



# The City of Lorain, Ohio

## Division of Buildings

*Rey Carrion, Safety/Service Director*

### **PLANNING COMMISSION**

**DATE: May 6, 2026**

**TIME: 9:00 A.M.**

**PLACE: Council Chambers**

### PLANNING COMMISSION AGENDA

ROLL CALL:

DISPOSITION OF MINUTES:

April 1st Meeting Minutes.

MATTERS FOR CONSIDERATION:

C.U.P. 01-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Truck Livery, Section 1143.07(j) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

C.U.P. 02-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Outdoor Storage Related to Principal Uses, Section 1143.08(a) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

F.D.P. 03-2026, Submission for Planning Commission's review and consideration, the Final Development Plan for an Indoor Self-Storage facility in an I-1 Light Industrial district, Chapter 1127- Industrial Districts and Section 1145- Site Development Plans located at, 2630 Colorado Ave. Jason Kucharski-agent, Rotar Industries LLC, applicant.

Z.C.A. 02-2026 Submission for Planning Commission's review and recommendation to Lorain City Council for the Zoning Reclassification of multiple parcels that require updated classifications and corrections, (see exhibits "A" through "K" for parcel information and maps). City of Lorain, applicant.

Z.C.A. 03-2026 Submission for Planning Commission's review and recommendation to Lorain City Council, the Zoning Reclassification of, 516 W 15th St, PPN 02-01-003-135-027 from an R-2, Transitional Residential District to a B-2 General Commercial District. 516 W 15 LLC, applicant.

MISCELLANEOUS CONCERNS:

ADJOURNMENT

EVELISSE ATKINSON, PLANNING & ZONING ADMINISTRATOR

**IF APPLICANT UNABLE TO ATTEND, PLEASE CALL (440) 204-2034**

Lorain City Hall, 200 West Erie Avenue, 5th Floor, Lorain, OH 44052  
Phone: 440-204-2045 / Fax: 440-204-2540



# CITY OF LORAIN

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## Planning Commission

3. A.

Meeting Date: 05/06/2026

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Subject:

April 1st Meeting Minutes.

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### Attachments

April 1st Meeting Minutes

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# PLANNING COMMISSION

## MEETING MINUTES

April 1st, 2026

9:00 A.M.

**Council Chambers. Lorain City Hall. 200 West Erie Ave**

### **A Quorum was established.**

**Call to Order:** This meeting was called to order at 10:48 A.M.

**Roll Call:** Mayor Jack Bradley; Chair, Henry Patterson; Member, Brandon Wysocki; Member, Tim Williams; Member, Evelisse Atkinson; Planning and Zoning Administrator David Faciana; Chief Building Official, Kenneth Resar; Lorain Law Dept and Chris Yates; Building Inspector.

### **Disposition of Minutes:**

Patterson made a motion to approve the March 6<sup>th</sup> Meeting Minutes. Wysocki seconded this motion. Motion carried unanimously.

### **Matters of Consideration:**

**C.U.P. 01-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Truck Livery, Section 1143.07(j) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.**

Bradley spoke regarding this matter. Laboy spoke regarding this matter. Resar spoke regarding this matter. Patterson spoke regarding this matter. Kempton spoke regarding this matter. Atkinson spoke regarding this matter.

Wysocki made a motion to hold this application in abeyance until the scheduled May 6<sup>th</sup> meeting. Patterson seconded this motion. Motion carried unanimously.

**C.U.P. 02-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Outdoor Storage Related to Principal Uses, Section 1143.08(a) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.**

Bradley spoke regarding this matter.

Wysocki made a motion to hold this application in abeyance until the scheduled May 6<sup>th</sup> meeting. Patterson seconded this application.

**C.U.P. 03-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for a Vehicle Service Station, Section 1143.07(o) in a B-2 Business Commercial district, and Section 1125.02 Schedule of Allowed Uses at, 2217 E 42nd St. Carlton Moore, agent, Rakesh Patel, applicant.**

Bradley spoke regarding this matter. Resar spoke regarding this matter. Moore spoke regarding this matter. Patel spoke regarding this matter. Atkinson spoke regarding this matter. Wysocki spoke regarding this mater.

Wysocki made a motion to approve this application with the conditions previously stated with the approval of the variance related to this application and with the condition that correct signage be placed at the address listed. Patterson seconded this motion. Motion carried unanimously.

**C.U.P. 04-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for a Boarding House, Section 1143.06(c), and Section 1123.02 Schedule of Allowed Uses in a R-3 High Density**

**Residential district at, 514 E 32<sup>nd</sup> St. Sara Simpson, agent, New Horizons Home Solution LLC, applicant.**

Resar spoke regarding this matter. Simpson spoke regarding this matter. Atkinson spoke regarding this matter. Wysocki spoke regarding this matter. Williams spoke regarding this matter. Patterson spoke regarding this matter.

Wysocki made a motion to approve this application as submitted. Williams seconded this motion. Motion carried with 3 in favor, with Patterson opposing this application. Motion carried.

**Miscellaneous Comments:**

There were no miscellaneous comments at this meeting.

**Adjournment:** This meeting was adjourned at 11:07 A.M.

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**Mayor Jack Bradley. Chairman**

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**Evelisse Atkinson. Planning and Zoning Administrator**

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**Recorded by: Chris Yates, Commercial Building Inspector**



# CITY OF LORAIN

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## Planning Commission

4. A.

Meeting Date: 05/06/2026

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Subject:

C.U.P. 01-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Truck Livery, Section 1143.07(j) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

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### Attachments

Application and Site Plan  
Recommendation Letter

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Jack Bradley  
Mayor

# CITY OF LORAIN PLANNING COMMISSION

NO. 41025218  
\$500.00  
1-2-2026  
2026-000

CONDITIONAL USE PERMIT

01-2026

### APPLICATION FOR A CONDITIONAL USE PERMIT

APPLICATION IS HEREBY MADE TO THE PLANNING COMMISSION OF THE CITY OF LORAIN, OHIO FOR A  
CONDITIONAL USE, CHAPTER 11.

NAME: Industrial Storages and Parking LLC - Jose Laboy

ADDRESS OF OWNER: 823 W. 18th St Lorain, OH 44052

CITY: Lorain STATE: Ohio ZIP CODE: 44052

PHONE: (BUSINESS) 44025810433 (RESIDENTIAL) \_\_\_\_\_

ADDRESS OF PROPERTY REQUIRING A CONDITIONAL USE IF DIFFERENT FROM ABOVE:

1305 Oberlin Ave Lorain, Ohio 44052

PLOT PLAN SUBMITTED: YES  NO

LETTER SUBMITTED: YES  NO

SECTION OF THE ZONING CODE INVOLVED: \_\_\_\_\_

REASON FOR REQUESTING THE CONDITIONAL USE: Use of designated parking  
and storage areas for industrial vehicles and equipment

NON-REFUNDABLE FEE: \$500.00 As per Ordinance 168-20 Effective January 21, 2021.

Jose Laboy  
Applicant's Signature

12-15-25  
Date

**Industrial Storages and Parking LLC**

**Jose Laboy**

**Managing Member**

**1305 Oberlin Avenue**

**Lorain, Ohio 44052**

**Phone: 440-258-6433**

**Email:** [REDACTED]

**Date: 12-10-2025**

**City of Lorain Planning Commission**

**Attn: Evelisse Atkinson, Planning & Zoning Administrator**

**City of Lorain – Building, Housing & Planning**

**200 West Erie Avenue, 5th Floor**

**Lorain, Ohio 44052**

**Re: Conditional Use Permit Application – Industrial Storages and Parking LLC**

**Dear Ms. Atkinson and Members of the Planning Commission,**

I am writing to formally submit this cover letter in support of my application for a Conditional Use Permit for the operation of an Industrial Storages and Parking LLC at the property located at 1305 Oberlin Avenue, Lorain, Ohio.

The proposed use consists of designated parking and storage areas for industrial vehicles and equipment, including but not limited to semi-trucks, trailers, commercial vehicles, RVs, and related industrial storage, within clearly defined areas of the property. This facility is intended to serve local businesses, contractors, logistics operators, and vehicle owners who require secure, off-street parking and storage.

The property is well-suited for this use due to its size, existing layout, and proximity to industrial corridors. Parking areas will be clearly marked and organized to maintain safe vehicle circulation, appropriate setbacks, and controlled access. Operations will be managed to minimize potential impacts on surrounding properties, including noise control, traffic management, and routine property maintenance.

This request is being made in accordance with Chapter 1143 of the Codified Ordinances of the City of Lorain. All required materials are included with this submission, including:

- A completed Conditional Use Permit application
- A list of abutting property owners
- A plot plan showing parking areas, access points, and setbacks

- The required non-refundable application fee

The proposed conditional use supports the City of Lorain's industrial and economic activity while providing an organized and compliant solution for industrial vehicle parking that reduces congestion on public streets.

I respectfully request the Planning Commission's review and approval of this Conditional Use Permit. I appreciate your time and consideration and will be present at the scheduled meeting to address any questions or concerns.

Thank you for your consideration.

Sincerely,

Jose Laboy  
Managing Member  
Industrial Storages and Parking LLC

## **PLOT PLAN NARRATIVE**

**Industrial Storages and Parking LLC  
1305 Oberlin Avenue, Lorain, Ohio**

This plot plan narrative accompanies the attached aerial image obtained from the Lorain County Auditor's website and is submitted in support of the Conditional Use Permit application for Industrial Storages and Parking LLC.

The aerial image is used as a base map for illustrative purposes only, to clearly depict the proposed layout, circulation, and designated use areas within the existing property boundaries.

### **Industrial and Recreational Vehicle Parking Areas (Red Highlighted Areas)**

The areas outlined in red on the attached image represent the only designated locations for industrial vehicle and recreational vehicle (RV) parking on the property. These areas are confined to existing paved and gravel surfaces and are located away from residential properties. No industrial or recreational vehicles will be parked outside of the red-designated areas.

The red-highlighted areas are intended for:

- Semi-trucks
- Trailers
- Commercial vehicles
- Recreational vehicles (RVs)

### **Vehicle Access and Entrance**

All industrial and recreational vehicles will access the site exclusively through the gated entrance off Oberlin Avenue. No industrial or recreational vehicle access is proposed from any residential streets. This controlled access point allows for traffic management, safety, and reduced impact on surrounding neighborhoods.

### **Equipment Storage and Non-Industrial Parking (Yellow and Blue Highlighted Areas)**

The areas highlighted in yellow and blue identify existing building structures on the property. These buildings are proposed for equipment storage, material storage, and general vehicle parking associated with the storage units.

Parking within the yellow and blue areas is limited to passenger vehicles and light-duty vehicles related to storage unit use only. No industrial or recreational vehicle parking is permitted within the yellow or blue designated areas.

### Separation of Uses

Industrial and recreational vehicle parking is clearly separated from the storage building areas and standard vehicle parking. This separation ensures orderly site operation, compliance with zoning intent, and minimal impact to surrounding residential properties.

No expansion beyond the highlighted areas is proposed, and all uses will remain within the existing site boundaries.

08E811, AM



Hamilton Avenue

NON SEMI-TRUCK USE AREA

Tree Logging Operations

West 13th Street

Norfolk & Southern Railroad

 SEMI-TRUCK PARKING AREA  
 TREE LOGGING AREA

NORFOLK SOUTHERN RR TRACKS

1305 Oberlin Avenue



# 1305 Oberlin Ave. Lorain, Ohio



1143.07

(j) Truck Livery.

(1) Minimum site size shall be one (1) acre.

**REQUIREMENTS MET**

(2) All portions of the site to be used for the storage or parking of semi-tractors or trailers shall be paved.

**REQUIREMENTS MET**

(3) Security lighting shall be provided in accordance with the requirements of this Ordinance.

**REQUIREMENTS MET**

(4) A six (6) foot high security fence shall be installed around the perimeter of the area in which vehicles are parked or stored.

**REQUIREMENTS MET**

(5) No truck or trailer shall be parked or stored within 200 feet of a residential zoning district.

**VARIANCE SUBMITTED**

**Abutting Property Owners – 1305 Oberlin Ave, Lorain, OH Industrial  
Parking and Storages LLC**

**Martha Ann Stalinski**  
1133 W. 12th St

**James Scott**  
1129 W. 12th St

**Jasmine Opps LLC**  
1125 W. 12th St

**Charles York**  
1121 W. 12th St

**JS Opportunities LLC**  
1119 W. 12th St

**Helen Mullins**  
1115 W. 12th St

**Potter Hank Russell & Katherine**  
1113 W. 12th St

**Potter Hank R & Catherine**  
1111 W. 12th St

**David Morales**  
1228 Oberlin Ave

**Lisa Mcie**  
1204 W. 13th St

**Bradley Smith / Deborah Smith**  
1245 Oberlin Ave

**Felix Rosario**  
1239 Oberlin Ave

**HSP Holdings LLC**  
1229 Oberlin Ave

**Alexis Crispin Mojica / Maria Yvette Mojica**  
1145 W. 12th St

**Danielle Price**  
1143 W. 12th St

**Brian Mcdermott**  
1141 W. 12th St

**Javier Gonzalo Ambrosi Devera Sr**  
1135 W. 12th St

**Abutting Property Owners – 1305 Oberlin Ave. Lorain, Ohio Industrial  
Storages and Parking LLC**

**Community Animal Task Force Inc**  
1109 W. 12th St

**Prugreen Properties LLC**  
1105 W. 12th St

**Keenan Adams**  
1101 W. 12th St

**Next Chapter Capital LLC**  
1055 W. 12th St

**Timothy Alan Long**  
1227 Hamilton Ave



Jack Bradley  
Mayor

# CITY OF LORAIN

Department of Building, Housing & Planning

Matthew Kuszmir  
Director

David Faciana  
Chief Building Official

April 29, 2026

To: Planning Commission

From: Evelisse Atkinson, Planning and Zoning Administrator

Re: C.U.P. 01-2026 Submission for Planning Commission's review and consideration, a Conditional Use Permit for Truck Livery, Section 1143.07(j) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

***My responses regarding compliance are below:***

### **Section 1143.03 General Review Standards**

In addition to the specific requirements for conditionally permissible uses as specified in this chapter, the planning commission shall review the particular facts and circumstances of each proposed use in terms of the following standards and shall determine that each use at the proposed location:

- A. Is, in fact, a conditionally permissible use within the zoning district in which the property is located.
- B. Will be consistent with the city's comprehensive plan and zoning ordinance.
- C. Will be designed, constructed, and maintained to be harmonious and appropriate in appearance with the existing or intended character of the vicinity.
- D. Will not create additional requirements at public cost for public facilities and services that will be detrimental to the economic welfare of the community.
- E. Will not involve uses, activities, processes, material, equipment, and conditions 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, or odors.
- F. Will have vehicular approaches to the property that are the minimum necessary to provide adequate and safe access to the property.
- G. Will not result in the destruction, loss or damage of a natural, scenic, or historic feature of significant importance.

### ***Requirements for Conditional Use Permit 1143.07(j) Truck Livery:***

- (1) Minimum site size shall be one (1) acre.
  - ***In compliance (separate parcels totaling more than an acre)***

(2) All portions of the site to be used for the storage or parking of semi-tractors or trailers shall be paved.

- **Truck Livery does not include RV's or other vehicles.**
- **Truck Livery is defined as follows (Section 1191.07): A use of land specifically designated and approved for the overnight parking and storage of semi tractors and trailers.**
- **The site is paved.**

(3) Security lighting shall be provided in accordance with the requirements of this Ordinance.

- **In compliance**

(4) A six (6) foot high security fence shall be installed around the perimeter of the area in which vehicles are parked or stored.

- **In compliance (fence screening is out of compliance)**

(5) No truck or trailer shall be parked or stored within 200 feet of a residential zoning district.

- **Variance requested a and new site plan has been submitted. See application BA 05-2026**

Respectfully,



Evelisse Atkinson  
Planning & Zoning Administrator



# CITY OF LORAIN

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## Planning Commission

4. B.

Meeting Date: 05/06/2026

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Subject:

C.U.P. 02-2026 (Previously held in abeyance) Submission for Planning Commission's review and consideration, a Conditional Use Permit for Outdoor Storage Related to Principal Uses, Section 1143.08(a) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

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### Attachments

Application and Site Plan  
Recommendation Letter

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# CITY OF LORAIN

## PLANNING COMMISSION

Jack Bradley  
Mayor

CONDITIONAL USE PERMIT 02-2026

### APPLICATION FOR A CONDITIONAL USE PERMIT

APPLICATION IS HEREBY MADE TO THE PLANNING COMMISSION OF THE CITY OF LORAIN, OHIO FOR A  
CONDITIONAL USE, CHAPTER 11.

NAME: Industrial Storages and Parking LLC - Jose Labay

ADDRESS OF OWNER: 823 W. 18th St Lorain, OH 44052

CITY: Lorain STATE: OH ZIP CODE: 44052

PHONE: (BUSINESS) 440 258-6433 (RESIDENTIAL) \_\_\_\_\_

ADDRESS OF PROPERTY REQUIRING A CONDITIONAL USE IF DIFFERENT FROM ABOVE:

1305 Oberlin Ave Lorain, OH 44052

PLOT PLAN SUBMITTED: YES  NO

LETTER SUBMITTED: YES  NO

SECTION OF THE ZONING CODE INVOLVED: \_\_\_\_\_

REASON FOR REQUESTING THE CONDITIONAL USE: Establish outdoor lumber storage, cutting, processing, bundling, and distribution on property

NON-REFUNDABLE FEE: \$500.00 As per Ordinance 168-20 Effective January 21, 2021.

[Signature]  
Applicant's Signature

12-15-25  
Date

08E811 AM



Hamilton Avenue

NON SEMI-TRUCK USE AREA

Tree Logging Operations

West 13th Street

Norfolk & Southern Railroad

 SEMI-TRUCK PARKING AREA  
 TREE LOGGING AREA

NORFOLK SOUTHERN RR TRACKS

1305 Oberlin Avenue



Industrial Storages and Parking LLC  
1305 Oberlin Ave  
Lorain, Ohio 44052

████████████████████  
440-258-6433

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

City of Lorain – Building, Housing & Planning Department  
Attn: Lorain Planning Commission  
200 West Erie Avenue  
Lorain, Ohio 44052

RE: Conditional Use Permit Application – Lumber Storage, Processing, and Distribution Operations  
at 1305 Oberlin Ave

To the Honorable Members of the Lorain Planning Commission:

I am submitting this cover letter along with the Conditional Use Permit Application on behalf of Industrial Storages and Parking LLC, the operator of the property located at 1305 Oberlin Ave, Lorain, Ohio 44052. We are requesting approval to continue and formally establish outdoor lumber storage, lumber cutting/processing, bundling, and on-site distribution as an approved conditional use on this property.

Industrial Storages and Parking LLC holds an active contract with a tree-cutting and land-clearing company that delivers raw lumber materials to our site. Our business then safely cuts, processes, and bundles the wood for lawful resale. This operation is conducted in a designated area of the property, separate from vehicle parking and other activities, and remains fully within commercial and industrial use standards.

This request ensures transparency and compliance with all City of Lorain requirements. Approval of this conditional use will allow our business to continue serving the community, support local contractors, and strengthen the area's commercial activity. We emphasize that:

- The lumber processing area is well-organized and safely managed.
- Wood is stored neatly and securely to prevent hazards or visual clutter.
- No chemicals, hazardous waste, or prohibited materials are involved.
- Operations are maintained in accordance with safety, noise, dust control, and fire prevention standards.
- The use does not create negative impacts on surrounding properties.
- We remain committed to working cooperatively with the City to maintain a clean, safe, and compliant operation.

This use supports local economic activity, provides materials for local buyers, and utilizes otherwise underused industrial land in a productive and lawful manner.

We respectfully request approval of this conditional use so we may continue operating this portion of our business in accordance with all applicable regulations.

Thank you for your consideration. I am available to meet, answer questions, or provide any additional documentation the Planning Commission may require.

Respectfully,  
Jose Laboy  
Industrial Storages and Parking  
LLC

[REDACTED]

440-258-6433

**Plot Plan – Conditional Use Permit**

1305 Oberlin Ave, Lorain, Ohio

Proposed Lumber Storage & Processing Use

This plot plan is based on an aerial image obtained from the Lorain County Auditor's website and is submitted in support of a Conditional Use Permit application for lumber storage and processing.

## 1305 Oberlin Ave -Lumber yard



### Proposed Use Description

The red outlined area identifies the proposed Lumber Storage & Processing Area. This area will be used for receiving, stacking, cutting, bundling, and temporary storage of lumber.

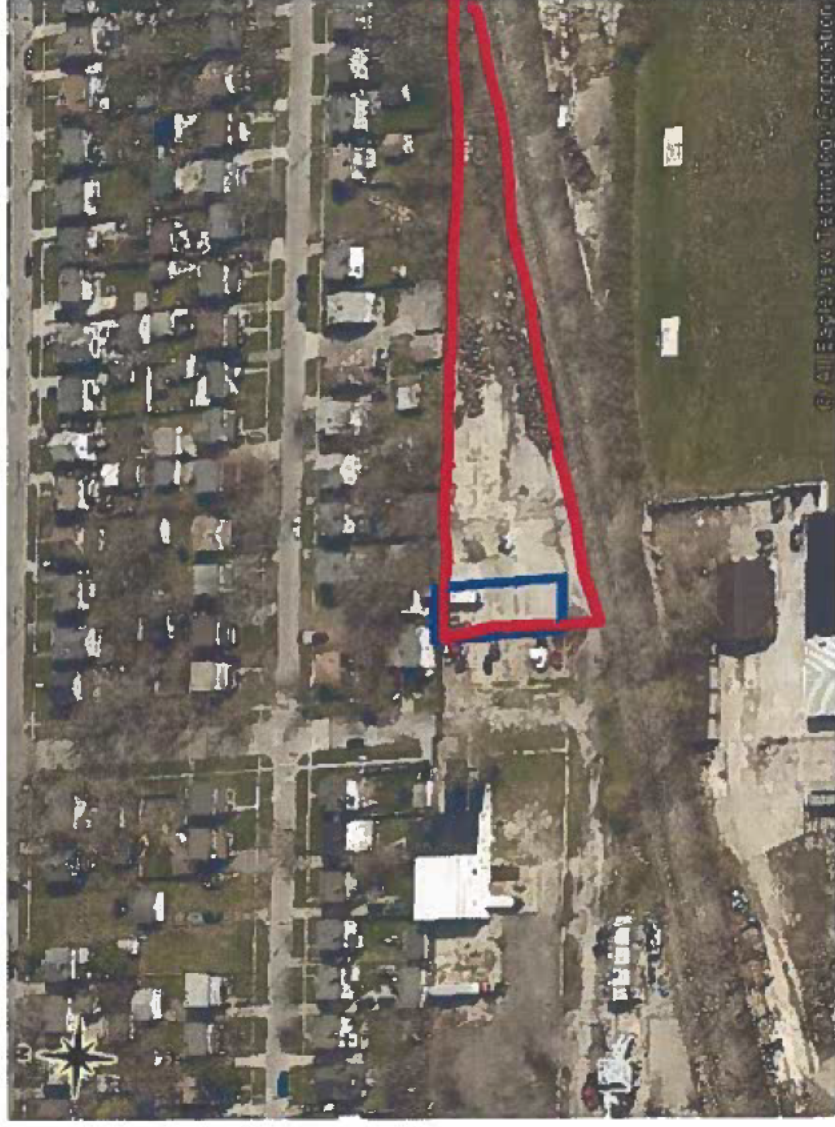
Lumber operations will remain within the designated area and will not interfere with parking, access drives, or adjacent uses.

#### Site Notes

- Adjacent residential properties are located to the north.
- Industrial and vacant uses are located to the south.
- Access to the site is provided from Oberlin Avenue.
- Fire lanes and access drives will remain unobstructed at all times.
- Lumber will not be stored within required setbacks from residential properties.

Note: Aerial image is for reference purposes and is not drawn to exact scale.

# 1305 Oberlin Ave - Lumber yard



**Abutting Property Owners – Lumber Yard**

**Kawbena Kemaujamel**

1053 W. 12th St

**Nancy Mieczkowski**

1049 W. 12th St

**Christopher & Catherine Thomas**

1045 W. 12th St

**Carlos Marrero & Kathleen Piskur**

1041 W. 12th St

**Kathy Foble Chamberlain**

1039 W. 12th St

**Amherst Park Ave Property LLC**

1035 W. 12th St

**David Long (PPN - 0201006122011)**

1031 W. 12th St

**David & Charles Perusek**

1029 W. 12th St

**Loomis Properties**

1025 W. 12th St

**Carl Cales Jr & Rayan Cales**

1023 W. 12th St

**BJSP LLC**

1019 W. 12th St

**John & Doris Dalton**

1017 W. 12th St

1143.08

(a) Outdoor Storage Related to Principal Industrial Uses.

(1) Outdoor storage shall not be permitted within any required front yard (30 feet).

**-REQUIREMENTS MET**

(2) Outdoor storage shall only be permitted as an accessory for use to principal uses in the industrial districts.

(3) The outdoor storage area shall be fenced on all sides in accordance with the requirements of Section 1141.08.

**-EXISTING FENSE**

(4) Any side that is visible to adjoining properties in a residential district, mixed-use district, neighboring parking lots or abutting streets shall be screened in accordance with the requirements of Section 1147.04(c).

**-EXISTING SCREENING**

(5) The Planning Commission may permit the required screening to be comprised of plant material, upon a determination that the alternate materials will provide the same degree or better of opacity, screening and compatibility with adjoining properties as a fence or wall.

**-REQUIREMENTS MET**



Jack Bradley  
Mayor

# CITY OF LORAIN

Department of Building, Housing & Planning

Matthew Kuszmir  
Director

David Faciana  
Chief Building Official

April 29, 2026

To: Planning Commission

From: Evelisse Atkinson, Planning and Zoning Administrator

Re: C.U.P. 02-2026 Submission for Planning Commission's review and consideration, a Conditional Use Permit for Outdoor Storage Related to Principal Uses, Section 1143.08(a) in a I-1 Light Industrial district, and Section 1127.02 Schedule of Allowed Uses at, 1305 Oberlin Ave. Industrial Storages and Parking- Jose Laboy, applicant.

***My responses regarding compliance are below:***

### **Section 1143.03 General Review Standards**

In addition to the specific requirements for conditionally permissible uses as specified in this chapter, the planning commission shall review the particular facts and circumstances of each proposed use in terms of the following standards and shall determine that each use at the proposed location:

- A. Is, in fact, a conditionally permissible use within the zoning district in which the property is located.
- B. Will be consistent with the city's comprehensive plan and zoning ordinance.
- C. Will be designed, constructed, and maintained to be harmonious and appropriate in appearance with the existing or intended character of the vicinity.
- D. Will not create additional requirements at public cost for public facilities and services that will be detrimental to the economic welfare of the community.
- E. Will not involve uses, activities, processes, material, equipment, and conditions 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, or odors.
- F. Will have vehicular approaches to the property that are the minimum necessary to provide adequate and safe access to the property.
- G. Will not result in the destruction, loss or damage of a natural, scenic, or historic feature of significant importance.

### ***Requirements for Conditional Use Permit 1143.08(a) Outdoor Storage Related to Principal Uses:***

- (1) Outdoor storage shall not be permitted within any required front yard.
  - **In compliance**

(2) Outdoor storage shall only be permitted as an accessory use to principal uses in the industrial districts.

- **In compliance**

(3) The outdoor storage area shall be fenced on all sides in accordance with the requirements of Section 1141.08.

- **In compliance**

(4) Any side that is visible to adjoining properties in a residential district, mixed-use district, neighboring parking lots or abutting streets shall be screened in accordance with the requirements of Section 1147.04(c).

- **The location is fenced however, the screening is out of compliance.**

(5) The Planning Commission may permit the required screening to be comprised of plant material, upon a determination that the alternate materials will provide the same degree or better of opacity, screening and compatibility with adjoining properties as a fence or wall.

Respectfully,



Evelisse Atkinson  
Planning & Zoning Administrator



# CITY OF LORAIN

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## Planning Commission

4. C.

Meeting Date: 05/06/2026

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Subject:

F.D.P. 03-2026, Submission for Planning Commission's review and consideration, the Final Development Plan for an Indoor Self-Storage facility in an I-1 Light Industrial district, Chapter 1127- Industrial Districts and Section 1145- Site Development Plans located at, 2630 Colorado Ave. Jason Kucharski-agent, Rotar Industries LLC, applicant.

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### Attachments

Application and Site Plan  
Plan Review Comments

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Jack Bradley  
Mayor

# CITY OF LORAIN

## PLANNING COMMISSION

PDP \_\_\_\_\_

FDP 03-2026

### APPLICATION FOR DEVELOPMENT PLAN SUBMISSION

APPLICATION IS HEREBY MADE TO THE PLANNING COMMISSION OF THE CITY OF LORAIN, OHIO FOR DEVELOPMENT PLAN APPROVAL, CHAPTER 1145.

PLEASE CHECK ONE:

PRELIMINARY DEVELOPMENT PLAN: \_\_\_\_\_ (required for Mixed-Use and Planned Unit Developments)

FINAL DEVELOPMENT PLAN:

\*\*\*\*\*  
OWNER OR AGENT NAME: Rotar Ind. LLC represented by Jason Kucharski

ADDRESS OF OWNER: 2694 Edgehi II Rd.

CITY: Cleveland Heights STATE: Ohio ZIP CODE: 44106

PHONE: 216.225.7054 EMAIL: [REDACTED]

PROPERTY ADDRESS or PPN: 2630 Colorado Ave.

CITY: Lorain STATE: Ohio ZIP CODE: 44052

BRIEF DESCRIPTION OF PROJECT: New construction of a self-storage facility. See attached narrative.

ZONING DISTRICT: Light Industrial

[Signature]  
APPLICANT'S SIGNATURE

4/14/26  
DATE

<b>APPROVED</b>	
_____ CHAIRMAN, CITY OF LORAIN PLANNING COMMISSION	_____ DATE
FOR OFFICE USE ONLY	

## Narrative for Planning Commission

Date: 4/12/26

Project Address: 2630 Colorado Ave. Lorain, Ohio 44052.

Developer: Rotar Industries LLC. 2694 Edgehill Rd. Cleveland Heights, Ohio 44106

Project Description: A two, possibly three phase development project, done in accordance with C.U.P. 04-2025 and variance B.A.12-25, of a fully automated 8 to14 building drive up self-storage facility. Complete project square footage= 88,450. The completed project will have ingress from Colorado Ave. and both ingress/egress from River Industrial Parkway. With each phase of the project the buildings will be completely fenced, with shielded lighting and security cameras. There will be no retail sales on the premises.

Phase One: Four buildings on the North side of the property totaling 31,200 square feet. With a mixture of units to accommodate the needs of the public. Along with a retention basin that will support phase one and two of the project.

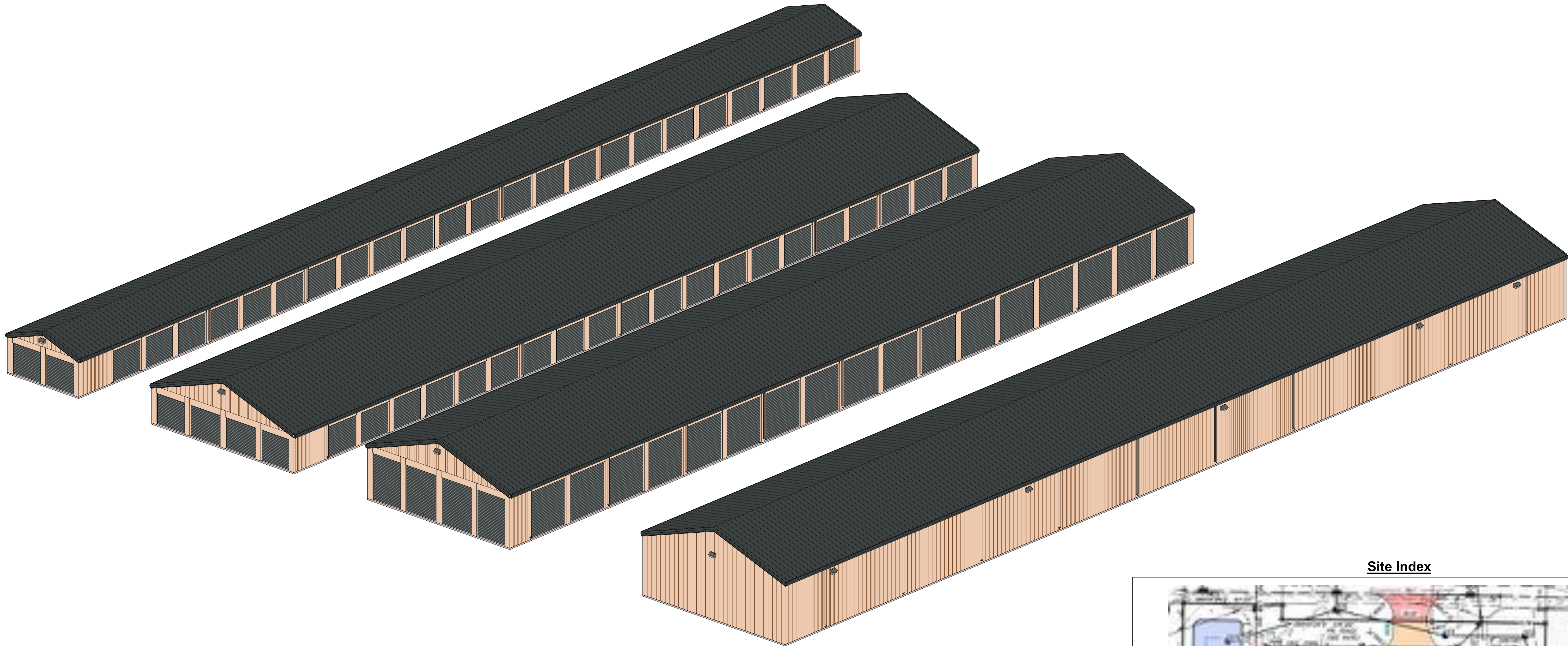
Phase Two: Four buildings on the Southeast portion of the property totaling 26,250 square feet. The unit mixture of this phase will be dependent upon the demand of the public from Phase One.

Phase Three (if needed): Six buildings on the Southwest portion of the property totaling 29,300 square feet. The unit mixture of this phase will be dependent upon the demand of the public from Phase Two.

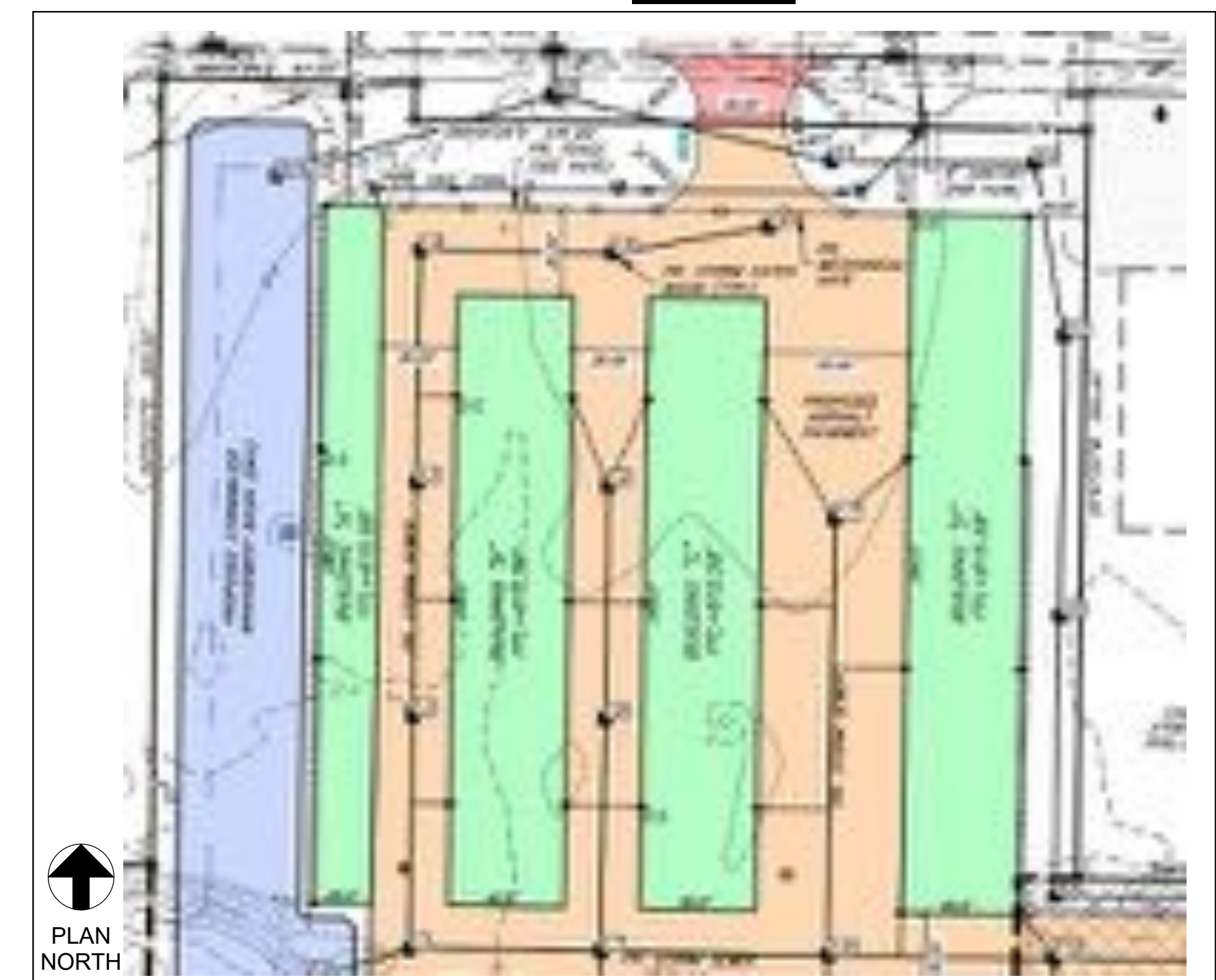
Site plan details are attached.

# Lorain Self Storage

2630 Colorado Avenue Lorain, OH 44052



Site Index



6014 Wrightville Ave.,  
Unit 120, Wilmington, NC. 28403  
Office phone: (910) 663-4056  
www.BuiltRiteStorageSystems.com

Drawn For :

Project :

**Lorain Self Storage**

2630 Colorado Avenue  
Lorain, OH 44052

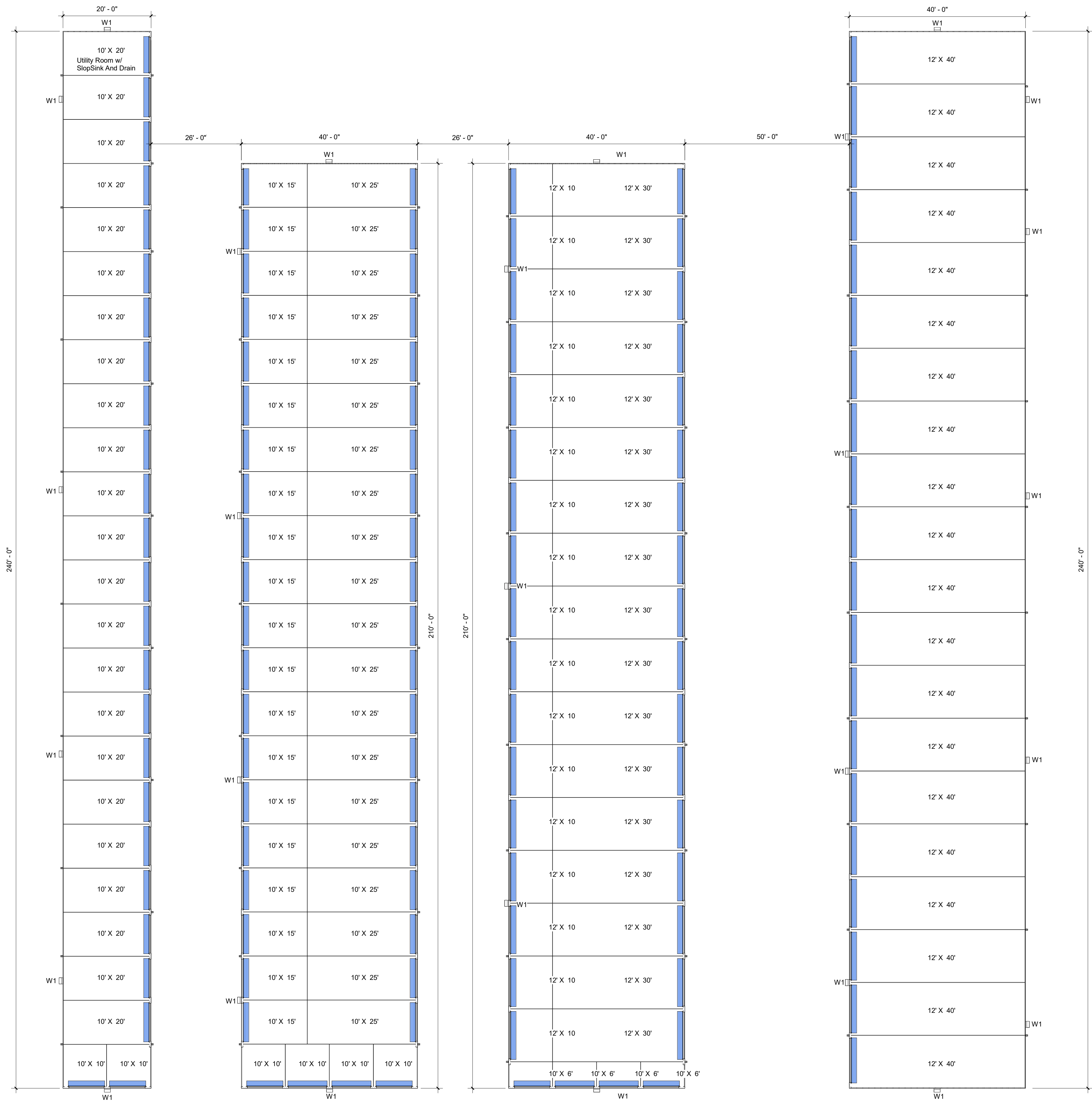
Engineer :

No	Date	Description
i	04-14-2026	---
ii	-	-
iii	-	-

Project Number #	-
Job #	---
Drawn By	TF
Checked By	-
Engineering Design By	Designer

**A0**  
3D View





**Building A**  
4,800 Sq.Ft.

**Building B**  
8,400 Sq.Ft.

**Building C**  
8,400 Sq.Ft.

**Building D**  
9,600 Sq.Ft.

**Note:**  
W1= Wall Packs Blocks



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Project :

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2630 Colorado Avenue  
Lorain, OH 44052

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No	Date	Description
i	04-14-2026	---
ii	-	-
iii	-	-

Project Number #	-
Job #	---
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Engineering Design By	Designer

**A1**  
**Building Layout**



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Drawn For :

Project :

### Lorain Self Storage

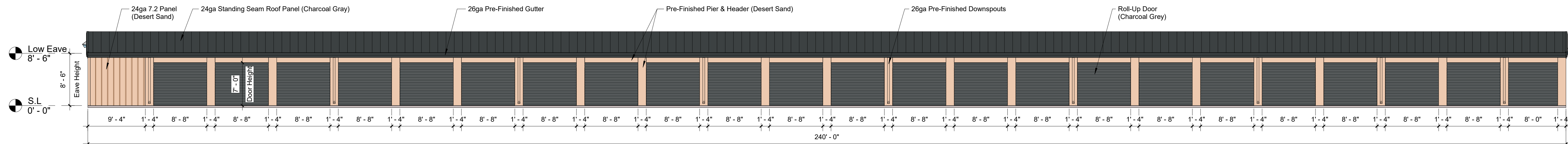
2630 Colorado Avenue  
Lorain, OH 44052

Engineer :

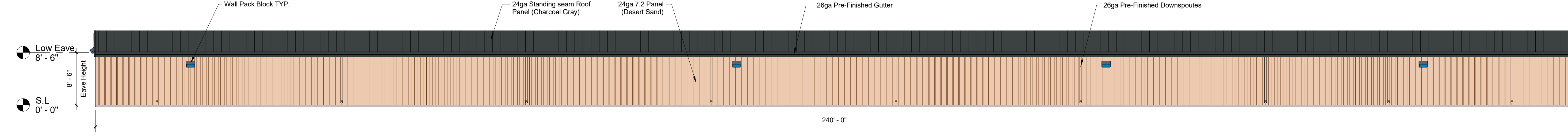
No	Date	Description
i	04-14-2026	---
ii	-	-
iii	-	-

Project Number #	-
Job #	---
Drawn By	TF
Checked By	-
Engineering Design By	Designer

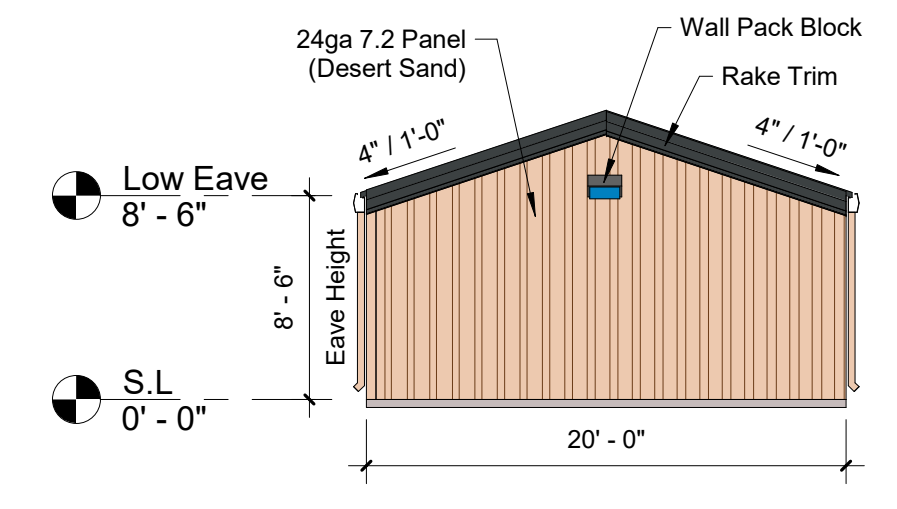
# A2 Elevations



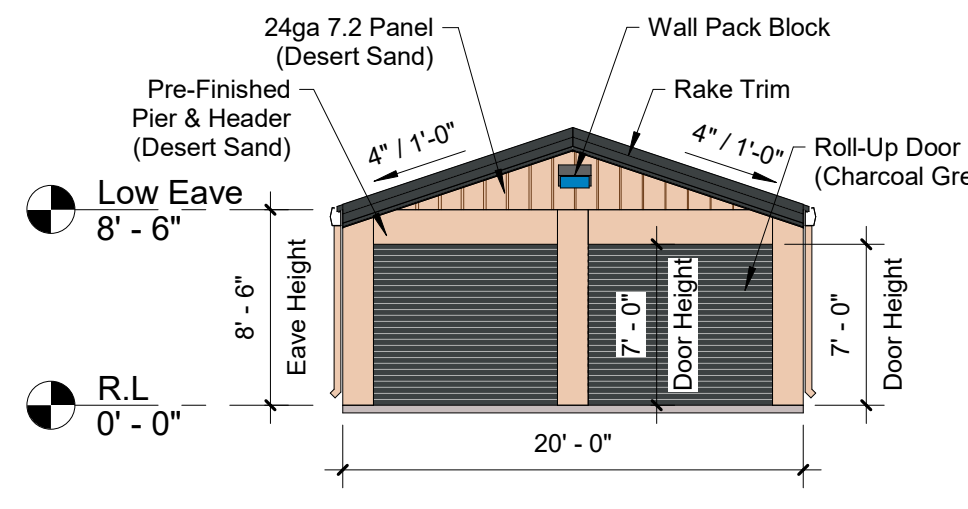
1 Building A East Elevation  
1 : 100



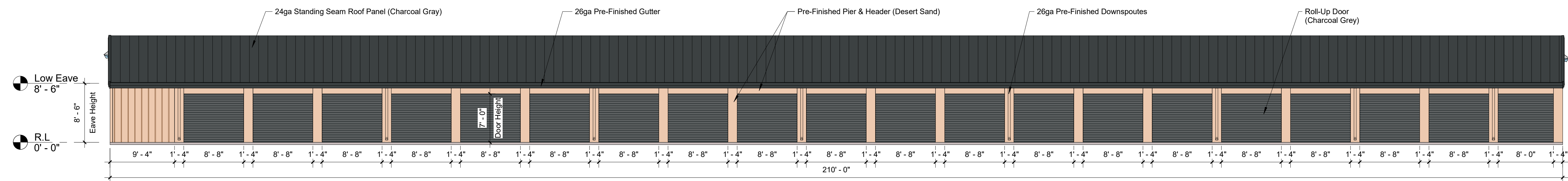
2 Building A West Elevation  
1 : 100



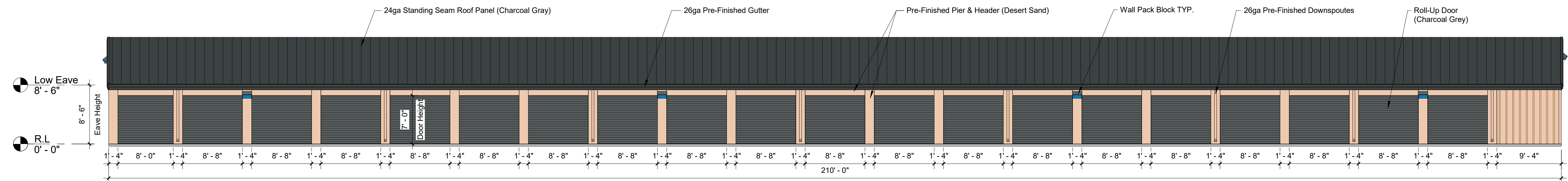
3 Building A North Elevation  
1/8" = 1'-0"



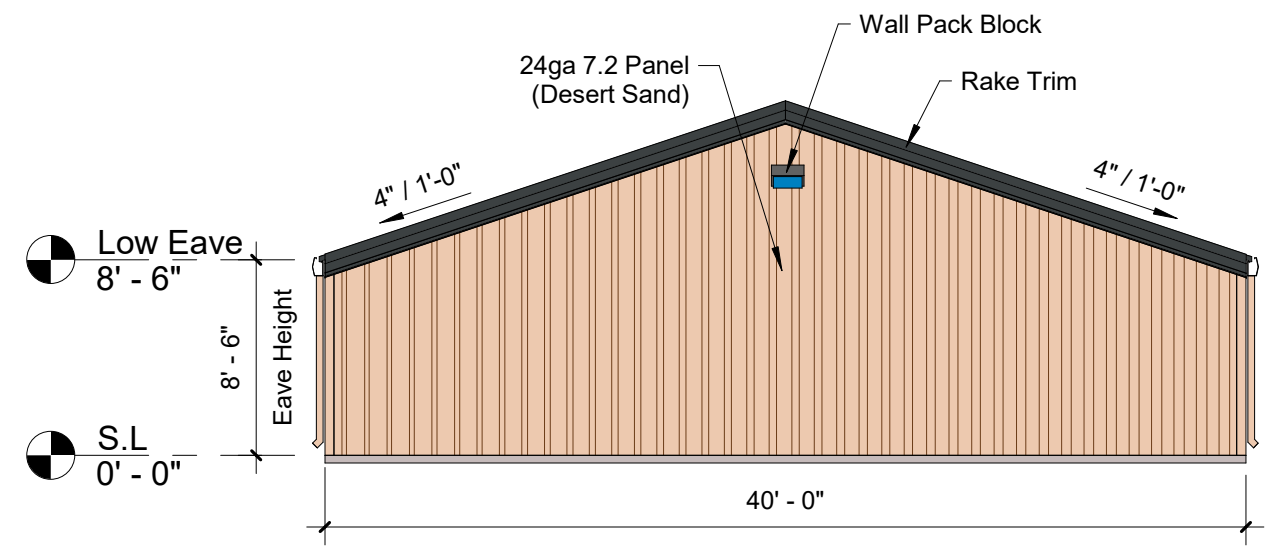
4 Building A South Elevation  
1 : 100



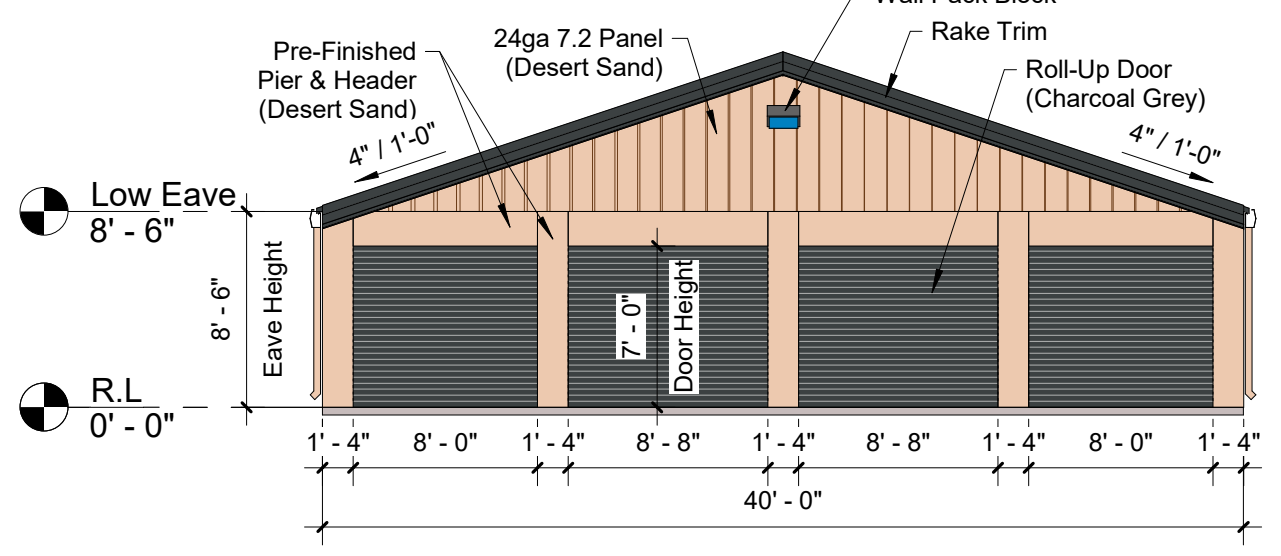
5 Building B East Elevation  
1 : 100



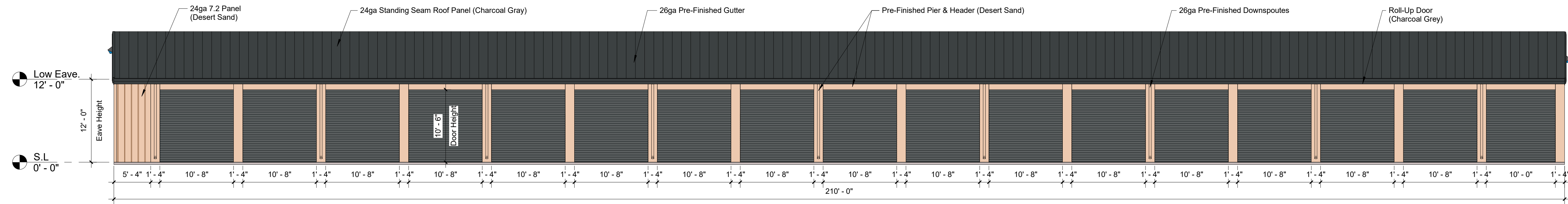
6 Building B West Elevation  
1 : 100



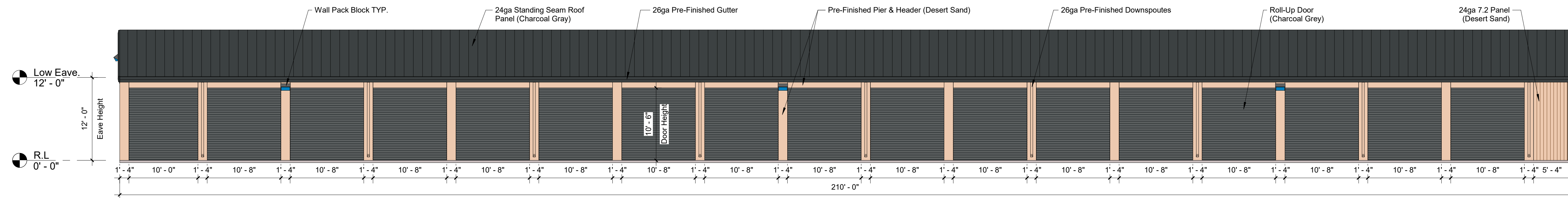
7 Building B North Elevation  
1 : 100



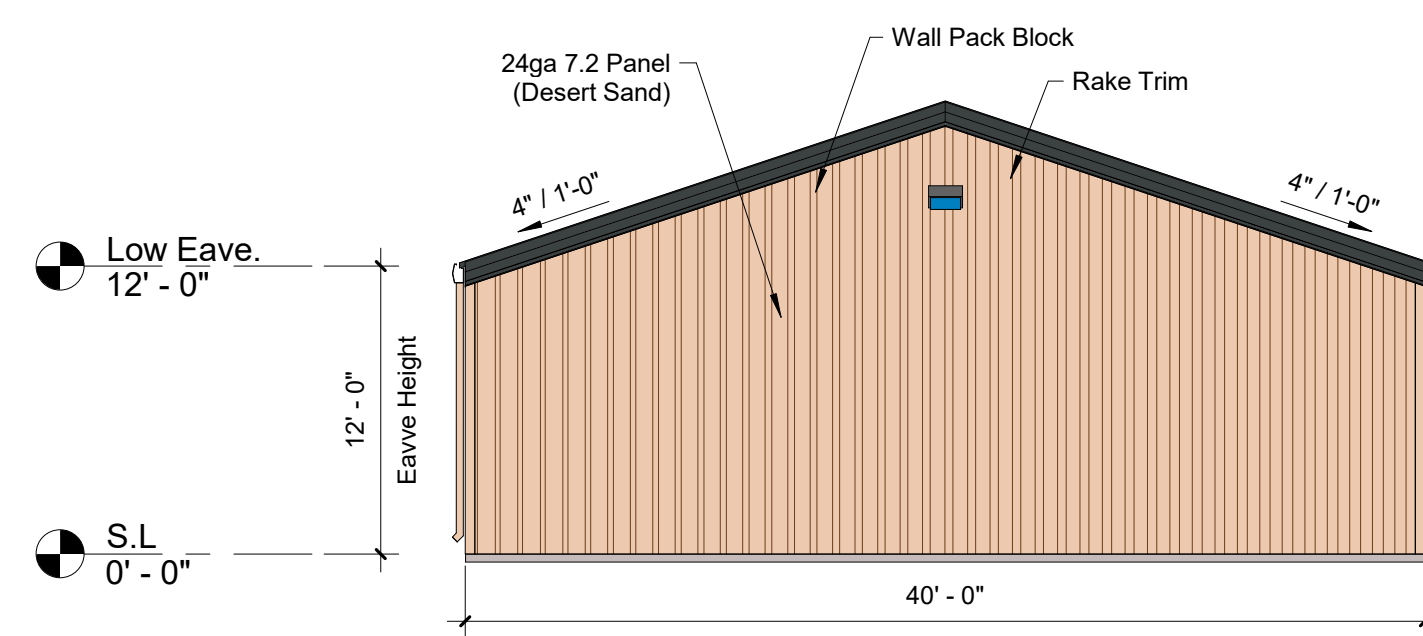
8 Building B South Elevation  
1 : 100



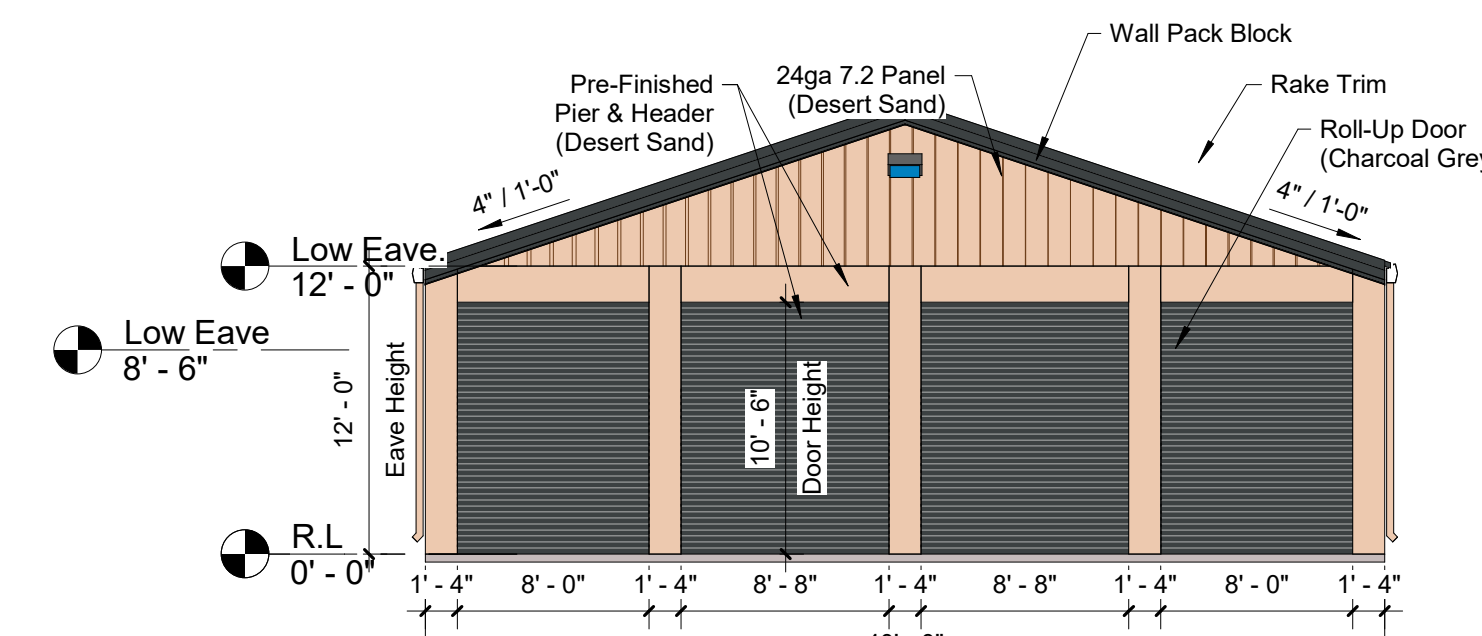
① Building C East Elevation  
1 : 100



② Building C West Elevation  
1 : 100



③ Building C North Elevation  
1/8" = 1'-0"



④ Building C South Elevation  
1/8" = 1'-0"

Drawn For :

Project :

### Lorain Self Storage

2630 Colorado Avenue  
Lorain, OH 44052

Engineer :

No	Date	Description
i	04-14-2026	---
ii	-	-
iii	-	-
△	-	-
△	-	-

Project Number #	-
Job #	---
Drawn By	TF
Checked By	-
Engineering Design By	Designer

# A3 Elevations



6014 Wrightville Ave.,  
Unit 120, Wilmington, NC. 28403  
Office phone: (910) 663-4056  
www.BuiltRiteStorageSystems.com

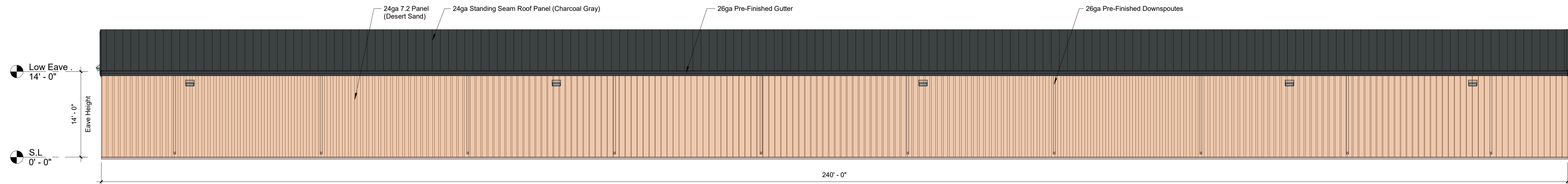
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Project :

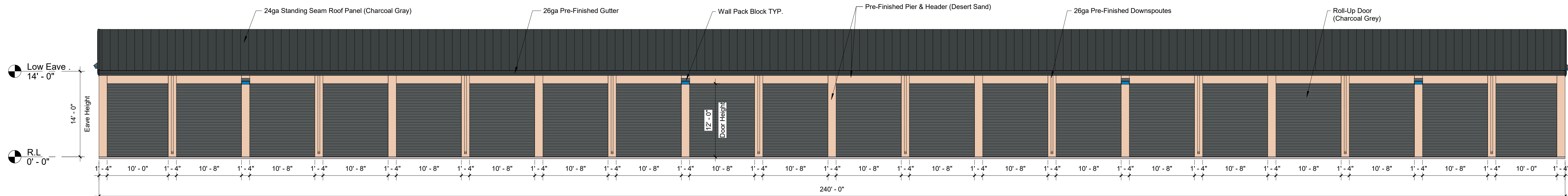
### Lorain Self Storage

2630 Colorado Avenue  
Lorain, OH 44052

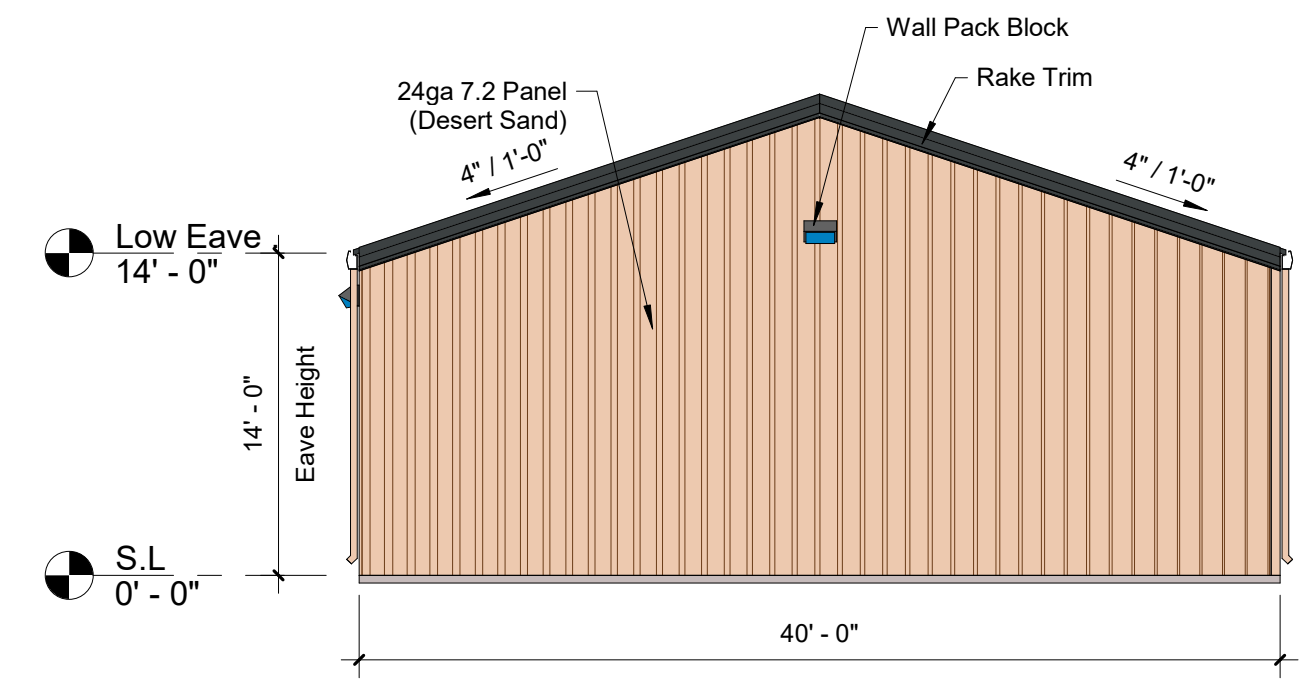
Engineer :



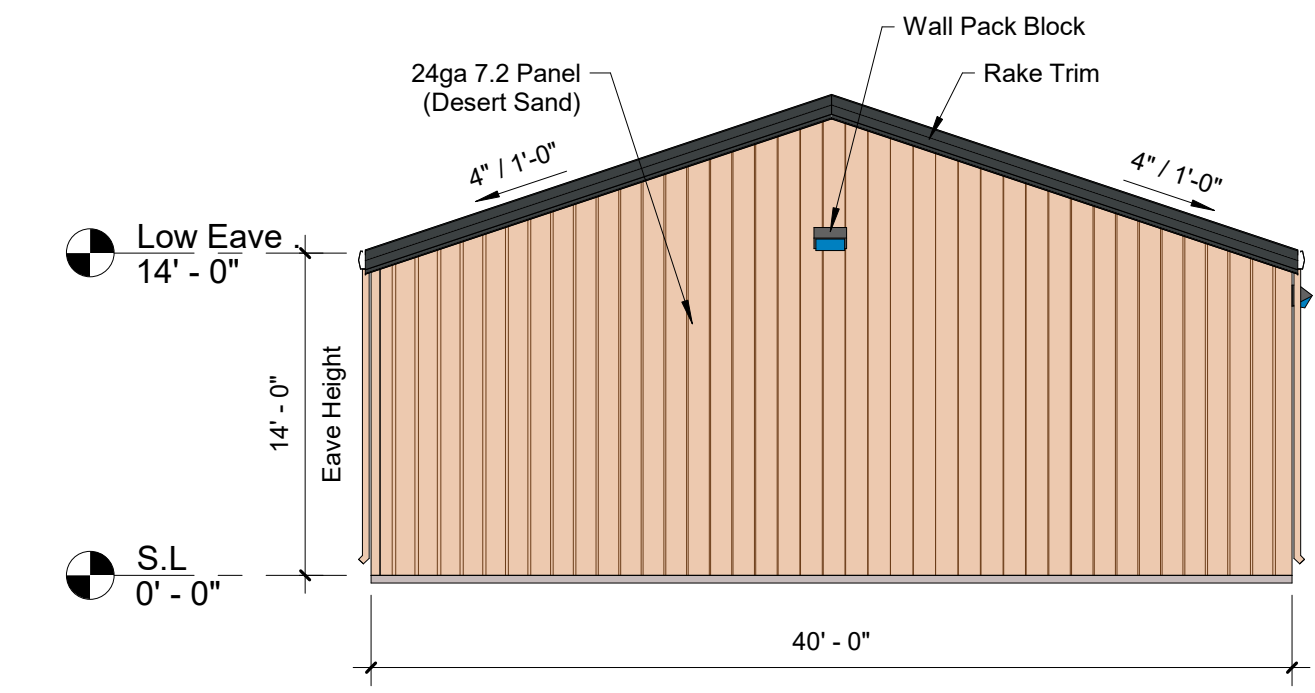
① Building D East Elevation  
1 : 100



② Building D West Elevation  
1 : 100



③ Building D North Elevation  
1 : 100



④ Building D South Elevation  
1 : 100

No	Date	Description
i	04-14-2026	---
ii	-	-
iii	-	-

Project Number #	-
Job #	---
Drawn By	TF
Checked By	-
Engineering Design By	Designer

# A4 Elevations

# STORAGE UNIT DEVELOPMENT

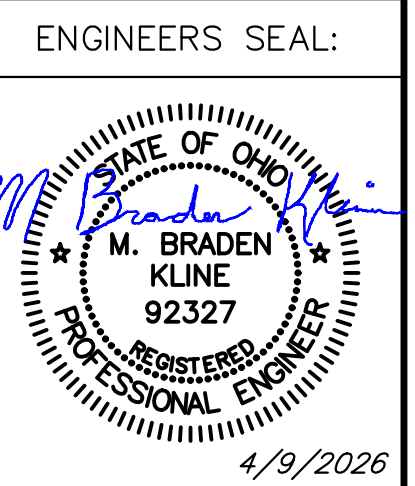
AT

## 2630 COLORADO AVENUE

LORAIN, OH 44052



Sheet	Title
1	Title
2	General Notes
3	Existing Conditions
4	Overall Site Plan
5	Grading Plan and Storm Sewer
6	Storm Sewer Details
7	Sediment Basin Plan
8	Stormwater Management Plan
9	Stormwater Pollution Prevention Notes
10	Stormwater Pollution Prevention Plan
11	Erosion Control Details



**UNDERGROUND UTILITIES**  
 CONTACT BOTH SERVICES  
 CALL TWO WORKING DAYS  
 BEFORE YOU DIG

CALL  
 1-800-362-2764  
 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE  
 NON-MEMBERS  
 MUST BE CALLED DIRECTLY

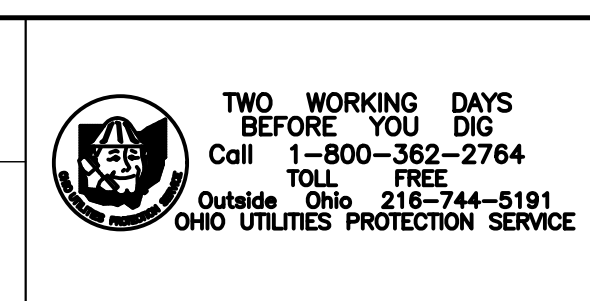
OIL & GAS PRODUCERS UNDERGROUND  
 PROTECTION SERVICE CALL: 1-800-925-0988

— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**

LEWIS LAND PROFESSIONALS  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

PROJECT:  
**STORAGE UNIT DEVELOPMENT – 2630 COLORADO AVE, LORAIN OHIO**

TITLE:  
**TITLE**



SCALES:  
 DRAWING FILE:  
 25-344 TITLE.dwg  
 IWDDES PERMIT NUMBER:  
 JGC16881\*AG

REVISION TABLE				DATE:
				4/8/2026
				PROJECT NUMBER:
2	4/9/26	FINAL CIVIL SITE PLAN	MBK	25-344
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK	SHEET NUMBER:
NO.	DATE	DESCRIPTION	BY	1 of 11

**CATCH BASINS & STORM MANHOLES**

ALL STORM SEWER CATCH BASINS AND MANHOLES SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. PIPE OPENINGS SHALL BE PRECAST, KNOCKOUT PANELS/SIDES ARE UNACCEPTABLE. CATCH BASINS SHALL BE INSTALLED WITH FINGER DRAINS TO ALLOW DRAINAGE OF THE STONE BASE INTO THE CATCH BASIN. CASTINGS FOR ALL MANHOLES AND CATCH BASINS SHALL MEET ODOT STANDARDS. CASTINGS SHALL BE ADA COMPLIANT. 4" UNDERDRAIN PIPES FOR STORM STRUCTURES IN PAVEMENT SHALL BE A MINIMUM OF 5' IN LENGTH. UNDERDRAINS SHALL BE BACKFILLED WITH #57 CRUSHED LIMESTONE AGGREGATE.

**CLEAN UP AT END OF PROJECT**

PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL ENSURE THAT ALL RECENTLY CONSTRUCTED IMPROVEMENTS AND EXISTING FEATURES IN OR ADJACENT TO THE IMPROVEMENTS ARE CLEAN AND FREE OF ANY AND ALL DEBRIS AND ALL IMPROVEMENTS ARE FUNCTIONING PROPERLY.

**CONSTRUCTION SURVEY STAKES**

THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, PLACING AND MAINTAINING CONSTRUCTION SURVEY STAKES NECESSARY FOR THE PROPER COMPLETION OF THE WORK ASSOCIATED WITH THIS PROJECT. BENCH MARKS WILL BE PROVIDED WITHIN AND/OR ADJACENT TO THE PROJECT SITE; THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLETE A BENCH CIRCUIT BETWEEN AT LEAST TWO (2) SEPARATE BENCH MARKS WHENEVER ELEVATIONS ARE BEING TRANSFERRED AND/OR SET. ANY DISCREPANCIES OUTSIDE NORMAL SURVEYING STANDARDS/LIMITS WITH THE BENCH MARK ELEVATIONS SHOWN SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE PROJECT ENGINEER. HORIZONTAL CONTROL WILL BE PROVIDED FOR THE CONTRACTOR'S USE BY THE OWNER. (AUTOCAD FILES CAN BE PROVIDED TO THE CONSTRUCTION MANAGER AND SURVEYOR, FOR A FEE.)

**UNSUITABLE SOILS UNIT PRICES TO BE INCLUDED**

1. THE CONTRACTOR SHALL PROVIDE A UNIT PRICE WITH THEIR PROJECT PRICE QUOTE FOR THE FOLLOWING:

- 1.1. UNIT PRICE #1
  - 1.1.1)1. UNIT PRICE #1 SHALL INCLUDE THE FOLLOWING:
    - 1.1.1)1.1. EXCAVATION AND REMOVAL OF UNSUITABLE SUBGRADE SOIL TO A DEPTH OF NOT GREATER THAN THREE FEET (3') BELOW FINISH GRADE.
    - 1.1.1)1.2. PROOFING #1 AND #2 CRUSHED AGGREGATE.
    - 1.1.1)1.3. INSTALLING AND COMPACTING #1 AND #2 AGGREGATE.
    - 1.1.1)1.4. CHECKING THE SURFACE OF THE #1 AND #2 AGGREGATE WITH FOUR INCH (4") THICK LAYER OF #304 CRUSHED AGGREGATE ROLLED FOR COMPACTION.
    - 1.1.1)1.5. ALL LABOR, MATERIAL, AND EQUIPMENT COMPLETE IN PLACE.
    - 1.1.1)1.6. DISPOSAL OF UNSUITABLE SOIL, SURPLUS MATERIAL AND DEBRIS TO OFF-SITE LOCATION.
    - 1.1.1)1.7. THE VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL SHALL BE DETERMINED BY AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER AND/OR ARCHITECT.
    - 1.1.1)1.8. UNIT PRICE SHALL BE PER CUBIC YARD AS DETERMINED BY PROJECT GEOTECHNICAL ENGINEER AND/OR ARCHITECT
  - 1.1.1)2. UNIT PRICE QUOTE SHALL BE PER CUBIC YARD, AN ESTIMATED VOLUME OF 50 CUBIC YARDS SHALL BE USED TO DETERMINE THE PRICE QUOTE. PAYMENT OF THIS ITEM SHALL BE AT THE UNIT PRICE QUOTE TIMES THE ACTUAL VOLUME IN CUBIC YARDS OF UNSUITABLE SUBGRADE SOIL.
2. ALL UNDERCUTS OVER (25) C.Y. SHALL BE REVIEWED BY CIVIL ENGINEER PRIOR TO REMEDIATION. A CALL SHOULD BE MADE WITH BOTH THE CONTRACTOR, GEOTECHNICAL TESTING COMPANY AND LEWIS LAND PROFESSIONALS THE DAY THE UNDERCUT IS IDENTIFIED.
3. ALL UNDERCUTS SHALL BE SUMMARIZED FOR THE WEEK AND EMAILED TO THE AE TEAM ON FRIDAY BY SPM WITH UPDATED COSTS, NOTING NEW COSTS FOR THE WEEK AND THE TOTAL FOR THE PROJECT.
4. NO UNDERCUTTING WILL BE PERMITTED WITHOUT DIRECT OBSERVATION BY THE GEOTECHNICAL TESTING COMPANY. VOLUME OF UNDERCUT SHALL BE RECORDED BY THE GEOTECHNICAL TESTING COMPANY AND IDENTIFIED ON EACH DAY'S REPORT, INCLUDING A SUMMARY OF TOTAL UNDERCUT FOR THE DAY AND TOTAL UNDERCUT FOR THE PROJECT.
5. CONTRACTOR TO NOTIFY DESIGN TEAM OF PROOF ROLLS WITH A 48 HOUR MIN. NOTICE.

**DISPOSAL OF EXCESS OR UNSUITABLE MATERIALS**

THE SITE CONTRACTOR SHALL DISPOSE OF ANY EXCESS, UNSUITABLE AND/OR UNUSABLE MATERIALS RESULTING FROM THE COMPLETION OF THIS PROJECT AND/OR ANY RESPECTIVE PHASES OF THIS PROJECT (INCLUDING ANY AND ALL DEMOLITION ITEMS). EACH CONTRACTOR SHALL PROVIDE WRITTEN VERIFICATION IDENTIFYING THE LOCATION AND ASSOCIATED APPROVALS FOR THE PLACEMENT OF THE MATERIAL FROM THIS PROJECT. EACH CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL CLAIMS RESULTING FROM THE PLACEMENT/DISPOSAL OF EXCESS, UNSUITABLE, AND/OR UNUSABLE MATERIALS ONTO OTHER PROPERTIES, INCLUDING BUT NOT LIMITED TO ENVIRONMENTAL ISSUES. DISPOSAL OF UNSUITABLE OR EXCESS TOPSOIL, SOIL, OR ROCK, TO AN APPROVED OFF-SITE LOCATION SHALL BE INCLUDED IN THE MASS GRADING/EARTHWORK SCOPE OF WORK.

IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO COORDINATE ALL DEMOLITION ITEMS WITH THE OWNER'S REPRESENTATIVE. THE SITE CONTRACTOR WILL BE EXPECTED TO PROVIDE TICKET QUANTITY INFORMATION IN A FORMAT AGREED UPON BY THE OWNER'S REPRESENTATIVE, AND PROVIDE THE LOCATION OF RECYCLING OR DISPOSAL, REGULAR MONTHLY MEETINGS SHOULD REVIEW SUBMITTALS, RECORDS, TICKET ITEMS, AND DISCREPANCIES IN A TIMELY MANNER.

**DUST CONTROL**

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO PROPERLY CONTROL DUST FROM THE PROJECT SITE AS NECESSARY/REQUIRED TO MAINTAIN SAFE VISIBILITY WITHIN AND/OR ADJACENT TO THE SITE, AND AVOID IMPACT ON DAILY OPERATIONS. METHODS FOR DUST CONTROL MUST BE APPROVED BY THE ENGINEER AND OWNER. DUST CONTROL MEASURES SHALL BE INCLUDED IN THE MASS GRADING & EARTHWORK SCOPE OF WORK.

**EXAMINATION OF SITE**

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO CLOSELY EXAMINE THE PROJECT SITE AND ALL ADJACENT AREAS AND APPRAISE HIMSELF OF ANY ITEMS AND/OR CONDITIONS THAT COULD AFFECT HIS/HER BID AND/OR ABILITY TO COMPLETE THE PROPOSED IMPROVEMENTS. EACH CONTRACTOR SHALL COMPLETE A SITE VISIT/INSPECTION PRIOR TO SUBMITTING A PROPOSAL OR BID.

**FINAL SEEDING**

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED BY SEEDING, FERTILIZING, MULCHING, ETC. IN ACCORDANCE WITH THE SEEDING DETAILS AND SPECIFICATIONS.

**MAINTAINING TRAFFIC**

THE SITE CONTRACTOR SHALL SAFELY AND PROPERLY MAINTAIN TRAFFIC ADJACENT TO, THROUGH, AND ALONG THE PROJECT ROUTES/SITE. EACH CONTRACTOR SHALL FURNISH AND MAINTAIN ALL SIGNS, FLAGS, FLAG MEN, BARRICADES, CONES, BARRELS AND INCIDENTALS NECESSARY TO SAFELY MAINTAIN TRAFFIC. ALL OPEN TRENCHES AND EXCAVATIONS SHALL BE PROTECTED WITH DRUMS, BARRICADES, BARRIERS, ETC. ACCESS SHALL BE MAINTAINED AT ALL TIMES.

**VERIFICATION OF UNDERGROUND UTILITIES**

THE SITE CONTRACTOR SHALL VERIFY THE EXISTENCE AND ACTUAL LOCATION (ALIGNMENT AND ELEVATION) OF THE EXISTING UTILITIES FOR THE PROJECT PRIOR TO ORDERING MATERIALS OR BEGINNING WORK. CONTRACTOR SHALL VERIFY CRITICAL UTILITY CROSSINGS WHICH COULD EFFECT THE COMPLETION OF THE IMPROVEMENTS. THIS WILL LIKELY REQUIRE EXPLORATORY EXCAVATIONS TO BE PERFORMED BY EACH CONTRACTOR FOR WHICH HE WILL NOT BE DIRECTLY REIMBURSED. WHERE A PROPOSED CONDUIT TO BE CONNECTED TO OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, EACH CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES (LINE AND GRADE) BEFORE STARTING TO INSTALL THE PROPOSED CONDUIT. ANY CONFLICTS AND/OR DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THE APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND/OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION.

**UTILITY NOTIFICATION**

AT LEAST 72 HOURS PRIOR TO COMMENCING WORK ON THIS PROJECT THE CONTRACTOR(S) SHALL NOTIFY THE CITY OF LORAIN UTILITY DEPARTMENT AND THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE TO BEGIN CONSTRUCTION ACTIVITY ON THIS PROJECT. PROOF OF SUCH NOTIFICATION SHALL BE FILED WITH THE PROJECT ENGINEER. THE MARKING AND/OR LOCATION OF EXISTING UTILITIES SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION. OHIO UTILITIES PROTECTION SERVICE: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY).

**STORM SEWER**

ALL PROPOSED STORM SEWER SHALL MEET THE REQUIREMENTS OF THE WRITTEN SPECIFICATIONS. STORM SEWER PIPE MATERIALS SHALL MEET THE REQUIREMENTS OF ODOT 707.45 (SMOOTH LINED CORRUGATED POLYETHYLENE) OR REINFORCED CONCRETE CIRCULAR PIPE PER ODOT 706.02 UNLESS OTHERWISE DENOTED ON PLANS.

ALL BUILDING DOWNSPOUT LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC) SDR-35 MEETING THE REQUIREMENTS OF ODOT 707.45. STANDARD BENDS AND FITTINGS SHALL BE USED FOR CHANGES IN DIRECTION AND/OR ELEVATION.

AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLETE (70+% VEGETATIVE COVER ESTABLISHED), THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS TO PROVE THE STORM SEWERS ARE CLEAR OF ANY SEDIMENT, TRASH OR DEBRIS. EACH STORM RUN MUST BE INSPECTED IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET-VAC PROCESS RECOMMENDED BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF

THE STORM SEWERS, AT NO ADDITIONAL COST TO THE PROJECT, ANY STRUCTURAL DEFICIENCIES NOTED IN THE PERFORMANCE REPORTS MUST BE REMEDIATED IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS PRIOR TO ACCEPTANCE.

**RESTORATION OF DISTURBED AREAS**

EXISTING DRIVES, PAVEMENT, SIGNS, LIGHT POLES AND OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL/REPLACEMENT SHALL BE RESTORED TO A CONDITION EQUAL TO THAT WHICH EXISTED PRIOR TO CONSTRUCTION AND TO COMPLETE SATISFACTION OF THE TOWNSHIP.

**PROTECTION OF UTILITIES**

THE SITE CONTRACTOR MUST PROTECT AND SUPPORT ANY EXISTING UTILITIES WITHIN OR ADJACENT TO THE PROJECT AREA. UTILITIES MUST BE KEPT IN SERVICE AT ALL TIMES.

**PROOF ROLLING**

PROOF ROLLING SHALL BE PERFORMED ON THE PREPARED COMPACTED SUBGRADE OF THE PROPOSED PARKING AREAS AND DRIVE AREAS PRIOR TO PLACEMENT OF ANY PAVEMENT BASE MATERIAL OR STAGING AGGREGATE. THE PROOF ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE SITE GEOTECHNICAL ENGINEER USING A FULLY LOADED TANDEM AXLE DUMP TRUCK OR VIA OTHER APPROVED MEANS. THE PROOF ROLLING OPERATION SHALL COVER THE ENTIRE WIDTH AND LENGTH OF THE PROPOSED AREAS. THE PURPOSE OF THIS PROCEDURE IS TO DETECT SOFT, YIELDING, CONTAMINATED AND/OR UNSTABLE ZONES WITHIN THE SUBGRADE. ANY SUCH ZONES THAT ARE FOUND SHALL BE CORRECTED. THE UNSATISFACTORY AREAS SHALL BE UNDERCUT AND REPLACED WITH CLEAN APPROVED MATERIAL, OR OTHERWISE STABILIZED/CORRECTED AS APPROVED/DIRECTED BY THE GEOTECHNICAL ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE TO THE CONTRACTOR FOR CORRECTION OF UNSUITABLE AREAS.

PROOF ROLLING SHALL ALSO BE PERFORMED AS SPECIFIED ABOVE ON ALL AREAS/SURFACES UPON WHICH EMBANKMENTS ARE TO BE CONSTRUCTED PRIOR TO THE PLACEMENT OF ANY EMBANKMENT/FILL.

**PROJECT SAFETY**

EACH CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL FOLLOW ALL THE O.S.H.A. REGULATIONS REGARDING OPEN TRENCHES AND EXCAVATIONS (TRENCH SAFETY), ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERRECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE. ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY OR PROPERLY SECURED AS APPROVED BY THE ENGINEER. AT NO TIME SHALL ANY PERSONNEL ENTER EXISTING STRUCTURES/CHAMBERS WITHOUT PROPER SAFETY EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR PACKS, AIR MONITORS, AND/OR AIR SENSORS, BODY HARNESS WITH POSITIVE MEANS OF RESCUING A PERSON FROM THE STRUCTURE/CHAMBER. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. REQUIREMENTS INCLUDING THOSE SPECIFIED FOR ENTERING CONFINED SPACES.

**UTILITY NOTES:**

1. ALL KNOWN UTILITIES HAVE BEEN SHOWN ON THE PLANS. EACH CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. ALERT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATING IS INITIATED. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND ADJACENT PROPERTIES FOR INDICATIONS OF POSSIBLE EXISTING UNDERGROUND NATURAL GAS PIPE LINES WHICH MAY CROSS THROUGH THE SUBJECT SITE. THE CONTRACTOR SHALL NOTIFY THE ENGINEERS IF ANY SUCH EVIDENCE OF EXISTING PIPELINES ARE FOUND.
2. ALL UTILITIES INCLUDING WATER LINES AND SANITARY AND STORM SEWERS, SHALL BE CONSTRUCTED, INSPECTED, AND TESTED IN ACCORDANCE WITH THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) AND THE CITY OF LORAIN STANDARDS AND REGULATIONS. THE CITY OF LORAIN SHALL BE NOTICED A MINIMUM OF 24 HOURS IN ADVANCE FOR SCHEDULING OF AN INSPECTOR.
3. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.
4. TRENCHES FOR THE UTILITIES UNDER PAVEMENT SHALL BE BACKFILLED TO THE PAVEMENT SUBBASE WITH ODOT ITEM 304 LIMESTONE AGGREGATE TO REDUCE SETTLEMENT. THE EXISTING PAVEMENT SHALL BE NEATLY SAW-CUT PRIOR TO REMOVAL, AND BE REPLACED IN ACCORDANCE WITH THE DRAWING DETAILS.
5. ALL OPEN TRENCHES SHALL BE TEMPORARILY BACKFILLED OVERNIGHT, OR INSTALL TEMPORARY FENCING AND/OR STEEL PLATES WITH THE APPROVAL OF THE OWNER OR HIS REPRESENTATIVE.
6. LENGTHS OF PIPE SHOWN ON THIS DRAWING ARE APPROXIMATE. FIELD VERIFY AND PROVIDE EXACT LENGTHS REQUIRED.
7. THE MINIMUM VERTICAL CLEARANCE BETWEEN UTILITIES AT ALL CROSSINGS IS 6" FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. EXCEPT AS NOTED BELOW. MAINTAIN THE FOLLOWING CLEARANCES AT SEWER/WATER CROSSINGS. SANITARY SEWER: 18" VERTICAL, 10' HORIZONTAL. STORM SEWER: 18" VERTICAL, 10' HORIZONTAL.
8. TRANSITIONS BETWEEN DISSIMILAR SEWER PIPE MATERIALS SHALL BE WITH APPROPRIATE COMPRESSION STYLE FERROUS FITTINGS.
9. SANITARY AND STORM SEWER PRESSURE TEST IN ACCORDANCE WITH ASTM F-1417 AND MANUFACTURER'S RECOMMENDATIONS, DEPENDING ON SIZE OF PIPE.
10. SANITARY AND STORM SEWER DEFLECTION TEST IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MAXIMUM PERMISSIBLE DEFLECTION 5.0%.

**GENERAL NOTES:**

1. THE SITE CONTRACTOR IS FULLY RESPONSIBLE FOR SOIL SEDIMENT POLLUTION FROM THE SITE AND THE PROPER PLACEMENT AND MAINTENANCE OF EROSION CONTROL ITEMS IN ACCORDANCE WITH STANDARD CONSTRUCTION PRACTICE (REFER TO EROSION CONTROL DETAILS).
2. OWNER AND CONTRACTOR SHALL COMPLY WITH THE CITY OF LORAIN CONSTRUCTION STANDARDS AND SPECIFICATIONS DURING CONSTRUCTION. ADDITIONAL CONTROLS SHALL BE PROVIDED AS NECESSARY, OR AS DIRECTED BY THE PROJECT ENGINEER AT NO ADDITIONAL COST TO THE PROJECT.
3. CITY INSPECTION IS REQUIRED FOR ALL WORK WITHIN THE STREET RIGHT OF WAY. CITY INSPECTION IS REQUIRED FOR WORK RELATED TO SANITARY SEWER, STORM SEWER, WATERMAIN & STORM WATER POLLUTION PROTECTION.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LORAIN 72 HOURS PRIOR TO WORK REQUIRING INSPECTION.
5. ALL CULVERTS, DITCHES, PAVEMENT, DRIVEWAYS, SHRUBS, SIGNS, FENCES, AND ANY OTHER PROPERTY OR EXISTING IMPROVEMENTS, EITHER PUBLIC OR PRIVATE, WHICH IS DAMAGED AS A RESULT OF THE WORK BY ANY CONTRACTOR SHALL BE RESTORED AND/OR REPLACED BY THE RESPECTIVE CONTRACTOR IN ACCORDANCE WITH CITY AND COUNTY SPECIFICATIONS. ANY DAMAGE TO EXISTING PROPERTY MARKERS AND MONUMENTS DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A REGISTERED SURVEYOR AT THE COST OF THE RESPECTIVE CONTRACTOR.

**AS-BUILT DRAWING REQUIREMENTS**

1. THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS FOR ALL SITE WORK IMPROVEMENTS UPON COMPLETION OF THE SITE WORK. FIELD MEASUREMENTS SHALL BE PERFORMED BY AND STAMPED BY A LICENSED SURVEYOR/ENGINEER. AS-BUILT DRAWINGS SHALL INCLUDE STORM SEWERS, SITE UTILITIES, WATER DISTRIBUTION SYSTEM, SANITARY SEWER SYSTEM, GRADING, BUILDING PAD, FINISH FLOOR, DETENTION BASIN, VOLUME & DISCHARGE RATE CERTIFICATION, OVERLAND FLOOD ROUTES & OTHER CRITICAL FEATURES. AS-BUILT DETENTION ROUTING CALCULATIONS ARE REQUIRED!
2. GENERAL REQUIREMENTS - ANY STRUCTURE - MANHOLE, VALVE, HYDRANT, ETC. THAT VARIES MORE THAN 2" HORIZONTALLY OR MORE THAN 2" VERTICALLY SHALL BE RE-DRAWN ON THE DRAWINGS AT THE AS-BUILT LOCATIONS.
3. FINAL AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE CITY ON PAPER SHOWING THE PROJECT TITLE, REVISED DATED, SURVEYOR/ENGINEER COMPANY NAME AND BEING LABELED "RECORD DRAWING" IN BOLD PRINT ON EACH SHEET. ALL AS-BUILT DRAWINGS SHALL BE COMPLETED ON EACH ENGINEERING PLAN SHEET. THE CREATION OF NEW SHEETS SOLELY FOR THE PURPOSE OF AN AS-BUILT SURVEY WILL NOT BE ACCEPTED.
4. FINAL AS-BUILT DRAWINGS SHALL ALSO BE SUBMITTED TO THE OWNER AND PROJECT ENGINEER IN AN ELECTRONIC AUTODESK AUTOCAD CIVIL 3D COMPATIBLE FILE, WHICH SHALL INCLUDE ALL SURFACES, CONTOURS, AS-BUILT STRUCTURES AND PIPES, AND ALL AS-BUILT SURVEY POINTS LOCATED.
5. SANITARY SEWER - SHOW AS-BUILT LOCATIONS OF ALL MANHOLES, CLEANOUTS, AND LATERAL LINES, RE-DRAW WHERE NECESSARY ON PLAN AND/OR PROFILE SHEETS. SHOW NEW LENGTHS AND GRADE PERCENTAGES - CROSS OUT THE ORIGINAL NUMBERS. MANHOLES SHALL SHOW THE AS-BUILT RIM AND INVERT ELEVATIONS INCLUDING ELEVATIONS OF DROPS INSIDE THE MANHOLE. RIM ELEVATIONS MUST BE DONE AFTER FINAL FIELD ADJUSTMENTS HAVE BEEN MADE. VERIFY THAT SANITARY SEWER LOCATIONS WILL FIT WITH ANY PROPOSED EASEMENTS IN AREAS OUTSIDE OF STREET R/W'S.

6. DETENTION BASINS AND/OR UNDERGROUND STORM WATER MANAGEMENT CHAMBER SYSTEMS - SHOW AS-BUILT LOCATIONS OF ALL DETENTION BASIN STRUCTURES INCLUDING ALL INLET AND OUTLET PIPE AND ORIFICE SIZES AND INVERT ELEVATIONS, DETENTION BASIN GRADING INCLUDING FOREBAYS, MICROPOOLS, EMERGENCY SPILLWAY, TOP OF EMBANKMENT AND BASIN SIDE SLOPES SHALL BE AS-BUILT SURVEYED TO VERIFY CONFORMANCE TO PLAN DOCUMENTS. THE AS-BUILT SURVEY SHALL BE SUBMITTED TO THE DESIGN ENGINEER TO VERIFY AND CONFIRM THAT ALL STORM WATER MANAGEMENT SYSTEM DESIGN REQUIREMENTS PER PLAN (OUTLETS, STORAGE VOLUMES AND WATER SURFACE ELEVATIONS) ARE SATISFIED BEFORE FINAL ACCEPTANCE. CONTRACTOR SHALL PROVIDE COMPLETE ASBUILT VOLUME AND ASBUILT ROUTING CALCULATIONS. IF THE DESIGN ENGINEER DETERMINES THAT THE BASIN OUTFLOW DISCHARGE RATES, AND OR DETENTION VOLUME ARE NOT IN CONFORMANCE WITH THE APPROVED DESIGN DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE CORRECTIONS TO THE GRADING, OUTLET STRUCTURE(S), STORM SEWER(S), OVERFLOW WEIR(S), FOREBAYS), MICROPOOL(S) AND ANY OTHER RELATED ITEMS INCLUDING ADDITIONAL ASBUILT DATA, AT NO ADDITIONAL COST TO THE PROJECT, UNTIL SAID DESIGN ENGINEER APPROVES THE CONSTRUCTED STORM WATER MANAGEMENT SYSTEM.

7. AS-BUILT DETENTION ROUTING CALCULATIONS ARE REQUIRED! THE AS-BUILT ROUTING CALCULATIONS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE PROJECT ENGINEER FOR REVIEW. ALL CALCULATIONS SHALL INCLUDE PRE-DEVELOPED & POST-DEVELOPED RUNOFF CONDITIONS, WATER QUALITY VOLUME DRAWDOWN CALCULATIONS IN ACCORDANCE WITH THE OHIO EPA GENERAL CONSTRUCTION PERMIT (GCD0000S, AS-BUILT DETENTION BASIN RELEASE RATES AND PEAK STORAGE ELEVATIONS, BASED ON THE AS-BUILT POND VOLUME AND OUTLET STRUCTURE(S).

8. AT THE END OF THE PROJECT, AFTER FINAL SITE STABILIZATION IS COMPLETE (70+% VEGETATIVE COVER ESTABLISHED), THE CONTRACTOR SHALL SUBMIT VIDEO EVIDENCE OF ALL STORM SEWERS AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEMS (IF APPLICABLE) TO PROVE THE STORM SEWERS AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEMS ARE CLEAR OF ANY SEDIMENT, TRASH OR DEBRIS. EACH STORM RUN AND UNDERGROUND STORMWATER MANAGEMENT CHAMBER SYSTEM RUN (IF APPLICABLE) SHALL BE INSPECTED, IN ACCORDANCE WITH ODOT 611.12 REQUIREMENTS AND A PERFORMANCE REPORT SHALL BE SUBMITTED ALONG WITH THE VIDEO FILES FOR REVIEW IN ACCORDANCE WITH ODOT 611.04 D. IF ANY SEDIMENT, TRASH OR DEBRIS IS PRESENT, THE CONTRACTOR SHALL CLEAN THE STORM SEWERS USING THE JET-VAC PROCESS RECOMMENDED BY THE MANUFACTURE AND RESUBMIT NEW VIDEO EVIDENCE AND PERFORMANCE REPORT OF THE STORM SEWERS, AT NO ADDITIONAL COST TO THE PROJECT.

9. IN THE EVENT THE CONTRACTOR FAILS TO PRODUCE ADEQUATE CLOSE OUT DOCUMENTS INCLUDING ASBUILTS AND VIDEO INSPECTION, THE DESIGN TEAM RESERVES THE RIGHT TO PERFORM AND/OR SUBCONTRACT THE REQUIRED SERVICES REQUIRED TO PROVE THE PROJECT TO THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST PLUS TEN PERCENT (10%) THE FEES ASSOCIATED WITH ACQUIRING THE REQUIRED DOCUMENTS.

**AGGREGATE BASE AND BACKFILL**

1. AGGREGATE SIZE, GRADATION, THICKNESS AND COMPACTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND PROJECT GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS. RECYCLED #304 CONCRETE AGGREGATE IS NOT PERMITTED FOR USE ON THIS PROJECT. IN CASE OF CONFLICT BETWEEN THE SPECIFICATIONS AND THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS THE GEOTECHNICAL ENGINEER'S REPORTS, REQUIREMENTS, AND RECOMMENDATIONS SHALL GOVERN.

**EXCAVATION AND TRENCHING SAFETY:**


1. IN FEDERAL REGISTER, VOLUME 54, NO. 209 (OCTOBER, 1989), THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AMENDED ITS "CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR, PART 1926, SUBPART P" TO MANDATE THAT ALL EXCAVATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW OSHA GUIDELINES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, BASEMENT EXCAVATIONS OR FOUNDATIONS EXCAVATIONS. THE OSHA GUIDELINES SHALL BE FOLLOWED CLOSELY, AND STRICTLY ENFORCED.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND CONSTRUCTING A STABLE, TEMPORARY EXCAVATIONS AND SHOULD SHORE, SLOPE OR BENCH THE SIDES OF THE EXCAVATIONS AS REQUIRED TO MAINTAIN STABILITY OF BOTH THE EXCAVATION SIDES AND BOTTOM.
3. THE CONTRACTOR'S "RESPONSIBLE PERSON" AS DEFINED IN "CFR PART 1926" SHOULD EVALUATE THE SOIL EXPOSED IN THE EXCAVATIONS AS PART OF THE CONTRACTOR'S SAFETY PROCEDURES. IN NO CASE SHOULD SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING UTILITY TRENCH EXCAVATION DEPTH, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
4. LEWIS LAND PROFESSIONALS, INC. DOES NOT ASSUME RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY OR THE CONTRACTOR'S ACTIVITIES. SUCH RESPONSIBILITY IS NOT BEING IMPLIED AND SHOULD NOT BE INFERRED.
5. SOILS ENCOUNTERED MAY BE SENSITIVE TO DISTURBANCES CAUSED BY CONSTRUCTION TRAFFIC AND TO CHANGES IN MOISTURE CONTENT. WET WEATHER PERIODS CAN INCREASE THE MOISTURE CONTENT AND CAUSE A SIGNIFICANT REDUCTION IN THE STRENGTH AND SUPPORT CAPABILITIES OF THE SOILS. THE CONTRACTOR SHALL USE CARE DURING THE GRADING OPERATIONS. THE CONTRACTOR SHALL SLOPE ALL BUILDING PADS AND PAVEMENT SUBGRADES TO MAINTAIN POSITIVE DRAINAGE AND PREVENT LOCAL PONDING OF RUNOFF WATER.
6. THE TRAFFIC OF HEAVY EQUIPMENT, INCLUDING COMPACTION EQUIPMENT, MAY CREATE PUMPING AND DETIORATION OF THE SOILS. TAKE CARE IN THE PRESENCE OF WATER. THE CONTRACTOR SHALL USE CAUTION WHILE GRADING IN THE WET SEASON, AND IF POSSIBLE, PERFORM ALL GRADING OPERATIONS DURING A DRY SEASON.

**EARTHWORK NOTES**

1. CONTRACTOR SHALL PERFORM AN EARTHWORK CUT/FILL ANALYSIS DURING THE PROJECT PRICE QUOTE PROCESS & SHALL NOTE ANY IMPORT AND/OR EXPORTING OF SOIL NECESSARY TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON THE PLANS AND ALL ASSOCIATED COSTS FOR IMPORTING AND/OR EXPORTING SOILS, PRIOR TO ANY SITE GRADING.
2. CONTRACTOR SHALL IMPORT/EXPORT SUITABLE SOIL TO ACHIEVE THE PROPOSED ELEVATIONS SHOWN ON GRADING PLANS. CHANGE ORDERS WILL NOT BE PERMITTED FOR ANY CONTRACTORS THAT DO NOT PERFORM THEIR OWN EARTHWORK CALCULATIONS PRIOR TO SUBMITTING A BID.

— PLAN PREPARED BY —

**LEWIS LAND PROFESSIONALS INC.**



CIVIL ENGINEERING LAND SURVEYING  
8691 WADSWORTH ROAD SUITE 100  
WADSWORTH, OH 44281 (330) 335-8232

PROJECT:

**STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**

TITLE:

**GENERAL NOTES**

TWO WORKING DAYS BEFORE YOU DIG

Call 1-800-362-2764

TOLL FREE

Outside Ohio 216-744-5191

OHIO UTILITIES PROTECTION SERVICE

SCALES:

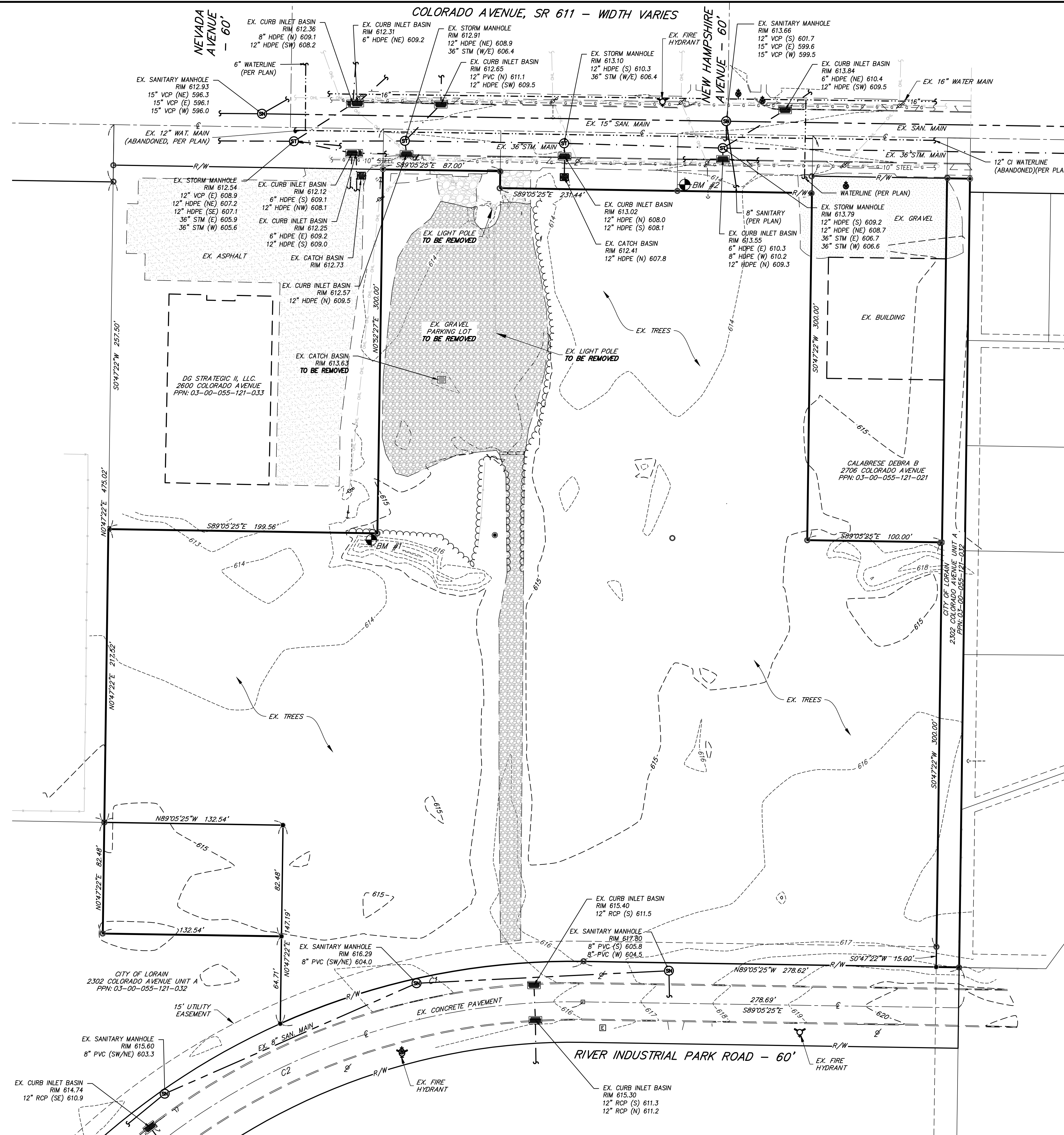
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25-344 TITLE.dwg

NPDES PERMIT NUMBER:

**3GC16881\*AG**

REVISION TABLE				DATE:
				4/8/2026
				PROJECT NUMBER:
2	4/9/26	FINAL CIVIL SITE PLAN	MBK	25-344
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK	SHEET NUMBER:
NO.	DATE	DESCRIPTION	BY	2 of 11

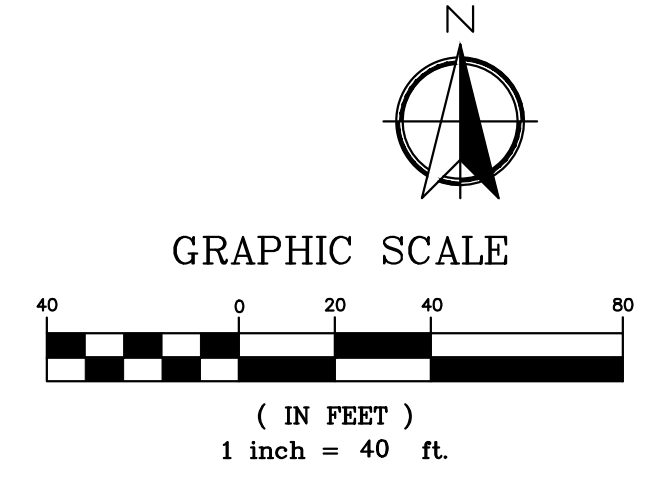


**LEGEND**

- CATCH BASIN
- CURB INLET BASIN
- ELECTRIC BOX
- GUY WIRE
- HYDRANT
- LIGHT POLE
- SANITARY MANHOLE
- STORM MANHOLE
- UTILITY POLE
- WATER VALVE
- IRON PIN SET
- IRON PIN FOUND
- IRON PIPE FOUND

**SURVEY NOTE:**  
 EXISTING CONDITIONS SURVEY INFORMATION IS SHOWN PER A SURVEY PERFORMED BY MCSTEEN LAND SURVEYORS ON 6/18/2023. ADDITIONAL SURVEY INFORMATION WAS OBTAINED BY LEWIS LAND PROFESSIONALS ON 1/7/2026 AT PARCEL: 0300055121020

BENCHMARK #1:  
 IRON PIN "BAYER BECKER"  
 ELEV.=615.59'  
 BENCHMARK #2:  
 5/8" IRON PIN  
 ELEV.=613.67'



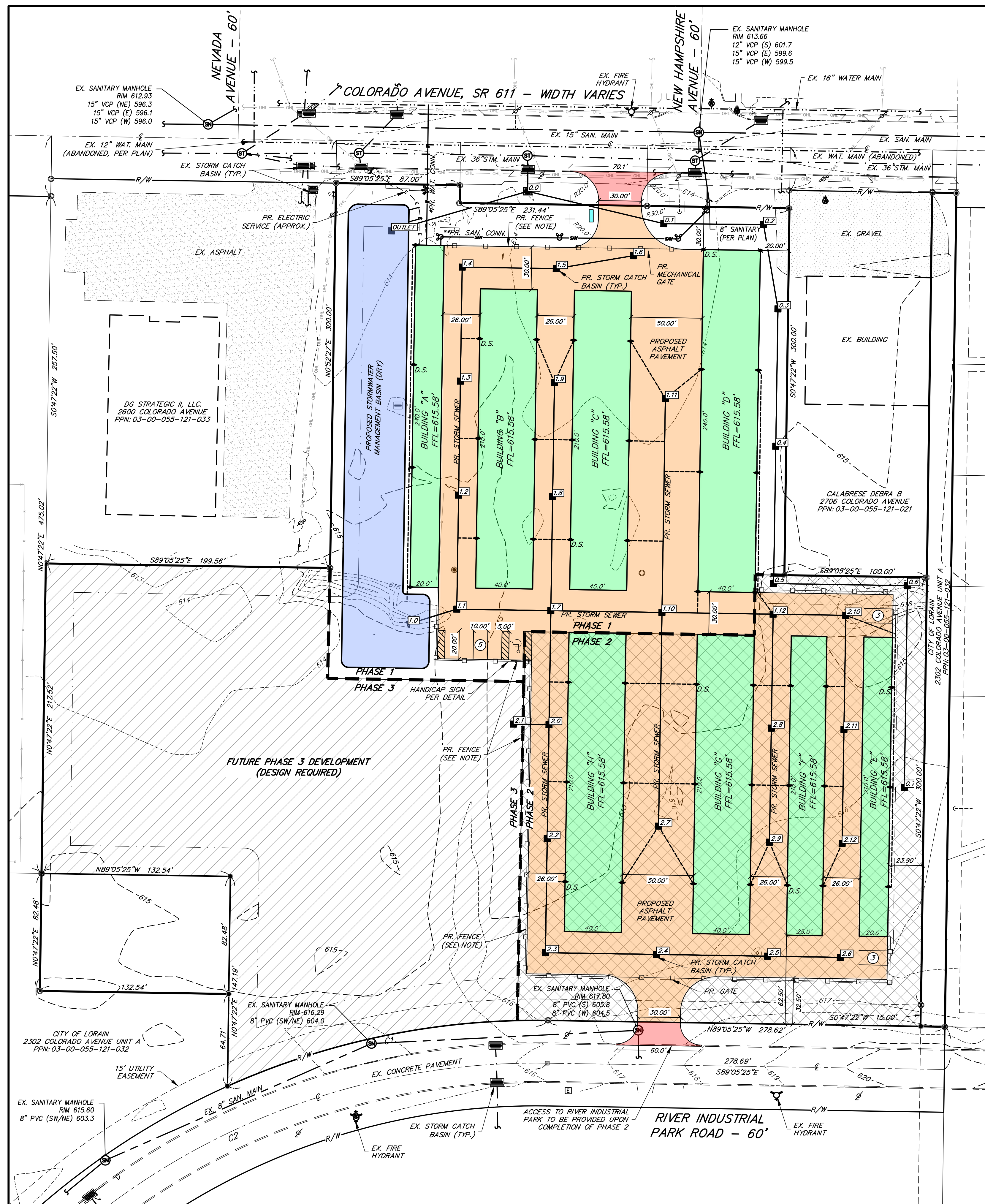
- PLAN PREPARED BY -  
**LEWIS LAND PROFESSIONALS INC.**  
  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

PROJECT: **STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**  
 TITLE: **EXISTING CONDITION AND DEMOLITION PLAN**

TWO WORKING DAYS BEFORE YOU DIG  
 Call 1-800-362-2764  
 TOLL FREE  
 Outside Ohio 216-744-5191  
 OHIO UTILITIES PROTECTION SERVICE

SCALES:  
**1" = 40'**  
 DRAWING FILE:  
 25-344 EXISTING CONDITIONS.dwg  
 NPDES PERMIT NUMBER:  
**JGC16881\*AG**

REVISION TABLE				DATE:
				4/8/2026
				PROJECT NUMBER:
2	4/9/26	FINAL CIVIL SITE PLAN	MBK	25-344
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK	SHEET NUMBER:
NO.	DATE	DESCRIPTION	BY	3 of 11



**OWNER**  
 ROTAR INDUSTRIES LLC  
 2694 EDGEHILL ROAD  
 CLEVELAND HEIGHTS, OH 44106

**CIVIL ENGINEER / SURVEYOR**  
 LEWIS LAND PROFESSIONALS, INC.  
 8691 WADSWORTH ROAD, SUITE 100  
 WADSWORTH, OHIO 44281  
 330-335-8232

**ZONING DATA**  
 ZONING DISTRICT = I-1  
 LIGHT INDUSTRIAL DISTRICT  
 MIN. FRONT YARD BLDG. SETBACK = 30'  
 MIN. SIDE YARD BLDG. SETBACK = 20'  
 MIN. REAR YARD BLDG. SETBACK = 35'  
 MAX. BUILDING HEIGHT = 45'

**SITE DATA**  
 ADDRESS: 2630 COLORADO AVE  
 ACREAGE: 6.17 ACRES  
 PRESENT USE: VACANT WOODED LOT  
 PROPOSED USE: STORAGE UNITS  
 PARCEL ID: 03-00-055-121-025

PHASE 1 - 2.32 ACRES  
 PHASE 2 - 1.88 ACRES  
 PHASE 3 - 1.97 ACRES

PR.=PROPOSED  
 EX.=EXISTING  
 FFL=FINISHED FLOOR  
 D.S.=DOWNSPOUT (TYP.)

**\*WATER CONNECTION NOTE:**  
 PROPOSED 60" WATER SERVICE LATERAL FROM EXISTING MAIN TO PROPOSED WATER SHUT OFF AND 30' FROM WATER SHUT OFF TO PROPOSED BUILDING. MAINTAIN MINIMUM OF 10' OF HORIZONTAL CLEARANCE WHERE WATER LATERAL IS NEAR SANITARY LATERAL. MAINTAIN MINIMUM OF 18" OF VERTICAL CLEARANCE WHERE WATER LATERAL IS NEAR STORM SEWER. WATER LATERAL SHALL HAVE A MINIMUM OF 5' COVER MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED GRADE. INSTALL PER CITY OF LORAIN REQUIREMENTS. CONTRACTOR SHALL VERIFY MAIN LOCATION PRIOR TO CONSTRUCTION.

**\*SANITARY CONNECTION NOTE:**  
 CONTRACTOR SHALL VIDEO INSPECT EXISTING MAIN TO DETERMINE LOCATION, DEPTH, SIZE AND CONDITION OF EXISTING MAIN. PROPOSED 217"-6" SDR35 PVC @ 1.0% MIN. FROM EXISTING 8" LATERAL TO PROPOSED BUILDING. INSTALL CLEANOUTS WITH MAXIMUM SPACING OF 100'. MAINTAIN MINIMUM OF 10' OF HORIZONTAL CLEARANCE WHERE SANITARY LATERAL IS NEAR WATER LATERAL. MAINTAIN MINIMUM OF 18" OF VERTICAL CLEARANCE WHERE SANITARY LATERAL IS NEAR STORM SEWER. SANITARY LATERAL SHALL BE INSTALLED PER CITY OF LORAIN REQUIREMENTS. CONTRACTOR SHALL VERIFY DEPTH, LOCATION, CONDITION AND SIZE PRIOR TO EXCAVATION.

**LEGEND**

- PR. ASPHALT PAVEMENT
- PR. BUILDINGS
- PR. STORMWATER MANAGEMENT BASIN
- PR. SIGN (DESIGN BY OTHERS)
- PHASE 2 (FUTURE PHASE)
- PHASE 3 (DESIGN REQUIRED)
- HANDICAP ACCESSIBLE SPACE
- PARKING SPACES

**TRAFFIC TRIP GENERATION**

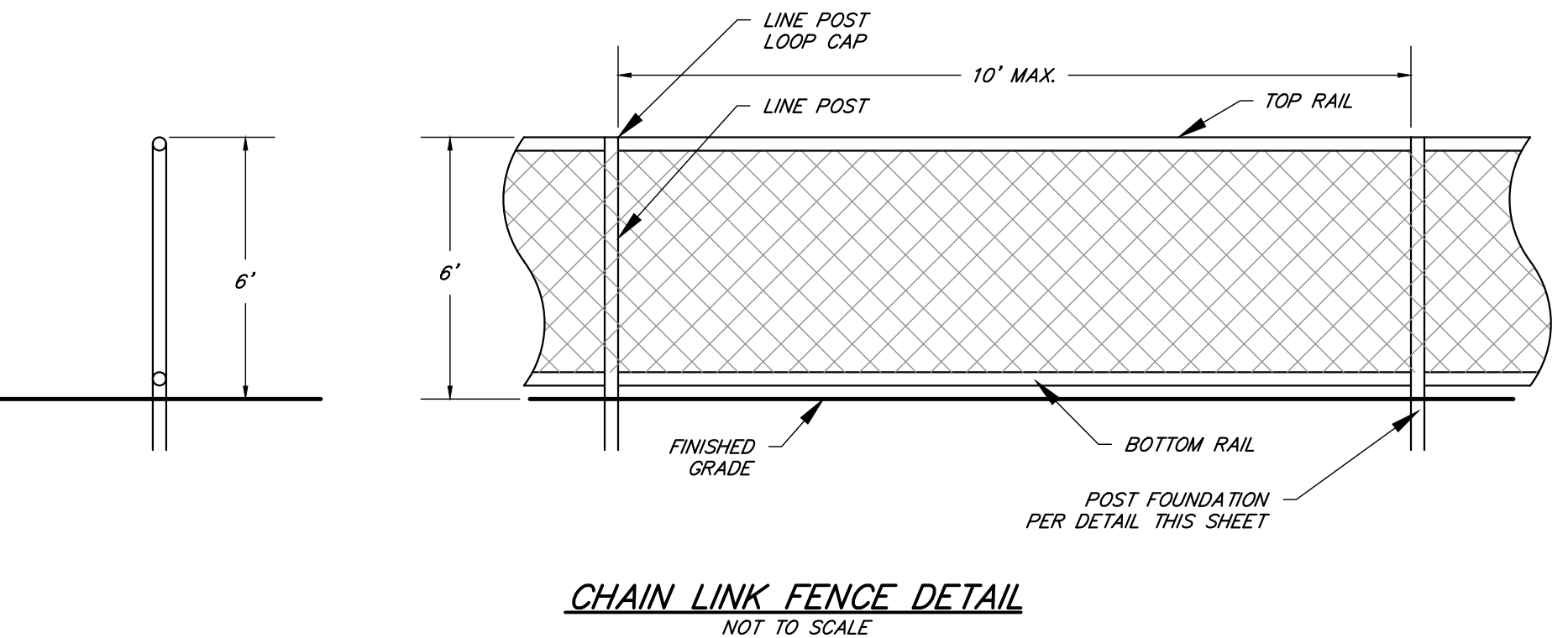
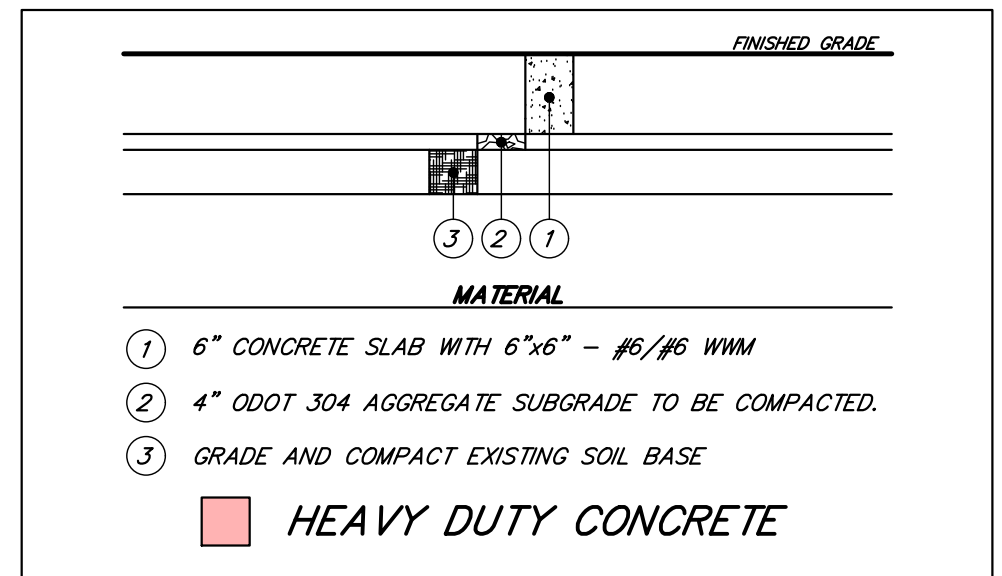
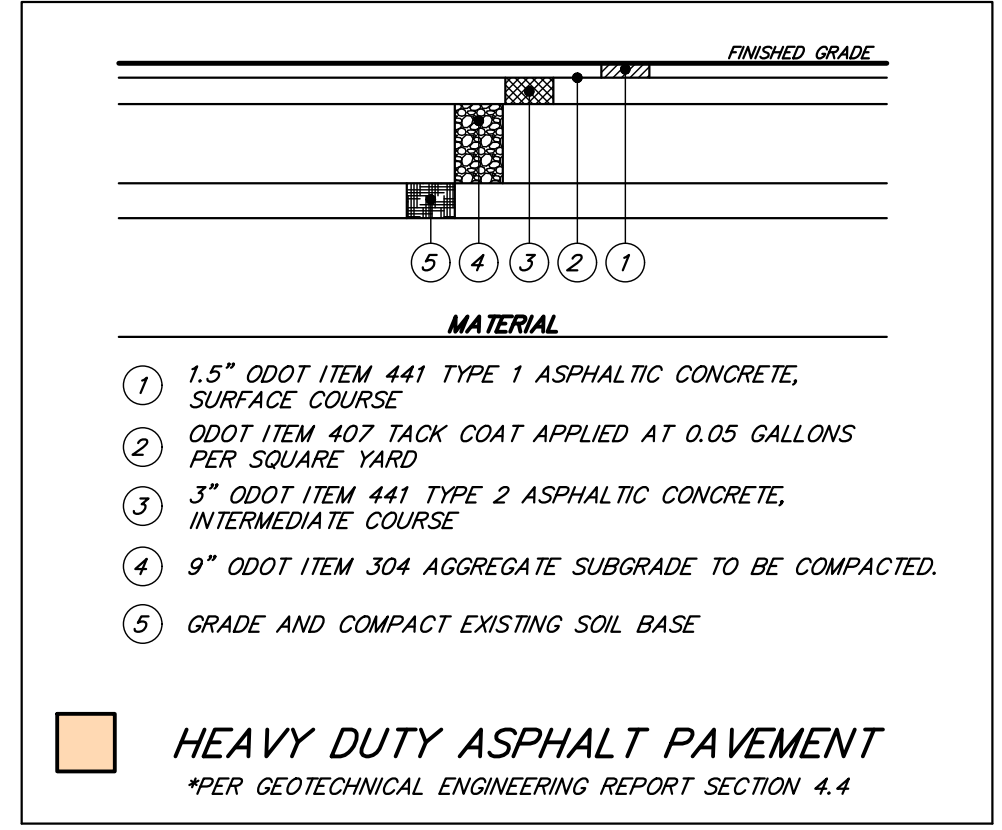
PRINCIPAL USE	AVERAGE VEHICLE TRIP ENDS PER 100 UNITS	SITE
MINI-WAREHOUSE (151) - ITE TRIP GENERATION MANUAL	WEEKDAY - AVERAGE RATE = 17.96	≈ 280 UNITS
	PHASE 1 - 144 UNITS x 17.96 ≈ 26 TRIPS PER DAY	
	PHASE 2 - 150 UNITS x 17.96 ≈ 27 TRIPS PER DAY	
	<b>TOTAL ≈ 294 UNITS x 17.96 ≈ 53 TRIPS PER DAY</b>	

**REQUIRED PARKING (CHAPTER 1149.03)**

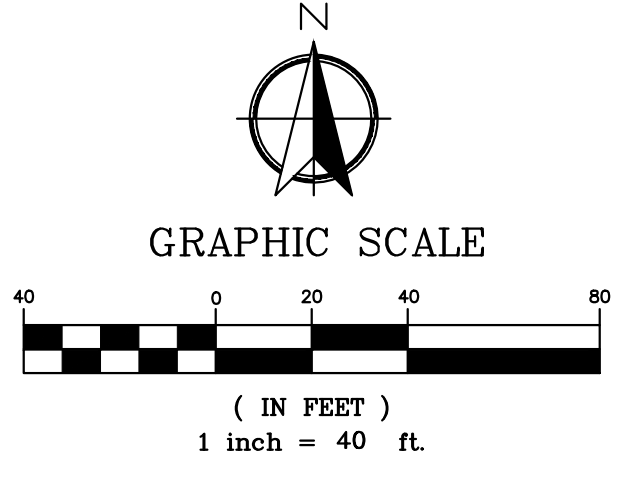
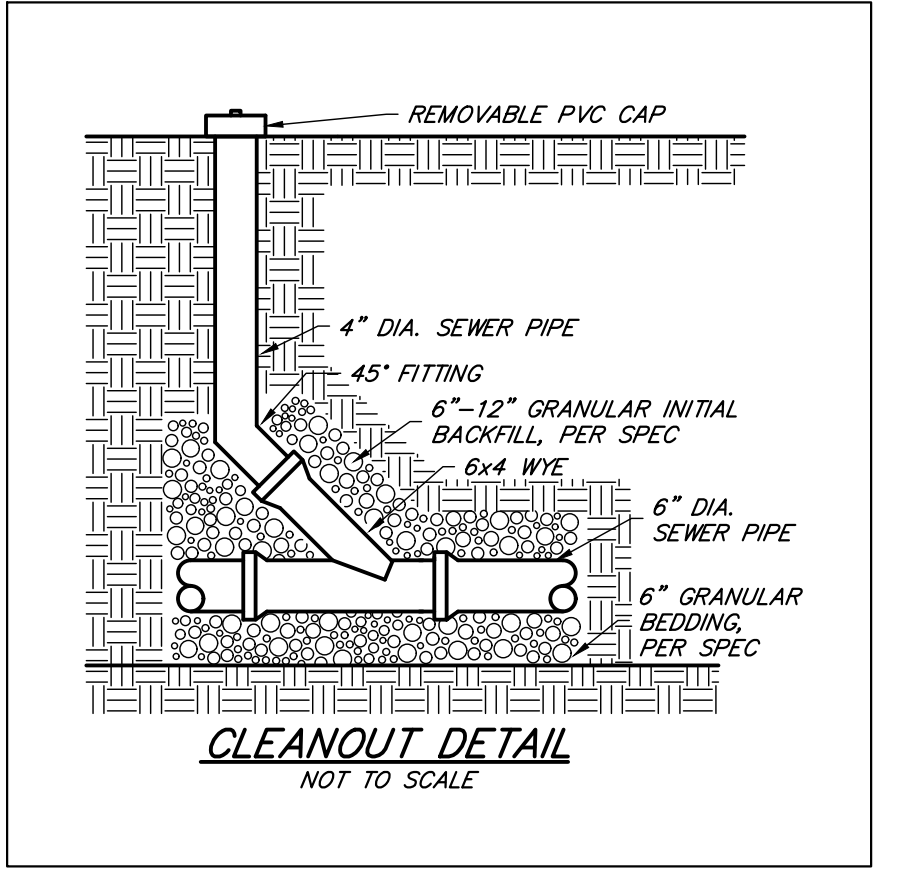
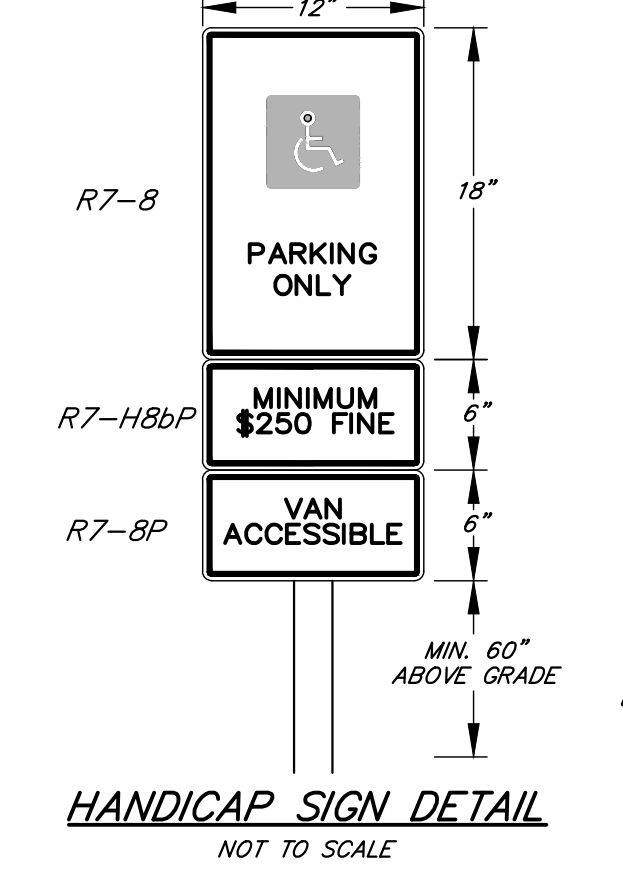
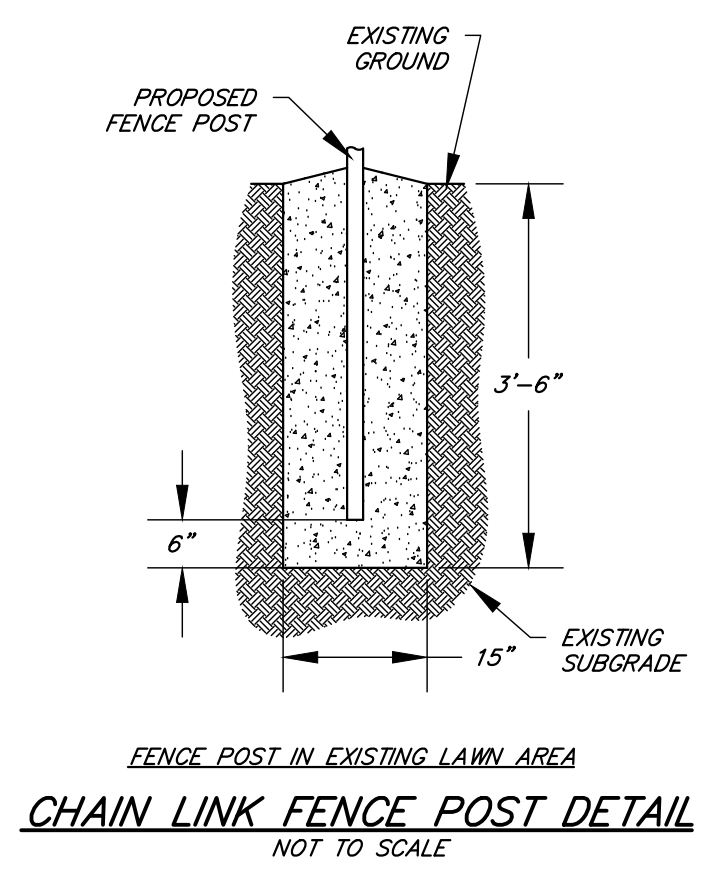
PRINCIPAL USE	PARKING REQUIRED	PARKING PROVIDED
MINI-WAREHOUSE SELF-STORAGE	1 SPACE PER 10 DOOR OPENINGS 1 SPACE PER 50 DOOR OPENINGS (CONDITIONAL USE PERMIT APPROVED)	10 SPACES PROVIDED 1 H/C SPACE
≈ 294 DOORS / 50 = 6 SPACES REQ.		
		<b>GRAND TOTAL: 11 PARKING SPACES</b>

**OVERALL NOTES:**

- LANDSCAPE PLAN TO BE PREPARED BY OTHERS PER CITY OF LORAIN ZONING CODE CHAPTER 1147.
- SIGN DESIGN AND LOCATION TO BE PREPARED BY OTHERS PER CITY OF LORAIN ZONING CODE CHAPTER 1151.
- EXISTING SIDEWALK THAT IS DAMAGED SHALL BE REPLACED OR RESTORED BACK TO ORIGINAL OR BETTER CONDITION UPON COMPLETION OF THE PROJECT.
- LEWIS LAND PROFESSIONALS, INC. (LLP) DOES NOT GUARANTEE THE LOCATION OF UTILITIES SHOWN AS LLP DOES NOT PERFORM SUBSURFACE INVESTIGATIONS FOR UNDERGROUND UTILITIES OR STRUCTURES. ALL UTILITIES ARE SHOWN PER OUPS FIELD MARKINGS FOUND ON SITE AT TIME OF TOPOGRAPHIC SURVEY OR PER PLANS PROVIDED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION OF CONNECTIONS PRIOR TO EXCAVATION.
- DIMENSIONS TO PROPERTY LINES ARE SHOWN TO FOUNDATION WALL ONLY AND DO NOT INCLUDE OVERHANGS OR FOOTER LOCATIONS.



**FENCE NOTE:**  
 THE ENTIRE SITE SHALL BE FENCED, IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1141.08. FENCES WITHIN FRONT YARDS AND ANY SIDE YARDS ADJACENT TO RESIDENTIAL ZONING DISTRICTS SHALL BE ALUMINUM OR WROUGHT IRON DECORATIVE FENCE OR A SIMILAR TYPE. CHAIN-LINK, OR SIMILAR STYLE FENCES, ARE PROHIBITED IN THESE AREAS.



— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

PROJECT: **STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**

TITLE: **OVERALL SITE PLAN**

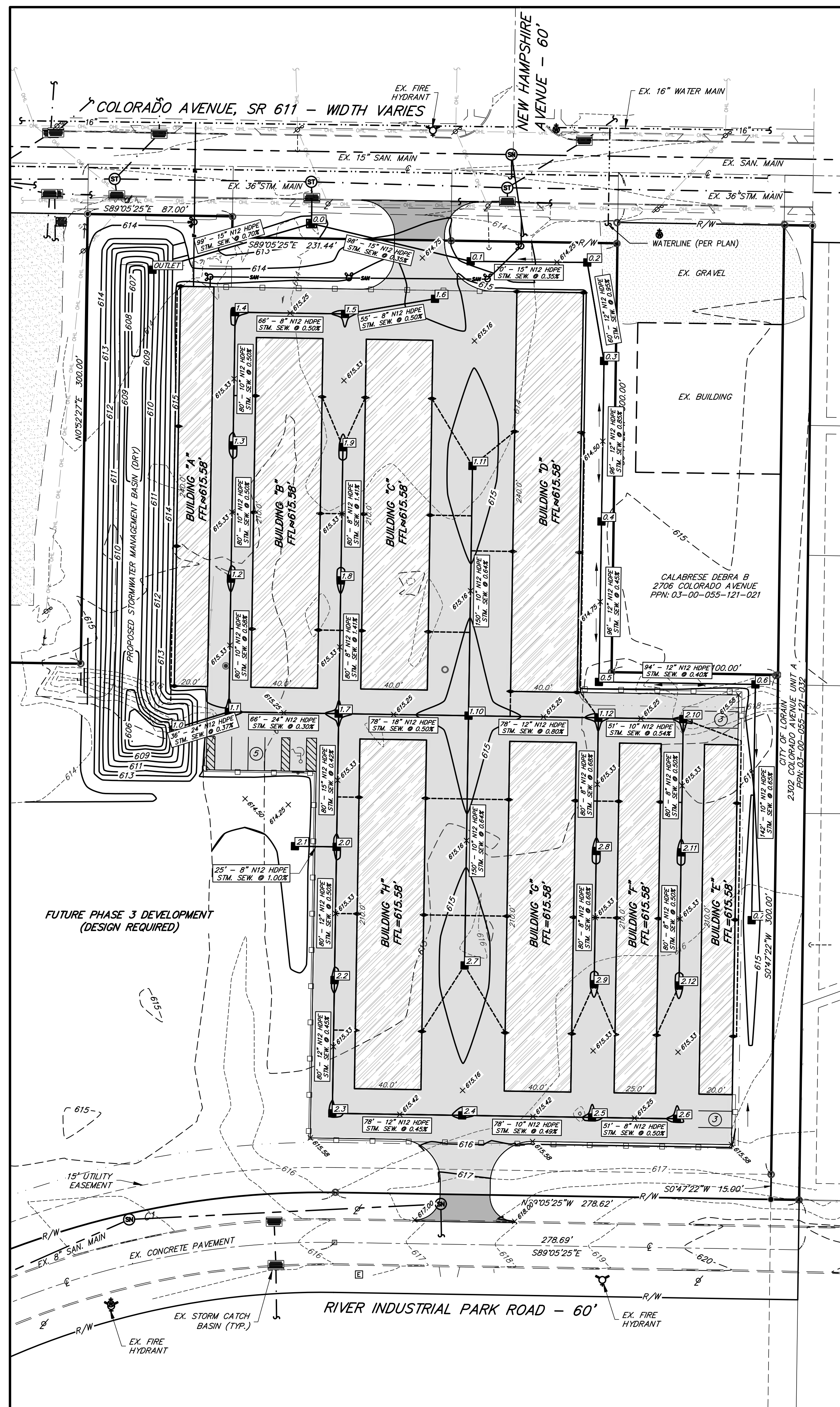
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SCALES:  
**1" = 40'**  
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 25-344 OVERALL SITE PLAN.dwg  
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1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK

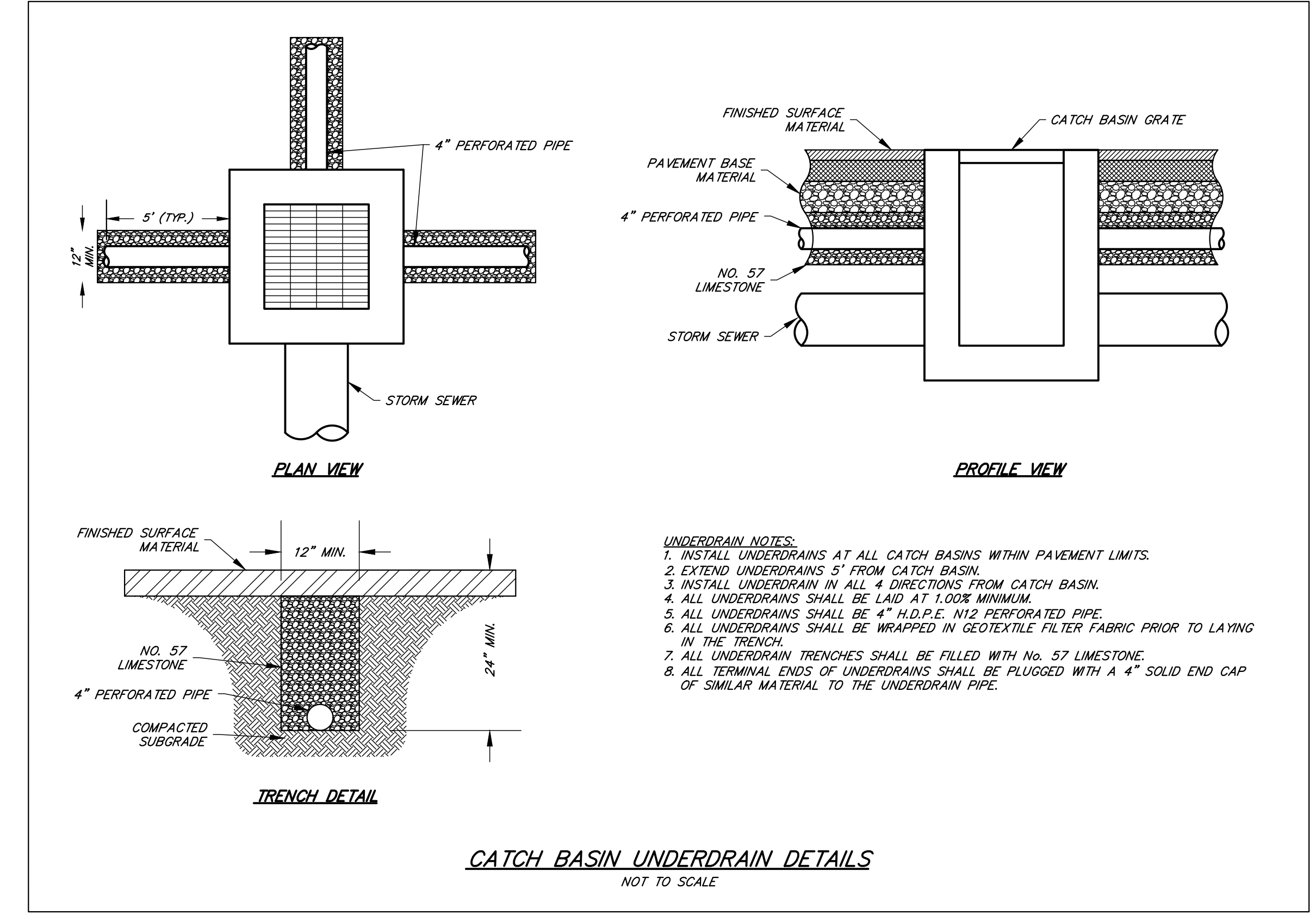
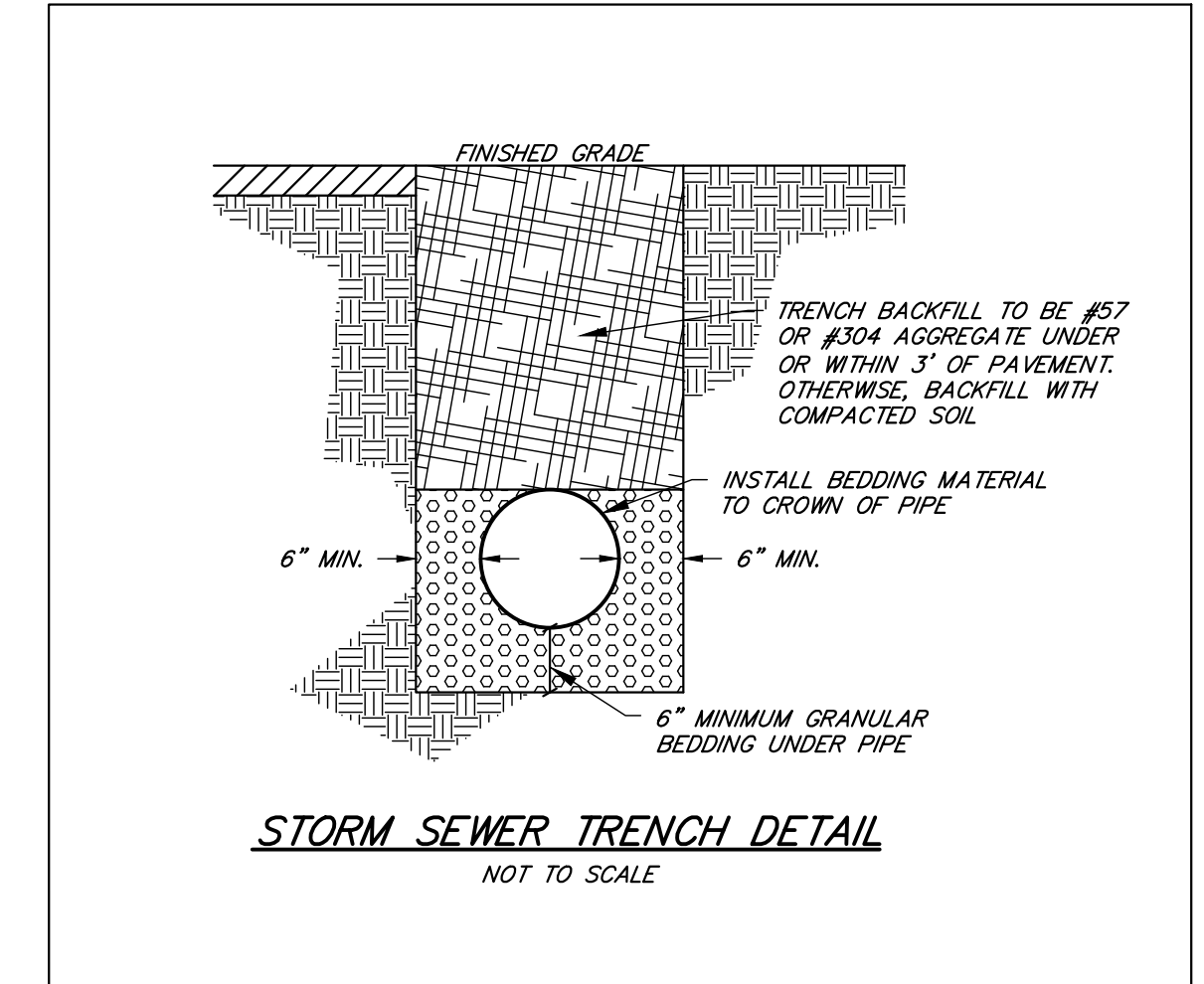
DATE: 4/8/2026  
 PROJECT NUMBER: 25-344  
 SHEET NUMBER: 4 of 11



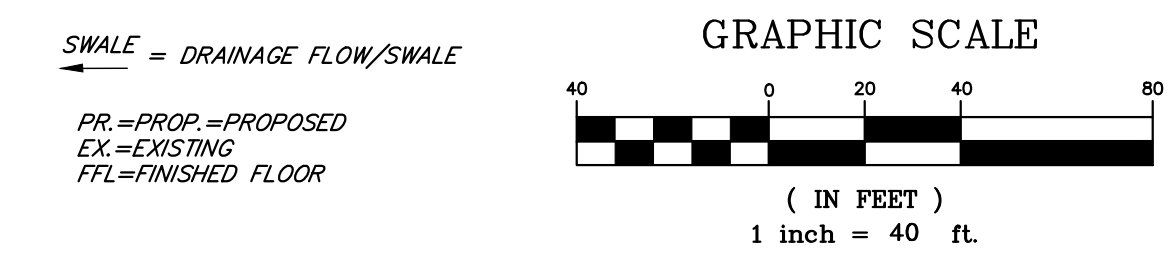
PROPOSED STORM STRUCTURE SCHEDULE		
NAME	STRUCTURE	DETAILS
0.0	Existing Catch Basin	RIM = 612.41' 15"W = 607.80' 15"E = 607.80' 12"N = 607.80'
OUTLET	INSTALL ODOT Catch Basin 2-2B	RIM = 612.75' 15"E = 608.50'
0.1	INSTALL ODOT Catch Basin 2-2B	RIM = 613.25' 15"E = 608.14' 15"W = 608.14'
0.2	INSTALL ODOT Catch Basin 2-2B	RIM = 614.00' 12"S = 608.62' 15"W = 608.39'
0.3	INSTALL ODOT Catch Basin 2-2B	RIM = 614.00' 12"S = 609.20' 12"N = 609.20'
0.4	INSTALL ODOT Catch Basin 2-2B	RIM = 614.00' 12"S = 610.02' 12"N = 610.02'
0.5	INSTALL ODOT Catch Basin 2-2B	RIM = 614.25' 12"E = 610.45' 12"N = 610.45'
0.6	INSTALL ODOT Catch Basin 2-2B	RIM = 614.50' 10"S = 611.00' 12"W = 610.83'
0.7	INSTALL ODOT Catch Basin 2-2B	RIM = 614.25' 10"N = 611.92'
1.0	INSTALL ODOT Half-Headwall, 24 in pipe	RIM = 611.15' 24"E = 608.99'
1.10	INSTALL ODOT Catch Basin 2-2B	RIM = 614.42' 18"W = 610.21' 10"N = 611.04' 10"S = 612.00' 12"E = 610.71'
1.1	INSTALL ODOT Catch Basin 2-3	RIM = 614.92' 10"N = 610.29' 24"W = 609.12' 24"E = 609.12'
1.11	INSTALL ODOT Catch Basin 2-2B	RIM = 614.42' 10"S = 612.00'
1.12	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"S = 611.66' 10"E = 611.50' 12"W = 611.33'
1.2	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 10"N = 610.76' 10"S = 610.76'
1.3	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 10"N = 611.16' 10"S = 611.16'
1.4	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"E = 611.73' 10"S = 611.56'
1.5	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"E = 612.06' 8"W = 612.06'
1.6	INSTALL ODOT Catch Basin 2-2B	RIM = 614.50' 8"W = 612.33'
1.7	INSTALL ODOT Catch Basin 2-3	RIM = 614.92' 24"W = 609.32' 8"N = 610.49' 18"E = 609.82' 15"S = 610.08'
1.8	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"N = 611.62' 8"S = 611.62'
1.9	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"S = 612.75'

PROPOSED STORM STRUCTURE SCHEDULE		
NAME	STRUCTURE	DETAILS
2.0	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 15"N = 610.42' 12"S = 610.66' 8"W = 610.58'
2.1	INSTALL ODOT Catch Basin 2-2B	RIM = 614.00' 8"E = 610.83'
2.10	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 10"W = 611.78' 8"S = 611.95'
2.11	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"N = 612.35' 8"S = 612.35'
2.12	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"N = 612.75'
2.2	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 12"N = 611.06' 12"S = 611.06'
2.3	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 12"N = 611.42' 12"E = 611.42'
2.4	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 12"W = 611.77' 10"E = 611.94'
2.5	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 10"W = 612.32' 8"E = 612.49'
2.6	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"W = 612.75'
2.7	INSTALL ODOT Catch Basin 2-2B	RIM = 614.42' 10"N = 611.04'
2.8	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"N = 612.20' 8"S = 612.20'
2.9	INSTALL ODOT Catch Basin 2-2B	RIM = 614.92' 8"N = 612.75'

STORM SEWER STRUCTURES 2.0 TO 2.12 TO BE INSTALLED DURING PHASE 2 DEVELOPMENT. CONTRACTOR SHALL PROVIDE STORM SEWER STUBS OUT OF CATCH BASINS 1.7, 1.10 AND 1.12 TO PROVIDE CONNECTIONS FOR PHASE 2 DEVELOPMENT



- UNDERDRAIN NOTES:
1. INSTALL UNDERDRAINS AT ALL CATCH BASINS WITHIN PAVEMENT LIMITS.
  2. EXTEND UNDERDRAIN 5' FROM CATCH BASIN.
  3. INSTALL UNDERDRAIN IN ALL 4 DIRECTIONS FROM CATCH BASIN.
  4. ALL UNDERDRAINS SHALL BE LAID AT 1.00% MINIMUM.
  5. ALL UNDERDRAINS SHALL BE 4" H.D.P.E. 1/2" PERFORATED PIPE.
  6. ALL UNDERDRAINS SHALL BE WRAPPED IN GEOTEXTILE FILTER FABRIC PRIOR TO LAYING IN THE TRENCH.
  7. ALL UNDERDRAIN TRENCHES SHALL BE FILLED WITH NO. 57 LIMESTONE.
  8. ALL TERMINAL ENDS OF UNDERDRAINS SHALL BE PLUGGED WITH A 4" SOLID END CAP OF SIMILAR MATERIAL TO THE UNDERDRAIN PIPE.



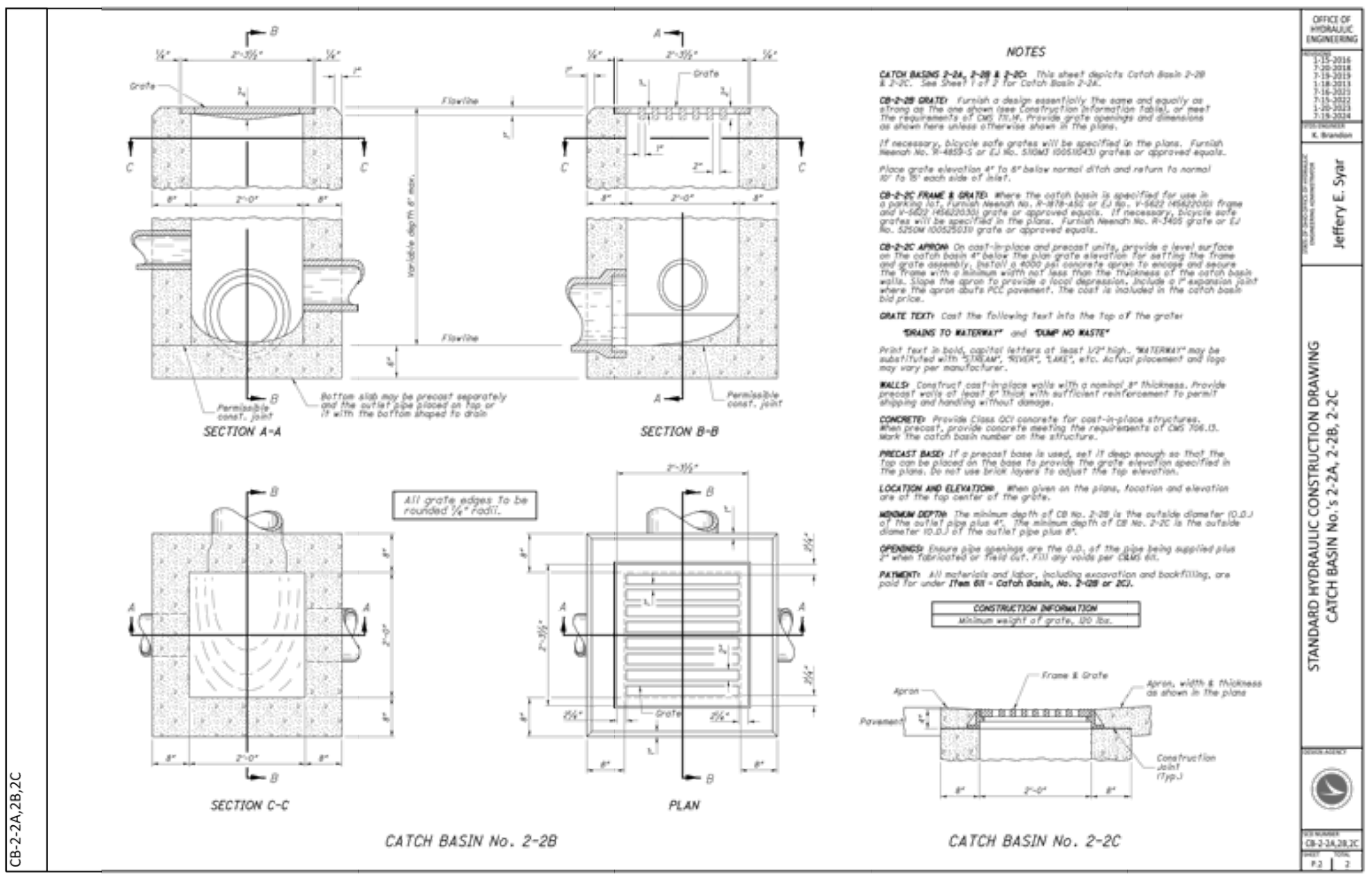
— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**  
CIVIL ENGINEERING LAND SURVEYING  
8691 WADSWORTH ROAD SUITE 100  
WADSWORTH, OH 44281 (330) 335-8232

PROJECT: **STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**  
TITLE: **GRADING PLAN AND STORM SEWER**

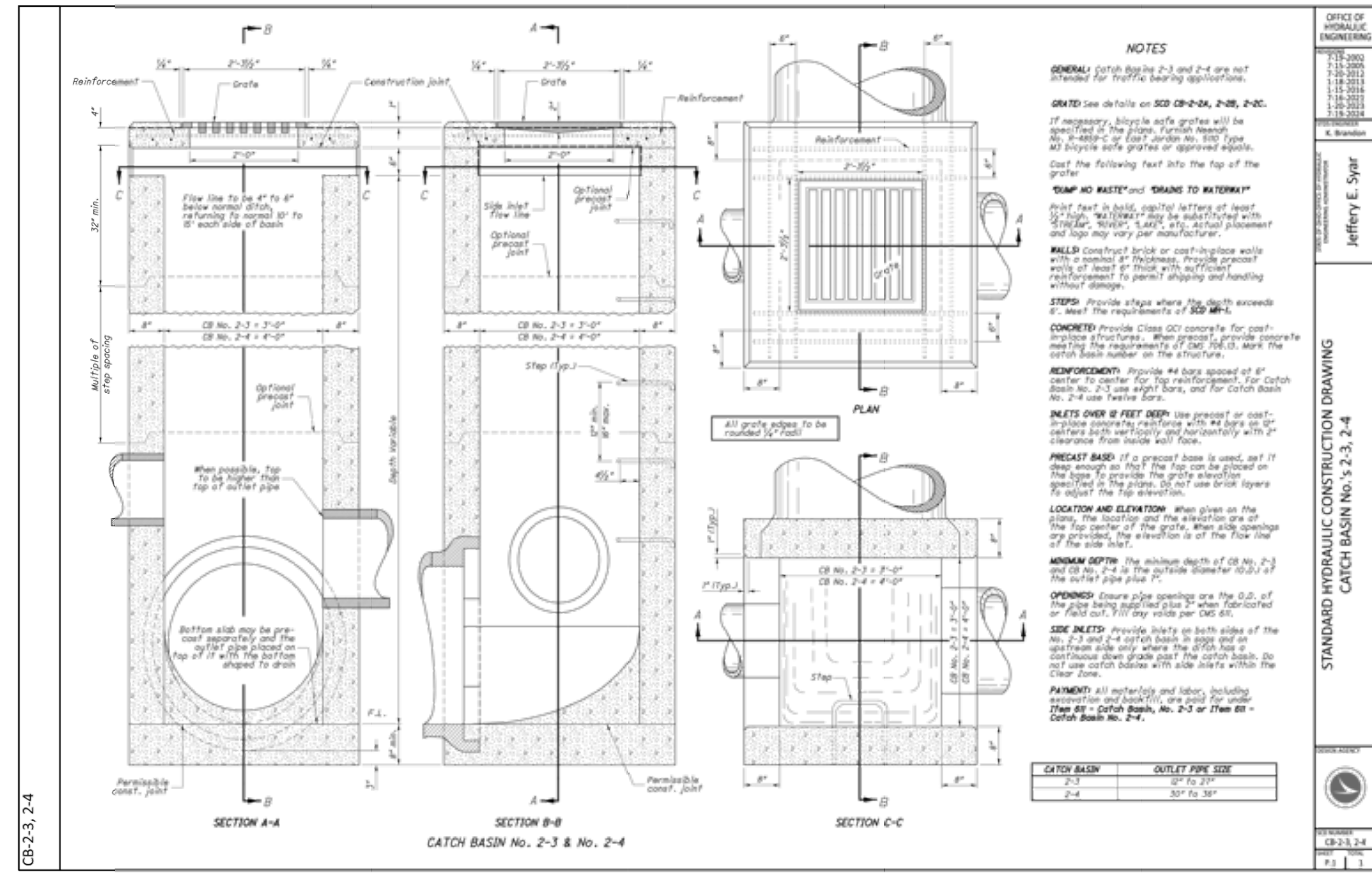
TWO WORKING DAYS BEFORE YOU DIG  
Call 1-800-362-2764  
TOLL FREE  
Outside Ohio 216-744-5191  
OHIO UTILITIES PROTECTION SERVICE

SCALE: **1" = 40'**  
DRAWING FILE: **25-344 GRADING PLAN.dwg**  
INPDES PERMIT NUMBER: **JGC16881\*AG**

REVISION TABLE				DATE:
				4/8/2026
				PROJECT NUMBER:
2	4/9/26	FINAL CIVIL SITE PLAN	MBK	25-344
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK	SHEET NUMBER:
NO.	DATE	DESCRIPTION	BY	5 of 11



CB-2-2A, 2B, 2C



CB-2-3, 2-4

**StormRax**  
BY PLASTIC SOLUTIONS

**PEAK SERIES**  
FOR 24" x 24" I.D. STRUCTURE

32-7/8" B

29-1/8" A

11-15/16" C

STRUCTURE I.D. 24"

**SIZE TABLE O.D.**

Width A	29-1/8"
Length B	32-7/8"
Height C	11-15/16"

**CONCRETE STRUCTURE DIMS. (IN.)**

I.D. Width:	I.D. Length:	Wall width (req'd):
24"	24"	8"

**STORMRAX PEAK DIMS. (IN.)**

Width A:	Length B:	Height C:
29-1/8"	32-7/8"	11-15/16"

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

Project: \_\_\_\_\_ By: \_\_\_\_\_

PROPRIETARY AND CONFIDENTIAL

USE INFORMATION CONTAINED HEREIN ONLY FOR THE PROJECT AND SITE SPECIFIC TO WHICH IT IS ISSUED. NO REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, IS PERMITTED WITHOUT THE WRITTEN PERMISSION OF PLASTIC SOLUTIONS, INC.

SHEET 1 OF 1

**METAL PIPE END TREATMENT 'A' W/ ANCHOR BOLT OPTION**

**METAL PIPE END TREATMENT 'B' W/ ANCHOR BOLT OPTION**

**CAST-IN-PLACE HW FOR CORRUGATED METAL PIPE & PLASTIC PIPE (English)**

D	W	H	T	CIRCULAR				PIPE ARCH							
				CONC. (cu. yds.)	SPAN	RISE	W	H	CONC. (cu. yds.)	SPAN	RISE	W			
12"	12"	12"	1/2"	0.01	13'	13'	13'	0.01	13'	13'	13'	0.01	13'	13'	13'
18"	18"	18"	1/2"	0.02	19'	19'	19'	0.02	19'	19'	19'	0.02	19'	19'	19'
24"	24"	24"	1/2"	0.03	25'	25'	25'	0.03	25'	25'	25'	0.03	25'	25'	25'
30"	30"	30"	1/2"	0.04	31'	31'	31'	0.04	31'	31'	31'	0.04	31'	31'	31'
36"	36"	36"	1/2"	0.05	37'	37'	37'	0.05	37'	37'	37'	0.05	37'	37'	37'
42"	42"	42"	1/2"	0.06	43'	43'	43'	0.06	43'	43'	43'	0.06	43'	43'	43'
48"	48"	48"	1/2"	0.07	49'	49'	49'	0.07	49'	49'	49'	0.07	49'	49'	49'
54"	54"	54"	1/2"	0.08	55'	55'	55'	0.08	55'	55'	55'	0.08	55'	55'	55'
60"	60"	60"	1/2"	0.09	61'	61'	61'	0.09	61'	61'	61'	0.09	61'	61'	61'
66"	66"	66"	1/2"	0.10	67'	67'	67'	0.10	67'	67'	67'	0.10	67'	67'	67'
72"	72"	72"	1/2"	0.11	73'	73'	73'	0.11	73'	73'	73'	0.11	73'	73'	73'
78"	78"	78"	1/2"	0.12	79'	79'	79'	0.12	79'	79'	79'	0.12	79'	79'	79'
84"	84"	84"	1/2"	0.13	85'	85'	85'	0.13	85'	85'	85'	0.13	85'	85'	85'
90"	90"	90"	1/2"	0.14	91'	91'	91'	0.14	91'	91'	91'	0.14	91'	91'	91'
96"	96"	96"	1/2"	0.15	97'	97'	97'	0.15	97'	97'	97'	0.15	97'	97'	97'
102"	102"	102"	1/2"	0.16	103'	103'	103'	0.16	103'	103'	103'	0.16	103'	103'	103'
108"	108"	108"	1/2"	0.17	109'	109'	109'	0.17	109'	109'	109'	0.17	109'	109'	109'
114"	114"	114"	1/2"	0.18	115'	115'	115'	0.18	115'	115'	115'	0.18	115'	115'	115'
120"	120"	120"	1/2"	0.19	121'	121'	121'	0.19	121'	121'	121'	0.19	121'	121'	121'
126"	126"	126"	1/2"	0.20	127'	127'	127'	0.20	127'	127'	127'	0.20	127'	127'	127'
132"	132"	132"	1/2"	0.21	133'	133'	133'	0.21	133'	133'	133'	0.21	133'	133'	133'
138"	138"	138"	1/2"	0.22	139'	139'	139'	0.22	139'	139'	139'	0.22	139'	139'	139'
144"	144"	144"	1/2"	0.23	145'	145'	145'	0.23	145'	145'	145'	0.23	145'	145'	145'
150"	150"	150"	1/2"	0.24	151'	151'	151'	0.24	151'	151'	151'	0.24	151'	151'	151'
156"	156"	156"	1/2"	0.25	157'	157'	157'	0.25	157'	157'	157'	0.25	157'	157'	157'
162"	162"	162"	1/2"	0.26	163'	163'	163'	0.26	163'	163'	163'	0.26	163'	163'	163'
168"	168"	168"	1/2"	0.27	169'	169'	169'	0.27	169'	169'	169'	0.27	169'	169'	169'
174"	174"	174"	1/2"	0.28	175'	175'	175'	0.28	175'	175'	175'	0.28	175'	175'	175'
180"	180"	180"	1/2"	0.29	181'	181'	181'	0.29	181'	181'	181'	0.29	181'	181'	181'
186"	186"	186"	1/2"	0.30	187'	187'	187'	0.30	187'	187'	187'	0.30	187'	187'	187'
192"	192"	192"	1/2"	0.31	193'	193'	193'	0.31	193'	193'	193'	0.31	193'	193'	193'
198"	198"	198"	1/2"	0.32	199'	199'	199'	0.32	199'	199'	199'	0.32	199'	199'	199'
204"	204"	204"	1/2"	0.33	205'	205'	205'	0.33	205'	205'	205'	0.33	205'	205'	205'
210"	210"	210"	1/2"	0.34	211'	211'	211'	0.34	211'	211'	211'	0.34	211'	211'	211'
216"	216"	216"	1/2"	0.35	217'	217'	217'	0.35	217'	217'	217'	0.35	217'	217'	217'
222"	222"	222"	1/2"	0.36	223'	223'	223'	0.36	223'	223'	223'	0.36	223'	223'	223'
228"	228"	228"	1/2"	0.37	229'	229'	229'	0.37	229'	229'	229'	0.37	229'	229'	229'
234"	234"	234"	1/2"	0.38	235'	235'	235'	0.38	235'	235'	235'	0.38	235'	235'	235'
240"	240"	240"	1/2"	0.39	241'	241'	241'	0.39	241'	241'	241'	0.39	241'	241'	241'
246"	246"	246"	1/2"	0.40	247'	247'	247'	0.40	247'	247'	247'	0.40	247'	247'	247'
252"	252"	252"	1/2"	0.41	253'	253'	253'	0.41	253'	253'	253'	0.41	253'	253'	253'

DATE: 12/26/2023 REV: #6

DRAWN BY: MJM

LEWIS LAND PROFESSIONALS INC.

CIVIL ENGINEERING LAND SURVEYING  
8691 WADSWORTH ROAD SUITE 100  
WADSWORTH, OH 44281 (330) 335-8232

PROJECT: STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO

TITLE: STORM SEWER DETAILS

DATE: 4/8/2026

PROJECT NUMBER: 25-344

SHEET NUMBER: 6 of 11

SCALE: N/A

DRAWING FILE: 25-344 GENERAL DETAILS.dwg

DATE: 2/12/26

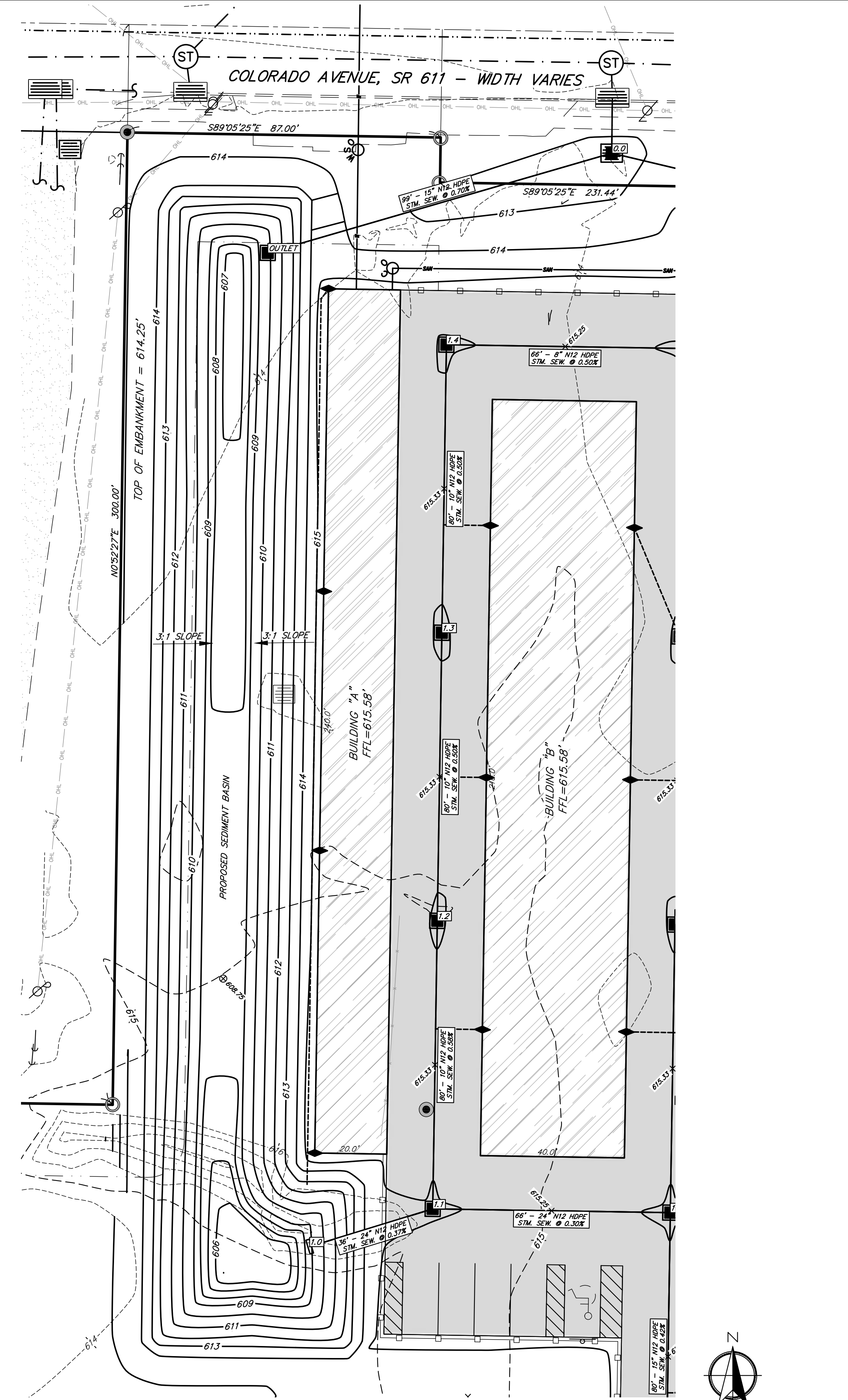
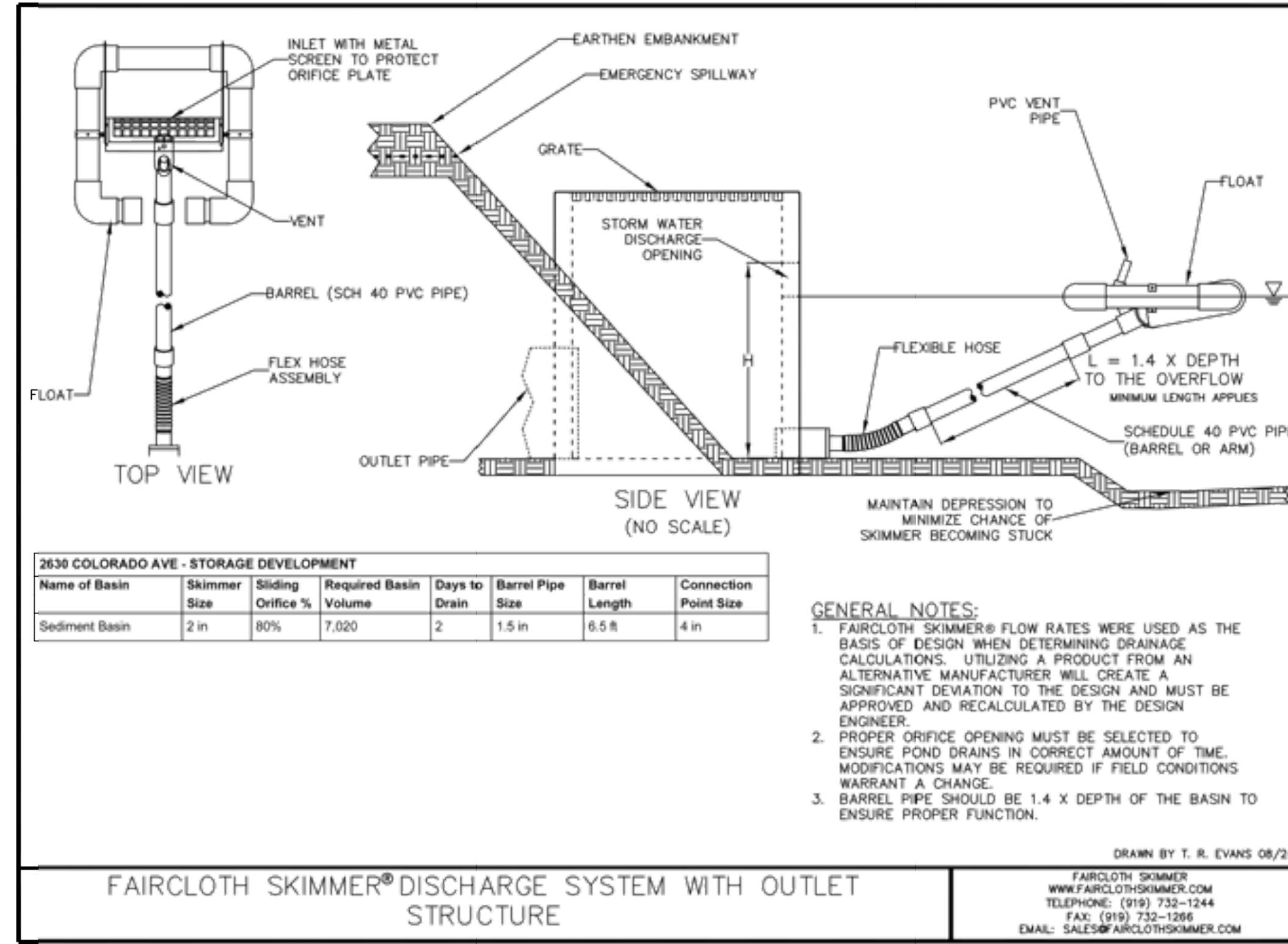
REVISED PERMIT NUMBER: 36C16881\*AG

REVISION TABLE

NO.	DATE	DESCRIPTION	BY
2	4/9/26	FINAL CIVIL SITE PLAN	MBK
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK

**SEDIMENT BASIN NOTES**

- 1) THE CONTRACTOR SHALL INSTALL THE SEDIMENT BASIN AS SHOWN ON THIS PLAN BEFORE PERFORMING ANY OTHER EARTHWORK ON THE SITE.
- 2) THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT BASIN DURING THE ENTIRE CONSTRUCTION PROCESS UNTIL ALL UPSLOPE WORK HAS BEEN COMPLETED AND PROPER SEEDING HAS BEEN ESTABLISHED.
- 3) SEDIMENT BUILT UP IN THE BASIN SHALL BE REMOVED AFTER EACH RAINFALL EVENT IF IT REACHES THE ELEVATION OF 609.00'
- 4) THE PROPOSED RETENTION BASIN IS BEING USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DURING ITS USE AS A SEDIMENT BASIN THE FOLLOWING OPERATION AND MAINTENANCE PROCEDURES SHALL BE ADHERED TO:
  - A) ESTABLISH VEGETATIVE COVER AND FERTILIZE AS NECESSARY TO MAINTAIN A VIGOROUS COVER IN AND AROUND THE SEDIMENT BASIN.
  - B) REMOVE UNDESIRABLE VEGETATION PERIODICALLY TO PREVENT THE GROWTH OF TREES AND SHRUBS ON THE EMBANKMENT AND SPILLWAY.
  - C) PROMPTLY REPAIR ERODED AREAS. RE-ESTABLISH VEGETATIVE COVER IMMEDIATELY WHERE SCOUR EROSION HAS REMOVED ESTABLISHED SEEDING.
  - D) PROMPTLY REMOVE ANY BURROWING RODENTS THAT MAY INVADE AREAS OF THE EMBANKMENT.
  - E) REMOVE SEDIMENT FROM THE BASIN WHEN IT FILLS THE DESIGN DEPTH OF THE SEDIMENT STORAGE ZONE. THIS ELEVATION SHALL BE MARKED ON A CLEANOUT STAKE NEAR THE OUTLET STRUCTURE.
  - F) CHECK OUTLETS AND POINTS OF INFLOW TO ENSURE DRAINAGE IS NOT CAUSING EROSION AND THAT OUTLETS ARE NOT CLOGGED. REPLACE DISPLACED RIPRAP IMMEDIATELY.
  - G) AFTER THE ENTIRE CONSTRUCTION PROJECT IS COMPLETED, THE SEDIMENT BASIN SHALL BE DEWATERED AND ALL SEDIMENT REMOVED BY THE CONTRACTOR TO CONFORM TO THE CONTOURS OF THE DETENTION BASIN PLAN. ALL TEMPORARY STRUCTURES SHOULD BE REMOVED AND THE AREA SEEDED, MULCHED, AND STABILIZED AS NECESSARY.



**Sediment Basin Sizing and Dewatering Compliance Tool**

Project Summary

Project Name	2630 Colorado Ave - Storage Development
Project Location	2630 Colorado Ave, Lorain, Ohio
Project Label	2630 Colorado Ave
Project Latitude	41.86807
Project Longitude	-83.155318
NPDES Permit Applicant	Urban Runoffs
Submitted by	Urban Land Professionals, Inc.
Date	02/12/2026

Watershed: **Urban**

Subwatershed Total Drainage Area, A<sub>total</sub> = 3.90 acres = 168,884 sq ft

Subwatershed Disturbed Drainage Area, A<sub>d</sub> = 3.90 acres = 168,884 sq ft

**Step 1 - Sediment Basin Volume Requirements**

For Statewide Watersheds	Minimum Sediment Storage Volume, V <sub>sediment</sub> = 2000 cu ft	Minimum Dewatering Zone Volume, V <sub>dewatering</sub> = 2000 cu ft	Minimum Dewatering Zone Volume, V <sub>dewatering</sub> = 2000 cu ft
	Minimum Sediment Storage Volume, V <sub>sediment</sub> = 7020 cu ft	Minimum Dewatering Zone Volume, V <sub>dewatering</sub> = 7020 cu ft	Minimum Dewatering Zone Volume, V <sub>dewatering</sub> = 7020 cu ft

**Step 2 - Basin Storage Relationship**

Elevation (ft)	Area (sq ft)	Incremental Volume (cu ft)	Incremental Volume (cu ft)
608.00	2,000	600	600
609.00	2,000	1,200	1,800
610.00	2,000	1,800	3,600
611.00	2,000	2,400	6,000
612.00	2,000	3,000	9,000
613.00	2,000	3,600	12,600
614.00	2,000	4,200	16,800
615.00	2,000	4,800	21,600
616.00	2,000	5,400	27,000
617.00	2,000	6,000	33,000
618.00	2,000	6,600	39,600
619.00	2,000	7,200	46,800
620.00	2,000	7,800	54,600
621.00	2,000	8,400	63,000
622.00	2,000	9,000	72,000
623.00	2,000	9,600	81,600
624.00	2,000	10,200	91,800
625.00	2,000	10,800	102,600
626.00	2,000	11,400	114,000
627.00	2,000	12,000	126,000
628.00	2,000	12,600	138,600
629.00	2,000	13,200	151,800
630.00	2,000	13,800	165,600
631.00	2,000	14,400	180,000
632.00	2,000	15,000	195,000
633.00	2,000	15,600	210,600
634.00	2,000	16,200	227,800
635.00	2,000	16,800	245,600
636.00	2,000	17,400	264,000
637.00	2,000	18,000	283,000
638.00	2,000	18,600	302,600
639.00	2,000	19,200	322,800
640.00	2,000	19,800	343,600
641.00	2,000	20,400	365,000
642.00	2,000	21,000	387,000
643.00	2,000	21,600	409,600
644.00	2,000	22,200	432,800
645.00	2,000	22,800	456,600
646.00	2,000	23,400	481,000
647.00	2,000	24,000	506,000
648.00	2,000	24,600	531,600
649.00	2,000	25,200	557,800
650.00	2,000	25,800	584,600
651.00	2,000	26,400	612,000
652.00	2,000	27,000	640,000
653.00	2,000	27,600	668,600
654.00	2,000	28,200	697,800
655.00	2,000	28,800	727,600
656.00	2,000	29,400	758,000
657.00	2,000	30,000	789,000
658.00	2,000	30,600	820,600
659.00	2,000	31,200	852,800
660.00	2,000	31,800	885,600
661.00	2,000	32,400	919,000
662.00	2,000	33,000	953,000
663.00	2,000	33,600	987,600
664.00	2,000	34,200	1,022,800
665.00	2,000	34,800	1,058,600
666.00	2,000	35,400	1,095,000
667.00	2,000	36,000	1,132,000
668.00	2,000	36,600	1,169,600
669.00	2,000	37,200	1,207,800
670.00	2,000	37,800	1,246,600
671.00	2,000	38,400	1,286,000
672.00	2,000	39,000	1,326,000
673.00	2,000	39,600	1,366,600
674.00	2,000	40,200	1,407,800
675.00	2,000	40,800	1,449,600
676.00	2,000	41,400	1,492,000
677.00	2,000	42,000	1,535,000
678.00	2,000	42,600	1,578,600
679.00	2,000	43,200	1,622,800
680.00	2,000	43,800	1,667,600
681.00	2,000	44,400	1,713,000
682.00	2,000	45,000	1,759,000
683.00	2,000	45,600	1,805,600
684.00	2,000	46,200	1,852,800
685.00	2,000	46,800	1,900,600
686.00	2,000	47,400	1,949,000
687.00	2,000	48,000	1,998,000
688.00	2,000	48,600	2,047,600
689.00	2,000	49,200	2,097,800
690.00	2,000	49,800	2,148,600
691.00	2,000	50,400	2,200,000
692.00	2,000	51,000	2,252,000
693.00	2,000	51,600	2,304,600
694.00	2,000	52,200	2,357,800
695.00	2,000	52,800	2,411,600
696.00	2,000	53,400	2,466,000
697.00	2,000	54,000	2,521,000
698.00	2,000	54,600	2,576,600
699.00	2,000	55,200	2,632,800
700.00	2,000	55,800	2,689,600
701.00	2,000	56,400	2,747,000
702.00	2,000	57,000	2,805,000
703.00	2,000	57,600	2,863,600
704.00	2,000	58,200	2,922,800
705.00	2,000	58,800	2,982,600
706.00	2,000	59,400	3,043,000
707.00	2,000	60,000	3,104,000
708.00	2,000	60,600	3,165,600
709.00	2,000	61,200	3,227,800
710.00	2,000	61,800	3,290,600
711.00	2,000	62,400	3,354,000
712.00	2,000	63,000	3,418,000
713.00	2,000	63,600	3,482,600
714.00	2,000	64,200	3,547,800
715.00	2,000	64,800	3,613,600
716.00	2,000	65,400	3,680,000
717.00	2,000	66,000	3,747,000
718.00	2,000	66,600	3,814,600
719.00	2,000	67,200	3,882,800
720.00	2,000	67,800	3,951,600
721.00	2,000	68,400	4,021,000
722.00	2,000	69,000	4,091,000
723.00	2,000	69,600	4,161,600
724.00	2,000	70,200	4,232,800
725.00	2,000	70,800	4,304,600
726.00	2,000	71,400	4,377,000
727.00	2,000	72,000	4,450,000
728.00	2,000	72,600	4,523,600
729.00	2,000	73,200	4,597,800
730.00	2,000	73,800	4,672,600
731.00	2,000	74,400	4,748,000
732.00	2,000	75,000	4,824,000
733.00	2,000	75,600	4,900,600
734.00	2,000	76,200	4,977,800
735.00	2,000	76,800	5,055,600
736.00	2,000	77,400	5,134,000
737.00	2,000	78,000	5,213,000
738.00	2,000	78,600	5,292,600
739.00	2,000	79,200	5,372,800
740.00	2,000	79,800	5,453,600
741.00	2,000	80,400	5,535,000
742.00	2,000	81,000	5,617,000
743.00	2,000	81,600	5,699,600
744.00	2,000	82,200	5,782,800
745.00	2,000	82,800	5,866,600
746.00	2,000	83,400	5,951,000
747.00	2,000	84,000	6,036,000
748.00	2,000	84,600	6,121,600
749.00	2,000	85,200	6,207,800
750.00	2,000	85,800	6,294,600
751.00	2,000	86,400	6,382,000
752.00	2,000	87,000	6,470,000
753.00	2,000	87,600	6,558,600
754.00	2,000	88,200	6,647,800
755.00	2,000	88,800	6,737,600
756.00	2,000	89,400	6,828,000
757.00	2,000	90,000	6,919,000
758.00	2,000	90,600	7,010,600
759.00	2,000	91,200	7,102,800
760.00	2,000	91,800	7,195,600
761.00	2,000	92,400	7,289,000
762.00	2,000	93,000	7,383,000
763.00	2,000	93,600	7,477,600
764.00	2,000	94,200	7,572,800
765.00	2,000	94,800	7,668,600
766.00	2,000	95,400	7,765,000
767.00	2,000	96,000	7,862,000
768.00	2,000	96,600	7,959,600
769.00	2,000	97,200	8,057,800
770.00	2,000	97,800	8,156,600
771.00	2,000	98,400	8,256,000
772.00	2,000	99,000	8,356,000
773.00	2,000	99,600	8,456,600
774.00	2,000	100,200	8,557,800
775.00	2,000	100,800	8,659,600
776.00	2,000	101,400	8,762,000
777.00	2,000	102,000	8,865,000
778.00	2,000	102,600	8,968,600
779.00	2,000	103,200	9,072,800
780.00	2,000	103,800	9,177,600
781.00	2,000	104,400	9,283,000
782.00	2,000	105,000	9,389,000
783.00	2,000	105,600	9,495,600
784.00	2,000	106,200	9,602,800
785.00	2,000	106,800	9,710,600
786.00	2,000	107,400	9,819,000
787.00	2,000	108,000	9,928,000
788.00	2,000	108,600	10,037,600
789.00	2,000	109,200	10,147,800
790.00	2,000	109,800	10,258,600
791.00	2,000	110,400	10,370,000
792.00	2,000	111,000	10,482,000
793.00	2,000	111,600	10,594,600
794.00	2,000	112,200	10,707,800
795.00	2,000	112,800	10,821,600
796.00	2,000	113,400	10,936,000
797.00	2,000	114,000	11,051,000
798.00	2,000	114,600	11,166,600
799.00	2,000	115,200	11,282,800
800.00	2,000	115,800	11,400,000

**STORMWATER MANAGEMENT BASIN NOTES**

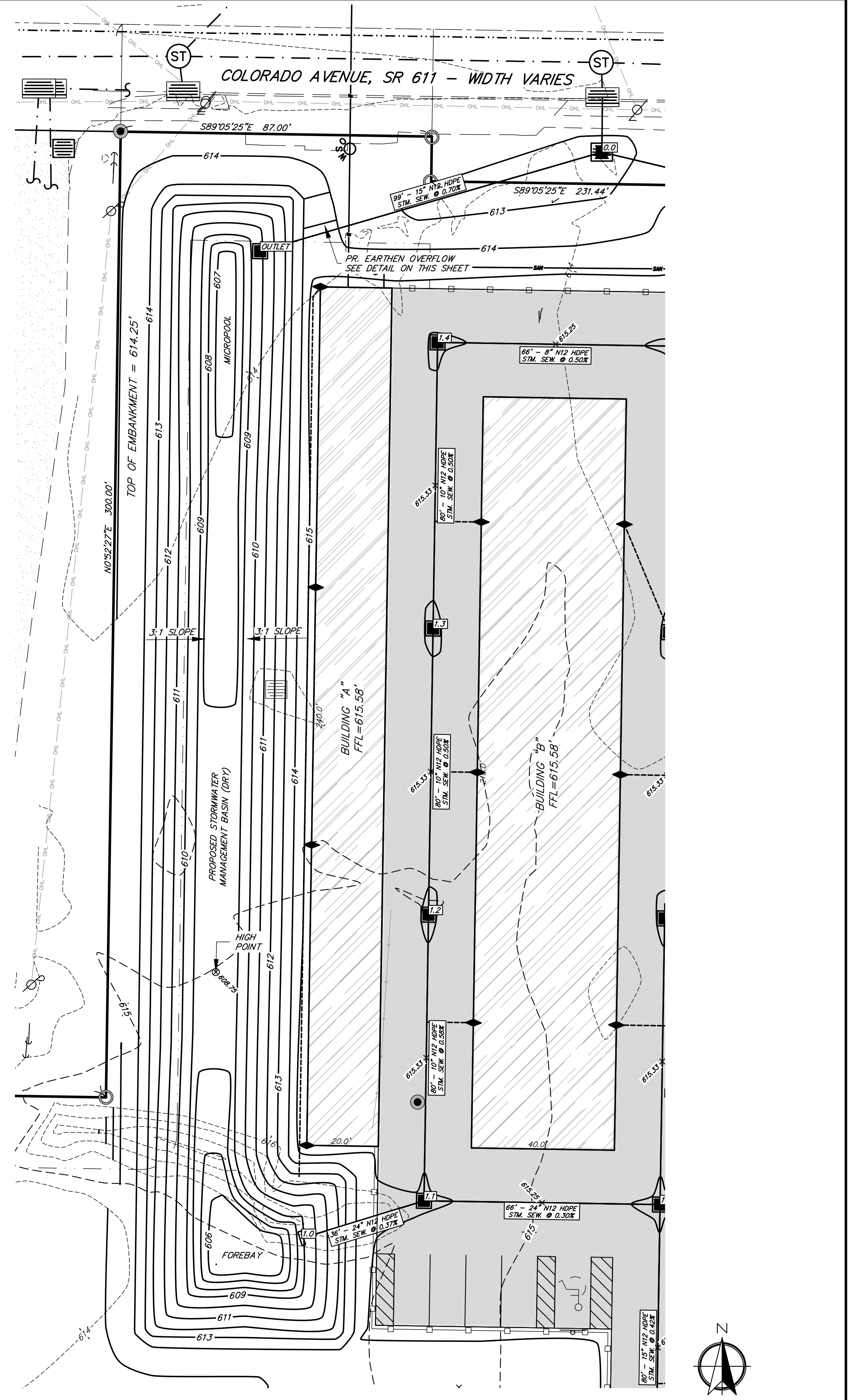
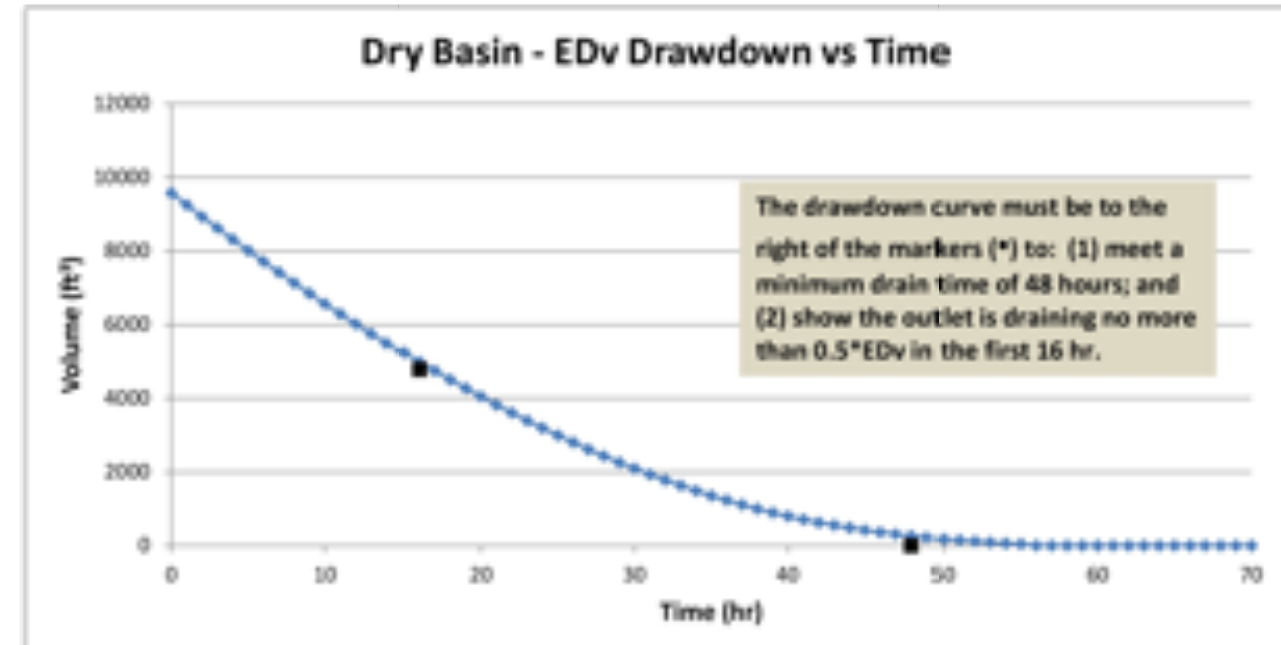
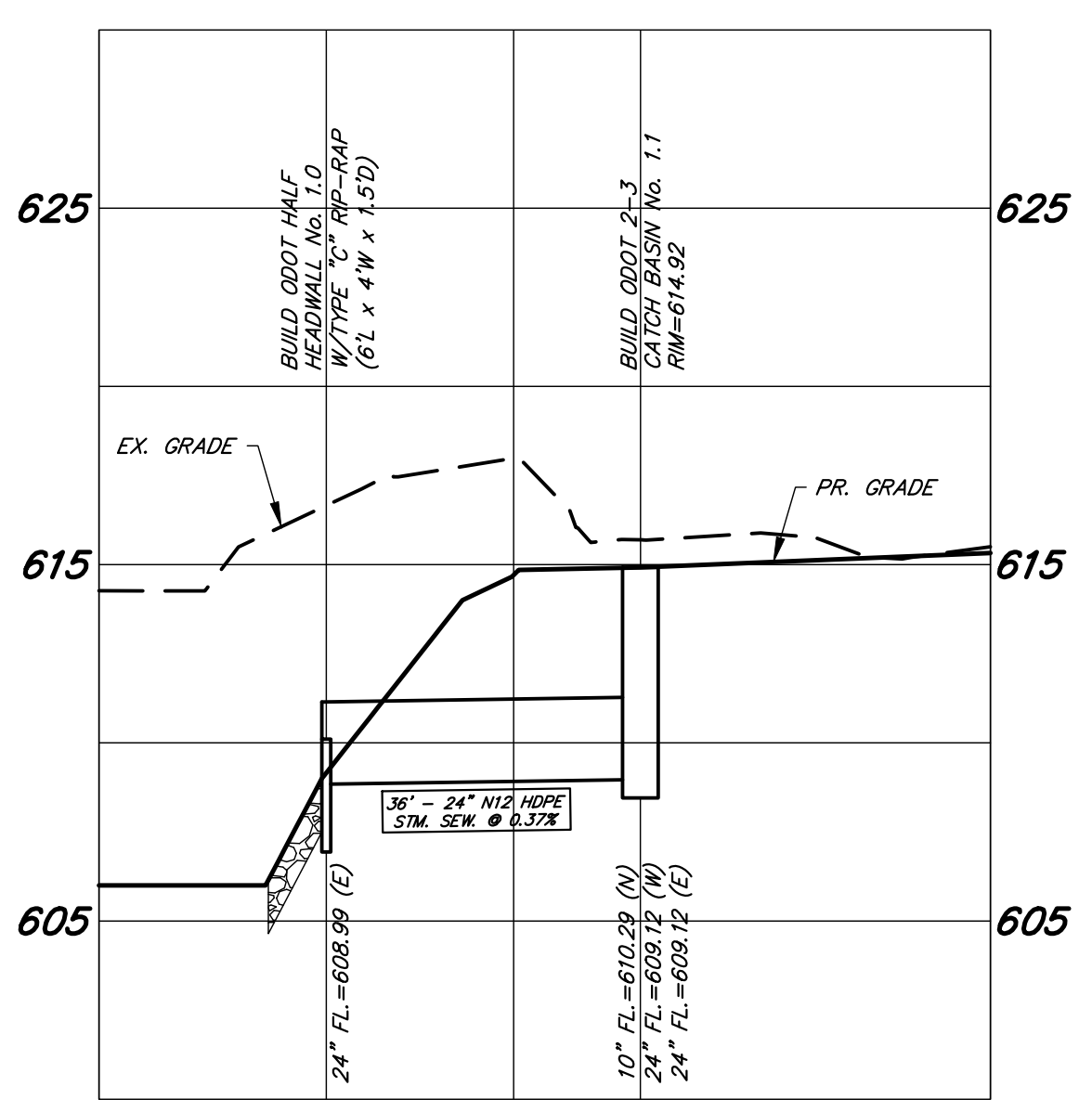
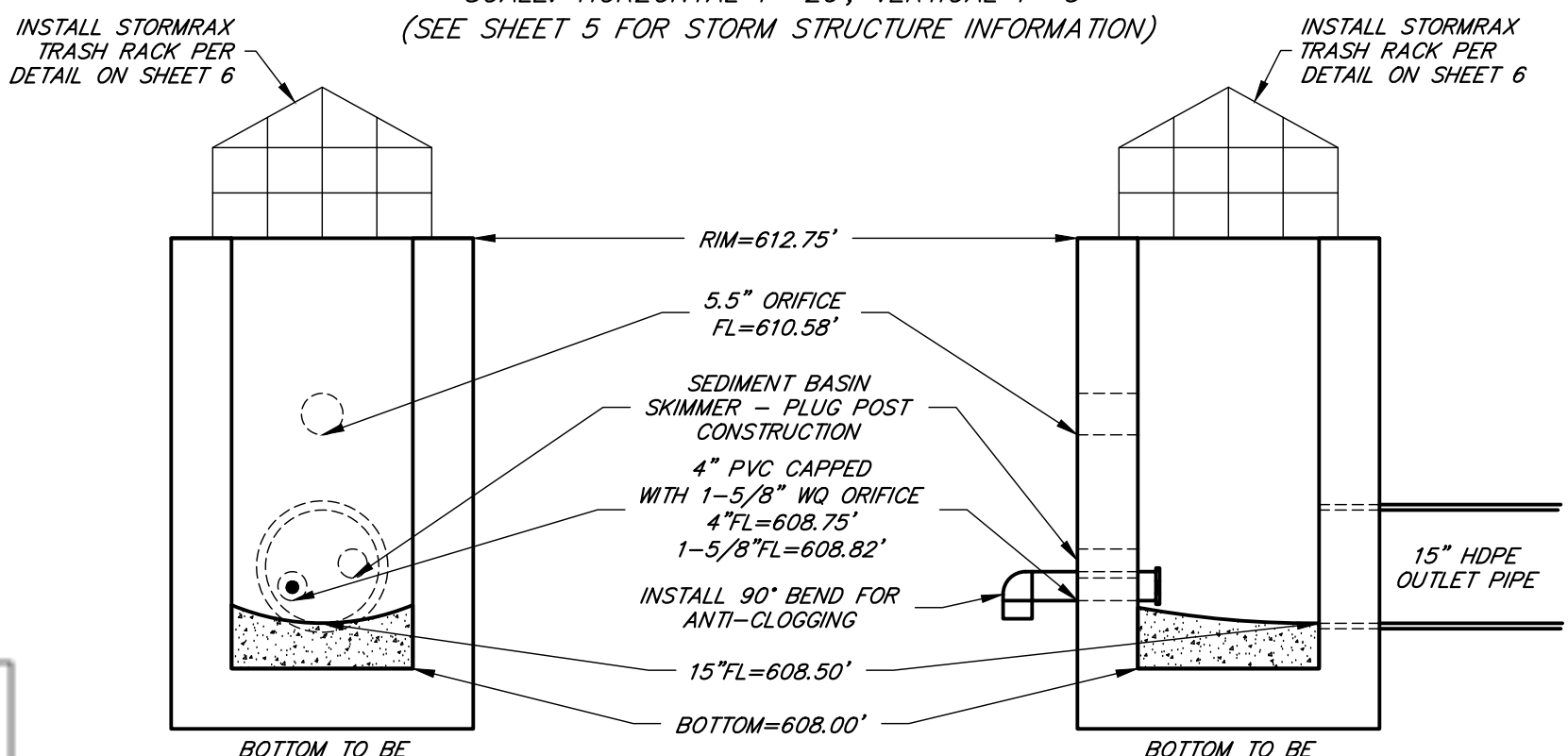
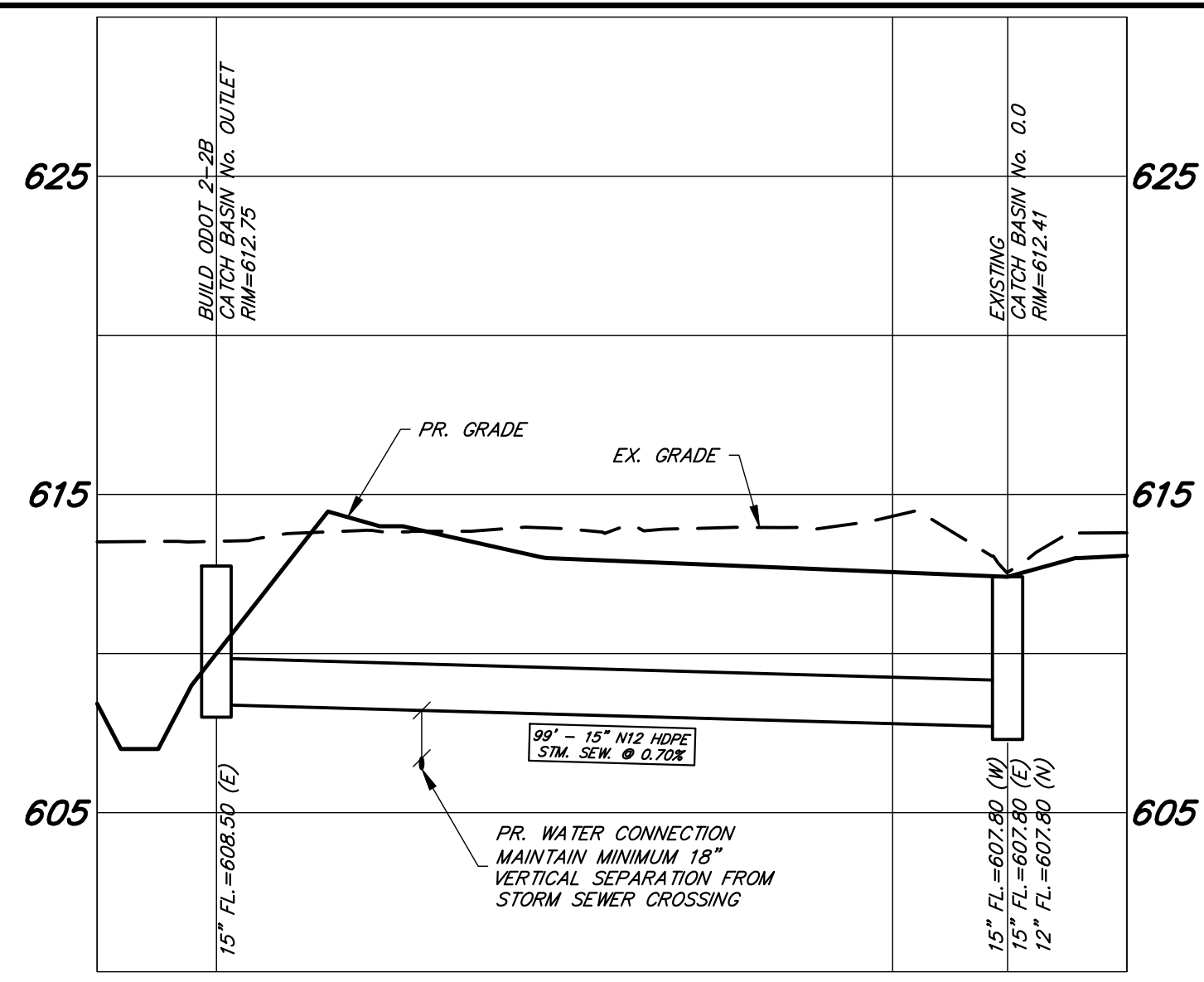
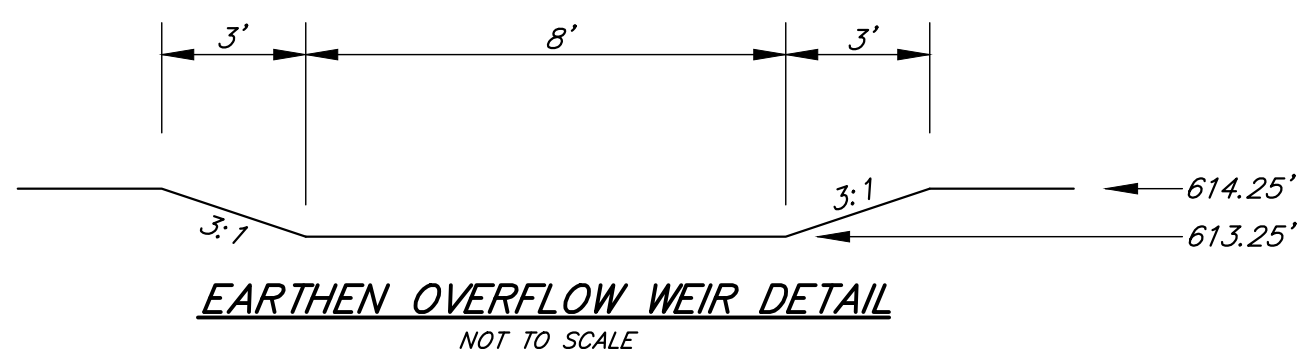
- 1) THE STORMWATER MANAGEMENT BASIN SHALL NOT BE INSTALLED UNTIL THE END OF THE PROJECT. STORMWATER MANAGEMENT BASIN SHALL BE USED AS A SEDIMENT BASIN WHILE THE SITE IS UNDER CONSTRUCTION.
- 2) THE CONTRACTOR SHALL INSTALL THE STORMWATER MANAGEMENT BASIN AS SHOWN ON THIS PLAN AT THE END OF THE PROJECT.
- 3) THE CONTRACTOR SHALL COMPLETELY DEWATER THE SEDIMENT BASIN PRIOR TO BEGINNING ANY REGRADING ANY PARTS OF THE SEDIMENT BASIN TO ACHIEVE THE FINAL PLAN ELEVATIONS OF THE STORMWATER MANAGEMENT BASIN.
- 4) THE CONTRACTOR IS RESPONSIBLE FOR ALL EXPENSES TO CONVERT THE SEDIMENT BASIN TO THE FINAL STORMWATER MANAGEMENT BASIN, AS SHOWN ON THIS PLAN, INCLUDING BUT NOT LIMITED TO: REGRADING OF THE STORMWATER MANAGEMENT BASIN, MODIFICATION OF THE OUTLET STRUCTURE, CLEANING OF THE OUTLET STRUCTURE AND SITE STORM SEWERS.
- 5) AFTER THE CONSTRUCTION OF THE STORMWATER MANAGEMENT BASIN AND CONVERSION OF THE OUTLET STRUCTURE, THE CONTRACTOR SHALL PROVIDE AN ASBUILT SURVEY STAMPED BY AN OHIO REGISTERED PROFESSIONAL SURVEYOR, IN BOTH PAPER COPY AND ELECTRONIC AUTOCAD FILE, AND STORMWATER MANAGEMENT BASIN ASBUILT ROUTING CALCULATIONS PREPARED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, TO THE PROJECT ENGINEER, OF THE STORMWATER MANAGEMENT BASIN AREA AND OUTLET STRUCTURE FOR REVIEW AND ACCEPTANCE OF WORK.
- 6) DEVIATION FROM THE DESIGN ELEVATIONS AND LOCATIONS OF MORE THAN 1/2" VERTICALLY OR 2' HORIZONTALLY FOR THE OUTLET STRUCTURE, INCLUDING RIMS, FLOWLINES, ORIFICE AND OVERFLOW WEIRS, WILL NOT BE ACCEPTED.
- 7) DEVIATION OF 5% OR GREATER FROM THE DESIGN STORAGE VOLUME AT EACH CONTOUR ELEVATION WILL NOT BE ACCEPTED.
- 8) THE STORMWATER MANAGEMENT BASIN SHALL NOT AT ANY TIME DISCHARGE STORM WATER AT A HIGHER RATE THAN ANY ALLOWABLE DISCHARGE RATE FOR EACH STORM EVENT.
- 9) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXPENSES TO HIRE A PROFESSIONAL SURVEYOR AND PROFESSIONAL ENGINEER TO PERFORM AN ASBUILT SURVEY AND PERFORM STORMWATER MANAGEMENT BASIN ROUTING CALCULATIONS, AS WELL AS REGRADE THE BASIN TO THE DESIGN ELEVATIONS AND LOCATIONS AND ADJUST OR REPLACE THE OUTLET STRUCTURE UNTIL SAID ASBUILT DRAWINGS AND CALCULATIONS DEMONSTRATE THAT THE WORK IS COMPLETE AND ACCEPTABLE TO THE PROJECT ENGINEER.

**STORMWATER MANAGEMENT BASIN INFORMATION**

1) PERVIOUS AREA = 0.88 ACRE  
 IMPERVIOUS AREA = 3.04 ACRE  
 TOTAL DRAINAGE AREA = 3.92 ACRE

Storm Event (Year)	Pre-Developed Runoff Rates (C.F.S.)	Post-Developed Runoff Rates (C.F.S.)	Allowable Developed Runoff Rates (C.F.S.)	Peak Detention Basin Run-off Rates (C.F.S.)	Peak Storage Elevation (FT.)
1	1.28	7.10	1.28	0.31	610.97
2	2.01	8.91	1.28	0.59	611.25
5	3.25	11.63	1.28	0.87	611.78
10	4.35	13.83	1.28	1.04	612.19
25*	6.01	16.97	1.28	1.23	612.74
50	7.44	19.56	7.44	3.74	612.96
100	9.00	22.31	9.00	7.57	613.16

\* Indicates critical storm event



**Dry Extended Detention Basin WQv Compliance Tool** version 1.2.2020-07-07

Project Name: 2630 Colorado Ave - Storage Development  
 Subwatershed ID/Label: 1  
 Submitted by: Lewis Land Professionals, Inc.  
 Date: 4/6/2025

Subwatershed Drainage Area, A <sub>sub</sub>	3.90 acres	=	169,884 ft <sup>2</sup>
Subwatershed Impervious Area, A <sub>imp</sub>	3.04 acres	=	132,422 ft <sup>2</sup>
Imperviousness fraction, I <sub>f</sub>	0.78	=	78 %
Water Quality Volume, WQv	9,576 ft <sup>3</sup>	=	0.22 ac-ft

**Step 4 - Outlet Elevations and Storage Volumes**

WQ Orifice Invert Elevation	608.82	
Elevation of Top of EDv	610.57	
Secondary Outlet Invert Elevation	610.58	OKAY
WQ Treatment Volume Provided, V <sub>provided</sub>	9,673 ft <sup>3</sup>	101% OKAY
Treatment Vol Provided Relative to EDv, V <sub>provided</sub> /EDv	1.01	
Permanent Pool Volume Provided, PPV	4,123 ft <sup>3</sup>	1.57
Forebay Volume Provided, V <sub>forebay</sub>	1,500 ft <sup>3</sup>	137% OKAY
Is forebay volume below WQ outlet? (Yes or No)	Yes	
Permanent Micropool Volume Provided, V <sub>micropool</sub>	2,623 ft <sup>3</sup>	274% OKAY
Ratio V <sub>micropool</sub> Provided to V <sub>micropool</sub> Required	2.74	
Sediment Storage Volume Provided, V <sub>sediment</sub>	4,123 ft <sup>3</sup>	215% OKAY
Ratio V <sub>sediment</sub> Provided to V <sub>sediment</sub> Required	2.15	

**Step 5 - Outlet (Orifice) Sizing**

Maximum Hydraulic Head, H <sub>max</sub>	1.75 ft	
Orifice Coefficient, C <sub>d</sub>	0.6	
Target (Minimum) Draw-down Time, T <sub>d</sub>	48 hr	
Target Average Discharge, Q <sub>avg</sub>	0.06 cfs	
Average Hydraulic Head, H <sub>avg</sub>	0.87 ft	
Estimated Orifice Area, A <sub>orifice</sub>	1.77 in <sup>2</sup>	0.012 ft <sup>2</sup>
Estimated Orifice Diameter, D <sub>orifice</sub>	1.50 in	0.13 ft
Design Orifice Diameter, D <sub>design</sub>	1.63 in	0.14 ft
Design Orifice Area, A <sub>design</sub>	2.06 in <sup>2</sup>	0.014 ft <sup>2</sup>
Time to Completely Drain EDv, T <sub>c</sub>	56 hr	must be ≥ 48 hr OKAY
Volume Drained in First 16 hr	4,584 ft <sup>3</sup>	
% of EDv	47.9%	must be ≤ 50% OKAY

**Step 3 - Basin Stage-Storage Relationship**

Elevation (ft)	Area (ft <sup>2</sup> )	Incremental Volume (ft <sup>3</sup> )	Cumulative Volume (ft <sup>3</sup> )
606.00	300		
607.00	739	503	503
608.00	2,001	1,319	1,822
609.00	4,138	3,006	4,827
610.00	6,113	5,099	9,926
611.00	8,289	7,119	17,045
612.00	10,289	9,296	26,341
613.00	12,486	11,870	37,610
614.00	14,740	15,597	51,207
614.25	15,312	3,756	54,963

— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

PROJECT: **STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**  
 TITLE: **STORMWATER MANAGEMENT PLAN**

TWO WORKING DAYS BEFORE YOU DIG  
 Call 1-800-362-2764  
 TOLL FREE  
 Outside Ohio 216-744-5191  
 OHIO UTILITIES PROTECTION SERVICE

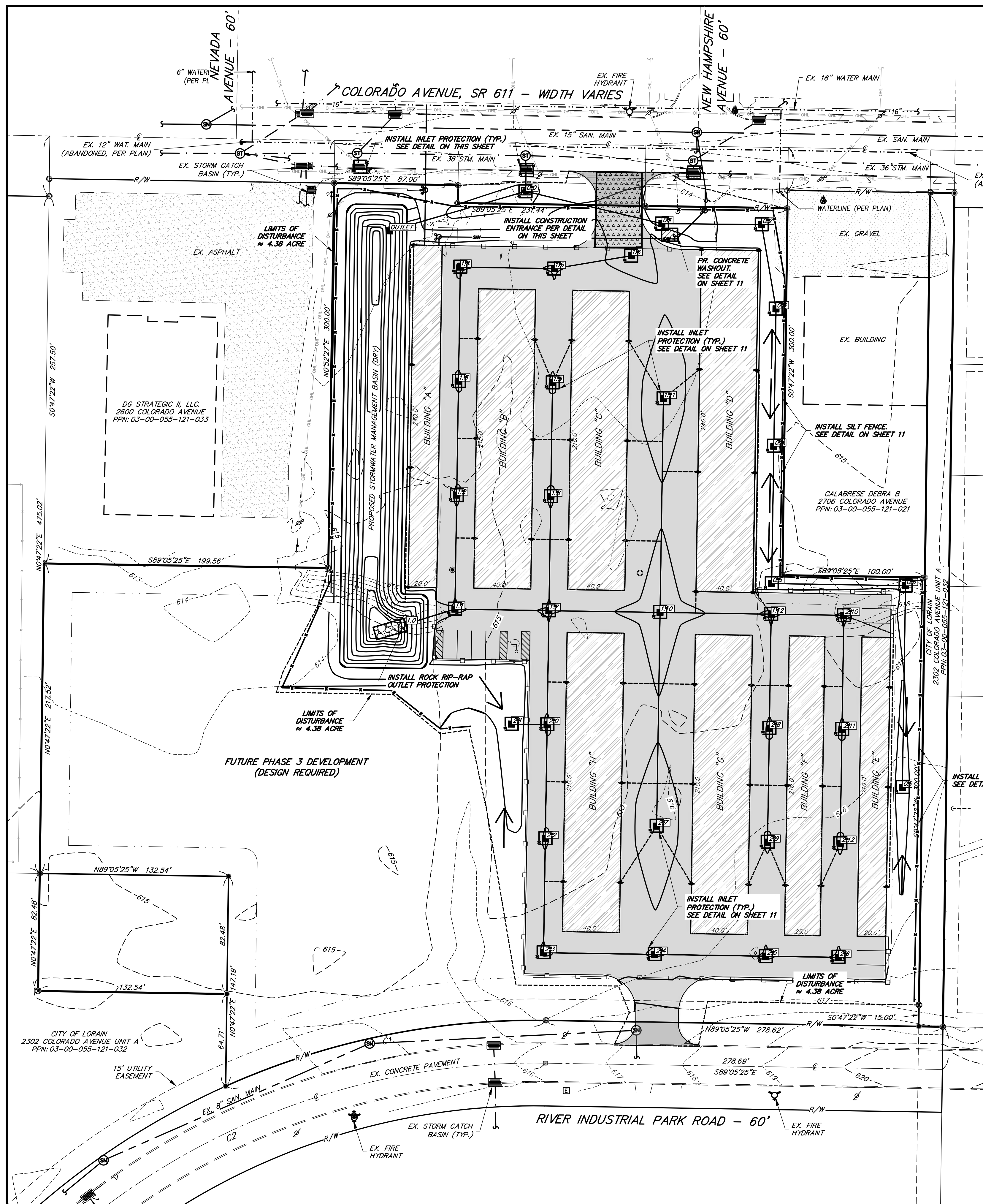
SCALES:  
**1" = 20'**  
 DRAWING FILE:  
 25-344 STORMWATER MANAGEMENT.dwg  
 NPDES PERMIT NUMBER:  
**JGC16881\*AG**

REVISION TABLE

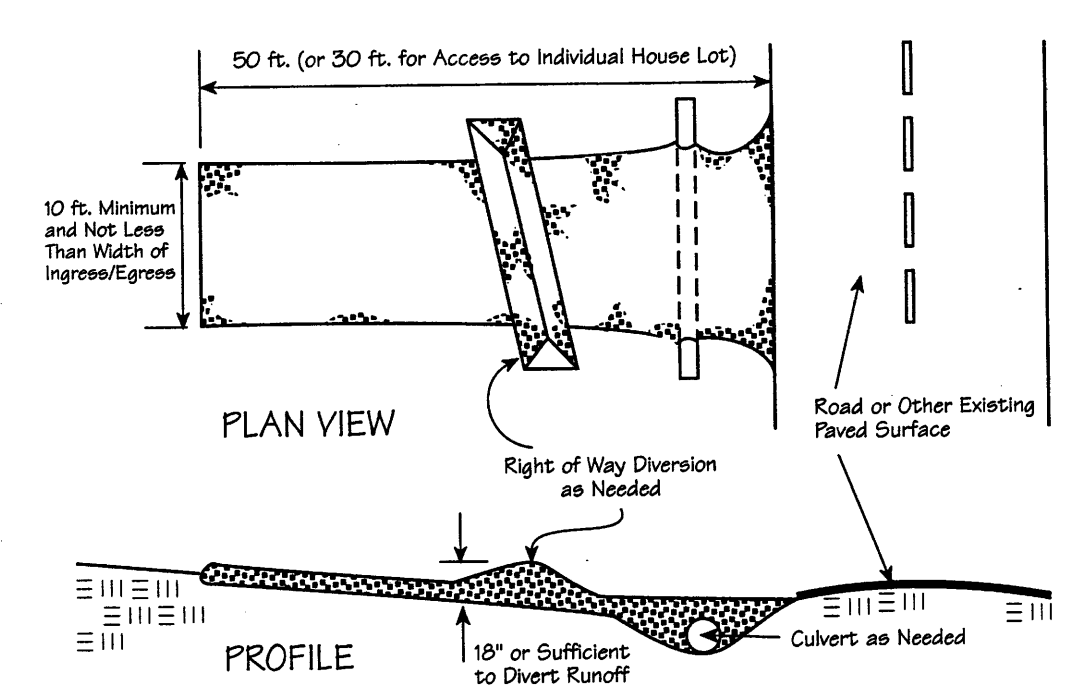
NO.	DATE	DESCRIPTION	BY
2	4/9/26	FINAL CIVIL SITE PLAN	MBK
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK

DATE: 4/8/2026  
 PROJECT NUMBER: 25-344  
 SHEET NUMBER: 8 of 11





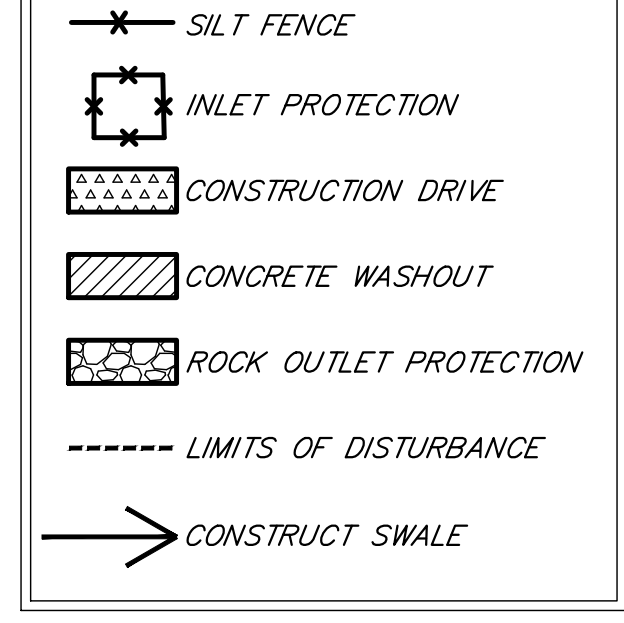
**Specifications for Construction Entrance**



**Specifications for Construction Entrance**

1. Stone Size -- Two-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 50 ft. (except on single residence lot where a 30-ft. minimum length applies).
3. Thickness--The stone layer shall be at least 6 in. thick.
4. Width -- The entrance shall be at least 10 ft. wide, but not less than the full width at points where ingress or egress occurs.
5. Bedding--A geotextile shall be placed over the entire area prior to placing stone. It shall have a Grab Tensile Strength of at least 200 lb. and a Mullen Burst Strength of at least 190 lb.
6. Culvert -- A pipe or culvert shall be constructed under the entrance if needed to prevent surface water flowing across the entrance from being directed out onto paved surfaces.
7. 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.
8. Maintenance -- Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed 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.
9. 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.

**EROSION CONTROL LEGEND**



**SEDIMENT CONTROL NOTE:**  
 PROPOSED DETENTION BASIN SHALL BE USED AS A SEDIMENT CONTROL DEVICE DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE AND MAINTAIN SEDIMENT AS NEEDED. SEE SHEET 7 FOR DETAILS ON SEDIMENT BASIN.  
 SEE SHEET 5 FOR STORM STRUCTURE INFORMATION

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

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	kN (kPa)	1.78 (1400) x 1.40 (115)
Grab Tensile Elongation	ASTM D 4832	%	12 x 18
Puncture Strength	ASTM D 4832	kN (kPa)	0.27 (150)
Mullen Burst Strength	ASTM D 3786	kPa (kPa)	2008 (200)
Pressure Tear Strength	ASTM D 4832	kN (kPa)	0.27 (150) x 0.19 (168)
UV Resistance	ASTM D 4328	%	80
Apparent Opening Size	ASTM D 4302	mm (US Std Sieve)	0.425 (40)
Flow Rate Permeability	ASTM D 4481	l/min/ft² (gal/min/ft²)	2000 (100)
Permeability	ASTM D 4481	sec	0.30

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	kN (kPa)	1.62 (1400) x 0.98 (2000)
Grab Tensile Elongation	ASTM D 4832	%	12 x 18
Puncture Strength	ASTM D 4832	kN (kPa)	0.40 (200)
Mullen Burst Strength	ASTM D 3786	kPa (kPa)	2007 (200)
Pressure Tear Strength	ASTM D 4832	kN (kPa)	0.51 (113) x 0.33 (75)
UV Resistance	ASTM D 4328	%	80
Apparent Opening Size	ASTM D 4302	mm (US Std Sieve)	0.425 (40)
Flow Rate Permeability	ASTM D 4481	l/min/ft² (gal/min/ft²)	2000 (100)
Permeability	ASTM D 4481	sec	0.1

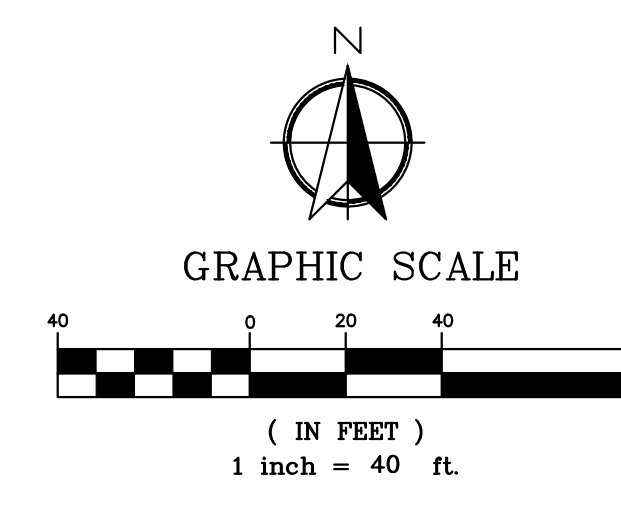
\*NOTE: ALL DANDY SACKS™ CAN BE ORDERED WITH OUR OPTIONAL OIL ABSORBENT FILLERS

**City of Lorain**  
 200 West Erie Avenue Lorain, Ohio 44052  
 Phone: (440) 204-2003

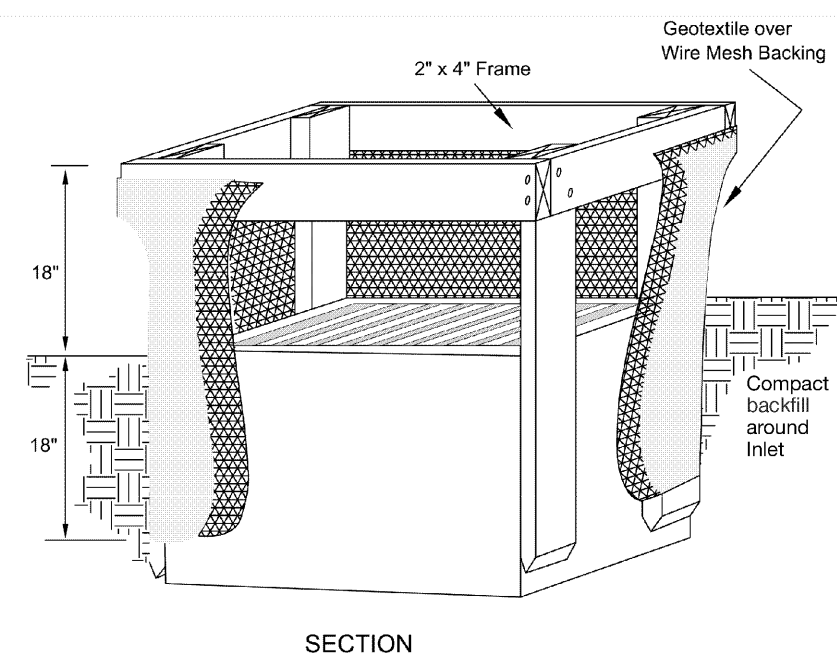
**STANDARD DESIGNS**  
**EROSION CONTROL**  
**INLET PROTECTION WITH CURB**

ER-5.0.dwg  
 EA: CV: 08/15/2016 NONE

**ER-5.0**



**Specifications for Geotextile Inlet Protection**



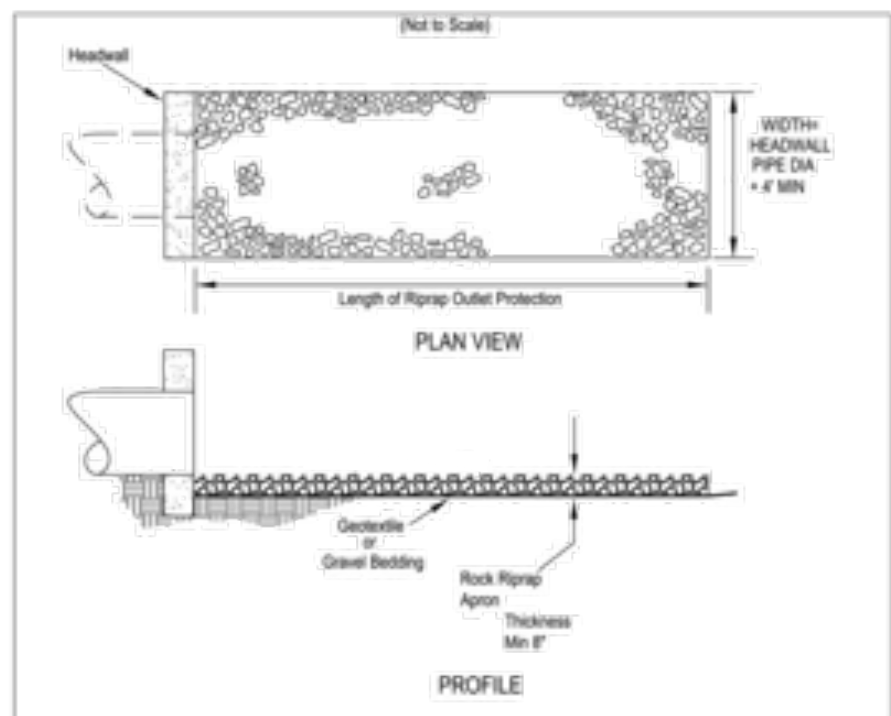
- Inlet protection shall be constructed either before upslope and disturbance begins or before the inlet becomes functional.
- The earth around the inlet shall be excavated completely to a depth of at least 18 inches.
- The wooden frame shall be constructed of 2-inch by 4-inch construction grade lumber. The 2-inch by 4-inch posts shall be driven one (1) ft. into the ground at four corners of the inlet and the top portion of 2-inch by 4-inch frame assembled using the overlap joint shown. The top of the frame shall be at least 18 inches below adjacent roads if ponded water will pose a safety hazard to traffic. Wire mesh shall be of sufficient strength to support fabric with water fully impounded against it. It shall be stretched tightly around the frame and fastened securely to the frame.
- Geotextile material shall have an equivalent opening size of 20-40 sieve and be resistant to sunlight. It shall be stretched tightly around the frame and fastened securely. It shall extend from the top of the frame to 18 inches below the inlet elevation. The geotextile shall overlap across one side of the inlet so the ends of the cloth are not fastened to the same post.
- Backfill shall be placed around the inlet in compacted 6-inch layers until the earth is even with road elevation on ends and top elevation on sides.
- A compacted earth dike or check dam shall be constructed in the ditch line below the inlet if the inlet is not in a depression. The top of the dike shall be at least 6 inches higher than the top of the frame.

**Specifications for Dust Control**

- Vegetative Cover and mulch**—Apply temporary or permanent seeding and mulch to areas that will remain idle for over 21 days. Saving existing trees and large shrubs will also reduce soil and air movement across disturbed areas. See Temporary Seeding, Permanent Seeding, Mulching Practices, and Tree and Natural Area Protection practices.
- Watering**—Spray site with water until the surface is wet before and during grading and repeat as needed, especially on haul roads and other heavy traffic routes. Watering shall be done at a rate that prevents dust but does not cause soil erosion. Wetting agents shall be utilized according to manufacturers instructions.
- Spray-On Adhesives**—Apply adhesive according to the following table or manufacturers' instructions.
- Stone**—Graded roadways and other suitable areas will be stabilized using crushed stone or coarse gravel as soon as possible after reaching an interim or final grade. Crushed stone or coarse gravel can be used as a permanent cover to provide control of soil emissions.
- Barriers**—Existing windbreak vegetation shall be marked and preserved. Snow fencing or other suitable barrier will be placed perpendicular to prevailing air currents at intervals of about 15 times the barrier height to control air currents and blowing soil.
- Calcium Chloride**—This chemical may be applied by mechanical spreader or hose, dry granules or flakes at a rate that keeps the surface moist but not so high as to cause water pollution or paint damage. Application rates should be strictly in accordance with suppliers' specified rates.
- Operation and Maintenance**—When Temporary Dust Control measures are used, repetitive treatment should be applied as needed to accomplish control.  
**Street Cleaning**—Paved areas that have accumulated sediment from construction should be cleaned daily or as needed, utilizing a street sweeper or bucket-type end-loader or scraper.

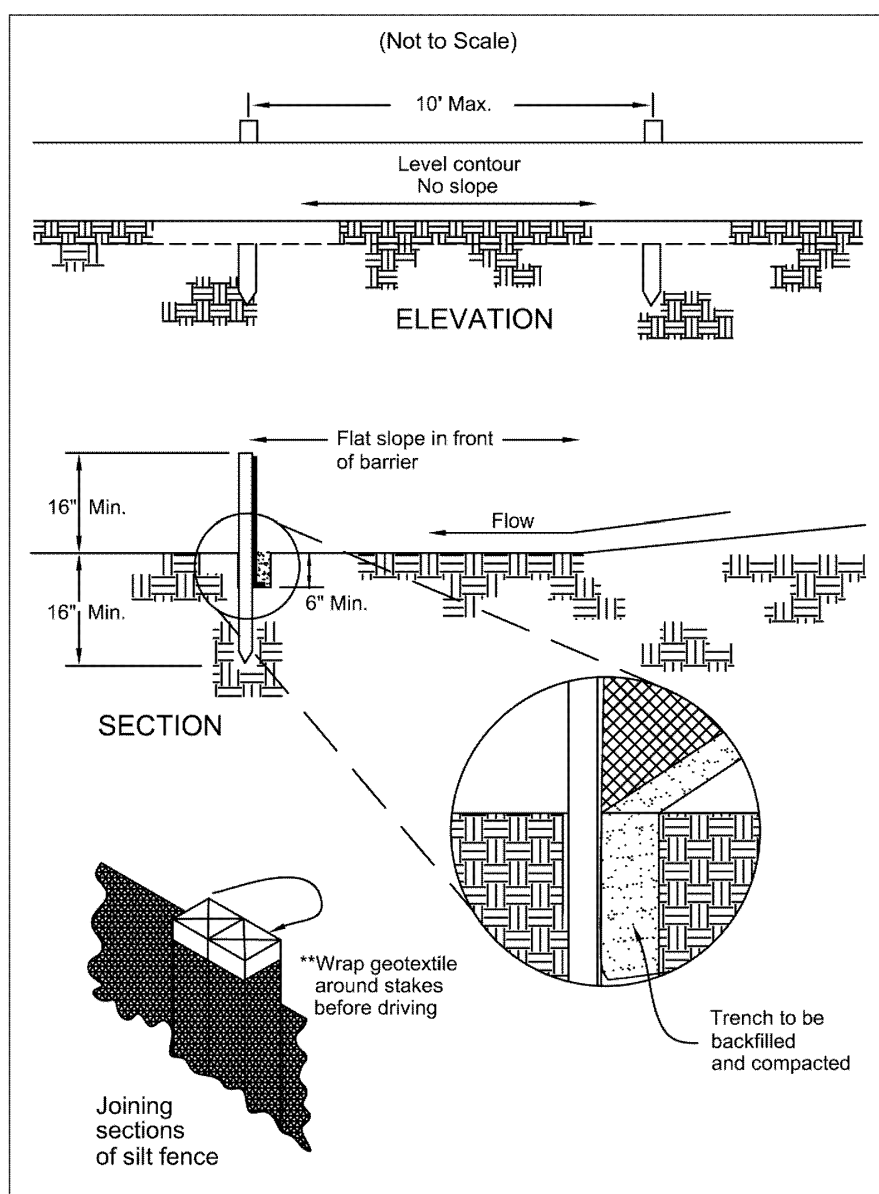
Adhesive	Adhesive (lb./gal)	Type	Application Rate (lb./sq. ft.)
Laticrete	12.5:1	Fine	235
Resin in Water Acrylic Emulsion (No-Traffic)	4:1	Fine	300
Acrylic Emulsion (No-Traffic)	7:1	Coarse	450
Acrylic Emulsion (Traffic)	3.5:1	Coarse	350

**Specifications for Rock Outlet Protection**



- Subgrade for the filter or bedding and riprap shall be prepared to the required lines and grades as shown on the plans. The subgrade shall be cleared of all stumps, stumps, roots, soil, rock, or other material.
- Riprap shall conform to the grading limits as shown on the plan.
- Geotextile shall be securely anchored according to manufacturer's recommendations.
- Geotextile shall be laid with the long dimension parallel to the direction of flow and shall be laid loosely but without wrinkles and creases. Where joints are necessary, strips shall be placed to provide a 12-in. minimum overlap, with the upstream strip overlapping the downstream strip.
- Gravel bedding shall be 0007 No. 67's or 57's unless shown differently on the drawings.
- Riprap may be placed by equipment but shall be placed in a manner to prevent slippage or damage to the geotextile.
- Riprap shall be placed by a method that does not cause segregation of sizes. Extensive pushing with a dozer causes segregation and shall be avoided by delivering riprap near its final location within the channel.
- Construction shall be sequenced so that outlet protection is placed and functional when the storm drain, culvert, or open channel above it becomes operational.
- All disturbed areas will be vegetated as soon as practical.

**Specifications for Silt Fence**



- Silt fence shall be constructed before upslope land disturbance begins.
- All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
- The ends of the silt fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
- Silt fence shall be placed on the flattest area available.
- Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
- The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
- The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.
- The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
- Seams between sections of silt fence shall be applied together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see details).
- Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) The layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or 3) other practices shall be installed. Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence. Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

- Criteria for silt fence materials
- Fence post—The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
  - Silt fence fabric—See chart below.

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4633
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4533
Aperture Opening Size	<0.08 mm	ASTM D 5751
Minimum Permeability	1X10 <sup>-2</sup> sec.-1	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

**Specifications for Temporary Seeding**

Table 7.8.1 Temporary Seeding Species Selection

Seeding Dates	Species	Lb./1,000 ft <sup>2</sup>	Lbs/Acre
March 1 to August 15	Tall Fescue	3	129 (4 bushel)
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Annual Ryegrass	1.25	55
	Perennial Ryegrass	3.25	142
	Creeping Red Fescue	0.4	17
	Kentucky Bluegrass	0.4	17
	Orts	3	129 (3 bushel)
August 16th to November	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Wheat	3	120 (2 bushel)
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	General Use	1	40
	Perennial Ryegrass	1	40
	Perennial Ryegrass	1	40
	Annual Ryegrass	1	40
	Annual Ryegrass	1.25	55
November 1 to Feb. 29	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Use much only or dormant seeding		

Note: Other approved species may be substituted.

- Structural erosion and sediment control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction site.
- Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 21 days or greater. These idle areas shall be seeded within 7 days after grading.
- The seeded should be pulverized and loose to ensure the success of establishing vegetation. Temporary seeding should not be postponed if ideal seeded preparation is not possible.
- Soil Amendments—Temporary vegetation seeding rates shall establish adequate stands of vegetation, which may require the use of soil amendments. Base rates for lime and fertilizer shall be used.
- Seeding Method—Seed shall be applied uniformly with a cyclone spreader, drill, cultipacker seeder, or hydrosower. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydrosowing is used, the seed and fertilizer will be mixed on-site and the seeding shall be done immediately without interruption.

**Specifications for Temporary Seeding**

**Mulching Temporary Seeding**

- Applications of temporary seeding shall include mulch, which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates on favorable, very flat soil conditions may not need mulch to achieve adequate stabilization.
- Materials:
  - Straw—If straw is used, it shall be unrotted small-grain straw applied at a rate of 2 tons per acre or 90 lbs./1,000 sq. ft. (2-3 bales).
  - Hydroseders—If wood cellulose fiber is used, it shall be used at 2,000 lbs./ac. or 46 lb./1,000-sq.-ft.
  - Other—Other acceptable mulches include mulch matings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.
- Straw Mulch shall be anchored immediately to minimize loss by wind or water. Anchoring methods:
  - Mechanical—A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but left to a length of approximately 6 inches.
  - Mulch Netting—Netting shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
  - Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petrosat, Terra Tack or equivalent may be used at rates specified by the manufacturer.
  - Wood Cellulose Fiber—Wood cellulose fiber binder shall be applied at a net dry wt. of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.

**Specifications for Permanent Seeding**

- From October 1 through November 20, prepare the seeded, and the required amount of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50% for this type of seeding.
- From November 20 through March 15, when soil conditions permit, prepare the seeded, lime and fertilizer, apply the selected seed mixture, mulch and anchor. Increase the seeding rates by 50% for this type of seeding.
- Apply seed uniformly with a cyclone spreader, drill, cultipacker seeder, or hydrosower (slurry may include seed and fertilizer) on a firm, moist seeded.
- Where feasible, except when a cultipacker type seeder is used, the seeded should be firm following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be to the contour where feasible.

- Seedbed Preparation**
- Lime—Agricultural ground limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 pounds per 1,000-sq. ft. or 2 tons per acre.
  - Fertilizer—Fertilizer shall be applied as recommended by a soil test. In place of a soil test, fertilizer shall be applied at a rate of 25 pounds per 1,000-sq. ft. or 1,000 pounds per acre of a 10-10-10 or 12-12-12 analysis.
  - The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 inches. On sloping land, the soil shall be worked on the contour.
- Seeding Dates and Soil Conditions**
- Seeding should be done March 1 to May 31 or August 1 to September 30. If seeding occurs outside of the above-specified dates, additional mulch and irrigation may be required to ensure a minimum of 80% germination. Tillage for seedbed preparation should be done when the soil is dry enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant seedings.
- Dormant Seedings**
- Seedings should not be made from October 1 through November 20. During this period, the seeds are likely to germinate but probably will not be able to survive the winter.
  - The following methods may be used for "Dormant Seeding":

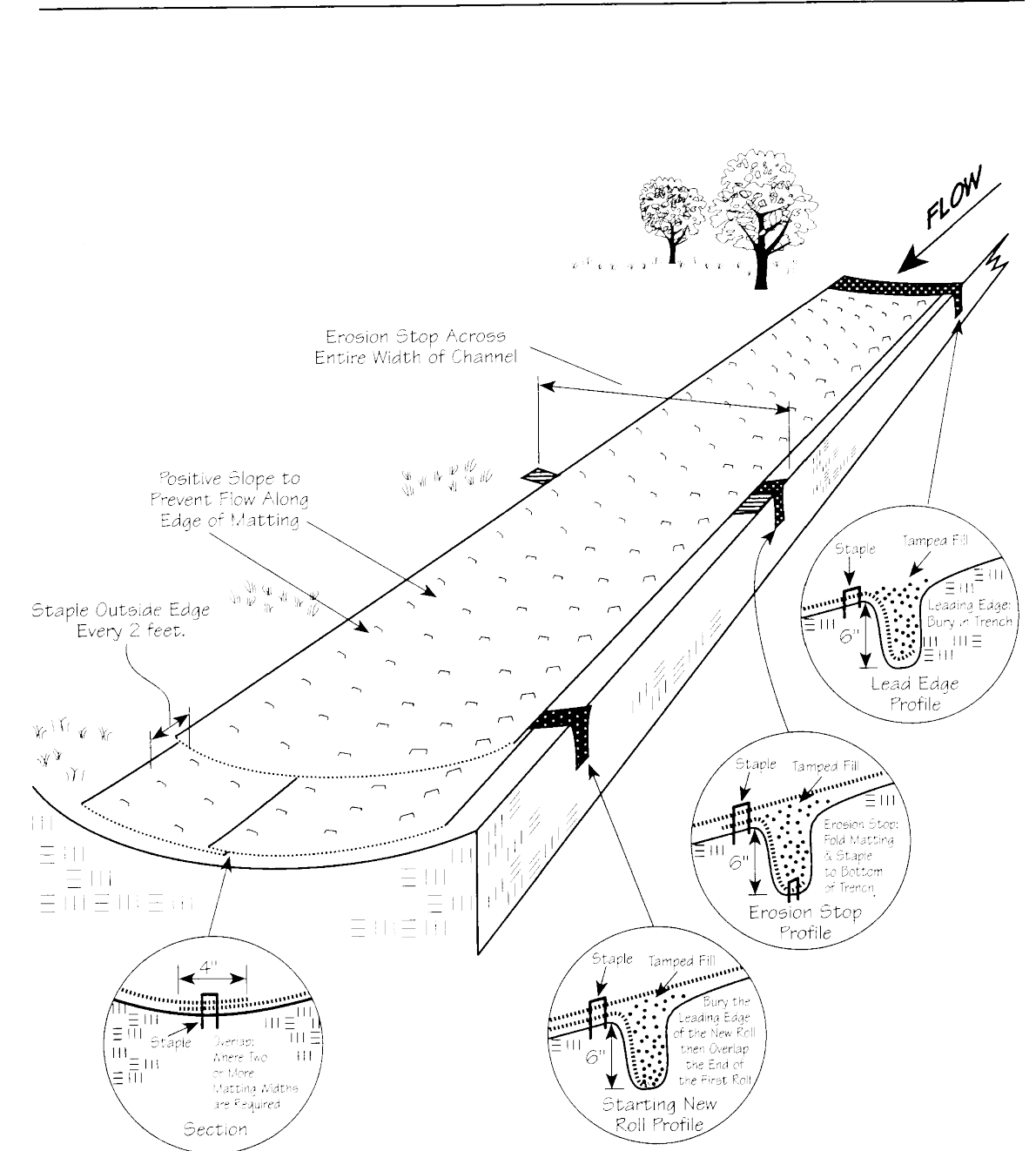
- Straw and Mulch Anchoring Methods
  - Straw mulch shall be anchored immediately to minimize loss by wind or water.
  - Mechanical—A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 inches.
  - Mulch Netting—Netting shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
  - Asphalt Emulsion—Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gallons per acre.
- Synthetic Binders—Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petrosat, Terra Tack or equivalent may be used at rates specified by the manufacturer.
- Wood Cellulose Fiber—Wood cellulose fiber shall be applied at a net dry weight of 750 pounds per acre. The wood cellulose fiber shall be mixed with water with the mixture containing a maximum of 50 pounds cellulose per 100 gallons of water.

Table 7.10.2 Permanent Seeding

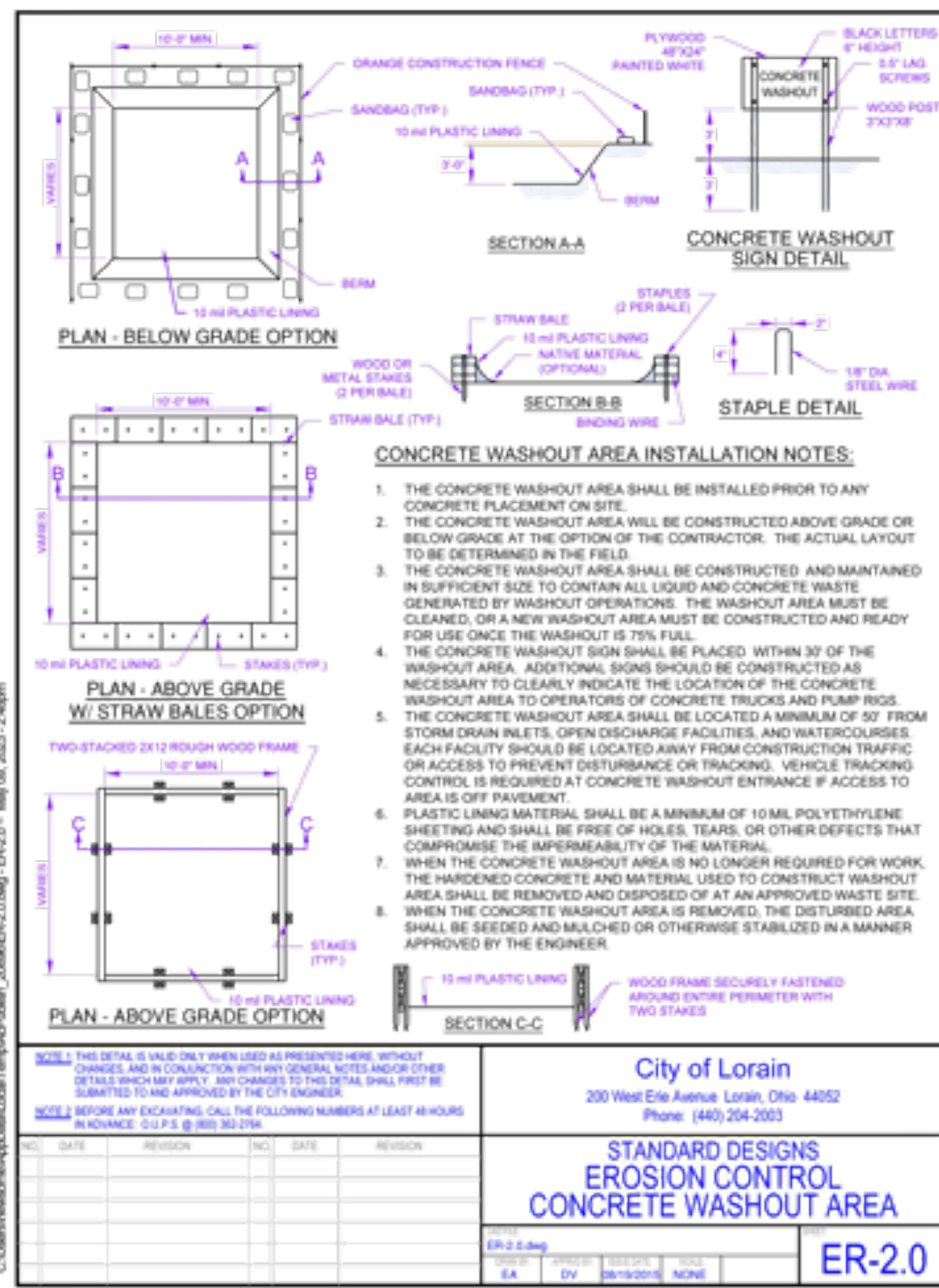
Seed Mix	Seeding Rate		Notes
	Lbs./acre	Lbs./1,000 Sq. Feet	
Creeping Red Fescue	20-40	1.2-1.4	For close mowing and for walkways with <2.0 ft/sec velocity
Perennial Ryegrass	10-20	1.4-1.2	
Kentucky Bluegrass	20-40	1.2-1.1	
Tall Fescue	40-50	1.1-1.4	
Turf-type dwarf Fescue	90	2.14	Do not seed later than August
Crown Vetch	10-20	1.4-1.2	
Tall Fescue	20-30	1.2-3.4	
Flax Pea	20-25	1.2-3.4	Do not seed later than August
Tall Fescue	20-30	1.2-3.4	
Road Ditches and Swales			
Tall Fescue	40-50	1-1.14	Lawns
Turf-type (dwarf) Fescue	90	2.14	
Kentucky Bluegrass	100-120	2	For shaded areas
Kentucky Bluegrass	100-120	2	
Creeping Red Fescue	100-120	1-1/2	

Note: Other approved seed species may be substituted.

**Specifications for Matting**



- Material**—Excelsior matting shall be 48 in. wide and weigh an average of 0.25 lb./sq. yd. or greater. Site matting shall be 48 in. wide and weigh an average of 1.2 lb./yd. or greater. Matting made of other material and providing equal or greater stabilization than the above may be substituted.
- Site Preparation**—After the site has been shaped and graded, a seedbed shall be prepared that is relatively free of foreign material, clods or rocks that are greater than 1.5 in. in diameter. The site shall be prepared to ensure that the matting has good soil contact and the matting will not "bridge" or "tent" over obstructions.
- Matting shall be held in place** as recommended by the matting manufacturer or an area specified where high-erosion potential may cause undermining and gullies to form beneath the matting.
- Erosion stops shall be made** of strips of matting placed in narrow trenches 6-12 in. deep that cover the full cross section of the channel. They shall be spaced according to the manufacturer's recommendations or by the following: -3 ft. down the channel from each point of entry of concentrated flow; -at points where change in gradient or direction of channel occurs, and -on long slopes at spacing from 20-100 ft. depending upon the erodibility of the soil, velocity and volume of flow.
- Matting shall be installed** as specified by the manufacturer or the following procedure may be used:
  - After the site is prepared and erosion stops are installed, start laying the mat from the top of the slope or channel and unroll the matting allowing 4-in. overlaps at the edges.
  - Secure the matting by burying the top ends in a trench 6 in. deep and staple the folded ends to the bottom of the trench. Backfill and tamp firmly to the established grade.
  - Staple matting every 12 in. across the width beginning at the edges and every 2 ft. in rows the entire length of the matting. Every other row of staples running the length of the matting should be staggered.
  - To join two rolls together, cut a trench to anchor the end of the new roll and secure it the same as the top roll. Overlap the end of the previous roll 18 in. over the new roll. Continue to staple as described above.
  - When using excelsior matting, the plastic netting shall be on top of the good soil contact and the matting will not "bridge" or "tent" over obstructions.
  - Erosion stops shall extend beyond the channel liner to the full design width of the channel, this will check any rills that might form outside or along the edge of the channel lining.
  - Erosion stops shall be constructed with 6 in. deep trench, stapled to the bottom of the trench, backfilled and tamped firmly to conform with the cross section of the channel.
  - If seeding has been done prior to installation of erosion stops, reseed disturbed areas prior to placement of channel liner.



**CONCRETE WASHOUT AREA INSTALLATION NOTES:**

- THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
- THE CONCRETE WASHOUT AREA WILL BE CONSTRUCTED ABOVE GRADE OR BELOW GRADE AT THE OPTION OF THE CONTRACTOR. THE ACTUAL LOCATION TO BE DETERMINED IN THE FIELD.
- THE CONCRETE WASHOUT AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. THE WASHOUT AREA MUST BE CLEANED. OR A NEW WASHOUT AREA MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS FULL.
- THE CONCRETE WASHOUT SIGN SHALL BE PLACED WITHIN 30' OF THE WASHOUT AREA. ADDITIONAL SIGNS SHOULD BE CONSTRUCTED AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP TRUCKS.
- THE CONCRETE WASHOUT AREA SHALL BE LOCATED A MINIMUM OF 50' FROM STORM DRAIN INLETS, OPEN DISCHARGE FACILITIES, AND WATER COURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS TO PREVENT OBSTRUCTION OR TRACKING. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO AREA IS OFF PAVEMENT.
- PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- WHEN THE CONCRETE WASHOUT AREA IS NO LONGER REQUIRED FOR WORK, THE HARDENED CONCRETE AND MATERIAL USED TO CONSTRUCT WASHOUT AREA SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED WASTE SITE.
- WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE ENGINEER.

**City of Lorain**  
200 West Elm Avenue, Lorain, Ohio 44052  
Phone: (440) 254-2003

**STANDARD DESIGN EROSION CONTROL CONCRETE WASHOUT AREA**

**ER-2.0**

— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**

CIVIL ENGINEERING LAND SURVEYING  
8691 WADSWORTH ROAD SUITE 100  
WADSWORTH, OH 44281 (330) 335-8232

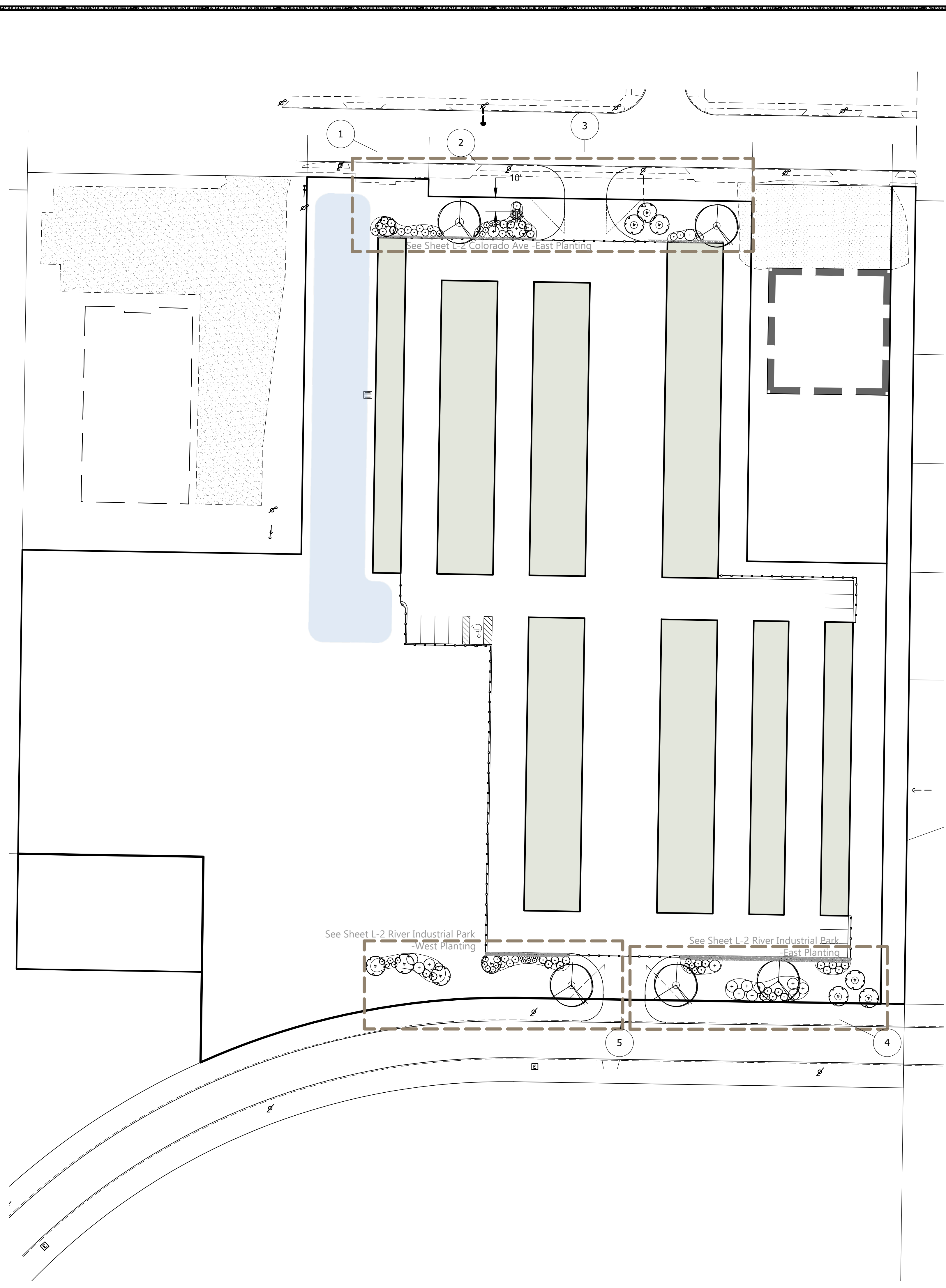
**PROJECT:**  
**STORAGE UNIT DEVELOPMENT - 2630 COLORADO AVE, LORAIN OHIO**

**TITLE:**  
**EROSION CONTROL DETAILS**

**TWO WORKING DAYS BEFORE YOU DIG**  
Call 1-800-362-2764  
TOLL FREE  
Outside Ohio 216-744-5191  
OHIO UTILITIES PROTECTION SERVICE

**SCALES:**  
**N/A**  
DRAWING FILE:  
**25-344 EROSION CONTROL DETAILS.dwg**  
INPDES PERMIT NUMBER:  
**3GC16881\*AG**

REVISION TABLE				DATE:
				4/8/2026
				PROJECT NUMBER:
2	4/9/26	FINAL CIVIL SITE PLAN	MBK	25-344
1	2/12/26	PRELIMINARY CONCEPT PLAN	MBK	SHEET NUMBER:
NO.	DATE	DESCRIPTION	BY	11 of 11



1 Colorado Ave View  
Not to Scale



2 Colorado Ave View  
Not to Scale



3 Colorado Ave View  
Not to Scale



4 River Industrial Park View  
Not to Scale



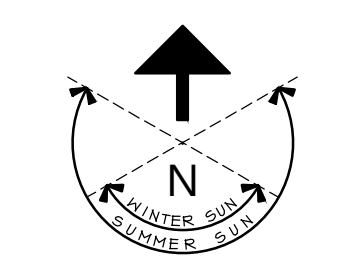
5 River Industrial Park View  
Not to Scale

PRELIMINARY

THIS DRAWING IS SUBJECT TO REVISIONS. ANYONE USING THIS DRAWING IS HEREBY ADVISED THAT REVISIONS MAY OCCUR AND VERIFICATION THAT THESE PLANS ARE CURRENT SHOULD BE MADE.



15533 Chillicothe Rd  
Novelty, OH 44072  
440-338-1288  
pattiegroupp.com



Scale: 1"=40'

Date	Planting	it
4.10.26		

Landscape Plan  
United Storage of America  
2630 Colorado Ave.  
Lorain, Ohio 44052

PROJECT NO.  
DBDS26-3021

L-1

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*PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO*

**STORM WATER MANAGEMENT  
CALCULATIONS  
for  
*PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE***

Located in  
CITY OF LORAIN  
LORAIN COUNTY, STATE OF OHIO

APRIL, 2026

Prepared for:  
JASON KUCHARSKI

*Prepared by:*



*8691 Wadsworth Road, Suite 100  
Wadsworth, Ohio 44281  
(330)335-8232*



**Job No. 25-344**

**PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO**

Narrative

The storm water management calculations presented in this report have been generated for the proposed storage unit development located at 2630 Colorado Avenue, Lorain Ohio 44052 (PPN: 03-00-055-121-025) on the existing light industrial district lot in the City of Lorain, Lorain County, Ohio. The existing condition was calculated as good grass cover, woods and gravel areas with soils being Haskins-Urban land complex and Mahoning silt loam being soil group "D". The proposed conditions were calculated as impervious and grassed open space. The existing conditions and proposed conditions were obtained from a combination of Lorain County online data, actual field survey information, and design data. The 25-Year Storm Event was determined to be the critical storm. Below is a table summarizing the calculated existing, proposed, and detained flow-rates.

The table below is a summary of the calculated storm water run-off flow rates found throughout this report.

Storm Event (Year)	Pre-Developed Runoff Rates (C.F.S.)	Post-Developed Runoff Rates (C.F.S.)	Allowable Developed Runoff Rates (C.F.S.)	Peak Detention Basin Run-off Rates (C.F.S.)	Peak Storage Elevation (FT.)
1	<b>1.28</b>	7.10	1.28	<b>0.31</b>	610.97
2	<b>2.01</b>	8.91	1.28	<b>0.59</b>	611.25
5	<b>3.25</b>	11.63	1.28	<b>0.87</b>	611.78
10	<b>4.35</b>	13.83	1.28	<b>1.04</b>	612.19
25*	<b>6.01</b>	16.97	1.28	<b>1.23</b>	612.74
50	<b>7.44</b>	19.56	7.44	<b>3.74</b>	612.96
100	<b>9.00</b>	22.31	9.00	<b>7.57</b>	613.16

\* Indicates critical storm event

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Overview**

Master Summary  
Critical Storm Calculation

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Master Network Summary

### Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
PRE-DEV	Lorain - , 1 yrs	1	7,104.000	12.300	1.28
PRE-DEV	Lorain - , 2 yrs	2	10,511.000	12.300	2.01
PRE-DEV	Lorain - , 5 yrs	5	16,291.000	12.250	3.25
PRE-DEV	Lorain - , 10 yrs	10	21,404.000	12.250	4.35
PRE-DEV	Lorain - , 25 yrs	25	29,217.000	12.250	6.01
PRE-DEV	Lorain - , 50 yrs	50	35,978.000	12.250	7.44
PRE-DEV	Lorain - , 100 yrs	100	43,443.000	12.250	9.00
POST-DEV	Lorain - , 1 yrs	1	19,338.000	12.000	7.10
POST-DEV	Lorain - , 2 yrs	2	24,567.000	12.000	8.91
POST-DEV	Lorain - , 5 yrs	5	32,616.000	12.000	11.63
POST-DEV	Lorain - , 10 yrs	10	39,242.000	12.000	13.83
POST-DEV	Lorain - , 25 yrs	25	48,840.000	12.000	16.97
POST-DEV	Lorain - , 50 yrs	50	56,813.000	12.000	19.56
POST-DEV	Lorain - , 100 yrs	100	65,376.000	12.000	22.31

### Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Out 10	Lorain - , 1 yrs	1	7,104.000	12.300	1.28
Out 10	Lorain - , 2 yrs	2	10,511.000	12.300	2.01
Out 10	Lorain - , 5 yrs	5	16,291.000	12.250	3.25
Out 10	Lorain - , 10 yrs	10	21,404.000	12.250	4.35
Out 10	Lorain - , 25 yrs	25	29,217.000	12.250	6.01
Out 10	Lorain - , 50 yrs	50	35,978.000	12.250	7.44
Out 10	Lorain - , 100 yrs	100	43,443.000	12.250	9.00
Out 20	Lorain - , 1 yrs	1	9,411.000	13.750	0.31
Out 20	Lorain - , 2 yrs	2	14,641.000	12.950	0.59
Out 20	Lorain - , 5 yrs	5	22,689.000	12.800	0.87
Out 20	Lorain - , 10 yrs	10	29,313.000	12.750	1.04
Out 20	Lorain - , 25 yrs	25	38,910.000	12.800	1.23
Out 20	Lorain - , 50 yrs	50	46,881.000	12.300	3.74
Out 20	Lorain - , 100 yrs	100	55,441.000	12.200	7.57

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
POND (IN)	Lorain - , 1 yrs	1	19,338.000	12.000	7.10	(N/A)	(N/A)
POND (OUT)	Lorain - , 1 yrs	1	9,411.000	13.750	0.31	610.97	16,797.000

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Master Network Summary

### Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ft <sup>3</sup> )	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ft <sup>3</sup> )
POND (IN)	Lorain - , 2 yrs	2	24,567.000	12.000	8.91	(N/A)	(N/A)
POND (OUT)	Lorain - , 2 yrs	2	14,641.000	12.950	0.59	611.25	19,162.000
POND (IN)	Lorain - , 5 yrs	5	32,616.000	12.000	11.63	(N/A)	(N/A)
POND (OUT)	Lorain - , 5 yrs	5	22,689.000	12.800	0.87	611.78	24,009.000
POND (IN)	Lorain - , 10 yrs	10	39,242.000	12.000	13.83	(N/A)	(N/A)
POND (OUT)	Lorain - , 10 yrs	10	29,313.000	12.750	1.04	612.19	28,222.000
POND (IN)	Lorain - , 25 yrs	25	48,840.000	12.000	16.97	(N/A)	(N/A)
POND (OUT)	Lorain - , 25 yrs	25	38,910.000	12.800	1.23	612.74	34,469.000
POND (IN)	Lorain - , 50 yrs	50	56,813.000	12.000	19.56	(N/A)	(N/A)
POND (OUT)	Lorain - , 50 yrs	50	46,881.000	12.300	3.74	612.96	37,114.000
POND (IN)	Lorain - , 100 yrs	100	65,376.000	12.000	22.31	(N/A)	(N/A)
POND (OUT)	Lorain - , 100 yrs	100	55,441.000	12.200	7.57	613.16	39,581.000

## SCS CN Volume Detailed Report: PRE CN Vol 1

Element Details		
ID	43	Notes
Label	PRE CN Vol 1	

### Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Gravel (w/ right-of-way) - Soil D	91.000	23,522.400	0.0	0.0	91.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	17,424.000	0.0	0.0	80.000
Woods - good	77.000	129,808.000	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	170,754.400	(N/A)	(N/A)	79.235

### COMPUTE RUNOFF VOLUME USING CN (Cumulative Volume from CN-Areas)

Frequency	1 years	Depth	1.96 in
-----------	---------	-------	---------

Soil/Surface Description	Adjusted CN	Runoff (in)	Area (ft <sup>2</sup> )	Volume (ft <sup>3</sup> )
Impervious Areas - Gravel (w/ right-of-way) - Soil D	91.000	1.13	23,522.400	2,212.515
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	0.54	17,424.000	781.587
Woods - good	77.000	0.43	129,808.000	4,617.479
TOTAL RUNOFF VOLUME --->	(N/A)	(N/A)	(N/A)	7,611.581

### COMPUTE RUNOFF VOLUME USING CN (From Composite Weighted CN)

Frequency	1 years	Depth	1.96 in
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Soil/Surface Description	Adjusted CN	Area (ft <sup>2</sup> )	Runoff (in)	Volume (ft <sup>3</sup> )
Impervious Areas - Gravel (w/ right-of-way) - Soil D	91.000	23,522.400	(N/A)	(N/A)
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	17,424.000	(N/A)	(N/A)
Woods - good	77.000	129,808.000	(N/A)	(N/A)
COMPOSITE RUNOFF VOLUME --->	79.235	170,754.400	0.50	7,103.991

## SCS CN Volume Detailed Report: POST CN Vol 2

Element Details		
ID	44	Notes
Label	POST CN Vol 2	

### Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads	98.000	132,422.400	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	38,332.800	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	170,755.200	(N/A)	(N/A)	93.959

### COMPUTE RUNOFF VOLUME USING CN (Cumulative Volume from CN-Areas)

Frequency	1 years	Depth	1.96 in		
Soil/Surface Description	Adjusted CN	Runoff (in)	Area (ft <sup>2</sup> )	Volume (ft <sup>3</sup> )	
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads	98.000	1.73	132,422.400	19,142.957	
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	0.54	38,332.800	1,719.491	
TOTAL RUNOFF VOLUME --->	(N/A)	(N/A)	(N/A)	20,862.448	

### COMPUTE RUNOFF VOLUME USING CN (From Composite Weighted CN)

Frequency	1 years	Depth	1.96 in		
Soil/Surface Description	Adjusted CN	Area (ft <sup>2</sup> )	Runoff (in)	Volume (ft <sup>3</sup> )	
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads	98.000	132,422.400	(N/A)	(N/A)	
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	38,332.800	(N/A)	(N/A)	
COMPOSITE RUNOFF VOLUME --->	93.959	170,755.200	1.36	19,337.301	

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Runoff Volume and Critical Storm Calculations**

% Increase in Storm Water Volume

$$\%_{\text{incr.}} = [(V_{\text{post}} - V_{\text{pre}}) / V_{\text{pre}}] * 100$$

$$\% = [(19,337.3 - 7,103.9) / 7,103.9] * 100 = 172.23\%$$

°° 25-yr. *critical* storm.

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Pre-Developed**

Time of Concentration  
“CN” Calculations  
Peak Runoff Rates

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PRE-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

### Time of Concentration Results

---

#### Segment #1: TR-55 Sheet Flow

---

Hydraulic Length	300.00 ft
Manning's n	0.150
Slope	0.017 ft/ft
2 Year 24 Hour Depth	2.35 in
Average Velocity	0.17 ft/s
Segment Time of Concentration	0.490 hours

---

---

#### Segment #2: TR-55 Shallow Concentrated Flow

---

Hydraulic Length	433.00 ft
Is Paved?	False
Slope	0.005 ft/ft
Average Velocity	1.14 ft/s
Segment Time of Concentration	0.105 hours

---

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#### Time of Concentration (Composite)

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Time of Concentration (Composite)	0.595 hours
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## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: PRE-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

### ==== SCS Channel Flow

$$T_c = \frac{R = Q_a / W_p}{V = (1.49 * (R^{2/3}) * (S_f^{-0.5})) / n}$$

Where:  $(L_f / V) / 3600$   
R= Hydraulic radius  
Aq= Flow area, square feet  
Wp= Wetted perimeter, feet  
V= Velocity, ft/sec  
Sf= Slope, ft/ft  
n= Manning's n  
Tc= Time of concentration, hours  
Lf= Flow length, feet

### ==== SCS TR-55 Shallow Concentration Flow

$$T_c = \frac{\text{Unpaved surface:}}{V = 16.1345 * (S_f^{0.5})}$$

$$\text{Paved Surface:}$$
$$V = 20.3282 * (S_f^{0.5})$$

Where:  $(L_f / V) / 3600$   
V= Velocity, ft/sec  
Sf= Slope, ft/ft  
Tc= Time of concentration, hours  
Lf= Flow length, feet

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Runoff CN-Area

Return Event: 1 years

Label: PRE-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

### Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Gravel (w/ right-of-way) - Soil D	91.000	23,522.400	0.0	0.0	91.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	17,424.000	0.0	0.0	80.000
Woods - good	77.000	129,808.000	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	170,754.400	(N/A)	(N/A)	79.235

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: PRE-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Storm Event	1 year
Return Event	1 years
Duration	35.000 hours
Depth	1.96 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>

Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.300 hours
Flow (Peak, Computed)	1.28 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	1.28 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	0.50 in
Runoff Volume (Pervious)	7,104.152 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	7,104.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 1 yrs

Return Event: 1 years

Storm Event: 1 year

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### SCS Unit Hydrograph Parameters

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Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 2 years

Label: PRE-DEV

Storm Event: 2 Year

Scenario: Lorain - , 2 yrs

Storm Event	2 Year
Return Event	2 years
Duration	35.000 hours
Depth	2.35 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>
<hr/>	
Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.300 hours
Flow (Peak, Computed)	2.01 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	2.01 ft <sup>3</sup> /s
<hr/>	
<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in
<hr/>	
<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	0.74 in
Runoff Volume (Pervious)	10,510.179 ft <sup>3</sup>
<hr/>	
<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	10,511.000 ft <sup>3</sup>
<hr/>	
<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 2 yrs

Return Event: 2 years

Storm Event: 2 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 5 years

Label: PRE-DEV

Storm Event: 5 Year

Scenario: Lorain - , 5 yrs

Storm Event	5 Year
Return Event	5 years
Duration	35.000 hours
Depth	2.94 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>

Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.220 hours
Flow (Peak, Computed)	3.26 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	3.25 ft <sup>3</sup> /s

Drainage Area	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.14 in
Runoff Volume (Pervious)	16,290.126 ft <sup>3</sup>

Hydrograph Volume (Area under Hydrograph curve)	
Volume	16,291.000 ft <sup>3</sup>

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 5 yrs

Return Event: 5 years

Storm Event: 5 Year

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### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: PRE-DEV

Storm Event: 10 Year

Scenario: Lorain - , 10 yrs

Storm Event	10 Year
Return Event	10 years
Duration	35.000 hours
Depth	3.42 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>

Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.220 hours
Flow (Peak, Computed)	4.37 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	4.35 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	1.50 in
Runoff Volume (Pervious)	21,402.957 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	21,404.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 10 yrs

Return Event: 10 years

Storm Event: 10 Year

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### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: PRE-DEV

Storm Event: 25 Year

Scenario: Lorain - , 25 yrs

Storm Event	25 Year
Return Event	25 years
Duration	35.000 hours
Depth	4.11 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>
<hr/>	
Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.220 hours
Flow (Peak, Computed)	6.06 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	6.01 ft <sup>3</sup> /s
<hr/>	
<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in
<hr/>	
<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	2.05 in
Runoff Volume (Pervious)	29,215.803 ft <sup>3</sup>
<hr/>	
<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	29,217.000 ft <sup>3</sup>
<hr/>	
<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 25 yrs

Return Event: 25 years

Storm Event: 25 Year

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### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 50 yrs

Return Event: 50 years

Storm Event: 50 Year

Storm Event	50 Year
Return Event	50 years
Duration	35.000 hours
Depth	4.68 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>

Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.220 hours
Flow (Peak, Computed)	7.51 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	7.44 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	2.53 in
Runoff Volume (Pervious)	35,976.598 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	35,978.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 50 yrs

Return Event: 50 years

Storm Event: 50 Year

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### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: PRE-DEV

Storm Event: 100 Year

Scenario: Lorain - , 100 yrs

Storm Event	100 Year
Return Event	100 years
Duration	35.000 hours
Depth	5.29 in
Time of Concentration (Composite)	0.595 hours
Area (User Defined)	170,754.400 ft <sup>2</sup>

Computational Time Increment	0.079 hours
Time to Peak (Computed)	12.220 hours
Flow (Peak, Computed)	9.10 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	9.00 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	79.000
Area (User Defined)	170,754.400 ft <sup>2</sup>
Maximum Retention (Pervious)	2.66 in
Maximum Retention (Pervious, 20 percent)	0.53 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	3.05 in
Runoff Volume (Pervious)	43,441.717 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	43,443.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.595 hours
Computational Time Increment	0.079 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: PRE-DEV

Scenario: Lorain - , 100 yrs

Return Event: 100 years

Storm Event: 100 Year

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### SCS Unit Hydrograph Parameters

---

Unit peak, qp	7.46 ft <sup>3</sup> /s
Unit peak time, Tp	0.397 hours
Unit receding limb, Tr	1.587 hours
Total unit time, Tb	1.984 hours

---

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Post-Developed**

Time of Concentration  
“CN” Calculations  
Peak Runoff Rates

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Time of Concentration Calculations

Return Event: 1 years

Label: POST-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

### Time of Concentration Results

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#### Segment #1: TR-55 Sheet Flow

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Hydraulic Length	69.00 ft
Manning's n	0.150
Slope	0.065 ft/ft
2 Year 24 Hour Depth	2.35 in
Average Velocity	0.22 ft/s
Segment Time of Concentration	0.088 hours

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#### Segment #2: Length and Velocity

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Hydraulic Length	547.00 ft
Velocity	2.50 ft/s
Segment Time of Concentration	0.061 hours

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#### Time of Concentration (Composite)

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Time of Concentration (Composite)	0.167 hours
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## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Time of Concentration Calculations

Label: POST-DEV

Scenario: Lorain - , 1 yrs

Return Event: 1 years

Storm Event: 1 year

### ==== User Defined Length & Velocity

Tc =  $(L_f / V) / 3600$

Where: Tc= Time of concentration, hours  
Lf= Flow length, feet  
V= Velocity, ft/sec

### ==== SCS Channel Flow

Tc =  $R = Q_a / W_p$   
 $V = (1.49 * (R^{2/3}) * (S_f^{*-0.5})) / n$

(Lf / V) / 3600  
Where: R= Hydraulic radius  
Aq= Flow area, square feet  
Wp= Wetted perimeter, feet  
V= Velocity, ft/sec  
Sf= Slope, ft/ft  
n= Manning's n  
Tc= Time of concentration, hours  
Lf= Flow length, feet

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Runoff CN-Area

Return Event: 1 years

Label: POST-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

### Runoff Curve Number Data

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads	98.000	132,422.400	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75%	80.000	38,332.800	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	170,755.200	(N/A)	(N/A)	93.959

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 1 years

Label: POST-DEV

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Storm Event	1 year
Return Event	1 years
Duration	35.000 hours
Depth	1.96 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	7.15 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	7.10 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	1.36 in
Runoff Volume (Pervious)	19,337.549 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	19,338.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 1 yrs

Return Event: 1 years

Storm Event: 1 year

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### SCS Unit Hydrograph Parameters

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Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

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## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 2 years

Label: POST-DEV

Storm Event: 2 Year

Scenario: Lorain - , 2 yrs

Storm Event	2 Year
Return Event	2 years
Duration	35.000 hours
Depth	2.35 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	8.99 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	8.91 ft <sup>3</sup> /s

Drainage Area	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.73 in
Runoff Volume (Pervious)	24,567.249 ft <sup>3</sup>

Hydrograph Volume (Area under Hydrograph curve)	
Volume	24,567.000 ft <sup>3</sup>

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 2 yrs

Return Event: 2 years

Storm Event: 2 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 5 years

Label: POST-DEV

Storm Event: 5 Year

Scenario: Lorain - , 5 yrs

Storm Event	5 Year
Return Event	5 years
Duration	35.000 hours
Depth	2.94 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	11.76 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	11.63 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	2.29 in
Runoff Volume (Pervious)	32,616.280 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	32,616.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 5 yrs

Return Event: 5 years

Storm Event: 5 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 10 years

Label: POST-DEV

Storm Event: 10 Year

Scenario: Lorain - , 10 yrs

Storm Event	10 Year
Return Event	10 years
Duration	35.000 hours
Depth	3.42 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	14.01 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	13.83 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	2.76 in
Runoff Volume (Pervious)	39,241.383 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	39,242.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 10 yrs

Return Event: 10 years

Storm Event: 10 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 25 years

Label: POST-DEV

Storm Event: 25 Year

Scenario: Lorain - , 25 yrs

Storm Event	25 Year
Return Event	25 years
Duration	35.000 hours
Depth	4.11 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>
<hr/>	
Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	17.22 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	16.97 ft <sup>3</sup> /s
<hr/>	
<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in
<hr/>	
<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	3.43 in
Runoff Volume (Pervious)	48,839.655 ft <sup>3</sup>
<hr/>	
<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	48,840.000 ft <sup>3</sup>
<hr/>	
<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 25 yrs

Return Event: 25 years

Storm Event: 25 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 50 yrs

Return Event: 50 years

Storm Event: 50 Year

Storm Event	50 Year
Return Event	50 years
Duration	35.000 hours
Depth	4.68 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	19.85 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	19.56 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	3.99 in
Runoff Volume (Pervious)	56,812.816 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	56,813.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 50 yrs

Return Event: 50 years

Storm Event: 50 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Return Event: 100 years

Label: POST-DEV

Storm Event: 100 Year

Scenario: Lorain - , 100 yrs

Storm Event	100 Year
Return Event	100 years
Duration	35.000 hours
Depth	5.29 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	170,755.200 ft <sup>2</sup>

Computational Time Increment	0.022 hours
Time to Peak (Computed)	11.978 hours
Flow (Peak, Computed)	22.66 ft <sup>3</sup> /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.000 hours
Flow (Peak Interpolated Output)	22.31 ft <sup>3</sup> /s

<b>Drainage Area</b>	
SCS CN (Composite)	94.000
Area (User Defined)	170,755.200 ft <sup>2</sup>
Maximum Retention (Pervious)	0.64 in
Maximum Retention (Pervious, 20 percent)	0.13 in

<b>Cumulative Runoff</b>	
Cumulative Runoff Depth (Pervious)	4.59 in
Runoff Volume (Pervious)	65,375.516 ft <sup>3</sup>

<b>Hydrograph Volume (Area under Hydrograph curve)</b>	
Volume	65,376.000 ft <sup>3</sup>

<b>SCS Unit Hydrograph Parameters</b>	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Unit Hydrograph Summary

Label: POST-DEV

Scenario: Lorain - , 100 yrs

Return Event: 100 years

Storm Event: 100 Year

---

### SCS Unit Hydrograph Parameters

---

Unit peak, qp	26.65 ft <sup>3</sup> /s
Unit peak time, Tp	0.111 hours
Unit receding limb, Tr	0.444 hours
Total unit time, Tb	0.556 hours

---

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Post-Developed Basin Data**

Basin Volume Calculations  
Basin Outlet Calculations  
Basin Release Rates

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Elevation-Area Volume Curve

Return Event: 1 years

Label: POND

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Elevation (ft)	Planimeter (ft <sup>2</sup> )	Area (ft <sup>2</sup> )	A1+A2+sq (A1*A2) (ft <sup>2</sup> )	Volume (ft <sup>3</sup> )	Volume (Total) (ft <sup>3</sup> )
606.00	0.0	300.000	0.000	0.000	0.000
607.00	0.0	739.000	1,509.850	503.000	503.000
608.00	0.0	2,001.000	3,956.034	1,319.000	1,822.000
609.00	0.0	4,138.000	9,016.523	3,006.000	4,827.000
610.00	0.0	6,113.000	15,280.473	5,093.000	9,921.000
611.00	0.0	8,163.000	21,340.023	7,113.000	17,034.000
612.00	0.0	10,289.000	27,616.557	9,206.000	26,240.000
613.00	0.0	12,486.000	34,109.393	11,370.000	37,610.000
614.00	0.0	14,740.000	40,792.268	13,597.000	51,207.000
614.25	0.0	15,312.000	45,075.278	3,756.000	54,963.000

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Outlet Input Data

Return Event: 1 years

Label: Outlet 1

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Requested Pond Water Surface Elevations	
Minimum (Headwater)	606.00 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	614.25 ft

### Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	RISER	Forward	CULVERT	612.75	614.25
Orifice-Circular	ORIFICE	Forward	CULVERT	610.58	614.25
Culvert-Circular	CULVERT	Forward	TW	608.50	614.25
Irregular Weir	WEIR	Forward	TW	613.25	614.25
Tailwater Settings	Tailwater			(N/A)	(N/A)

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Outlet Input Data

Label: Outlet 1

Scenario: Lorain - , 1 yrs

Return Event: 1 years

Storm Event: 1 year

---

Structure ID: RISER	
Structure Type: Inlet Box	
<hr/>	
Number of Openings	1
Elevation	612.75 ft
Orifice Area	4.0 ft <sup>2</sup>
Orifice Coefficient	0.670
Weir Length	8.00 ft
Weir Coefficient	3.10 (ft <sup>0.5</sup> )/s
K Reverse	1.000
Manning's n	0.000
Key, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Outlet Input Data

Return Event: 1 years

Label: Outlet 1

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Structure ID: CULVERT	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.00 in
Length	100.00 ft
Length (Computed Barrel)	100.00 ft
Slope (Computed)	0.007 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.012
Ke	0.000
Kb	0.020
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 2
K	0.5340
M	0.5550
C	0.0196
Y	0.9000
T1 ratio (HW/D)	1.070
T2 ratio (HW/D)	1.210
Slope Correction Factor	-0.500

Use unsubmerged inlet control 1 equation below T1 elevation.

Use submerged inlet control 1 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	609.84 ft	T1 Flow	4.80 ft <sup>3</sup> /s
T2 Elevation	610.01 ft	T2 Flow	5.49 ft <sup>3</sup> /s



## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 1 years

Label: POND (IN)

Storm Event: 1 year

Scenario: Lorain - , 1 yrs

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	608.75 ft		
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s		
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s		
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	7.10 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	0.31 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	13.750 hours
Elevation (Water Surface, Peak)	610.97 ft		
Volume (Peak)	16,797.499 ft <sup>3</sup>		
Mass Balance (ft <sup>3</sup> )			
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Volume (Total Inflow)	19,338.000 ft <sup>3</sup>		
Volume (Total Infiltration)	0.000 ft <sup>3</sup>		
Volume (Total Outlet Outflow)	9,411.000 ft <sup>3</sup>		
Volume (Retained)	13,796.000 ft <sup>3</sup>		
Volume (Unrouted)	0.000 ft <sup>3</sup>		
Error (Mass Balance)	0.0 %		

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 2 years

Label: POND (IN)

Storm Event: 2 Year

Scenario: Lorain - , 2 yrs

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	608.75 ft		
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s		
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s		
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	8.91 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	0.59 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.950 hours
Peak Conditions			
Elevation (Water Surface, Peak)	611.25 ft		
Volume (Peak)	19,161.529 ft <sup>3</sup>		
Mass Balance (ft <sup>3</sup> )			
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Volume (Total Inflow)	24,567.000 ft <sup>3</sup>		
Volume (Total Infiltration)	0.000 ft <sup>3</sup>		
Volume (Total Outlet Outflow)	14,641.000 ft <sup>3</sup>		
Volume (Retained)	13,796.000 ft <sup>3</sup>		
Volume (Unrouted)	0.000 ft <sup>3</sup>		
Error (Mass Balance)	0.0 %		

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 5 years

Label: POND (IN)

Storm Event: 5 Year

Scenario: Lorain - , 5 yrs

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	608.75 ft		
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s		
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s		
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	11.63 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	0.87 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.800 hours
Elevation (Water Surface, Peak)	611.78 ft		
Volume (Peak)	24,008.678 ft <sup>3</sup>		
Mass Balance (ft <sup>3</sup> )			
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Volume (Total Inflow)	32,616.000 ft <sup>3</sup>		
Volume (Total Infiltration)	0.000 ft <sup>3</sup>		
Volume (Total Outlet Outflow)	22,689.000 ft <sup>3</sup>		
Volume (Retained)	13,797.000 ft <sup>3</sup>		
Volume (Unrouted)	0.000 ft <sup>3</sup>		
Error (Mass Balance)	0.0 %		

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 10 years

Label: POND (IN)

Storm Event: 10 Year

Scenario: Lorain - , 10 yrs

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### Infiltration

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Infiltration Method (Computed)	No Infiltration
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---

### Initial Conditions

---

Elevation (Water Surface, Initial)	608.75 ft
Volume (Initial)	3,870.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	0.050 hours

---



---

### Inflow/Outflow Hydrograph Summary

---

Flow (Peak In)	13.83 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	1.04 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.750 hours

---

Elevation (Water Surface, Peak)	612.19 ft
Volume (Peak)	28,222.134 ft <sup>3</sup>

---

### Mass Balance (ft<sup>3</sup>)

---

Volume (Initial)	3,870.000 ft <sup>3</sup>
Volume (Total Inflow)	39,242.000 ft <sup>3</sup>
Volume (Total Infiltration)	0.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	29,313.000 ft <sup>3</sup>
Volume (Retained)	13,798.000 ft <sup>3</sup>
Volume (Unrouted)	0.000 ft <sup>3</sup>
Error (Mass Balance)	0.0 %

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 25 years

Label: POND (IN)

Storm Event: 25 Year

Scenario: Lorain - , 25 yrs

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	608.75 ft		
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s		
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s		
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	16.97 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	1.23 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.800 hours
Peak Conditions			
Elevation (Water Surface, Peak)	612.74 ft		
Volume (Peak)	34,468.590 ft <sup>3</sup>		
Mass Balance (ft <sup>3</sup> )			
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Volume (Total Inflow)	48,840.000 ft <sup>3</sup>		
Volume (Total Infiltration)	0.000 ft <sup>3</sup>		
Volume (Total Outlet Outflow)	38,910.000 ft <sup>3</sup>		
Volume (Retained)	13,800.000 ft <sup>3</sup>		
Volume (Unrouted)	0.000 ft <sup>3</sup>		
Error (Mass Balance)	0.0 %		

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 50 years

Label: POND (IN)

Storm Event: 50 Year

Scenario: Lorain - , 50 yrs

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### Infiltration

---

Infiltration Method (Computed)	No Infiltration
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---

### Initial Conditions

---

Elevation (Water Surface, Initial)	608.75 ft
Volume (Initial)	3,870.000 ft <sup>3</sup>
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s
Time Increment	0.050 hours

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### Inflow/Outflow Hydrograph Summary

---

Flow (Peak In)	19.56 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000	hours
Flow (Peak Outlet)	3.74 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.300	hours

---

Elevation (Water Surface, Peak)	612.96 ft
Volume (Peak)	37,114.293 ft <sup>3</sup>

---

### Mass Balance (ft<sup>3</sup>)

---

Volume (Initial)	3,870.000 ft <sup>3</sup>
Volume (Total Inflow)	56,813.000 ft <sup>3</sup>
Volume (Total Infiltration)	0.000 ft <sup>3</sup>
Volume (Total Outlet Outflow)	46,881.000 ft <sup>3</sup>
Volume (Retained)	13,802.000 ft <sup>3</sup>
Volume (Unrouted)	0.000 ft <sup>3</sup>
Error (Mass Balance)	0.0 %

---

## 25-344 Storage Development - 2630 Colorado Avenue

Subsection: Level Pool Pond Routing Summary

Return Event: 100 years

Label: POND (IN)

Storm Event: 100 Year

Scenario: Lorain - , 100 yrs

Infiltration			
Infiltration Method (Computed)	No Infiltration		
Initial Conditions			
Elevation (Water Surface, Initial)	608.75 ft		
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Flow (Initial Outlet)	0.00 ft <sup>3</sup> /s		
Flow (Initial Infiltration)	0.00 ft <sup>3</sup> /s		
Flow (Initial, Total)	0.00 ft <sup>3</sup> /s		
Time Increment	0.050 hours		
Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	22.31 ft <sup>3</sup> /s	Time to Peak (Flow, In)	12.000 hours
Flow (Peak Outlet)	7.57 ft <sup>3</sup> /s	Time to Peak (Flow, Outlet)	12.200 hours
Peak Conditions			
Elevation (Water Surface, Peak)	613.16 ft		
Volume (Peak)	39,581.044 ft <sup>3</sup>		
Mass Balance (ft <sup>3</sup> )			
Volume (Initial)	3,870.000 ft <sup>3</sup>		
Volume (Total Inflow)	65,376.000 ft <sup>3</sup>		
Volume (Total Infiltration)	0.000 ft <sup>3</sup>		
Volume (Total Outlet Outflow)	55,441.000 ft <sup>3</sup>		
Volume (Retained)	13,804.000 ft <sup>3</sup>		
Volume (Unrouted)	0.000 ft <sup>3</sup>		
Error (Mass Balance)	0.0 %		

***PROPOSED STORAGE UNIT DEVELOPMENT  
2630 COLORADO AVENUE, CITY OF LORAIN, OHIO***

**Supporting Documents**

Sediment Basin Calculations  
Water Quality Calculations  
Storm Sewer Calculations  
Pre/Post Drainage Maps

**Sediment Basin Sizing and Dewatering Compliance Tool**

version 1.2 2022-08-30

**Project Summary**

Project Name: 2630 Colorado Ave - Storage Development  
 Project Location: 2630 Colorado Ave, Lorain Ohio  
 Subwatershed ID/Label: 1  
 Project Latitude: 41.464807  
 Project Longitude: -82.142534  
 NPDES Permit Applicant: Jason Kucharski  
 Submitted by: Lewis Land Professionals, Inc.  
 Date: 3/27/2026

Street address (or street name and nearest intersection), City, state, zip code

Enter latitude at entrance to site in decimal degrees (format: 40.947544)

Enter longitude at entrance to site in decimal degrees (format: -81.465240)

Name of design engineer  
mm/dd/yyyy

Select from dropdown which watershed the project is located in, select "Statewide" if not in the Big Darby Creek Watershed

Watershed: Statewide

Subwatershed Total Drainage Area,  $A_{total}$  = 3.90 acres = 169,884 ft<sup>2</sup>  
 Subwatershed Disturbed Drainage Area,  $A_{dist}$  = 3.90 acres = 169,884 ft<sup>2</sup>

Report to the nearest 0.01 acre; include any drainage from off-site

All Basin dewatering discharge calculations in these worksheets assume free discharge from the outlet (i.e., no tailwater)

**Step 1 - Sediment Basin Volume Requirements**

**For Statewide Watersheds**

Minimum Sediment Storage Volume,  $V_{sediment}$  = 3900 ft<sup>3</sup> = 144 yd<sup>3</sup> = 0.090 acre-ft  
 Minimum Dewatering Zone Volume,  $V_{dewatering}$  = 7020 ft<sup>3</sup> = 260 yd<sup>3</sup> = 0.161 acre-ft

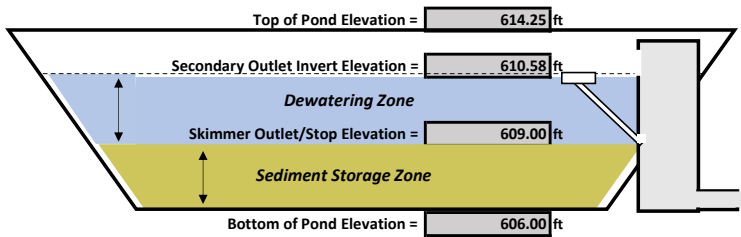
Requirement: Minimum Sediment Volume = 1000 ft<sup>3</sup>/acre of disturbed drainage area

Requirement: Minimum Dewatering Volume = 1800 ft<sup>3</sup>/acre of total drainage area

**Step 2 - Basin Stage-Storage Relationship**

	Elevation ft	Area ft <sup>2</sup>	Incremental Volume ft <sup>3</sup>	Cumulative Volume ft <sup>3</sup>
Bottom of Sediment Storage (Pond) =	606.00	300		
	607.00	739	503	503
	608.00	2,001	1,319	1,822
	609.00	4,138	3,006	4,827
<i>IMPORTANT: Must include the exact Skimmer Outlet/Skimmer Stop Elevation and the Secondary Outlet Invert Elevation in the Stage-Storage Table</i>	610.00	6,113	5,093	9,921
	610.58	7,200	3,856	13,777
	611.00	8,163	3,224	17,002
	612.00	10,289	9,206	26,207
	613.00	12,486	11,370	37,577
	614.00	14,740	13,597	51,174
	614.25	15,312	3,756	54,931

**Basin Schematic**



Note: The basin dewatering discharge calculation in this worksheet assumes a free discharge from the outlet (i.e., no tailwater). The skimmer outlet elevation may need to be adjusted upward to account for tailwater as appropriate. Tailwater is common to low gradient ditches or water bodies with prolonged increases in water level

### Step 3 - Outlet Elevations and Storage Volumes

Skimmer Outlet Invert/Skimmer Stop Elevation =	609.00 ft	OKAY
Secondary Outlet Invert Elevation =	610.58 ft	OKAY
Provided Sediment Storage Volume =	4,827 ft <sup>3</sup>	OKAY
Provided Dewatering Volume =	8,950 ft <sup>3</sup>	OKAY

The invert of the Skimmer Outlet/Skimmer Stop (e.g. stone pad) corresponds to the top of the sediment storage zone/permanent pool and the bottom of the Dewatering Volume. It cannot be below the bottom of the pond.  
The invert elevation for the next (usually peak discharge or flood control) outlet. This elevation must exceed that of the Skimmer Outlet invert Elevation and be below the top of the pond. \*Check - The difference between the skimmer outlet invert/skimmer stop elevation and the secondary outlet invert elevation (dewatering zone depth) must not exceed 5ft.

The Sediment Storage Volume must exceed the requirement listed above in Step 1

The Dewatering Volume must exceed the requirement listed above in Step 1

\*ERROR\* Check - The Step 2 Stage Storage Table above must include the exact Skimmer Outlet/Skimmer Stop Elevation and the Secondary Outlet Invert Elevation provided in Step 3

### Step 4 - Skimmer-Type Outlet Sizing

Select Skimmer Type or Manufacturer: Faircloth Skimmer

Faircloth Skimmer Sizing Calculator: [Click Here For Link to Online Calculator](#)

Orifice Size Selected: SEE PLAN in  
Dewatering Drawdown Time: 48 hrs

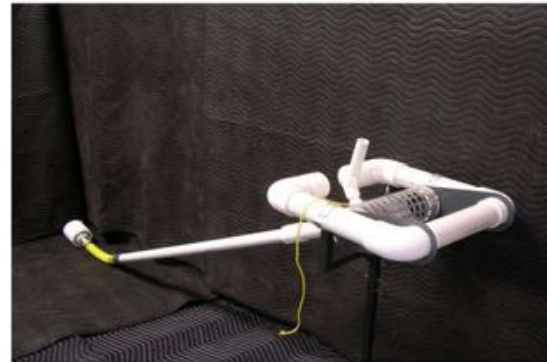
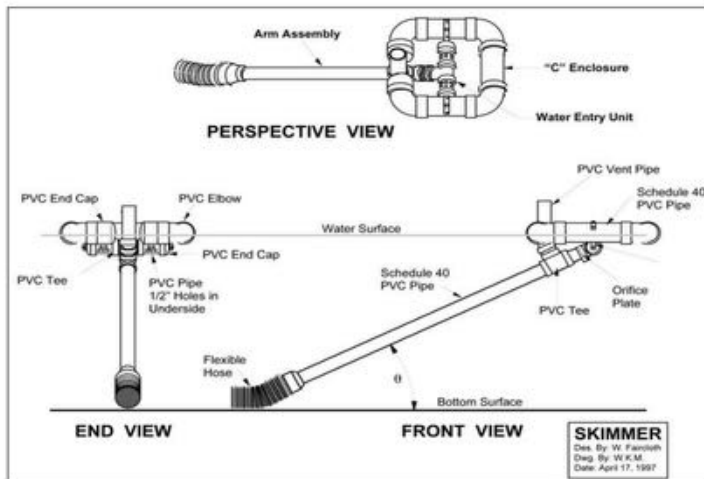
Follow directions on webpage to calculate exact skimmer size and model, include screenshot of results in SWP3. \*Note\* Input required

Check to ensure that orifice sizing calculation is done using required, NOT provided dewatering volume  
Check that dewatering drawdown time is greater than 2 days and less than 7 days

### Example Faircloth Float Spec Sheet

### Faircloth Float Photo

Please note the drawing and image shown below are provided solely to assist with identification of the skimmer type and its associated components. The drawing and photo below does not necessarily depict an installation that complies with the General Permit or Rainwater & Land Development specification, especially where the sediment storage zone is omitted.



## Dry Extended Detention Basin WQv Compliance Tool

version 3.2 2020-07-07

### Project Summary

**Project Name:** 2630 Colorado Ave - Storage Development  
**Subwatershed ID/Label:** 1  
**Submitted by:** Lewis Land Professionals, Inc.  
**Date:** 4/6/2026

Subwatershed Drainage Area, $A_{total}$ =	3.90	acres	=	169,884	ft <sup>2</sup>
Subwatershed Impervious Area, $A_{imp}$ =	3.04	acres	=	132,422	ft <sup>2</sup>
Imperviousness fraction, $i$ =	0.78			78	%
Water Quality Volume, WQv =	9,576	ft <sup>3</sup>	=	0.22	ac-ft

### Step 1 - Soil Suitability

Soil Series Mahoning Silt Loam
HSG D

### Step 2 - Dry ED Basin Volume Requirements

Extended Detention Volume, EDv =	9576	ft <sup>3</sup>			
Minimum Sediment Storage Volume, $V_{sediment}$ =	1915	ft <sup>3</sup>			
Minimum Forebay Volume, $V_{forebay}$ =	958	ft <sup>3</sup>			
Minimum Permanent Micropool Volume, $V_{micropool}$ =	958	ft <sup>3</sup>			

### Step 3 - Basin Stage-Storage Relationship

	Elevation ft	Area ft <sup>2</sup>	Incremental Volume ft <sup>3</sup>	Cumulative Volume ft <sup>3</sup>	
Bottom of Permanent Micropool = (include forebay area if below EDv)	606.00	300			
	607.00	739	503	503	
	608.00	2,001	1,319	1,822	
	609.00	4,138	3,006	4,827	
	610.00	6,113	5,093	9,921	
	611.00	8,163	7,113	17,034	
	612.00	10,289	9,206	26,240	
	613.00	12,486	11,370	37,610	
	614.00	14,740	13,597	51,207	
	614.25	15,312	3,756	54,963	

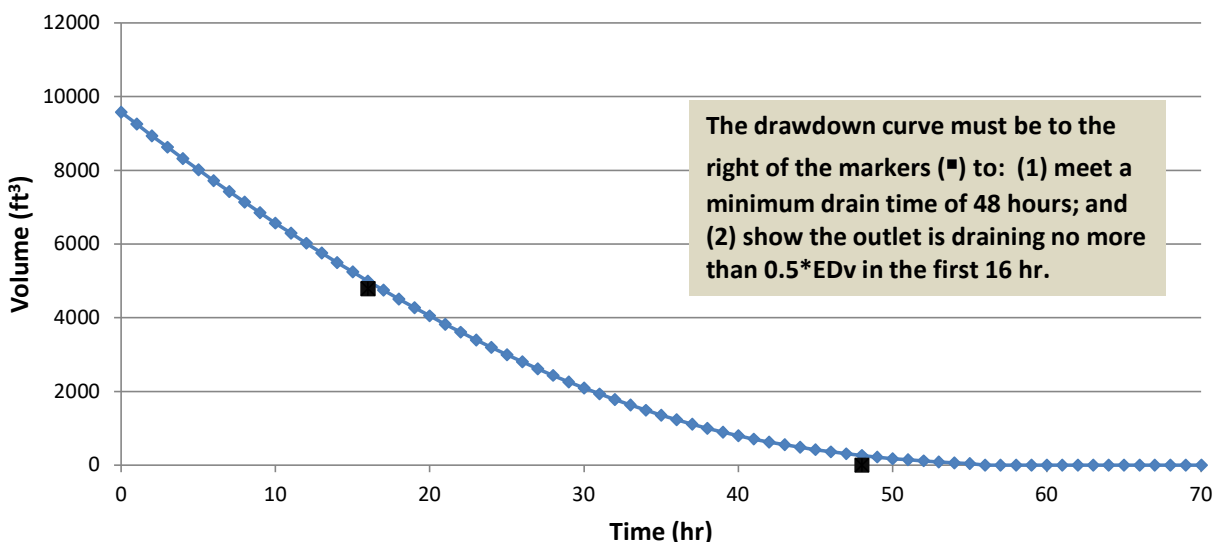
### Step 4 - Outlet Elevations and Storage Volumes

WQ Orifice Invert Elevation =	608.82		
Elevation of Top of EDv =	610.57		
Secondary Outlet Invert Elevation =	610.58		OKAY
WQ Treatment Volume Provided, $V_{\text{treatment}}$ =	9,673	ft <sup>3</sup>	
Treatment Vol Provided Relative to EDv, $V_{\text{treatment}}/EDv$ =	1.01		= 101% OKAY
Permanent Pool Volume Provided, PPv =	4,123	ft <sup>3</sup>	
Forebay Volume Provided, $V_{\text{forebay}}$ =	1,500	ft <sup>3</sup>	= 1.57
Is forebay volume below WQ outlet? (Yes or No)	Yes		= 157% OKAY
Permanent Micropool Volume Provided, $V_{\text{micropool}}$ =	2,623	ft <sup>3</sup>	
Ratio $V_{\text{micropool}}$ Provided to $V_{\text{micropool}}$ Required =	2.74		= 274% OKAY
Sediment Storage Volume Provided, $V_{\text{sediment}}$ =	4,123	ft <sup>3</sup>	
Ratio $V_{\text{sediment}}$ Provided to $V_{\text{sediment}}$ Required =	2.15		= 215% OKAY

### Step 5 - Outlet (Orifice) Sizing

Maximum Hydraulic Head, $H_{\text{max}}$ =	1.75	ft	
Orifice Coefficient, $C$ =	0.6		
Target (Minimum) Draw-down Time, $T_d$ =	48	hr	
Target Average Discharge, $Q_{\text{avg}}$ =	0.06	cfs	
Average Hydraulic Head, $H_{\text{avg}}$ =	0.87	ft	
Estimated Orifice Area, $A_{\text{orifice}}$ =	1.77	in <sup>2</sup>	= 0.012 ft <sup>2</sup>
Estimated Orifice Diameter, $D_{\text{orifice}}$ =	1.50	in	= 0.13 ft
Design Orifice Diameter, $D_{\text{orifice}}$ =	1.63	in	= 0.14 ft
Design Orifice Area, $A_{\text{orifice}}$ =	2.06	in <sup>2</sup>	= 0.014 ft <sup>2</sup>
Time to Completely Drain EDv, $T_d$ =	56	hr	must be $\geq 48$ hr OKAY
Volume Drained in First 16 hr =	4,584	ft <sup>3</sup>	
% of EDv =	47.9	%	must be $\leq 50\%$ OKAY

### Dry Basin - EDv Drawdown vs Time



## STORM SEWER COMPUTATION SHEET

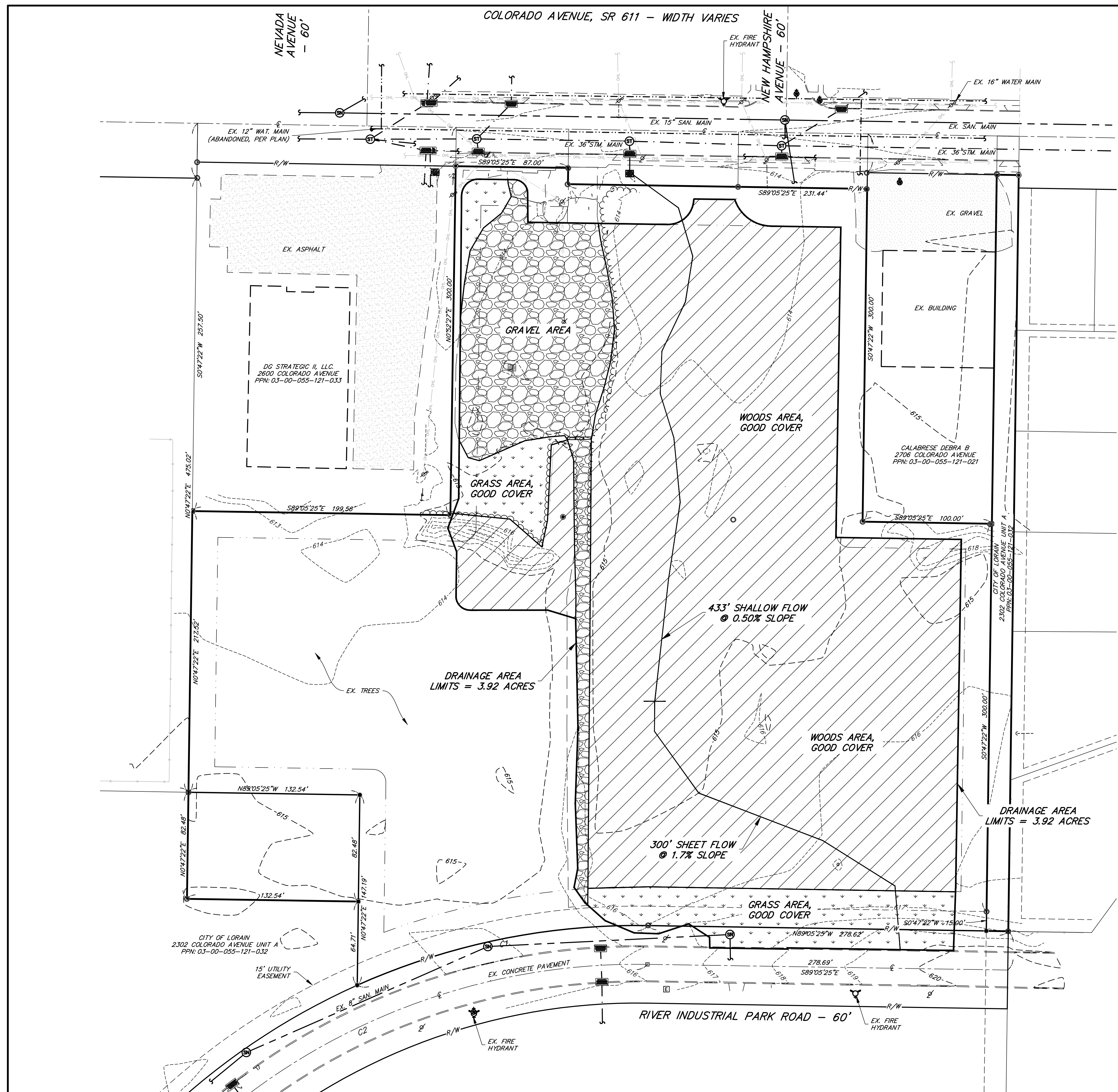
PROJECT:	2630 Colorado Avenue - Storage Development								BY: MBK				n=0.013 - RCP			
DATE:	4/7/2026	10-yr Design Storm							CHECKED BY:				n=0.012 - HDPE			
M.H. or C.B. No.	Drains to	DRAINAGE AREA					TIME		RAINFALL INTENSITY	DISCHARGE	PIPE LEN- GTH	PIPE SLOPE	PIPE SIZE	MEAN VELOCITY	CAPACITY FLOWING FULL	REMARKS
		ΔA	ΣA	C	ΔCA	ΣCA	ΔT	ΣT	I <sub>s</sub>	Q <sub>s</sub>	FT.	FT./FT.	IN.	F.P.S.	C.F.S.	
		ACRES	ACRES		ACRES	ACRES	MIN.	MIN.	IN./HR.	C.F.S.	FT.	FT./FT.	IN.	F.P.S.	C.F.S.	
2.12	2.11	0.07	0.07	0.960	0.067	0.07	10	10	4.91	0.330	80	0.0050	8	2.66	0.93	HDPE
2.11	2.10	0.07	0.14	0.960	0.067	0.13	-	10	4.91	0.660	80	0.0050	8	2.66	0.93	HDPE
2.10	1.12	0.17	0.31	0.960	0.163	0.30	-	10	4.91	1.461	51	0.0054	10	3.21	1.75	HDPE
2.9	2.8	0.10	0.10	0.960	0.096	0.10	10	10	4.91	0.471	80	0.0068	8	3.10	1.08	HDPE
2.8	1.12	0.10	0.20	0.960	0.096	0.19	-	10	4.91	0.943	80	0.0068	8	3.10	1.08	HDPE
1.12	1.10	0.20	0.71	0.960	0.192	0.68	1	11	4.76	3.244	78	0.0080	12	4.41	3.46	HDPE
2.7	1.10	0.24	0.24	0.960	0.230	0.23	10	10	4.91	1.131	150	0.0064	10	3.49	1.90	HDPE
1.11	1.10	0.25	0.25	0.960	0.240	0.24	10	10	4.91	1.178	150	0.0064	10	3.49	1.90	HDPE
1.10	1.7	0.44	1.64	0.960	0.422	1.57	10	10	4.91	7.730	78	0.0050	18	4.57	8.07	HDPE
2.6	2.5	0.12	0.12	0.960	0.115	0.12	10	10	4.91	0.566	51	0.0050	8	2.66	0.93	HDPE
2.5	2.4	0.12	0.24	0.960	0.115	0.23	-	10	4.91	1.131	78	0.0049	10	3.05	1.67	HDPE
2.4	2.3	0.14	0.38	0.960	0.134	0.36	-	10	4.91	1.791	78	0.0045	12	3.31	2.60	HDPE
2.3	2.2	0.11	0.49	0.960	0.106	0.47	1	11	4.76	2.239	80	0.0045	12	3.31	2.60	HDPE
2.2	2.0	0.08	0.57	0.960	0.077	0.55	-	11	4.76	2.605	80	0.0050	12	3.48	2.74	HDPE
2.1	2.0	0.23	0.23	0.400	0.092	0.09	10	10	4.91	0.452	25	0.0050	8	2.66	0.93	HDPE
2.0	1.7	0.08	0.88	0.960	0.077	0.72	-	11	4.76	3.408	80	0.0042	15	3.71	4.55	HDPE
1.9	1.8	0.11	0.11	0.960	0.106	0.11	10	10	4.91	0.518	80	0.0141	8	4.47	1.56	HDPE

1.8	1.7	0.11	0.22	0.960	0.106	0.21	-	10	4.91	1.037	80	0.0141	8	4.47	1.56	HDPE
1.7	1.1	0.18	2.92	0.96	0.173	2.67	-	11	4.76	12.730	66	0.0030	24	4.28	13.46	HDPE
1.6	1.5	0.11	0.11	0.960	0.106	0.11	10	10	4.91	0.518	55	0.0050	8	2.66	0.93	HDPE
1.5	1.4	0.06	0.17	0.960	0.058	0.16	-	10	4.91	0.801	66	0.0050	8	2.66	0.93	HDPE
1.4	1.3	0.05	0.22	0.960	0.048	0.21	-	10	4.91	1.037	80	0.0050	10	3.09	1.68	HDPE
1.3	1.2	0.08	0.30	0.960	0.077	0.29	1	11	4.76	1.371	80	0.0050	10	3.09	1.68	HDPE
1.2	1.1	0.08	0.38	0.960	0.077	0.36	-	11	4.76	1.736	80	0.0058	10	3.32	1.81	HDPE
1.1	1.0	0.08	3.38	0.960	0.077	3.12	-	11	4.76	14.832	36	0.0037	24	4.76	14.95	HDPE
<b>LEWIS LAND PROFESSIONALS - 8691 WADSWORTH ROAD, WADSWORTH OHIO</b>																

## STORM SEWER COMPUTATION SHEET

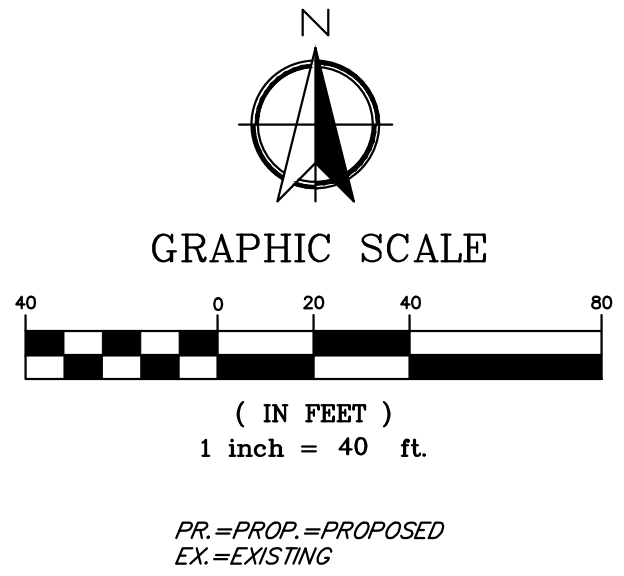
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M.H. or C.B. No.	Drains to	DRAINAGE AREA					TIME		RAINFALL INTENSITY	DISCHARGE	PIPE LEN- GTH	PIPE SLOPE	PIPE SIZE	MEAN VELOCITY	CAPACITY FLOWING FULL	REMARKS
		$\Delta A$	$\Sigma A$	C	$\Delta CA$	$\Sigma CA$	$\Delta T$	$\Sigma T$	$I_s$	$Q_s$	FT.	FT./FT.	IN.	F.P.S.	C.F.S.	
		ACRES	ACRES		ACRES	ACRES	MIN.	MIN.	IN./HR.	C.F.S.	FT.	FT./FT.	IN.	F.P.S.	C.F.S.	
0.7	0.6	0.96	0.96	0.400	0.384	0.38	10	10	4.91	1.885	142	0.0065	10	3.52	1.92	HDPE
0.6	0.5	0.28	1.24	0.400	0.112	0.50	-	10	4.91	2.435	94	0.0040	12	3.12	2.45	HDPE
0.5	0.4	0.09	1.33	0.400	0.036	0.53	1	11	4.76	2.532	96	0.0045	12	3.31	2.60	HDPE
0.4	0.3	0.50	1.83	0.400	0.200	0.73	-	11	4.76	3.484	96	0.0085	12	4.54	3.57	HDPE
0.3	0.2	0.06	1.89	0.400	0.024	0.76	-	11	4.76	3.599	60	0.0095	12	4.80	3.77	HDPE
0.2	0.1	0.03	1.92	0.400	0.012	0.77	1	12	4.57	3.510	70	0.0035	15	3.38	4.15	HDPE
0.1	0.0	0.04	1.96	0.400	0.016	0.78	-	12	4.57	3.583	98	0.0035	15	3.38	4.15	HDPE

LEWIS LAND PROFESSIONALS - 8691 WADSWORTH ROAD, WADSWORTH OHIO



**PRE-DEVELOPED DRAINAGE MAP**

2630 Colorado Avenue  
 Situated in the City of Lorain  
 County of Lorain and State of Ohio  
 PPN: 03-00-055-121-025



**PRE-DEVELOPED DRAINAGE AREA**

- WOODS, GOOD, D - 2.98 ACRE
- GRAVEL - 0.54 ACRE
- GRASS, GOOD, D - 0.40 ACRE

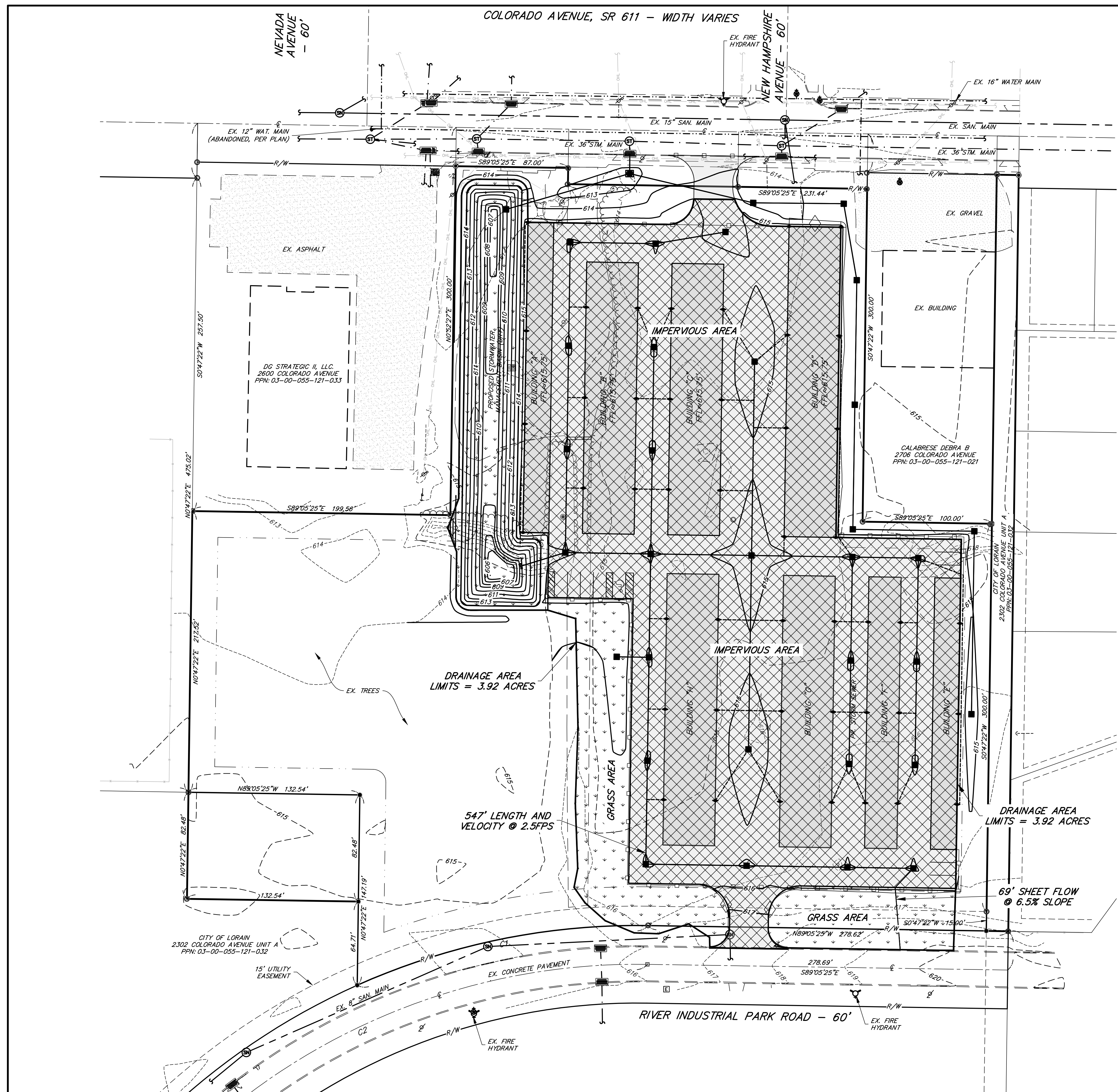
— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

PROJECT:  
**2630 COLORADO AVE - LORAIN OHIO**  
 TITLE:  
**PRE-DEVELOPED DRAINAGE MAP**

**TWO WORKING DAYS BEFORE YOU DIG**  
 Call 1-800-362-2764  
 TOLL FREE  
 Outside Ohio: 216-744-5191  
 OHIO UTILITIES PROTECTION SERVICE

SCALES:  
 DRAWING FILE:  
**25-344 Drainage Maps.dwg**  
 INPDES PERMIT NUMBER:

REVISION TABLE				DATE:
				4/7/2026
				PROJECT NUMBER:
				25-344
				SHEET NUMBER:
1	2/12/26	PRELIMINARY CONCEPT PLAN	MRK	
NO.	DATE	DESCRIPTION	BY	

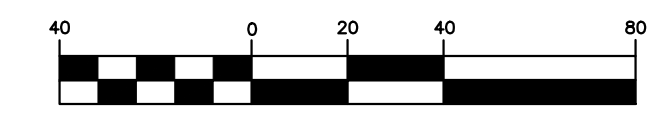


**POST-DEVELOPED DRAINAGE MAP**

2630 Colorado Avenue  
 Situated in the City of Lorain  
 County of Lorain and State of Ohio  
 PPN: 03-00-055-121-025



GRAPHIC SCALE



( IN FEET )  
 1 inch = 40 ft.

PR.=PROP.=PROPOSED  
 EX.=EXISTING



**POST-DEVELOPED DRAINAGE AREA**

- GRASS AREA, GOOD, D - 0.88 ACRE
- IMPERVIOUS - 3.04 ACRE

DRAINAGE AREA LIMITS = 3.92 ACRES

547' LENGTH AND VELOCITY @ 2.5FPS

DRAINAGE AREA LIMITS = 3.92 ACRES

69' SHEET FLOW @ 6.5% SLOPE

— PLAN PREPARED BY —  
**LEWIS LAND PROFESSIONALS INC.**  
 CIVIL ENGINEERING LAND SURVEYING  
 8691 WADSWORTH ROAD SUITE 100  
 WADSWORTH, OH 44281 (330) 335-8232

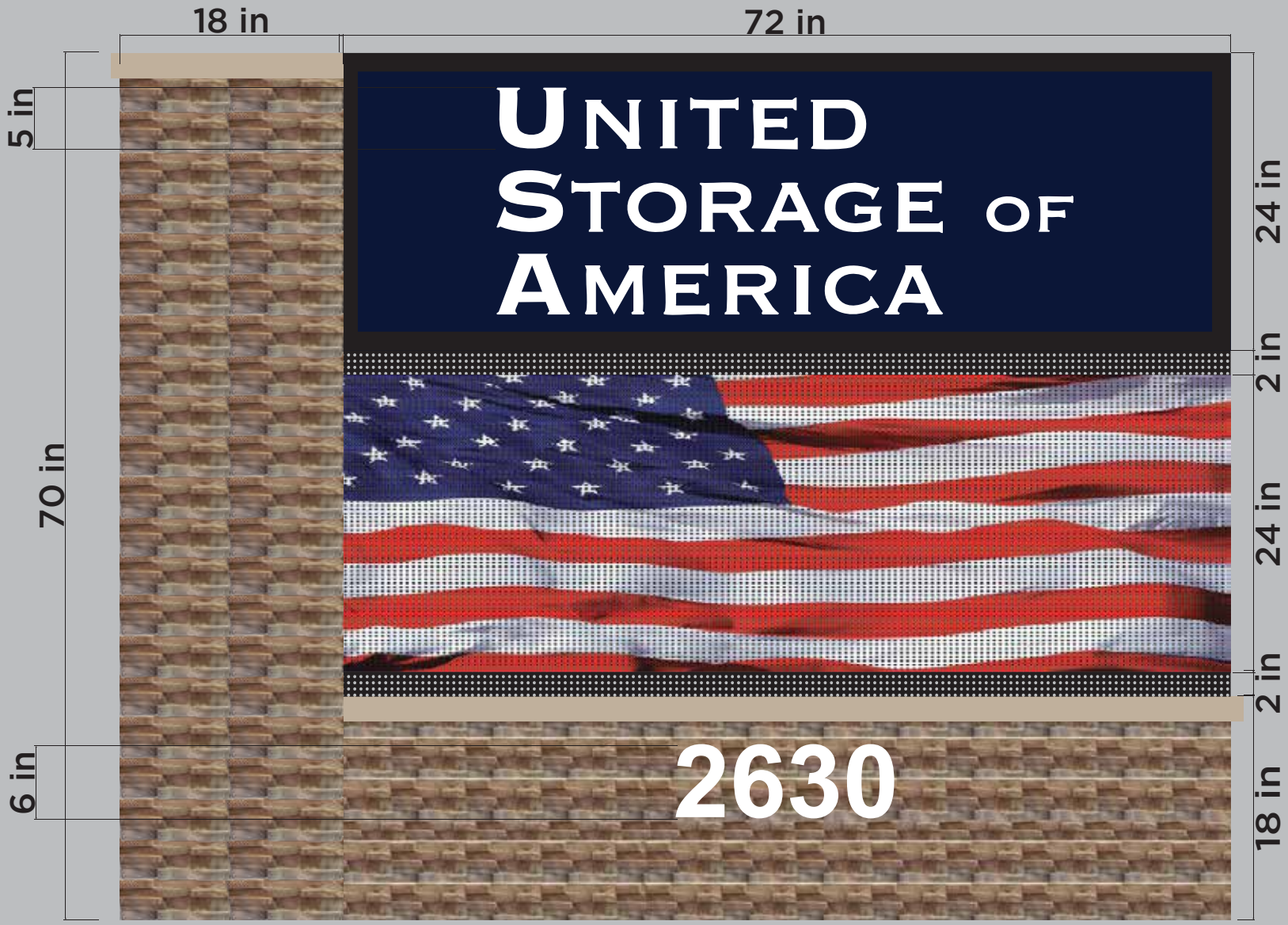
PROJECT: **2630 COLORADO AVE - LORAIN OHIO**  
 TITLE: **POST-DEVELOPED DRAINAGE MAP**

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 TOLL FREE  
 Outside Ohio 216-744-5191  
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SCALES:  
 DRAWING FILE: **25-344 Drainage Maps.dwg**  
 NPDES PERMIT NUMBER:

REVISION TABLE				DATE:
				4/7/2026
				PROJECT NUMBER:
				25-344
				SHEET NUMBER:
1	2/12/26	PRELIMINARY CONCEPT PLAN	MRK	
NO.	DATE	DESCRIPTION	BY	

72" x 24" Internally illuminated cabinet with back printed graphics & 72" x 24" Digital display, 2" ventilation top and bottom, mounted to 72" x 18" Stone veneer base with 2" Capstone & 18" x 70" Stone veneer pillar. Stud mounted 6" Acrylic address numbers



Project: United Storage of America

Project Location: 2630 Colorado Ave, Lorain, OH 44052

Client: Jason Kucharski



212 Warden Ave.  
Elyria, OH  
44035

These are original designs or concepts and are the property of L3 Sign & Image and may not be shown to any individuals other than the addressee without the written consent of L3 Sign & Image. Should these designs be used in anyway other than as intended by the addressee, design changes will apply.

Client Signature: \_\_\_\_\_

Date Issued: 12/31/25 | Revision Date: \_\_\_\_\_ | Revision #: \_\_\_\_\_

Table 1

Name	Address
FLOWERS STEVEN & JAMI	2738 COLORADO AVE LORAIN OH 44052
CALABRESE DEBRA	2720 COLORADO AVE LORAIN OH 44052
BOBINSKI KRZYSTOF	1716 NEW JERSEY AVE LORAIN OH 44052
NORRIS DARIEN	1730 NEW JERSEY AVE LORAIN OH 44052
LORAIN CITY OF	NEW JERSEY AVE LORAIN OH 44052
BAYVIEW REALTY GROUP LLC	1758 NEW JERSEY AVE LORAIN OH 44052
KADIRI DAVID	1766 NEW JERSEY AVE LORAIN OH 44052
LORAIN CITY O	2302 COLORADO AVE , UNIT H LORAIN OH 44052
HORIZON ACTIVITIES CENTER	2500 COLORADO AVE LORAIN OH 44052
DG STRATEGIC II LLC	2600 COLORADO AVE LORAIN OH 44052
VERDE PROPERTIES LLC	2615 COLORADO AVE LORAIN OH 44052
OAKTREE ROAD ACQUISITIONS LLC	2647 COLORADO AVE LORAIN OH 44052
STANTON RICHARD O & MARION M	2715 COLORADO AVE LORAIN OH 44052



Jack Bradley  
Mayor

# CITY OF LORAIN

Department of Building, Housing & Planning

Matthew Kuszmir  
Director

David Faciana  
Chief Building Official

April 29, 2026

To: Planning Commission

Re: *F.D.P. 03-2026, Submission for Planning Commission's review and consideration, the Final Development Plan for an Indoor Self-Storage facility in an I-1 Light Industrial district, Chapter 1127-Industrial Districts and Section 1145- Site Development Plans located at, 2630 Colorado Ave. Jason Kucharski-agent, Rotar Industries LLC, applicant.*

The following comments were received in response to the plans for consideration:

**Planning and Zoning-** ZBA 12-2025, application was approved with the condition that a dual entrance and exit be added to the south of the property and that Colorado Ave be limited to an entrance only.

- Will both points of access be completed in phase one (1)?
- Directional signage will be required.
- A variance of 41 parking spaces was granted requiring a total of 11 parking spaces. The site plan shows five spaces for phase one and three spaces for phase two. Please advise.

**Engineering-** Upon final approval from Planning Commission, a Commercial Application and Sanitary/Stormwater Permit Application will be required.

Review of the Preliminary or Final Development Plan by City departments and Planning Commission does not permit or authorize the commencement of any development or construction. The applicant must submit the required applications, fees, and necessary documentation to each respective department for permit consideration after full approval from Planning Commission.

Respectfully,

Evelisse Atkinson  
Planning & Zoning Administrator



# CITY OF LORAIN

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## Planning Commission

4. D.

Meeting Date: 05/06/2026

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Subject:

Z.C.A. 02-2026 Submission for Planning Commission's review and recommendation to Lorain City Council for the Zoning Reclassification of multiple parcels that require updated classifications and corrections, (see exhibits "A" through "K" for parcel information and maps). City of Lorain, applicant.

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### Attachments

Zoning map amendments

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Jack Bradley  
Mayor

# CITY OF LORAIN

## PLANNING COMMISSION

Z.C.A. 02-2026

### ZONING RECLASSIFICATION OF PROPERTY APPLICATION

Application is hereby made to the Lorain City Council, to reclassify the below described property now in a see exhibits district to a see exhibits district.

Owner of property Multiple

Address of owner see cover letter

City: Lorain State OH Zip \_\_\_\_\_

Phone (business) \_\_\_\_\_ (residential) \_\_\_\_\_

Address of property to be rezoned see cover letter

Permanent Parcel Number see cover letter

The reason(s) for requesting the zoning reclassification is as follows:

Please see cover letter and exhibits A through K

Two separate non-refundable payments made payable to the City of Lorain:

Five hundred (\$500.00) Building department fee

Thirty dollar (30.00) Engineering department fee

Signature of Applicant

4/16/2026

Date



Jack Bradley  
Mayor

# CITY OF LORAIN

Department of Building, Housing & Planning

Matthew Kuszmir  
Director

David Faciana  
Chief Building Official

April 29, 2026

To: Planning Commission

From: Evelisse Atkinson, Planning and Zoning Administrator

Re: Z.C.A. 02-2026 Submission for Planning Commission's review and recommendation to Lorain City Council for the Zoning Reclassification of multiple parcels that require updated classifications and amendments. See exhibits "A" through "K" for parcel information and maps. City of Lorain, applicant.

**Below is an explanation for exhibits A through K:**

**Exhibit A:** Request for the Zoning Reclassification of parcels on W 44<sup>th</sup> St., currently classified as R-1B (Moderate Density Single-Family) and UR (Under Review) to R-3 (High Density Residential). Parcels classified as UR, require a classification and the R-1B classification does not permit multi-family dwellings.

**Exhibit B:** Request for the Zoning Reclassification of parcels on Grove Ave., currently classified, UR (Under Review) to B-2 (General Business), continuing the classification of contiguous parcels. Parcels classified as UR, require a classification.

**Exhibit C:** Request for the Zoning Reclassification of parcels on W 11<sup>th</sup> St., currently classified as R-2 (Transitional Residential) and R-3 (High Density Residential) to B-2 (General Business) continuing the classification of parcels serving Lorain County Community Action Agency- Head Start.

**Exhibit D:** Request for the Zoning Reclassification of parcels on Laurel Rd. and Pearl Ave., currently unclassified to R-2 (Transitional Residential) continuing the classification of contiguous parcels.

**Exhibit E:** Request for the Zoning Reclassification of parcels on 6<sup>th</sup> Court and 7<sup>th</sup> St., currently classified as R-3B (Medium to High Density Residential) and R-2 (Transitional Residential) to R-3 (High Density Residential), removing an obsolete classification, (R-3B) and combining the use under one classification (R-3).

**Exhibit F:** Request for the Zoning Reclassification of 4953 W Erie Ave., currently unclassified to B-2 (General Business) continuing the classification of adjoining parcels.

**Exhibit G:** Request for the Zoning Reclassification of a parcel currently classified as R-3 (High Density Residential) to B-2 (General Business) continuing the classification of contiguous parcels.

**Exhibit H:** Request for the Zoning Reclassification of parcels on W 37<sup>th</sup> St., currently classified as R-3B (Medium to High Density Residential) to R-3 (High Density Residential) and removing an obsolete classification (R-3B).

**Exhibit I:** Request for the Zoning Reclassification of parcels on Root Rd., currently unclassified to I-1 (Light Industrial) and continuing the classification of adjoining parcels.

**Exhibit J:** Request for the Zoning Reclassification of parcels on Tower Blvd., currently classified as B-2 (General Business) to R-3 (High Density Residential) continuing the classification of adjoining parcels. The B-2 classification does not permit multi-family dwellings.

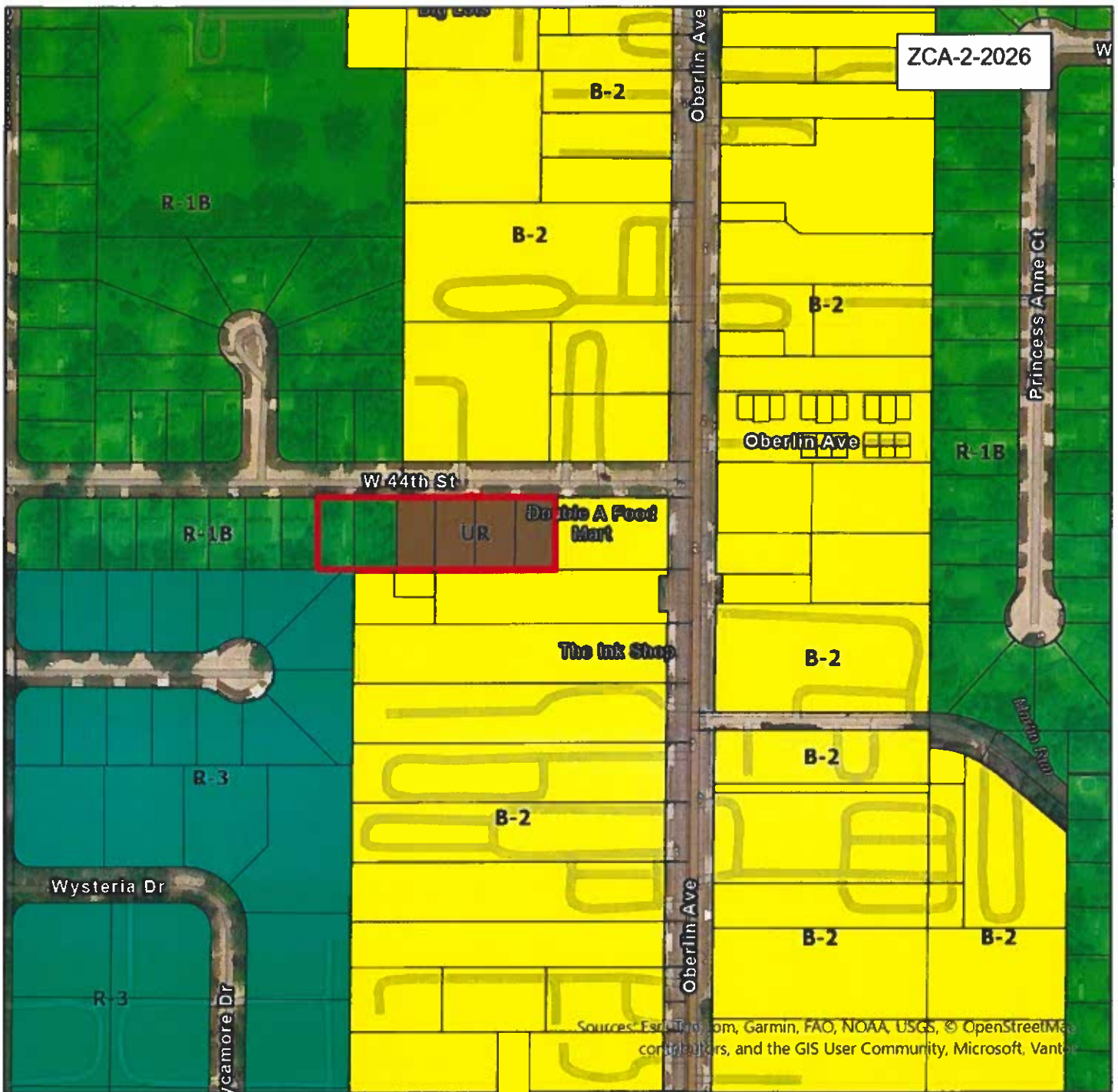
**Exhibit K:** Request for the Zoning Reclassification of parcels on 2<sup>nd</sup> St, W. Erie Ave., and Hamilton Ave., currently classified as R-3B (Medium to High Density Residential) to R-3 (High Density Residential) and removing an obsolete classification (R-3B).

Respectfully,



Evelisse Atkinson

Planning & Zoning Administrator



**PROPOSED ZONE CHANGE TO OUTLINED AREA: UR & R-1B to R-3**

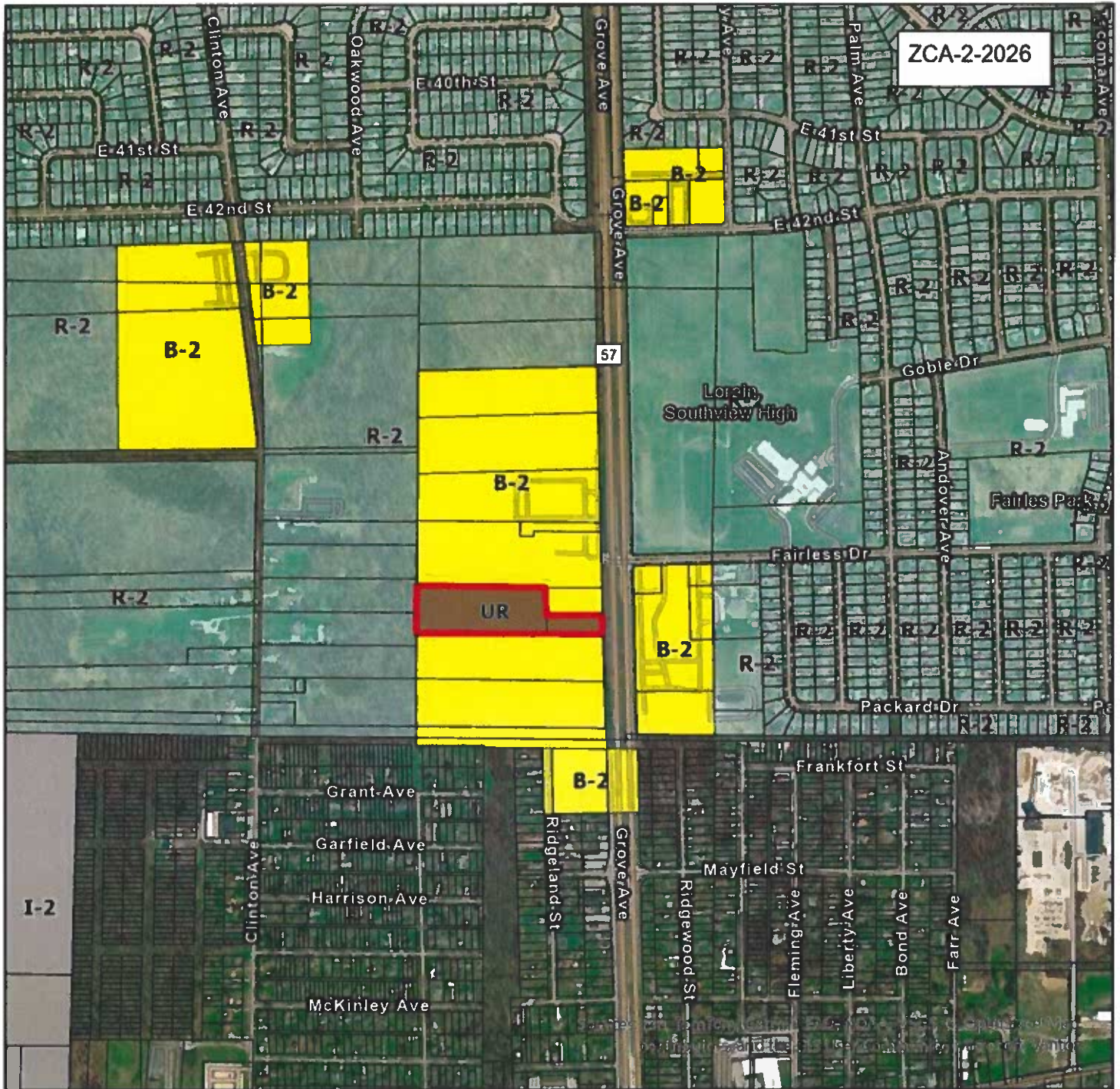


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0202006115015	1203 W 44TH ST	HARRIOTT NICOLE & PAUL	UR	R-3
0202006115014	1205 W 44TH ST	SUNRISE 1828 LLC	UR	R-3
0202006115013	1207 W 44TH ST	SUNRISE HOMES LP	UR	R-3
0202006115012	1209 W 44TH ST	KINGSTONS REALTY HOME LLC	UR	R-3
0202006115011	1211 W 44TH ST	1211 PROPERTIES LLC	R-1B	R-3
0202006115010	1217 W 44TH ST	1217 PROPERTIES LLC	R-1B	R-3



**PROPOSED ZONE CHANGE TO OUTLINED AREA: UR TO B-2**

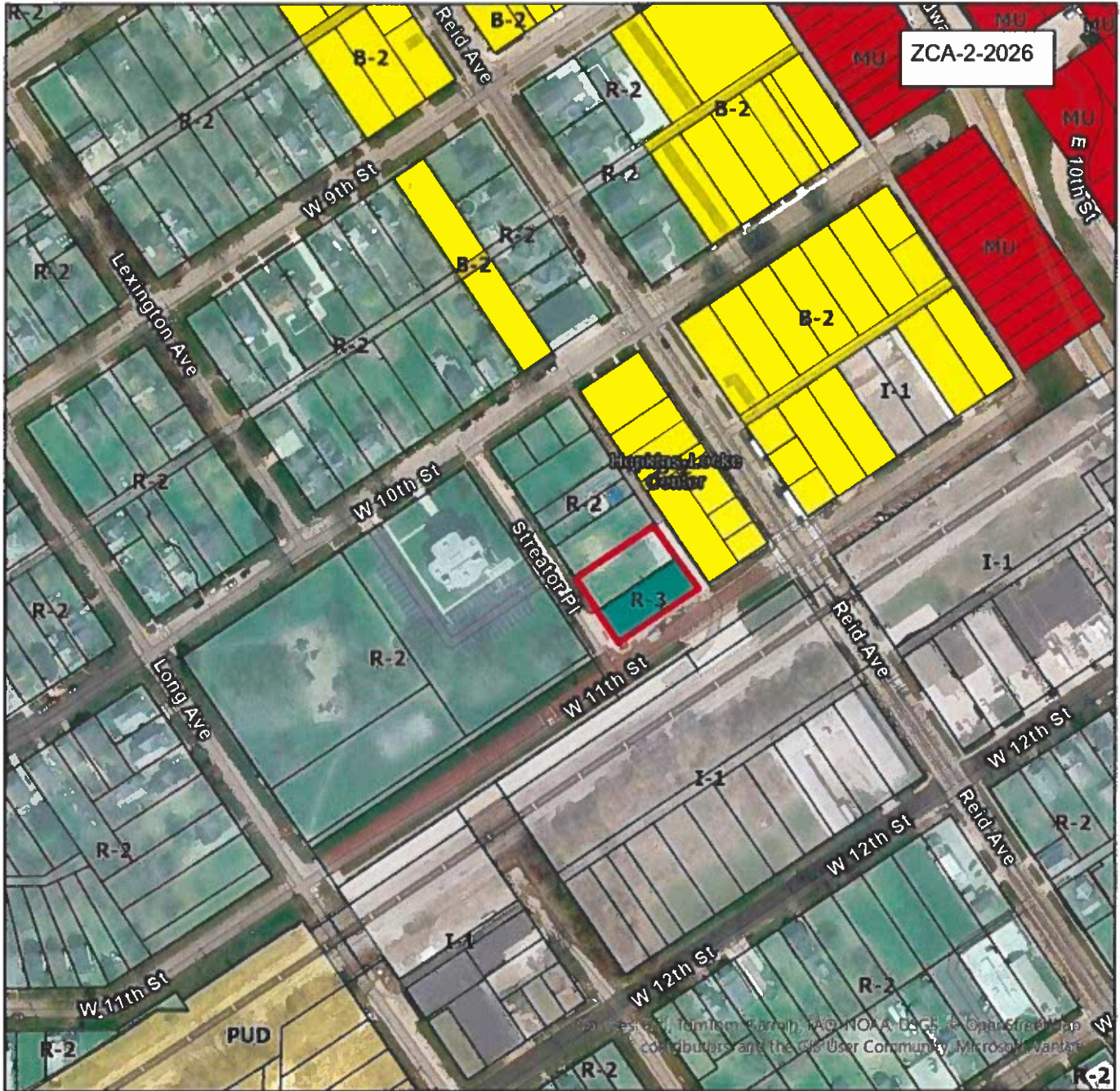


APPROVED \_\_\_\_\_  
 PUBLIC HEARING \_\_\_\_\_  
 APPROVED BY COUNCIL \_\_\_\_\_  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0300104101018	Vacant	GREEN LINE INVESTMENT LLC	UR	B-2 Grove Ave
0300104101021	Vacant	GREEN LINE INVESTMENT LLC	UR	B-2 Grove Ave



**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-2 & R-3 TO B-2**



APPROVED \_\_\_\_\_  
 PUBLIC HEARING \_\_\_\_\_  
 APPROVED BY COUNCIL \_\_\_\_\_  
 ORDINANCE NO. \_\_\_\_\_

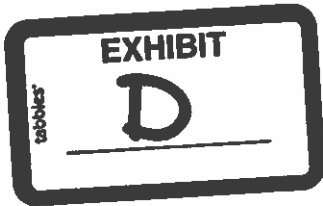
DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0201003122008	1047 STREATOR PL	LORAIN COUNTY COMMUNITY ACTION AGENCY INC	R2	B2- Head Start
0201003122009	STREATOR PL	LORAIN CITY OF	R3	B2- Head Start



**PROPOSED ZONE CHANGE TO OUTLINED AREA: UNCLASSIFIED TO R-2**

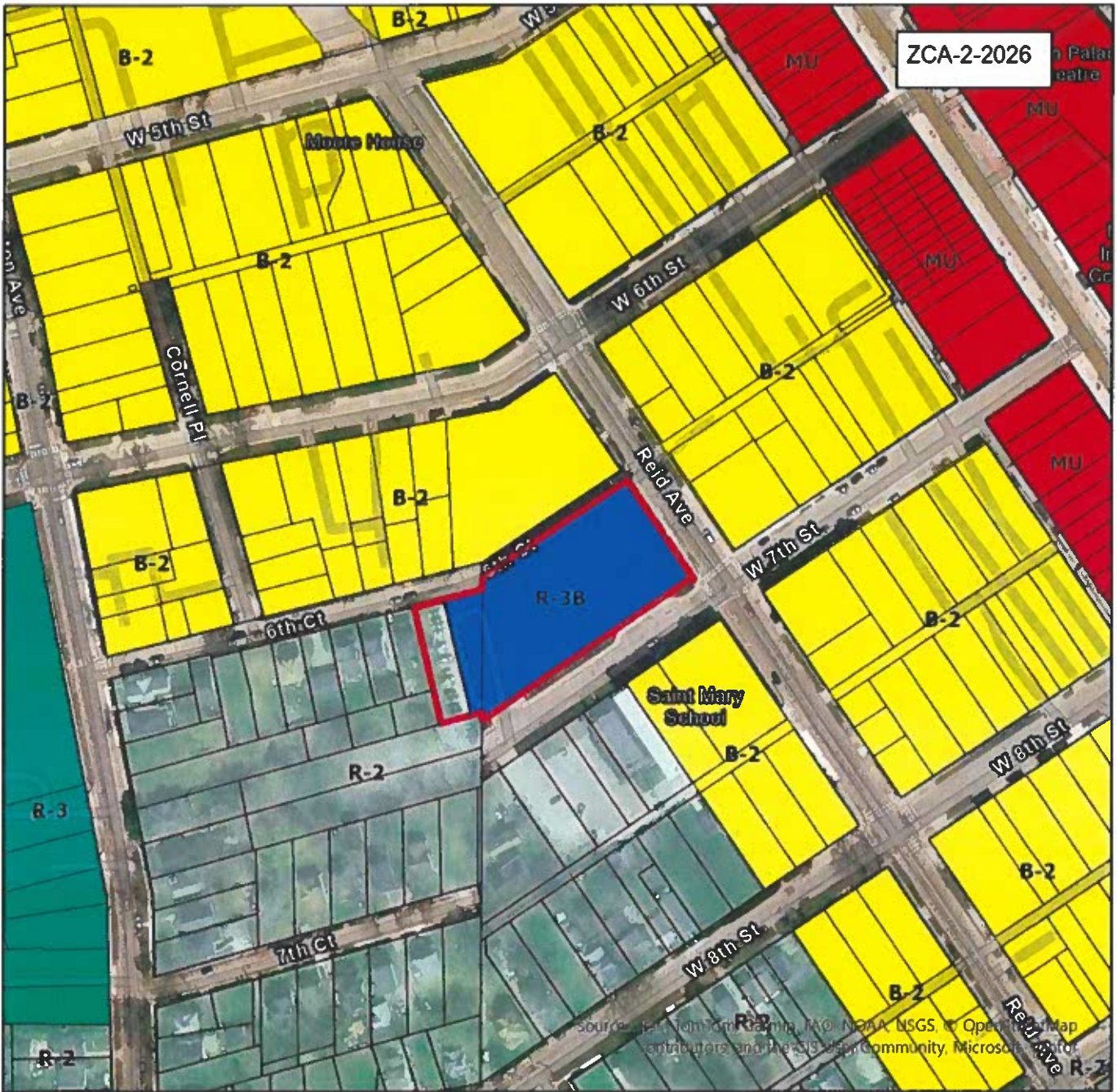


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0300105103001	4346 PEARL AVE	IRACE DAVID M	Not classified	R2- Laurel Rd
0300105103002	PEARL AVE	IRACE DAVID M	Not classified	R2- Laurel Rd
0300105103003	PEARL AVE	IRACE DAVID M	Not classified	R2- Laurel Rd
0300105103004	PEARL AVE	IRACE DAVID M	Not classified	R2- Laurel Rd
0300105103005	PEARL AVE	WADE DAVID	Not classified	R2- Laurel Rd
0300105103006	4398 PEARL AVE	WADE DAVID	Not classified	R2- Laurel Rd
0300105103007	PEARL AVE	WADE DAVID	Not classified	R2- Laurel Rd
0300105103008	4424 PEARL AVE	ANDERSON ROGER A	Not classified	R2- Laurel Rd
0300105103009	LAUREL RD	ANGELOS CHRISTOPHER J & GERTRUD M	Not classified	R2- Laurel Rd
0300105103010	4421 LAUREL RD	ANGELOS CHRISTOPHER J & GERTRUD M	Not classified	R2- Laurel Rd
0300105103011	LAUREL RD	ANGELOS CHRISTOPHER J & GERTRUD M	Not classified	R2- Laurel Rd
0300105103012	LAUREL RD	FIFTH STREET REALTY COMPANY	Not classified	R2- Laurel Rd
0300105103013	LAUREL RD	LORAIN CITY OF COMMUNITY DEV DEPT	Not classified	R2- Laurel Rd
0300105103014	LAUREL RD	LORAIN CITY OF COMMUNITY DEV DEPT	Not classified	R2- Laurel Rd
0300105103015	4484 PEARL AVE	GLASS DORISSA KAY	Not classified	R2- Laurel Rd
0300105103016	PEARL AVE	KUMP FRANK	Not classified	R2- Laurel Rd
0300105103017	4498 PEARL AVE	MUSIAL MATTHEW & CAROLYN CHAPMAN ETAL	Not classified	R2- Laurel Rd
0300105104010	LAUREL RD	VANCE SHEILA & DAVID CRAWFORD	Not classified	R2- Laurel Rd
0300105104007	LAUREL RD	ROE LINDA J	Not classified	R2- Laurel Rd
0300105104008	4406 LAUREL RD	ROE LINDA J	Not classified	R2- Laurel Rd
0300105104009	LAUREL RD	VANCE SHEILA & DAVID CRAWFORD	Not classified	R2- Laurel Rd
0300105104002	4400 LAUREL RD	VANCE SHEILA & DAVID CRAWFORD	Not classified	R2- Laurel Rd
0300105104001	LAUREL RD	LINCOLN RICHARD L	Not classified	R2- Laurel Rd



**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-2 & R-3B TO R-3**



APPROVED \_\_\_\_\_  
 PUBLIC HEARING \_\_\_\_\_  
 APPROVED BY COUNCIL \_\_\_\_\_  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0201005113019	6TH CT	LORAIN METROPOLITAN HOUSING AUTHORITY	R-3B	R-3 LMHA- lakeview
0201005113018	6TH CT	LORAIN METROPOLITAN HOUSING AUTHORITY	R-2	R-3 LMHA- lakeview
0201004104010	310 W 7TH ST	LORAIN METROPOLITAN HOUSING AUTHORITY	R-3B	R-3 LMHA- lakeview



**PROPOSED ZONE CHANGE TO OUTLINED AREA: UNCLASSIFIED TO B-2**

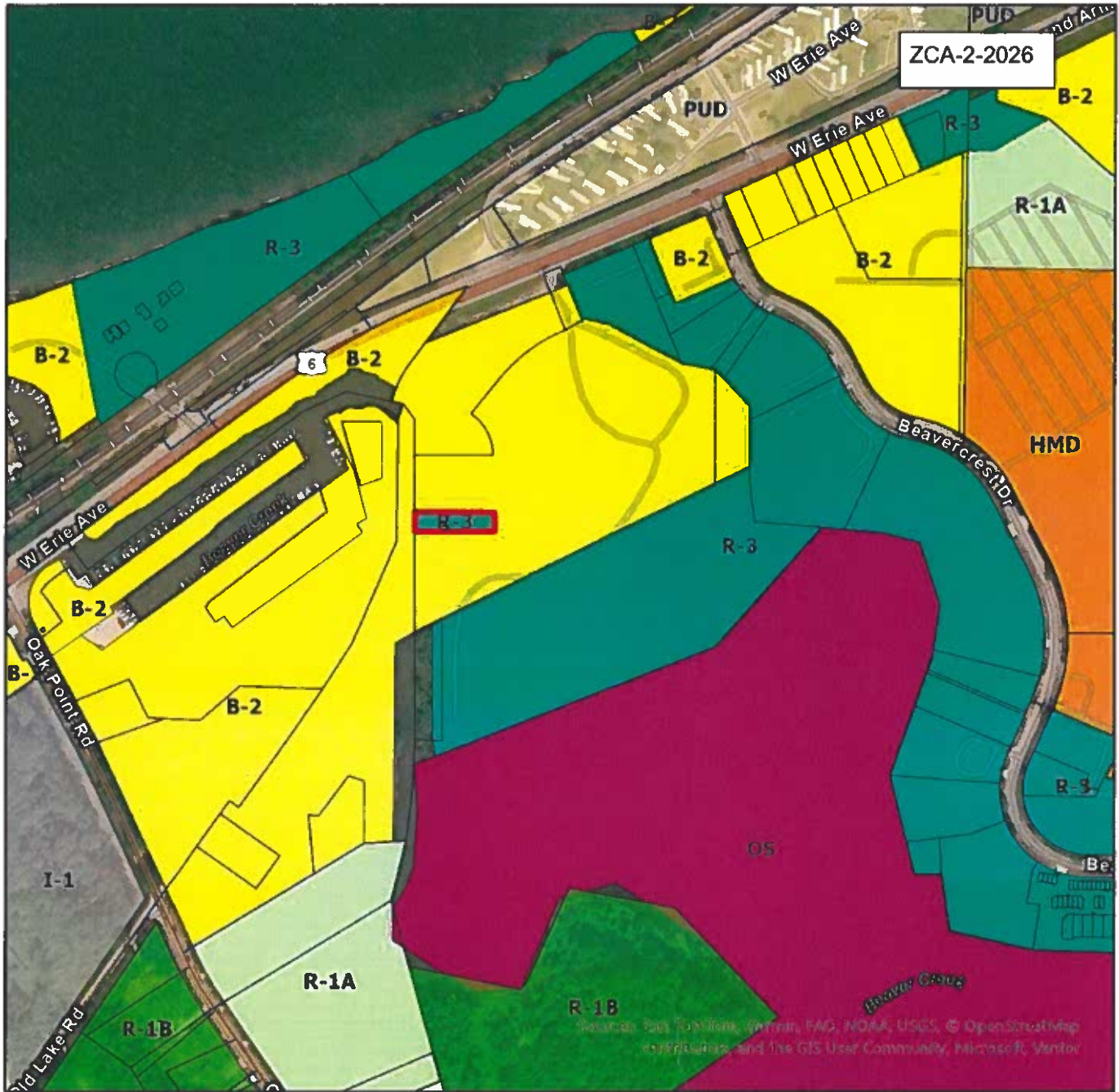


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0203001108011	4935 W ERIE AVE	WEST ERIE MARATHON LLC	Not classified	B2



**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-3 TO B-2**

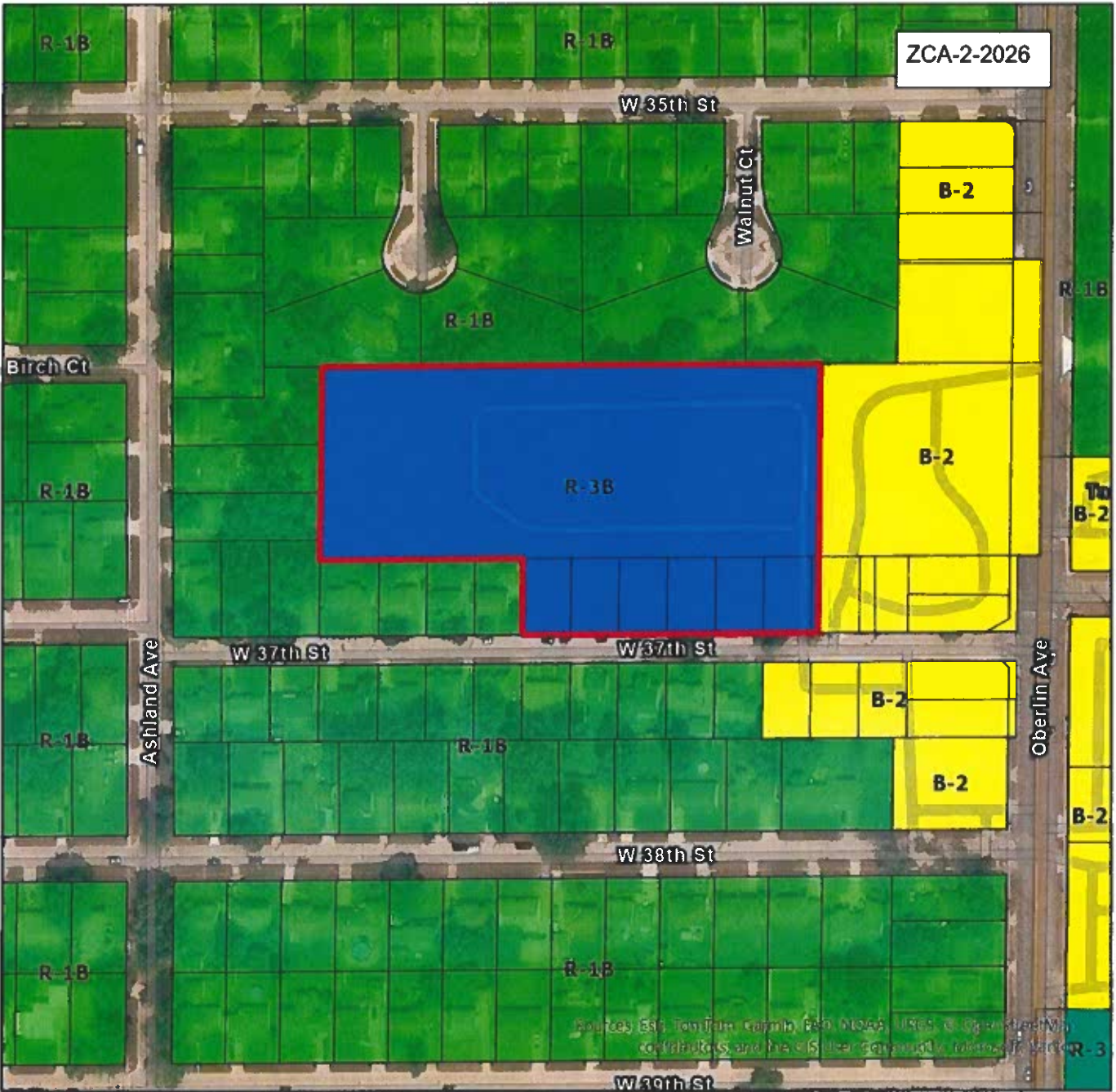


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0203002106021	REAR LAND	DIVER DEVELOPMENTS LLC	R3	B-2



**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-3B TO R-3**

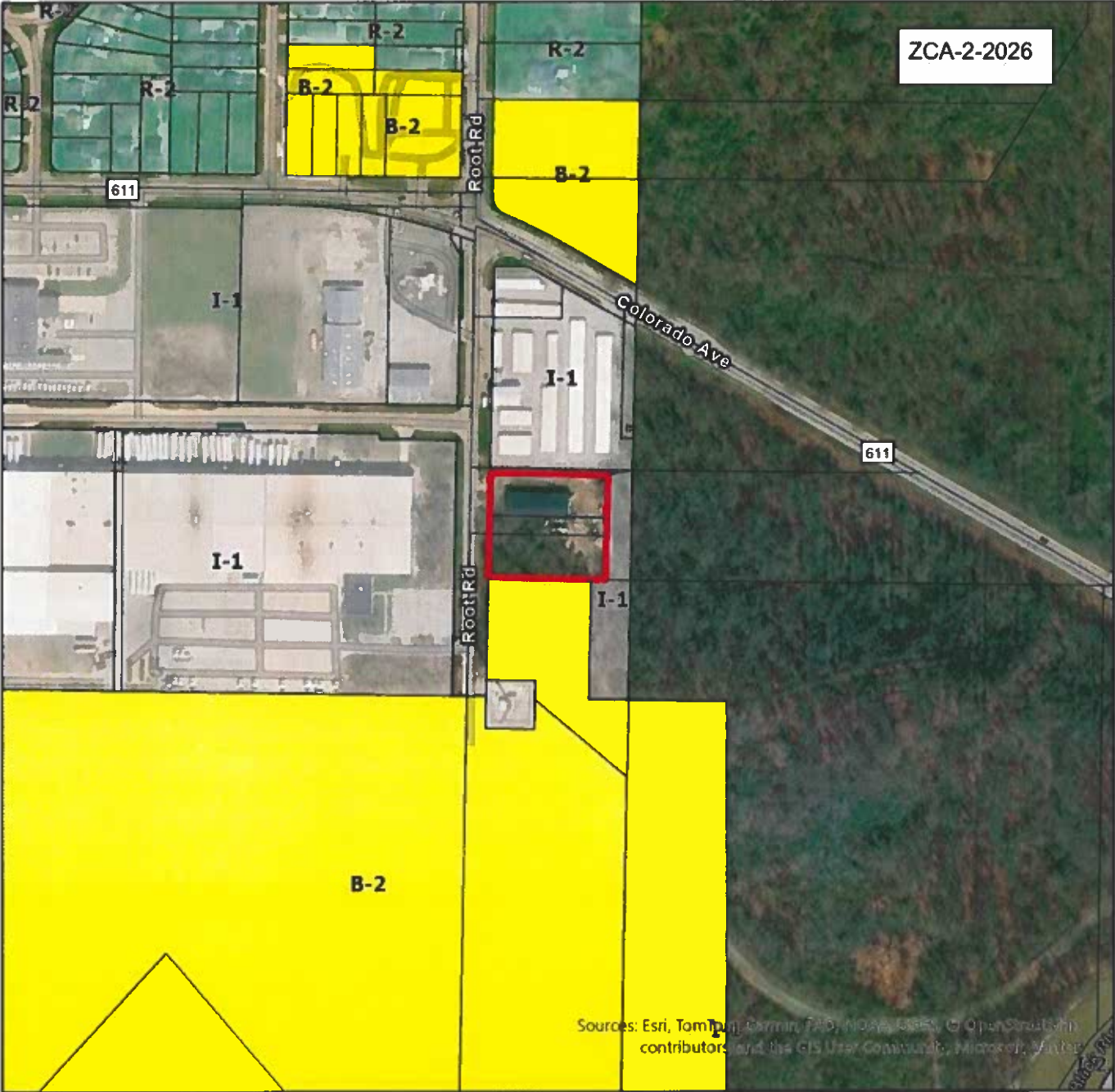


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0202015109037	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109038	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109039	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109040	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109041	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109042	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109063	W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor
0202015109065	1220 W 37TH ST	OBERLIN MANOR LTD	R-3B	R-3 Oberlin Manor



**PROPOSED ZONE CHANGE TO OUTLINED AREA: UNCLASSIFIED TO I-1**

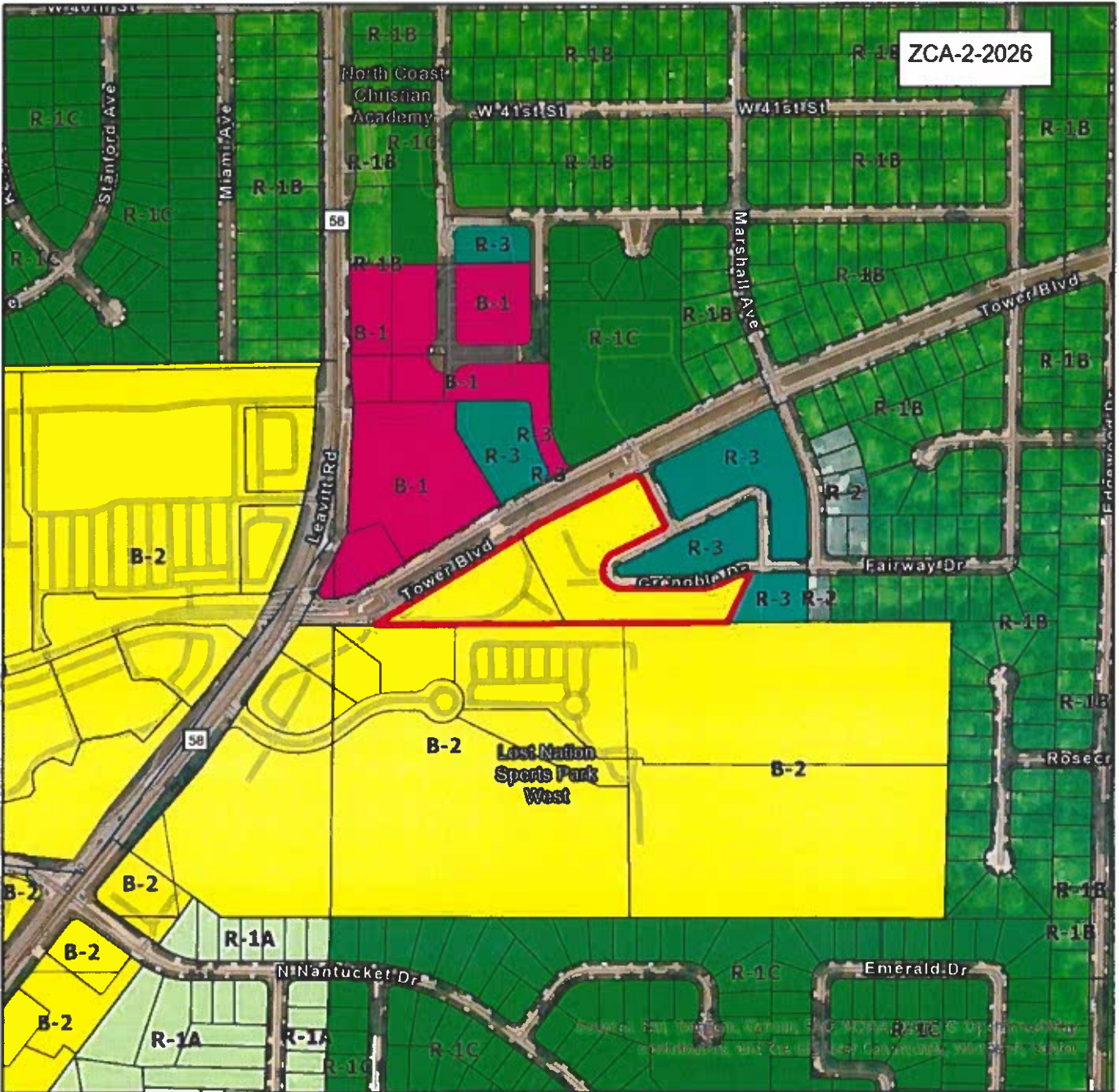


APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0300058102002	1809 ROOT RD	CARLSON BROTHERS PROPERTY MANAGEMENT LLC	Not classified	I-1 - Carlson Masonry
0300058102003	ROOT RD	CARLSON BROTHERS PROPERTY MANAGEMENT LLC	Not classified	I-1 - Carlson Masonry
0300058102013	ROOT RD	CARLSON BROTHERS PROPERTY MANAGEMENT LLC	Not classified	I-1 - Carlson Masonry



**PROPOSED ZONE CHANGE TO OUTLINED AREA: B-2 TO R-3**



APPROVED \_\_\_\_\_  
 PUBLIC HEARING \_\_\_\_\_  
 APPROVED BY COUNCIL \_\_\_\_\_  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0202007101014	2205 TOWER BLVD	LIBERTY CIRCLE APARTMENTS LLC	B2	R3- Liberty Circle Apts
0202007101050	2000 E SERENITY LN	PREFERRED INVESTMENT PROPERTIES LTD	B2	R3- Almadien Village Townhomes



**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-3B TO R-3**



APPROVED  
 PUBLIC HEARING  
 APPROVED BY COUNCIL  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

Parcel Number	Address	Owner	Current Classification	Recommendation
0201006104005	1129 W 2ND ST	PASA NICHOLAS	R-3B	R-3 Residential
0201006104006	1125 W 2ND ST	WOLF MICHAEL JOHN	R-3B	R-3 Residential
0201006104007	1121 W 2ND ST	KATIE SADKA LLC	R-3B	R-3 Residential
0201006104008	1117 W 2ND ST	KATIE SADKA LLC	R-3B	R-3 Residential
0201006104009	1115 W 2ND ST	PATTERSON HENRY T & DEBRA L	R-3B	R-3 Residential
0201006104010	1109 W 2ND ST	TAYLOR PROPERTIES LLC	R-3B	R-3 Residential
0201006104011	1107 W 2ND ST	LOCAL CITY HOUSING LLC	R-3B	R-3 Residential
0201006104012	1103 W 2ND ST	GALVIN LORI	R-3B	R-3 Residential
0201006104013	220 HAMILTON AVE	MIDWEST ASSET PRESERVATION OF OHIO LLC	R-3B	R-3 Residential
0201006104014	226 HAMILTON AVE	DUTRO RAYMOND C & ANGELA S	R-3B	R-3 Residential
0201006104018	1130 W ERIE AVE	KILLIAN HOLDINGS LLC	R-3B	R-3 Residential
0201006104019	1126 W ERIE AVE	SPANGLER JASON & DONALD WARNER	R-3B	R-3 Residential
0201006104020	1124 W ERIE AVE	MASS RAYMOND F	R-3B	R-3 Residential
0201006104021	1120 W ERIE AVE	MASS RAYMOND F	R-3B	R-3 Residential
0201006104022	1114 W ERIE AVE	SMITH RENEE B TRUSTEE & FREDERICK W TRUSTEE	R-3B	R-3 Residential
0201006104023	1112 W ERIE AVE	LORAIN POST 30 AMERICAN LEGION	R-3B	R-3 Residential
0201006104024	HAMILTON AVE	AMERICAN LEGION POST 30 INC	R-3B	R-3 American Legion
0201006104025	HAMILTON AVE	AMERICAN LEGION POST 30 INC	R-3B	R-3 American Legion
0201006104026	HAMILTON AVE	AMERICAN LEGION POST 30 INC	R-3B	R-3 American Legion



## CITY OF LORAIN

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### Planning Commission

4. E.

Meeting Date: 05/06/2026

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Subject:

Z.C.A. 03-2026 Submission for Planning Commission's review and recommendation to Lorain City Council, the Zoning Reclassification of, 516 W 15th St, PPN 02-01-003-135-027 from an R-2, Transitional Residential District to a B-2 General Commercial District. 516 W 15 LLC, applicant.

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### Attachments

Application and Site Plan  
Recommendation Letter

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Jack Bradley,  
Mayor

**CITY OF LORAIN**  
PLANNING COMMISSION

**RECEIVED**  
APR 15 2023  
BY: \_\_\_\_\_

Z.C.A. 03-2026

**ZONING RECLASSIFICATION OF PROPERTY APPLICATION**

Application is hereby made to the Lorain City Council, to reclassify the below described property now in a R2 district to a B2 district.

Owner of property 516 West 15 LLC

Address of owner 2021 E. 31 St.

City: Lorain State Ohio Zip 44053

Phone (business) 440 657-6745 (residential) \_\_\_\_\_

Address of property to be rezoned 516 West 15th Street

Permanent Parcel Number 02-01-003-135-027

The reason(s) for requesting the zoning reclassification is as follows:

We own the existing parking lot to the west of the building that is zoned B2 and was originally a part of the parking for this building. The building was originally a retail store and several other businesses over the years. Our intent is to re-open the building for a neighborhood deli. and market. the second floor has been renovated for an apartment. We are respectfully requesting a change to the zoning from R2 to B2. i am working on combining the parcel that contains the parking with the parcel that contains the building into 1 1 parcel.

Two separate non-refundable payments made payable to the City of Lorain:

Five hundred (\$500.00) Building department fee  
Thirty dollar (30.00) Engineering department fee

*Jaime Torres Serrano*  
Signature of Applicant

4-15-26  
Date

04/09/26

City of Lorain  
Board of Zoning Appeals  
200 West Erie Ave.  
5<sup>th</sup> Floor  
Lorain, Ohio 44052  
Attn: Evelisse Adkinson – Zoning Administrator

Re: 516 West 15<sup>th</sup> Street | Rezoning

Honorable members of the Zoning Board of Appeals.

My client is requesting a rezoning of the existing 2 story commercial and residential property located at 516 West 15<sup>th</sup> Street from R2 to B2.


The existing building was constructed a first floor retail business space with a second floor apartment in the 1920's. The apartment entrance is at the rear of the building and is entirely on the second floor. The first floor space was used as a retail space up to the time of the business closing some years ago. The first floor of the building was clearly constructed as a business use and is not easily convertible to residential use. The owner wishes to open a neighborhood convenience store in the building and has worked to renovate the structure to prepare the space for this.

The adjacent parking lot, to the west, under the same ownership is zoned B2 and provides adequate parking for business use. There are also two spaces on the existing property. The owner has started the process to combine the properties. The property to the west is the existing parking, and to the East is used for outdoor space and parking for the nativity Manor, multi-family, apartments. The properties to the north are rental homes and directly to the north is a vacant parcel. The properties to the south consist of a large vacant lot that was the former Polish Club and a rental property.

The re-zoning of this property will not negatively affect the neighborhood in that it will return a small commercial property to beneficial use and serve the neighborhood residences as it was originally built to do. It will not negatively impact the delivery of city services.

Because of the nature of the structure and the adjacent parking, reasonable justice will be served given the unique nature of the existing building and adjacent parking and zoning for the parking.

Respectfully



Gary Fischer R.A.  
Principal | Architect

FISCHER & ASSOCIATES



ARCHITECTS INC.

554 West Ninth Street  
Lorain, Ohio 44052  
Tel: (440) 315-2300

E mail: andrea@fischerarch.com

Fischer & Associates © 2020  
ISSUE: DATE:

PERMIT 03/17/20  
SITE PLAN 03/30/26

Client Name/Project Name/Address

**PLAZA BUILDING**

(Site Rezoning)

516 West 15th Street  
LORAIN, Ohio 44052

Drawing Name

COVER SHEET-GENERAL NOTES-  
SITE LOCATION PLANS-  
FLOOR PLANS

Fischer Project Number

20.028

SHEET #

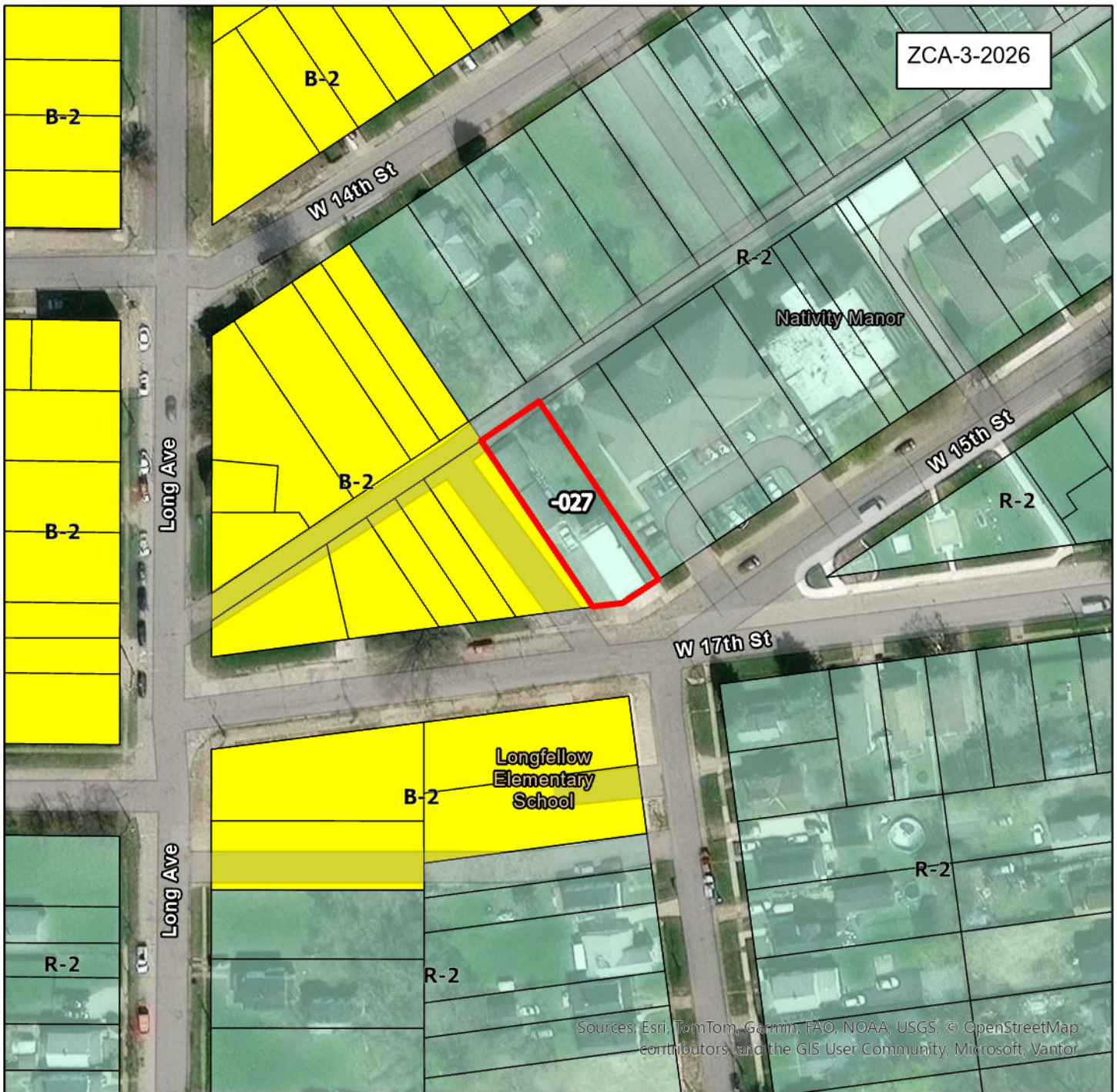
SP-100

Seal



SITE PLAN  
1" = 10'-0"





**PROPOSED ZONE CHANGE TO OUTLINED AREA: R-2 TO B-2**



APPROVED \_\_\_\_\_  
 PUBLIC HEARING \_\_\_\_\_  
 APPROVED BY COUNCIL \_\_\_\_\_  
 ORDINANCE NO. \_\_\_\_\_

DATE \_\_\_\_\_  
 DATE \_\_\_\_\_  
 DATE \_\_\_\_\_

**AMENDING AND ESTABLISHING ZONE CLASSIFICATION UNDER ZONING CODE ORDINANCE 186-85**

2009-0299993

To All Persons to Whom These Presents shall Come - Greeting  
Whereas, on the 14th day of September 2006, Daniel J. Talarek, County Treasurer of Lorain County, Ohio, Plaintiff, filed his certain Complaint and then and thereby commenced a civil action in the Court of Common Pleas of Lorain County, Ohio, against John T. Michalek, et al and numbered on the Docket of said Court as Case No. 07TX000628, praying among other things, for the sale of the property in said complaint and as hereinafter described.

And, Whereas, such proceedings were had in said action, that by the consideration and judgment of said Court, at the January Term thereof, 2008, the said Daniel J. Talarek County Treasurer, recovered a judgment against the said John T. Michalek, et al for the sum of Eight Thousand Four Hundred Seventy-Eight Dollars and Thirty-Two cents (\$8,478.32) and costs of the action.

And, Whereas, it was then and there further ordered, adjudged and decreed by the said Court, that Phil R. Stammitti, Sheriff of Lorain County, Ohio should cause the lands and tenements in said complaint and order mentioned and hereinafter described to be advertised and sold in the manner provided by law for the sale of real estate on execution without appraisal.

And, Whereas, afterwards on the 3rd day of April 2008, in pursuance of said order and the judgment of said Court, and founded thereon an order of sale issued from said court, directed to Phil R. Stammitti, Sheriff of Lorain County, Ohio, commanding him to execute the said order, and in all things to be governed by the provisions of the statute in such case made and provided, and of said order, with his proceedings thereon, he should make due return.

And, Whereas, I, Phil R. Stammitti, as Sheriff aforesaid, having advertised the time and place of selling the same, in the Morning Journal a newspaper printed and of general circulation in said County, once a week for three consecutive weeks prior to the day of sale, and otherwise complied with the said order and the provisions of the statute in such cases made and provided, did, on the 28th day of May A.D. 2008, at the Court House in said County, at 10:15 o'clock A.M. of said day, expose to sale, at public auction, the premises hereinafter described, and thereupon George H. Schneider having bid for said premises the sum of Fifteen Thousand Three Hundred Dollars and Zero cents - (\$15,300.00) which said sum being the highest and best bid offered for the same, the said premises were then and there sold to his the said George H. Schneider, the purchaser, for the sum above mentioned.

And Whereas, the said Court at its April Term, 2008 having examined the proceedings of the said Phil R. Stammitti as Sheriff, aforesaid, in the premises, under said order of sale, and being satisfied that the sale aforesaid had been made in all respects in pursuance to said judgment and order of sale, and in accordance with the provisions and requisitions of the statute regulating such sales, did order that such sale should be confirmed, and that the said Sheriff should convey the said real estate by deed in fee simple, to the purchaser, George H. Schneider.

NOW THEREFORE, I, Phil R. Stammitti as Sheriff aforesaid, by virtue of said judgment, order of sale, sale and confirmation, and, in consideration of the premises and the payment of the sum of Fifteen Thousand Three Hundred Dollars and Zero cents (\$15,300.00) do hereby GRANT, BARGAIN, SELL and CONVEY unto the said, George H. Schneider, successors heirs and assigns forever, the Real Estate sold as aforesaid situated in the City of Lorain, County of Lorain and State of Ohio and bounded and described as follows:

SITUATED IN THE CITY OF LORAIN, COUNTY OF LORAIN AND STATE OF OHIO AND KNOWN AS BEING SUBLOT NO. 19 IN BLOCK NO. 34 IN W.S. STREATOR TRUSTEE'S SUBDIVISION OF PART OF ORIGINAL BLACK RIVER TOWNSHIP LOT NOS 3 AND 6 IN TRACT NO. 1 AS SHOWN BY THE RECORDED PLAT IN VOLUME 4 OF MAPS, PAGE 29 OF LORAIN COUNTY RECORDS, AND BEING 30.59 FEET ON THE NORTHWESTERLY SIDE OF EIGHTH AVENUE, NOW KNOWN AS FIFTEENTH STREET, 21.66 FEET ON THE NORTHWESTERLY SIDE OF CLARK STREET, NOW KNOWN AS SEVENTEENTH STREET, 154.50 FEET DEEP ON THE NORTHEASTERLY LINE 144.89 FEET DEEP ON THE SOUTHWESTERLY LINE AND 50 FEET IN THE REAR, WHICH IS ALSO THE SOUTHEASTERLY LINE OF AN ALLEY, AS APPEARS BY SAID PLAT, BE THE SAME MORE OR LESS, BUT SUBJECT TO ALL LEGAL HIGHWAYS

COMMONLY KNOWN AS: 516 WEST 15TH STREET, LORAIN, OHIO  
PPN: 02-01-003-135-027

Doc ID: 015358670002 Type: OFF  
Kind: DEEDS  
Recorded: 08/18/2009 at 04:07:47 PM

Prior 19980563058  
Together with all the privileges and appurtenances thereto belonging, and all the right, title and interest of the said Lorain County Treasurer and of all the other parties to said suit, of, in, and to the same.

TO HAVE AND TO HOLD the same with all appurtenances thereto belonging to George H. Schneider, and successors heirs and assigns forever, as fully and completely as I, the said Phil R. Stammitti, Sheriff of Lorain County, Ohio, by virtue of said judgment, order of sale, sale and confirmation, and of the statute made and provided for such cases, might or should sell and convey the same.

In Witness Whereof, I have hereunto set my hand and seal, officially, this 24th day of July 2008.

Signed, Sealed and Acknowledged in the Presence of:

Cheryl Muek  
Diana Thesler

Phil R. Stammitti  
Phil R. Stammitti  
Sheriff of Lorain County

The State of Ohio, Lorain County, ss  
BE IT REMEMBERED, that on this 24th day of July A.D. 2008, Phil R. Stammitti, Sheriff of Lorain County, Ohio, personally came before me, the undersigned Mary Margaret Ochenas - Notary Public, in and for said County and State, and acknowledged that he did voluntarily sign, seal and deliver the above deed in his official capacity as Sheriff of Lorain County, Ohio, for the uses and purposes therein expressed.

IN TESTIMONY WHEREOF I have hereunto subscribed my name and affixed my official seal, on the day and year last aforesaid.  
Mary Margaret Ochenas  
Notary Public  
April 24th, 2011

EXHIBIT  
A  
tabbles

MR  
8/18/2009

ANTHONY BAKER ESQ  
5320 HOAG DRIVE

4/9/2026

**ADJACENT PROPERTY OWNERS ABUTTING PROPERTY:**  
**(516 W. 15<sup>th</sup> ST | PARCEL# 02-01-003-135-027)**

**Parcel#** 02-01-003-135-028  
**Owner:** NATIVITY MANOR APARTMENTS, LLC  
**Address:** 166 W. MAIN ST, SUITE 200  
NEW ALBANY, OH 43054

**Parcel#** 02-01-003-135-026  
**Owner:** SAUL PLAZA  
**Address:** 3835 AMHERST AVE.  
LORAIN, OH 44052

**Parcel#** 02-01-003-135-005  
**Owner:** NIO PHOENIX, LLC.  
**Address:** 3646 WETHERILL CT.  
AVON, OH 44011

**Parcel#** 02-01-003-135-004  
**Owner:** NIO PHOENIX, LLC.  
**Address:** 3646 WETHERILL CT.  
AVON, OH 44011

**Parcel#** 02-01-003-135-003  
**Owner:** NIO PHOENIX, LLC.  
**Address:** 3646 WETHERILL CT.  
AVON, OH 44011

**Parcel#** 02-01-003-135-006  
**Owner:** SERENITY GRACE HOMES  
**Address:** 3690 W. GANDY BLVD, SUITE 428  
TAMPA, FL 33611

**Parcel#** 02-01-003-144-001  
**Owner:** RUST BELT RESIDENCES, LLC.  
**Address:** 6545 MARKET AVE. N, SUITE 100  
N. CANTON, OH 44721

**Parcel#** 02-01-003-144-003  
**Owner:** DIAMOND TOUCH CLEANING SERVICE, LLC.  
**Address:** 215 W. 35<sup>TH</sup> ST.  
LORAIN, OH 44055

**Parcel#** 02-01-003-143-001  
**Owner:** ECCLESIASTES HALL  
**Address:** 1109 W. 21<sup>ST</sup> ST.  
LORAIN, OH 44052



Jack Bradley  
Mayor

# CITY OF LORAIN

Department of Building, Housing & Planning

Matthew Kuszmir  
Director

David Faciana  
Chief Building Official

April 29, 2026

To: Planning Commission

From: Evelisse Atkinson, Planning and Zoning Administrator

Re: Z.C.A. 03-2026 Submission for Planning Commission's review and recommendation to Lorain City Council, the Zoning Reclassification of, 516 W 15<sup>th</sup> St, PPN 02-01-003-135-027 from an R-2, Transitional Residential District to a B-2 General Commercial District. 516 W 15 LLC, applicant.

**My responses regarding compliance are below:**

A Special Inspection application was submitted for 516 W 15<sup>th</sup> St., to open a market and deli. The property is currently classified R-2, Transitional Residential, and a market and deli are not a permitted use therefore, the application was denied. The applicant also owns the parking lot to the west and that parcel is currently zoned B-2, General Business. If approved, the market and deli would be a permitted use.

***Standards for a Zoning Map Amendment:***

Section 1177.04 In order to promote the public health, safety, and general welfare of the city against the unrestricted use of property, the Council and Planning Commission may consider the following standards and any other factors relevant to balancing the public interest in making any rezoning decision:

- (a) Is the request in conformance with the City's comprehensive long-range plan?
- (b) Is this request a logical extension of a zoning boundary which would improve the pattern of uses in the general area?
- (c) Does the current zoning classification unreasonably restrict the use and enjoyment of the subject property?
- (d) Has a change of conditions occurred in the surrounding area which makes the current zoning of the property unreasonable?
- (e) Is this spot zoning and generally unrelated to either existing zoning or the pattern of development of the area?
- (f) Could traffic created by the proposed use or other uses permissible under the proposed zoning district travel through established residential neighborhoods on minor streets, leading to congestion, noise and traffic hazards?
- (g) Will the proposed use substantially conflict with existing density patterns in the zone or neighborhood?
- (h) Would the proposed use precipitate similar requests which would generate or accelerate adverse land use changes in the zone or neighborhood?

(i) Will the request have any impact on any present or planned historic site or development in the City?

(j) Will the action adversely impact adjacent or nearby properties in terms of:

(1) Environmental quality or livability, resulting from the introduction of uses or activities which would create traffic, noise, odor or visual hazards or the reduction of light and air that is incompatible with the established development pattern.

(2) Property values, by rendering such properties less suitable and therefore less marketable for the type of development to which they are committed or restricted.

(k) Will the action create development potential of such increased intensity that storm water runoff from the site cannot be controlled within previous limits, resulting in adverse impacts upon existing down-stream drainage problems or potential problems?

(l) Will the action create development opportunities that could create traffic flow beyond the carrying capacity of the current street system?

(m) Will the action result in public service requirements such as provision of utilities or safety services which, because of the location or scale of the development, cannot be provided economically and therefore would create an actual burden to the public?

Respectfully,



Evelisse Atkinson

Planning & Zoning Administrator

