# VILLAGE OF SUGAR GROVE
# BOARD REPORT

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| **TO:** | VILLAGE PRESIDENT & BOARD OF TRUSTEES |
| **FROM:** | DANIELLE MARION, COMMUNITY DEVELOPMENT DIRECTOR |
| **SUBJECT:** | ORDINANCE: BRIGHTON RIDGE FINAL PLANNED UNIT DEVELOPMENT |
| **AGENDA:** | JULY 1, 2025 |
| **DATE:** | JUNE 25, 2025 |

**ISSUE**
Shall the Village Board approve an Ordinance approving a Final Planned Unit Development (PUD) for Brighton Ridge.

**DISCUSSION**
On June 3, 2025 the Village Board discussed the Final PUD for Brighton Ridge. No changes were requested by the Board.

A Preliminary Planned Unit Development for Brighton Ridge was approved on April 15, 2025. The Village has since received an application for a Final PUD approval for this development. The subject property is located on the northwest corner of Galena Boulevard and Route 56, just east of Windsor Pointe; the proposed PUD includes 174 single-family detached homes, 148 townhomes, a 1.1 acre park, a 0.7 acre tot lot, and a multi-use path with potential for future connection to the Virgil Gilman Trail. During the discussion with the Village Board for the Preliminary PUD, concerns were expressed by residents of traffic cutting through Windsor Pointe from Brighton Ridge; the result of the discussion was a road connection change for Hampton Road. This road now makes a 90 degree turn shortly after entering the Brighton Ridge subdivision. This change is reflected on the Final PUD.

The Final PUD complies with the approved Preliminary PUD, no changes are proposed. The Plan Commission discussed the proposal for the Final PUD at the May 21, 2025 Plan Commission meeting and were supportive of the proposed development. The Plan Commission voted unanimously to recommend the Village Board approve the proposed Final PUD for Brighton Ridge.

**COST**
All costs associated with this are borne by the applicant.

**ATTACHMENTS**
Plan Commission Recommendation PC25-10
Ordinance approving a Final PUD for Brighton Ridge
Final PUD
List of Approved Deviations
Final Engineering
Final Landscape Plans

**RECOMMENDATION**
That the Village Board approve the Ordinance approving the Final PUD (Planned Unit Development) for Brighton Ridge.

VILLAGE PRESIDENT
Sue Stillwell

VILLAGE ADMINISTRATOR
Scott Koeppel

VILLAGE CLERK
Tracey R. Conti

VILLAGE TRUSTEES
Heidi Lendi
Matthew Bonnie
Sean Michels
Anthony Speciale
Nora London
Michael Roskopf

# R E C O M M E N D A T I O N
# PC25-10

| | |
|---|---|
| TO: | Village President and Board of Trustees |
| FROM: | Planning Commission |
| DATE: | Meeting of June 3, 2025 |
| PETITION: | 25-009 Lennar: Final Planned Unit Development (PUD), Final Plat of Subdivision |

## PROPOSAL

The applicant is requesting Final PUD approval and Final Plat of Subdivision approval. The PUD will include 174 single-family detached homes and 148 townhomes.

## LOCATION MAP




## BACKGROUND & HISTORY

The subject property was rezoned from the R2 PUD, B3 PUD, and R1 Districts to the R2 PUD and R3 PUD

Districts at the April 15, 2025 Village Board meeting. It is approximately 141 acres and is currently vacant. In 2006, the subject property was annexed into the Village and shortly after, a Planned Unit Development (PUD) was approved with Ordinance 20060221C. Pulte Homes was the prospective developer. Development never commenced and the property has remained vacant. The current petitioner, CalAtlantic Group on behalf of Lennar, received approval for the Preliminary PUD and the Preliminary Plat of Subdivision at the April 15, 2025 Village Board meeting. As approved with the preliminary plans, the petitioner is proposing to develop 174 single-family detached homes and 148 townhomes on the property.

The petitioner received the following zoning deviations at the April 15, 2025 Village Board meeting:

1. The petitioner is proposing to construct 322 residential units. The subject area is 141 acres. There are approximately 57 acres of open space and approximately 21 acres of ROW. The Code requires a net calculation for units per acre (excluding open space and 15% of total acreage for the ROW), which leaves 63 net developable acres. The petitioner received a deviation to Table 3 of Section 11-11-5 to allow 5.2 dwelling units per acre, as opposed to the Village Code allowance for PUDs, which is 4.5 dwelling units per acre.
2. A deviation to Table 3 of Section of 11-11-5 to permit an average lot size of 8,700 square feet, as opposed to the minimum PUD Standard of 9,600 square feet.
3. A deviation to Section 11-11-5(C)(3)(b)(1) to permit a minimum lot size of 7,000 square feet for a single-family detached dwelling in a medium density residential PUD, as opposed to the minimum PUD standard of 8,750 square feet.
4. A deviation to Section 11-7-3(E)(1)(b) to permit a minimum lot width of 50 feet at the building setback line and 40 feet at the front lot line in the R-2 zoning district, as opposed to the minimum PUD and R2 District Standards of 75 feet at the building setback line and 50 feet at the front lot line.
5. A deviation to Section 11-7-3(F)(1) to permit a minimum front and corner yard setback of 25 feet in the R-2 district, as opposed to the minimum R2 District Standard of 30 feet.
6. A deviation to Section 11-7-3(F)(2) to permit an interior side yard setback of 7 feet in the R-2 district, as opposed to the minimum R2 District Standard of 10 feet.
7. A deviation to Section 11-7-3(F)(4) to permit a maximum lot coverage of 50% for Lots 1 through 81. The R-2 District Standard of 45% maximum lot coverage shall apply to Lots 82-174.
8. A deviation to Section 11-7-3(I) to permit a first floor living area of 900 square feet in a multi-story residence, as opposed to the R2 District Standard of 1000 square feet.
9. A deviation to Section 11-7-4(G)(1) to waive the minimum front and corner yard setback in the R-3 District, as opposed to the R3 District Standard of 25 feet for single-family attached dwellings.
10. A deviation to Section 11-7-4(G)(2) to waive the interior side yard setback in the R-3 District, as opposed to the R3 District Standard of 15 feet for single-family attached buildings.

11. A deviation to Section 11-7-4(G)(3) to waive the minimum rear yard setback requirement in the R-3 District, as opposed to the R3 District Standard of 25 feet for single-family attached dwellings.
12. A deviation to Section 11-7-4(G)(4) to permit a side-to-side separation of 20 feet in the R-3 District, as opposed to the R3 District Standard minimum of 30 feet.
13. A deviation to Section 11-7-4(I) to waive the FAR value requirement in the R-3 District, as opposed to the R3 District Standard of a maximum FAR of .45.
14. A deviation to Section 11-7-4(J) to waive the lot coverage requirement in the R-3 District, as opposed to the R3 District Standard of 60% maximum lot coverage.
15. A deviation to waive the signage requirements set forth in Section 11-14-10. In lieu of the signage requirements of Section 11-14-10, all temporary signage will be constructed in conformance with the Signage Plan included with the submittal material.
16. A deviation to waive the landscape requirements set forth in Section 11-11-5(E). In lieu of the landscape requirements of Section 11-11-5(E), all landscaping and trees will be constructed in conformance with the Landscape Plan included with the submittal.
17. A deviation to Section 11-14-8(D) to permit a subdivision monument sign with a width of fifteen feet (15') as depicted on the Preliminary Landscape Plan.
18. A deviation to Section 11-14-8(A)(1) to permit a subdivision monument sign without the lettering "of Sugar Grove" as depicted on the Preliminary Landscape Plan.

The following are four additional deviations to the Engineering Requirements and Subdivision Control Regulations that the petitioner received at the April 15, 2025 Village Board meeting:

1. A deviation to Section II.A. to allow 12" of lime stabilization applied to roadway subgrade and allowance of structural coefficient of 0.10 per 1" of lime stabilization to be credited towards minimum required pavement Structural Number.
2. A deviation to Section II.B.2–Table A "Minimum Standards for Street Design" to permit:
    a. 60' minimum ROW width
    b. 28' minimum pavement width (B-B)
    c. 90' minimum horizontal centerline radius
3. A deviation to waive Section 12-8-2 "Prohibition of Development" and Section 12-8-4 "Drainage into Wetlands" requirements to permit development as depicted on the engineering plans included with the submittal documents. In lieu of the requirements of Section 12-8-2 and Section 12-8-4, the petitioner will comply with the wetland setback and buffer requirements set forth in Section 9-177(B) of the Kane County Stormwater Management Ordinance.
4. A deviation to waive the tree requirements set forth in Section12-6-11. In lieu of the tree requirements of Section 12-6-11, all landscaping and trees will be constructed in

conformance with the Landscape Plan included with the submittal material. The Landscape Plan shall prevail over the requirements of Section12-6-11.

**DISCUSSION**

The Commissioners briefly discussed the final plans and were supportive of the proposed development.

**EVALUATION**

The Final PUD and the Final Plat of Subdivision plans comply with the preliminary approvals and meet Staff, Plan Commission, and Village Board suggestions.

**RECOMMENDATION**

After carefully considering the facts, the Planning Commission recommends the Village Board **approve** the Final Planned Unit Development (PUD) for CalAtlantic Group, LLC. / Lennar at the subject property, located at the NW corner of Galena Blvd and IL Rt. 56, subject to Final Engineering approval.

AYES: Rockwell, Coia, Guddendorf, Bieritz, Sabo

NAYES: None

ABSENT: None

The Planning Commission also recommends the Village Board **approve** the Final Plat of Subdivision for CalAtlantic Group, LLC. / Lennar at the subject property, located at the NW corner of Galena Blvd and IL Rt. 56, subject to Final Engineering approval.

AYES: Rockwell, Coia, Guddendorf, Bieritz, Sabo

NAYES: None

ABSENT: None

## Motions Passed

**VILLAGE OF SUGAR GROVE**
**KANE COUNTY, ILLINOIS**

**ORDINANCE NO. 2025-0701CD1**

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**An Ordinance Granting Approval of a Final Planned Unit Development for Brighton Ridge (Lennar Corporation)**

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Adopted by the Board of Trustees and President of the Village of Sugar Grove this 1st day of July 2025

Published in pamphlet form by authority of the Board of Trustees of the Village of Sugar Grove this 1st day of July 2025

**VILLAGE OF SUGAR GROVE**

**ORDINANCE NO. 2025-0701CD1**

**An Ordinance Granting Approval of a Final Planned Unit Development for Brighton Ridge (Lennar Corporation)**

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**WHEREAS,** the Village of Sugar Grove ("Village") is not a home rule municipality within Article VII, Section 6A of the Illinois Constitution, and accordingly, acts pursuant to the powers granted to it under 65 ILCS 5/1-1 *et seq.* and other applicable statutes; and,

**WHEREAS,** the applicant, CalAtlantic Group, LLC ("Applicant"), a wholly-owned subsidiary of Lennar Corporation, has requested approval of Final Planned Unit Development Plan for property on Galena Boulevard ("Final PUD"), with the subject property legally described in Exhibit "A", attached hereto and incorporated herein by reference ("Property"); and,

**WHEREAS,** the Planning Commission/Zoning Board of Appeals held a meeting on May 21, 2025, to consider the Final PUD, at which time the Planning Commission/Zoning Board of Appeals recommended approval of the Final PUD as described in their report PC Recommendation 25-10; and,

**WHEREAS,** the Village Board has reviewed the request and has deemed that the Final PUD complies with the standards as set forth in the Zoning Ordinance of the Village of Sugar Grove and concurs with the recommendation of the Planning Commission/Zoning Board:

**NOW, THEREFORE, BE IT ORDAINED** by the President and Board of Trustees of the Village of Sugar Grove, Kane County, Illinois, as follows:

**SECTION ONE: APPROVAL OF A FINAL PLANNED UNIT DEVELOPMENT PLAN**

Pursuant to Section 11-11-6-D of the Village of Sugar Grove Zoning Ordinance, the Final PUD, attached hereto as Exhibit "B" and made a part hereof by this reference, is hereby approved on the Subject Property. Development of the Subject Property shall be in general accordance with the plans herein approved.

**SECTION TWO: GENERAL PROVISIONS**

REPEALER: All ordinances or portions thereof in conflict with this ordinance are hereby repealed to the extent of any such conflict.

SEVERABILITY: Should any provision of this ordinance be declared invalid by a court of competent jurisdiction, the remaining provisions will remain in full force and effect the same as if the invalid provision had not been a part of this ordinance.

EFFECTIVE DATE: This ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

**PASSED AND APPROVED** by the President and Board of Trustees of the Village of Sugar Grove, Kane County, Illinois this 1st day of July 2025.

ATTEST:

Sue Stillwell,
President of the Board of Trustees

Tracey Conti,
Village Clerk

| | Aye | Nay | Absent | Abstain |
|---|---|---|---|---|
| Trustee Heidi Lendi | ___ | ___ | ___ | ___ |
| Trustee Matthew Bonnie | ___ | ___ | ___ | ___ |
| Trustee Sean Michels | ___ | ___ | ___ | ___ |
| Trustee Anthony Speciale | ___ | ___ | ___ | ___ |
| Trustee Nora London | ___ | ___ | ___ | ___ |
| Trustee Michael Roskopf | ___ | ___ | ___ | ___ |

**Exhibit A**

*(Legal Description)*

THAT PART OF SECTION 15, TOWNSHIP 38 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPALMERIDIAN, DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 15; THENCE SOUTH 00 DEGREES 27 MINUTES 09 SECONDS EAST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, 1857.20 FEET, TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 27 MINUTES 09 SECONDS EAST ALONG SAID EAST LINE 787.40 FEET, TO THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION15; THENCE SOUTH 00 DEGREES 02 MINUTES 47 SECONDS EAST, ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 15, 440.86 FEET, TO THE NORTH LINE OF F.A.I. ROUTE 141, ACCORDING TO PROCEEDINGS HELD IN THE CIRCUIT COURT FOR THE 16$^{TH}$ JUDICIAL CIRCUIT, KANE COUNTY, ILLINOIS, AS CASE 67-CI-6079; THENCE 389.14 FEET, ALONG AN ARC, CONCAVE TO THE NORTH, HAVING A RADIUS OF 532.65 FEET, WITH A CHORDBEARING SOUTH 73 DEGREES 57 MINUTES 20 SECONDS WEST, 380.54 FEET; THENCE NORTH 85 DEGREES 06 MINUTES 55 SECONDS WEST, 240.00 FEET; THENCE 412.70 FEET, ALONG AN ARC, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 449.00 FEET, WITH A CHORD BEARING SOUTH 68 DEGREES 33 MINUTES 10 SECONDS WEST, 398.32 FEET; THENCE 195.25 FEET, ALONG AN ARC, CONCAVE TO THE EAST, HAVING A RADIUS OF 359.00 FEET, WITH ACHORD BEARING SOUTH 26 DEGREES 38 MINUTES 25 SECONDS WEST, 192.85 FEET; THENCE SOUTH 11 DEGREES 03 MINUTES 34 SECONDS WEST, 158.10 FEET; THENCE SOUTH 60 DEGREES 45 MINUTES 32 SECONDS WEST, 69.05 FEET, TO THE NORTH LINE OF U.S. ROUTE 30, ACCORDING TO SAID CASE 67-C1-6079; THENCE NORTH 78 DEGREES 56 MINUTES 26 SECONDS WEST, 746.13 FEET; THENCE NORTH 11 DEGREES 03 MINUTES 34 SECONDS EAST,25.00 FEET; THENCE NORTH 78 DEGREES 56 MINUTES 26 SECONDS WEST 848.75 FEET; THENCE NORTH 86 DEGREES 49 MINUTES 10 SECONDS WEST, 506.03 FEET; THENCE SOUTH 11 DEGREES 03 MINUTES 34 SECONDS WEST, 30.00 FEET TO THE CENTER LINE OF SAID U.S. ROUTE 30; THENCE 23.06 FEET, ALONG AN ARC CONCAVE TO THE SOUTH, HAVING A RADIUS OF 22175.75 FEET, WITH A CHORD BEARING NORTH 79 DEGREES 32 MINUTES 37 SECONDSWEST, 23.06 FEET, TO A LINE DRAWN PARALLEL WITH AND 577.50 FEET WEST OF, AS MEASURED ALONG THE SOUTH LINE OF SAID SECTION 15, THE NORTH AND SOUTH CENTER LINE OF SAID SECTION 15; THENCE NORTH 00 DEGREES 21 MINUTES 15 SECONDS WEST, ALONG SAID PARALLEL LINE 2219.87 FEET; THENCE SOUTH 77 DEGREES 18 MINUTES 05 SECONDS EAST, 3335.52 FEET, TO THE POINT OF BEGINNING, IN KANE COUNTY, ILLINOIS.

**Exhibit B**

*(Final PUD)*

# FINAL P.U.D. PLAT

# BRIGHTON RIDGE

BEING A SUBDIVISION OF PART OF SECTION 15, TOWNSHIP 38 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN IN SUGAR GROVE, KANE COUNTY, ILLINOIS

## PROPERTY DESCRIPTION:

THAT PART OF SECTION 15, TOWNSHIP 38 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 15; THENCE SOUTH 00 DEGREES 27 MINUTES 09 SECONDS EAST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 15, 1857.20 FEET, TO THE POINT OF BEGINNING; THENCE CONTINUING SOUTH 00 DEGREES 27 MINUTES 09 SECONDS EAST ALONG SAID EAST LINE 787.40 FEET, TO THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 15; THENCE SOUTH 00 DEGREES 01 MINUTES 55 SECONDS EAST (SOUTH 00 DEGREES 02 MINUTES 47 SECONDS EAST RECORD), ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 15, A DISTANCE OF 446.60 FEET (440.86 FEET RECORD), TO THE NORTH LINE OF F.A.I. ROUTE 141, ACCORDING TO PROCEEDINGS HELD IN THE CIRCUIT COURT FOR THE 16TH JUDICIAL CIRCUIT, KANE COUNTY, ILLINOIS, AS CASE 67–CI–6079; THENCE 386.92 FEET (389.14 FEET RECORD), ALONG AN ARC, CONCAVE TO THE NORTH, HAVING A RADIUS OF 532.65 FEET, WITH A CHORD BEARING SOUTH 74 DEGREES 15 MINUTES 39 SECONDS WEST (SOUTH 73 DEGREES 57 MINUTES 20 SECONDS WEST RECORD); THENCE NORTH 84 DEGREES 55 MINUTES 44 SECONDS WEST (NORTH 85 DEGREES 06 MINUTES 55 SECONDS WEST RECORD), 240.00 FEET; THENCE 412.70 FEET, ALONG AN ARC, CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 449.00 FEET, WITH A CHORD BEARING SOUTH 68 DEGREES 44 MINUTES 21 SECONDS WEST (SOUTH 68 DEGREES 33 MINUTES 10 SECONDS WEST RECORD); THENCE 195.25 FEET, ALONG AN ARC, CONCAVE TO THE EAST, HAVING A RADIUS OF 359.00 FEET, WITH A CHORD BEARING SOUTH 26 DEGREES 49 MINUTES 36 SECONDS WEST (SOUTH 26 DEGREES 38 MINUTES 25 SECONDS WEST RECORD); THENCE SOUTH 11 DEGREES 14 MINUTES 45 SECONDS WEST (SOUTH 11 DEGREES 03 MINUTES 34 SECONDS WEST RECORD), 158.10 FEET; THENCE SOUTH 60 DEGREES 56 MINUTES 43 SECONDS WEST (SOUTH 60 DEGREES 45 MINUTES 32 SECONDS WEST RECORD), 69.05 FEET, TO THE NORTH LINE OF U.S. ROUTE 30, ACCORDING TO SAID CASE 67–CI–6079; THENCE NORTH 78 DEGREES 45 MINUTES 15 SECONDS WEST (NORTH 78 DEGREES 56 MINUTES 26 SECONDS WEST RECORD), 746.13 FEET; THENCE NORTH 11 DEGREES 14 MINUTES 45 SECONDS EAST (NORTH 11 DEGREES 03 MINUTES 34 SECONDS EAST RECORD), 25.00 FEET; THENCE NORTH 78 DEGREES 45 MINUTES 15 SECONDS WEST (NORTH 78 DEGREES 56 MINUTES 26 SECONDS WEST RECORD), 850.00 FEET (848.75 FEET RECORD); THENCE NORTH 87 DEGREES 12 MINUTES 55 SECONDS WEST (NORTH 86 DEGREES 49 MINUTES 10 SECONDS WEST RECORD), 351.92 FEET; THENCE 185.28 FEET, ALONG AN ARC CONCAVE TO THE SOUTH, HAVING A RADIUS OF 22225.75 FEET, WITH A CHORD BEARING NORTH 79 DEGREES 44 MINUTES 05 SECONDS WEST, TO A LINE DRAWN PARALLEL WITH AND 577.50 FEET WEST OF, AS MEASURED ALONG THE SOUTH LINE OF SAID SECTION 15, THE NORTH AND SOUTH CENTER LINE OF SAID SECTION 15; THENCE NORTH 00 DEGREES 20 MINUTES 38 SECONDS WEST (NORTH 00 DEGREES 21 MINUTES 15 SECONDS WEST RECORD), ALONG SAID PARALLEL LINE 2169.04 FEET; THENCE SOUTH 77 DEGREES 16 MINUTES 54 SECONDS EAST (SOUTH 77 DEGREES 18 MINUTES 05 SECONDS EAST RECORD), 3335.60 FEET (3335.52 FEET RECORD), TO THE POINT OF BEGINNING, IN KANE COUNTY, ILLINOIS.

EXCEPTING THEREFROM THAT PART OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 38 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 15; THENCE SOUTH 00 DEGREES 01 MINUTES 55 SECONDS EAST (SOUTH 00 DEGREES 02 MINUTES 47 SECONDS EAST RECORD), ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 15, A DISTANCE OF 446.60 FEET (440.86 FEET RECORD), TO THE NORTH LINE OF F.A.I. ROUTE 141, ACCORDING TO PROCEEDINGS HELD IN THE CIRCUIT COURT FOR THE 16TH JUDICIAL CIRCUIT, KANE COUNTY, ILLINOIS, AS CASE 67–CI–6079; THENCE 386.92 FEET (389.14 FEET RECORD), ALONG AN ARC, CONCAVE TO THE NORTH, HAVING A RADIUS OF 532.65 FEET, WITH A CHORD BEARING SOUTH 74 DEGREES 15 MINUTES 39 SECONDS WEST (SOUTH 73 DEGREES 57 MINUTES 20 SECONDS WEST RECORD); THENCE NORTH 84 DEGREES 55 MINUTES 44 SECONDS WEST (NORTH 85 DEGREES 06 MINUTES 55 SECONDS WEST RECORD), 117.95 FEET; THENCE NORTH 31 DEGREES 36 MINUTES 03 SECONDS WEST, 811.77 FEET; THENCE NORTH 36 DEGREES 18 MINUTES 00 SECONDS WEST, 234.56 FEET; THENCE NORTH 66 DEGREES 33 MINUTES 11 SECONDS WEST, 218.14 FEET TO THE POINT OF BEGINNING; THENCE NORTH 67 DEGREES 07 MINUTES 16 SECONDS WEST, 200.00 FEET; THENCE NORTH 22 DEGREES 52 MINUTES 44 SECONDS EAST, 140.00 FEET; THENCE SOUTH 67 DEGREES 07 MINUTES 16 SECONDS EAST, 200.00 FEET; THENCE SOUTH 22 DEGREES 52 MINUTES 44 SECONDS WEST, 140.00 FEET TO THE POINT OF BEGINNING, IN KANE COUNTY, ILLINOIS.

## SITE DATA:

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|---|---|
| CURRENT ZONING: / PROPOSED ZONING: | R2 P.U.D. & B3 P.U.D. / R2 P.U.D./R3 P.U.D. |
| TOTAL SITE (GROSS) AREA: | 6,120,919 SF (140.517 AC.) |
| INTERNAL STREETS/RIGHT OF WAY AREA: | 673,153 SF (15.453 AC.) [11.00%] |
| TOTAL OPEN SPACE AREA: (LOTS 900 + 901 + 902 + 913) | 2,507,293 SF (57.560 AC.) [40.96%] |
| ACTUAL NET DEVELOPABLE AREA: | 2,940,473 SF (67.504 AC.) [48.04%] |
| NET DEVELOPABLE AREA PER CODE: (LESS OPEN SPACE & 15% GROSS FOR ROW) | 2,695,488 SF (61.880 AC.) [44.04%] |
| TOTAL UNITS: | 322 |
| TOTAL NET DENSITY: | 5.20 UNITS/AC. |
| TOTAL SINGLE FAMILY AREA: (LOTS 1–174, 903, 906, 911, 912) | 1,712,513 SF (39.314 AC.) [58.24%] |
| TOTAL SINGLE FAMILY UNITS: | 174 |
| MINIMUM LOT SIZE (LOTS 1–81): | 8,382 SF |
| MINIMUM LOT SIZE (LOTS 82–174): | 7,056 SF |
| AVERAGE SINGLE FAMILY LOT SIZE: (LOTS 1–174) | 8,726 SF |
| NET SINGLE FAMILY DENSITY: | 4.43 UNITS/AC. |
| MAXIMUM LOT COVERAGE (LOTS 1–81): | 50% |
| MAXIMUM LOT COVERAGE (LOTS 82–174): | 45% |
| TOTAL TOWNHOME AREA: (LOTS 175–204, 904, 905, 907, 908, 909) | 1,227,960 SF (28.190 AC.) [41.76%] |
| TOTAL TOWNHOME UNITS: | 148 |
| AVERAGE TOWNHOME BUILDING BOX SIZE: (LOTS 175–204) | 10,170 SF |
| NET TOWNHOME DENSITY: | 5.25 UNITS/AC. |
| MAXIMUM LOT COVERAGE: | NOT APPLICABLE |
| TOTAL PROPOSED IMPERVIOUS SURFACE: | 1,590,590 SF (36.515 AC.) [25.99%] |

## NOTES:

1. THIS PLAT IS BASED IN PART ON INFORMATION CONTAINED IN COMMITMENT FOR TITLE INSURANCE ISSUED BY CHICAGO TITLE INSURANCE COMPANY, ORDER NUMBER 24004434WF WITH A COMMITMENT DATE OF JUNE 7, 2024 AND PRINTED DATE OF OCTOBER 04, 2024, AND HAS BEEN USED FOR LEGAL DESCRIPTION.
2. BEARINGS BASED ON NAD83 (2011) ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE.
3. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
4. NO DIMENSIONS SHALL BE DERIVED FROM SCALE MEASUREMENT.
5. PLANNED UNIT DEVELOPMENT WITH PROPOSED UNDERLYING ZONING SHOWN HEREON.
6. A BLANKET STORMWATER MANAGEMENT EASEMENT TO BE GRANTED OVER LOTS 901, 904, 906 & 911.
7. A BLANKET LANDSCAPE BUFFER EASEMENT TO BE GRANTED OVER LOTS 905 & 906.
8. LOT 902 TO BE CONVEYED TO THE KANE COUNTY FOREST PRESERVE DISTRICT.
9. LOT 900 AND 913 TO BE CONVEYED TO THE PARK DISTRICT.
10. LOT 910 IS INTENTIONALLY OMITTED.
11. LOTS 901, 903, 904, 905, 906, 907, 908, 909, 911 AND 912 TO BE CONVEYED TO THE HOMEOWNER'S ASSOCIATION.

## SITE PLANNER/LANDSCAPE ARCHITECT

GARY R. WEBER ASSOCIATES, INC.
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187

## ARCHITECT

LENNAR HOMES
1700 E. GOLF ROAD
SUITE 1100
SCHAUMBURG, IL 60173

## LAND SURVEYOR/ENGINEER:

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

## OWNER OF RECORD

OWNER:_____

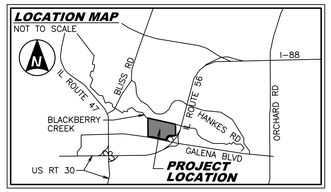
ADDRESS:_____
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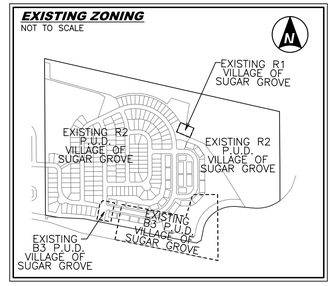
## DEVELOPER

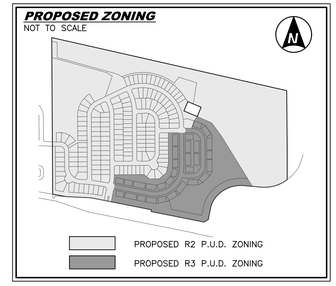
CALATLANTIC GROUP, LLC
1700 EAST GOLF ROAD
SUITE 1100
SCHAUMBURG, ILLINOIS 60173

## MUNICIPALITY AND SCHOOL DISTRICT

THE LAND IS LOCATED IN THE VILLAGE OF SUGAR GROVE AND WITHIN KANELAND SCHOOL DISTRICT 302




## BENCHMARKS:

SOURCE BENCHMARK:
(NGS MONUMENT DESIGNATION ZAU B, PID AA6281)
LOCATED ALONG EVERGREEN DRIVE, 0.35 MILES NORTH OF SULLIVAN ROAD AND SOUTH OF THE ENTRANCE FOR SMOKE TREE BUSINESS PARK.
ELEVATION = 692.95 (NAVD88)

SITE BENCHMARK #1:
CUT "X" ON TOP OF NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED AT THE NORTHEAST CORNER OF HAMPTON ROAD AND SOMERSET DRIVE.
ELEVATION = 686.92

SITE BENCHMARK #2:
CUT "X" ON TOP OF NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED AT THE SOUTHWEST CORNER OF SITE ON THE NORTH SIDE OF GALENA BOULEVARD.
ELEVATION = 686.35

SITE BENCHMARK #3:
SQUARE CUT ON TOP OF NORTHEAST CORNER OF TRAFFIC CONTROL BOX LOCATED AT THE SOUTHWEST CORNER OF ILLINOIS ROUTE 56 AND GALENA BOULEVARD.
ELEVATION = 684.91

## P.I.N.'s:

14-15-100-007
14-15-100-010
14-15-200-004
14-15-200-007
14-15-200-028
14-15-200-029
14-15-200-035
14-15-200-062
14-15-200-064
14-15-300-008
14-15-400-011
14-15-400-017
14-15-400-018
14-15-400-021
14-15-400-023
14-15-400-025

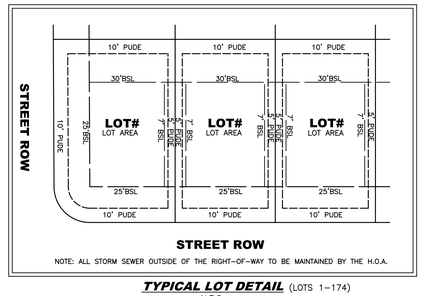
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SCALE: 1" = 200'

## AREA:

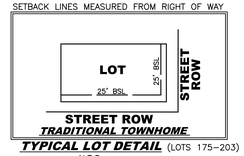
PROPERTY CONTAINS 6,120,919 SQUARE FEET OR 140.517 ACRES MORE OR LESS.

## LEGEND:

| | |
|---|---|
| | BOUNDARY LINE |
| | PROPOSED LOT LINE |
| BSL | BUILDING SETBACK LINE (BSL) |
| DUE | PROPOSED EASEMENT LINE |
| | EXISTING EASEMENT LINE |
| | EXISTING RIGHT–OF–WAY LINE |
| | EXISTING LOT LINE |
| | UNDERLYING LOT LINE |
| | SECTION LINE |
| BSL | BUILDING SETBACK LINE |
| DUE | DRAINAGE AND UTILITY EASEMENT |
| FIR | FOUND IRON ROD |
| FIP | FOUND IRON PIPE |
| POB | POINT OF BEGINNING |
| PUDE | PUBLIC UTILITY & DRAINAGE EASEMENT |
| SME | STORMWATER MANAGEMENT EASEMENT |
| CB= | CHORD BEARING |
| CH= | CHORD LENGTH |
| L= | ARC LENGTH |
| R= | RADIUS |
| (R) | RECORD |




**TYPICAL LOT DETAIL** (LOTS 1–174)
N.T.S.




**TYPICAL LOT DETAIL** (LOTS 175–203)
N.T.S.

## TOWNHOME MIN. BUILDING SEPARATION:

| | |
|---|---|
| SIDE TO SIDE | 20' |
| BACK TO BACK | 50' |
| BACK TO SIDE | 40' |
| FRONT TO SIDE | 40' |

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-23-25 | REVISED PER COMMENTS | MJF |
| 05-30-25 | REVISED PER COMMENTS | MJF |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | MJF |
| APPROVED | DAG |
| DATE | 04/04/2025 |
| SCALE | 1" = 200' |

CLIENT: LENNAR
1700 E. GOLF ROAD
SUITE 1100
SCHAUMBURG, IL 60173

FINAL P.U.D. PLAT
BRIGHTON RIDGE
SUGAR GROVE, IL

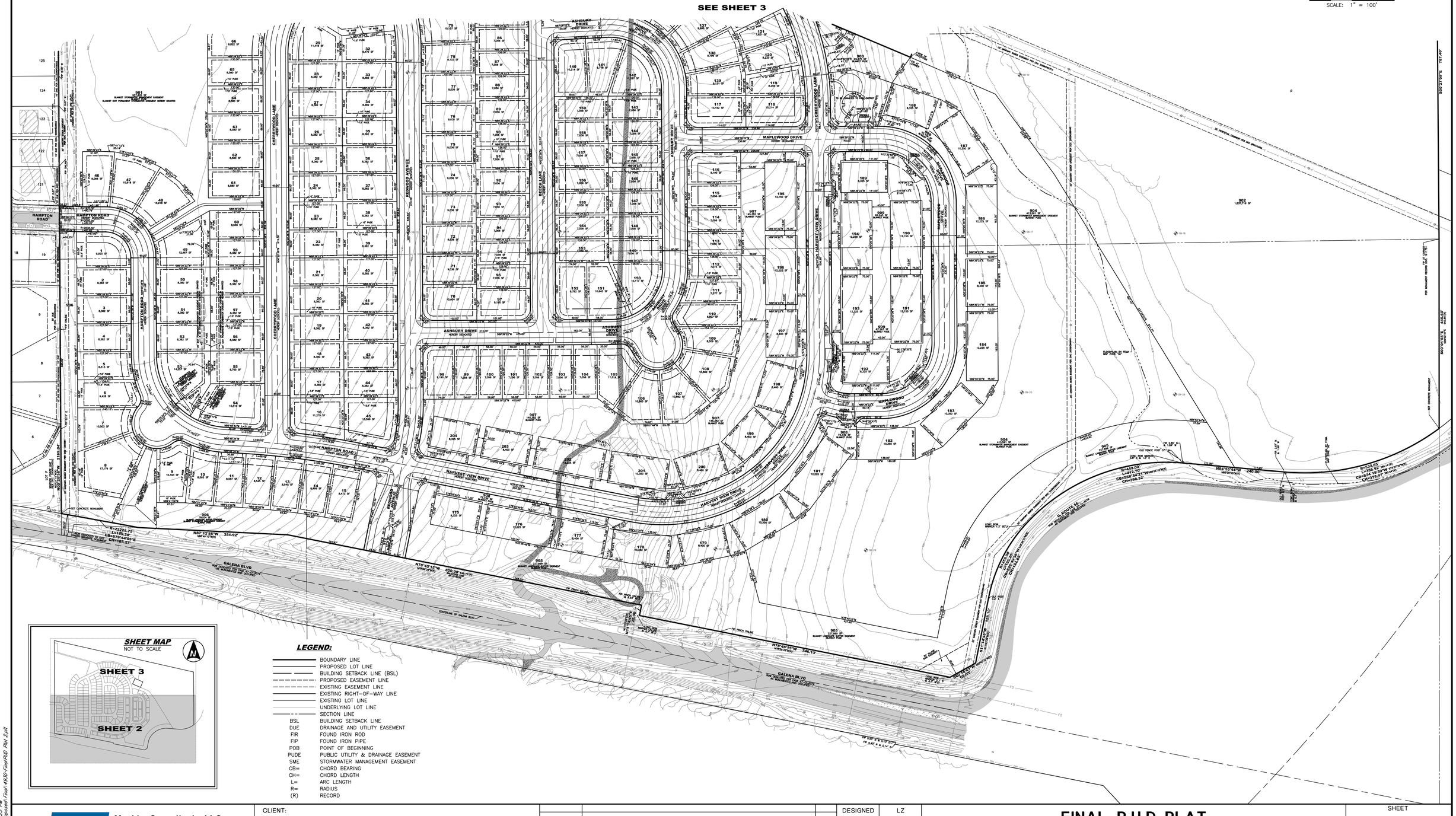
SHEET 1 OF 3
PROJECT NUMBER: 4930
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ILLINOIS FIRM LICENSE 184-002694

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# FINAL P.U.D. PLAT
# BRIGHTON RIDGE

SEE SHEET 3

100 50 0 100
SCALE: 1" = 100'




**SHEET MAP**
NOT TO SCALE




***LEGEND:***

| | |
|---|---|
| | BOUNDARY LINE |
| | PROPOSED LOT LINE |
| | BUILDING SETBACK LINE (BSL) |
| | PROPOSED EASEMENT LINE |
| | EXISTING EASEMENT LINE |
| | EXISTING RIGHT-OF-WAY LINE |
| | EXISTING LOT LINE |
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| (R) | RECORD |

MACKIE CONSULTANTS
**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

CLIENT:
LENNAR
1700 E. GOLF ROAD
SUITE 1100
SCHUAMBURG, IL 60173

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-23-25 | REVISED PER COMMENTS | MJF |
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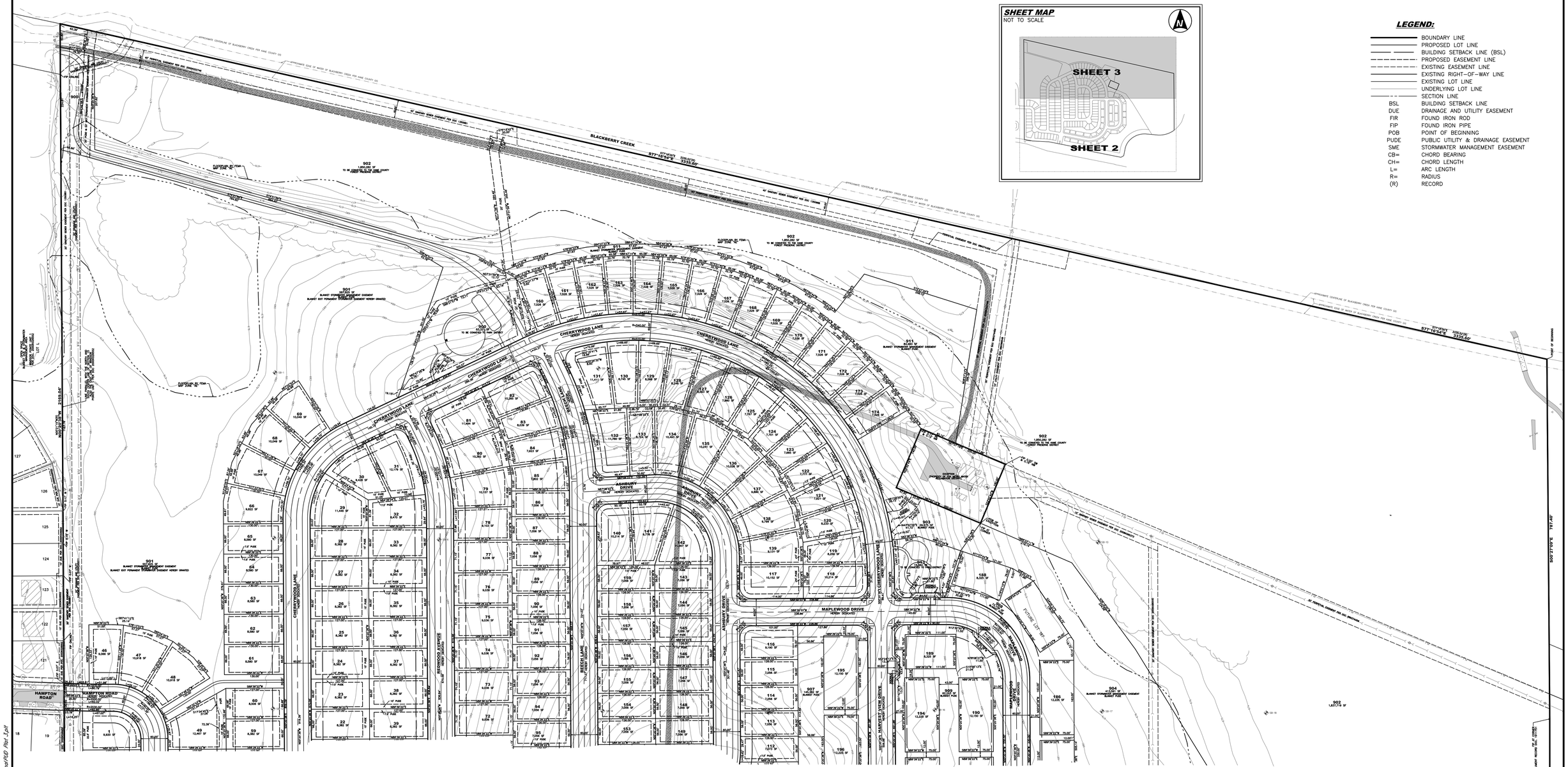
| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | MJF |
| APPROVED | DAG |
| DATE | 04/04/2025 |
| SCALE | 1" = 100' |

**FINAL P.U.D. PLAT**
**BRIGHTON RIDGE**
**SUGAR GROVE, IL**

SHEET 2 OF 3
PROJECT NUMBER: 4930
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# FINAL P.U.D. PLAT
# BRIGHTON RIDGE







100 50 0 100
SCALE: 1" = 100'

**LEGEND:**

| | |
|---|---|
| | BOUNDARY LINE |
| | PROPOSED LOT LINE |
| | BUILDING SETBACK LINE (BSL) |
| | PROPOSED EASEMENT LINE |
| | EXISTING EASEMENT LINE |
| | EXISTING RIGHT-OF-WAY LINE |
| | EXISTING LOT LINE |
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| R= | RADIUS |
| (R) | RECORD |


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
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CLIENT:
LENNAR
1700 E. GOLF ROAD
SUITE 1100
SCHUAMBURG, IL 60173

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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | MJF |
| APPROVED | DAG |
| DATE | 04/04/2025 |
| SCALE | 1" = 100' |

**FINAL P.U.D. PLAT**
**BRIGHTON RIDGE**
**SUGAR GROVE, IL**

SHEET 3 OF 3
PROJECT NUMBER: 4930
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DEVIATIONS

1. The petitioner is proposing to construct 322 residential units. The subject area is 141 acres. There are approximately 57 acres of open space and approximately 21 acres of ROW. The Code requires a net calculation for units per acre (excluding open space and 15% of total acreage for the ROW), which leaves 63 net developable acres. The petitioner is requesting a deviation to Table 3 of Section 11-11-5 to allow 5.2 dwelling units per acre, as opposed to the Village Code allowance for PUDs, which is 4.5 dwelling units per acre.
2. The petitioner is requesting a deviation to Table 3 of Section of 11-11-5 to permit an average lot size of 8,700 square feet, as opposed to the minimum PUD Standard of 9,600 square feet.
3. The petitioner is requesting a deviation to Section 11-11-5(C)(3)(b)(1) to permit a minimum lot size of 7,000 square feet for a single-family detached dwelling in a medium density residential PUD, as opposed to the minimum PUD standard of 8,750 square feet.
4. The petitioner is requesting a deviation to Section 11-7-3(E)(1)(b) to permit a minimum lot width of 50 feet at the building setback line and 40 feet at the front lot line in the R-2 zoning district, as opposed to the minimum PUD and R2 District Standards of 75 feet at the building setback line and 50 feet at the front lot line.
5. The petitioner is requesting a deviation to Section 11-7-3(F)(1) to permit a minimum front and corner yard setback of 25 feet in the R-2 district, as opposed to the minimum R2 District Standard of 30 feet.
6. The petitioner is requesting a deviation to Section 11-7-3(F)(2) to permit an interior side yard setback of 7 feet in the R-2 district, as opposed to the minimum R2 District Standard of 10 feet.
7. The petitioner is requesting a deviation to Section 11-7-3(F)(4) to permit a maximum lot coverage of 50% for Lots 1 through 81. The R-2 District Standard of 45% maximum lot coverage shall apply to Lots 82-174.
8. The petitioner is requesting a deviation to Section 11-7-3(I) to permit a first floor living area of 900 square feet in a multi-story residence, as opposed to the R2 District Standard of 1000 square feet.
9. The petitioner is requesting a deviation to Section 11-7-4(G)(1) to waive the minimum front and corner yard setback in the R-3 District, as opposed to the R3 District Standard of 25 feet for single-family attached dwellings.
10. The petitioner is requesting a deviation to Section 11-7-4(G)(2) to waive the interior side yard setback in the R-3 District, as opposed to the R3 District Standard of 15 feet for single-family attached buildings.
11. The petitioner is requesting a deviation to Section 11-7-4(G)(3) to waive the minimum rear yard setback requirement in the R-3 District, as opposed to the R3 District Standard of 25 feet for single-family attached dwellings.
12. Deviation to Section 11-7-4(G)(4) to permit a side-to-side separation of 20 feet in the R-3 District, as opposed to the R3 District Standard minimum of 30 feet.
13. Deviation to Section 11-7-4(I) to waive the FAR value requirement in the R-3 District, as opposed to the R3 District Standard of a maximum FAR of .45.

14. Deviation to Section 11-7-4(J) to waive the lot coverage requirement in the R-3 District, as opposed to the R3 District Standard of 60% maximum lot coverage.
15. Deviation to waive the signage requirements set forth in Section 11-14-10. In lieu of the signage requirements of Section 11-14-10, all temporary signage will be constructed in conformance with the Signage Plan included with the submittal material.
16. Deviation to waive the landscape requirements set forth in Section 11-11-5(E). In lieu of the landscape requirements of Section 11-11-5(E), all landscaping and trees will be constructed in conformance with the Landscape Plan included with the submittal.
17. Deviation to Section 11-14-8(D) to permit a subdivision monument sign with a width of fifteen feet (15') as depicted on the Preliminary Landscape Plan.
18. Deviation to Section 11-14-8(A)(1) to permit a subdivision monument sign without the lettering "of Sugar Grove" as depicted on the Preliminary Landscape Plan.

The following are four additional requested deviations to the Engineering Requirements and Subdivision Control Regulations:

1. The petitioner is requesting a deviation to Section II.A. to allow 12" of lime stabilization applied to roadway subgrade and allowance of structural coefficient of 0.10 per 1" of lime stabilization to be credited towards minimum required pavement Structural Number.
2. Deviation to Section II.B.2–Table A "Minimum Standards for Street Design" to permit:
    a. 60' minimum ROW width
    b. 28' minimum pavement width (B-B)
    c. 90' minimum horizontal centerline radius
3. The petitioner is requesting a deviation to waive Section 12-8-2 "Prohibition of Development" and Section 12-8-4 "Drainage into Wetlands" requirements to permit development as depicted on the engineering plans included with the submittal documents. In lieu of the requirements of Section 12-8-2 and Section 12-8-4, the petitioner will comply with the wetland setback and buffer requirements set forth in Section 9-177(B) of the Kane County Stormwater Management Ordinance.
4. The petitioner is requesting a deviation to waive the tree requirements set forth in Section12-6-11. In lieu of the tree requirements of Section12-6-11, all landscaping and trees will be constructed in conformance with the Landscape Plan included with the submittal material. The Landscape Plan shall prevail over the requirements of Section12-6-11.

# FINAL ENGINEERING PLANS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

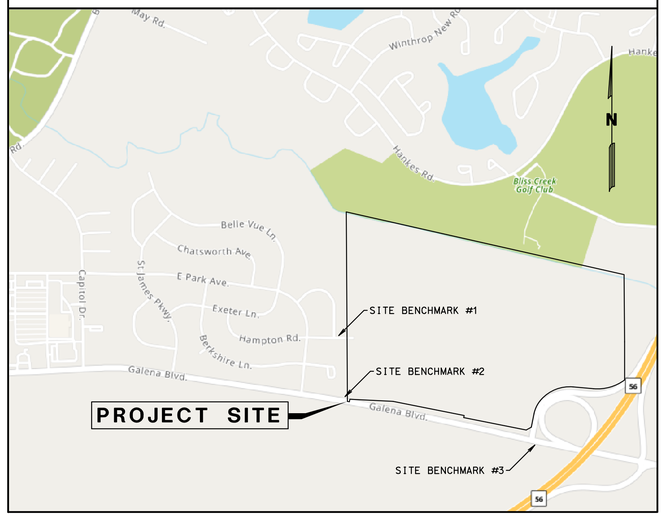
## LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| SANITARY SEWER | 8" PVC | 8" PVC |
| FORCE MAIN | FM | FM |
| STORM SEWER | 12" RCP | 12" RCP |
| UNDERDRAIN | UD | UD |
| MANHOLE | | |
| CATCH BASIN | | |
| INLET | | |
| CLEANOUT | | |
| WATER MAIN | WM | 8" WM |
| VALVE VAULT | | |
| VALVE BOX | | |
| FIRE HYDRANT | | |
| FLARED END SECTION | | |
| COMBINED SEWER | | |
| STREET LIGHT/PARKING LOT LIGHT | | |
| POWER POLE | | |
| STREET SIGN | | |
| FENCE | X X X | X X X |
| GAS MAIN | G G G G | G G G G |
| OVERHEAD LINE | OH OH | OH OH OH |
| TELEPHONE LINE | T T T T | T T T T |
| ELECTRIC LINE | E E E E | E E E E |
| CABLE TV LINE | CATV CATV | CATV CATV |
| HIGH WATER LEVEL | | HWL XXX |
| NORMAL WATER LEVEL | NWL XXX | NWL XXX |
| CONTOUR LINE | XXX.XX | XXX.XX |
| TOP OF CURB ELEVATION | TC XXX.XX | TC XXX.XX |
| TOP OF DEPRESSED CURB | TDC XXX.XX | TDC XXX.XX |
| PAVEMENT ELEVATION | P XXX.XX | P XXX.XX |
| SPOT ELEVATION | XXX.XX | XXX.XX |
| FINISHED FLOOR ELEVATION | FF = XXX.XX | FF = XXX.XX |
| TOP OF FOUNDATION | TF = XXX.XX | TF = XXX.XX |
| GRADE AT FOUNDATION | GF = XXX.XX | GF = XXX.XX |
| HIGH OR LOW POINT | | Ⓛ = Ⓗ |
| OVERLAND FLOOD ROUTE | | |
| PAVEMENT FLOW DIRECTION | | 2.0% |
| SWALE FLOW DIRECTION | | |
| DEPRESSED CURB AND GUTTER | | |
| REVERSE CURB AND GUTTER | | |

## INDEX OF SHEETS


| | |
|---|---|
| 1 | COVER SHEET |
| 2 | OVERALL SITE PLAN |
| 3 | EXISTING CONDITIONS AND DEMOLITION PLAN |
| 4 | GRADING PLAN SOUTHWEST |
| 5 | GRADING PLAN SOUTHEAST |
| 6 | GRADING PLAN CENTRAL WEST |
| 7 | GRADING PLAN CENTRAL EAST |
| 8 | GRADING PLAN NORTHWEST |
| 9 | GRADING PLAN NORTHEAST |
| 10 | GRADING PLAN EAST |
| 11-12 | GRADING DETAILS |
| 12A-B | ADA GRADING DETAILS |
| 13 | STORMWATER POLLUTION PREVENTION PLAN (SWPPP) |
| 14 | SWPPP DETAILS |
| 15 | SWPPP SPECIFICATIONS |
| 16 | OVERALL UTILITY PLAN |
| | PLAN AND PROFILES |
| 17 | REDWOOD AVENUE |
| 18-20 | HAMPTON ROAD / HARVEST VIEW DRIVE |
| 21-23 | CHERRYWOOD LANE |
| 24-25 | ASHBURY DRIVE |
| 26 | BEECH LANE |
| 27-28 | MAPLEWOOD DRIVE |
| 29 | WATERMAIN ALONG GALENA BOULEVARD |
| 30 | ADDITIONAL SANITARY SEWER PROFILES |
| 31 | PAVEMENT MARKING AND SIGNAGE PLAN |
| 32-37 | CONSTRUCTION DETAILS |
| 38-40 | PROJECT SPECIFICATIONS |
| 41-42 | FOX METRO SPECIFICATIONS AND GENERAL NOTES |


## LOCATION MAP




JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS

CALL UTILITY TOLL FREE 1-800-892-0123

Call 48 hours before you dig (Excluding Sat, Sun, & Holidays)

1-800-892-0123

NOTES:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

- STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION.
- STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION.
- VILLAGE OF SUGAR GROVE CODE OF ORDINANCE & STANDARD SPECIFICATIONS FOR IMPROVEMENTS
- FOX METRO WATER RECLAIMATION DISTRICT STANDARD SPECIFICATIONS

IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

## ABBREVIATIONS

| | | | | | |
|---|---|---|---|---|---|
| AC | ACRE | HMA | HOT MIX ASPHALT | ROW | RIGHT OF WAY |
| ARVV | AIR RELEASE VALVE VAULT | HWL | HIGH WATER ELEVATION | SAN | SANITARY SEWER |
| BC | BACK OF CURB | INL | INLET | SMH | SANITARY MANHOLE |
| BTM | BOTTOM | INV | INVERT | STA | STATION |
| CB | CATCH BASIN | LF | LINEAL FEET/FOOT | STM | STORM SEWER |
| CFS | CUBIC FEET PER SECOND | LP | LIGHT POLE | SY | SQUARE YARD |
| CY | CUBIC YARD | LT | LEFT | SWPP | STORMWATER POLLUTION PREVENTION PLAN |
| DIA | DIAMETER | L/W | LOWEST GRADE ADJACENT TO RETAINING WALL | TDC | TOP OF DEPRESSED CURB |
| DIWM | DUCTILE IRON WATER MAIN | MAX | MAXIMUM | TC | TOP OF CURB |
| EL | ELEVATION | MH | STORM MANHOLE | TF | TOP OF FOUNDATION |
| EP | EDGE OF PAVEMENT | MIN | MINIMUM | T/W | TOP OF RETAINING WALL |
| FF | FINISHED FLOOR | NWL | NORMAL WATER ELEVATION | TYP | TYPICAL |
| FES | FLARED END SECTION | OCS | OUTLET CONTROL STRUCTURE | VB | VALVE BOX |
| FT | FOOT/FEET | P | PAVEMENT ELEVATION | VC | VERTICAL CURVE |
| G | GUTTER ELEVATION | PVC | POLYVINYL CHLORIDE PIPE | VV | VALVE VAULT |
| GF | GRADE AT FOUNDATION | R | RADIUS | W | WALK ELEVATION |
| GR | GRADE RING ELEVATION | RCP | REINFORCED CONCRETE PIPE | WM | WATER MAIN |
| HDPE | HIGH DENSITY POLYETHYLENE PIPE | RIM | RIM ELEVATION | VPI | VERTICAL POINT OF INTERSECTION |
| HYD | FIRE HYDRANT | RT | RIGHT | | |

## BENCHMARKS

SOURCE BENCHMARK:
(NGS MONUMENT DESIGNATION ZAU B, PID AA6281)
LOCATED ALONG EVERGREEN DRIVE, 0.35 MILES NORTH OF SULLIVAN ROAD AND SOUTH OF THE ENTRANCE FOR SMOKE TREE BUSINESS PARK.
ELEVATION = 692.95 (NAVD88)

SITE BENCHMARK #1:
CUT "X" ON TOP OF NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED AT THE NORTHEAST CORNER OF HAMPTON ROAD AND SOMERSET DRIVE.
ELEVATION = 686.92

SITE BENCHMARK #2:
CUT "X" ON TOP OF NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED AT THE SOUTHWEST CORNER OF SITE ON THE NORTH SIDE OF GALENA BOULEVARD.
ELEVATION = 686.35

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SQUARE CUT ON TOP OF NORTHEAST CORNER OF TRAFFIC CONTROL BOX LOCATED AT THE SOUTHWEST CORNER OF ILLINOIS ROUTE 56 AND GALENA BOULEVARD.
ELEVATION = 684.91

## CONTACTS

VILLAGE OF SUGAR GROVE
DANIELLE MARION
COMMUNITY DEVELOPMENT DIRECTOR
601 HEARTLAND DRIVE
SUGAR GROVE, IL 60554
(630) 391-7226

VILLAGE OF SUGAR GROVE
BRAD MERKEL, PUBLIC WORKS DIRECTOR
601 HEARTLAND DRIVE
SUGAR GROVE, IL 60554
(630) 391-7234

VILLAGE OF SUGAR GROVE
BRIAN SCHIBER, VILLAGE ENGINEER
601 HEARTLAND DRIVE
SUGAR GROVE, IL 60554
(630) 391-7231

COM ED
PRT.IL@USICLLC.COM
2001 AUCUTT ROAD
MONTGOMERY, IL 60538

MEDIACON CABLE COMPANY
CHRIS MINARD
(815) 597-5103

AT&T CABLE
VANESSA ROSS
(217)-381-4284

NICOR GAS
UTILITY CONSULTANT
(630)-388-2362

ENGINEERING ENTERPRISES INC.
52 WHEELER ROAD
SUGAR GROVE, IL 60554
(630) 466-6700

FOX METRO WATER RECLAMATION DISTRICT (FMWRD)
682 ROUTE 31
OSWEGO, ILLINOIS 60543
(630) 892-4378

IEPA WATER POLLUTION CONTROL DIVISION
1021 N. GRAND AVE. EAST
SPRINGFIELD, ILLINOIS 62702
(217) 782-0610

IEPA PUBLIC WATER SUPPLY DIVISION
1021 N. GRAND AVE. EAST
SPRINGFIELD, ILLINOIS 62702
(217) 782-9470

METRO FIBERNET, LLC
811DESIGN@METRONET.COM
(812) 213-1050

ZAYO FIBER SOLUTIONS
JOHN FERRARESI
(847) 417-9609

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION, DIRECTION AND MEANS & METHODS OF CONSTRUCTION

LICENSED ENGINEER

LICENSED PROFESSIONAL ENGINEER — LUKE E ZANONI — 062-076103 — OF ILLINOIS

ENGINEER'S SEAL


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


LENNAR

1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

**COVER SHEET**
**BRIGHTON RIDGE**
**SUGAR GROVE, ILLINOIS**

SHEET 1 OF 42

PROJECT NUMBER: 4930


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BLISS CREEK GOLF CLUB

BLACKBERRY CREEK

BLACKBERRY CREEK

KANE COUNTY FOREST PRESERVE

VIRGIL GILMAN TRAIL

FOX VALLEY PARK DISTRICT

KANE COUNTY FOREST PRESERVE

IL ROUTE 56

WINDSOR POINTE UNIT 1

WINDSOR POINTE UNIT 1

HAMPTON ROAD

HARVEST VIEW DRIVE

GALENA BLVD

AGRICULTURAL (UNSUBDIVIDED)

CHERRYWOOD LANE

REDWOOD AVENUE

BEECH LANE

ASHBURY DRIVE

MAPLEWOOD DRIVE

PARK

PHASE 2

COMPENSATORY STORAGE AREA A

COMPENSATORY STORAGE AREA B

NATURALIZED STORMWATER BASIN NO.1

NATURALIZED WET BOTTOM AREA

STORMWATER BASIN NO.2

DRY BOTTOM AREA

LANDSCAPE BERM

SCREENING BERM (3:1 MAX)

EXISTING IDOT ROW

ROW 100'

STORMWATER DISCHARGE FROM BASIN AND COMPENSATORY STORAGE AREA TO BLACKBERRY CREEK

EXISTING ISOLATED WETLAND E (0.69 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING ISOLATED WETLAND D (0.08 AC) LIMITS TO REMAIN UNDISTURBED

PROPOSED SANITARY SEWER CONNECTION

EXISTING ISOLATED WETLAND C (0.08 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING ISOLATED WETLAND B (0.18 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING FOX METRO 36" SANITARY SEWER

EXISTING GRAVEL PATH SHALL BE POSTED "FOR MAINTENANCE ACCESS ONLY"

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 677.0

PROPOSED 10 YR BASE FLOOD ELEV

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 678.1 (FLOODPLAIN BY ELEVATION)

PROPOSED 100 YR BASE FLOOD ELEV

EXISTING USACOE WETLAND F (1.32 AC) LIMITS TO REMAIN UNDISTURBED

50' WETLAND BUFFER

EXISTING USACOE WETLAND A (11.99 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING FOX METRO LIFT STATION

PROPOSED SANITARY SEWER CONNECTION

EXISTING 24" FOX METRO SANITARY FORCEMAIN

EXISTING 16" FOX METRO SANITARY SEWER

EXISTING VILLAGE 14" SANITARY SEWER

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 676.7

EXISTING FEMA FLOODWAY LIMITS

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 678.1

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 679.2 (FLOODPLAIN BY ELEVATION)

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING WOODLAND AREA

PROPOSED 10 YR BASE FLOOD ELEVATION

PROPOSED 100 YR BASE FLOOD ELEVATION

15' WETLAND BUFFER

20' WETLAND BUFFER

10' HMA MULTI-USE PATH

EXISTING FEMA FLOODWAY LIMITS

HWL=680.7

NWL=674.0

HWL=685.0

HWL=678.0

NWL=678.0

HWL=685.0

PROPOSED WATERMAIN CONNECTION

EXISTING FOX METRO 24" SANITARY INTERCEPTOR

EXISTING VILLAGE 16" WATERMAIN

PROPOSED WATERMAIN CONNECTION

PROPOSED IDOT ROW

EXISTING IDOT ROW

PROPOSED MONUMENT SIGNS

EXISTING DRIVEWAY TO BE USED AS A TEMPORARY CONSTRUCTION ACCESS PRIOR TO FINAL IDOT APPROVAL OF FULL ACCESS ROAD

AREA RESERVED FOR FUTURE VILLAGE WELCOME SIGN

STORMWATER DISCHARGE FROM BASIN TO ONSITE WETLAND

PROPOSED FULL ACCESS IMPROVEMENTS ALONG GALENA BOULEVARD IN COORDINATION WITH IDOT

N

SCALE 1" = 150'

0 150 300

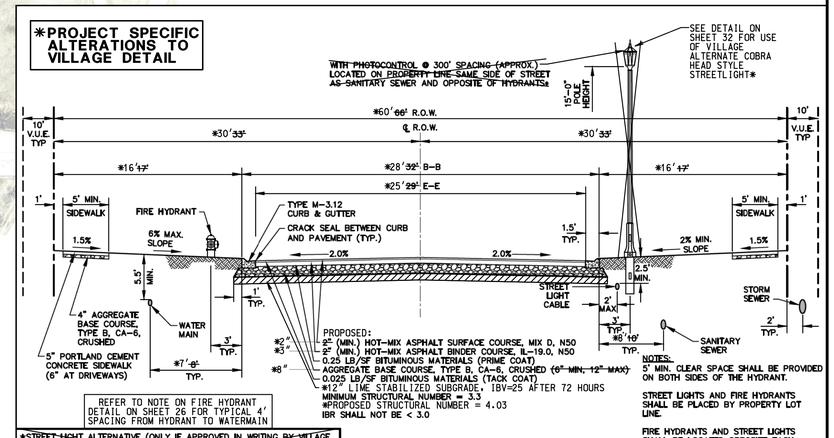
REFER TO FINAL PLAT FOR THE LENGTH AND BEARINGS OF EXTERNAL BOUNDARIES, ROADWAY GEOMETRICS, TOTAL ACREAGE CONTAINED, AND ZONING DISTRICT CLASSIFICATIONS FOR ADJOINING LANDS AND SUBJECT PARCEL

## SITE DATA:

| | |
|---|---|
| TOTAL SITE AREA: | 140.52 AC. |
| TOTAL UNITS: | 322 UNITS |
| TOTAL SINGLE FAMILY LOTS: | 174 LOTS |
| SINGLE FAMILY MEDALLION SERIES LOTS: (66' X 127' MIN) | 81 LOTS (1–81) |
| SINGLE FAMILY HORIZON SERIES LOTS: (56' X 126' MIN) | 93 LOTS (82–174) |
| TOTAL TOWNHOME BUILDINGS: | 30 BUILDINGS |
| TOTAL TOWNHOME UNITS: | 148 UNITS |

**NOTE: PHASING LIMIT SHOWN AROUND HOMESITE 187 REFERENCES PLATTING PHASING LIMITS DUE TO FLOODPLAIN LOCATION. IT IS LENNAR HOMES INTENTION TO CONSTRUCT THE SUBDIVISION AS ONE PHASE

## *PROJECT SPECIFIC ALTERATIONS TO VILLAGE DETAIL




REFER TO NOTE ON FIRE HYDRANT DETAIL ON SHEET 26 FOR TYPICAL 4' SPACING FROM HYDRANT TO WATERMAIN

*STREET LIGHT ALTERNATIVE (ONLY IF APPROVED IN WRITING BY VILLAGE STAFF) (SEE DETAIL SG-51-03):
POLE HEIGHT = 19'-7"
LUMINAIRE IS "AMERICAN ELECTRIC LIGHTING" MODEL 150W ATBS-P30-MVOLT-R2-3K-P7-PCL1

NOTES: UTILITY STRUCTURES ARE NOT PERMITTED IN PAVED AREAS.

STREET LIGHT SPACING SHALL BE APPROX. 300' UNLESS A PHOTOMETRIC ANALYSIS IS REQUIRED BY VILLAGE AND THEN SPACING SHALL BE AMENDED ACCORDINGLY.

**TYPICAL STREET SECTION - LOCAL (66' ROW) *60' ROW**

Village of Sugar Grove
160 Municipal Drive
Sugar Grove, Illinois 60554
Phone: 630-391-7230

| SCALE: | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|
| N.T.S. | SG-RD | 01 | KKP |
| DATE: 4/2/24 | | | REVISED: |


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
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FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | | | |
|---|---|---|---|
| DESIGNED | LZ | | |
| DRAWN | JD | | |
| APPROVED | MTL | | |
| DATE | 04/04/2025 | | |
| SCALE | 1" = 150' | | |

# OVERALL SITE PLAN
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

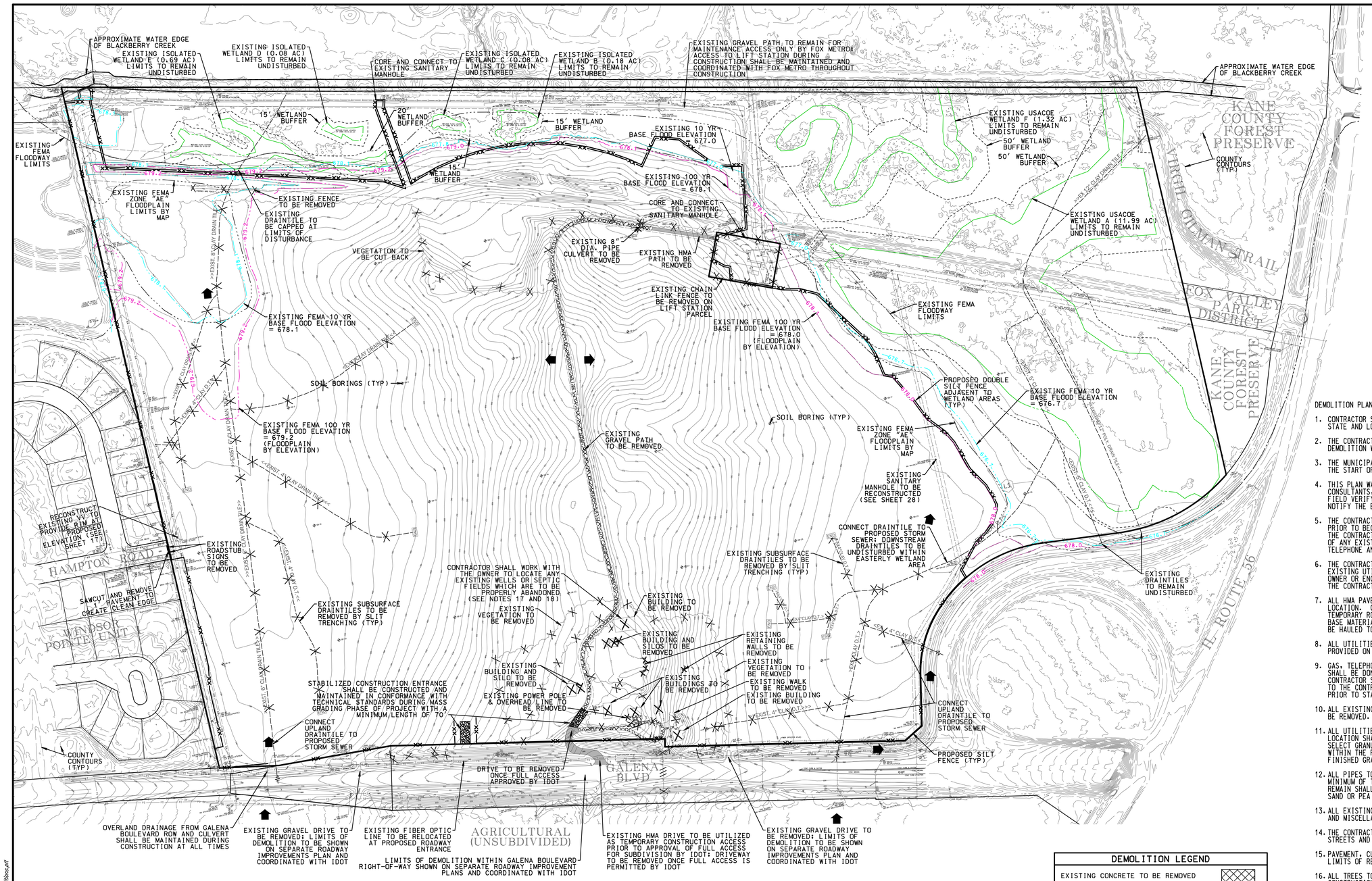
SHEET 2 OF 42

PROJECT NUMBER: 4930

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DEMOLITION PLAN GENERAL NOTES:

1. CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR DEMOLITION WORK AND ASSOCIATED UTILITY DISCONNECT FEES.
3. THE MUNICIPALITY AND THE OWNER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. THIS PLAN WAS PREPARED FROM TOPOGRAPHIC SURVEY PREPARED BY MACKIE CONSULTANTS, LLC, DATED 11/14/2024 AND AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES SHOWN AND NOT SHOWN BEFORE COMMENCING WORK AND NOTIFY THE ENGINEER OR OWNER OF ANY DISCREPANCIES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO BEGINNING DEMOLITION WORK FOR THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL ARRANGE FOR THE DISCONNECTION, PROTECTION OR RELOCATION OF ANY EXISTING UTILITY SERVICES, INCLUDING WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE.
6. THE CONTRACTOR IS REQUIRED TO ASSURE HIMSELF OF LOCATION AND DEPTH OF EXISTING UTILITIES AND RELATED FEATURES AND SHALL REPORT AT ONCE TO THE OWNER OR ENGINEER ANY DISCREPANCIES WITH RESPECT TO INFORMATION INDICATED IN THE CONTRACT DOCUMENTS.
7. ALL HMA PAVEMENT AND BUILDING MATERIALS SHALL BE REMOVED TO AN OFFSITE LOCATION. GRAVEL BASE MATERIALS SHALL BE STOCKPILED ONSITE AND USED FOR TEMPORARY ROADS OR GENERAL FILL, AS APPROVED BY THE OWNER OR DEVELOPER. ANY BASE MATERIALS REMAINING UPON COMPLETION OF THE PROPOSED IMPROVEMENTS SHALL BE HAULED TO AN OFFSITE LOCATION.
8. ALL UTILITIES TO REMAIN AS NOTED SHALL BE ADJUSTED TO THE FINAL GRADES AS PROVIDED ON THE UTILITY PLANS.
9. GAS, TELEPHONE AND ELECTRIC DISTRIBUTION SYSTEM REMOVALS AND ADJUSTMENTS SHALL BE DONE BY RESPECTIVE UTILITY AND PAID FOR SEPARATELY BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT. ALL ENVIRONMENTAL REMEDIATION WILL BE COMPLETED BY OWNER PRIOR TO START OF CONSTRUCTION.
10. ALL EXISTING UTILITIES ARE TO REMAIN IN SERVICE UNLESS SPECIFICALLY SHOWN TO BE REMOVED.
11. ALL UTILITIES AND STRUCTURES LOCATED WITHIN 5 FEET OF THE PROPOSED BUILDING LOCATION SHALL BE COMPLETELY REMOVED AND THE EXCAVATION BACKFILLED WITH SELECT GRANULAR MATERIAL. ALL REMAINING UTILITIES AND STRUCTURES LOCATED WITHIN THE PROJECT AREA SHALL BE REMOVED TO A DEPTH OF 2-FEET BELOW PROPOSED FINISHED GRADE.
12. ALL PIPES TO BE ABANDONED IN PLACE SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FEET NON-SHRINK CONCRETE MORTAR PLUGS. ANY STRUCTURES TO REMAIN SHALL HAVE THE BOTTOM BROKEN TO FACILITATE DRAINAGE AND FILLED WITH SAND OR PEA GRAVEL.
13. ALL EXISTING TREES, BRUSH, AND MISCELLANEOUS APPURTENANCES, SUCH AS FENCES AND MISCELLANEOUS DEBRIS SHALL BE HAULED TO AN OFFSITE LOCATION.
14. THE CONTRACTOR SHALL ENSURE THAT ALL ADJOINING AREAS, INCLUDING ADJACENT STREETS AND DRIVEWAYS, SHALL BE FREE OF DEBRIS AT ALL TIMES.
15. PAVEMENT, CURB AND GUTTER AND SIDEWALK SHALL BE SAWCUT FULL DEPTH AT THE LIMITS OF REMOVAL.
16. ALL TREES TO REMAIN SHALL BE PROTECTED WITH SILT FENCE OR ORANGE CONSTRUCTION FENCES. PROTECTIVE FENCING SHALL BE PLACED AT THE DRIP LINE OF THE TREE TO BE SAVED. CONSTRUCTION WITHIN THE FENCE WITHOUT PERMISSION FROM THE OWNER OR MUNICIPALITY IS STRICTLY PROHIBITED.
17. EXISTING WELLS ENCOUNTERED SHALL BE EXCAVATED, SEALED AND ABANDONED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS. CONTRACTOR SHALL PERMIT ABANDONMENT OF ALL ONSITE WELLS WITH THE KANE COUNTY DEPARTMENT OF HEALTH.
18. EXISTING SEPTIC FIELDS ENCOUNTERED SHALL BE EXPOSED, DRAINED AND ABANDONED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS. CONTRACTOR SHALL PERMIT ABANDONMENT OF ALL ONSITE SEPTIC FIELDS WITH THE KANE COUNTY DEPARTMENT OF HEALTH.
19. ANY DAMAGE DONE TO EXISTING STRUCTURES OR OBJECTS NOT SHOWN TO BE REMOVED OR REPLACED SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

## DEMOLITION LEGEND

- EXISTING CONCRETE TO BE REMOVED
- EXISTING HMA PAVEMENT TO BE REMOVED
- EXISTING GRAVEL TO BE REMOVED
- EXISTING UTILITY TO BE REMOVED
- EXISTING UTILITY TO BE ABANDONED
- EXISTING UTILITY TO BE REMOVED OR ABANDONED AS NEEDED
- EXISTING STRUCTURE, TREE, MISCELLANEOUS OBJECT TO BE REMOVED
- SILT FENCE
- DOUBLE ROW SILT FENCE


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


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| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 150' |

# EXISTING CONDITIONS AND DEMOLITION PLAN
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 3 OF 42

PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

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SCALE 1" - 50'

0 50 100

GRADING PLAN GENERAL NOTES

1. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS ON 11/14/2024. CONTRACTOR SHALL FIELD CHECK EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
2. ALL DISTURBED AREAS SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDED.
3. EXCAVATION AND EMBANKMENT SHALL BE PERFORMED PER THE DETAILED SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
4. ALL CURB ELEVATIONS ARE TO BE TOP OF CURB. ALL GUTTER ELEVATIONS ARE 0.25' BELOW TOP OF CURB ELEVATION UNLESS OTHERWISE NOTED.
5. DRIVEWAY SLOPES FROM THE RIGHT-OF-WAY SHALL BE A MINIMUM OF 2% AND A MAXIMUM OF 8%.
6. MAXIMUM ALLOWABLE YARD SLOPE IS 4:1.
7. GRADING INDICATED MAY NEED TO BE ADJUSTED BASED ON FIELD CONDITIONS. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES WITH FIELD CONDITIONS PRIOR TO FINE GRADING.
8. BUILDING AREA INDICATED IS APPROXIMATE AND REPRESENTS ONE POSSIBLE OPTION OF HOME. GRADING MAY NEED TO BE ADJUSTED AS OTHER HOMES ARE SOLD.
9. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING/UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT, OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED IN RECORD DRAWINGS.
10. WINDOW WELLS SHALL NOT BE ALLOWED ON EITHER SIDE OF OVERLAND FLOOD ROUTES WHEN THEY OCCUR BETWEEN HOUSES.
11. OVERFLOW DRAINAGE ROUTES AND SWALES MUST BE INSTALLED AT THE ELEVATION AND LOCATION SHOWN.
12. DO NOT INTERRUPT DRAINAGE FROM OFF SITE DURING CONSTRUCTION OPERATIONS. PROVIDE TEMPORARY DRAINAGE DITCHES WHERE REQUIRED.
13. CONTRACTOR SHALL MEET EXISTING GROUND ELEVATIONS AT PROPERTY LINE, UNLESS OTHERWISE NOTED AND THE APPROPRIATE EASEMENTS OR PERMISSION HAS BEEN OBTAINED.
14. PROPOSED UTILITY STRUCTURES ARE NOT PERMITTED WITHIN DRIVEWAYS OR DRIVEWAY APRONS.
15. BORROW PITS SHALL NOT BE FILLED WITH TOPSOIL AND TOPSOIL SHALL NOT BE TRANSFERED OUT OF THE VILLAGE CORPORATE BOUNDARY WITHOUT WRITTEN APPROVAL OF THE VILLAGE ENGINEER OF VILLAGE BOARD.

MATCHLINE
REFER TO SHEET 6

MATCHLINE
REFER TO SHEET 5

HAMPTON ROAD

HAMPTON ROAD

CHERRYWOOD LANE

REDWOOD AVENUE

ASHBERRY DRIVE

HARVEST VIEW DRIVE

GALENA BLVD

MATCH PROPOSED SIDEWALK TO EXISTING WALK
MATCH EXISTING ROADWAY, CURB, & PAVEMENT
MATCH PROPOSED SIDEWALK TO EXISTING WALK

100 YEAR STORM SEWER TO CONVEY OVERLAND FLOW FROM WINDSOR POINTE UNIT 1 TO DETENTION BASIN

NO WINDOW WELLS THIS SIDE

NO WINDOW WELLS THIS SIDE

LANDSCAPE BERM (4:1 MAX)

SCREENING BERM (3:1 MAX)

SCREENING BERM (3:1 MAX)

DOWNSTREAM FLOW OVER SIDEWALK

M3.12 REVERSE CURB & GUTTER MEDIAN

PROPOSED MONUMENT SIGN (SEE LANDSCAPE PLAN BY OTHERS)

PROPOSED MONUMENT SIGN (SEE LANDSCAPE PLAN BY OTHERS)

EXISTING DRAINTILE SHALL BE FIELD LOCATED AND CONNECTED TO PROPOSED STORM SEWER SYSTEM

EXISTING OFFSITE FLOW FROM IDOT CULVERT TO DRAIN THROUGH THE PROJECT

REFER TO SEPARATE IMPROVEMENT PLANS FOR GRADING WITHIN IDOT/GALENA BOULEVARD ROW

PER VILLAGE OF SUGAR GROVE, NO UTILITY STRUCTURES ARE PERMITTED IN PAVED OR CONCRETE AREAS.

**WHEN WORKING AROUND FOX METRO'S 24" SANITARY INTERCEPTOR, EXTREME CARE MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

REFER TO SHEETS 11 & 12 FOR GRADING DETAILS


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR

1700 EAST GOLF ROAD, SUITE 1100
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PHONE: 224-293-3100
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| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

DESIGNED LZ
DRAWN JD
APPROVED MTL
DATE 04/04/2025
SCALE 1" = 50'

# GRADING PLAN SOUTHWEST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 4 OF 42

PROJECT NUMBER: 4930

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REFER TO SHEET 7 FOR WEIR SIZING INFORMATION

HARVEST VIEW DRIVE

MAPLEWOOD DRIVE

MATCHLINE
REFER TO SHEET 7

ASHBURY DRIVE

HARVEST VIEW DRIVE

GALENA BLVD

REFER TO SHEET 4 MATCHLINE

REFER TO SHEET 10 MATCHLINE

SCALE 1" - 50'
0 50 100

N

EXISTING FLOODPLAIN BY ELEVATION

LANDSCAPE BERM (4:1 MAX)

SCREENING BERM (4:1 MAX)

NATURALIZED STORMWATER BASIN NO. 2

PROPOSED AERATOR (REFER TO LANDSCAPE PLANS)

10' DEEP POOL AREA

15' SAFETY SHELF (2' DEEP)

9" NATIVE PLANTED RETENTION SHELF

NWL=678.0

HWL=685.0

EXISTING DRAINTILE SHALL BE FIELD LOCATED AND CONNECTED TO PROPOSED STORM SEWER SYSTEM

3:1 MAX GRADING PROPOSED FOR BACK SIDE OF DETENTION BASIN BERM

EAST STORMWATER MANAGEMENT FACILITY NO. 2

| | |
|---|---|
| DISTURBED AREA* = | 41.26 AC |
| DETENTION VOLUME REQUIRED = | 19.70 AC-FT |
| DETENTION VOLUME PROVIDED = | 20.58 AC-FT |
| NORMAL WATER LEVEL = | 678.0 |
| HIGH WATER LEVEL = | 685.0 |

*INCLUDES 1.66 ACRES FOR GALENA BOULEVARD IMPROVEMENTS

EXISTING DRAINTILE SHALL BE FIELD LOCATED AND CONNECTED TO PROPOSED STORM SEWER SYSTEM

EXISTING DRAINAGE DITCH WITHIN IDOT ROW TO REMAIN UNDISTURBED

PROPOSED EASEMENT AREA FOR FUTURE VILLAGE SIGN (BY OTHERS)

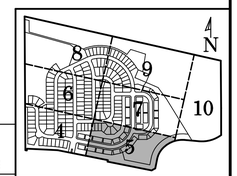
EXISTING DRAINTILE SHALL BE FIELD LOCATED AND CONNECTED TO PROPOSED STORM SEWER SYSTEM

DRAINAGE FROM SOUTH THROUGH EXISTING CULVERT TO BE CONVEYED WITHIN DITCH IN IDOT ROW AS IN EXISTING CONDITIONS

PER VILLAGE OF SUGAR GROVE, NO UTILITY STRUCTURES ARE PERMITTED IN PAVED OR CONCRETE AREAS.

**WHEN WORKING AROUND SUGAR GROVE'S 14" SANITARY SEWER, EXTREME CARE MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

REFER TO SHEETS 11 & 12 FOR GRADING DETAILS





Mackie Consultants, LLC
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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN SOUTHEAST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 5 OF 42

PROJECT NUMBER: 4930

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| WEST STORMWATER MANAGEMENT FACILITY NO. 1 | |
|---|---|
| DISTURBED AREA* - | 58.13 AC |
| DETENTION VOLUME REQUIRED - | 32.16 AC-FT |
| DETENTION VOLUME PROVIDED - | 32.18 AC-FT |
| NORMAL WATER LEVEL - | 674.0 |
| HIGH WATER LEVEL - | 680.7 |

*INCLUDES 3.74 ACRES FOR GALENA BOULEVARD IMPROVEMENTS

REFER TO SHEET 7 FOR WEIR SIZING INFORMATION

N

SCALE 1" - 50'
0 50 100

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 678.1

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 679.2 (FLOODPLAIN BY ELEVATION)

9" NATIVE PLANTINGS RETENTION SHELF

NATURALIZED STORMWATER BASIN NO. 1

5' DEEP SETTLING BASINS (TYP)

NWL=674.0

673.25

RECONSTRUCT EXISTING VALVE VAULT RIM = 683.60

MATCHLINE
REFER TO SHEET 8

REFER TO SHEET 4
MATCHLINE

HAMPTON ROAD

CHERRYWOOD LANE

CHERRYWOOD AVENUE

ASHBURY DRIVE

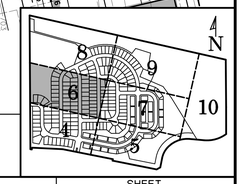
ASHBURY LANE

NO WINDOW WELLS THIS SIDE

2 DS

WHEN WORKING AROUND FOX METRO'S 24" SANITARY INTERCEPTOR, EXTREME CARE MUST BE TAKEN WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED. THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.

REFER TO SHEETS 11 & 12 FOR GRADING DETAILS





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| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN CENTRAL WEST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

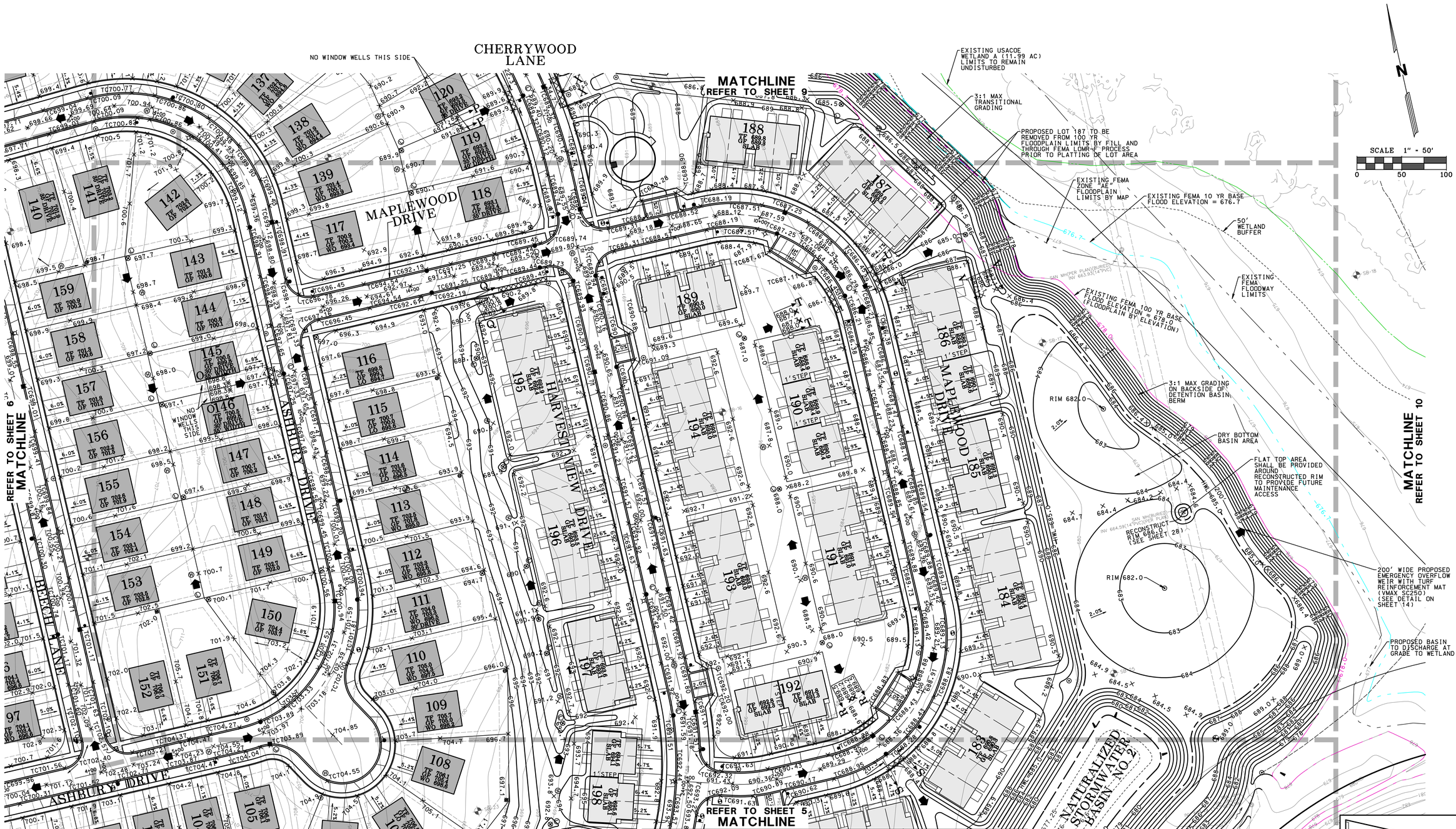
SHEET 6 OF 42

PROJECT NUMBER: 4930

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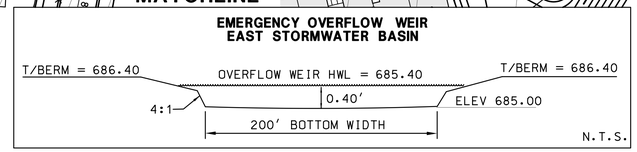
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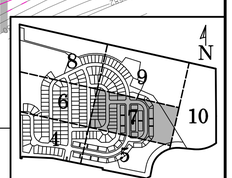



**WHEN WORKING AROUND SUGAR GROVE'S 14" SANITARY SEWER, EXTREME CARE MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

**EMERGENCY OVERFLOW WEIR**
**EAST STORMWATER BASIN**




**REFER TO SHEETS 11 & 12 FOR GRADING DETAILS**





**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


**LENNAR**

1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN CENTRAL EAST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 7 OF 42

PROJECT NUMBER: 4930


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## COMPENSATORY STORAGE AREA A

| | |
|---|---|
| 10-YR BASE FLOOD ELEVATION | - 678.1 |
| 0-10 YR REQUIRED COMPENSATORY STORAGE | - 0.50 AC-FT |
| 100-YR BASE FLOOD ELEVATION | - 679.2 |
| 10-100 YR REQUIRED COMPENSATORY STORAGE | - 1.86 AC-FT |
| TOTAL COMPENSATORY STORAGE VOLUME REQUIRED | - 3.54 AC-FT |
| 0-10 YR PROVIDED COMPENSATORY STORAGE | - 6.46 AC-FT |
| 10-100 YR PROVIDED COMPENSATORY STORAGE | - 1.88 AC-FT |
| COMPENSATORY STORAGE VOLUME PROVIDED | - 8.34 AC-FT |

10' WIDE HMA MULTI-USE PATH TO TERMINATE AT PROPERTY BOUNDARY

FLARED END SECTION SHALL REMAIN OUTSIDE OF LIMITS OF BLACKBERRY CREEK WATER EDGE INV 672.5

APPROXIMATE WATER EDGE OF BLACKBERRY CREEK

CONSTRUCTION OF SANITARY SEWER WITHIN FLOODWAY LIMITS SHALL RESULT IN NO FILL ABOVE EXISTING GRADE AND MEET THE TERMS AND CONDITIONS OF IDNR REGIONAL PERMIT NO. 3

APPROXIMATE WATER EDGE OF BLACKBERRY CREEK

SCALE 1" - 50'

0 50 100

CONSTRUCTION OF PATH WITHIN FLOODWAY LIMITS SHALL RESULT IN NO FILL ABOVE EXISTING GRADE AND MEET THE TERMS AND CONDITIONS OF IDNR REGIONAL PERMIT NO. 3

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 678.1

EXISTING FEMA FLOODWAY LIMITS

EXISTING ISOLATED WETLAND E (0.69 AC) LIMITS TO REMAIN UNDISTURBED

15' WETLAND BUFFER

EXISTING ISOLATED WETLAND D (0.08 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING ISOLATED WETLAND C (0.08 AC) LIMITS TO BE UNDISTURBED

15' WETLAND BUFFER

15' WETLAND BUFFER

EXISTING ISOLATED WETLAND B (0.18 AC) LIMITS TO BE UNDISTURBED

EXISTING FEMA FLOODWAY LIMITS

EXISTING DRAINTILE TO REMAIN

20' WETLAND BUFFER

DRAINTILE TO BE CAPPED AT LIMITS OF DISTURBANCE

10' HMA MULTI-USE PATH

REFER TO LANDSCAPE PLANS FOR PROPOSED PARK IMPROVEMENTS

FLARED END SECTION AND STORM SEWER TO DRAIN COMPENSATORY STORAGE AREA INV 674.0

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 679.2 (FLOODPLAIN BY ELEVATION)

COMPENSATORY STORAGE AREA A

PROPOSED 250' WIDE EMERGENCY OVERFLOW WEIR WITH TURF REINFORCEMENT MAT (VMAX 250) (SEE DETAIL ON SHEET 14)

NATURALIZED STORMWATER BASIN NO. 1

PROPOSED AERATOR (REFER TO LANDSCAPE PLANS)

5' DEEP SETTLING BASINS

XHWL = 680.0
XNWL = 674.0

LOT 1

PARK

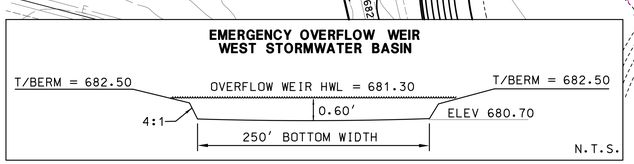
CHERRYWOOD LANE

ASHBURY DRIVE

REDWOOD AVENUE

BEECH LANE

**EMERGENCY OVERFLOW WEIR**
**WEST STORMWATER BASIN**

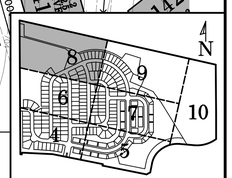



REFER TO SHEET 6 MATCHLINE

REFER TO SHEET 9 MATCHLINE

**WHEN WORKING AROUND FOX METRO'S 24" AND 36" SANITARY INTERCEPTOR, EXTREME CARE MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

REFER TO SHEETS 11 & 12 FOR GRADING DETAILS





Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN NORTHWEST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 8 OF 42

PROJECT NUMBER: 4930

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## COMPENSATORY STORAGE AREA B

| | |
|---|---|
| 10-YR BASE FLOOD ELEVATION | - 677.0 |
| 0-10 YR REQUIRED COMPENSATORY STORAGE | - 0.01 AC-FT |
| 100-YR BASE FLOOD ELEVATION | - 678.1 |
| 10-100 YR REQUIRED COMPENSATORY STORAGE | - 0.57 AC-FT |
| TOTAL COMPENSATORY STORAGE VOLUME REQUIRED | - 0.87 AC-FT |
| 0-10 YR PROVIDED COMPENSATORY STORAGE | - 0.29 AC-FT |
| 10-100 YR PROVIDED COMPENSATORY STORAGE | - 0.58 AC-FT |
| TOTAL COMPENSATORY STORAGE VOLUME PROVIDED | - 0.87 AC-FT |

APPROXIMATE WATER EDGE OF BLACKBERRY CREEK

EXISTING ISOLATED WETLAND_B (0.18 AC) LIMITS TO BE UNDISTURBED

15' WETLAND BUFFER

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 678.1 (FLOODPLAIN BY ELEVATION)

EXISTING FEMA 10 YR BASE FLOOD ELEVATION = 677.0

EXISTING FEMA FLOODWAY LIMITS

PROPOSED 10 YR BFE = 677.0

PROPOSED 100 YR BFE = 678.1

COMPENSATORY STORAGE AREA B

50' WETLAND BUFFER

EXISTING USACOE WETLAND F (1.32 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING USACOE WETLAND A (11.99 AC) LIMITS TO REMAIN UNDISTURBED

WETLAND FLAGS LOCATED BY GRWA ON 8-26-24

WETLAND FLAGS LOCATED ON 8-23-24

MASS GRADING WORK TO REMOVE PORTIONS OF EXISTING BERM AFTER INSTALLATION OF OFFSITE FLOOD MITIGATION BERM AND LOT GRADING TO FINAL

PROPOSED 10 YR BFE = 676.7

PROPOSED 100 YR BFE = 678.0

TOT LOT (REFER TO LANDSCAPE PLANS FOR ADDITIONAL DETAIL)

CHERRYWOOD LANE

ASHBURY DRIVE

MAPLEWOOD DRIVE

REFER TO SHEET 8 MATCHLINE

REFER TO SHEET 10 MATCHLINE

REFER TO SHEET 7 MATCHLINE

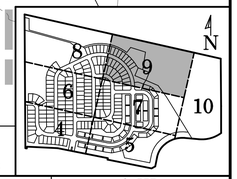
SCALE 1" - 50'

0 50 100

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WHEN WORKING AROUND FOX METRO'S 16" SANITARY SEWER AND 36" SANITARY INTERCEPTOR AND SUGAR GROVE'S 14" SANITARY SEWER EXTREME CARE MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.

REFER TO SHEETS 11 & 12 FOR GRADING DETAILS





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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN NORTHEAST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 9 OF 42

PROJECT NUMBER: 4930


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REFER TO SHEET 7
MATCHLINE

REFER TO SHEET 9
MATCHLINE

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SCALE 1" - 50'
0 50 100

EXISTING FEMA ZONE "AE" FLOODPLAIN LIMITS BY MAP

EXISTING FEMA 10 YEAR BASE FLOOD ELEVATION = 676.7

50' WETLAND BUFFER

EXISTING FEMA FLOODWAY LIMITS

EXISTING FEMA 100 YR BASE FLOOD ELEVATION = 678.0 (FLOODPLAIN BY ELEVATION)

EXISTING SUBSURFACE DRAINTILES WITHIN WETLAND AREA TO REMAIN (TYP)

EXISTING USACOE WETLAND A (11.99 AC) LIMITS TO REMAIN UNDISTURBED

EXISTING DRAINAGE SWALE IN IDOT ROW TO REMAIN UNDISTURBED

IL ROUTE 56

KANE COUNTY FOREST PRESERVE

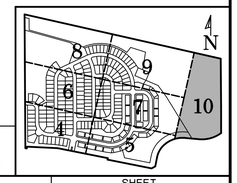
FOX VALLEY PARK DISTRICT

KANE COUNTY FOREST PRESERVE

BLACKBERRY CREEK

VIRGIL GILMAN TRAIL

APPROXIMATE WATER EDGE OF BLACKBERRY CREEK




REFER TO SHEETS 11 & 12 FOR GRADING DETAILS


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
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PHONE: 224-293-3100
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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# GRADING PLAN EAST
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

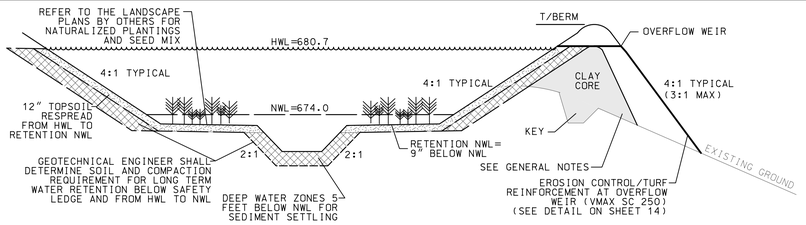
SHEET
10 OF 42

PROJECT NUMBER: 4930


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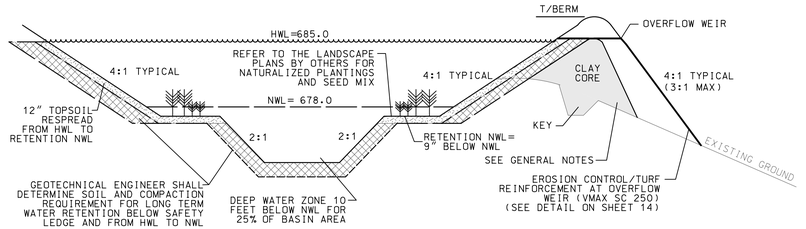

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## TYPICAL NATURALIZED DETENTION POND CROSS SECTION - WEST BASIN

N.T.S.



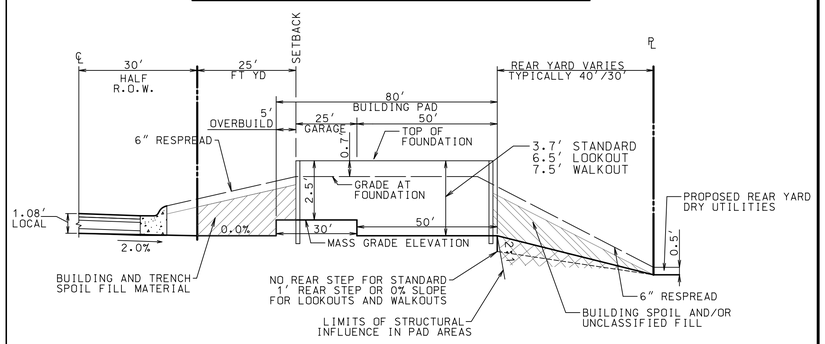

## TYPICAL WET BOTTOM DETENTION POND CROSS SECTION - EAST BASIN

N.T.S.

GENERAL NOTES:

1. THE DETENTION BASIN AND ADJACENT EMBANKMENT AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SOILS REPORT AND SPECIFICATIONS HEREIN.
2. THE CLAY CORE SHALL BE CONSTRUCTED AS REQUIRED BY THE SOILS CONSULTANT. THE MATERIAL MUST BE IDENTIFIED AND SAMPLED PRIOR TO BEGINNING WORK.
3. A PROFESSIONAL ENGINEER FROM A QUALIFIED SOILS CONSULTANT MUST BE PRESENT DURING THE CONSTRUCTION OF THIS EMBANKMENT.
4. DIMENSIONS AND SIZE OF THE CLAY CORE, INCLUDING KEY (IF NECESSARY), SHALL BE PROVIDED BY THE SOILS CONSULTANT PRIOR TO START OF CONSTRUCTION.
5. EMBANKMENT FILL SHALL CONSIST OF COHESIVE SOIL (REFER TO SPECIFICATIONS SHEET).
6. COMPACTION OF THE EMBANKMENT SHALL BE CONSTRUCTED TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D 1557) AND SHALL BE PLACED IN APPROXIMATE 8 INCH LIFTS.

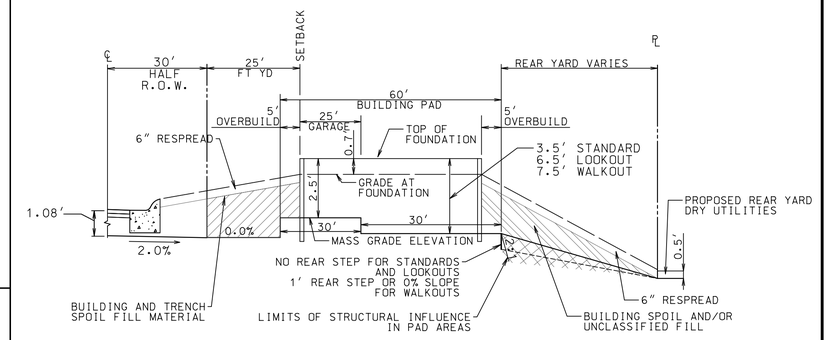
## MASS GRADING SECTION
## SINGLE FAMILY - MEDALLION SERIES




## SINGLE FAMILY STANDARD FOUNDATIONS (HOMESITES 1-81)

N.T.S.

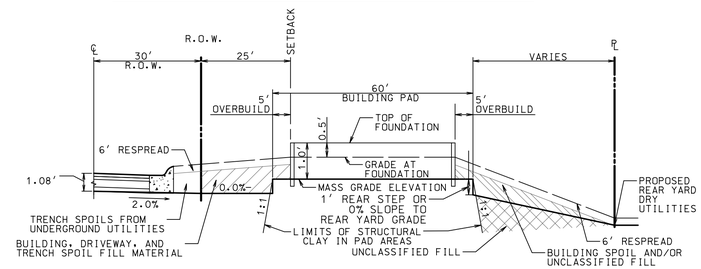
## MASS GRADING SECTION
## SINGLE FAMILY - HORIZON SERIES




## SINGLE FAMILY STANDARD FOUNDATIONS (HOMESITES 82-174)

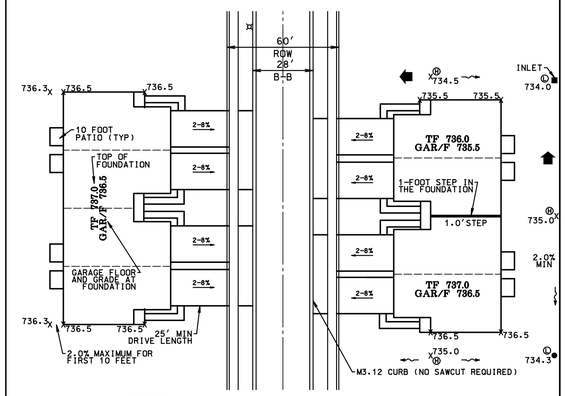
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## MASS GRADING SECTION
## TOWNHOMES - SLAB FOUNDATIONS




## SLAB FOUNDATIONS (HOMESITES 175-204)

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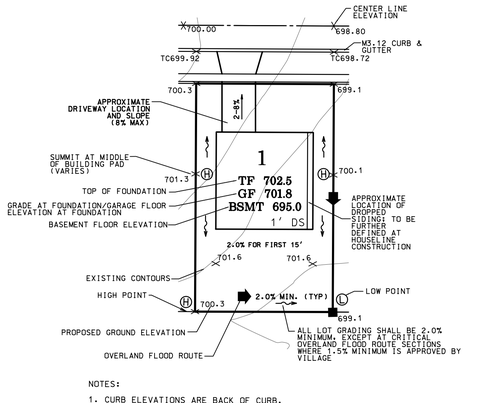



NOTES:

1. ALL HOMES ARE SLAB FOUNDATIONS (NO BASEMENTS).
2. CURB ELEVATIONS ARE TOP OF CURB.
3. THE MINIMUM SLOPES IN LANDSCAPE AREAS SHALL BE BETWEEN 2% AND 25%. UNLESS OTHERWISE APPROVED BY VILLAGE ENGINEER.

## "TRADITIONAL" FRONT-LOADED TOWNHOME TYPICAL GRADING DETAIL

NOT TO SCALE




NOTES:

1. CURB ELEVATIONS ARE BACK OF CURB.
2. ALL HOMES ADJACENT TO EMERGENCY OVERLAND FLOOD ROUTES SHALL NOT HAVE WINDOW WELLS ON THAT SIDE OF THE HOME.
3. SLOPES ON INDIVIDUAL LOTS SHALL NOT EXCEED 4:1 (UNLESS OTHERWISE NOTED).

LOOKOUT = LO = TF MINUS 5.1' TO REAR GRADE AT FOUNDATION
WALKOUT = WO = TF MINUS 7.5' TO REAR GRADE AT FOUNDATION

## TYPICAL SINGLE FAMILY GRADING DETAIL

NOT TO SCALE


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
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|---|---|
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| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# GRADING DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 11 OF 42

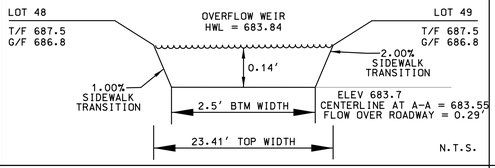
PROJECT NUMBER: 4930

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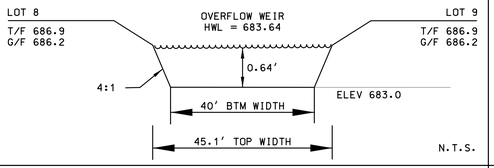
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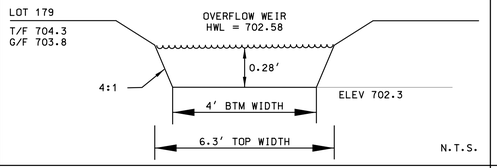
### SECTION A-A
### SIDE YARD LOTS 48 & 49



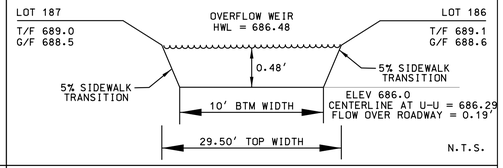

### SECTION G2-G2
### SIDE YARD LOTS 8 & 9



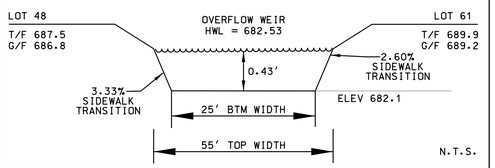

### SECTION N-N
### REAR YARD LOT 179



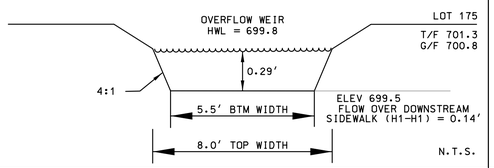

### SECTION U-U
### SIDE YARD LOTS 186 & 187



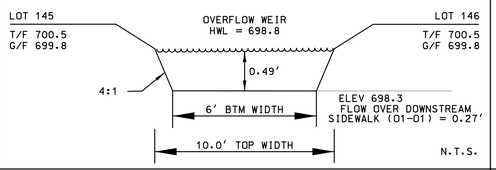

### SECTION B-B
### INFLOW TO NW POND



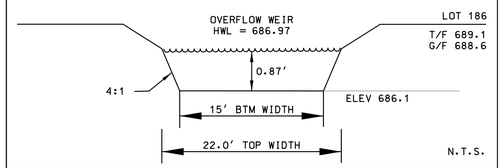

### SECTION H-H
### REAR YARD LOT 175



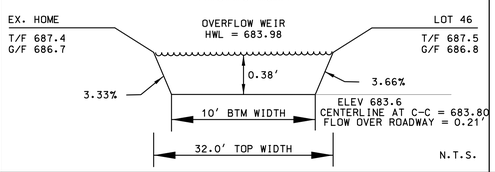

### SECTION O-O
### SIDE YARD LOTS 145 & 146



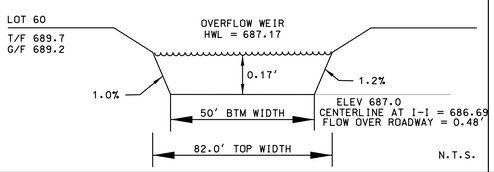

### SECTION V-V
### REAR YARD LOT 186



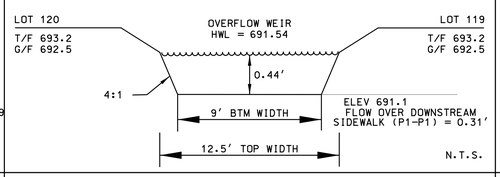

### SECTION C-C
### SIDE YARD LOT 46 & REAR YARD
### EXISTING HOME



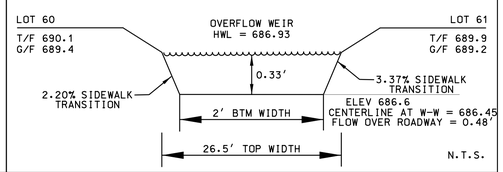

### SECTION I-I
### SIDE YARD LOT 60



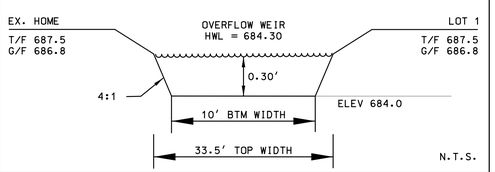

### SECTION P-P
### SIDE YARD LOTS 119 & 120



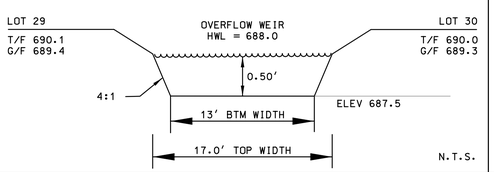

### SECTION W-W
### SIDE YARD LOTS 60 & 61



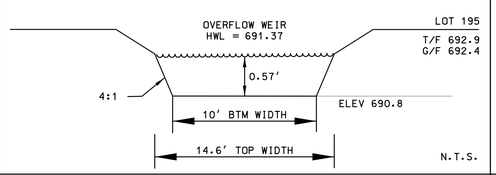

### SECTION D-D
### SIDE YARD LOT 1 & REAR YARD EXISTING HOME



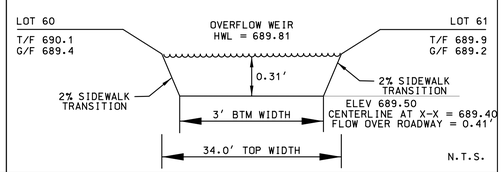

### SECTION J-J
### SIDE YARD LOTS 29 & 30



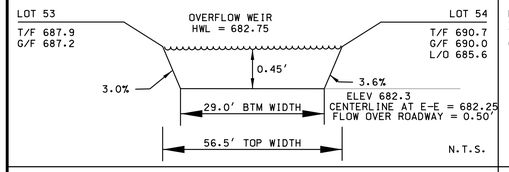

### SECTION Q-Q
### SIDE YARD LOT 195



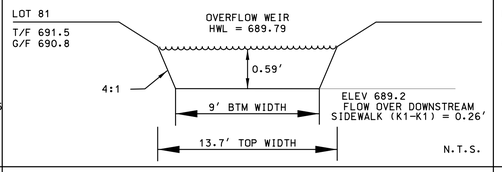

### SECTION X-X
### SIDE YARD LOTS 60 & 61



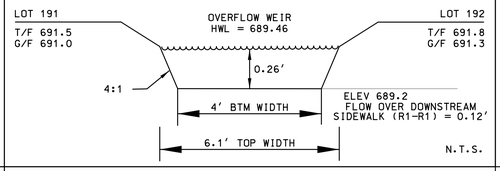

### SECTION E-E
### SIDE YARD LOT 53 & REAR YARD LOT 54



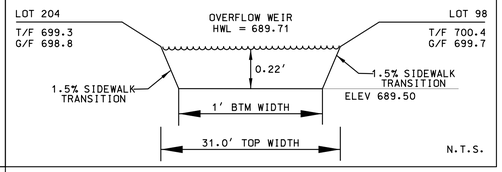

### SECTION K-K
### SIDE YARD LOT 81



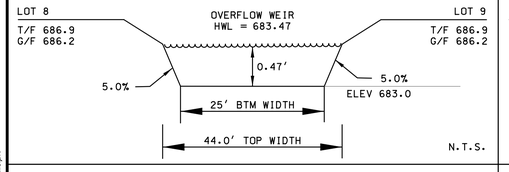

### SECTION R-R
### SIDE YARD LOTS 191 & 192



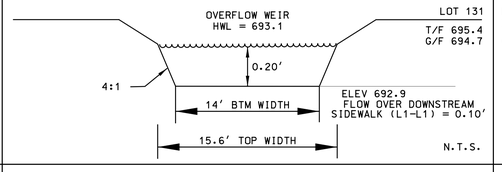

### SECTION Y-Y
### SIDE YARD LOTS 204 & 98



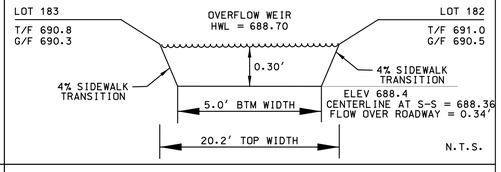

### SECTION F-F
### SIDE YARD LOTS 8 & 9



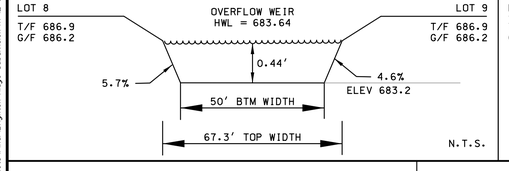

### SECTION L-L
### SIDE YARD LOT 131



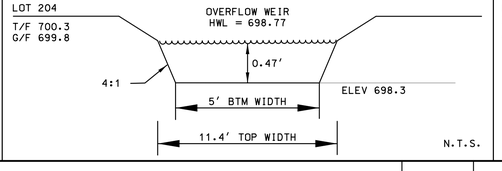

### SECTION S-S
### SIDE YARD LOTS 182 & 183



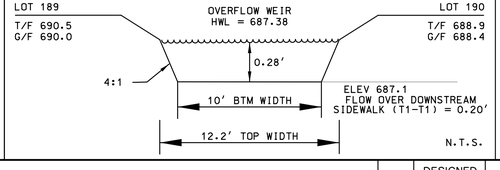

### SECTION G1-G1
### SIDE YARD LOTS 8 & 9




### SECTION M-M
### REAR YARD 204




### SECTION T-T
### SIDE YARD LOTS 189 & 190





Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# GRADING DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

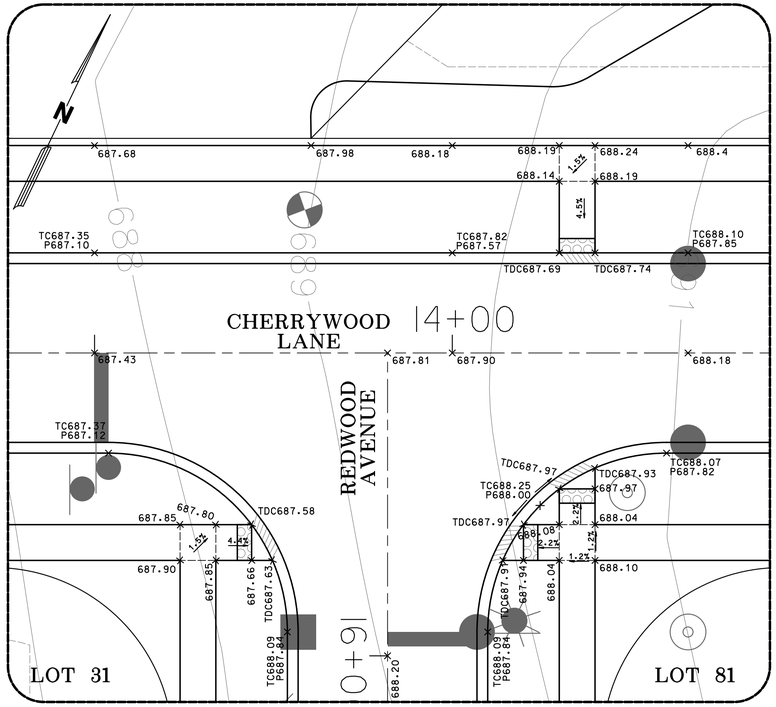
SHEET 12 OF 42

PROJECT NUMBER: 4930

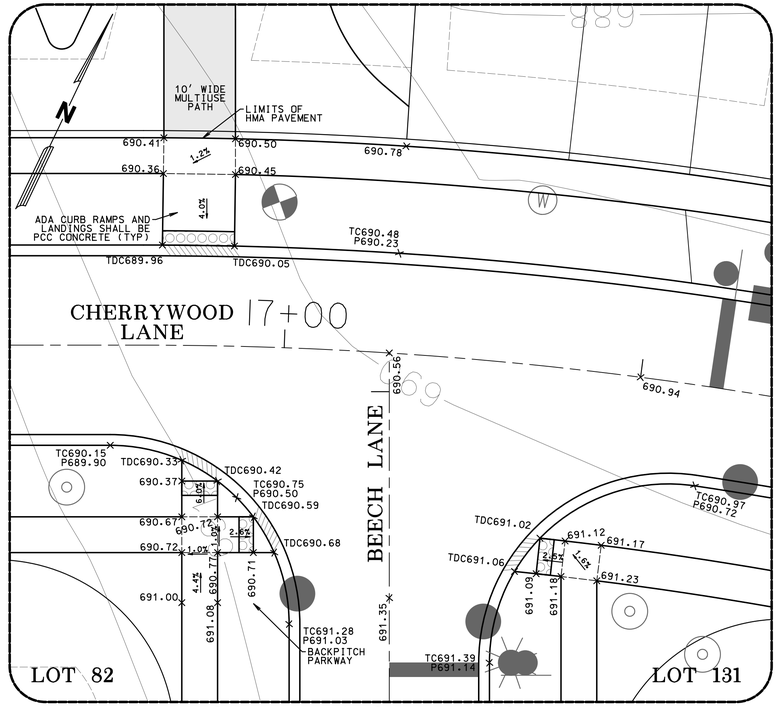
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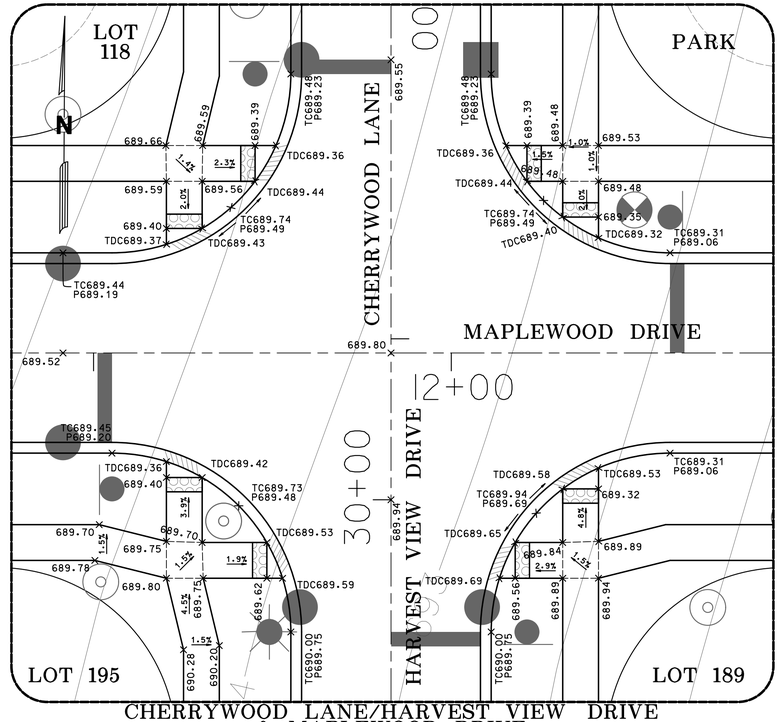
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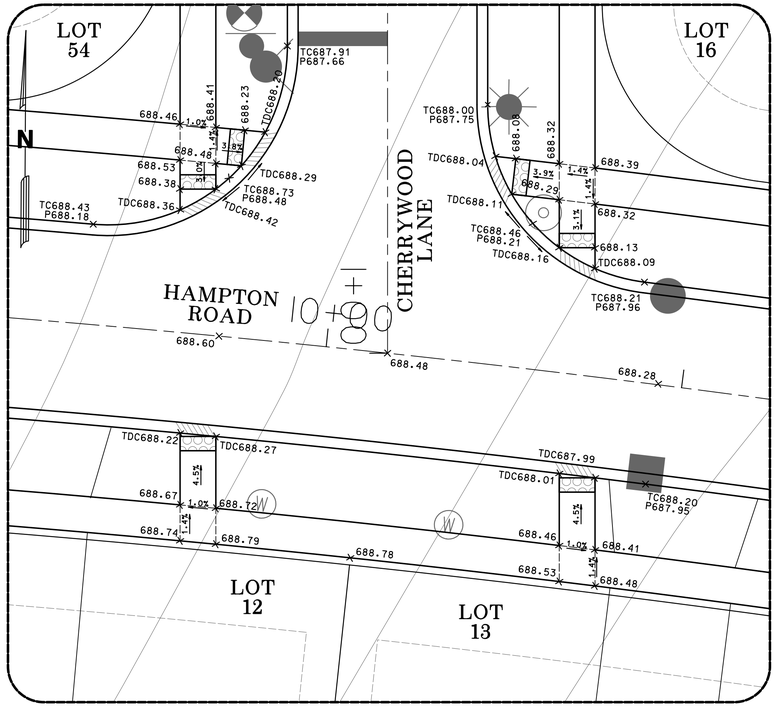

REDWOOD AVENUE & CHERRYWOOD LANE



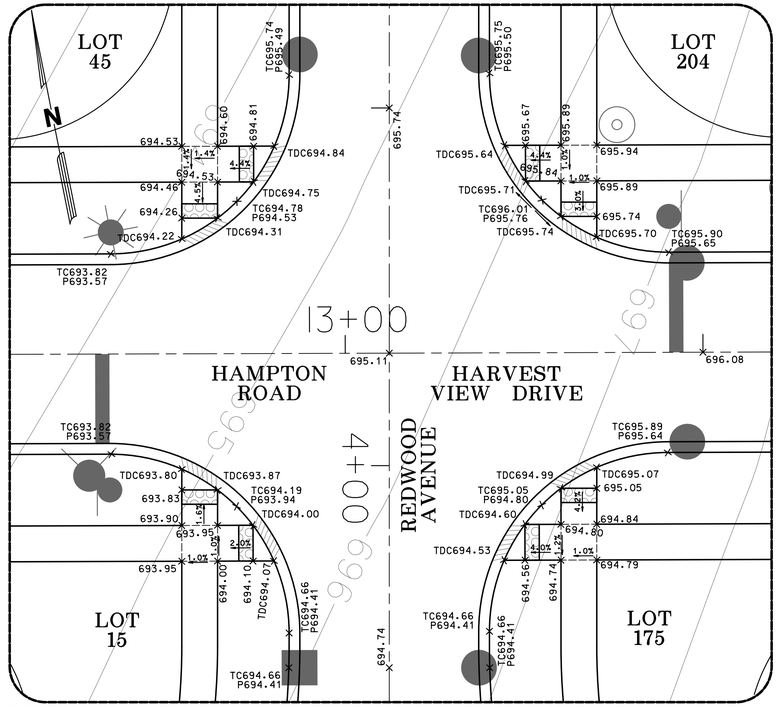

BEECH LANE & CHERRYWOOD LANE



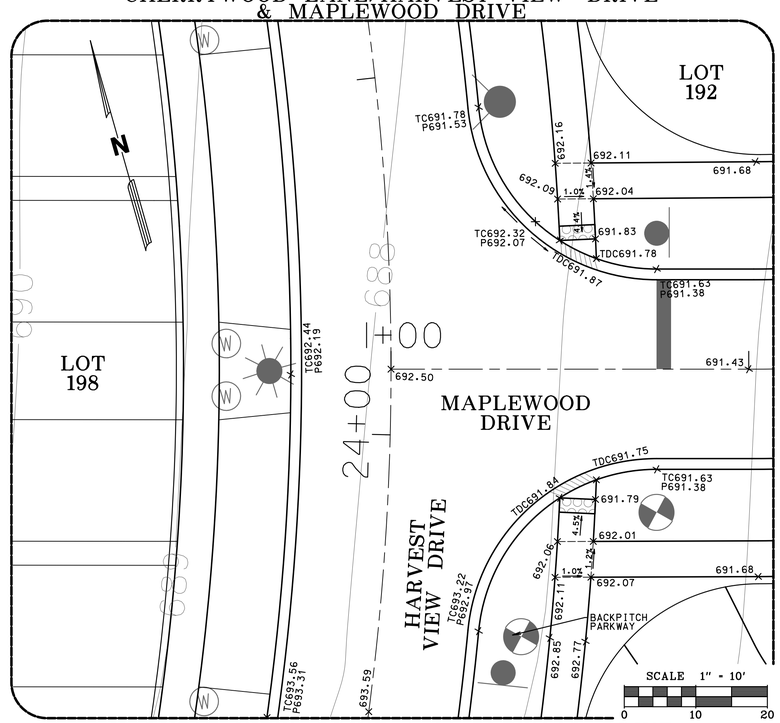

CHERRYWOOD LANE/HARVEST VIEW DRIVE & MAPLEWOOD DRIVE




CHERRYWOOD LANE & HAMPTON ROAD




REDWOOD AVENUE & HAMPTON ROAD/HARVEST VIEW DRIVE




HARVEST VIEW DRIVE & MAPLEWOOD DRIVE


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR

1700 EAST GOLF ROAD, SUITE 1100
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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 10' |

# ADA GRADING DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

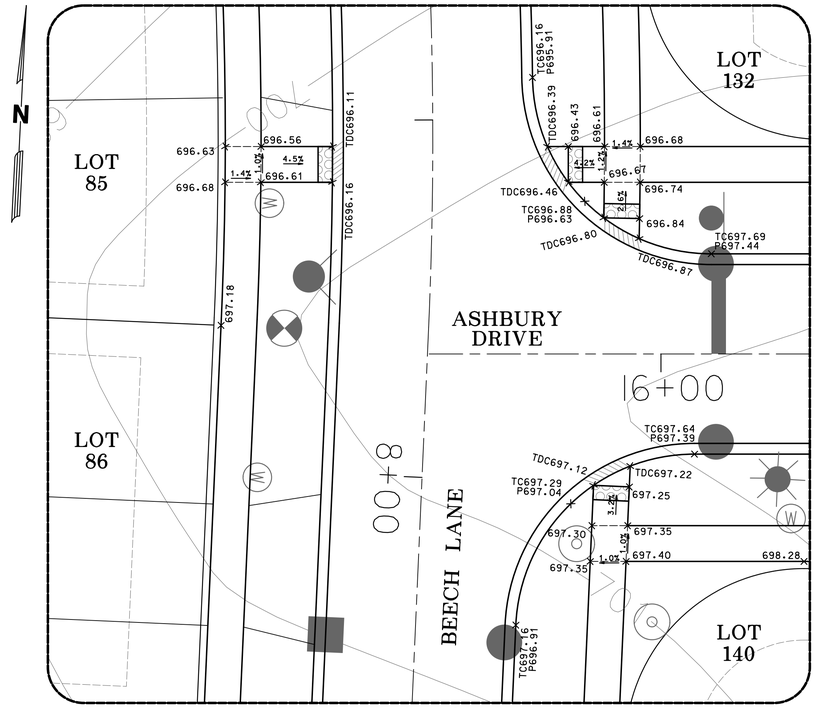
SHEET 12A OF 42

PROJECT NUMBER: 4930

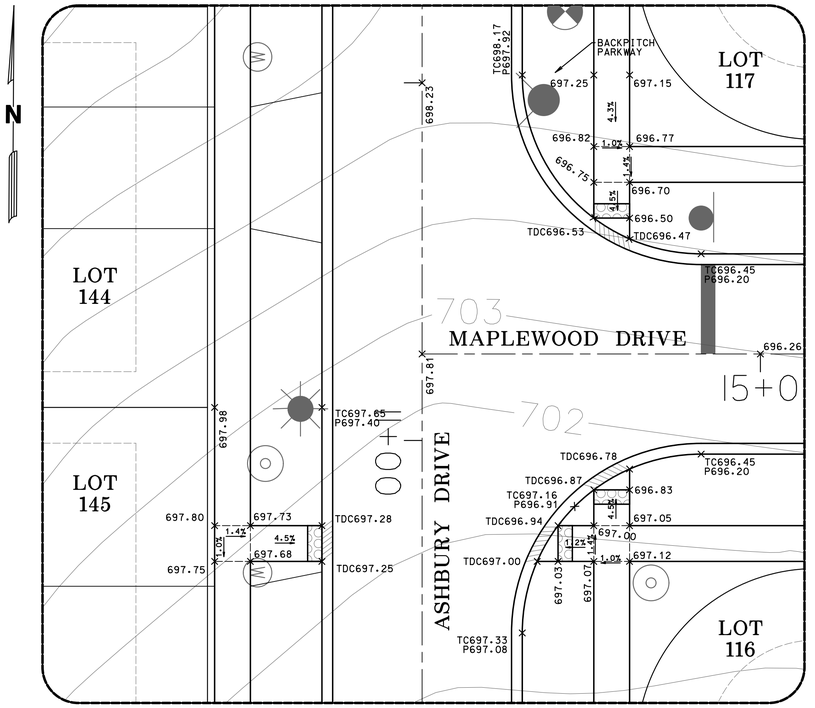
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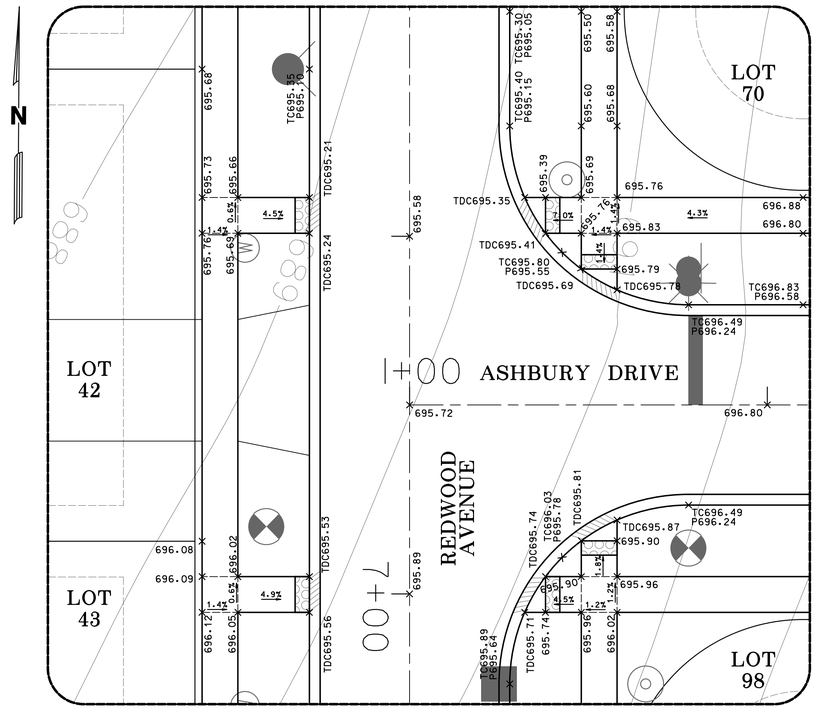

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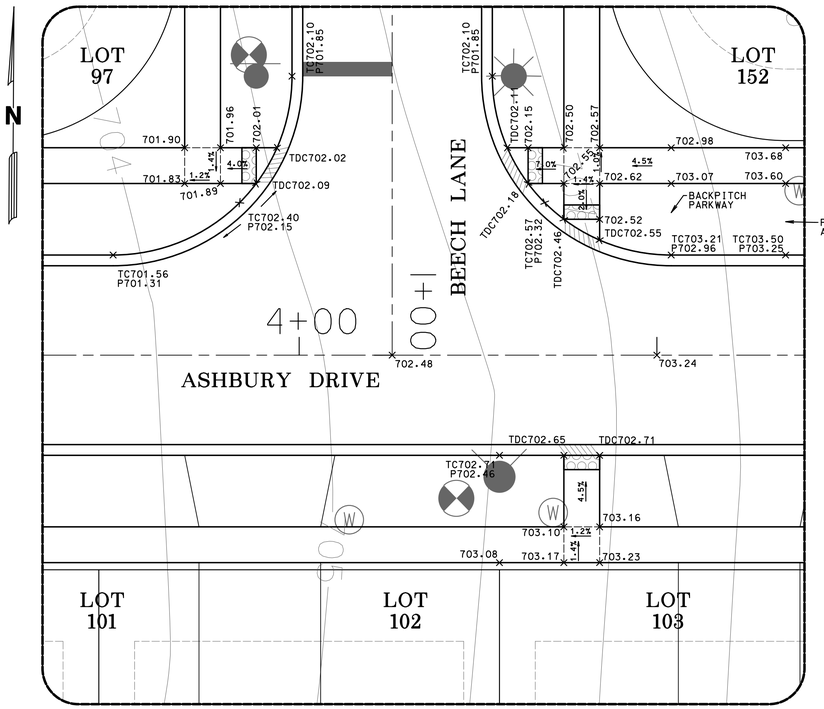

BEECH LANE & ASHBURY DRIVE




ASHBURY DRIVE & MAPLEWOOD DRIVE




REDWOOD AVENUE & ASHBURY DRIVE




BEECH LANE & ASHBURY DRIVE

SCALE 1" - 10'

0 10 20

| DATE | DESCRIPTION OF REVISION | BY |
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| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

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| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
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| SCALE | 1" = 10' |


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
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FAX: 224-293-3101


# ADA GRADING DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

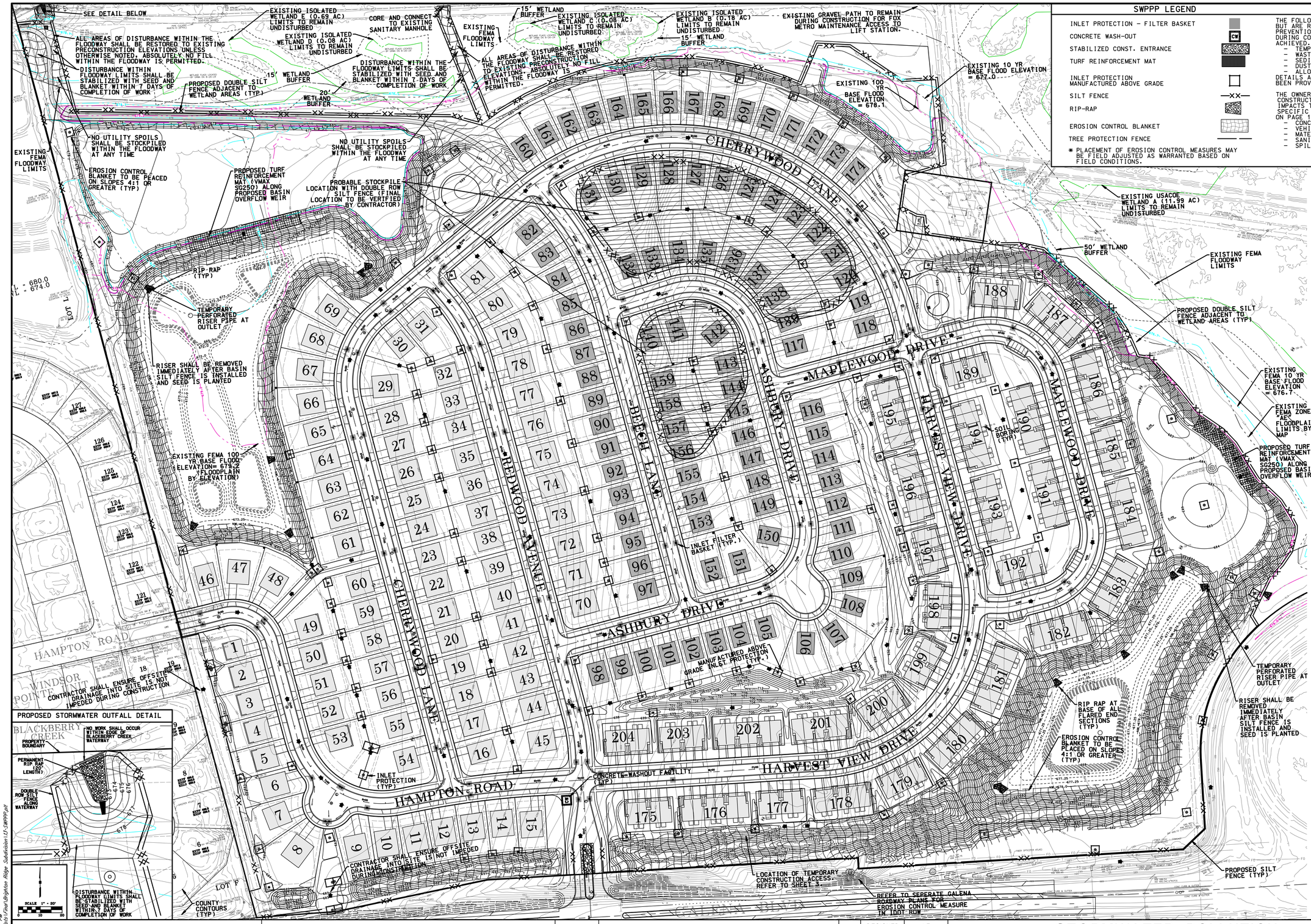
SHEET 12B OF 42

PROJECT NUMBER: 4930


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## SWPPP LEGEND

- INLET PROTECTION - FILTER BASKET
- CONCRETE WASH-OUT (CW)
- STABILIZED CONST. ENTRANCE
- TURF REINFORCEMENT MAT
- INLET PROTECTION MANUFACTURED ABOVE GRADE
- SILT FENCE
- RIP-RAP
- EROSION CONTROL BLANKET
- TREE PROTECTION FENCE

* PLACEMENT OF EROSION CONTROL MEASURES MAY BE FIELD ADJUSTED AS WARRANTED BASED ON FIELD CONDITIONS.

THE FOLLOWING ITEMS HAVE NOT BEEN SPECIFICALLY SHOWN BUT ARE REQUIRED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MUST BE INCORPORATED DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
- TEMPORARY AND/OR PERMANENT STABILIZATION
- WASTE MANAGEMENT
- SEDIMENT TRAPS
- DUST CONTROL
- ALLOWABLE DEWATERING OPERATIONS.

DETAILS AND INFORMATION REGARDING THESE MEASURES HAVE BEEN PROVIDED ON SHEET 13-15.

THE OWNER AND CONTRACTORS SHALL ALSO REVIEW ALL CONSTRUCTION PRACTICES TO MINIMIZE THE POTENTIAL IMPACTS TO STORMWATER DISCHARGES FROM THE SITE. SPECIFIC CONSIDERATIONS ARE PROVIDED ON PAGE 15 FOR THE FOLLOWING ACTIVITIES:
- CONCRETE CUTTING
- VEHICLE STORAGE AND MAINTENANCE
- MATERIAL STORAGE
- SANITARY STATIONS
- SPILL PREVENTION

## PROPOSED STORMWATER OUTFALL DETAIL




GENERAL INFORMATION

THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL NPDES PERMIT NO. ILR10 FOR THE DISCHARGE OF STORM WATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE ILR10 FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE ILR10 GENERAL NPDES PERMIT, MODIFIED DATE AUGUST 3, 2018.

ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "PROCEDURES AND STANDARDS FOR URBAN SOIL AND EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" AND THE "ILLINOIS URBAN MANUAL."

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ONSITE WITH THE APPROVED SWPPP.

SWPPP AVAILABILITY

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

KEEPING PLANS CURRENT

THE PERMITTEE SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITY. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVIEWING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ONSITE AS PART OF THE SWPPP.

RETENTION OF RECORDS

THE OWNER SHALL RETAIN COPIES OF THIS PLAN AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

ILR10 NOTICE OF TERMINATION GUIDANCE

WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORM WATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE ILR10 PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH PART II.F.1.e (SIGNATORY REQUIREMENTS) OF THE PERMIT.

BEST MANAGEMENT PRACTICES FOR POST CONSTRUCTION STORMWATER MANAGEMENT

THE FOLLOWING POST-CONSTRUCTION PRACTICES HAVE BEEN INCLUDED WITHIN THIS STORMWATER POLLUTION PREVENTION PLAN TO CONTROL POLLUTION UPON COMPLETION OF CONSTRUCTION ACTIVITIES:
- DEEP WATER DETENTION PONDS WITH NATIVE VEGETATION PLANTED ON SIDE SLOPES;
- DRY BOTTOM DETENTION PONDS WITH NATIVE PLANTINGS;
- WATER-QUALITY DETENTION BASIN WITH EMERGENT AND NATIVE PLANTINGS;
- POND INLET/OUTLET DESIGN TO PREVENT SHORT-CIRCUITING OF FLOW;
- SEDIMENT POOLS AT DISCHARGE POINTS IN WATER QUALITY PONDS;
- VEGETATED SWALES WITH NATIVE PLANTINGS;
- VEGETATED SWALES WITH TURF GRASSES;
- FILTER STRIPS, 25-FOOT MINIMUM, WITH NATIVE GRASSES;
- RIP RAP AT STORMWATER DISCHARGE POINTS;
- HOUSE DOWNSPOUTS POSITIONED TO DISCHARGE ON GRADE VEGETATED/PERVIOUS GROUND COVER.

NOTES:

1. TOPSOIL STOCKPILE LOCATIONS WILL BE FINALIZED BY CONTRACTOR BASED ON PHASING AND LOGISTICS AT THE TIME OF CONSTRUCTION.
2. EROSION CONTROL BLANKET TO BE PLACED ON ALL SLOPES 4:1 OR GREATER, AND LOCATIONS AS SHOWN ON PLAN.
3. OVERNIGHT EQUIPMENT PARKING AND MATERIAL STAGING SHALL BE LOCATED OUTSIDE OF THE FLOODWAY.


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 100' |

# STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BRIGHTON RIDGE SUGAR GROVE, ILLINOIS

SHEET 13 OF 42

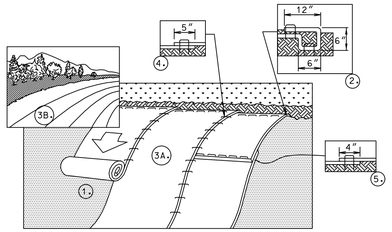
PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

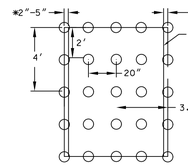
6/27/2025 12:52:31 PM
N:\4300\Engineering\Plat Civil\Brighton Ridge Subdivision\15-SWPPP.dwl

## EROSION CONTROL BLANKET DETAILS




EROSION CONTROL BLANKET SPECIFICATIONS:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S OVER COMPACTED SOIL WITH A ROW OF BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S ARE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2' - 5" OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE WITH AN APPROXIMATE 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP'S WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.
6. BURY TOE OF RECP'S IN TRENCH 6" WIDE BY 6" DEEP.

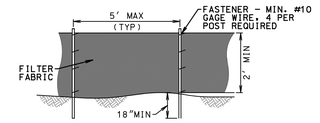



3.4 STAPLES PER SQ. YD.

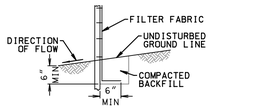
### EROSION CONTROL BLANKET STAPLE PATTERN DETAIL

NOT TO SCALE

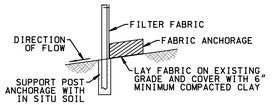
1. STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER SY FOR STITCHED BLANKETS. NON-STITCHED BLANKETS SHALL USE 4 STAPLES PER SY OF MATERIAL.
2. STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS (MINIMUM STAPLE LENGTH IS 6-INCHES.
3. ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12-INCH INTERVALS.




### ELEVATION



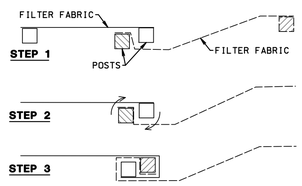

### FABRIC ANCHOR DETAIL




### DETAIL TO BE USED IN AREAS ADJACENT TO TREE PROTECTION FENCE

NOTES:

1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE SHALL BE REMOVED IN CONJUNCTION WITH FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS AS SET FORTH BY AASHTO M-288-00, CHAPTER 9.
3. FENCE POST SHALL EITHER BE STANDARD STEEL POST OR WOOD POST WITH A MINIMUM SECTIONAL AREA OF 3.0 SQ. IN.



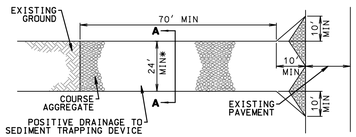

### ATTACHING TWO SILT FENCES

NOTES:

1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
3. DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.

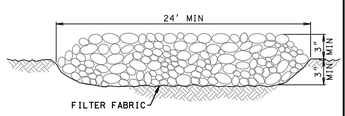
### SILT FENCE DETAIL

NOT TO SCALE

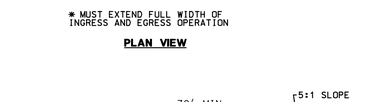



* MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION

### PLAN VIEW




### SECTION A-A



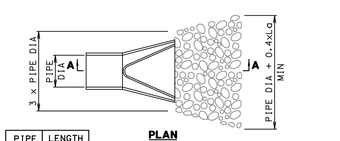

### SIDE ELEVATION

### STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

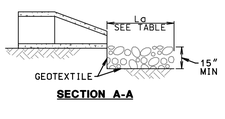
NOTES:

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF AASHTO M-288-00 AND SHALL BE PLACED OVER THE CLEARED AREA PRIOR TO THE PLACING OF ROCK.
2. ROCK OR RECLAIMED CONCRETE SHALL BE IDOT COARSE AGGREGATE GRADATION CA-1, CA-2, CA-3 OR CA-4.
3. STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO ONSET OF CONSTRUCTION OPERATIONS AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT DURATION.
4. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
5. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.




### PLAN

| PIPE DIA | LENGTH (Lg) |
|---|---|
| 12" | 12' |
| 18" | 16' |
| 24" | 17' |
| 30" | 20' |
| 36" | 22' |
| 48" | 24' |
| 60" | 26' |



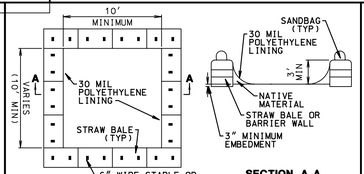

### SECTION A-A

NOTES:

1. THE FILTER FABRIC SHALL MEET THE REQUIREMENTS AS SET FORTH BY AASHTO M-288-0.
2. THE ROCK RIPRAP SHALL BE A MINIMUM OF RR-3 PER IDOT REQUIREMENTS AS NOTED IN THE IDOT STANDARD SPECIFICATIONS, LATEST EDITION.
3. THE RIPRAP SHALL BE PLACED ACCORDING TO SECTION 281 OF THE IDOT STANDARD SPECIFICATIONS, LATEST EDITION.
4. RECYCLED CONCRETE EQUIVALENT MAY BE USED PROVIDED IT HAS A DENSITY OF AT LEAST 150 PCF AND DOES NOT HAVE ANY EXPOSED STEEL OR REINFORCING.

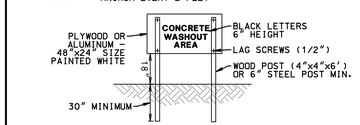
### RIP RAP AT STORM OUTLET DETAIL

NOT TO SCALE




### PLAN

### SECTION A-A



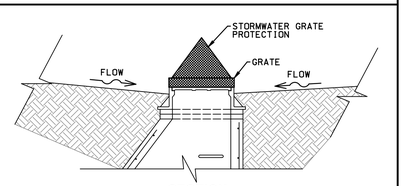

### SIGN DETAIL (OR EQUIVALENT)

NOTES:

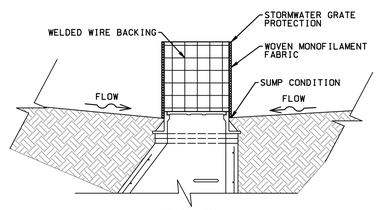
1. LAYOUT AND LOCATION AS SHOWN ON ENGINEERING PLANS OR FIELD LOCATED AS APPROVED BY MUNICIPALITY OR AUTHORIZED AGENT.
2. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING FACILITY TO A FUNCTIONAL CONDITION.
3. FACILITY SHALL BE CLEANED OR RE-CONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.

### CONCRETE WASHOUT FACILITY

NOT TO SCALE




### SECTION




### SECTION

NOTES:

1. A MAINTENANCE SCHEDULE MUST MAINTAIN A SEDIMENT ACCUMULATION OF LESS THAN 50% OF THE HEIGHT OF THE INLET PROTECTION.
2. DEVICE SHOULD BE SUPPORTED.
3. FABRIC TYPE SHOULD BE 1UM 592 STANDARD TABLE 1 CLASS 4

### MANUFACTURED ABOVE GRADE INLET PROTECTION

NOT TO SCALE

## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR SOIL EROSION AND SEDIMENTATION CONTROL

**1. General**

a) On site sediment control measures, as specified below, shall be constructed and functional prior to initiating clearing, grading, stripping, excavation or fill activities on the site.

b) The Contractor shall provide Soil Erosion and Sedimentation Control in accordance with Village ordinances, Village Standard Specifications for Improvements, "Standards and Specifications For Soil Erosion And Sediment Control" (the yellow book), the Illinois Urban Manual (latest edition), and in accordance with the approved plans, the Kane County Stormwater Management Ordinance, the Village's MS4 Permit, and as applicable both the Stormwater Pollution Prevention Plan and the Notice of Intent as issued by the Illinois Environmental Protection Agency (IEPA).

c) The Contractor shall be responsible for maintaining a log of the conditions of the soil erosion and sedimentation control measures per the National Pollutant Discharge Elimination System (NPDES) (regional or project specific) permit requirements. The contractor is obligated to review and record the status of the soil erosion and sedimentation control measures at minimum every week and after every ½" rainfall event. This log shall be kept on site, and the Village and/or Village Engineer reserves the right to review this log upon request. Soil erosion and sedimentation control measures shall be cleaned and restored as required.

d) The Village Engineer or his representative will have the authority to stop work if proper soil stabilization and sedimentation controls are not being observed.

e) Any deficiencies in soil erosion and sedimentation control measures will be reported to the Illinois Environmental Protection Agency.

**2. Soil Stabilization**

a) Topsoil Stripping – Stripped topsoil shall be stockpiled on-site (for reuse) at the location(s) designated on the approved plans and stabilized accordingly.

b) Temporary Seeding - Temporary seeding shall be provided within 7 days to any disturbed areas that are scheduled to remain denuded for longer than 15 days.

c) Permanent Seeding - Immediately following finish grading and topsoil placement, seeding or sod shall be installed in areas as designated on plans.

d) Dust Control – Under dry conditions where soil migration is an issue, the contractor will be required to wet the exposed unprotected soil surface with watering trucks to effectively eliminate soil migration. Grading activities producing dust must be suspended until the nuisance is abated. If, at the Village Engineer's discretion, proper dust control is not being observed, an order to immediately stop work will be issued until proper dust control measures are implemented.

e) Paved Areas – The aggregate base course should be installed as soon as possible to stabilize the exposed soil subgrade. In certain conditions and as recommended by a geotechnical professional, lime stabilization of roadway sub-grade may be approved by the Village Engineer. Village Engineer approval must be obtained IN WRITING prior to lime stabilization.

f) Slope Protection – Steep slopes may require additional stabilization, in addition to seeding, such as mulch, geotextiles, sod, or equal.

**3. Sediment Control**

a) For projects disturbing greater than 1 acre, the project shall comply with IEPA regulations with a Notice of Intent and Stormwater Pollution Prevention Plan.

b) For disturbed areas more than one acre, a sediment trap or equivalent control measure shall be constructed at the downslope point of the disturbed area.

c) Sediment basin and sediment trap designs shall provide for both detention storage and sediment storage. The detention storage shall be composed of equal volumes of wet detention storage and dry detention storage, and each shall be sized for the 2-year, twenty-four (24) hour runoff from the site under maximum runoff conditions during construction. The release rate of the basin shall be that rate required to achieve minimum detention times of at least ten (10) hours. The elevation of the outlet structure shall be placed such that it only drains the dry detention storage.

d) Adjacent Property Protection – Adjacent properties shall be protected from sediment deposition by preserving a vegetated buffer strip (minimum width of 25 feet) or sediment barriers (e.g. silt fence) at the lower perimeter of the lot. Where possible, both a vegetated buffer strip and sediment barrier shall be installed.

e) Stockpile Protection – Sedimentation barriers shall be provided in all areas around the perimeter of stockpile areas.

f) Storm Sewer Inlet Protection – During construction sediment shall be filtered through a filter fabric barrier around all front, side, or backyard inlets before it enters newly constructed storm sewer (straw bales are not allowed). The Village recommends all storm sewer inlet structures (including roadway and front, side, or backyard structures) utilize IPP Inlet Filters™, Marathon Materials, Inc. "Catch All Inlet Protector" sediment control inlet filters or approved equal to properly manage sediment control and to minimize storm sewer televising and cleaning which would otherwise be required prior to Village acceptance of the storm sewer system. All inlet filters shall be properly maintained until such time as all areas tributary to a particular inlet have been adequately vegetated as determined by the Village Engineer.

g) Ditch Protection – Rock dams shall be installed as ditch checks and staked in place at 250 lineal feet maximum spacing in all swales. If ditch slopes are severe, closer spacing of ditch checks may be required. Straw bales and silt fences are not allowed as ditch checks.

h) Construction Access - Construction traffic shall enter and leave the site at a designated access. Provisions shall be made to minimize the transport of sediment by runoff or vehicle tracking onto state/county/township highways or local streets. Truck washing facilities may be required. If necessary, highways or local streets shall be cleaned daily at the end of each workday or as required by the Village Engineer to keep mud and/or other debris off of any highway or street.

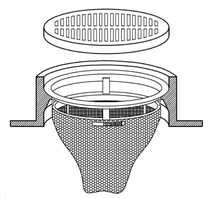
i) Roadway Cleaning & Street Sweeping – Roadways shall be kept clean during the course of construction by utilizing manual cleaning, street sweepers, or other machinery. Upon the installation of the final surface course of the roadway, absolutely no heavy machinery (e.g. skid steer, endloader) shall be utilized for roadway cleaning.

j) Removal of Control Measures – After final site stabilization is deemed achieved by the Village Engineer, all temporary erosion and sediment control measures shall be removed within 30 days.

**4. Field Review**

a) The Village Engineer or their representative shall make field reviews as described below, and shall either state that the portion of the work is completed satisfactorily or shall notify the Developer when the work fails to comply with the site development or erosion and sedimentation control plan as approved. In order to obtain field reviews and to ensure compliance with the approved erosion and sediment control plan, the grading or building permit, and this title, the Developer shall notify the Village Engineer within two (2) working days of the completion of the construction stages specified below:
   1. Upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), prior to proceeding with any other earth disturbance or grading;
   2. After stripping and clearing;
   3. After rough grading;
   4. After final grading;
   5. After seeding and landscaping deadlines; and
   6. After final stabilization and landscaping, prior to removal of sediment controls.

b) If stripping, clearing, grading and/or landscaping are to be done in phases or areas, the Developer shall give notice and request a field review at the completion of each of the above work stages in each phase or area. If a field review is not made and notification of the results given within five (5) working days after notice is received from the Developer, the Developer may continue work at his own risk, without presuming acceptance by the Village. Notification of the results of the inspection shall be given in writing to the Developer.



NOTES:

1. INLET FILTER SYSTEM SHALL CONSIST OF A REPLACEABLE REINFORCED FILTER BAG SUSPENDED FROM A RETAINER RING OR FRAME.
2. INLET FILTER SYSTEMS SHALL BE THE CATCH-ALL "HR", WITH OVERFLOW, AS FURNISHED BY MARATHON MATERIALS, INC., IPP INLET FILTER ASSEMBLY, OR PRE-APPROVED EQUAL.
3. THE FILTER BAG SHALL BE CONSTRUCTED OF A NON-WOVEN POLYPROPYLENE FILTER GEOTEXTILE FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD., A MINIMUM FLOW RATE OF 145 GAL./MIN./SQ.FT., AND DESIGNED FOR A MINIMUM SILT AND DEBRIS CAPACITY OF 2 CU. FT. THE FILTER BAG SHALL BE REINFORCED WITH A POLYESTER MESH FABRIC WITH A MINIMUM WEIGHT OF 4 OZ./SQ.YD.
4. THE FILTER BAG SHALL BE SUSPENDED FROM A GALVANIZED STEEL RING OR FRAME, CONFORMING TO ASTM-A36, UTILIZING A STAINLESS STEEL BAND AND LOCKING CLAMP. THE FRAME SHALL BE DESIGNED WITH AN OVERFLOW FEATURE TO PREVENT ANY PONDING DURING HEAVY RAINFALL.
5. FILTER BAG MUST BE INSPECTED ONCE PER WEEK AND AFTER 1/2" RAINS.

### INLET FILTER

| | | | | |
|---|---|---|---|---|
| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: SG-SE | DRAWING NUMBER: 02 | DRAWN BY: BLM |
| | DATE: 4/22/24 | | | REVISED: |

R.O.W. & REMAINING GRASSED AREA: IDOT CLASS 1 SEEDING MIXTURE
PERMANENT SEEDING MIXTURE – 100 LBS./AC. KENTUCKY BLUEGRASS, 60 LBS./AC. PERENNIAL RYEGRASS, 40 LBS./AC. CREEPING RED FESCUE
TEMPORARY SEEDING MIXTURE – 50 LBS./AC. PERENNIAL RYE GRASS, 64 LBS./AC. OATS, SPRING

GRASSED WATERWAY AREA: CLASS 5 SEEDING MIXTURE
PERMANENT SEEDING MIXTURE – 150 LBS./AC. KENTUCKY BLUEGRASS, 150 LBS./AC. SMOOTH BROME GRASS
TEMPORARY SEEDING MIXTURE – 50 LBS./AC. PERENNIAL RYEGRASS, 64 LBS./AC. OATS, SPRING

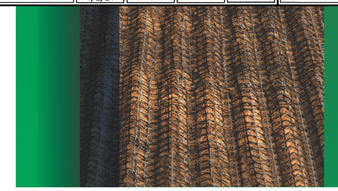
| SEEDING SCHEDULE | JAN | FEB | MARCH | APRIL | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PERMANENT SEEDING MIXTURE NONIRRIGATED | | | | | | | | | | | | |
| IRRIGATED | | | | | | | | | | | | |
| DORMANT (DOUBLE RATE) | | | | | | | | | | | | |
| TEMPORARY SEEDING MIXTURE RYE OR WHEAT | | | | | | | | | | | | |
| OATS | | | | | | | | | | | | |

FERTILIZER MIXTURE FOR PROPOSED SEEDING AREAS
NITROGEN (N) 90 LBS./AC.
PHOSPHORUS (P) 90 LBS./AC/ OR 120 LBS./AC. $P_2O_5$
POTASSIUM (K) 90 LBS./AC/ OR 120 LBS./AC. $K_2O$

EROSION CONTROL BLANKET SHALL BE PROVIDED AT ALL AREAS LOCATED WITHIN THE RIGHT OF WAY.

### SEEDING INFORMATION AND SCHEDULE

| | | | | |
|---|---|---|---|---|
| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: SG-SE | DRAWING NUMBER: 11 | DRAWN BY: CLN |
| | DATE: 4/22/24 | | | REVISED: |



RollMax Product Selection Chart

**TEMPORARY**

| | Product Description | Longevity | Typical Slope Applications (H:V) | Channel Application Thresholds |
|---|---|---|---|---|
| DS75 | Accelerated photodegradable, polypropylene top net, 100% straw fiber matrix | 45 days | 4:1 - 3:1 | 1.55 psf / 5.0 fps |
| DS150 | Accelerated photodegradable, polypropylene top & bottom net, 100% straw fiber matrix | 60 days | 3:1 - 2:1 | 1.75 psf / 6.0 fps |
| S75 | Photodegradable, polypropylene top net, 100% straw fiber matrix | 12 months | 4:1 - 3:1 | 1.55 psf / 5.0 fps |
| S150 | Photodegradable, polypropylene top & bottom net, 100% straw fiber matrix | 12 months | 3:1 - 2:1 | 1.75 psf / 6.0 fps |
| SC150 | UV-stable polypropylene top net, 70% straw/30% coconut fiber matrix, photodegradable polypropylene bottom net | 24 months | 2:1 - 1:1 | 2.0 psf / 8.0 fps |
| C125 | UV stable polypropylene top & bottom nets, 100% coconut fiber matrix | 36 months | 1:1 and Greater | 2.25 psf / 10.0 fps |
| **BIONET** | | | | |
| S75BN | Leno woven biodegradable jute top net, 100% straw fiber matrix | 12 months | 4:1 - 3:1 | 1.6 psf / 5.0 fps |
| S150BN | Woven biodegradable jute top and bottom net, 100% straw fiber matrix | 12 months | 3:1 - 2:1 | 1.85 psf / 6.0 fps |
| SC150BN | Woven biodegradable jute top and bottom net, 70% straw/30% coconut fiber matrix | 18 months | 2:1 - 1:1 | 2.10 psf / 8.0 fps |

**TEMPORARY**

| | Product Description | Longevity | Typical Slope Applications (H:V) | Channel Application Thresholds |
|---|---|---|---|---|
| C125BN | Woven biodegradable jute top and bottom net, 100% coconut fiber matrix | 36 mo. | 1:1 and Greater | 2.35 psf / 10.0 fps |
| C700BN | 700 g woven biodegradable coir top net, 100% coconut fiber matrix, woven biodegradable jute bottom net | 36+ mo. | 1:1 and Greater | 2.35 psf / 10.0 fps |
| **PERMANENT** | | | | |
| **ERONET** | | | | |
| P300 | UV-stable polypropylene (PP) top and bottom net, 100% PP fiber matrix | Permanent | 1:1 | Unvegetated 3.0 psf/ 9 fps<br>Vegetated 10 psf / 16.0 fps |
| **VMAX** | | | | |
| S200 | UV-stable PP top & bottom nets, UV-stable PP crimped center net, 100% straw fiber matrix | Permanent | 1:1 and Greater | Unvegetated 2.3 psf/8.5 fps<br>Vegetated 8 psf / 18 fps |
| SC250 | UV-stable PP top & bottom nets, UV-stable PP crimped center net, 70% straw/30% coconut fiber matrix | Permanent | 1:1 and Greater | Unvegetated 3.0 psf/9.5 fps<br>Vegetated 10 psf / 15.0 fps |
| C350 | UV-stable PP top & bottom nets, UV-stable PP crimped center net, 100% coconut fiber matrix | Permanent | 1:1 and Greater | Unvegetated 3.2 psf/ 10.5 fps<br>Vegetated 12 psf / 20 fps |
| S350BN | Woven biodegradable jute top and bottom net, 100% straw fiber matrix | Permanent | 1:1 and Greater | Unvegetated 4.0 psf/12.5 fps<br>Vegetated 14 psf / 25 fps |
| P550 | Woven biodegradable jute top and bottom net, 70% straw/30% coconut fiber matrix | Permanent | 1:1 and Greater | Vegetated TMax: 16 psf / 25 fps<br>TMax-3k: 12 psf / 20 fps |
| TMAX/ TMAX3k | 100% UV-stable PP monofilament yarns, woven into a 3-D structure | | | |




**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


LENNAR


1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# SWPPP DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 14 OF 42

PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

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GENERAL INFORMATION

SITE DESCRIPTION

A. THIS PLAN COVERS THE DEVELOPMENT OF BRIGHTON RIDGE RESIDENTIAL DEVELOPMENT.

B. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF CONSTRUCTION ACTIVITIES:
1. INSTALL PERIMETER SOIL EROSION AND SEDIMENT CONTROL MEASURES
   - SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
   - PERIMETER SILT FENCE
   - CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
   - STABILIZED CONSTRUCTION ENTRANCE
   - INLET FILTER BASKETS AND INLET SILT FENCE BOXES ON ADJACENT SITE AREAS
2. DEMOLITION OF EXISTING STRUCTURES.
3. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB).
4. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS).
5. CONSTRUCTION DETENTION FACILITIES AND OUTLET CONTROL STRUCTURE WITH OUTLET PROTECTION NOTED ON PLAN.
6. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE.
7. TEMPORARY STABILIZE TOPSOIL STOCKPILES (INCLUDING SEED AND SILT FENCE AROUND THE PERIMETER).
8. INSTALL STORM SEWER, SANITARY SEWER, AND WATER MAIN.
9. INSTALL INLET PROTECTION WITHIN ALL STORM STRUCTURES WITH OPEN GRATES.
10. PERMANENTLY STABILIZE DETENTION BASINS WITH SEED AND EROSION CONTROL BLANKET OR AS SHOWN ON THE APPROVED LANDSCAPE PLAN.
11. TEMPORARY STABILIZE ALL AREAS INCLUDING AREAS THAT HAVE REACHED TEMPORARY GRADE WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY IN THAT AREA.
12. INSTALL ROADWAYS.
13. PERMANENTLY STABILIZE GRASSY AREAS.
14. REMOVAL ALL TEMPORARY CONTROL MEASURES AFTER SITE IS STABILIZED AND RE-SEED AREAS DISTURBED BY THEIR REMOVAL.

C. THE SITE HAS A TOTAL ACREAGE OF APPROXIMATELY 140.5 ACRES. CONSTRUCTION ACTIVITY WILL DISTURB APPROXIMATELY 94.0 ACRES OF THE SITE.

D. THE RUNOFF COEFFICIENT FOR THE SITE FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES IS COMPOSITE "C"= 0.70. THE EXISTING SOILS FROM THE SITE MAINLY CONSIST OF DANABROOK SILT LOAM, EL PASO SILTY CLAY, AND OCTAGON SILT LOAM.

E. PLEASE REFER TO PAGE 13 FOR A MAP INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFFSITE SEDIMENT TRACKING, AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATIONS OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS), AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO A SURFACE WATER.

F. THE RECEIVING WATER OF THE PROPOSED DEVELOPMENT IS BLACKBERRY CREEK.

G. POTENTIAL SOURCES OF POLLUTION ASSOCIATED WITH THIS CONSTRUCTION ACTIVITY MAY INCLUDE:

| | |
|---|---|
| - SEDIMENT FROM DISTURBED SOILS | - SANITARY STATIONS |
| - FUEL TANKS | - STAGING AREAS |
| - WASTE CONTAINERS | - RAW MATERIALS (IE BAGGED PORTLAND CEMENT) |
| - OIL OR OTHER PETROLEUM PRODUCTS | - ADHESIVES |
| - TAR | - SOLVENTS |
| - DETERGENTS | - FERTILIZERS |
| - PAINTS | - LITTER |
| - CONSTRUCTION DEBRIS | - LANDSCAPE WASTE |
| - CONCRETE AND CONCRETE TRUCKS | |

ADDITIONAL MEASURES REQUIRED:

1. STABILIZATION: STABILIZATION PRACTICES MUST BE INITIATED WITHIN ONE (1) WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN ANY AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED AS PROVIDED BELOW:
   A. WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
   B. ON AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD CAN BE USED.
   C. THE FOLLOWING PRACTICES ARE ACCEPTABLE STABILIZATION MEASURES:
      - PERMANENT SEEDING: IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
      - TEMPORARY SEEDING: MAY CONSIST OF SPRING OATS (100 LBS/ACRE) AND/OR WHEAT OR CEREAL RYE (150 LBS/ACRE).
      - MULCHING
      - GEOTEXTILES
      - SODDING
      - VEGETATIVE BUFFER STRIPS
      - PROTECTION OF TREES
      - PRESERVATION OF MATURE VEGETATION
      - STAGED OR STAGGERED DEVELOPMENT

   THE APPROPRIATE STABILIZATION MEASURE SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME THE CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE.

2. WASTE MANAGEMENT

   NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT. ALL WASTE MATERIALS SHOULD BE COLLECTED AND STORED IN APPROVED RECEPTACLES. NO WASTES SHOULD BE PLACED IN ANY LOCATION OTHER THAN IN THE APPROVED CONTAINERS APPROPRIATE FOR THE MATERIALS BEING DISCARDED. THERE SHOULD BE NO LIQUID WASTES DEPOSITED INTO DUMPSTERS OR OTHER CONTAINERS WHICH MAY LEAK. RECEPTACLES WITH DEFICIENCIES SHOULD BE REPLACED AS SOON AS POSSIBLE AND THE APPROPRIATE CLEAN-UP PROCEDURE SHOULD TAKE PLACE, IF NECESSARY. CONSTRUCTION WASTE MATERIAL IS NOT TO BE BURIED ONSITE. WASTE DISPOSAL SHOULD COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS

   ONSITE HAZARDOUS MATERIAL STORAGE SHOULD BE MINIMIZED AND STORED IN LABELED, SEPARATE RECEPTACLES FROM NON-HAZARDOUS WASTE. ALL HAZARDOUS WASTE SHOULD BE STORED AND DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND FEDERAL REGULATION OR BY THE MANUFACTURER.

3. CONCRETE WASTE MANAGEMENT

   CONCRETE WASTE OR WASHOUT SHOULD NOT BE ALLOWED IN THE STREET OR ALLOWED TO REACH A STORM WATER DRAINAGE SYSTEM OR WATERCOURSE. A SIGN SHOULD BE POSTED AT EACH LOCATION TO IDENTIFY THE WASHOUT. TO THE EXTENT PRACTICABLE, CONCRETE WASHOUT AREAS SHOULD BE LOCATED A REASONABLE DISTANCE FROM A STORM WATER DRAINAGE INLET OR WATERCOURSE. CONCRETE WASHOUT AREAS SHOULD BE LOCATED AT LEAST 10 FEET BEHIND THE CURB. IF THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD. A STABILIZED ENTRANCE THAT MEETS ILLINOIS URBAN MANUAL STANDARDS SHOULD BE INSTALLED AT EACH WASHOUT AREA.

   THE CONTAINMENT FACILITIES SHOULD BE OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND CONCRETE WASTE MATERIALS INCLUDING ENOUGH CAPACITY FOR ANTICIPATED LEVELS OF RAINWATER. THE DRIED CONCRETE WASTE MATERIAL SHOULD BE PICKED UP AND DISPOSED OF PROPERLY WHEN 75% CAPACITY IS REACHED. HARDENED CONCRETE CAN BE PROPERLY RECYCLED AS APPROVED BY THE MUNICIPALITY AND USED AGAIN ONSITE OR HAULED OFFSITE TO AN APPROPRIATE LANDFILL.

4. DEWATERING OPERATIONS

   DURING DEWATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). DISCHARGES SHALL BE TREATED TO MINIMIZE DISCHARGE OF POLLUTANTS. INLET HOSES SHOULD BE PLACED IN A STABILIZED SUMP PIT OR FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. DISCHARGE OF VISIBLE SOLIDS OR FOAMS IS NOT PERMITTED. PUMPING OPERATIONS SHOULD BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (I.E. STONE, SEDIMENT FILTER BAG, OR BOTH). WHEN NECESSARY, STABILIZED CONVEYANCE CHANNELS SHOULD BE INSTALLED TO DIRECT WATER TO THE DESIRED LOCATION. ADDITIONAL BMP'S MAY BE REQUIRED AT THE OUTLET AREA AS REQUESTED BY THE MUNICIPALITY, OR OTHER REVIEWING AGENCY.

5. DUST CONTROL

   DUST SHALL BE MINIMIZED ON AREAS OF EXPOSED SOILS THROUGH THE APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES AS LISTED BELOW:

| | |
|---|---|
| - SPRINKLING/IRRIGATION | - VEGETATIVE COVER |
| - MULCH | - SPRAY-ON SOIL TREATMENTS |
| - TILLAGE | - STONE |
| - WATER TRUCK | |

6. OFF-SITE VEHICLE TRACKING

   STABILIZED CONSTRUCTION ENTRANCE(S) SHOULD BE INSTALLED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. TO REDUCE EXCESS SEDIMENT, DIRT OR STONE TRACKED FROM THE SITE. SEDIMENT TRACKED OFFSITE ONTO ADJACENT ROADWAYS SHALL BE CLEANED BY THE END OF THE SAME BUSINESS DAY IN WHICH THE TRACK-OUT OCCURS OR BY THE END OF THE NEXT BUSINESS DAY IF TRACK-OUT OCCURS ON A NON-BUSINESS DAY. ACCUMULATED SEDIMENT AND STONE SHOULD BE REMOVED FROM THE STABILIZED ENTRANCE AS NEEDED. VEHICLES HAULING ERODIBLE MATERIAL TO AND FROM THE CONSTRUCTION SITE SHOULD BE COVERED WITH A TARP. HOSING OR SWEEPING SEDIMENT INTO THE STORMWATER SYSTEM OR WATERS OF THE U.S. IS NOT PERMITTED.

7. CONCRETE CUTTING

   CONCRETE WASTE MANAGEMENT SHOULD BE IMPLEMENTED TO CONTAIN AND DISPOSE OF SAW-CUTTING SLURRIES. CONCRETE CUTTING SHOULD NOT TAKE PLACE DURING OR IMMEDIATELY AFTER A RAINFALL EVENT. WASTE GENERATED FROM CONCRETE CUTTING SHOULD BE CLEANED-UP AND DISPOSED INTO THE CONCRETE WASHOUT FACILITY AS DESCRIBED ABOVE.

8. VEHICLE STORAGE AND MAINTENANCE

   WHEN NOT IN USE, VEHICLES UTILIZED IN THE DEVELOPMENT OPERATIONS OF THE SITE SHOULD BE STORED IN A DESIGNATED UPLAND AREA AWAY FROM ANY NATURAL OR CREATED WATERCOURSE, POND, DRAINAGE-WAY OR STORM DRAIN. WHENEVER POSSIBLE VEHICLE MAINTENANCE, FUELING, AND WASHING SHOULD OCCUR OFFSITE. IF ALLOWED ON-SITE; VEHICLE MAINTENANCE (INCLUDING BOTH ROUTINE MAINTENANCE AS WELL AS ON-SITE REPAIRS) SHOULD BE MADE WITHIN THE DESIGNATED AREA TO PREVENT THE MIGRATION OF MECHANICAL FLUIDS (OIL, ANTIFREEZE, ETC.) INTO WATERCOURSES, WETLANDS OR STORM DRAINS. DRIP PANS OR ABSORBENT PADS SHOULD BE USED FOR ALL VEHICLE AND EQUIPMENT MAINTENANCE ACTIVITIES THAT INVOLVE GREASE, OIL, SOLVENTS, OR OTHER VEHICLE FLUIDS. CONSTRUCTION VEHICLES SHOULD BE INSPECTED FREQUENTLY TO IDENTIFY ANY LEAKS; LEAKS SHOULD BE REPAIRED IMMEDIATELY OR THE VEHICLE SHOULD BE REMOVED FROM SITE. DISPOSE OF ALL USED OIL, ANTIFREEZE, SOLVENTS AND OTHER AUTOMOTIVE-RELATED CHEMICALS ACCORDING TO MANUFACTURER OR MSDS INSTRUCTIONS. CONTRACTORS SHOULD IMMEDIATELY REPORT SPILLS TO THE OWNER FOR PROPER REMEDIATION.

   WASH WATERS, FROM EQUIPMENT OR VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS, MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.

9. MATERIAL STORAGE

   MATERIALS AND OR CONTAMINANTS SHOULD BE STORED IN A MANNER THAT MINIMIZES THE POTENTIAL TO DISCHARGE INTO STORM DRAINS OR WATERCOURSES. AN ONSITE AREA SHOULD BE DESIGNATED FOR MATERIAL DELIVERY AND STORAGE. ALL MATERIALS KEPT ONSITE SHOULD BE STORED IN THEIR ORIGINAL CONTAINERS WITH LEGIBLE LABELS, AND IF POSSIBLE UNDER A ROOF OR OTHER ENCLOSURE. LABELS SHOULD BE REPLACED IF DAMAGED OR DIFFICULT TO READ. BERMED-OFF STORAGE AREAS ARE AN ACCEPTABLE CONTROL MEASURE TO PREVENT CONTAMINATION OF STORM WATER. MSDS SHEETS SHOULD BE AVAILABLE FOR REFERENCING CLEAN UP PROCEDURES. ANY RELEASE OF CHEMICALS OR CONTAMINANTS SHOULD BE IMMEDIATELY CLEANED UP AND DISPOSED OF PROPERLY. CONTRACTORS SHOULD IMMEDIATELY REPORT ALL SPILLS TO THE OWNER, WHO SHOULD NOTIFY THE APPROPRIATE AGENCIES, IF NEEDED.

   TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS ONSITE, HAZARDOUS PRODUCTS SHOULD BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RE-SEALABLE. THE ORIGINAL LABELS AND MSDS DATA SHOULD BE RETAINED ONSITE AT ALL TIMES. HAZARDOUS MATERIALS AND ALL OTHER MATERIAL ONSITE SHOULD BE STORED IN COVERED OR DESIGNATED CONTAINMENT AREAS IN ACCORDANCE WITH MANUFACTURER OR MSDS SPECIFICATIONS. WHEN DISPOSING OF HAZARDOUS MATERIALS, FOLLOW MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS.

10. SANITARY STATIONS

   TO THE EXTENT PRACTICABLE, PORT-A-POTTIES SHOULD BE LOCATED AT A MINIMUM 8 FEET BEHIND THE CURB AND GUTTER OF THE INTERNAL ROADS AND BE LOCATED IN AN AREA THAT DOES NOT DRAIN TO ANY PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR STORM WATER STRUCTURES AND SHOULD BE ANCHORED TO THE GROUND TO PREVENT FROM TIPPING OVER. PORT-A-POTTIES LOCATED ON IMPERVIOUS SURFACES SHOULD BE PLACED ON TOP OF A SECONDARY CONTAINMENT DEVICE, OR BE SURROUNDED BY A CONTROL DEVICE (I.E. GRAVEL-BAG BERM).

11. SPILL PREVENTION

   DISCHARGES OF A HAZARDOUS SUBSTANCE OR OIL CAUSED BY A SPILL (E.G., A SPILL OF OIL INTO A SEPARATE STORM SEWER OR WATERS OF THE STATE) ARE NOT AUTHORIZED BY THIS PERMIT. IF A SPILL OCCURS, NOTIFY THE OWNER IMMEDIATELY. THE CONSTRUCTION SITE SHOULD HAVE THE CAPACITY TO CONTROL, CONTAIN, AND REMOVE SPILLS IF THEY OCCUR. SPILLS SHOULD BE CLEANED IMMEDIATELY AFTER DISCOVERY IN ACCORDANCE WITH MSDS AND NOT BURIED ON SITE OR WASHED INTO STORM DRAINS OR WATERS OF THE STATE.

   SPILLS IN EXCESS OF FEDERAL REPORTABLE QUANTITIES (AS ESTABLISHED UNDER 40 CFR PARTS 110 ,117, OR 302), SHOULD BE REPORTED TO THE NATIONAL RESPONSE CENTER BY CALLING (800) 424-8802. MSDS OFTEN INCLUDE INFORMATION ON FEDERAL REPORTABLE QUANTITIES FOR MATERIALS. SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHOULD BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE. WHEN CLEANING UP A SPILL, THE AREA SHOULD BE KEPT WELL VENTILATED AND APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT SHOULD BE USED TO MINIMIZE INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

   IN ADDITION TO PROPER WASTE MANAGEMENT, CONCRETE WASTE MANAGEMENT, CONCRETE CUTTING, VEHICLE STORAGE AND MAINTENANCE, MATERIAL STORAGE, AND SANITARY STATION PROTECTION, THE FOLLOWING MINIMUM PRACTICES SHOULD BE FOLLOWED TO REDUCE THE RISK OF SPILLS:
   - ON-SITE VEHICLES SHOULD BE MONITORED FOR LEAKS AND SHOULD RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.
   - PETROLEUM PRODUCTS SHOULD BE STORED IN TIGHTLY SEALED AND CLEARLY LABELED CONTAINERS.
   - ALL PAINT CONTAINERS SHOULD BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHOULD BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS, AND SHOULD NOT BE DISCHARGED TO THE STORM SEWER.
   - CONTRACTORS SHOULD FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL OF MATERIALS.

MAINTENANCE

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT SHOULD BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATION CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES STORMWATER UTILITY STRUCTURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN AND STANDARD SPECIFICATIONS.

STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCES SHOULD BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC STREETS. MAINTENANCE INCLUDES TOP DRESSING WITH ADDITIONAL STONE AND REMOVING TOP LAYERS OF STONES AND SEDIMENT. THE SEDIMENT RUN-OFF ONTO THE PUBLIC RIGHT OF WAY SHOULD BE REMOVED IMMEDIATELY.

RIPRAP OUTLET PROTECTION: RIPRAP SHOULD BE INSPECTED FOR ANY SCOUR BENEATH THE RIPRAP OR FOR STONES THAT HAVE BEEN DISLODGED. SEDIMENT ACCUMULATION IN THE OUTFALL AREA SHOULD BE REMOVED AS NEEDED.

CONCRETE WASHOUT AREA: EXISTING FACILITIES SHOULD BE CLEANED OUT, OR NEW FACILITIES SHOULD BE CONSTRUCTED AND OPERATIONAL ONCE THE EXISTING WASHOUT IS 75% FULL. WASHOUTS SHOULD BE INSPECTED FREQUENTLY TO ENSURE THAT PLASTIC LININGS ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. WHEN THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD, THE PAVED ROAD SHOULD BE INSPECTED FOR ACCUMULATED CONCRETE WASTE. ANY ACCUMULATED CONCRETE WASTE ON THE ROAD, CURB, OR GUTTER SHOULD BE REMOVED AND PROPERLY DISPOSED.

EROSION CONTROL BLANKET: THE BLANKET AND STAPLES SHOULD BE INSPECTED FREQUENTLY AND SHALL BE INSTALLED TO THE ILLINOIS URBAN MANUAL, UNLESS OTHERWISE INSTRUCTED BY THE MANUFACTURER. EROSION OCCURRING UNDERNEATH THE BLANKET SHOULD BE BACK-FILLED AND SEEDED WITH THE APPROPRIATE SEED MIX. ADDITIONAL BMP'S MAY NEED TO BE INSTALLED TO REDUCE EROSION UNDER THE BLANKET.

SILT FILTER FENCE: SILT FENCES SHOULD BE INSPECTED REGULARLY FOR UNDERCUTTING WHERE THE FENCE MEETS THE GROUND, OVERTOPPING, AND TEARS ALONG THE LENGTH OF THE FENCE. DEFICIENCIES SHOULD BE REPAIRED IMMEDIATELY. REMOVE ACCUMULATED SEDIMENTS FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-HALF THE FENCE HEIGHT. DURING FINAL STABILIZATION, PROPERLY DISPOSE OF ANY SEDIMENT THAT HAS ACCUMULATED ON THE SILT FENCE. INSTANCES WHEN AREAS OF SILT FENCE CONTINUALLY FAIL, REPLACE SILT FENCE WITH ANOTHER BMP AS SEEN FIT.

INLET PROTECTION: INLET FILTERS SHOULD BE INSPECTED FOR PROPER FILTERING. STORMWATER INLET STRUCTURE PROTECTION MEASURES SHALL BE CLEANED OR REMOVED AND REPLACED AS SEDIMENT ACCUMULATES, FILTERS BECOME CLOGGED, FILTER BAGS ARE MORE THAN 50% FILLED, OR PERFORMANCE IS COMPROMISED. SEDIMENT ACCUMULATIONS ADJACENT TO INLET PROTECTION MEASURES SHALL BE CLEANED BY THE END OF THE SAME BUSINESS DAY ON WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING BUSINESS DAY IF REMOVAL IN THE SAME BUSINESS DAY IS NOT FEASIBLE. DO NOT PUNCTURE HOLES IN FILTERS IF PONDING OCCURS.

SEDIMENT BASIN: SEDIMENT BASINS SHALL BE CLEANED WHEN ACCUMULATED SEDIMENT HAS REACHED 50% CAPACITY. POST CONSTRUCTION CLEANING OF ACCUMULATED SEDIMENT SHALL BE CONDUCTED IF THE BASIN IS TO REMAIN AFTER CONSTRUCTION IS COMPLETE.

INSPECTIONS

THE OWNER SHALL DESIGNATE A QUALIFIED PERSONNEL TO BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL OBSERVATION REPORTING. THIS QUALIFIED PERSONNEL SHALL MEET THE REQUIREMENTS NOTED IN THE ILR10 PERMIT CONDITIONS AND LOCAL CODES. SITE OBSERVATIONS SHOULD OCCUR AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OR BY THE END OF THE FOLLOWING BUSINESS OR WORK DAY THAT IS 0.5 INCHES OR GREATER, OR EQUIVALENT SNOWFALL. OBSERVATIONS MAY BE REDUCED TO ONCE A MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS. WEEKLY OBSERVATIONS SHOULD RECOMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS 0.5" OR GREATER RAIN EVENT, OR A DISCHARGE DUE TO SNOWMELT OCCURS. AREAS INACCESSIBLE DURING INSPECTIONS DUE TO FLOODING OR OTHER UNSAFE CONDITIONS SHALL BE INSPECTED WITHIN 72 HOURS OF BECOMING ACCESSIBLE.

SITE OBSERVATION REPORTS SHOULD BE MAINTAINED ONSITE AS PART OF THE SWPPP. EACH SITE OBSERVATION SHALL INCLUDE THE FOLLOWING COMPONENTS:

A. DISTURBED AREAS AND AREAS USED FOR THE STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE CHECKED FOR EVIDENCE OF, OR POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY HAVE BEEN INSTALLED AND ARE OPERATING CORRECTLY. WHERE DISCHARGE POINTS ARE ACCESSIBLE, THEY SHOULD BE CHECKED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHOULD BE CHECKED FOR OFF-SITE SEDIMENT TRACKING. ALL PUMPING OPERATIONS AND ALL OTHER POTENTIAL NON-STORM WATER DISCHARGES SHOULD BE OBSERVED.

B. BASED ON THE RESULTS OF THE SITE OBSERVATION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED, AND THE POLLUTION PREVENTION MEASURES DESCRIBED IN THIS PLAN SHALL BE REVISED AS APPROPRIATE, AS SOON AS PRACTICABLE AFTER THE OBSERVATION. THE MODIFICATIONS, IF ANY, SHALL PROVIDE FOR TIMELY IMPLEMENTATION OF ANY CHANGES TO THE PLAN WITHIN 7 CALENDAR DAYS FOLLOWING THE SITE OBSERVATION.

C. A REPORT SUMMARIZING THE SCOPE OF THE OBSERVATION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE OBSERVATION, THE DATE(S) OF THE OBSERVATION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PARAGRAPH B ABOVE SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE OF FINAL STABILIZATION OR PERMIT COVERAGE IS TERMINATED. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THE ILR10 NPDES PERMIT.

D. THE OWNER SHALL NOTIFY THE APPROPRIATE AGENCY FIELD OPERATIONS SECTION OFFICE BY EMAIL AT EPA.SWNONCOMP@ILLINOIS.GOV, TELEPHONE, OR FAX WITHIN 24 HOURS OF ANY INCIDENCE OF NONCOMPLIANCE FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING A SITE OBSERVATION, OR FOR VIOLATIONS OF ANY CONDITION OF THE PERMIT. THE OWNER SHALL COMPLETE AND SUBMIT WITHIN 5 DAYS AN INCIDENCE OF NONCOMPLIANCE(ION) REPORT FOR ANY VIOLATION OF THE STORM WATER POLLUTION PREVENTION PLAN OBSERVED DURING AN INSPECTION CONDUCTED. SUBMISSION SHALL BE ON FORMS PROVIDED BY THE AGENCY AND INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT, WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE.

E. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY AS DEFINED IN PART VI.G OF THE ILR10 NPDES PERMIT (SIGNATORY REQUIREMENTS).

F. ALL REPORTS OF NONCOMPLIANCE SHALL BE MAILED TO THE AGENCY AT THE FOLLOWING ADDRESS:
   ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
   DIVISION OF WATER POLLUTION CONTROL
   COMPLIANCE ASSURANCE SECTION
   1021 NORTH GRAND AVENUE EAST
   POST OFFICE BOX 19276
   SPRINGFIELD, ILLINOIS 62794-9276

NON-STORM WATER DISCHARGES

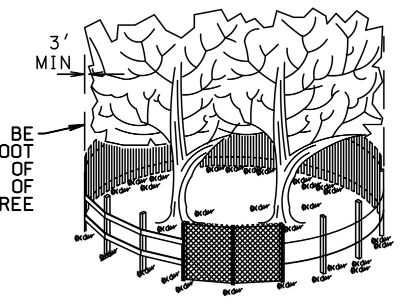
NON-STORM WATER FLOWS THAT MAY BE COMBINED WITH STORM WATER DISCHARGES ARE INCLUDED WITHIN THIS PLAN. THESE DISCHARGES INCLUDE: DISCHARGES FROM FIRE FIGHTING ACTIVITIES; FIRE HYDRANT FLUSHINGS; WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED; WATERS USED TO CONTROL DUST; POTABLE WATER SOURCES INCLUDING UNCONTAMINATED WATERLINE FLUSHINGS; LANDSCAPE IRRIGATION DRAINAGES; ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT USE DETERGENTS; PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED; UNCONTAMINATED AIR CONDITIONING CONDENSATE; UNCONTAMINATED SPRING WATER; UNCONTAMINATED GROUND WATER; AND FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.

THE FOLLOWING NON-STORM WATER DISCHARGES ARE PROHIBITED: CONCRETE AND WASTEWATER FROM WASHOUT OF CONCRETE (UNLESS MANAGED BY AN APPROPRIATE CONTROL), WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS, FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE, SOAPS, SOLVENTS, OR DETERGENTS, TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE, OR ANY OTHER POLLUTANT THAT COULD CAUSE OR TEND TO CAUSE WATER POLLUTION.

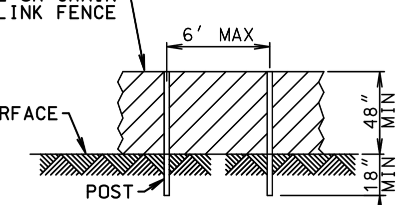
DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING TRENCHES AND EXCAVATIONS ARE ALLOWABLE IF MANAGED BY APPROPRIATE CONTROLS.

NATURAL BUFFERS

PROJECTS WITHIN 50 FEET OF WATERS OF THE UNITED STATES MUST PROVIDE AN UNDISTURBED NATURAL 50 FOOT BUFFER OR OTHER EROSION AND SEDIMENT CONTROL MEASURES AS IDENTIFIED OR OTHERWISE COORDINATED WITH APPLICABLE LOCAL AND STATE PERMITTING AGENCIES.




SIDE VIEW




POST AND FENCE DETAIL

GENERAL NOTES

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO IMPLEMENTING CONSTRUCTION ACTIVITIES.
2. NO TREE CUTTING AND/OR PRUNING SHALL BE ALLOWED UNLESS ABSOLUTELY NECESSARY. ANY NECESSARY PRUNING SHALL BE IN ACCORDANCE WITH ANSI A300 STANDARDS.
3. THE FENCE SHALL BE LOCATED A MINIMUM OF 3 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
4. FENCE POSTS SHALL BE EITHER 6-FOOT STEEL POSTS AT 1.33 LBS/FOOT OR 2"X2" WOOD POSTS.
5. THE FENCE MAY BE EITHER 48" HIGH SNOW FENCE, PLASTIC WEB FENCING (SNOW FENCE) OR ANY OTHER MATERIAL AS APPROVED BY THE ENGINEER.
6. AS NECESSARY TO INDICATE TREE PRESERVATION AREAS, SIGNAGE INDICATING "TREE PRESERVATION AREA, DO NOT ENTER" SHALL BE PLACED ON THE FENCING.
7. TREE PROTECTION FENCING SHALL BE CONTINUOUSLY MONITORED AND ANY NECESSARY MAINTENANCE REPAIRS SHALL BE MADE IMMEDIATELY.

INSTALLATION

1. PLACE BARRIERS AROUND PROTECTED AND PRESERVED AREAS TO PREVENT THE APPROACH OF EQUIPMENT AT THE DRIP LINE OF TREES TO BE RETAINED.
2. NO TREE ROOTS SHALL BE CUT INSIDE THE TREE DRIP LINE.
3. DO NOT PLACE EQUIPMENT, CONSTRUCTION MATERIALS, TOPSOIL, OR FILL DIRT WITHIN THE LIMIT OF THE DRIP LINE OF THE TREES TO BE SAVED.
4. TREE PROTECTION BARRIERS SHALL BE REMOVED DURING FINAL SITE CLEANUP.

**TREE PROTECTION FENCE DETAIL**

NOT TO SCALE




Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com
MACKIE CONSULTANTS


LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

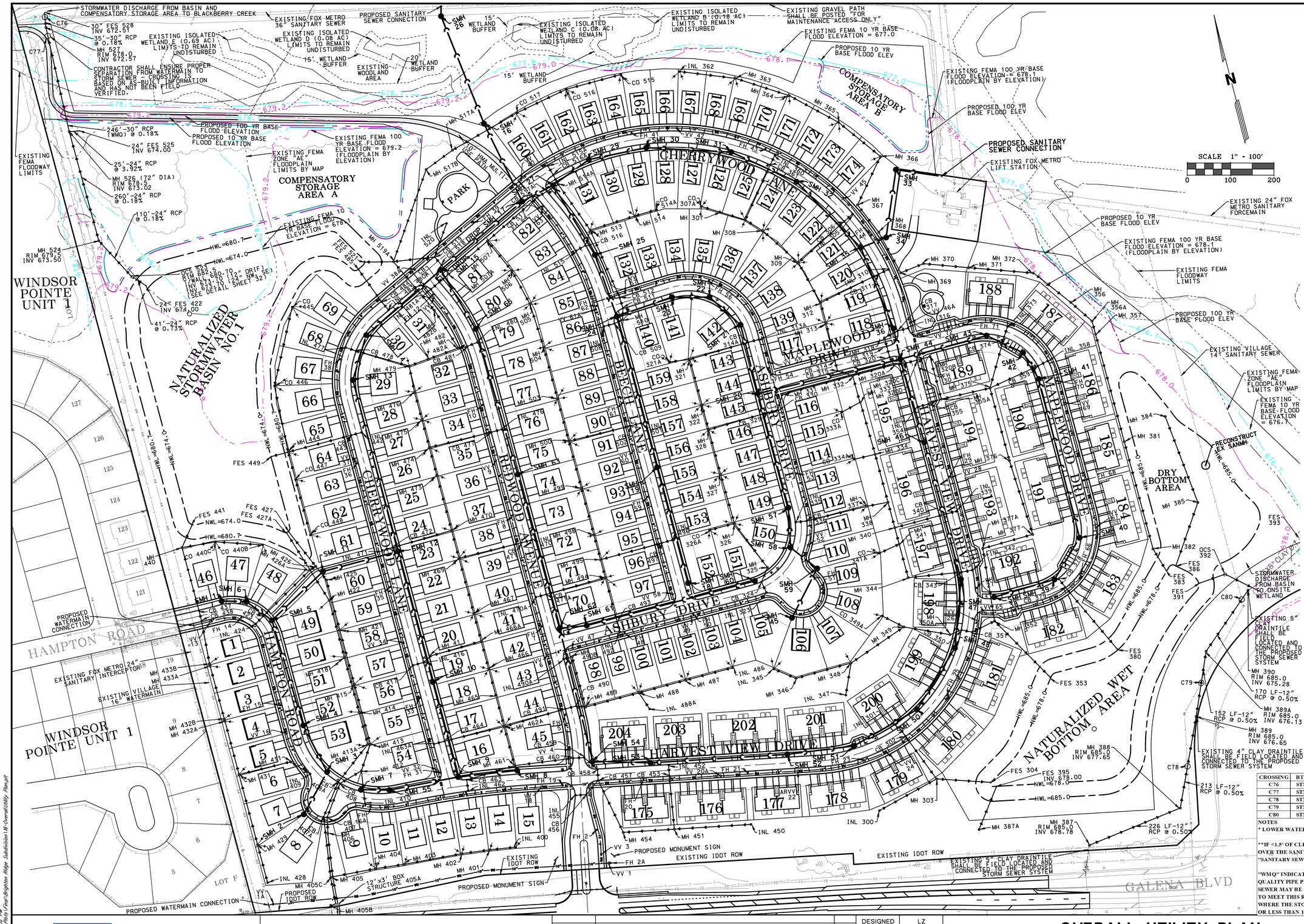
**SWPPP SPECIFICATIONS**
**BRIGHTON RIDGE**
**SUGAR GROVE, ILLINOIS**

SHEET 15 OF 42

PROJECT NUMBER: 4930


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UNDERGROUND UTILITY GENERAL NOTES

1. ALL MANHOLES AND CATCH BASINS SHALL BE 48-INCH DIAMETER, UNLESS OTHERWISE INDICATED.
2. ALL SANITARY SEWER, LESS THAN 20 FEET DEEP, SHALL BE PVC, SDR 26, UNLESS OTHERWISE INDICATED. ALL SANITARY SEWERS GREATER THAN 20-FEET DEEP SHALL BE PVC DR 18, UNLESS OTHERWISE INDICATED. PVC SANITARY SEWER SHALL HAVE ELASTOMERIC JOINTS IN CONFORMANCE WITH ASTM D-3212.
3. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE, CLASS 52, AWWA C-600 WITH "PUSH-ON" TYPE JOINTS, UNLESS OTHERWISE INDICATED. ALL WATER MAIN SHALL HAVE A MINIMUM OF 5'-6" OF COVER FROM TOP OF WATERMAIN TO FINISHED GRADE.
4. ALL STORM SEWERS SHALL BE REINFORCED CONCRETE PIPE, MINIMUM CLASS III, WITH ASTM C76 PIPE AND C443 JOINTS, UNLESS OTHERWISE INDICATED. ALL STORM SEWERS WHICH ARE LOCATED IN THE SIDE YARD SHALL HAVE "O" -RING GASKETED JOINTS. ALL OTHER SEWERS SHALL HAVE BITUMINOUS MASTIC JOINTS.
5. GRANULAR TRENCH BACKFILL (CA-7) SHALL BE PROVIDED FOR ALL SANITARY, WATER AND STORM UTILITIES WHEN THE TRENCH LIMITS FALL WITHIN TWO FEET OF STREETS, SIDEWALKS, DRIVEWAYS, MULTI-USE PATH AND AS NOTED ON THE SPECIFICATIONS.
6. OVERHEAD SANITARY SEWER IS REQUIRED FOR ALL HOMES.
7. ALL SUMP PUMPS MUST BE CONNECTED TO THE STORM SEWER SYSTEM. SUMP PUMP CONNECTIONS SHALL BE 4" PVC, UNLESS OTHERWISE NOTED.
8. ALL WATERMAIN AND WATER SERVICE LINES SHALL BE PROTECTED FROM OTHER UTILITIES IN ACCORDANCE WITH SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS.
9. ALL DRAIN TILES ENCOUNTERED DURING MASS GRADING UTILITY WORK MUST BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM. A RECORD MUST BE KEPT, OF ANY DRAIN TILE ENCOUNTERED, TO BE INCLUDED WITH THE RECORD DRAWINGS.
10. ALL UNDERGROUND UTILITY INFORMATION NOTED ON THE PLANS IS BASED ON INFORMATION OBTAINED FROM THE MUNICIPALITY, UTILITY COMPANIES OR FIELD MEASUREMENTS. THIS INFORMATION, WHILE BELIEVED TO BE COMPLETE AND ACCURATE, CANNOT BE GUARANTEED.
11. CONTRACTOR SHALL VERIFY ALL BUILDING SERVICE LOCATIONS AND SIZES WITH ARCHITECTURAL PLANS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER OR OWNER OF ANY DISCREPANCIES.
12. CONTRACTOR SHALL CONTACT JULIE (1-800-892-0123) PRIOR TO START OF CONSTRUCTION TO LOCATE ALL UTILITIES WITHIN THE RIGHT-OF-WAY.
13. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES AT ALL PROPOSED CONNECTIONS PRIOR TO START OF CONSTRUCTION AND NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES.
14. FIELD LOCATION OF ALL HOUSE SERVICES TO BE VISIBLY REMARKED, SUPPLIED BY CONTRACTOR AND SHOWN ON RECORD DRAWINGS. SEE GENERAL SPECIFICATIONS SHEET FOR MARKING WATER AND SANITARY SERVICES ON CURB.
15. A TEN (10) FOOT MINIMUM SEPARATION SHALL BE PROVIDED BETWEEN THE WATERMAIN SERVICE AND THE SANITARY OR STORM SEWER SERVICES.
16. IN CASE OF CONFLICTS, THE MUNICIPALITY STANDARDS AND FOX METRO SPECIFICATIONS SHALL TAKE PRECEDENCE.
17. PLUMBING CONTRACTOR TO MAKE ALL CONNECTIONS WITH BUILDING SERVICES CONSTRUCTED BY UTILITY CONTRACTOR. SITE UTILITY CONTRACTOR TO CONSTRUCT SERVICES TO WITHIN 5-FEET OF BUILDING, EXCEPT WATER INTO BUILDING, 1-FOOT ABOVE FLOOR WITH BLIND FLANGE AND PROVIDE TESTING.
18. EXISTING PAVEMENT REMOVED FOR UTILITY CONSTRUCTION SHALL BE DONE BY THE RESPECTIVE UTILITY COMPANY AND PAID FOR SEPARATELY BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THIS WORK INCIDENTAL TO THE CONTRACT.
19. EXISTING OR PROPOSED MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS REQUIRING OVER 8-INCHES OF ADJUSTMENT RINGS SHALL USE AN ADDITIONAL BARREL SECTION TO MAINTAIN A MAXIMUM OF 8-INCH TOTAL ADJUSTMENT RING DEPTH.
20. ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT A DEPTH OF NO MORE THAN 6-7 FEET.
21. ADHERENCE TO THE SPECIFICATIONS OF FOX METRO WATER RECLAMATION DISTRICT IS REQUIRED.
22. EXPECTED RISERS FOR LOTS 26-31, 63-69, 118-120 TO BE FIELD VERIFIED. SEE RISER DETAIL ON SHEET 37.
23. PER VILLAGE OF SUGAR GROVE PUBLIC WORKS, NO WATERMAIN SHALL BE CONSTRUCTED WITH A CASING PIPE TO MEET WATERMAIN SEPARATION REQUIREMENTS.

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C76 | STM | 672.17 | SAN | 667.54 | 4.63 |
| C77 | STM | 672.30 | WTR | 642.80 | 29.50 |
| C78 | STM | 676.93 | SAN | 666.92 | 10.02 |
| C79 | STM | 676.04 | SAN | 666.30 | 9.74 |
| C80 | STM | 675.17 | SAN | 673.17 | 2.00 |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


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| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
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| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 100' |

# OVERALL UTILITY PLAN
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

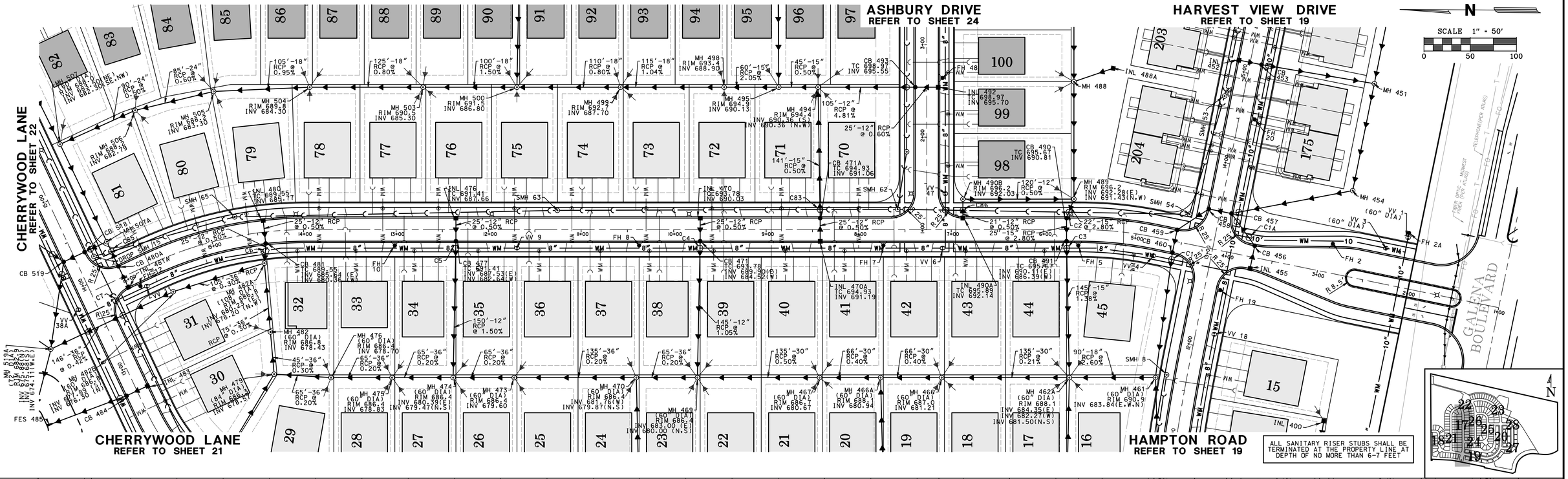
SHEET 16 OF 42

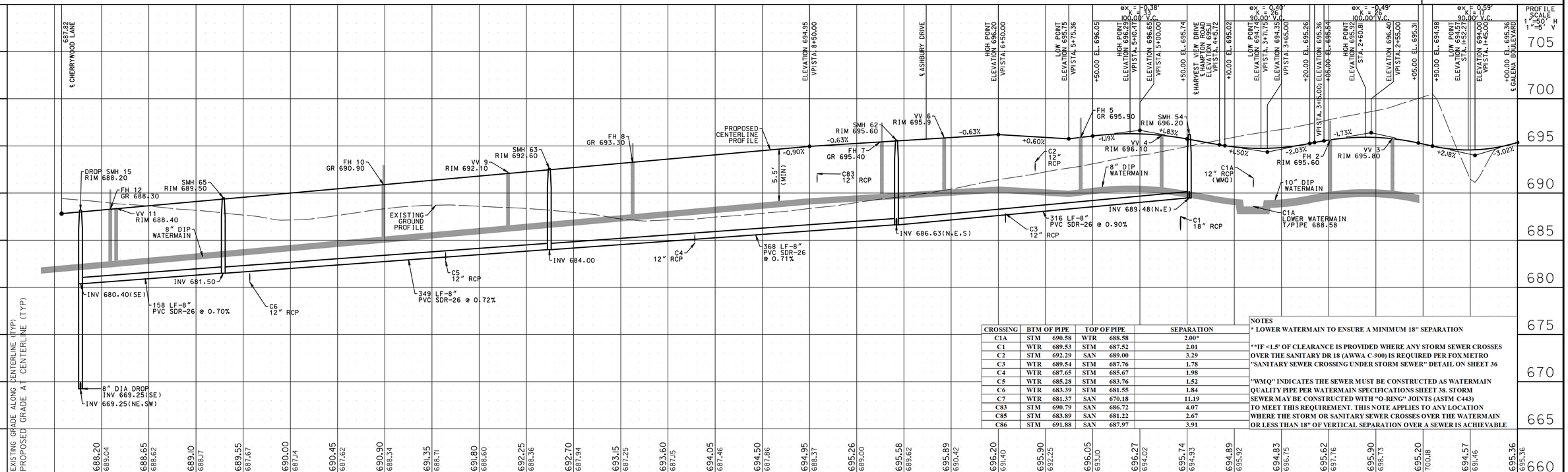
PROJECT NUMBER: 4930

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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C1A | STM | 690.58 | WTR | 688.58 | 2.00* |
| C1 | WTR | 689.53 | STM | 687.52 | 2.01 |
| C2 | STM | 692.29 | SAN | 689.00 | 3.29 |
| C3 | WTR | 689.54 | STM | 687.76 | 1.78 |
| C4 | WTR | 687.65 | STM | 685.67 | 1.98 |
| C5 | WTR | 685.28 | STM | 683.76 | 1.52 |
| C6 | WTR | 683.39 | STM | 681.55 | 1.84 |
| C7 | WTR | 681.37 | SAN | 670.18 | 11.19 |
| C83 | STM | 690.79 | SAN | 686.72 | 4.07 |
| C85 | STM | 683.89 | SAN | 681.22 | 2.67 |
| C86 | STM | 691.88 | SAN | 687.97 | 3.91 |

NOTES
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Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
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FAX: 224-293-3101


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|---|---|---|
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| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# REDWOOD AVENUE - STA. 1+00 TO 16+42
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 17 OF 42

PROJECT NUMBER: 4930


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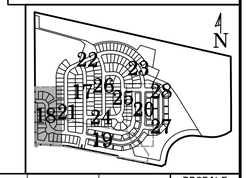
MATCHLINE
REFER TO SHEET 19

N

SCALE 1" = 50'
0 50 100

WHEN WORKING AROUND FOX METRO'S 24" SANITARY INTERCEPTOR, EXTREME CAUTION MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.

ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET



CUT IN 16"X8" TEE INTO EXISTING WATERMAIN

RECONSTRUCT EX VV

CONTRACTOR SHALL PROVIDE MAXIMUM DEPTH OF SERVICE DEPENDENT TO WATERMAIN SECTION

STORM SEWER DOWNSTREAM OF MH 431 SIZED TO CONVEY 100YR STORM FLOWS

94 LF - DUAL 36" RCP REFER TO SEPARATE PLANS FOR GALENA BOULEVARD

EXISTING 5" CLAY DRAINTILE SHALL BE FIELD LOCATED AND CONNECTED TO THE PROPOSED STORM SEWER SYSTEM

12'-3" BOX STRUCTURE 405A WITH HIGH CAPACITY GRATE (REFER TO SHEET 34)

PROFILE SCALE 1"=50' H 1"=5' V

MILLED BUTT JOINT SHALL BE USED TO PROVIDE A SMOOTH TRANSITION INTO THE EXISTING PAVEMENT WITHIN HAMPTON ROAD

EXISTING HAMPTON ROAD

CONTRACTOR SHALL PROVIDE DRITHERM (POWDERED UNDERGROUND PIPE INSTALLATION AND CORROSION PROTECTION) AND FOAMULAR 250 (RIGID POLYSTRENE BOARD INSULATION) OR EQUAL FOR SECTION OF WATERMAIN WITH LESS THAN 5.5' COVER (REFER TO DETAIL SHEET 32)

EX 16" DIP WATERMAIN

PROPOSED CENTERLINE PROFILE

EXISTING GROUND PROFILE

8" DIP WATERMAIN

5.5' (MIN)

4.5' (MIN)

SMH 3 TO SMH 2

PROPOSED GROUND PROFILE ABOVE SANITARY SEWER

TO CREATE A FLOW CHANNEL, THE BENCH NEEDS TO BE CORED IN CONJUNCTION WITH THE MANHOLE WALL. INSTEAD OF CORING THE BENCH, SAID BENCH MAY BE RECONSTRUCTED TO PROVIDE A SWEEPING FLOW CHANNEL

CONTRACTOR SHALL PROVIDE INCREASED BENCH SLOPE TO PREVENT FUTURE BACK UPS AT SERVICE CONNECTION TO MANHOLE

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C8 | WTR | 678.61 | STM | 677.11 | 1.50 |
| C9 | STM | 679.03 | SAN | 674.96 | 4.07 |
| C11 | STM | 679.02 | WTR | 677.02 | 2.00* |
| C12 | SAN | 676.96 | WTR | 674.96 | 2.00* |
| C13A | STM | 675.84 | WTR | 673.84 | 2.00* |
| C13 | STM | 675.83 | WTR | 673.83 | 2.00* |
| C14 | STM | 678.43 | SAN | 677.51 | 0.92** |

NOTES
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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# HAMPTON ROAD - STA. 1+00 TO 8+80
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

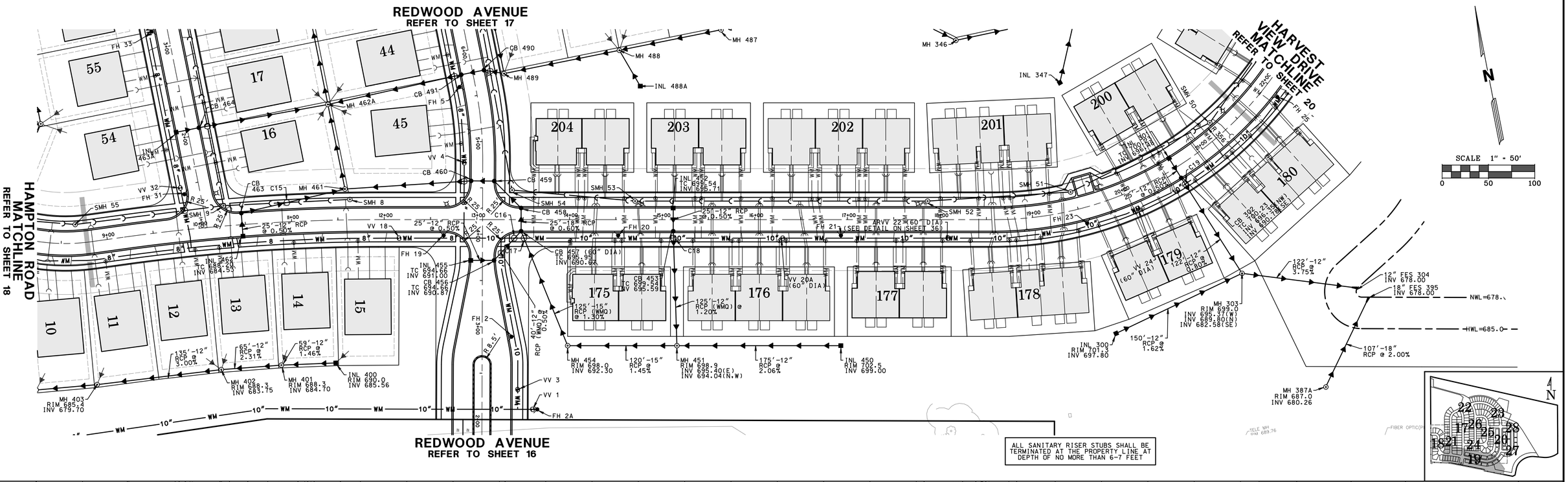
SHEET 18 OF 42

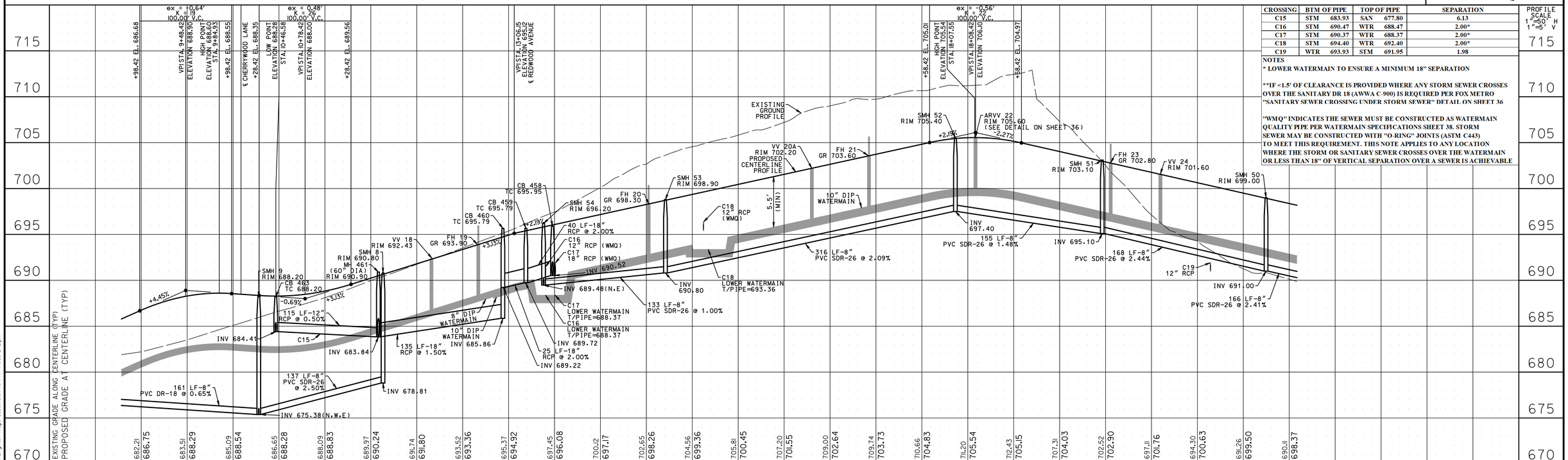
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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C15 | STM | 683.93 | SAN | 677.80 | 6.13 |
| C16 | STM | 690.47 | WTR | 688.47 | 2.00* |
| C17 | STM | 690.37 | WTR | 688.37 | 2.00* |
| C18 | STM | 694.40 | WTR | 692.40 | 2.00* |
| C19 | WTR | 693.93 | STM | 691.95 | 1.98 |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE

PROFILE SCALE
1"=50' H
1"=5' V


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com



LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

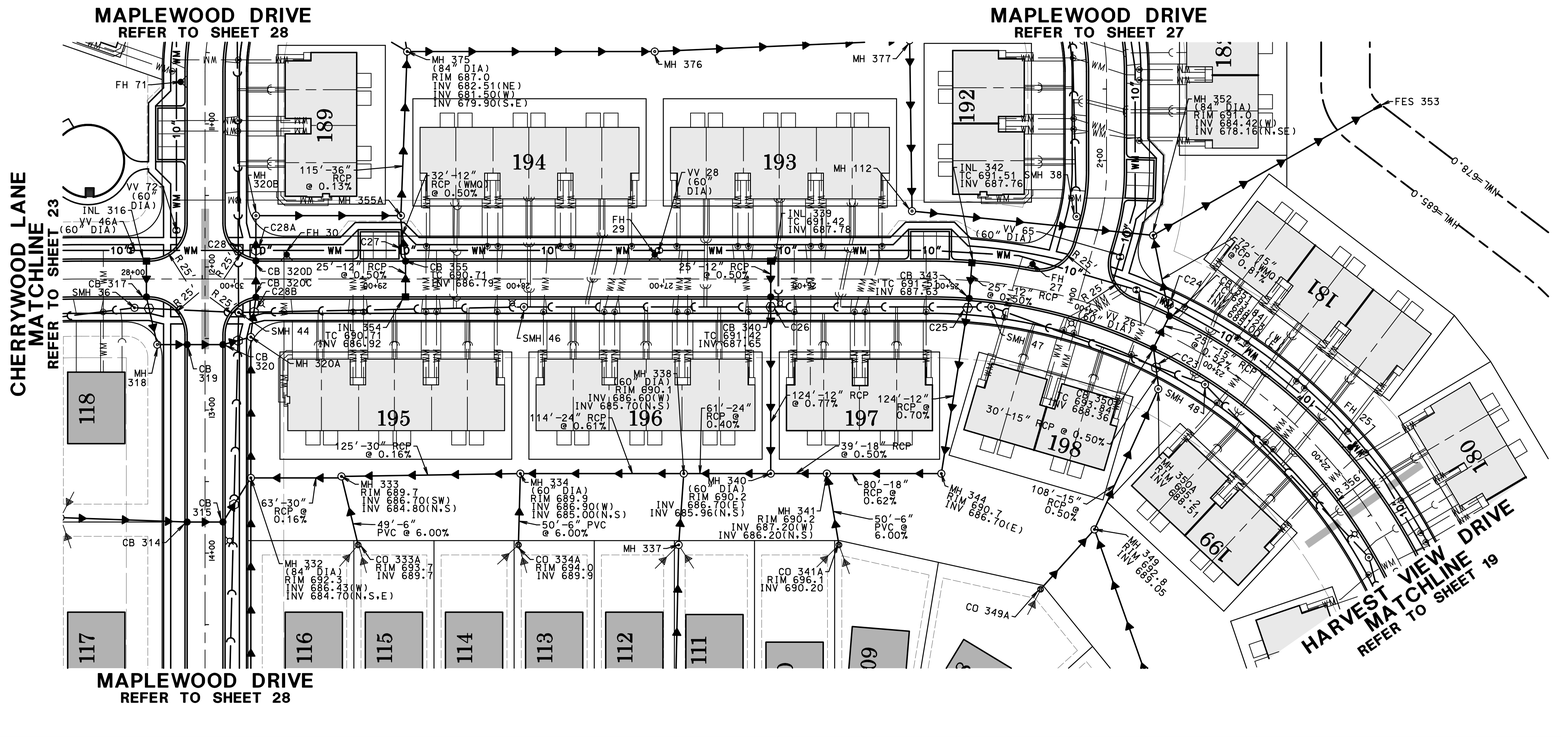
# HAMPTON ROAD / HARVEST VIEW DRIVE
## STA. 8+80 TO 21+60
## BRIGHTON RIDGE
## SUGAR GROVE, ILLINOIS

SHEET 19 OF 42

PROJECT NUMBER: 4930


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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C23 | STM | 688.97 | SAN | 685.73 | 3.23 |
| C24 | WTR | 687.69 | STM | 685.97 | 1.73 |
| C25 | STM | 687.34 | SAN | 684.06 | 3.28 |
| C26 | STM | 687.36 | SAN | 681.44 | 5.91 |
| C27 | STM | 686.52 | WTR | 684.52 | 2.00* |
| C28 | WTR | 683.28 | SAN | 677.07 | 6.21 |
| C28A | STM | 684.08 | WTR | 682.08 | 2.00* |
| C28B | STM | 684.16 | SAN | 674.50 | 9.66 |

**NOTES**

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE


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www.mackieconsult.com

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PHONE: 224-293-3100
FAX: 224-293-3101


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| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# HARVEST VIEW DRIVE - STA. 21+60 TO 30+21
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

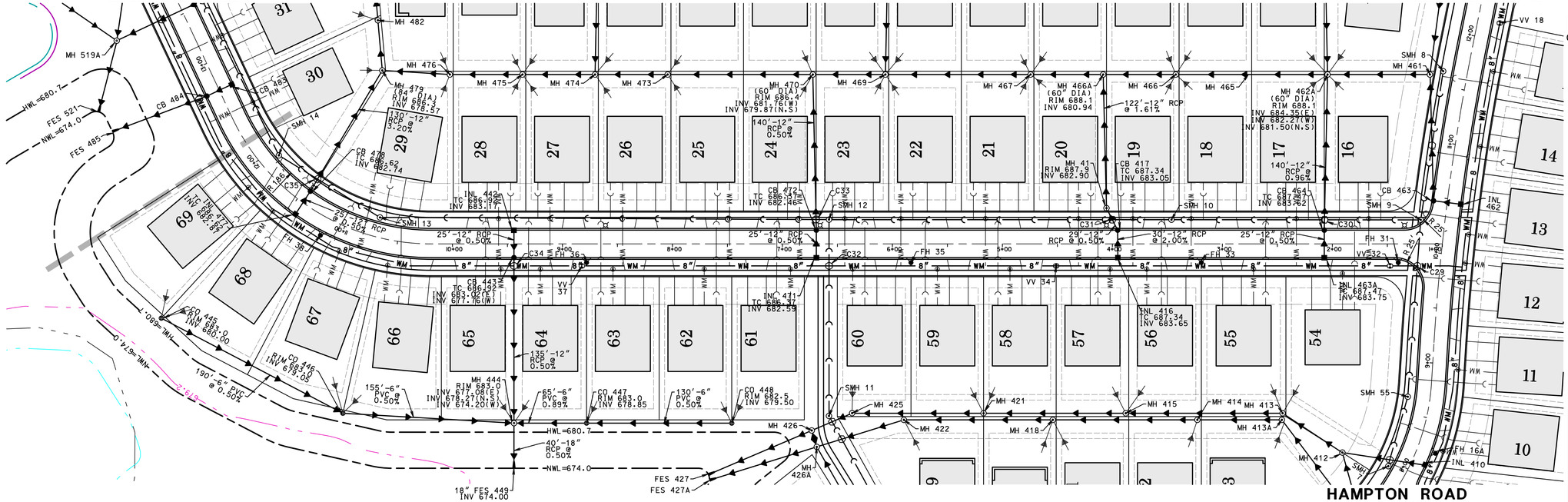
SHEET 20 OF 42

PROJECT NUMBER: 4930

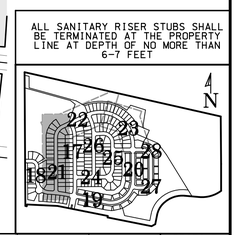
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ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET



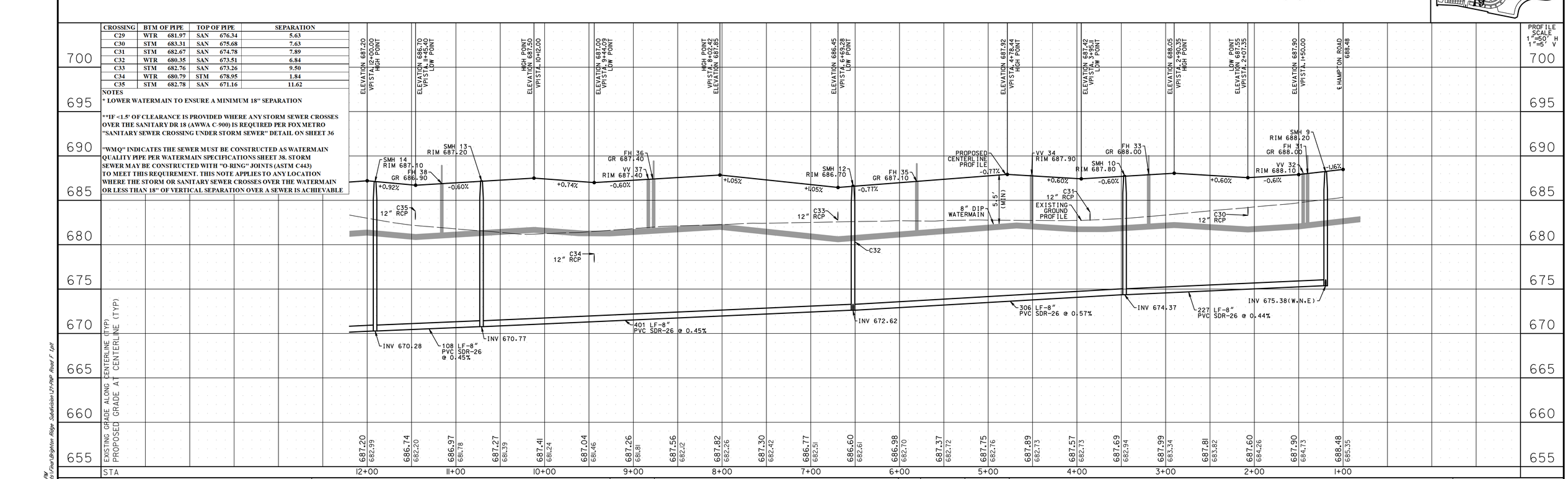

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C29 | WTR | 681.97 | SAN | 676.34 | 5.63 |
| C30 | STM | 683.31 | SAN | 675.68 | 7.63 |
| C31 | STM | 682.67 | SAN | 674.78 | 7.89 |
| C32 | WTR | 680.35 | SAN | 673.51 | 6.84 |
| C33 | STM | 682.76 | SAN | 673.26 | 9.50 |
| C34 | WTR | 680.79 | STM | 678.95 | 1.84 |
| C35 | STM | 682.78 | SAN | 671.16 | 11.62 |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE





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PHONE: 224-293-3100
FAX: 224-293-3101

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| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# CHERRYWOOD LANE - STA. 1+00 TO 12+20
## BRIGHTON RIDGE
## SUGAR GROVE, ILLINOIS

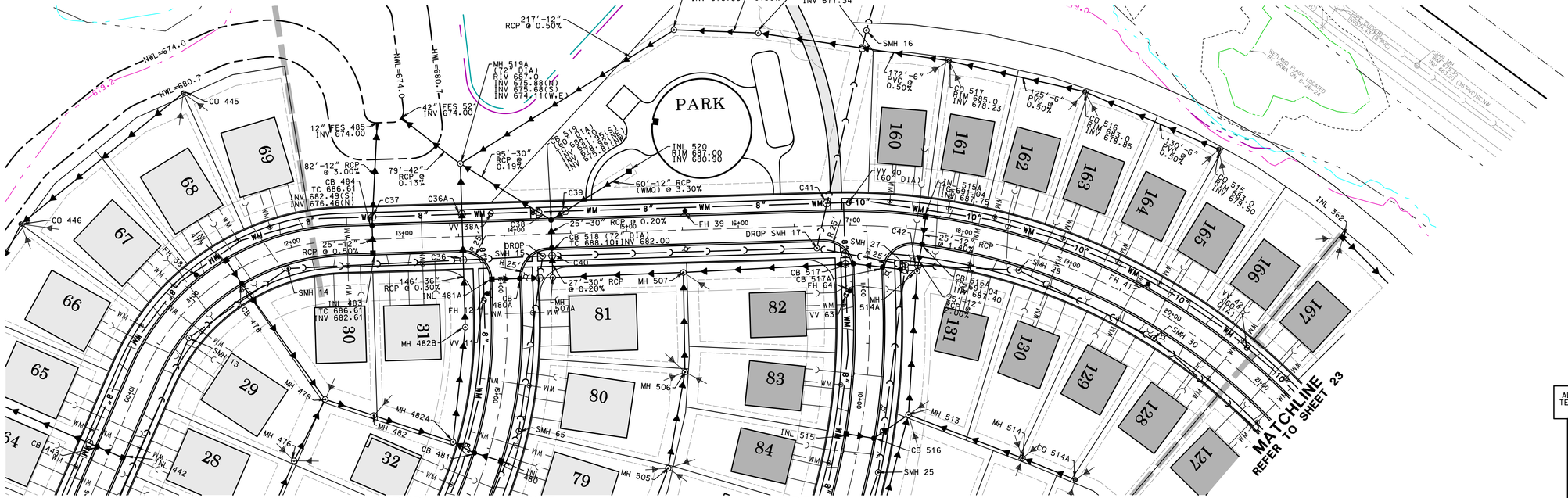
SHEET 21 OF 42

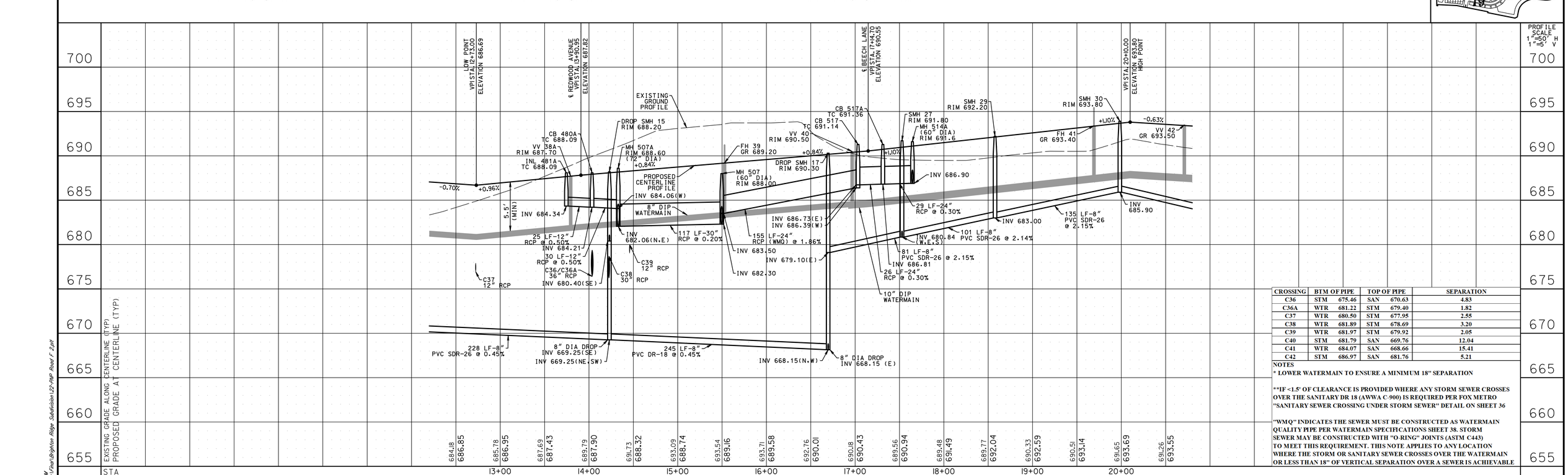
PROJECT NUMBER: 4930


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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C36 | STM | 675.46 | SAN | 670.63 | 4.83 |
| C36A | WTR | 681.22 | STM | 679.40 | 1.82 |
| C37 | WTR | 680.50 | STM | 677.95 | 2.55 |
| C38 | WTR | 681.89 | STM | 678.69 | 3.20 |
| C39 | WTR | 681.97 | STM | 679.92 | 2.05 |
| C40 | STM | 681.79 | SAN | 669.76 | 12.04 |
| C41 | WTR | 684.07 | SAN | 668.66 | 15.41 |
| C42 | STM | 686.97 | SAN | 681.76 | 5.21 |

**NOTES**

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| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# CHERRYWOOD LANE - STA. 12+20 TO 20+80
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

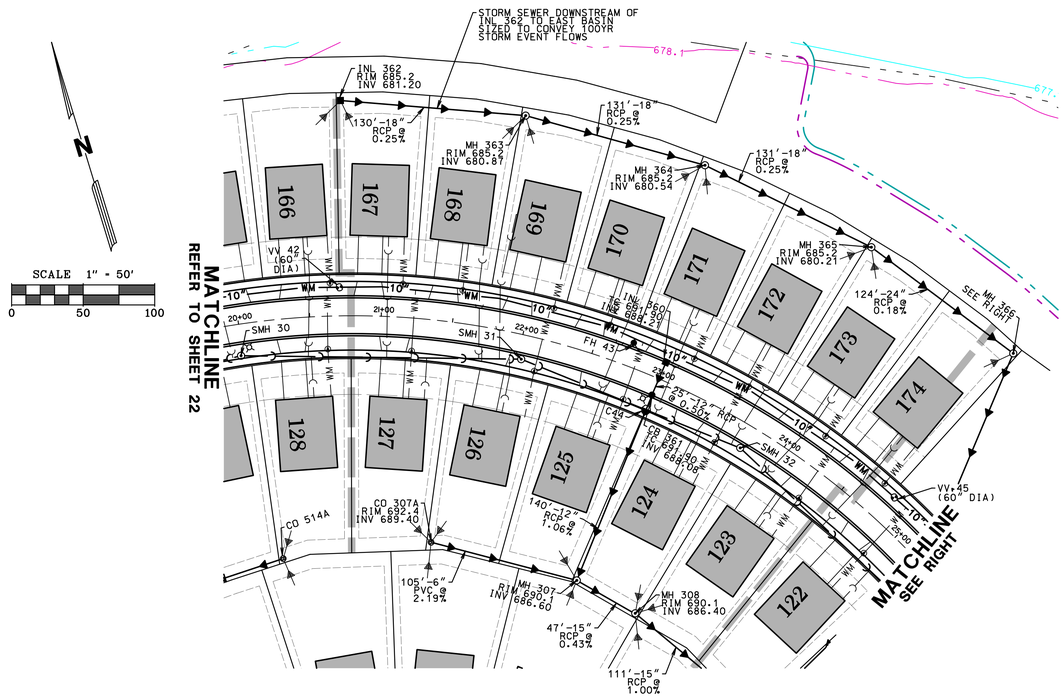
SHEET 22 OF 42

PROJECT NUMBER: 4930

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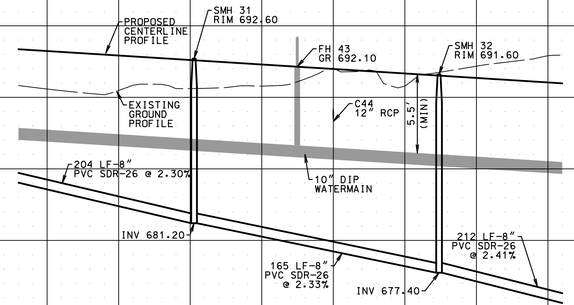

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C44 | STM | 687.79 | SAN | 679.70 | 8.10 |
| C45 | STM | 685.35 | SAN | 674.68 | 10.67 |
| C46 | WTR | 683.72 | SAN | 675.08 | 8.64 |
| C47 | STM | 679.26 | SAN | 672.43 | 6.83 |
| C48 | STM | 685.36 | SAN | 673.32 | 12.03 |
| C49 | STM | 685.53 | SAN | 674.01 | 11.52 |

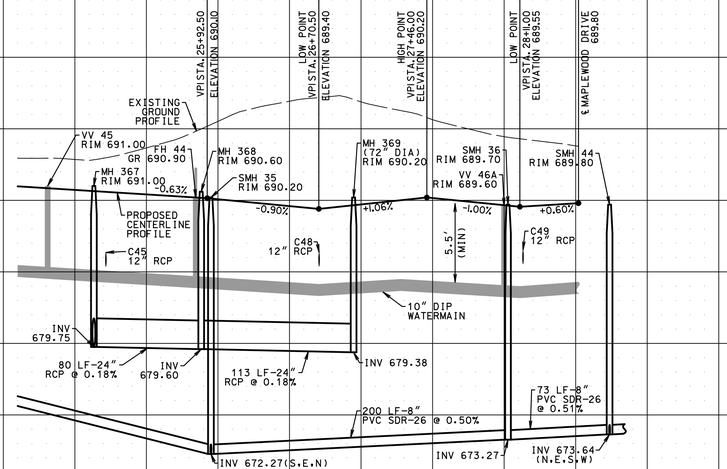
**NOTES**

*** LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION**

****IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36**

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|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
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| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

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1700 EAST GOLF ROAD, SUITE 1100
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# CHERRYWOOD LANE - STA. 20+80 TO 28+52
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

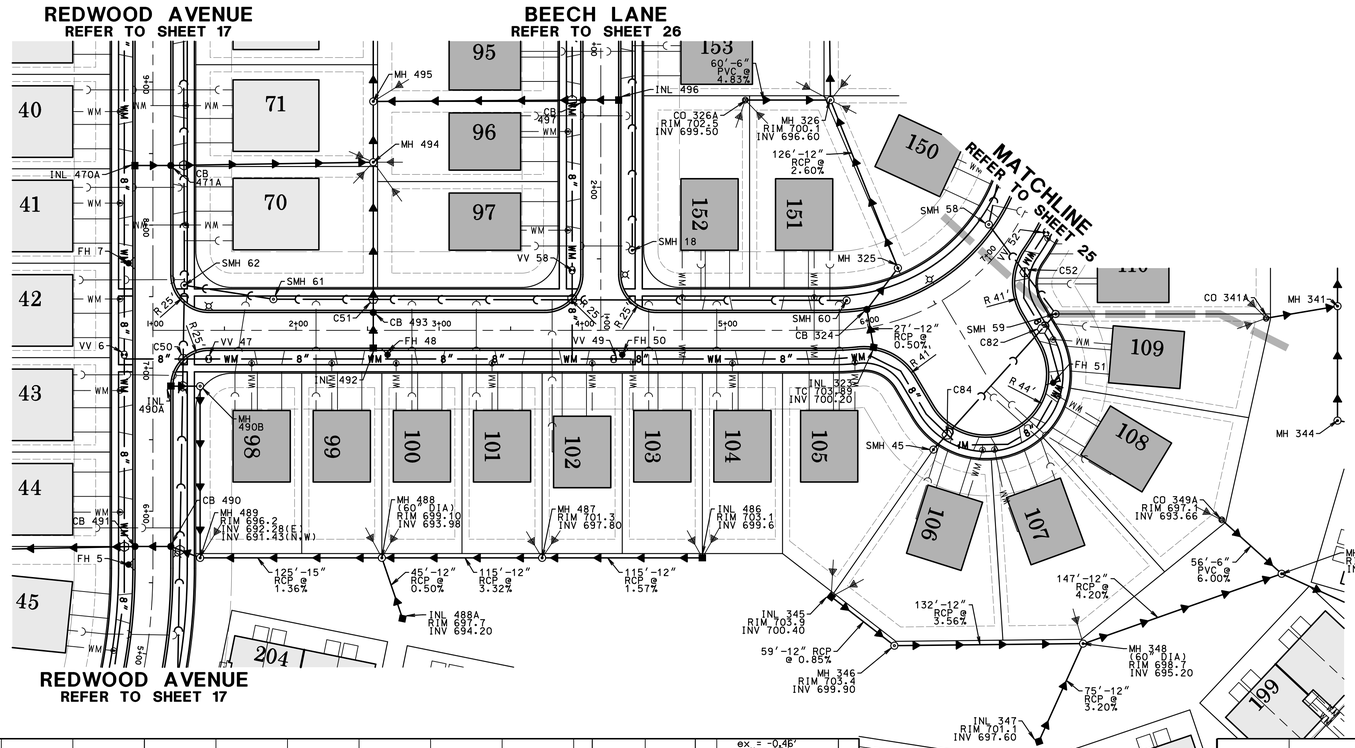
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PROJECT NUMBER: 4930

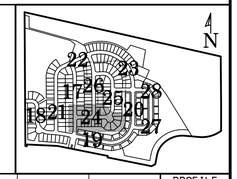

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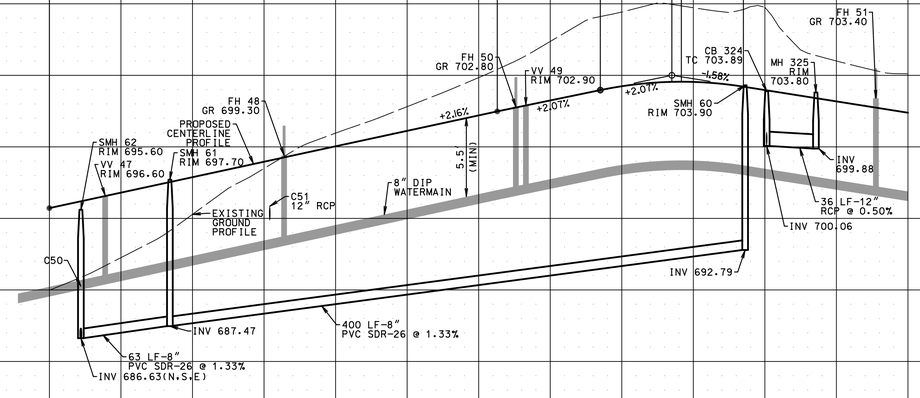


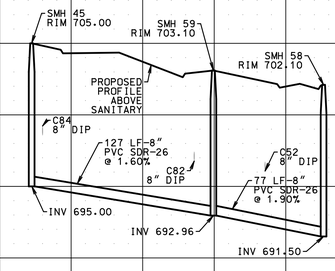
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ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET




| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C50 | WTR | 689.64 | SAN | 687.79 | 1.85 |
| C51 | STM | 694.85 | SAN | 689.10 | 5.75 |
| C52 | WTR | 696.07 | SAN | 692.96 | 3.11 |
| C82 | WTR | 696.77 | SAN | 693.87 | 2.90 |
| C84 | WTR | 698.67 | SAN | 695.47 | 3.20 |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

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PROFILE SCALE
1"=50' H
1"=5' V

715 710 705 700 695 690 685 680 675 670

EXISTING GRADE ALONG CENTERLINE (TYP)
PROPOSED GRADE AT CENTERLINE (TYP)

| STA | 1+00 | 2+00 | 3+00 | 4+00 | 5+00 | 6+00 | 7+00 |
|---|---|---|---|---|---|---|---|
| | 689.98 | 692.25 | 695.28 | 698.49 | 700.96 | 702.81 | 704.84 |
| | 695.72 | 696.80 | 697.88 | 698.96 | 700.04 | 701.12 | 702.20 |
| | 707.37 | 709.42 | 709.73 | 709.76 | 706.00 | 705.11 | |
| | 703.24 | 704.24 | 704.54 | 703.97 | 703.18 | 702.39 | |


Mackie Consultants, LLC
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| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# ASHBURY DRIVE - STA. 1+00 TO 7+00
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

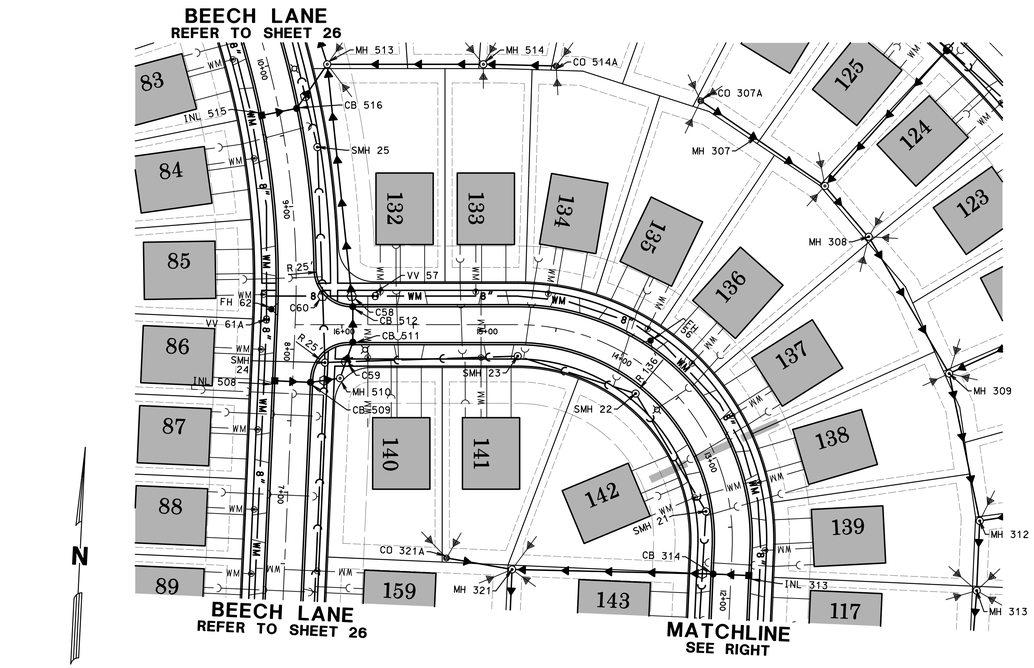
SHEET 24 OF 42

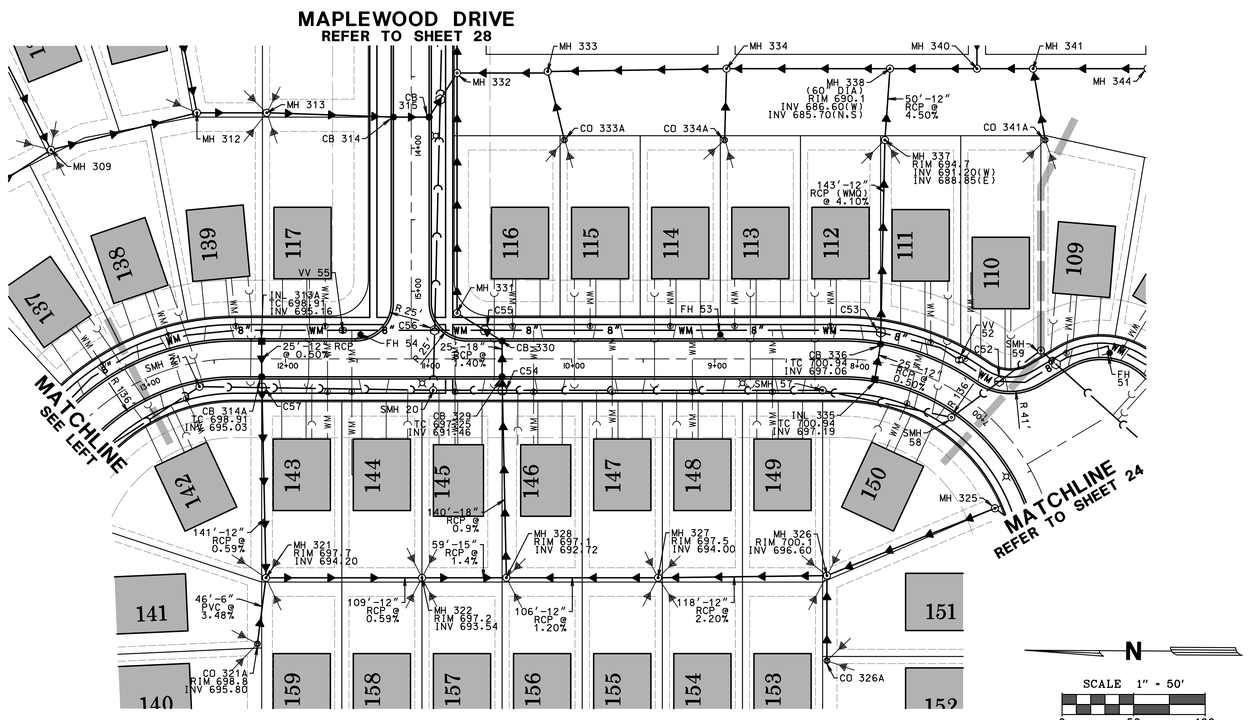
PROJECT NUMBER: 4930

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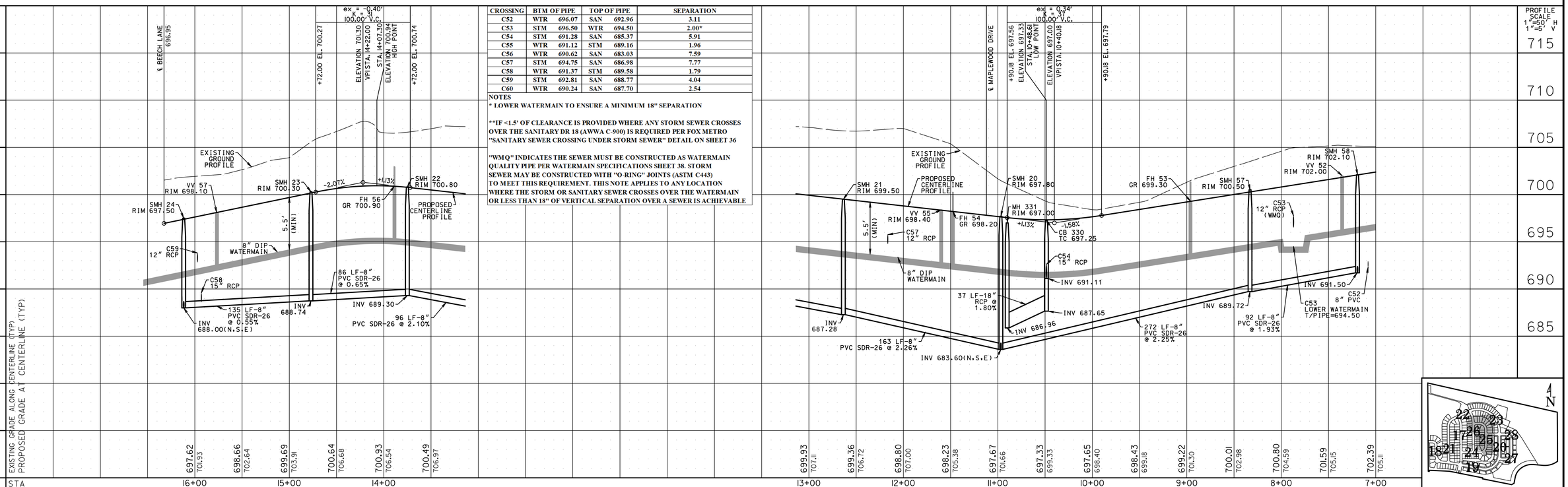

ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C52 | WTR | 696.07 | SAN | 692.96 | 3.11 |
| C53 | STM | 696.50 | WTR | 694.50 | 2.00* |
| C54 | STM | 691.28 | SAN | 685.37 | 5.91 |
| C55 | STM | 691.12 | STM | 689.16 | 1.96 |
| C56 | WTR | 690.62 | SAN | 683.03 | 7.59 |
| C57 | STM | 694.75 | SAN | 686.98 | 7.77 |
| C58 | WTR | 691.37 | STM | 689.58 | 1.79 |
| C59 | STM | 692.81 | SAN | 688.77 | 4.04 |
| C60 | WTR | 690.24 | SAN | 687.70 | 2.54 |

NOTES
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**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE








Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# ASHBURY DRIVE - STA. 7+00 TO 16+33
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

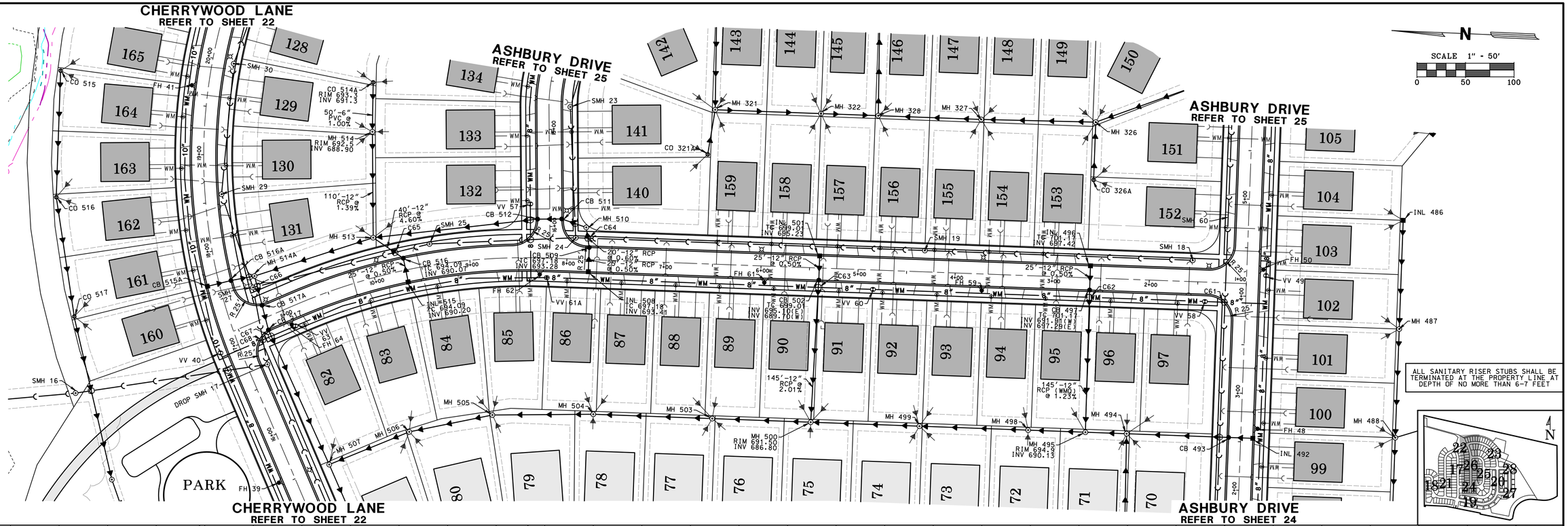
SHEET
25 OF 42

PROJECT NUMBER: 4930


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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C61 | WTR | 696.16 | SAN | 690.95 | 5.21 |
| C62 | WTR | 695.07 | STM | 693.06 | 2.01 |
| C63 | WTR | 692.87 | STM | 690.78 | 2.09 |
| C64 | STM | 692.97 | SAN | 688.84 | 4.14 |
| C65 | STM | 689.38 | SAN | 684.71 | 4.67 |
| C66 | STM | 686.52 | SAN | 681.62 | 4.91 |
| C67 | STM | 685.93 | WTR | 683.93 | 2.00* |
| C68 | WTR | 683.46 | SAN | 680.35 | 3.11 |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE


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| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# BEECH LANE - STA. 1+00 TO 11+55
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

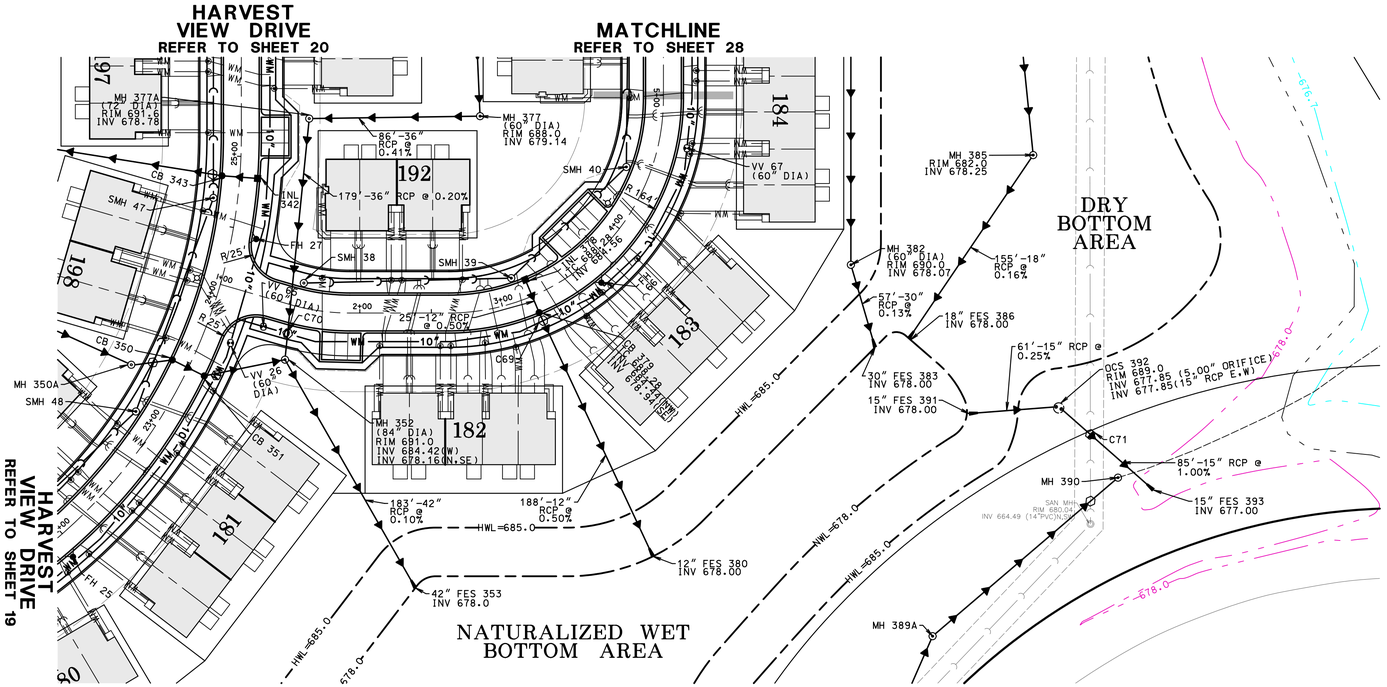
SHEET 26 OF 42

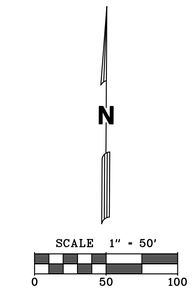
PROJECT NUMBER: 4930


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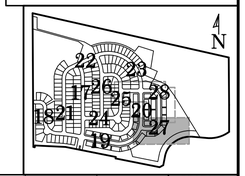
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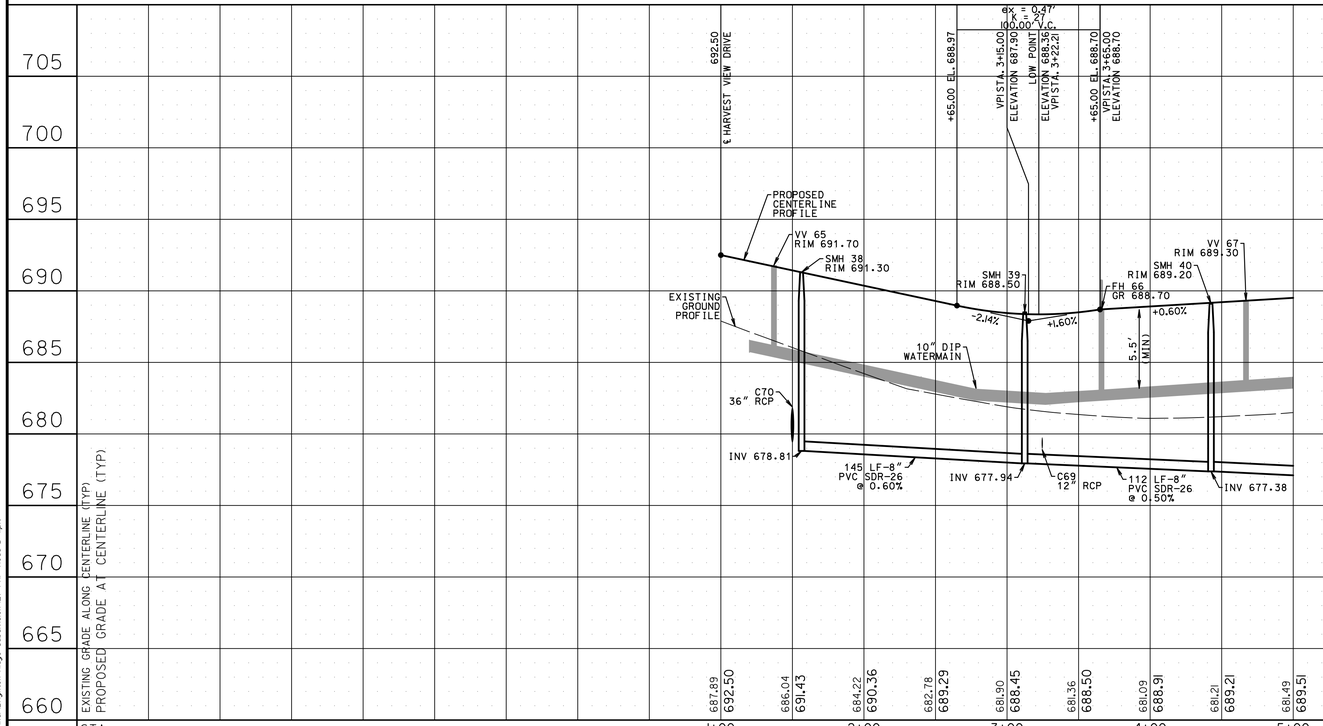



**WHEN WORKING AROUND SUGAR GROVE'S 14" SANITARY SEWER, EXTREME CAUTION MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET




PROFILE SCALE
1"=50' H
1"=5' V

| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C69 | WTR | 683.00 | STM | 680.16 | 2.84 |
| C70 | WTR | 684.99 | STM | 681.88 | 3.11 |
| C71 | STM | 676.69 | SAN | 665.71 | 10.98 |

**NOTES**

*** LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION**

****IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36**

**"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE**


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FAX: 224-293-3101


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| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# MAPLEWOOD DRIVE - STA. 1+00 TO 5+00
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

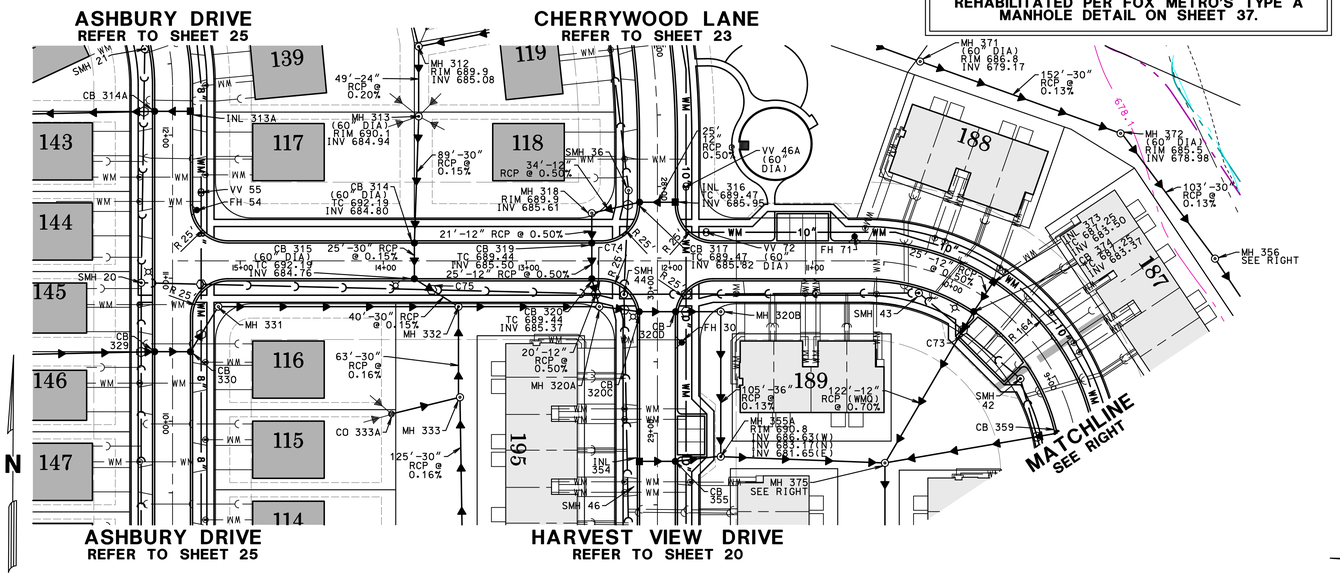
SHEET 27 OF 42

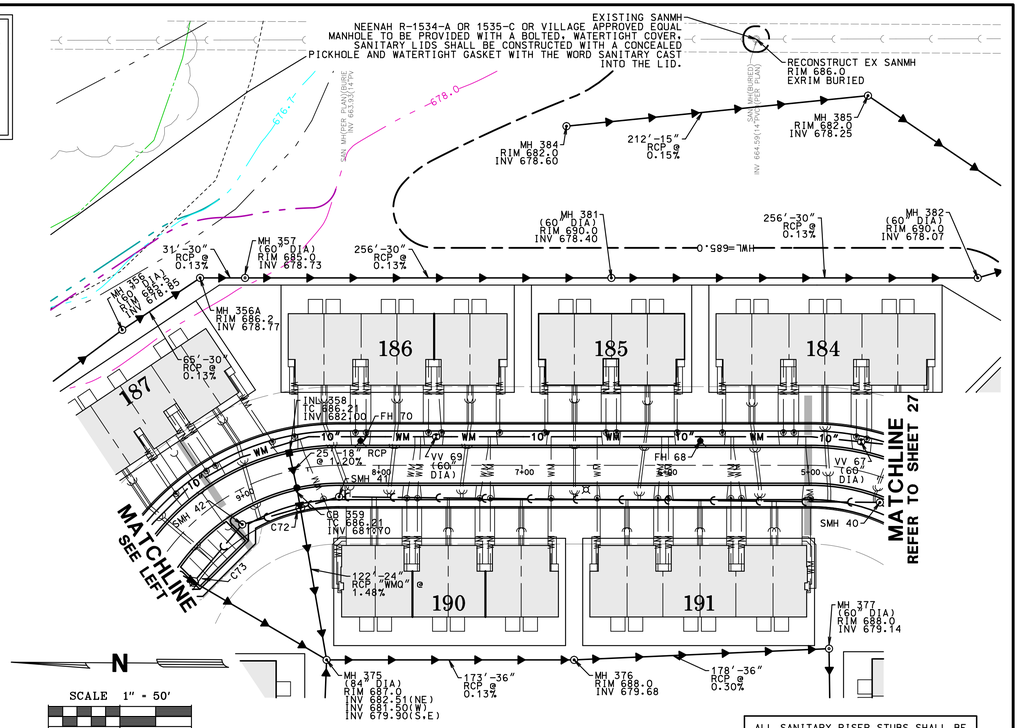
PROJECT NUMBER: 4930


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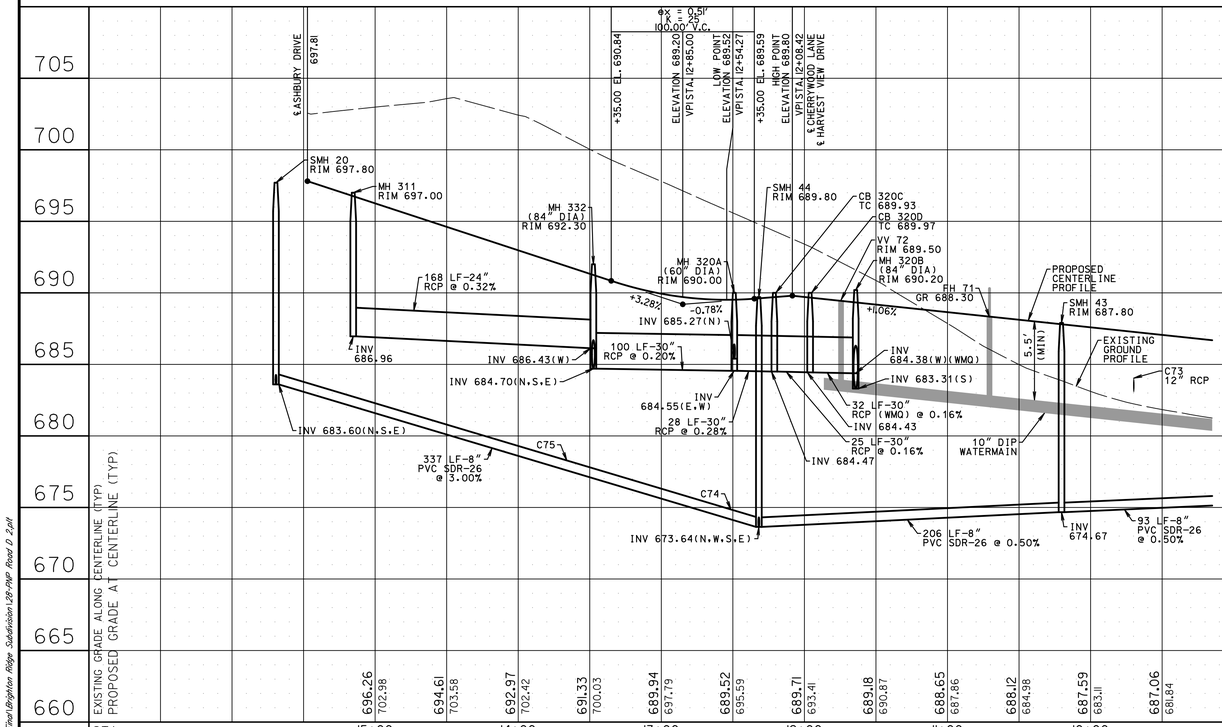

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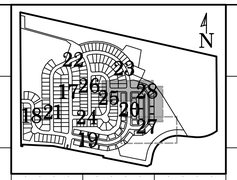
**WHEN WORKING AROUND SUGAR GROVE'S 14" SANITARY SEWER, EXTREME CAUTION MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**




ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET




| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C72 | STM | 681.99 | SAN | 676.04 | 5.95 |
| C73 | STM | 683.04 | SAN | 675.57 | 7.47 |
| C74 | STM | 685.10 | SAN | 674.75 | 10.35 |
| C75 | STM | 683.87 | SAN | 678.19 | 5.68 |

**NOTES**

**" LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION**

**"IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36**

**"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE**


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| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# MAPLEWOOD DRIVE - STA. 5+00 TO 15+47
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

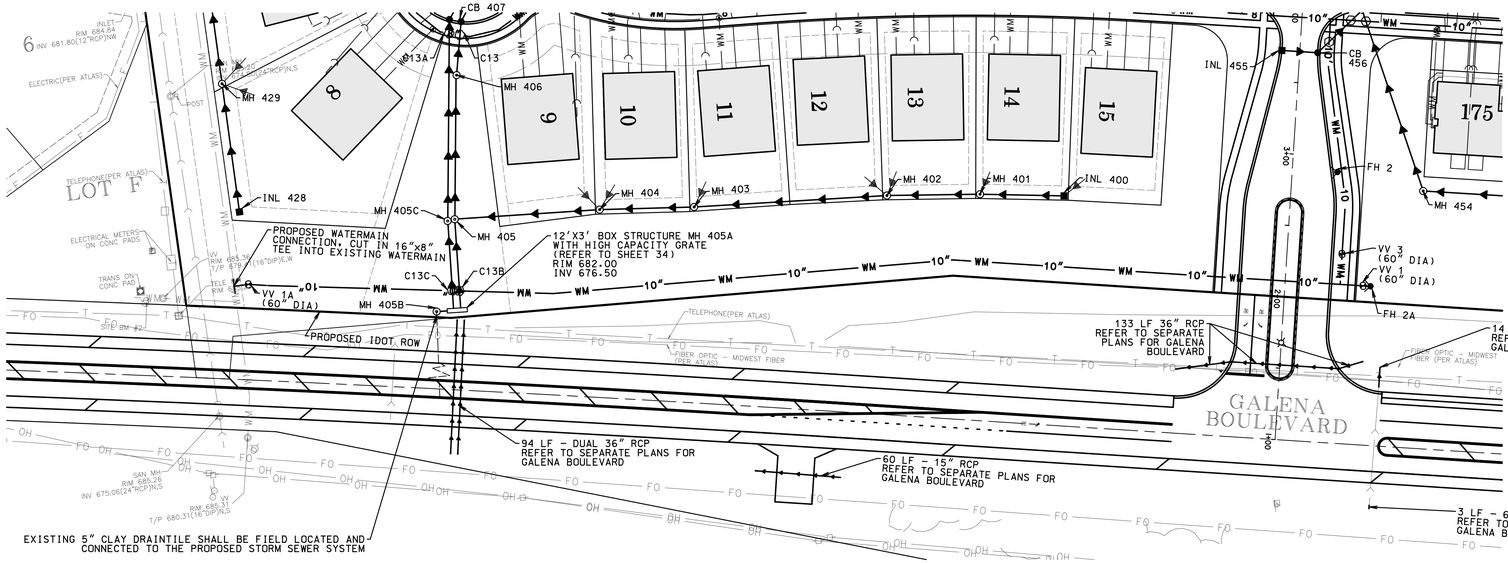
SHEET 28 OF 42

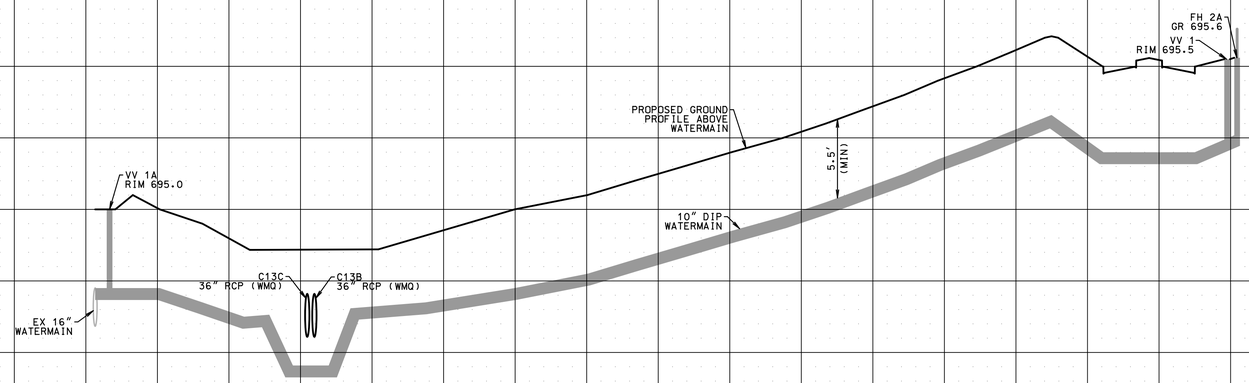
PROJECT NUMBER: 4930


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| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C13B | STM | 676.09 | WTR | 674.09 | 2.00" |
| C13C | STM | 676.09 | WTR | 674.09 | 2.00" |

NOTES

* LOWER WATERMAIN TO ENSURE A MINIMUM 18" SEPARATION

**IF <1.5' OF CLEARANCE IS PROVIDED WHERE ANY STORM SEWER CROSSES OVER THE SANITARY DR 18 (AWWA C-900) IS REQUIRED PER FOX METRO "SANITARY SEWER CROSSING UNDER STORM SEWER" DETAIL ON SHEET 36

"WMQ" INDICATES THE SEWER MUST BE CONSTRUCTED AS WATERMAIN QUALITY PIPE PER WATERMAIN SPECIFICATIONS SHEET 38. STORM SEWER MAY BE CONSTRUCTED WITH "O-RING" JOINTS (ASTM C443) TO MEET THIS REQUIREMENT. THIS NOTE APPLIES TO ANY LOCATION WHERE THE STORM OR SANITARY SEWER CROSSES OVER THE WATERMAIN OR LESS THAN 18" OF VERTICAL SEPARATION OVER A SEWER IS ACHIEVABLE

PROFILE SCALE 1"=50' H 1"=5' V


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| DATE | DESCRIPTION OF REVISION | BY |
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| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# WATERMAIN ALONG GALENA BOULEVARD
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 29 OF 42

PROJECT NUMBER: 4930

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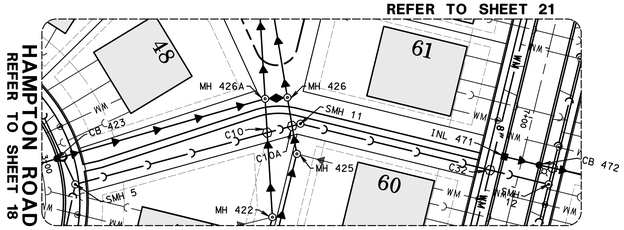
**WHEN WORKING AROUND FOX METRO'S 16" SANITARY SEWER AND 24" SANITARY FORCE MAIN AND 36" SANITARY SEWER, EXTREME CAUTION MUST BE TAKEN! WHERE ANY RIM ELEVATION IS PROPOSED AND/OR THE AREA AROUND SAID MANHOLE IS FULLY EXPOSED, THE ENTIRE AREA AROUND THE MANHOLE SHALL BE REHABILITATED PER FOX METRO'S TYPE A MANHOLE DETAIL ON SHEET 37.**

N

SCALE 1" - 50'

0 50 100

## SMH 5 TO SMH 12



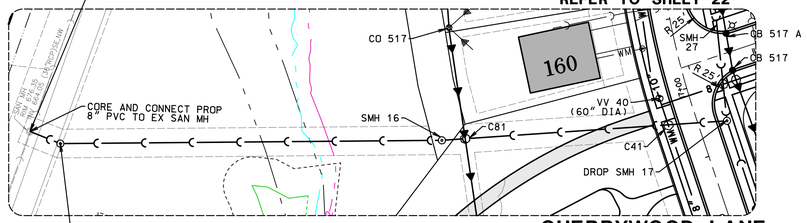

N

SCALE 1" - 50'

0 50 100

## EXSMH TO SMH 17

TO CREATE A FLOW CHANNEL, THE BENCH NEEDS TO BE CORED IN CONJUNCTION WITH THE MANHOLE WALL. INSTEAD OF CORING THE BENCH, SAID BENCH MAY BE RECONSTRUCTED TO PROVIDE A SWEEPING FLOW CHANNEL.



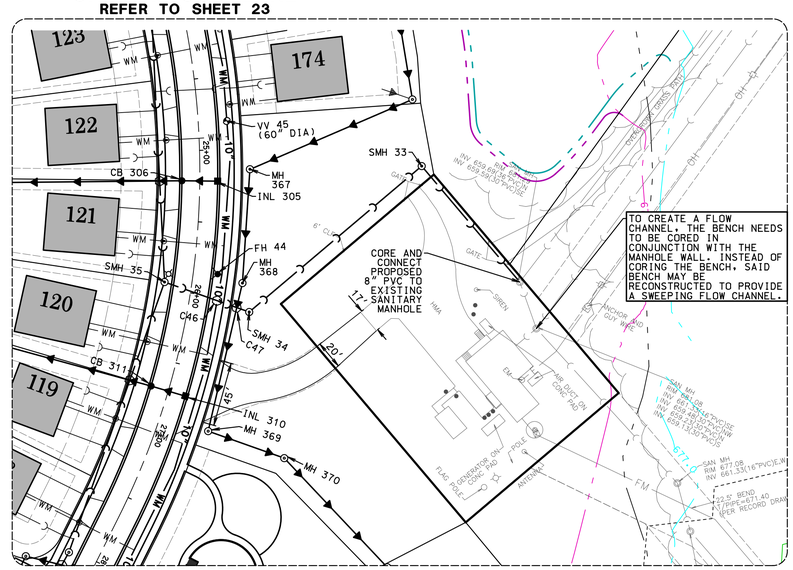

SMH 26
NEENAH R-1534-A OR 1535-C OR VILLAGE APPROVED EQUAL MANHOLE TO BE PROVIDED WITH A BOLTED, WATERTIGHT COVER. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD SANITARY CAST INTO THE LID.

N

SCALE 1" - 50'

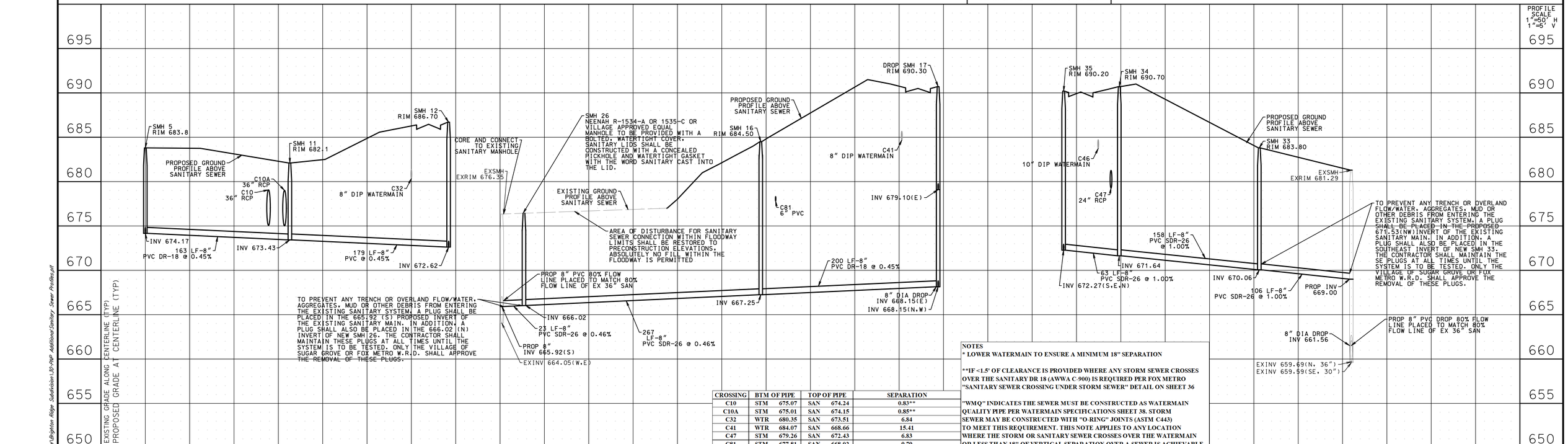
0 50 100

## SMH 35 TO EXSMH




## SMH 35 TO EXSMH

ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT DEPTH OF NO MORE THAN 6-7 FEET




| CROSSING | BTM OF PIPE | | TOP OF PIPE | | SEPARATION |
|---|---|---|---|---|---|
| C10 | STM | 675.07 | SAN | 674.24 | 0.83** |
| C10A | STM | 675.01 | SAN | 674.15 | 0.85** |
| C32 | WTR | 680.35 | SAN | 673.51 | 6.84 |
| C41 | WTR | 684.07 | SAN | 668.66 | 15.41 |
| C47 | STM | 679.26 | SAN | 672.43 | 6.83 |
| C81 | STM | 677.81 | SAN | 668.02 | 9.79 |

**NOTES**

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| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 50' |

# ADDITIONAL SANITARY SEWER PROFILES
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

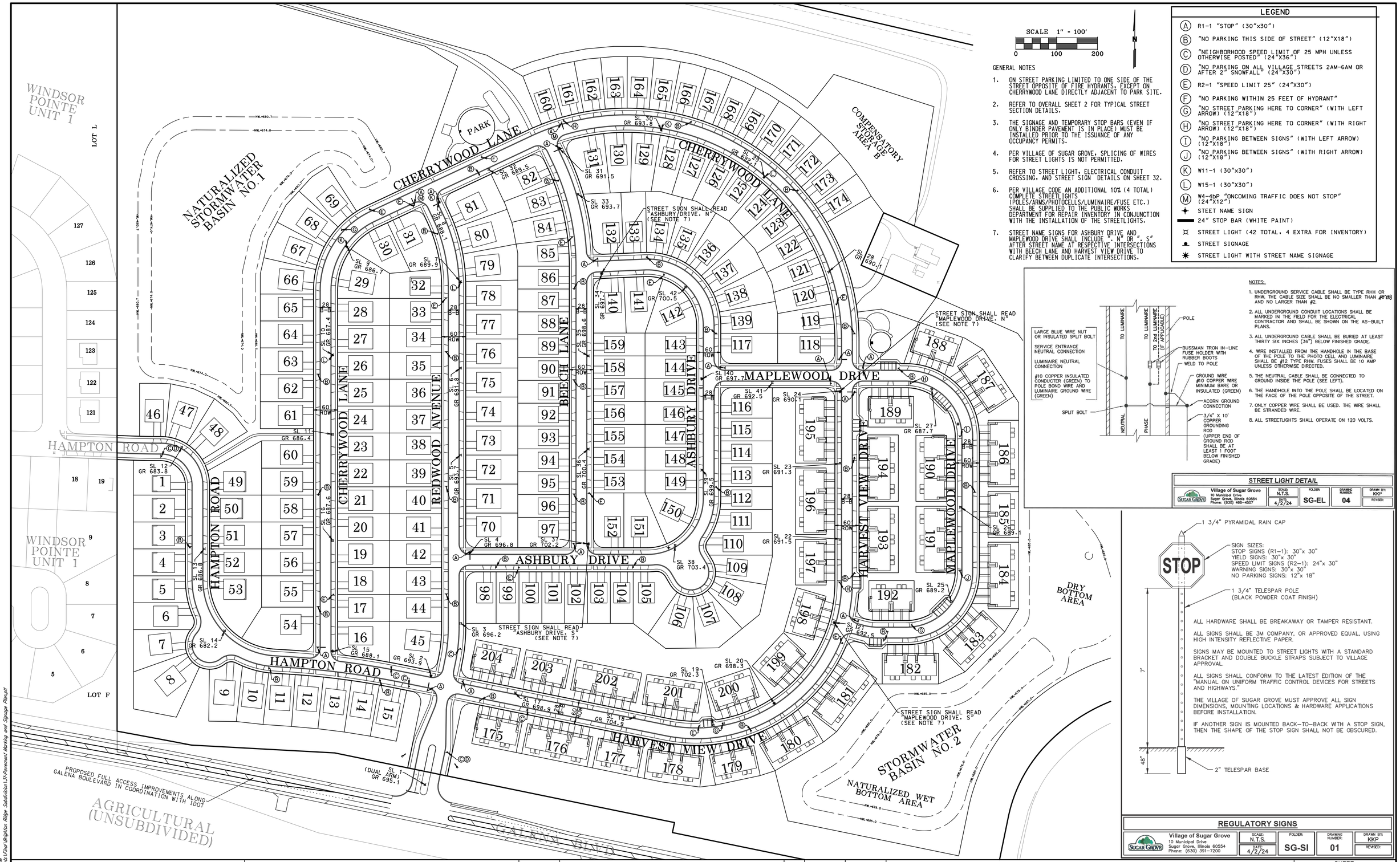
SHEET 30 OF 42

PROJECT NUMBER: 4930


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| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | 1" = 100' |

# PAVEMENT MARKINGS AND SIGNAGE PLAN
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 31 OF 42

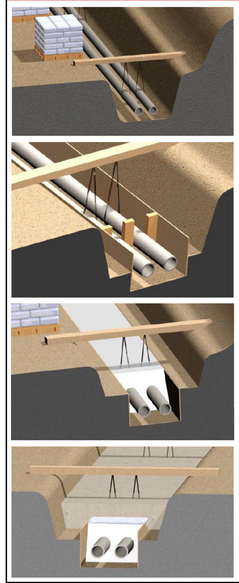
PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694


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## DRITHERM™ INSTALLATION SHEET



**Preparation:**
1. Excavate to minimum trench dimensions according to factory recommended spacing table (see page 2).
2. Ensure the trench is wide and deep enough in areas that require thermal cushioning.
3. Place excavated earth to one side of the trench leaving a clear work area the opposite side.
4. Install permanent anchors and guides as recommended by manufacturer.
5. Grade and compact trench base to ensure spacing between pipes and trench bottom will be consistent.
6. Hang pipes using wire, cable, or blocks.
7. When possible place the pipes to one side of the trench using the trench wall as a form for the DriTherm™ pour.
8. Inspect pipe seams and leak test system.
9. Install mineral fiber thermal cushion on elbows, Z bends, and expansion loops.
10. Verify pipe spacing using a wood gauge cut to the minimum DriTherm™ thickness. Spacing may be maintained using scrap wood or drywall shims.

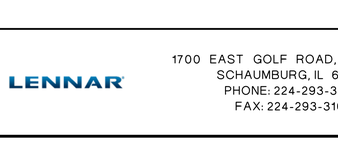
**Forming:**
1. Place drywall or wood forms as necessary to create a uniform trench maintaining minimum DriTherm™ thicknesses. Forms should be flared out and trenches made deeper to accommodate thermal cushions were necessary.
2. Use temporary shims to maintain spacing between the pipes and forms.
3. Backfill halfway up the side of the forms to hold them in place against temporary spacers.
4. Apply bituminastic or silicone grease to permanent supports and at the beginning and end of each run.

**DriTherm™ Pour:**
1. Pour DriTherm™ filling the forms to minimum *Z* dimensions. You may place a mark on the form or use a dip stick to verify thickness. **MAKE SURE TO POUR TO DIMENSIONS FROM TABLE ON THE PAGE 2.**
2. Remove all temporary shims replacing DriTherm™ as necessary.
3. Level out the DriTherm™ pour and place 4 to 6 mil plastic sheeting over the DriTherm™.

**Backfill:**
1. Place initial 6" of clean backfill carefully by hand or as close proximity to the top of the DriTherm™ as possible to reduce the impact from backfill on the product. Backfill should be free of large debris and stone.
2. Sand, crushed stone and pea gravel are not acceptable backfill materials.
3. Compact only after a minimum of 10-12 inches of clean backfill have been placed.
4. Remove temporary supports only after completing first compaction pass.
5. Complete backfill and compaction as required to finish grade (minimum of 18" of coverage over

## DRITHERM™ INSTALLATION SHEET

(OR APPROVED EQUAL)



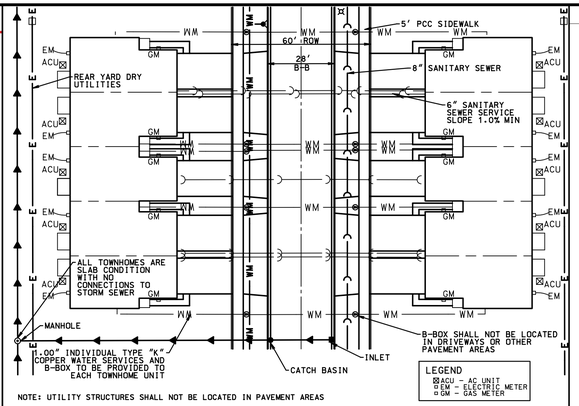

**RECOMMENDED FORMING DIMENSIONS [INCHES]**

| Pipe Dia. | TEMPERATURE RANGE | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 35 to 100 F | | | 101 to 230 F | | | 231 to 305 F | | | 306 to 400 F | | | 401 to 480 F | | |
| | X | Y | Z | X | Y | Z | X | Y | Z | X | Y | Z | X | Y | Z |
| 1.315 | 3 | 2 | 6.5 | 3 | 2 | 6.5 | 3 | 2 | 6.5 | 3 | 2 | 6.5 | 4 | 2 | 8.0 |
| 2.375 | 3 | 2 | 6.5 | 3 | 2 | 6.5 | 3 | 2 | 6.5 | 4 | 2 | 8.5 | 4 | 2 | 8.5 |
| 3.5 | 3 | 2 | 7.0 | 3 | 2 | 7.0 | 4 | 2 | 9.0 | 4 | 2 | 9.0 | 4 | 2 | 9.0 |
| 4.5 | 4 | 2 | 9.0 | 4 | 2 | 9.0 | 4 | 2 | 9.0 | 5 | 2 | 11.0 | 5 | 2 | 11.0 |
| 5.563 | 4 | 3 | 9.0 | 4 | 3 | 9.5 | 4 | 3 | 9.5 | 5 | 3 | 11.0 | 5 | 3 | 11.0 |
| 6.625 | 4 | 3 | 9.5 | 4 | 3 | 9.5 | 4 | 3 | 9.5 | 5 | 3 | 11.5 | 6 | 3 | 13.5 |
| * 8.625 | 4 | 3 | 10.0 | 5 | 3 | 12.0 | 5 | 3 | 12.0 | 6 | 3 | 14.0 | 6 | 4 | 14.0 |
| 10.75 | 4 | 3 | 10.0 | 5 | 3 | 12.5 | 6 | 3 | 14.5 | 6 | 3 | 14.5 | 6 | 4 | 14.5 |
| 12.75 | 4 | 3 | 10.5 | 6 | 4 | 14.5 | 6 | 4 | 14.5 | 7 | 4 | 17.0 | 7 | 4 | 17.0 |
| 14 | 5 | 4 | 12.5 | 6 | 4 | 15.0 | 7 | 4 | 17.0 | 7 | 4 | 17.0 | 7 | 4 | 17.0 |
| 16 | 5 | 4 | 13.0 | 6 | 4 | 15.0 | 7 | 4 | 17.0 | 8 | 4 | 19.5 | 8 | 5 | 19.5 |
| 18 | 5 | 4 | 13.0 | 7 | 4 | 17.5 | 7 | 4 | 17.5 | 8 | 4 | 19.5 | 8 | 5 | 19.5 |
| 20 | 5 | 4 | 13.5 | 7 | 4 | 18.0 | 8 | 4 | 20.0 | 9 | 4 | 22.0 | 9 | 5 | 22 |
| 24 | 5 | 4 | 14.0 | 7 | 4 | 18.5 | 8 | 4 | 20.5 | 10 | 4 | 24.5 | 10 | 5 | 24.5 |

**Z dimensions reflects DriTherm usage before backfill to account for up to 30% compaction.**

**Look Up Table Design Conditions:**
Thicknesses were determined using Dritherm properties under 400 PSF compressive loading and estimated minimum thermal efficiency of 80% with ground temperature of 60F, steel carrier pipe, and damp soil conditions. Compaction occurs during backfill and compression will vary depending on installed conditions. Consult factory for application specific recommendations. User is ultimately responsible for calculating and verifying installed conditions.

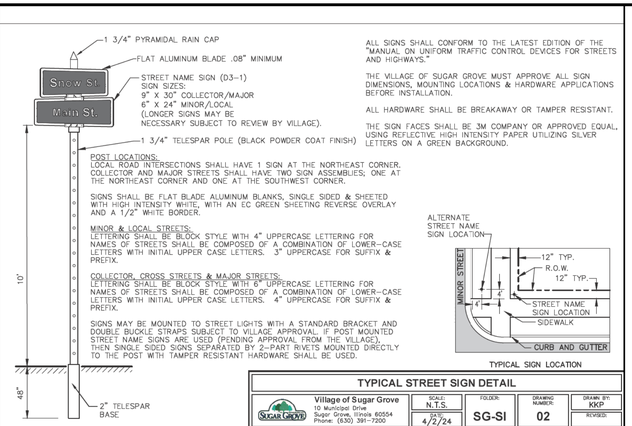
**Terms, Conditions, & Disclaimers:**
Representations of physical properties are the result of tests conducted by independent, certified third-party laboratories. Test reports available upon request. Information contained herein is provided as a convenience and for informational purposes only. Physical properties are subject to manufacturing variations, raw material variations, and variations in installed conditions. All products supplied including all recommendations and technical support is provided for convenience only. Product selection, installation, system design, site condition review are the ultimate responsibility of the engineer of record and/or the owners consultant/representative. This data sheet is subject to change without notice and supersedes all previous versions.




NOTE: UTILITY STRUCTURES SHALL NOT BE LOCATED IN PAVEMENT AREAS

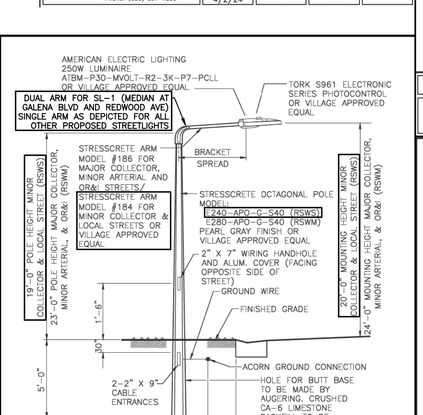
### TYPICAL "TRADITIONAL" FRONT-LOADED TOWNHOME UTILITY LAYOUT AND SERVICE CONNECTIONS

NOT TO SCALE




**TYPICAL STREET SIGN DETAIL**

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: SG-SI | DRAWING NUMBER: 02 | DRAWN BY: KKP |
|---|---|---|---|---|
| 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | DATE: 4/2/24 | | | REVISED: |

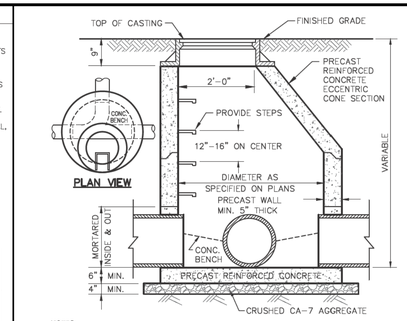



NOTES:
1. PRECAST MANHOLES AND STRUCTURES SHALL CONFORM TO ASTM C478 AND THE DIMENSIONS SHOWN ON THE PLANS. PRECAST COMPONENTS SHALL BE SUBSTANTIALLY FREE FROM FRACTURES, LARGE OR DEEP CRACKS AND SURFACE ROUGHNESS CONFORMING THE QUALITY CRITERIA ESTABLISHED IN ASTM C478.
2. PRECAST SECTIONS TO BE JOINED WITH TONGUE AND GROOVE JOINTS SEALED WITH A CONTINUOUS LAYER OF PREFORMED FLEXIBLE GASKETS, RUBBER GASKETS BUTYL ROPE OR OTHER EQUIVALENT BITUMINOUS MATERIAL PER THE STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS., LATEST EDITION.
3. STEPS SHALL BE NEENAH R-1980-J OR APPROVED EQUAL.
4. FRAME TO BE SET TO FINISHED GRADE SHOWN ON PLANS OR GRADE ESTABLISHED BY ENGINEER. MANHOLE DIMENSIONS SHALL BE DETERMINED BASED ON ELEVATIONS PROVIDED ON THE PLANS.
5. ALL LIFT HOLES SHALL BE FILLED WITH A PRECAST CONCRETE PLUG SEALED AND COVERED WITH MASTIC OR THOROUGHLY WETTED, FILLED WITH MORTAR, SMOOTHED AND POINTED INSIDE AND OUT.
6. AGGREGATE BACKFILL (IDOT CA-6, CA-7, CA-10 OR FA-10) SHALL BE PROVIDED AROUND STRUCTURE TO SUBGRADE ELEVATION WHEN STRUCTURE FALLS WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTER, DRIVEWAYS AND SIDEWALKS.

### OUTLET CONTROL STRUCTURE W/RESTRICTOR PLATE

NOT TO SCALE

| BASIN LABEL | OCS LABEL | OCS RIM | 100-YR RESTRICTOR SIZE | 100-YR RESTRICTOR INV |
|---|---|---|---|---|
| WEST | OCS 523 | 682.5 | 12.00" DIA | 673.70 |
| EAST | OCS 392 | 689.0 | 5.00" DIA | 677.85 |




NOTES:
1. IN TURF AREAS, FRAME AND LID SHALL BE NEENAH R-1713 FRAME WITH TYPE B COVER, EJW 1050, OR APPROVED EQUAL.
2. ALL "CLOSED" LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE"AND "STORM" CAST INTO THEM.
3. IN PAVED AREAS, CAST-IN-PLACE CONCRETE BLOCKING A MINIMUM OF 10" THICK, EXTENDING 18" OUT FROM THE FRAME IS REQUIRED. THE SURFACE OF THE CONCRETE BLOCKING SHALL BE SET TO THE ELEVATION OF THE TOP OF THE BITUMINOUS BINDER COURSE. IN CONCRETE PAVEMENT APPLICATIONS, THE SURFACE OF THE BLOCKING SHALL MATCH THE FINISH PAVEMENT SURFACE.
4. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED FOR ALL MANHOLES. NO MORE THAN 2 PRECAST ADJUSTING RINGS, TOTALING NO MORE THAN 8" SHALL BE USED. BETWEEN EACH SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL.

**STORM MANHOLE TYPE A**

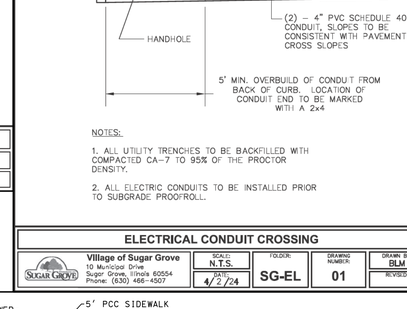
| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: SG-ST | DRAWING NUMBER: 01 | DRAWN BY: CLN |
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NOTE:
COATINGS REQUIRED: 2 COATS VEX-HSFT FULL LENGTH OF POLE.
LIGHTING CONTRACTOR SHALL PROVIDE CUT SHEETS OF STREET LIGHT LUMINAIRE, POLE, PHOTOCELL, AND ARM TO VILLAGE PRIOR TO ORDERING TO CONFIRM APPROVAL

**STREET LIGHT DETAIL - OPTION 2**

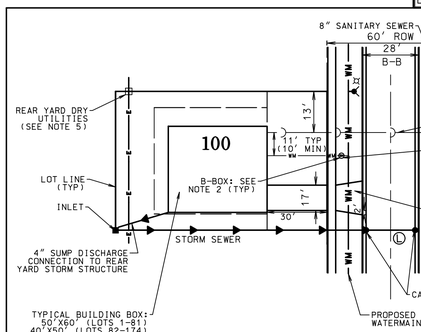
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|---|---|---|---|---|
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NOTES:
1. ALL UTILITY TRENCHES TO BE BACKFILLED WITH COMPACTED CA-7 TO 95% OF THE PROCTOR DENSITY.
2. ALL ELECTRIC CONDUITS TO BE INSTALLED PRIOR TO SUBGRADE PROOFROLL.

**ELECTRICAL CONDUIT CROSSING**

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### TYPICAL SINGLE FAMILY UTILITY LAYOUT AND SERVICE CONNECTIONS

NOT TO SCALE

NOTES:
1. FIELD LOCATION OF ALL HOUSE SERVICES TO BE SUPPLIED BY CONTRACTOR AND SHOWN ON "RECORD DRAWING" PLANS AND STAKED. SEE GENERAL CONSTRUCTION NOTES FOR MARKING WATER AND SANITARY SERVICES AT CURB.
2. B-BOX TO BE LOCATED IN PARKWAY BETWEEN SIDEWALK AND BACK OF CURB (1' FROM SIDEWALK TYP).
3. THE MINIMUM DISTANCE BETWEEN SERVICE TAPS IS 2.0'.
4. CONFIGURATION FOR SANITARY AND WATER SERVICES FOR INDIVIDUAL LOTS TO BE PROVIDED PER THE TYPICAL UTILITY LAYOUT UNLESS OTHERWISE SHOWN.
5. DRY UTILITIES SHALL BE IN REAR YARD EASEMENTS FOR ALL LOTS.
6. ALL CORP CONNECTIONS, INCLUDING B-BOX, SHALL BE IN COMPRESSION
7. UTILITY STRUCTURES, INCLUDING B-BOXES AND CLEANOUTS, SHALL NOT BE LOCATED IN PAVEMENT AREAS.


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 32 OF 42

PROJECT NUMBER: 4930

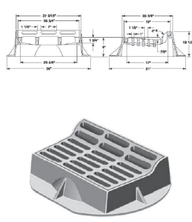
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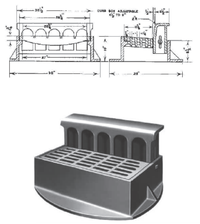
M-3.12 CURB & GUTTER
(UNDER PONDING OR CONTINUOUS GRADE CONDITIONS)

NEENAH R-3501-P, EJIW 7525
OR APPROVED EQUAL



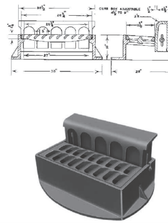
B-6.12 CURB & GUTTER
(UNDER PONDING CONDITIONS)

NEENAH R-3281-A, EJIW 7210
W/ TYPE M1 GRATE AND T1 BACK
OR APPROVED EQUAL



B-6.12 CURB & GUTTER
(UNDER CONTINUOUS GRADE CONDITIONS)

NEENAH R-3281-AL, EJIW 7210 W/TYPE M4
VANE GRATE & T1 BACK OR APPROVED
EQUAL



## STANDARD CASTINGS

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| | | | | REVISED: |

R-4340-B SERIES OR
EAST JORDAN 6527
ROUND BEHIVE GRATE

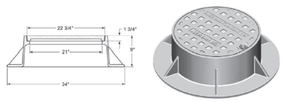
| Catalog No. | O Dia. | O.D. Legs | Dia. Bthe | Ht. Bthe | No. Legs | Size Bars | Size Op. | Pipe Size |
|---|---|---|---|---|---|---|---|---|
| R-4340-A | 34 | 28 1/8 | 20 1/8 | 6 | 6 | 1 1/2 | | 36 |
| R-4340-S | 31 | 25 | 20 | 6 | 6 | 2 | 1 1/2 | 24 |
| R-4340-C | 31 | 25 | 23 | 5 3/4 | 4 | 1 | 1 1/4 | 24 |
| R-4340-B | 31 | 25 | 23 | 6 | 4 | 1 | 1 | 24 |
| R-4340-X1 ** | 31 1/2 | 25 3/4 | 23 | 5 | 4 | 1 | 1 | 24 |
| R-4340-S ** | 31 | 25 | 19 | 3 | 4 | 1 3/4 | 2 | 18 |
| R-4340-H | 25 | 19 | 17 | 3 | 3 | 1 5/8 | 1 3/4 | 12 |

* Furnished with ring instead of legs.
** Frame not available.
Grate/Ramps featured: "SUMP NO VALVE" – ENGINEERED



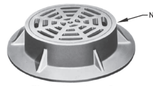

*Illustrating R-4340-B*

R-1713 FRAME AND LID,
EJIW 1050 OR APPROVED EQUAL



NOTE:

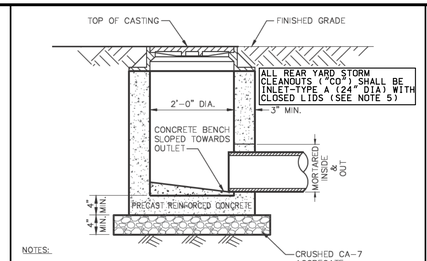
TYPE D GRATES TO BE USED FOR OPEN LIDS. CLOSED LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE" AND "STORM" CAST INTO THE LID.




*Illustrating type D cover - flat*

## STANDARD CASTINGS

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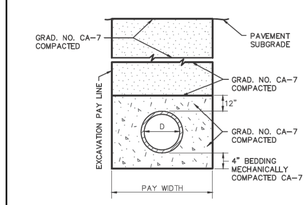



NOTES:

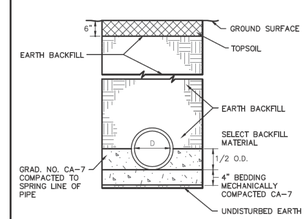
1. FRAME AND GRATE SHALL BE:
   A. IN PAVED AREAS:
      I. M-3.12 CURB & GUTTER (UNDER PONDING OR CONTINUOUS GRADE CONDITIONS): NEENAH R-3501-P, EJIW 7525, OR APPROVED EQUAL.
      II. B-6.12 CURB AND GUTTER (UNDER PONDING CONDITIONS): NEENAH R-3281-A, EJIW 7210 W/TYPE M2 GRATE AND T1 BACK, OR APPROVED EQUAL.
      III. B-6.12 CURB AND GUTTER (UNDER CONTINOUS GRADE CONDITIONS): NEENAH R-3281-AL, EJIW 7210 W/TYPE M4 VANE GRATE AND T1 BACK, OR APPROVED EQUAL.
   B. IN NON-PAVED AREAS: NEENAH R-1713 WITH TYPE D COVER, EJIW 1050 WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
2. ROADSIDE DITCH DRAINAGE STRUCTURES SHALL BE EVALUATED ON A CASE-BY-CASE BASIS.
3. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED FOR ALL CATCH BASINS. NO MORE THAN 2 PRECAST ADJUSTING RINGS, TOTALING NO MORE THAN 8" SHALL BE USED. BETWEEN EACH SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL.
4. ALL CURB INLET FRAMES SHALL BE SEALED WITH A HYDRAULIC CEMENT FILLET BETWEEN THE FRAME AND TOP ADJUSTING RING OR CONE.
5. ALL CLOSED STRUCTURE LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE" AND "STORM" CAST INTO TOP AND SHALL BE THE CONCEALED PICK HOLE TYPE.

## INLET - TYPE A

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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| | | | | REVISED: |



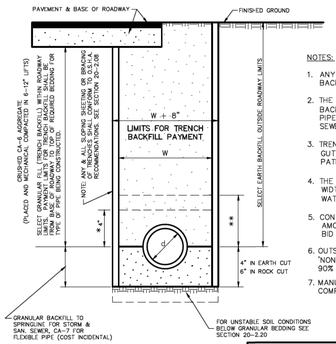

SECTION IN PAVED AREAS




SECTION IN GRASS AREAS

## STORM SEWER TRENCH DETAIL

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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| | | | | REVISED: |




*4" ALL RIGID PIPE INSTALLATION

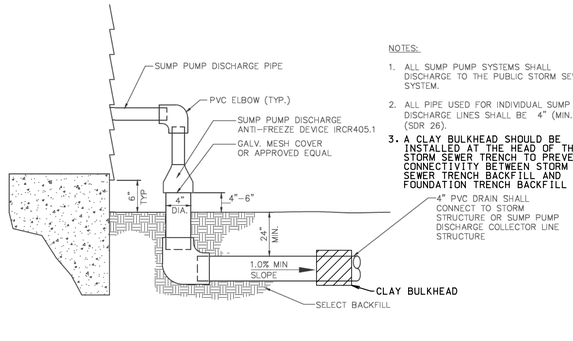
** CA-7 AGGREGATE TO 1.0' OVER TOP OF PIPE FOR FLEXIBLE PIPE

NOTES:

1. ANY FLARE OR EXCAVATION BEYOND THE LIMITS SPECIFIED SHALL BE BACKFILLED ACCORDINGLY AT THE EXPENSE OF THE CONTRACTOR.
2. THE PROVIDING AND INSTALLATION OF THE CA-7 AGGREGATE BACKFILL FROM HEIGHT SPECIFIED TO 4" BELOW THE BOTTOM OF THE PIPE SHALL BE INCIDENTAL TO THE UNIT COST OF THE TYPE OF SEWER BEING CONSTRUCTED.
3. TRENCH BACKFILL LIMITS SHALL BE DEFINED AS 2' BEHIND CURB AND GUTTERS AND 2' BEYOND AGGREGATE SHOULDERS, SIDEWALKS, BIKE PATHS, OR OTHER PAVED AREAS.
4. THE BOTTOM WIDTH OF THE TRENCH (W) SHALL NOT EXCEED THE WIDTHS STATED IN THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS. (LATEST EDITION)
5. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE ACTUAL AMOUNT OF GRANULAR TRENCH BACKFILL REQUIRED. NO ADJUSTMENT TO BID PRICE WILL BE ALLOWED UNLESS THERE IS A CHANGE IN THE PLANS.
6. OUTSIDE THE LIMITS FOR TRENCH BACKFILL, (AS DESCRIBED IN NOTE 3) 'NON-STRUCTURAL' FILL MATERIAL SHALL BE MANUALLY COMPACTED TO 90% OF THE STANDARD PROCTOR DENSITY.
7. MANUAL COMPACTION IS THE ONLY ACCEPTABLE FORM OF BACKFILL COMPACTION; JETTING IS NOT ALLOWED.

## TYPICAL TRENCH DETAIL

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| 10 Municipal Drive<br>Sugar Grove, Illinois 60554<br>Phone: (630) 391-7200 | DATE: 4/2/24 | SG-MI | 01 | KKP |
| | | | | REVISED: |

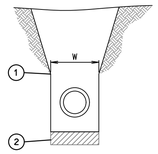



NOTES:

1. ALL SUMP PUMP SYSTEMS SHALL DISCHARGE TO THE PUBLIC STORM SEWER SYSTEM.
2. ALL PIPE USED FOR INDIVIDUAL SUMP PUMP DISCHARGE LINES SHALL BE 4" (MIN.) PVC (SDR 26).
3. **A CLAY BULKHEAD SHOULD BE INSTALLED AT THE HEAD OF THE STORM SEWER TRENCH TO PREVENT CONNECTIVITY BETWEEN STORM SEWER TRENCH BACKFILL AND FOUNDATION TRENCH BACKFILL**

## SUMP PUMP SERVICE LINE

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| 10 Municipal Drive<br>Sugar Grove, Illinois 60554<br>Phone: (630) 391-7200 | DATE: 4/2/24 | SG-ST | 12 | CLN |
| | | | | REVISED: |




**STORM SEWER**

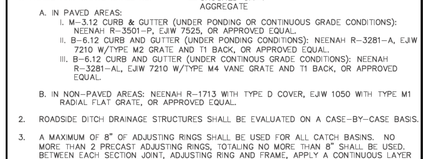
(1) CLAY FILL COMPACTED TO 90% PROCTOR FOR 4' OF TRENCH LENGTH. NO GRANULAR BEDDING.

(2) UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED AS DIRECTED BY SOILS ENGINEER.

NOTES:

1. SEE SPECIFICATIONS FOR "W" AND ACCEPTABLE PIPE MATERIALS.
2. PURPOSE IS TO PREVENT WATER MIGRATION IN STONE BEDDING TO HOME SUMP PUMPS.
3. CLAY BULKHEADS SHALL BE USED ON ALL SIDE YARD STORM SEWER.

**COMPACTED CLAY BULKHEAD**
NOT TO SCALE



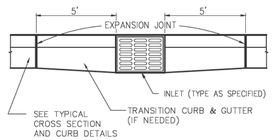

NOTES:

1. FRAME AND GRATE SHALL BE:
   A. IN PAVED AREAS:
      I. M-3.12 CURB & GUTTER (UNDER PONDING OR CONTINUOUS GRADE CONDITIONS): NEENAH R-3501-P, EJIW 7525, OR APPROVED EQUAL.
      II. B-6.12 CURB AND GUTTER (UNDER PONDING CONDITIONS): NEENAH R-3281-A, EJIW 7210 W/TYPE M2 GRATE AND T1 BACK, OR APPROVED EQUAL.
      III. B-6.12 CURB AND GUTTER (UNDER CONTINOUS GRADE CONDITIONS): NEENAH R-3281-AL, EJIW 7210 W/TYPE M4 VANE GRATE AND T1 BACK, OR APPROVED EQUAL.
   B. IN NON-PAVED AREAS: NEENAH R-1713 WITH TYPE D COVER, EJIW 1050 WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
2. ROADSIDE DITCH DRAINAGE STRUCTURES SHALL BE EVALUATED ON A CASE-BY-CASE BASIS.
3. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED FOR ALL CATCH BASINS. NO MORE THAN 2 PRECAST ADJUSTING RINGS, TOTALING NO MORE THAN 8" SHALL BE USED. BETWEEN EACH SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL.
4. ALL CURB INLET FRAMES SHALL BE SEALED WITH A HYDRAULIC CEMENT FILLET BETWEEN THE FRAME AND TOP ADJUSTING RING OR CONE.
5. ALL CLOSED STRUCTURE LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE" AND "STORM" CAST INTO TOP AND SHALL BE THE CONCEALED PICK HOLE TYPE.

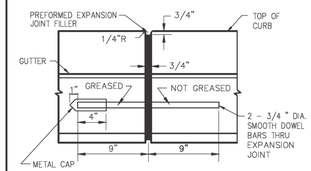
## CATCH BASIN - TYPE A

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| 10 Municipal Drive<br>Sugar Grove, Illinois 60554<br>Phone: (630) 391-7200 | DATE: 4/2/24 | SG-ST | 02 | CLN |
| | | | | REVISED: |

## CURB & GUTTER
## TRANSITION DETAIL AT INLETS



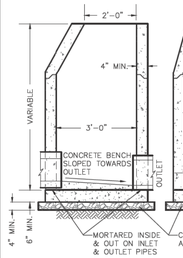

## CURB & GUTTER
## EXPANSION JOINT DETAIL



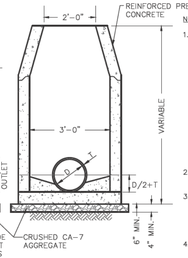

## EXPANSION JOINT DETAIL & TRANSITION DETAIL AT INLETS

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| 160 Municipal Drive<br>Sugar Grove, Illinois 60554<br>Phone: 630-391-7230 | DATE: 4/2/24 | SG-RD | 08 | KKP |
| | | | | REVISED: |

PLAN-ECCENTRIC




PLAN-CONCENTRIC




NOTES:

1. FRAME AND GRATE SHALL BE:
   A. IN PAVED AREAS:
      I. M-3.12 CURB & GUTTER (UNDER PONDING OR CONTINUOUS GRADE CONDITIONS): NEENAH R-3501-P, EJIW 7525, OR APPROVED EQUAL.
      II. B-6.12 CURB AND GUTTER (UNDER PONDING CONDITIONS): NEENAH R-3281-A, EJIW 7210 W/TYPE M2 GRATE AND T1 BACK, OR APPROVED EQUAL.
      III. B-6.12 CURB AND GUTTER (UNDER CONTINOUS GRADE CONDITIONS): NEENAH R-3281-AL, EJIW 7210 W/TYPE M4 VANE GRATE AND T1 BACK, OR APPROVED EQUAL.
   B. IN NON-PAVED AREAS: NEENAH R-1713 WITH TYPE D COVER, EJIW 1050 WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
2. ROADSIDE DITCH DRAINAGE STRUCTURES SHALL BE EVALUATED ON A CASE-BY-CASE BASIS.
3. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED FOR ALL INLETS. NO MORE THAN 2 PRECAST ADJUSTING RINGS, TOTALING NO MORE THAN 8" SHALL BE USED. BETWEEN EACH SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL.
4. ALL CURB INLET FRAMES SHALL BE SEALED WITH A HYDRAULIC CEMENT FILLET BETWEEN THE FRAME AND TOP ADJUSTING RING OR CONE.
5. ALL CLOSED STRUCTURE LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE" AND "STORM" CAST INTO TOP AND SHALL BE THE CONCEALED PICK HOLE TYPE.

## INLET - TYPE B

| Village of Sugar Grove | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| 10 Municipal Drive<br>Sugar Grove, Illinois 60554<br>Phone: (630) 391-7200 | DATE: 4/2/24 | SG-ST | 05 | CLN |
| | | | | REVISED: |


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


LENNAR

1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

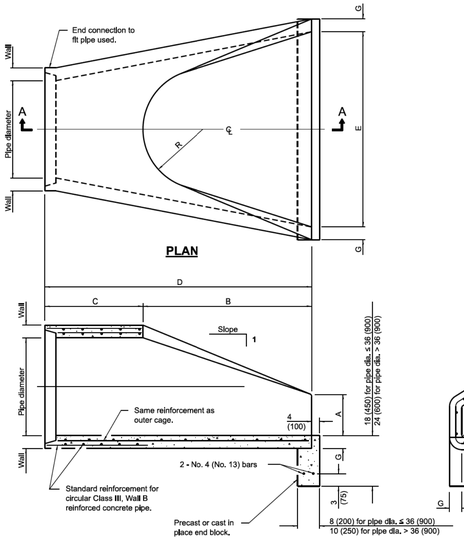
SHEET
33 OF 42

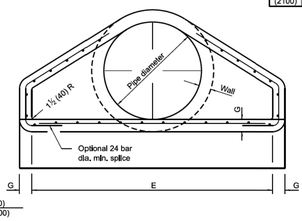
PROJECT NUMBER: 4930


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ILLINOIS FIRM LICENSE 184-002694



6/27/2025
M:\4930\Engineering\Plans\Final\Brighton Ridge Subdivision LD_ST-Construction Details.pdf




| PIPE DIA. | APPROX. QTY. lbs. (kg) | WALL | A | B | C | D | E | G | R | APPROX. SLOPE |
|---|---|---|---|---|---|---|---|---|---|---|
| 12 (300) | 530 (240) | 2 (51) | 4 (102) | 24 (610) | 4'-0⅝" (1.241 m) | 6'-0⅝" (1.851 m) | 24 (610) | 2 (51) | 9 (229) | 1:2,4 |
| 15 (375) | 740 (335) | 2½ (57) | 6 (152) | 27 (686) | 3'-10" (1.168 m) | 6'-1" (1.854 m) | 30 (762) | 2½ (57) | 11 (280) | 1:2,4 |
| 18 (450) | 990 (450) | 2½ (64) | 9 (229) | 27 (686) | 3'-10" (1.168 m) | 6'-1" (1.854 m) | 36 (914) | 2½ (64) | 12 (305) | 1:2,4 |
| 21 (525) | 1280 (580) | 2¾ (70) | 9 (229) | 35 (889) | 38 (965) | 6'-1" (1.854 m) | 3'-6" (1.067 m) | 2¾ (70) | 13 (330) | 1:2,4 |
| 24 (600) | 1520 (690) | 3 (76) | 9½ (241) | 3'-7½" (1.105 m) | 30 (762) | 6'-1½" (1.867 m) | 4'-0" (1.219 m) | 3 (76) | 14 (356) | 1:2,5 |
| 27 (675) | 1930 (875) | 3¼ (83) | 10½ (267) | 4'-0" (1.219 m) | 25½ (648) | 6'-1½" (1.867 m) | 4'-6" (1.372 m) | 3¼ (83) | 14½ (368) | 1:2,4 |
| 30 (750) | 2190 (995) | 3½ (89) | 12 (305) | 4'-6" (1.372 m) | 19¾ (502) | 6'-1½" (1.874 m) | 5'-0" (1.524 m) | 3½ (89) | 15 (381) | 1:2,5 |
| 33 (825) | 3200 (1450) | 3¾ (95) | 13½ (343) | 4'-10½" (1.486 m) | 39¼ (997) | 8'-1¾" (2.483 m) | 5'-6" (1.676 m) | 3¾ (95) | 17½ (445) | 1:2,5 |
| 36 (900) | 4100 (1860) | 4 (102) | 15 (381) | 5'-3" (1.6 m) | 34⅝ (883) | 8'-1½" (2.483 m) | 6'-0" (1.829 m) | 4 (102) | 20 (508) | 1:2,5 |
| 42 (1050) | 5380 (2440) | 4½ (114) | 21 (533) | 5'-3" (1.6 m) | 35 (889) | 8'-2" (2.489 m) | 6'-6" (1.981 m) | 4½ (114) | 22 (559) | 1:2,5 |
| 48 (1200) | 6550 (2970) | 5 (127) | 24 (610) | 6'-0" (1.829 m) | 26 (660) | 8'-2" (2.489 m) | 7'-0" (2.134 m) | 5 (127) | 22 (559) | 1:2,5 |
| 54 (1350) | 8240 (3740) | 5½ (140) | 27 (686) | 5'-5" (1.651 m) | 35 (889) | 8'-4" (2.54 m) | 7'-6" (2.286 m) | 5½ (140) | 24 (610) | 1:2,0 |
| 60 (1500) | 8730 (3960) | 6 (152) | 35 (889) | 5'-0" (1.524 m) | 39 (991) | 8'-3" (2.515 m) | 8'-0" (2.438 m) | 5 (127) | * | 1:1,9 |
| 66 (1650) | 10710 (4860) | 6½ (165) | 30 (762) | 6'-0" (1.829 m) | 27 (686) | 8'-3" (2.515 m) | 8'-6" (2.591 m) | 5½ (140) | * | 1:1,7 |
| 72 (1800) | 12520 (5680) | 7 (178) | 36 (914) | 6'-6" (1.981 m) | 21 (533) | 8'-3" (2.514 m) | 9'-0" (2.743 m) | 6 (152 | * | 1:1,8 |
| 78 (1950) | 14770 (6700) | 7½ (191) | 36 (914) | 7'-6" (2.286 m) | 21 (533) | 9'-3" (2.819 m) | 9'-6" (2.896 m) | 6½ (165) | * | 1:1,8 |
| 84 (2100) | 18160 (8240) | 8 (203) | 36 (914) | 7'-6½" (2.299 m) | 21 (533) | 9'-3½" (2.832 m) | 10'-0" (3.048 m) | 6½ (165) | * | 1:1,6 |

* Radius as furnished by manufacturer

## GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

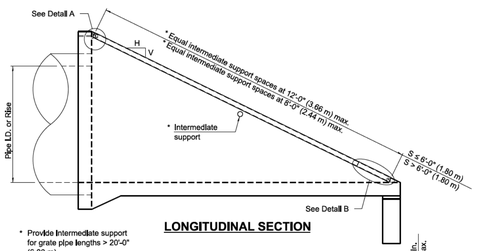
All dimensions are in inches (millimeters) unless otherwise shown.

| DATE | REVISIONS |
|---|---|
| 1-1-11 | Clarified ref. to pipe dia. on |
| | Section A-A, Changed 'Inner' |
| | to 'outer' cage, ref. |
| 1-1-09 | Switched units to English (metric), |
| | |
| | |

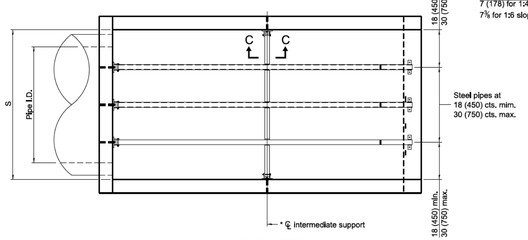
# PRECAST REINFORCED CONCRETE FLARED END SECTION

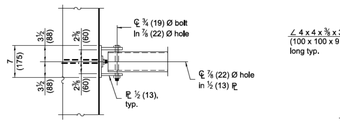
**STANDARD 542301-03**

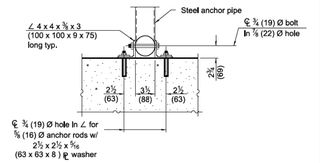
Illinois Department of Transportation
APPROVED January 1, 2011 — ENGINEER OF BRIDGES AND STRUCTURES
APPROVED January 1, 2011 — ENGINEER OF DESIGN AND ENVIRONMENT
BSDES-1.DGN

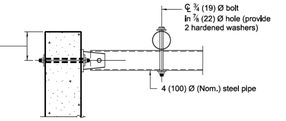



* Provide intermediate support for grate pipe lengths > 20'-0" (6.00 m).

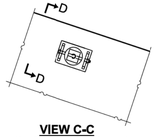


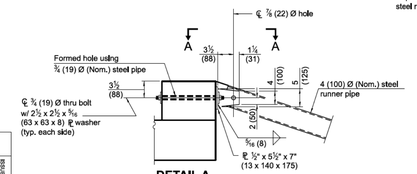



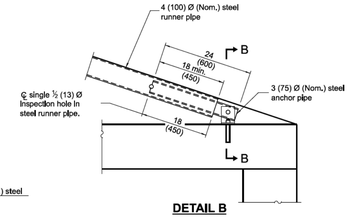




** Measured perpendicular to top of culvert wall. In addition, formed hole shall be located a minimum of 6 (150) measured horizontally from any vertical joints necessary for construction of the culvert end section.




## GENERAL NOTES

This standard shall only be used on concrete end sections not skewed more than ± 15 degrees with roadway.

The minimum distance from the center of a hole to the free edge of a structural shape or plate shall be 1½ (38) unless noted otherwise.

All dimensions are in inches (millimeters) unless otherwise shown.

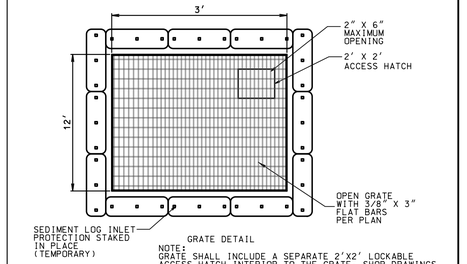
| DATE | REVISIONS |
|---|---|
| 1-1-18 | Corrected value in elliptical |
| | pipe table, Renamed standard, |
| | |
| 4-1-16 | Corrected typo. |
| | |

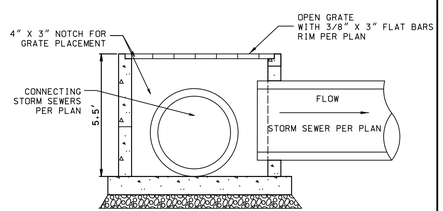
# TRAVERSABLE PIPE GRATE FOR CONCRETE END SECTIONS

(Sheet 1 of 2)

**STANDARD 542311-07**

Illinois Department of Transportation
APPROVED January 1, 2018 — ENGINEER OF BRIDGES AND STRUCTURES
APPROVED January 1, 2018 — ENGINEER OF DESIGN AND ENVIRONMENT
BSDES-1.DGN




LARGE CAPACITY GRATE STRUCTURE

## PIPE-GRATE SCHEDULE FOR PIPE CULVERT END SECTIONS

| Pipe I.D. | Slope of End Section | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1:3 | | | 1:4 | | | 1:6 | | |
| | Main Pipe No. / Length | Int. Support No. / Length | Total Length of Pipe | Main Pipe No. / Length | Int. support No. / Length | Total Length of Pipe | Main Pipe No. / Length | Int. Support No. / Length | Total Length of Pipe |
| 27 (675) | 1 @ 9'-8" 1 @ (2,95 m) | N/A | 9'-8" (2,95 m) | 1 @ 12'-11" 1 @ (3,94 m) | N/A | 12'-11" (3,94 m) | 1 @ 19'-7" 1 @ (5,97 m) | N/A | 19'-7" (5,97 m) |
| 30 (750) | 1 @ 11'-4" 1 @ (3,43 m) | N/A | 11'-4" (3,43 m) | 1 @ 14'-10" 1 @ (4,52 m) | N/A | 14'-10" (4,52 m) | 1 @ 21'-10" 1 @ (6,65 m) | 1 @ 3'-6 1 @ 1,07 m) | 25'-4" (7,72 m) |
| 33 (825) | 1 @ 12'-1" 1 @ (3,68 m) | N/A | 12'-1" (3,68 m) | 1 @ 15'-10" 1 @ (4,83 m) | N/A | 15'-10" (4,83 m) | 1 @ 23'-5" 1 @ (7,14 m) | 1 @ 3'-7" 1 @ (1,09 m) | 27'-0" (8,23 m) |
| 36 (900) | 1 @ 12'-10" 1 @ (3,91 m) | N/A | 12'-10" (3,91 m) | 1 @ 16'-10" 1 @ (5,13 m) | N/A | 16'-10" (5,13 m) | 1 @ 24'-11" 1 @ (7,59 m) | 2 @ 3'-11" 2 @ (1,19 m) | 32'-9" (9,97 m) |
| 42 (1050) | 2 @ 14'-9" 2 @ (4,50 m) | N/A | 29'-6" (9,00 m) | 2 @ 19'-3" 2 @ (5,87 m) | N/A | 38'-6" (11,74 m) | 2 @ 28'-6" 2 @ (8,69 m) | 2 @ 4'-7" 2 @ (1,40 m) | 66'-2" (20,18 m) |
| 48 (1200) | 2 @ 16'-4" 2 @ (4,98 m) | N/A | 32'-8" (9,96 m) | 2 @ 21'-4" 2 @ (6,50 m) | 1 @ 5'-1" 1 @ (1,55 m) | 47'-9" (14,55 m) | 2 @ 31'-6" 2 @ (9,60 m) | 2 @ 5'-1" 2 @ (1,55 m) | 73'-2" (22,30 m) |
| 54 (1350) | 2 @ 18'-2" 2 @ (5,54 m) | N/A | 36'-4" (11,08 m) | 2 @ 23'-9" 2 @ (7,24 m) | 2 @ 5'-9" 2 @ (1,75 m) | 59'-0" (16,23 m) | 2 @ 35'-1 2 @ (10,69 m) | 4 @ 5'-9" 4 @ (1,75 m) | 93'-2" (28,38 m) |
| 60 (1500) | 2 @ 19'-9" 2 @ (6,02 m) | N/A | 39'-6" (12,04 m) | 2 @ 25'-10" 2 @ (7,87 m) | 3 @ 6'-3" 3 @ (1,91 m) | 70'-5" (21,47 m) | 2 @ 38'-1" 2 @ (11,61 m) | 4 @ 6'-3" 4 @ (1,91 m) | 101'-2" (30,86 m) |
| 66 (1650) | 2 @ 21'-7" 2 @ (6,58 m) | 2 @ 6'-11" 2 @ (2,11 m) | 57'-0" (17,38 m) | 2 @ 28'-2" 2 @ (8,59 m) | 3 @ 6'-11" 3 @ (2,11 m) | 77'-1" (23,51 m) | 2 @ 41'-11" 2 @ (12,78 m) | 5 @ 6'-11" 5 @ (2,11 m) | 127'-5" (36,11 m) |
| 72 (1800) | 3 @ 23'-2" 3 @ (7,06 m) | 2 @ 7'-5" 2 @ (2,26 m) | 84'-4" (25,70 m) | 3 @ 30'-3" 3 @ (9,22 m) | 3 @ 7'-5" 3 @ (2,26 m) | 113'-0" (34,44 m) | 3 @ 44'-5" 3 @ (13,61 m) | 5 @ 7'-5" 5 @ (2,26 m) | 171'-1" (52,13 m) |
| 78 (1950) | 3 @ 25'-0" 3 @ (7,62 m) | 3 @ 6'-1" 3 @ (2,46 m) | 99'-3" (30,24 m) | 3 @ 32'-8" 3 @ (9,96 m) | 4 @ 6'-1" 4 @ (2,46 m) | 130'-4" (39,72 m) | 3 @ 48'-3" 3 @ (14,71 m) | 6 @ 6'-1" 6 @ (2,46 m) | 193'-3" (58,89 m) |
| 84 (2100) | 3 @ 26'-7" 3 @ (8,10 m) | 3 @ 7'-7" 3 @ (2,62 m) | 105'-6" (32,16 m) | 3 @ 34'-9" 3 @ (10,59 m) | 4 @ 6'-7" 4 @ (2,62 m) | 138'-7" (42,25 m) | 3 @ 51'-3" 3 @ (15,62 m) | 6 @ 6'-7" 6 @ (2,62 m) | 206'-3" (62,58 m) |

## PIPE-GRATE SCHEDULE FOR ELLIPTICAL PIPE CULVERT END SECTIONS

| Pipe I.D. (Equiv. Round) | Slope of End Section | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1:3 | | | 1:4 | | | 1:6 | | |
| | Main Pipe No. / Length | Int. Support No. / Length | Total Length of Pipe | Main Pipe No. / Length | Int. Support No. / Length | Total Length of Pipe | Main Pipe No. / Length | Int. Support No. / Length | Total Length of Pipe |
| 21 (525) | 1 @ 8'-2" 1 @ (2,49 m) | N/A | 8'-2" (2,49 m) | 1 @ 11'-2" 1 @ (3,40 m) | N/A | 11'-2" (3,40 m) | 1 @ 17'-5" 1 @ (5,31 m) | N/A | 17'-5" (5,31 m) |
| 24 (600) | 1 @ 8'-2" 1 @ (2,49 m) | N/A | 8'-2" (2,49 m) | 1 @ 11'-2" 1 @ (3,40 m) | N/A | 11'-2" (3,40 m) | 1 @ 17'-5" 1 @ (5,31 m) | N/A | 17'-5" (5,31 m) |
| 27 (675) | 1 @ 8'-11" 1 @ (2,72 m) | N/A | 8'-11" (2,72 m) | 1 @ 12'-2" 1 @ (3,71 m) | N/A | 12'-2" (3,71 m) | 1 @ 18'-11" 1 @ (5,77 m) | N/A | 18'-11" (5,77 m) |
| 30 (750) | 1 @ 9'-5" 1 @ (2,87 m) | N/A | 9'-5" (2,87 m) | 1 @ 12'-11" 1 @ (3,94 m) | N/A | 12'-11" (3,94 m) | 1 @ 19'-11" 1 @ (6,07 m) | N/A | 19'-11" (6,07 m) |
| 36 (900) | 2 @ 11'-0" 2 @ (3,35 m) | N/A | 22'-0" (6,70 m) | 2 @ 14'-11" 2 @ (4,55 m) | N/A | 29'-10" (9,10 m) | 2 @ 22'-11" 2 @ (6,99 m) | 1 @ 4'-7" 1 @ (1,40 m) | 50'-6" (15,38 m) |
| 42 (1050) | 2 @ 12'-4" 2 @ (3,76 m) | N/A | 24'-8" (7,52 m) | 2 @ 16'-8" 2 @ (5,08 m) | N/A | 33'-4" (10,16 m) | 2 @ 25'-6" 2 @ (7,77 m) | 2 @ 5'-5" 2 @ (1,65 m) | 61'-10" (18,84 m) |
| 48 (1200) | 2 @ 13'-8" 2 @ (4,17 m) | N/A | 27'-4" (8,34 m) | 2 @ 18'-5" 2 @ (5,61 m) | N/A | 36'-10" (11,22 m) | 2 @ 28'-0" 2 @ (8,53 m) | 3 @ 6'-1" 3 @ (1,85 m) | 74'-3" (22,61 m) |
| 54 (1350) | 2 @ 15'-0" 2 @ (4,75 m) | N/A | 30'-0" (9,50 m) | 2 @ 20'-1" 2 @ (6,12 m) | 2 @ 6'-9" 2 @ (2,06 m) | 53'-8" (16,36 m) | 2 @ 30'-7" 2 @ (9,32 m) | 3 @ 6'-9" 3 @ (2,06 m) | 81'-5" (24,82 m) |
| 60 (1500) | 3 @ 16'-7" 3 @ (5,05 m) | N/A | 49'-9" (15,15 m) | 3 @ 22'-2" 3 @ (6,76 m) | 2 @ 7'-7" 2 @ (2,31 m) | 81'-8" (24,90 m) | 3 @ 33'-7" 3 @ (10,24 m) | 4 @ 7'-7" 4 @ (2,31 m) | 131'-1" (39,96 m) |
| 66 (1650) | 3 @ 17'-11" 3 @ (5,46 m) | N/A | 53'-9" (16,38 m) | 3 @ 23'-11" 3 @ (7,29 m) | 2 @ 8'-3" 2 @ (2,51 m) | 88'-3" (26,89 m) | 3 @ 36'-2" 3 @ (11,02 m) | 4 @ 8'-3" 4 @ (2,51 m) | 141'-6" (43,10 m) |
| 72 (1800) | 3 @ 19'-6" 3 @ (5,94 m) | N/A | 58'-6" (17,82 m) | 3 @ 25'-11" 3 @ (7,90 m) | 3 @ 8'-11" 3 @ (2,72 m) | 104'-8" (31,86 m) | 3 @ 39'-2" 3 @ (11,94 m) | 4 @ 8'-11" 4 @ (2,72 m) | 153'-2" (46,70 m) |

# TRAVERSABLE PIPE GRATE FOR CONCRETE END SECTIONS

(Sheet 2 of 2)

**STANDARD 542311-07**

Illinois Department of Transportation
APPROVED January 1, 2018 — ENGINEER OF BRIDGES AND STRUCTURES
APPROVED January 1, 2018 — ENGINEER OF DESIGN AND ENVIRONMENT
BSDES-1.DGN


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

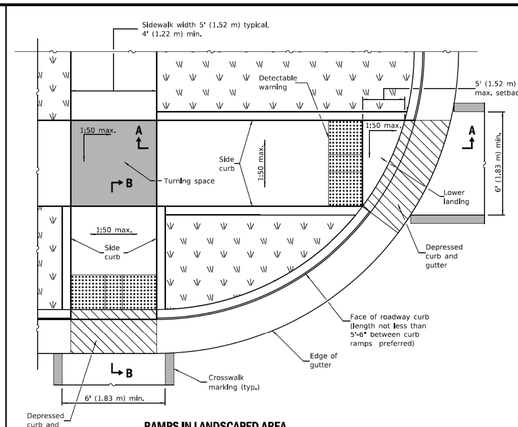
# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 34 OF 42

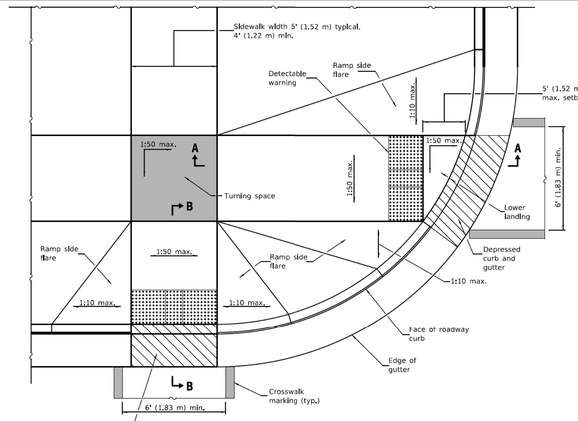
PROJECT NUMBER: 4930


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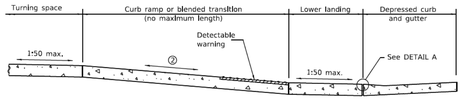

6/27/2025 12:53:24 PM
N:\4930\Engineering Plans\Final\Brighton Ridge - Subdivision\12_ST-Construction Details.pdf




**RAMPS IN LANDSCAPED AREA**
**SETBACK ≤ 5'**

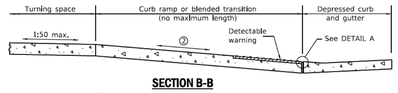



**RAMPS IN PAVED AREA**
**SETBACK ≤ 5'**




**SECTION A-A**

② The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.

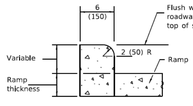



**SECTION B-B**

② The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.




**DETAIL A**



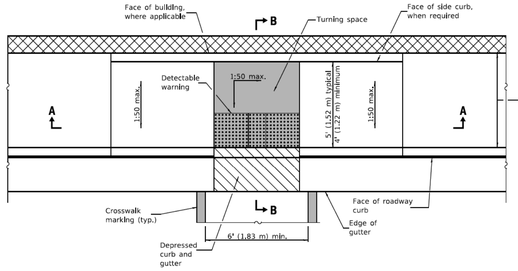

**SIDE CURB DETAIL**

See Sheet 2 for GENERAL NOTES.

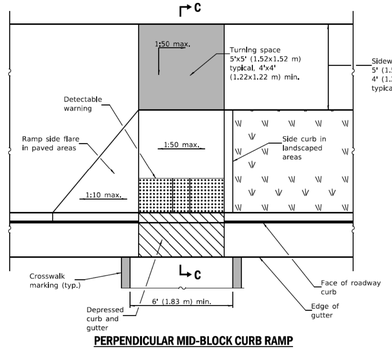
| DATE | REVISIONS |
|---|---|
| 1-1-19 | Removed "15-foot rule", added "Blended transitions" and placement tolerances for detectable warnings, |
| 1-1-18 | Omitted diagonal slope at turning spaces and lower landings, |

**PERPENDICULAR CURB RAMPS FOR SIDEWALKS**
(Sheet 1 of 2)

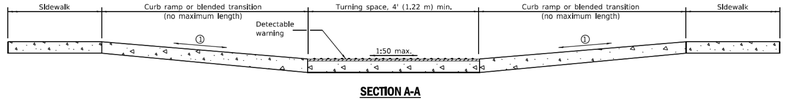
**STANDARD 424001-11**




**PARALLEL MID-BLOCK CURB RAMP**

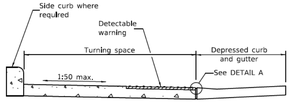



**PERPENDICULAR MID-BLOCK CURB RAMP**

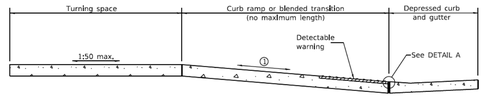



**SECTION A-A**

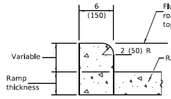
① The running slope of a curb ramp shall be 1:20 min. and 1:12 max. The running slope of a blended transition shall be 1:20 max.



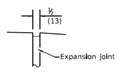

**SECTION B-B**




**SECTION C-C**




**SIDE CURB DETAIL**




**DETAIL A**

| DATE | REVISIONS |
|---|---|
| 1-1-19 | Removed upper landing, added blended transitions and detectable warning tolerances, |
| 1-1-18 | Omitted diagonal slope at turning spaces and lower landings, |

**MID-BLOCK CURB RAMPS FOR SIDEWALKS**

**STANDARD 424016-05**

## GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Where the turning space is constrained on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:64 is preferred.

Detectable warnings are shown in their ideal locations but the following placement tolerances are allowed.

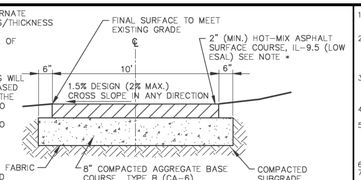
Side Border - Detectable warnings should extend the full width of the walking surface (excluding flared sides) but a border along each side up to 2 in. (50 mm) in, width is allowed.

Curb Set-Back - Detectable warnings located at the back of curb should closely align with the curb but a gap up to 6 in. (150 mm) behind the curb is allowed.

See Standard 606001 for details of depressed curb adjacent to curb ramp.

All dimensions are in inches (millimeters) unless otherwise shown.

•NOTE: ALTERNATE MATERIALS/THICKNESS AT THE APPROVAL OF VILLAGE ENGINEER. ASPHALT THICKNESS WILL BE INCREASED TO 4" IF THE PATH ALSO PROVIDES ACCESS TO VILLAGE UTILITIES

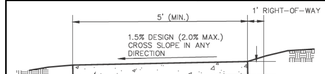



NOTES:

1. THE PATH CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH IDOT'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."
2. PROVIDE RAMP AND DETECTABLE WARNING AT ALL STREET CROSSINGS IN ACCORDANCE WITH THE VILLAGE'S SIDEWALK AND BIKE PATH RAMP DETAIL AND ADA REQUIREMENTS. IF A CONFLICT EXISTS BETWEEN THE DETAIL AND ADA REQUIREMENTS, THE MORE STRINGENT REQUIREMENT WILL APPLY. THIS WILL REQUIRE A MINIMUM 5 FOOT LENGTH OF THE MULTI-USE PATH TO BE CONCRETE AT THE RAMP TO ALLOW FOR THE PLACEMENT OF THE RED PANELS. THE CONCRETE AT THIS LOCATION SHALL BE 10 FOOT WIDE AND MEET THE SIDEWALK DETAIL REQUIREMENTS.
3. NO UTILITY STRUCTURES SHALL BE ALLOWED IN THE MULTI-USE PATH.
4. PROOF ROLLS ARE REQUIRED OF THE SUB-GRADE AND AGGREGATE BASE. THE CONTRACTOR SHALL PROVIDE THE LOADED TRUCK AND DRIVER FOR THE PROOF ROLLS. THE VILLAGE ENGINEER SHALL WITNESS ALL PROOF ROLLS. THE CONTRACTOR SHALL PROVIDE A COPY OF THE LOAD TICKET TO THE VILLAGE ENGINEER. THE VILLAGE ENGINEER DETERMINES IF THE PROOF ROLL PASSES OR FAILS. THE CONTRACTOR DETERMINES CORRECTIVE MEASURES AND IMPLEMENTS THEM. IF REQUIRED BY VILLAGE ENGINEER, SUBSEQUENT ADDITIONAL PROOF ROLLS WILL BE COMPLETED BY THE CONTRACTOR AND WITNESSED BY THE VILLAGE ENGINEER, BUT AT NO ADDITIONAL EXPENSE TO THE VILLAGE.
5. THE VILLAGE ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY PROOF ROLL OR PAVING.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING QUALITY CONTROL TESTING. A TESTER SHALL TAKE SAMPLES AT THE PLANT PRIOR TO PAVING AND THEN BE ON SITE AT THE START OF THE PAVING. THE VILLAGE RESERVES THE RIGHT TO PERFORM QUALITY ASSURANCE TESTING.
7. TWO FOOT (2') AGGREGATE SHOULDER MAY BE REQUIRED.

**TYPICAL MULTI-USE PATH SECTION**

| Village of Sugar Grove, 160 Municipal Drive, Sugar Grove, Illinois 60554, Phone: 630-391-7230 | SCALE: N.T.S. | FOLDER: SG-RD | DRAWING NUMBER: 12 | DRAWN BY: KKP |
|---|---|---|---|---|
| | DATE: 4/2/24 | | | REVISED: |




GENERAL NOTES:

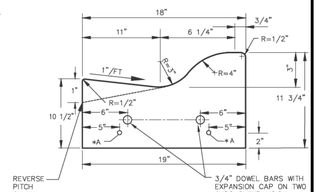
1. REMOVE ALL TOPSOIL. PLACE CONCRETE ON 4" MIN. COMPACTED CA-6 STONE.
2. A CONTROL (CONTRACTION) JOINT SHALL BE TOOLED AT 5' INTERVALS AT THE TIME OF PLACEMENT. EXPANSION JOINTS WITH 1/2" BITUMINOUS FILLER MATERIAL SHALL BE SPACED AT INTERVALS SPECIFIED BELOW, AND AT 2.5' EITHER SIDE OF UTILITY STRUCTURES.
3. SIDEWALK SHALL BE INSTALLED THROUGH ALL RESIDENTIAL AND NON-RESIDENTIAL ACCESS DRIVES WITHIN THE VILLAGE'S RIGHT OF WAY. SIDEWALK SHALL BE 6" THICK MIN. AT RESIDENTIAL DRIVEWAY CROSSINGS AND AT SIDEWALK RAMPS, 8" THICK MIN. AT NON-RESIDENTIAL DRIVEWAYS, AND 5" MIN. OTHER AREAS.
4. CONCRETE SHALL BE CLASS SI.
5. PLACE 3/4" PREFORMED BIT. FILLER MATERIAL AT THE FULL DEPTH OF CONCRETE AT EDGES ABUTTING SIDEWALKS, CONCRETE DRIVES OR PRIVATE SIDEWALKS.
6. MAX. LONGITUDINAL SLOPE IS 5.0%.
7. THE SURFACE SHALL HAVE A LIGHT BROOM FINISH.
8. ALL SIDEWALK SHALL BE CURED TO THE REQUIREMENTS OF ARTICLE 1020.13 OF THE STATE OF ILLINOIS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTIONS, LATEST EDITION. MEMBRANE CURING SHALL BE W.R. MEADOWS CS 309 WITH WHITE FUGITIVE DYE AS PER TYPE II MEMBRANE CURING OR APPROVED EQUAL.
9. QUALITY CONTROL TESTING SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR. QUALITY ASSURANCE TESTING SHALL BE THE RESPONSIBILITY OF THE VILLAGE. THE MIX SHALL MEET IDOT
10. THE VILLAGE ENGINEER SHALL BE CONTACTED 48 HOURS PRIOR TO THE POUR FOR A REVIEW OF THE SUBGRADE, REINFORCING AND FORMWORK.
11. CONCRETE DELIVERY TICKETS FROM THE CONCRETE SUPPLIER SHALL BE PROVIDED TO THE VILLAGE ENGINEER INDICATING A MINIMUM OF SIX (6) BAG MIX, CLASS "SI" CONCRETE, 5% TO 8% AIR ENTRAINMENT, AND THE LOCATION, AND DATE OF THE POUR. A COPY OF THE DATED BILLING FOR THE CURING COMPOUND SHALL ALSO BE REQUIRED FOR APPROVAL.
12. 2-20' – NO. 4 REBAR IS REQUIRED AT ALL TRENCH CROSSINGS.
13. UTILITY STRUCTURES ARE NOT PERMITTED IN THE SIDEWALK.
14. PROVIDE RAMP AND DETECTABLE WARNING AT ALL STREET CROSSINGS IN ACCORDANCE WITH THE VILLAGE'S SIDEWALK AND BIKE PATH RAMP DETAIL AND ADA REQUIREMENTS. IF A CONFLICT EXISTS BETWEEN THE DETAIL AND ADA REQUIREMENTS, THE MORE STRINGENT REQUIREMENT WILL APPLY.
15. SIDEWALK SHALL BE POURED IN A MONOLITHIC POUR WHEN POSSIBLE.
16. ALL SIDEWALKS SHALL BE PROTECTED PER IDOT ARTICLE 1020.13 WHEN WEATHER CONDITIONS DICTATE.
17. ALL WEATHER AND CONCRETE CONDITIONS SHALL MEET IDOT REQUIREMENTS.

| TYPICAL EXPANSION JOINT SPACING CURB AND SIDEWALK | |
|---|---|
| POUR TEMP. (DEG. F) | EXPANSION JOINT (SPACING FT.) |
| 40 MIN. | 70' |
| 45 | 75' |
| 50 | 80' |
| 55 | 90' |
| 60 | 95' |
| 65 | 105' |
| 70 | 115' |
| 75 | 125' |
| 80 | 145' |
| 85 | 160' |
| 90 MAX. | 190' |

**TYPICAL SIDEWALK SECTION**

| Village of Sugar Grove, 160 Municipal Drive, Sugar Grove, Illinois 60554, Phone: 630-391-7230 | SCALE: N.T.S. | FOLDER: SG-RD | DRAWING NUMBER: 13 | DRAWN BY: KKP |
|---|---|---|---|---|
| | DATE: 4/2/24 | | | REVISED: |

1. ALL CONCRETE FOR CURB AND GUTTER SHALL CONFORM TO I.D.O.T. STD. SPEC. FOR ROAD & BRIDGE CONST. SEC. 606 AND BE CLASS "SI" CONCRETE SIX BAG MIX, WITH 5% TO 8% AIR ENTRAINMENT.
2. CONTRACTION JOINTS SHALL BE PLACED AT TEN (10) FOOT (MIN.) O.C. PER ARTICLE 420.05 AND SHALL BE SAW CUT TO A MINIMUM DEPTH OF TWO (2) INCHES FROM FRONT TO BACK WITHIN TWENTY-FOUR (24) HOURS OF CONCRETE PLACEMENT AND SHALL BE SEALED WITH POLYSULFIDE JOINT SEALANT PER ARTICLE 420.12.
3. 2-3/4" X 18" SMOOTH DOWEL BARS WITH CAPS AND WITH ONE END GREASED SHALL BE USED AT ALL EXPANSION JOINTS. 3/4" PREMOLDED EXPANSION JOINTS TO BE PLACED AT ALL P.C.'S, P.T.'S AND AS INDICATED BELOW.
4. EXPANSION JOINTS, AS DETAILED HEREIN, SHALL BE CONSTRUCTED AT A MINIMUM SPACING AS INDICATED BELOW.
5. ALL CURBS SHALL BE CURED TO THE REQUIREMENTS OF ARTICLE 1020.13 OF THE STATE OF ILLINOIS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. MEMBRANE CURING SHALL BE W.R. MEADOWS CS 309 WITH WHITE FUGITIVE DYE AS PER TYPE II MEMBRANE CURING OR APPROVED EQUAL.
6. THE MINIMUM LONGITUDINAL CURB SLOPE SHALL BE 0.5%.
7. CUTS IN THE CURB WILL BE MADE FULL DEPTH WITH FULL EXPANSION JOINTS DRILLED AT EACH END AS SHOWN HEREIN.
8. CURB AND GUTTER SHALL HAVE A LIGHT BROOM FINISH.
9. CURB TO BE PLACED ON A 4" (MINIMUM) CRUSHED CA-6 AGGREGATE BASE THAT EXTENDS BEYOND THE BACK OF CURB 1'.
10. THE CURB AND GUTTER SHALL BE DEPRESSED AT ALL SIDEWALK AND MULTI-USE PATH TEES IN COMPLIANCE WITH ILLINOIS ACCESSIBILITY STANDARDS.
11. THE COMPACTED CURB SUBGRADE SHALL BE SHAPED PARALLEL TO CURB FLOW LINE AND POSITIVELY DRAINED TO THE INLETS AND CATCH BASINS.
12. THE MINIMUM CURB AND GUTTER REPLACEMENT SHALL BE 10 FEET AND SHALL BE NO LESS THAN JOINT TO JOINT EXCEPT WHERE RECOMMENDED BY THE VILLAGE ENGINEER.
13. ALL CURB AND GUTTER SHALL BE PROTECTED PER IDOT ARTICLE 1020.13 WHEN WEATHER CONDITIONS DICTATE.
14. ALL WEATHER AND CONCRETE CONDITIONS SHALL MEET IDOT REQUIREMENTS.
15. ALL WATER AND SANITARY SERVICES SHALL BE STAMPED WITH A "W" OR AN "S" ACCORDINGLY IN THE FACE OF THE CURB HEAD.
16. THE VILLAGE ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY POUR.
17. CURB CUTS/DEPRESSIONS ARE PERMITTED AT DRIVEWAYS ON A CASE BY CASE BASIS AS APPROVED BY VILLAGE ENGINEER.



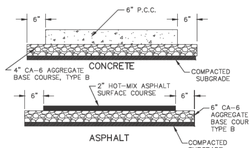

•A 2–20', NO.4 REBAR AT ALL TRENCH CROSSINGS

**TYPE M-3.12 CONCRETE CURB & GUTTER**

| Village of Sugar Grove, 160 Municipal Drive, Sugar Grove, Illinois 60554, Phone: 630-391-7230 | SCALE: N.T.S. | FOLDER: SG-RD | DRAWING NUMBER: 07 | DRAWN BY: KKP |
|---|---|---|---|---|
| | DATE: 4/2/24 | | | REVISED: |

| TYPICAL EXPANSION JOINT SPACING CURB AND GUTTER | |
|---|---|
| POUR TEMP. (DEG. F) | EXPANSION JOINT (SPACING FT.) |
| 40 MIN. | 70' |
| 45 | 75' |
| 50 | 80' |
| 55 | 90' |
| 60 | 95' |
| 65 | 105' |
| 70 | 115' |
| 75 | 125' |
| 80 | 145' |
| 85 | 160' |
| 90 MAX. | 190' |

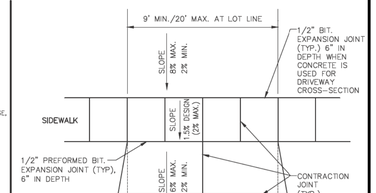
TYPICAL PAVEMENT SECTIONS




NOTES:

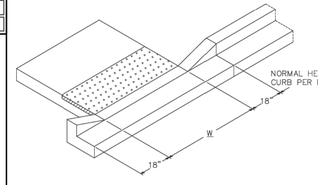
1. CONCRETE SHALL CONFORM TO I.D.O.T. STD. SPEC. FOR ROAD AND BRIDGE CONSTRUCTION SEC. 420 AND SHALL BE CLASS "SI" CONCRETE, 6 BAG, WITH 5% TO 8% AIR-ENTRAINMENT.
2. HOT-MIX ASPHALT SURFACE COURSE SHALL BE MIX C, N50.
3. AGGREGATE BASE COURSE SHALL BE COMPACTED CA-6.
4. 6" CONTINUOUS PRE MOLDED EXPANSION JOINTS SHALL BE PROVIDED AGAINST SIDEWALK AND CURB & GUTTER. (CONCRETE DRIVE ONLY)
5. CONCRETE DRIVEWAYS MAY BE REINFORCED WITH WELDED WIRE FABRIC.
6. NO UTILITY STRUCTURES SHALL BE INSTALLED IN PAVED AREAS.
7. 20' – NO. 4 REBAR SHALL BE INSTALLED AT TRENCH CROSSINGS IN CONCRETE DRIVEWAYS.
8. IF CONCRETE, THE DRIVEWAY SHALL BE CURED AS PER THE REQUIREMENTS FOR SIDEWALKS.
9. ALL CONCRETE SHALL BE PROTECTED PER IDOT ARTICLE 1020.13 WHEN THE WEATHER DICTATES IT.
10. ALL CONCRETE SLABS SHALL BE SYMMETRICALLY JOINTED.
11. CURB CUTS / DEPRESSIONS ARE PERMITTED AT DRIVEWAYS ON A CASE BY CASE BASIS AS APPROVED BY VILLAGE ENGINEER.
12. IN NO CASE SHALL THE ALGEBRAIC DIFFERENCE OF THE DRIVE GRADE AND STREET GRADE EXCEED 8%.

TYPICAL DRIVEWAY APRON




**RESIDENTIAL DRIVEWAY APRON DETAIL**

| Village of Sugar Grove, 160 Municipal Drive, Sugar Grove, Illinois 60554, Phone: 630-391-7230 | SCALE: N.T.S. | FOLDER: SG-RD | DRAWING NUMBER: 11 | DRAWN BY: KKP |
|---|---|---|---|---|
| | DATE: 4/2/24 | | | REVISED: |




NOTES:

1. PLACEMENT OF DETECTABLE WARNING TILES SHALL ADHERE TO LOCATIONS AND SETBACKS AS SHOWN IN IDOT HIGHWAY STANDARDS. SIDEWALK RAMP WIDTH (W) AND LAYOUT SHALL BE ACCORDING TO THE MOST CURRENT IDOT HIGHWAY STANDARDS, EXCEPT A SIDE CURB SHALL NOT BE CONSTRUCTED IN LANDSCAPED AREAS. THE ENGINEER SHALL INCLUDE THE MOST CURRENT IDOT STANDARDS IN THE FINAL ENGINEERING PLANS.
2. A PREFABRICATED, BRICK RED (FEDERAL STANDARD COLOR 30166) DETECTABLE WARNING PANEL WITH SQUARE PATTERNED TRUNCATED DOMES, SHALL BE UTILIZED. THE PANEL SHALL BE AN ADA SOLUTIONS CAST IN PLACE DETECTABLE WARNING PANEL OR APPROVED EQUAL, BY VILLAGE ENGINEER.
3. TILES SHALL BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
4. THE COLORING AND STAMPING OF CONCRETE WILL NOT BE ALLOWED.
5. ALL CONCRETE SHALL BE POURED IN PLACE.
6. THE PANEL SHALL LIE PERPENDICULAR TO THE STREET AND SHALL BE ALIGNED WITH RAMPS ACROSS THE STREET.
7. A FIELD MEETING SHALL BE SET UP WITH THE VILLAGE ENGINEER OR THEIR REPRESENTATIVE PRIOR TO BEGINNING WORK ON ANY RAMP. THE CONTRACTOR'S FIELD SUPERINTENDENT RESPONSIBLE FOR RAMP CONSTRUCTION SHALL BE PRESENT AT MEETING.
8. DESIGN ENGINEER SHALL INCLUDE CURRENT IDOT RAMP DETAIL IN PLAN SET.

**CURB HEAD TAPER AT PEDESTRIAN RAMPS FOR SIDEWALKS IN LANDSCAPED AREAS**

| Village of Sugar Grove, 160 Municipal Drive, Sugar Grove, Illinois 60554, Phone: 630-391-7230 | SCALE: N.T.S. | FOLDER: SG-RD | DRAWING NUMBER: 18 | DRAWN BY: KKP |
|---|---|---|---|---|
| | DATE: 4/2/24 | | | REVISED: |

Illinois Department of Transportation
PASSED January 1, 2019 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2019 — ENGINEER OF BUREAU OF ENVIRONMENT
SHEET 1 OF 2 SHEETS

Illinois Department of Transportation
PASSED January 1, 2019 — ENGINEER OF POLICY AND PROCEDURES
APPROVED January 1, 2019 — ENGINEER OF BUREAU OF ENVIRONMENT
SHEET 2 OF 2 SHEETS

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Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

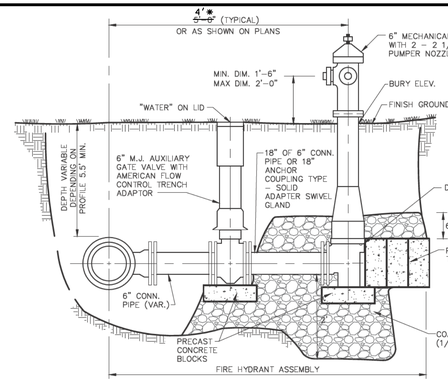
# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 35 OF 42

PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694



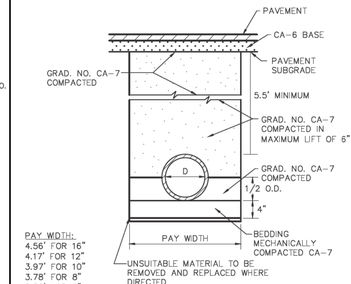

NOTES:

1. CONTRACTORS WILL SUPPLY HYDRANTS WITH AUXILIARY VALVES & MECHANICAL JOINT CONNECTIONS WITH 18" LONG PLAIN END DUCTILE IRON PIPE OR 6"x18" SWIVEL X SOLID ADAPTOR BETWEEN HYDRANT AND VALVE.
2. ALL FIRE HYDRANTS ALONG A POTABLE WATER MAIN SHALL BE RED. ALL FIRE HYDRANTS ALONG A RAW WATER MAIN SHALL BE EMERALD GREEN BY WATEROUS, PAINT CODE M4157.

✱ CONTRACTOR SHALL PROVIDE CUT SHEET TO VILLAGE FOR APPROVAL OF LAYOUT OF 4' SPACING BETWEEN HYDRANT AND WATERMAIN PRIOR TO CONSTRUCTION

## FIRE HYDRANT ASSEMBLY INSTALLATION

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 01 | CLN |
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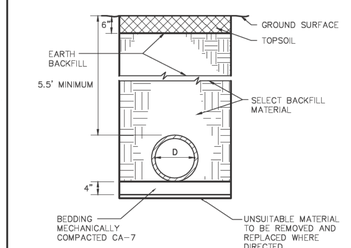



PAY WIDTH:
4.56' FOR 16"
4.17' FOR 12"
3.97' FOR 10"
3.78' FOR 8"
3.58' FOR 6"

### PAVED AREAS & DRIVEWAYS

TRENCH BACKFILL INSTALLATION LIMITS ARE DEFINED AS ALL LOCATIONS UNDER AND WITHIN 2 FEET OF ANY PAVED AREA. PAVED AREAS INCLUDE SHOULDERS, CURB AND GUTTER, SIDEWALK, PATHS, AND ANY AGGREGATE SURFACE COURSE.

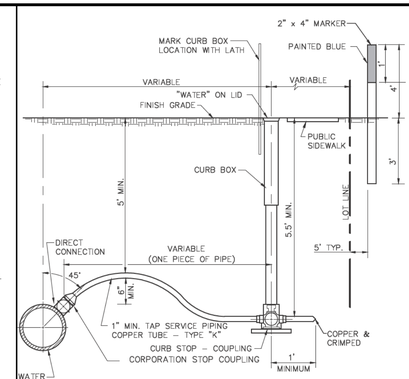
NOTE:
THE 10-POINT SOIL TEST EVALUATION FOR DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C105/A21.5 SHALL BE USED TO DETERMINE THE CORROSIVITY OF THE SOILS ON A PER PROJECT BASIS AND WHETHER OR NOT POLYETHYLENE WRAP IS REQUIRED FOR CORROSION PROTECTION.




### GRASSED AREAS

## WATER MAIN TRENCH DETAIL

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 07 | CLN |
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1. B-BOXES SHALL BE SET IN THE PARKWAY BETWEEN THE SIDEWALK AND BACK OF CURB.
2. NO JOINTS ARE ALLOWED BETWEEN THE CORPORATION STOP AND THE CURB STOP.
3. NO B-BOX SHALL BE ALLOWED IN A SIDEWALK, DRIVEWAY, OR OTHER PAVED SURFACE.
4. THE B-BOX SHALL BE LOCATED IN FRONT OF THE LOT IT SERVES.
5. ALL COPPER SERVICE LINES UNDER AND WITHIN 2 FEET OF PAVEMENT SHALL BE BACKFILLED WITH CA-7.
6. ALL WATER SERVICE FITTINGS SHALL HAVE COMPRESSION CONNECTIONS.
7. A DUCTILE IRON SADDLE WITH 2 STAINLESS STEEL STRAPS AND ACCESSORIES IS REQUIRED FOR WATER SERVICES 1.5" OR LARGER.
8. IN THE EVENT OF MULTI-FAMILY B-BOXES GROUPED TOGETHER, THE B-BOXES SHOULD BE PLACED IN A POURED PCC SLAB AND THE B-BOXES MARKED TO CORRESPOND WITH THE RESIDENTIAL UNIT NUMBER.
9. REFER TO SG-WA-04-2 FOR MODEL NUMBERS.

1 OF 2

## WATER SERVICE ACCESSORIES DETAIL

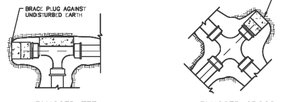
| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 04-1 | CLN |
| | | | | REVISED: |

| BRAND | MUELLER | | |
|---|---|---|---|
| SIZE | 1" | 1.5" | 2" |
| CORPORATION STOP | B-25008 | B-25008 | B-25008 |
| CURB STOP | B-25155 | B-25155 | B-25155 |
| CURB BOX | H-10302 | H-10302-99007 | H-10302-99007 |
| BRAND | FORD | | |
| SIZE | 1" | 1.5" | 2" |
| CORPORATION STOP | FB1000-4-Q | FB1000-6-Q | FB1000-7-Q |
| CURB STOP | B44-444-MQ | B44-666-MQ | B44-777-MQ |
| CURB BOX | EM2-55-67 | EM2-55-67 | EM2-55-67 |
| BRAND | A.Y.McDONALD | | |
| SIZE | 1" | 1.5" | 2" |
| CORPORATION STOP | 74701BQ (1") | 74701BQ (1.5") | 74701BQ (2") |
| CURB STOP | 76104Q (1") | 76104Q (1.5") | 76104Q (2") |
| CURB BOX | ✪ 5.5' MIN. THREADED 1.25" UPPER, 2" BOTTOM THREAD 5615A | | |

2 OF 2

## WATER SERVICE ACCESSORIES DETAIL

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: CLN | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 04-2 | KKP |
| | | | | REVISED: |




PLUGGED TEE

PLUGGED CROSS

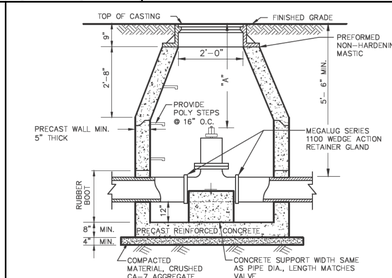
TEE

90° ELBOW

NOTES:
1. ALL PRECAST CONCRETE BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH.
2. ARROWS INDICATE DIRECTION OF THRUST.
3. ALL BLOCKS TO BE 3000 P.S.I. CONCRETE AND A MINIMUM OF 12" THICK.
4. ALL FITTINGS SHOWN IN PLAN VIEW EXCEPT WATER MAIN LOWERING IS IN PROFILE.

## TYPICAL THRUST BLOCK INSTALLATION

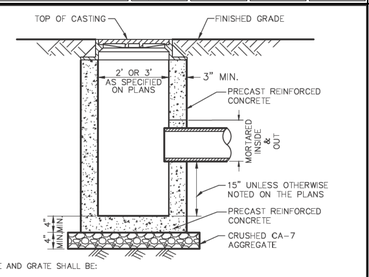
| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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NOTES:
1. VALVES FOR ALL WATER MAINS SHALL BE AMERICAN FLOW CONTROL DUCTILE IRON RESILIENT WEDGE GATE VALVES. IN ACCORDANCE WITH AWWA C-515 STANDARD. ALL VALVES SHALL BE INSTALLED IN VAULTS.
2. IF "A" IS GREATER THAN 6'-0" PROVIDE AN EXTENSION ON THE OPERATING NUT.
3. VALVE VAULT SHALL HAVE A DIA. OF 48" FOR 8" AND SMALLER VALVES AND 60" FOR 10" AND LARGER VALVES. PRECAST REINFORCED CONCRETE MANHOLE SECTIONS SHALL BE IN ACCORDANCE WITH A.S.T.M. C-478 AND SET IN BUTYL ROPE.
4. FRAME AND LID SHALL BE NEENAH R-1713 WITH CONCEALED PICKHOLES. THE WORDS "VILLAGE OF SUGAR GROVE" AND "WATER" SHALL BE CAST INTO THE LID.
5. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED. NO MORE THAN 2 ADJUSTING RINGS ARE ALLOWED. BITUMINOUS MASTIC SHALL BE USED FOR EACH RING AND CASTING IS REQUIRED.
6. BETWEEN EACH MANHOLE SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF PREFORMED NON-HARDENING BITUMINOUS MASTIC MATERIAL.
7. VALVE MUST ALIGN WITH THE CENTER OF VAULT OPENINGS.
8. CONES MUST BE CONCENTRIC UNLESS A PRESSURE TAP VALVE IS PROVIDED.

## VALVE VAULT INSTALLATION

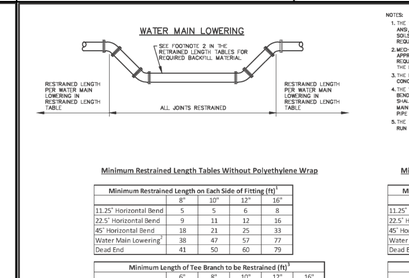
| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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| | | | | REVISED: |




NOTES:
1. FRAME AND GRATE SHALL BE:
   A. IN PAVED AREAS:
      I. M-3.12 CURB & GUTTER (UNDER PONDING OR CONTINUOUS GRADE CONDITIONS): NEENAH R-3501-P, EJW 7525, OR APPROVED EQUAL.
      II. B-6.12 CURB AND GUTTER (UNDER PONDING CONDITIONS): NEENAH R-3281-A, EJW 7210 W/TYPE M2 GRATE AND T1 BACK, OR APPROVED EQUAL.
      III. B-6.12 CURB AND GUTTER (UNDER CONTINOUS GRADE CONDITIONS): NEENAH R-3281-AL, EJW 7210 W/TYPE M4 VANE GRATE AND T1 BACK, OR APPROVED EQUAL.
   B. IN NON-PAVED AREAS: NEENAH R-1713 WITH TYPE D COVER, EJW 1050 WITH TYPE M1 RADIAL FLAT GRATE, OR APPROVED EQUAL.
2. ROADSIDE DITCH DRAINAGE STRUCTURES SHALL BE EVALUATED ON A CASE-BY-CASE BASIS.
3. A MAXIMUM OF 8" OF ADJUSTING RINGS SHALL BE USED FOR ALL CATCH BASINS. NO MORE THAN 2 PRECAST ADJUSTING RINGS, TOTALING NO MORE THAN 8" SHALL BE USED. BETWEEN EACH SECTION JOINT, ADJUSTING RING AND FRAME, APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL.
4. ALL CURB INLET FRAMES SHALL BE SEALED WITH A HYDRAULIC CEMENT FILLET BETWEEN THE FRAME AND TOP ADJUSTING RING OR CONE.
5. ALL CLOSED STRUCTURE LIDS SHALL HAVE "VILLAGE OF SUGAR GROVE" AND "STORM" CAST INTO TOP AND SHALL BE THE CONCEALED PICK HOLE TYPE.

## CATCH BASIN - TYPE C

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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NOTES:
1. THE 10-POINT SOIL TEST EVALUATION FOR DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C105/A21.5 SHALL BE USED TO DETERMINE THE CORROSIVITY OF THE SOILS ON A PER PROJECT BASIS AND WHETHER OR NOT POLYETHYLENE WRAP IS REQUIRED FOR CORROSION PROTECTION.
2. MECHANICAL JOINT FITTINGS WITH RETAINER GLANDS AND FIELD LOK 350 GASKETS OR APPROVED EQUAL SHALL BE USED TO SATISFY THE RESTRAINED LENGTH REQUIREMENTS. FIELD LOK GASKETS MUST BE FROM THE SAME MANUFACTURER AS THE PIPE.
3. THE MINIMUM RESTRAINT LENGTHS ARE ALL IN ADDITION TO THE USE OF PRECAST CONCRETE THRUST BLOCKS FOR HORIZONTAL BENDS AND DEAD ENDS.
4. THE WATER MAIN LOWERING RESTRAINED LENGTH IS ON EACH SIDE OF THE OUTERMOST BENDS. WHEN LOWERING WATER MAIN UNDER A PIPE WITH 4 BENDS, ALL JOINTS SHALL BE RESTRAINED BETWEEN THE OUTERMOST 45 DEGREE BENDS. THE WATER MAIN SHALL HAVE COMPACTED CA-7 FROM 4" BELOW THE PIPE TO 6" ABOVE THE PIPE WITHIN THE LOWERED SECTION.
5. THE TOTAL LENGTH BETWEEN THE FIRST JOINTS ON EITHER SIDE OF THE TEE ON THE RUN SHALL BE A MINIMUM OF 10'.

Minimum Restrained Length Tables Without Polyethylene Wrap

| Minimum Restrained Length on Each Side of Fitting (ft)[1] | 6" | 8" | 10" | 12" | 16" |
|---|---|---|---|---|---|
| 11.25° Horizontal Bend | 5 | 5 | 6 | 8 | |
| 22.5° Horizontal Bend | 9 | 13 | 12 | 16 | |
| 45° Horizontal Bend | 18 | 21 | 25 | 33 | |
| Water Main Lowering[2] | 38 | 47 | 57 | 77 | |
| Dead End | 41 | 50 | 60 | 79 | |

| Minimum Length of Tee Branch to be Restrained (ft)[3] | 6" | 8" | 10" | 12" | 16" |
|---|---|---|---|---|---|
| 8" Tee Run X Branch | 25 | 37 | | | |
| 10" Tee Run X Branch | 23 | 35 | 45 | | |
| 12" Tee Run X Branch | 22 | 34 | 44 | 55 | |
| 16" Tee Run X Branch | 19 | 32 | 42 | 53 | 74 |

| Minimum Restrained Length of Larger Pipe Side (ft) | 8" | 10" | 12" |
|---|---|---|---|
| Reducer: 10" X | 17 | | |
| Reducer: 12" X | 18 | 18 | |
| Reducer: 16" X | 58 | 47 | 34 |

Minimum Restrained Length Tables With Polyethylene Wrap

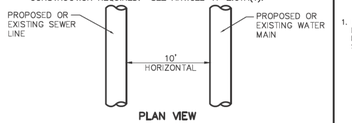
| Minimum Restrained Length on Each Side of Fitting (ft)[1] | 6" | 8" | 10" | 12" | 16" |
|---|---|---|---|---|---|
| 11.25° Horizontal Bend | 5 | 6 | 7 | 10 | |
| 22.5° Horizontal Bend | 10 | 12 | 15 | 19 | |
| 45° Horizontal Bend | 21 | 25 | 30 | 39 | |
| Water Main Lowering[2] | 56 | 69 | 83 | 111 | |
| Dead End | 59 | 71 | 85 | 113 | |

| Minimum Length of Tee Branch to be Restrained (ft)[3] | 6" | 8" | 10" | 12" | 16" |
|---|---|---|---|---|---|
| 8" Tee Run X Branch | 36 | 52 | | | |
| 10" Tee Run X Branch | 33 | 50 | 65 | | |
| 12" Tee Run X Branch | 32 | 49 | 63 | 78 | |
| 16" Tee Run X Branch | 27 | 45 | 60 | 76 | 105 |

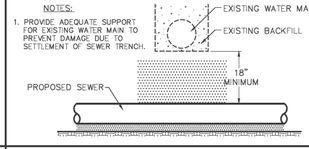
| Minimum Restrained Length of Larger Pipe Side (ft) | 8" | 10" | 12" |
|---|---|---|---|
| Reducer: 10" X | 24 | | |
| Reducer: 12" X | 45 | 25 | |
| Reducer: 16" X | 82 | 67 | 48 |

## MINIMUM RESTRAINED LENGTH

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
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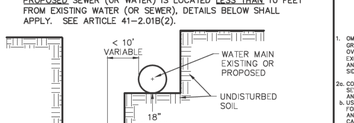



PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE ARTICLE 41-2.01A(1).

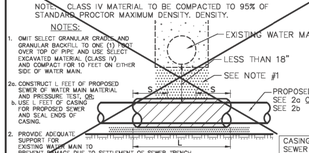



PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM VERTICAL SEPARATION.

NOTES:
1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.




PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE ARTICLE 41-2.01B(2).

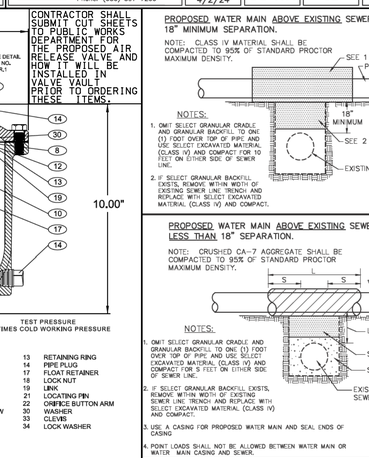



PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION.

NOTES:
1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE.
2a. CONSTRUCT L FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR,
2b. USE L FEET OF CASING FOR PROPOSED SEWER AND SEAL ENDS OF CASING.
2. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.
3. "S" IS THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO THE EXISTING WATER MAIN.

## WATER & SEWER SEPARATION REQUIREMENTS

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 05 | CLN |
| | | | | REVISED: |




CONTRACTOR SHALL SUBMIT CUT SHEETS TO PUBLIC WORKS DEPARTMENT FOR THE PROPOSED AIR RELEASE VALVE AND HOW IT WILL BE INSTALLED IN VALVE VAULT PRIOR TO ORDERING THESE ITEMS.

SEE DRAWING NO. VM-38-M FOR STANDARD MATERIALS OF CONSTRUCTION.

| SERIES NO. 38 | | | |
|---|---|---|---|
| INLET SIZE | | 1" | 2" |
| OUTLET SIZE | | 1/2" | 1/2" |
| WORKING PRESSURE RANGE | 150 PSI CWP | MODEL NO. | 38VC | 38-2VC |
| | | SEAT | 3/16" | 3/16" |
| | 300 PSI CWP | MODEL NO. | 38-5VC | 38-6VC |
| | | SEAT | 5/32" | 5/32" |
| | 600 PSI CWP | MODEL NO. | 38HPVC | 38HP-2VC |
| | | SEAT | 1/8" | 1/8" |

VACUUM CHECK NET NO. SPA-AVC SHIPPED LOOSE.

| | | | |
|---|---|---|---|
| 1 | BODY | 13 | RETAINING RING |
| 2 | COVER | 14 | PIPE PLUG |
| 3 | LEVER FRAME | 17 | FLOAT RETAINER |
| 4 | SEAT | 18 | LOCK NUT |
| 5 | FLOAT | 19 | LINK |
| 6 | GASKET | 21 | LOCATING PIN |
| 7 | COVER BOLT | 22 | ORIFICE BUTTON ARM |
| 8 | RETAINING SCREW | 30 | WASHER |
| 10 | FLOAT ARM | 33 | CLEVIS |
| 11 | ORIFICE BUTTON | 34 | LOCK WASHER |
| 12 | PIVOT PIN | | |

AIR RELEASE VALVE WITH VACUUM CHECK

VAL-MATIC VALVE AND MANUFACTURING CORP.

DATE 4-19-11
DRWG. NO. VMC-38VC

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.

NOTE: CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.

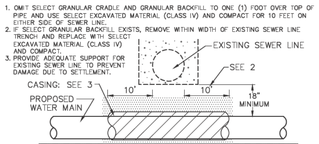



NOTES:
1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE.
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.

NOTE: CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.

NOTES:
1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE.
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.



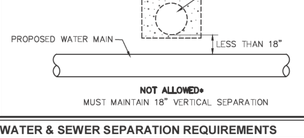

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" SEPARATION.

NOTE: CRUSHED CA-7 AGGREGATE SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.




NOTES:
1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 5 FEET ON EITHER SIDE OF SEWER LINE.
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE A CASING FOR PROPOSED WATER MAIN AND SEAL ENDS OF CASING
4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER.

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH LESS THAN 18" MINIMUM SEPARATION.




NOT ALLOWED✱
MUST MAINTAIN 18" VERTICAL SEPARATION

## WATER & SEWER SEPARATION REQUIREMENTS

| Village of Sugar Grove, 10 Municipal Drive, Sugar Grove, Illinois 60554, Phone: (630) 391-7200 | SCALE: N.T.S. | FOLDER: | DRAWING NUMBER: | DRAWN BY: |
|---|---|---|---|---|
| | DATE: 4/2/24 | SG-WA | 06 | CLN |
| | | | | REVISED: |


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 36 OF 42

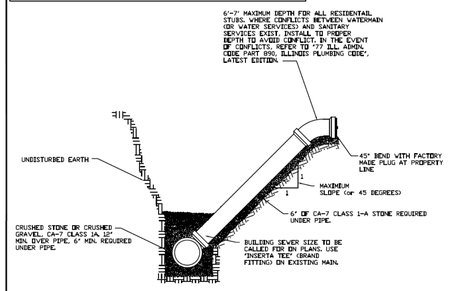
PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

6/27/2025 12:53:35 PM
N:\4900 Engineering\Plats\Final\Brighton Ridge Subdivision\1_ES_FT-Construction Details.pdf

ALL SANITARY RISER STUBS SHALL BE TERMINATED AT THE PROPERTY LINE AT A DEPTH OF NO MORE THAN 6-7 FEET.




**NOTE**

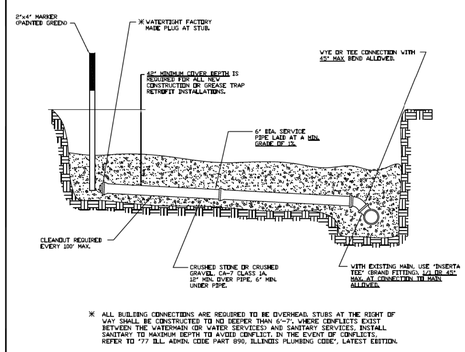
FOR SERVICE PIPE MATERIAL SEE SPECIFICATIONS IN PLANS. 6'-7' MAX. DEPTH FOR ALL RESIDENTIAL STUBS.

**GREATER THAN 45 ° CONNECTION TO MAIN NOT ALLOWED**

**RISER CONNECTION FOR SERVICE LATERAL**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | E Riser & Conflict Notes | 03/15/01 |
| APPROVED KZ, MF | | F Conflict Note | 04/29/08 |
| DATE 05-15-00 | | G Misc. Note Revisions | 12/15/16 |
| SCALE NTS | | H NOTE "12" riser note removed | 12/06/2023 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | H |




* ALL BUILDING CONNECTIONS ARE REQUIRED TO BE OVERHEAD STUBS AT THE RIGHT OF WAY SHALL BE CONSTRUCTED TO NO DEEPER THAN 6'-7'. WHERE CONFLICTS EXIST BETWEEN THE WATERMAIN (OR WATER SERVICES) AND SANITARY SERVICES, INSTALL SANITARY TO MAXIMUM DEPTH TO AVOID CONFLICT. IN THE EVENT OF CONFLICTS, REFER TO 77 ILL. ADMIN. CODE PART 890, ILLINOIS PLUMBING CODE', LATEST EDITION.

**NOTE**

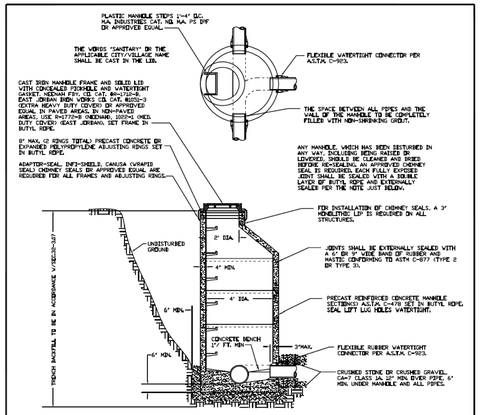
SELECT GRANULAR BACKFILL, REQUIRED UNDER PAVED AREAS, TO BE APPROVED BY APPROPRIATE CITY OR VILLAGE.

**GREATER THAN 45 ° CONNECTION AT MAIN NOT ALLOWED**

**SANITARY SERVICE CONNECTION**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | F Note Revisions | 04/29/08 |
| APPROVED KZ, MF | | G Note Revisions | 05/15/13 |
| DATE 05-12-00 | | H Overhead & Misc. Note Revisions | 02/24/17 |
| SCALE NTS | | I Depth of stub at R.O.W. note rev. | 07/23/2020 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | I |



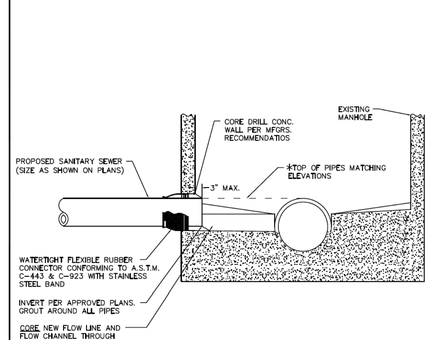

**NOTE**

WHERE EXISTING SEWERS ARE 14" AND LESS, THE INVERT(S) OF NEW PIPE(S) SHALL BE DETERMINED BY MATCHING THE PROPOSED ELEVATION(S) TO THE TOP OF THE DOWNSTREAM PIPE. FOR SEWERS 15" OR GREATER, SEE APPROVED PLANS FOR INVERT INFORMATION. ALL FLOW CHANNELS SHALL BE PRECAST INTO THE BENCH.

**TYPE " A " MANHOLE**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | H Misc. Note Revisions | |
| APPROVED KZ, MF | | I I "NOTE" Revision-determine inv. | 03/06/17 |
| DATE 05-12-00 | | J Expanded Polypropylene adj. rings | 01/26/2021 |
| SCALE NTS | | | |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | I |




**NOTES**

* TO ESTABLISH THE INVERT OF THE NEW PIPE(S) WHERE THE EXISTING SEWER IS 14" DIA. OR LESS, MATCH THE ELEVATION OF THE TOP OF THE INCOMING PIPE TO THE TOP OF THE EXISTING DOWNSTREAM PIPE. FOR EXISTING SEWERS GREATER THAN OR EQUAL TO 15", SEE APPROVED PLANS.

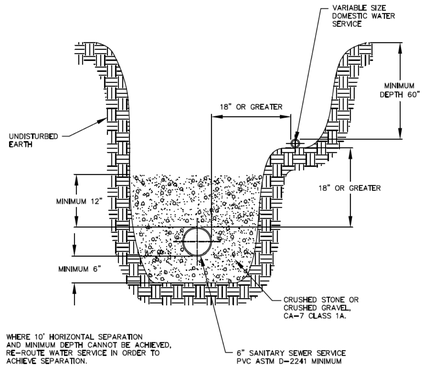
SERVICES: NO 6" DROP CONNECTIONS ALLOWED. CORE AT THE MANHOLE BOTTOM PER ABOVE WITH A SINGLE CONNECTION. THEN, TO ESTABLISH UPSTREAM LINE/GRADE, USE TWO 45 DEGREE FITTINGS.

**PIPE TO EXISTING MANHOLE CONNECTION**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | E Grout Note | 01/05/06 |
| APPROVED KZ, MF | | F Note Additions | 04/08/08 |
| DATE 05-15-00 | | G "Notes" revision | 02/15/17 |
| SCALE NTS | | H Revises "NOTES regarding new invert | 12/06/2023 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | H |

REQUIRED WHEN A 10' MINIMUM SEPARATION IS NOT POSSIBLE FOR WATER AND SEWER SERVICES



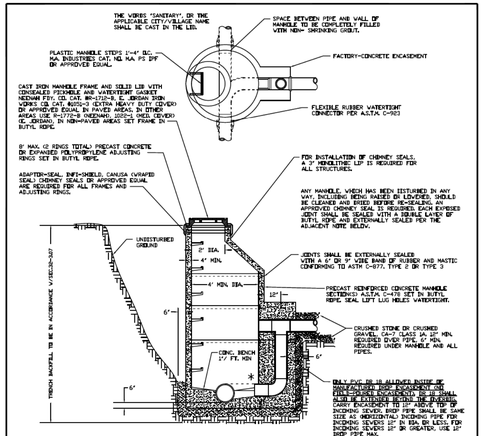

**NOTE**

INSTALL PER "77 ILL ADMIN. CODE PART 890 ILLINOIS PLUMBING CODE" LATEST EDITION.

**SANITARY SEWER SERVICE & POTABLE WATER SERVICE SEPARATION**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | A Revised 2004 | 10/05/04 |
| APPROVED KZ, MF | | B Depth Note | 02/03/05 |
| DATE 08-28-00 | | C Note Revision | 01/30/06 |
| SCALE NTS | | | |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | C |



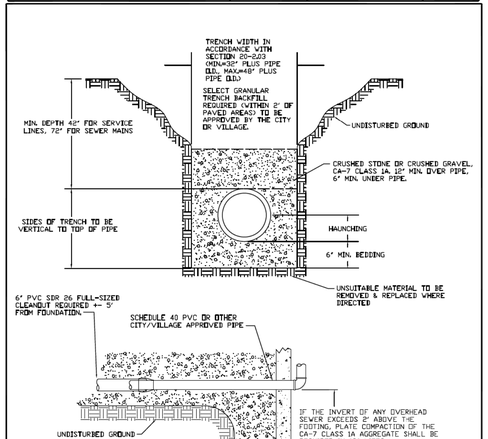

*** NOTE**

WHERE EXISTING SEWERS ARE 14" AND LESS, THE INVERT(S) OF NEW PIPE(S) SHALL BE DETERMINED BY MATCHING ELEVATIONS OF THE TOPS OF THE PROPOSED AND DOWNSTREAM PIPE. HOWEVER, FOR SEWERS 15" OR GREATER, SEE APPROVED PLANS FOR INVERT INFORMATION. ALL FLOW CHANNELS SHALL BE PRECAST INTO THE BENCH.

**DROP MANHOLE / NEW CONSTRUCTION**

**Fox Metro**
Water Reclamation District

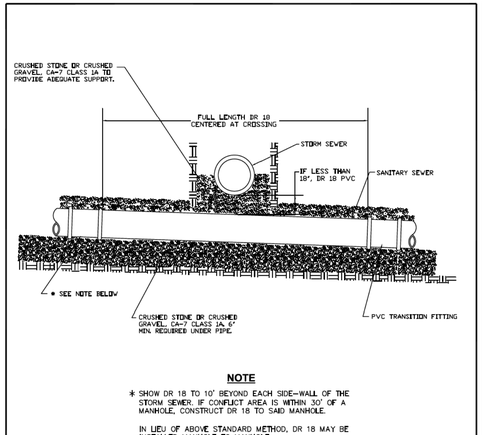
| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KWZ | | F Chimney Seal Notes | 04/29/08 |
| APPROVED KZ, MF | | G Minor Note Mod's | 12/14/16 |
| DATE 05-15-00 | | H Revise "NOTE regarding est. of Inv | 12/28/2020 |
| SCALE NTS | | J Expanded Polypropylene adj. rings | 01/27/2021 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | H |




**TYPICAL TRENCH FOR SANITARY SERVICES & MAINS**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | D Stone Note | 01/05/06 |
| APPROVED KZ, MF | | E 07 Revisions | 03/08/07 |
| DATE 05-12-00 | | F Overdig Compaction Note | 03/08/07 |
| SCALE NTS | | G Full-Sized C.O. Req'd Note | 07/23/2020 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | G |




**NOTE**

* SHOW DR 18 TO 10' BEYOND EACH SIDE-WALL OF THE STORM SEWER. IF CONFLICT AREA IS WITHIN 30' OF A MANHOLE, CONSTRUCT DR 18 TO SAID MANHOLE.

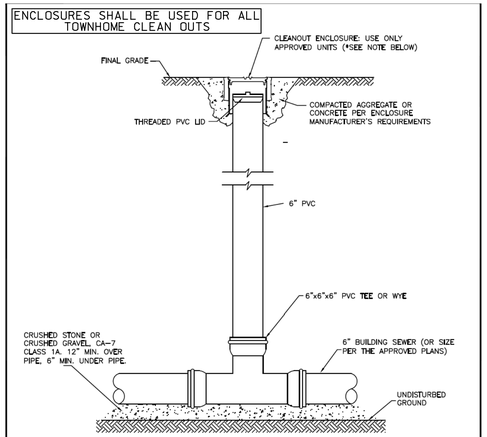
IN LIEU OF ABOVE STANDARD METHOD, DR 18 MAY BE INSTALLED MANHOLE TO MANHOLE.

**SANITARY SEWER CROSSING UNDER STORM SEWER**

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED FMWRD | | REVISION | 2023 |
| DRAWN KZ | | G Dimension Change | 04/29/08 |
| APPROVED KZ, MF | | H Full Length DR 18 Note Rev. | 02/08/17 |
| DATE 05-15-00 | | I Rev. "NOTE" 10' beyond side wall | 7/23/2020 |
| SCALE NTS | | J Added "if" to "Less than18" note | 1/26/2021 |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | J |

ENCLOSURES SHALL BE USED FOR ALL TOWNHOME CLEAN OUTS




NOTE

* AN APPROVED ENCLOSURE IS REQUIRED WHERE ANY CLEANOUT IS INSTALLED WITHIN OR NEAR ANY PAVED SURFACE. IN NON-PAVED AREAS WHERE DAMAGE TO A CLEANOUT MAY OCCUR, ENCLOSURE(S) MAY BE REQUIRED AT THE DISCRETION OF THE DISTRICT.

SANITARY SERVICE CLEAN OUT

**Fox Metro**
Water Reclamation District

| | | | |
|---|---|---|---|
| DESIGNED F.K./P.G. | | REVISION | 2023 |
| DRAWN STAFF | | A NEW DETAIL | 4/13/2021 |
| APPROVED F.K. | | | |
| DATE 4/4/2021 | | | |
| SCALE N.T.S. | | | |
| SHEET 1 | CAD DWG. | | REVISION |
| OF 1 | JOB NO. | | A |


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com


LENNAR

1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | | |
|---|---|---|
| DESIGNED | LZ | |
| DRAWN | JD | |
| APPROVED | MTL | |
| DATE | 04/04/2025 | |
| SCALE | N.T.S. | |

# CONSTRUCTION DETAILS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 37 OF 42

PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

6/27/2025 12:53:40 PM
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# GENERAL NOTES

## A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:

   - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   - STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION
   - VILLAGE OF SUGAR GROVE CODE OF ORDINANCE
   - VILLAGE OF SUGAR GROVE STANDARD SPECIFICATIONS FOR IMPROVEMENTS
   - FOX METRO WATER RECLAMATION DISTRICT

   IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

## B. NOTIFICATIONS

1. THE VILLAGE OF SUGAR GROVE MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.
2. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF THE UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

## C. GENERAL NOTES

1. THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.
2. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION. INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.
3. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY THE MUNICIPALITY OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.
4. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR SEWER DISTRICT AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.
5. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY UNPOLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.
6. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY AND/OR SEWER DISTRICT.
7. THE LOCATION OF VARIOUS EXISTING UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.
8. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
9. NO FINAL CONNECTION SHALL BE MADE TO THE EXISTING WATER MAIN SYSTEM UNTIL THE WATER MAIN HAS BEEN PRESSURE TESTED AND CHLORINATED.
10. ALL NON-PAVING CONCRETE USED ON THE PROJECT SHALL BE IDOT CLASS SI.
11. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY AND OWNER.
12. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.
13. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION WHICH DRAIN OFFSITE PROPERTY SHALL BE CONNECTED TO THE STORM SEWER SYSTEM. ALL EXISTING FIELD DRAINAGE TILE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION THAT SERVES ON-SITE PROPERTY CAN BE CAPPED AND/OR REMOVED FROM THE SITE.
14. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.
15. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.
16. TRAFFIC CONTROL SIGNS SHALL BE INSTALLED DURING CONSTRUCTION IN ACCORDANCE WITH THE IDOT SS AND IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE SAFE AND ORDERLY PASSAGE OF TRAFFIC AND PEDESTRIANS SHALL BE MAINTAINED AT ALL TIMES.
17. ADHERENCE TO THE SPECIFICATIONS OF FOX METRO WATER RECLAMATION DISTRICT IS REQUIRED.

## D. EXCAVATION AND SITE GRADING

1. EXCAVATION AND EMBANKMENT REQUIRED FOR SITE GRADING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SOILS REPORTS PREPARED FOR THIS SITE. COPIES OF THE SOILS REPORTS ARE AVAILABLE FROM THE OWNER.
2. BUILDING PAD, BUILDING FOOTING, AND PAVEMENT SUBGRADES SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, AND COMPACTED TO A MINIMUM BEARING CAPACITY OF 3,000 PSF IN BUILDING PAD AREAS AND 95% MODIFIED PROCTOR DENSITY WITHIN ([PUBLIC, PARKING LOT] PAVEMENT AREAS OR PUBLIC RIGHT-OF-WAYS.)
3. ALL CLAY EMBANKMENT NECESSARY FOR STORMWATER MANAGEMENT AREAS AS NOTED ON THE CROSS SECTION SHALL CONSIST OF COHESIVE SOIL TYPES WITH LESS THAN 25% SAND AND GRAVEL. MATERIAL SHALL HAVE A COEFFICIENT OF PERMEABILITY OF LESS THAN 10 X -7 CM/SEC. MAXIMUM PARTICLE SIZE SHALL BE 4-INCHES. THESE MATERIALS WILL BE PRACTICALLY IMPERVIOUS. MATERIAL SHALL BE TESTED FOR CLASSIFICATION, COMPACTION CHARACTERISTICS, PERMEABILITY CHARACTERISTICS AND UNCONFINED COMPRESSIVE STRENGTH, IN ORDER TO ENSURE THAT THEY MEET THE ABOVE REQUIREMENTS.

   THE MATERIAL SHALL BE CL TYPE (USING THE USC CLASSIFICATION SYSTEM, ASTM D2487) AND FREE FROM GRAVEL, ROOTS, ORGANIC MATTER, AND ANY OTHER OBJECTIONABLE MATERIALS.

   THE EMBANKMENT SHALL BE PLACED IN ESSENTIALLY HORIZONTAL LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS. EACH LIFT SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN THE LABORATORY BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557). EACH LIFT TO BE COMPACTED TO SPECIFIED DENSITY PRIOR TO THE PLACEMENT OF ADDITIONAL FILL. MOISTURE CONTROL IS IMPORTANT IN THE COMPACTION OF COHESIVE SOIL TYPES, AND THE WATER CONTENT OF THE EMBANKMENT FILL SHALL BE WITHIN 4 PERCENTAGE POINTS OF OPTIMUM MOISTURE AS ESTABLISHED BY THE LABORATORY COMPACTION CURVE.
4. COMPACTION TESTING SHALL MEET THE REQUIREMENTS OF THE MUNICIPALITY AND THE OWNER.
5. NO EQUIPMENT, MATERIAL OR WORK IS TO BE PERFORMED OUTSIDE THE LIMITS OF CONSTRUCTION.
6. THE CONTRACTOR IS REQUIRED TO MEET ALL SOIL EROSION CONTROL AND SEDIMENTATION REQUIREMENTS AS SET FORTH IN THE IEPA STANDARDS, MUNICIPAL ORDINANCES, COUNTY ORDINANCES, AND THE ENGINEERING PLANS.
7. ALL PAVEMENT SUBGRADES SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK. ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.
8. ALL UNSUITABLE MATERIAL, AS DETERMINED BY THE SOILS ENGINEER, SHALL BE REMOVED AND (A.) DISC-DRIED AND RECOMPACTED, OR (B.) LIME OR CEMENT DRIED AND RECOMPACTED, OR (C.) REPLACED WITH CRUSHED STONE, IDOT CA-6 GRADATION. ALL OPTIONS MEETING COMPACTION REQUIREMENTS AS SPECIFIED EARLIER IN THESE SPECIFICATIONS.
9. LIMITS OF BUILDING PAD SHALL EXTEND FIVE (5) FEET BEYOND PROPOSED BUILDING WALLS. LIMITS OF SUITABLE PAVEMENT SUBGRADE SHALL EXTEND TWO (2) FEET BEYOND BACK OF PROPOSED CURB, OR EDGE OF PAVEMENT.
10. ALL REMOVAL OR EXCAVATION ITEMS BEING DISPOSED OF AT AN UNCONTAMINATED SOIL FILL OPERATION OR CLEAN CONSTRUCTION AND DEMOLITION DEBRIS (CCDD) FILL SITE SHALL MEET THE REQUIREMENTS OF PUBLIC ACT 96-1416. ALL COSTS ASSOCIATED WITH MEETING THESE REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE COST FOR THE ASSOCIATED REMOVAL OR EXCAVATION ITEMS IN THE CONTRACT. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO ALL REQUIRED TESTING, LAB ANALYSIS, CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER, AND STATE AND LOCAL TIPPING FEES.

## E. PAVEMENT CONSTRUCTION

1. HOT-MIX ASPHALT PAVEMENT SHALL HAVE A MINIMUM TOTAL COMPACTED THICKNESS AS SHOWN ON THE DRAWINGS AND SHALL BE COMPACTED TO 93% OF THE MAXIMUM UNIT WEIGHT AS DETERMINED BY ASTM D-2041.
2. THE PAVEMENT SUBGRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 301 (SUBGRADE PREPARATION) OF THE IDOT SS. SUBGRADE SHALL BE COMPACTED TO A MINIMUM IBR OF 3.0.
3. THE AGGREGATE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 351 (AGGREGATE BASE COURSE) OF THE IDOT SS.
4. NO AGGREGATE BASE COURSE SHALL BE INSTALLED UNTIL THE SUBGRADE HAS BEEN APPROVED BY THE OWNER.
5. HOT-MIX ASPHALT PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 406 (HOT-MIX ASPHALT BINDER AND SURFACE COURSE).
6. NO HOT-MIX ASPHALT BINDER SHALL BE INSTALLED UNTIL THE AGGREGATE BASE COURSE HAS BEEN APPROVED BY THE OWNER. AGGREGATE BASE COURSE PRIME COAT (MC-30) SHALL BE APPLIED AT A RATE OF 0.25 TO 0.5 GALLONS PER SQUARE YARD, THE EXACT RATE TO BE SPECIFIED BY THE ENGINEER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY SIGNS, BARRICADES, FENCES, ETC. TO KEEP THE CONSTRUCTION SITE IN COMPLIANCE WITH STATE AND FEDERAL LAWS. THE MUNICIPALITY MAY REQUIRE ADDITIONAL SIGNAGE OR BARRICADES. THE CONTRACTOR SHALL COMPLY WITH ALL SUCH MUNICIPAL REQUIREMENTS.
8. ALL EXISTING PAVEMENT, SIDEWALK, OR CURB AND GUTTER TO BE REMOVED SHALL BE SAWCUT ALONG THE LIMITS OF THE PROPOSED REMOVAL BEFORE REMOVAL OPERATIONS BEGIN.
9. PRIOR TO PLACEMENT OF BASE COURSE, THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TEN WHEEL TRUCK, AND ANY SOFT YIELDING AREAS SHALL BE REMOVED AND REPLACED WITH COMPACTED CA-6 CRUSHED STONE.
10. CURB AND GUTTER REMOVAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 440 (REMOVAL OF EXISTING PAVEMENT AND APPURTENANCES) OF THE IDOT SS.
11. ALL PAVEMENT MARKINGS SHALL BE (PAINT, THERMOPLASTIC, PREFORMED PLASTIC).
12. P.C.C. ROADWAY PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420 (PORTLAND CEMENT CONCRETE PAVEMENT) OF THE IDOT SS. P.C.C. PAVEMENT FOR TRUCK DOCKS OR OTHER MISCELLANEOUS AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 423 (PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT) OF THE IDOT SS. PCC PAVEMENT SHALL BE CLASS PV, UNLESS OTHERWISE NOTED. CONCRETE SHALL BE FINISHED AS DIRECTED BY THE OWNER OR ARCHITECT. JOINTS IN CONCRETE PAVEMENT SHALL BE PROVIDED AS FOLLOWS:
    a. JOINTS WITHIN SINGLE LANE PAVEMENT (APPROXIMATELY 12-FEET WIDE) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420.
    b. CONTRACTION JOINTS IN TRUCK DOCK PAVEMENT OR SIMILAR CONSTRUCTION SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT 10 FOOT MAXIMUM INTERVALS BOTH TRANSVERSELY AND LONGITUDINALLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THESE GROOVES SHALL EXTEND TO 1/4 THE DEPTH OF THE PAVEMENT, SHALL NOT BE LESS THAN 1/8 INCH NOR MORE THAN 1/4 INCH IN WIDTH AND SHALL BE EDGED WITH AN EDGING TOOL HAVING A 1/4 INCH RADIUS. THE EDGES OF THE SLABS SHALL BE EDGED AS DESCRIBED ABOVE.
    c. EXPANSION JOINTS SHALL BE PROVIDED WHERE THE PROPOSED PAVEMENT OCCUPIES THE ENTIRE SPACE BETWEEN THE CONCRETE CURB OR COMBINATION CURB AND GUTTER AND AN ADJACENT BUILDING, PERMANENT STRUCTURE, EXISTING DRIVEWAY OR OTHER SIMILAR OBSTRUCTION, A ONE (1) INCHED PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED BETWEEN THE DRIVEWAY PAVEMENT AND THE OBSTRUCTION. THE EXPANSION JOINT FILLER SHALL EXTEND THE ENTIRE DEPTH OF THE PAVEMENT.
13. ADA ACCESSIBLE CURB RAMPS SHALL BE PROVIDED AT ALL LOCATIONS WHERE THE SIDEWALK ADJOINS THE CURB AND GUTTER. ALL ADA RAMPS SHALL PROVIDE DETECTABLE WARNINGS PER THE DETAIL NOTED WITHIN THIS PLAN SET. THE INSTALLATION OF THESE DETECTABLE WARNINGS SHALL CONFORM TO SECTION 424 OF THE IDOT SS AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.
14. ALL CONCRETE FOR SIDEWALK AND CURB AND GUTTER IS TO BE CLASS SI, 6.1 BAG MIX WITH NO FLY ASH.
15. COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 606 (CONCRETE GUTTER, CURB, MEDIAN,AND PAVED DITCH) OF THE IDOT SS.
    a. EXPANSION JOINTS SHALL BE PLACED AT THE END OF RADII AND AT INTERVALS OF NO MORE THAN 40-FEET IN STRAIGHT LINE PORTIONS OF WORK. EXPANSION JOINTS SHALL BE PROVIDED WHERE THE CURB AND GUTTER ABUTS AN EXISTING OR PROPOSED SIDEWALK, BUILDING, PERMANENT STRUCTURE OR EXISTING OR PROPOSED CONCRETE DRIVEWAY. EXPANSION JOINTS ARE REQUIRED 5-FEET ON EACH SIDE OF ANY STORM SEWER STRUCTURE IN THE CURB LINE. EXPANSION JOINTS SHALL CONSIST OF 1-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL.
    b. EXPANSION JOINTS SHALL INCLUDE 12-INCH LONG #4 DOWEL BARS WITH CAP.
    c. CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NO MORE THAN 10-FEET. CONTRACTION JOINTS SHALL BE SAWED TO A DEPTH EQUAL TO 1/3 THE THICKNESS OF THE GUTTER FLAG AND TO A WIDTH OF NOT LESS THAN 1/8 INCH.
    d. A MINIMUM 4-INCH COMPACTED AGGREGATE BASE SHALL BE PROVIDED UNDER THE CURB AND GUTTER AND SHALL EXTEND 1-FOOT BEHIND BACK OF CURB.

    REFER TO SECTION 606 FOR ADDITIONAL JOINTING REQUIREMENTS.
16. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 424 (PORTLAND CEMENT CONCRETE SIDEWALK) OF THE IDOT SS.
    a. THE SURFACE SHALL BE DIVIDED BY GROOVES CONSTRUCTED AT RIGHT ANGLES TO THE CENTERLINE OF THE SIDEWALK OR AS SHOWN ON THE ENGINEERING PLANS. GROOVES SHALL EXTEND TO 1/4 THE DEPTH OF THE SIDEWALK, SHALL BE NOT LESS THAN 1/8 IN. NOR MORE THAN 1/4 IN. IN WIDTH, AND SHALL BE LONGER THAN 6 FT. NOR LESS THAN 4 FT. ON ANY SIDE, UNLESS OTHERWISE NOTED.
    b. EXPANSION JOINTS SHALL BE 1/2 IN. THICK AND CONSIST OF PREFORMED JOINT FILLER. THE TOP OF THE JOINT FILLER SHALL BE 1/4 IN. BELOW THE SURFACE OF THE SIDEWALK.
    c. EXPANSION JOINTS SHALL BE PLACED BETWEEN THE SIDEWALK AND ALL STRUCTURES SUCH AS LIGHT POLES, TRAFFIC SIGNAL POLES, TRAFFIC POLES AND SUBWAY COLUMNS, WHICH EXTEND THROUGH THE SIDEWALK. EXPANSION JOINTS SHALL BE PLACED AT MAXIMUM INTERVALS OF 50 FT. IN THE SIDEWALK. WHERE THE SIDEWALK IS CONSTRUCTED ADJACENT TO PAVEMENT OR CURB HAVING EXPANSION JOINTS, THE EXPANSION JOINTS IN THE SIDEWALK SHALL BE PLACED IN LINE WITH THE EXPANSION JOINTS AS NEARLY AS PRACTICABLE. EXPANSION JOINTS SHALL BE PLACED WHERE THE SIDEWALK ABUTS EXISTING SIDEWALKS, BETWEEN DRIVEWAY PAVEMENT AND SIDEWALK, AND BETWEEN SIDEWALK ACCESSIBILITY RAMPS AND CURBS WHERE THE RAMP ABUTS A CURB.
17. HOT-MIX ASPHALT BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION 355 (HOT-MIX ASPHALT BASE COURSE) OF THE IDOT SS.
18. HOT-MIX ASPHALT SPECIFICATIONS SHALL BE AS FOLLOWS:

| ITEM | AIR VOIDS |
|---|---|
| HMA SURFACE COURSE, MIX "D", IL-9.5MM, N50, 1.5" MIN. | 4% AT 50 GYR. |
| HMA BINDER COURSE, IL-19.0, N50; 2.25" MIN | 4% AT 50 GYR. |
| LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" MIN | 3.5% AT 50 GYR. |
| CLASS D PATCHES (HMA BINDER IL-19mm) | 4% AT 70 GYR. |

    THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

    THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR ALL NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE SPECIAL PROVISIONS. APPLICABLE DISTRICT ONE SPECIAL PROVISIONS MAY INCLUDE, "RECLAIMED ASPHALT PAVEMENT AND SHINGLES", "HMA MIXTURE IL-4.75" AND "STONE MATRIX ASPHALT (SMA)".
19. ALL CURBS CONSTRUCTED OVER A UTILITY TRENCH SHALL BE REINFORCED WITH TWO EQUALLY SPACED #4 REBARS CENTERED IN THE FLAG FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH. SIDEWALKS SHALL BE TREATED IN THE SAME MANNER USING THREE EQUALLY SPACED #4 REBARS CENTERED IN THE SIDEWALK FOR A LENGTH OF 10 FEET ON EITHER SIDE OF THE TRENCH.
20. ALL WATER AND SANITARY SERVICE LOCATIONS SHALL BE STAMPED ON THE CURB WITH "W" OR "S" AT THE DEMARKED LOCATIONS WHERE POSSIBLE.

## F. SANITARY SEWER

1. ALL SANITARY SEWERS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS OR FOX METRO SANITARY DISTRICT SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).
2. SANITARY SEWERS SHALL BE:
   a. POLYVINYL CHLORIDE PIPE (PVC), SDR 26 PER ASTM D-3034 WITH ELASTOMERIC JOINTS IN ACCORDANCE WITH ASTM D-3212 AND F477 or
   b. DUCTILE IRON PIPE (DIP) ANSI A21.51, CLASS 52 PER ANSI A 21.50 (AWWA C150), CEMENT LINED WITH BITUMINOUS COATING PER ANSI A21.4 (AWWA C104), WITH MECHANICAL OR RUBBER RING (SLIP SEAL OR PUSH-ON) JOINTS PER ANSI A21.11 (AWWA C111 AND C600);
   c. PRESSURE RATED PIPE (WATER MAIN QUALITY) SHALL BE IN ACCORDANCE WITH ASTM D 2241. PVC PIPE JOINTS SHALL BE SOLVENT CEMENTED JOINTS PER ASTM D 2672 OR FLEXIBLE ELASTOMERIC JOINTS PER ASTM D3139 AND F477.
   d. POLYPROPYLENE (PP) PIPE SHALL BE DOUBLE WALL PIPE CONFORMING TO ASTM F2764 FOR SIZES 6" TO 30". POLYPROPYLENE PIPE JOINTS SHALL BE FLEXIBLE ELASTOMERIC SEALS PER ASTM D3212 AND F477.
3. GRANULAR PIPE BEDDING MATERIAL SHALL BE IDOT CA-7 AND SHALL BE INSTALLED PER ASTM D2321. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
4. SELECTED GRANULAR BACKFILL, IDOT CA-7 SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS AND SIDEWALKS.
5. SANITARY SEWER TESTING SHALL INCLUDE EXFILTRATION TEST OR INFILTRATION TESTING IN ACCORDANCE WITH THE SSWS, MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. ALL SANITARY SEWERS CONSTRUCTED OF FLEXIBLE PIPE SHALL BE DEFLECTION TESTED IN ACCORDANCE WITH THE SSWS, MUNICIPAL REQUIREMENTS AND/OR SANITARY DISTRICT REQUIREMENTS. DEFLECTION TESTING SHALL NOT OCCUR SOONER THAN THIRTY (30) DAYS AFTER COMPLETION OF THE SEWER INSTALLATION OF THE SECTION BEING TESTED.
6. SANITARY MANHOLES SHALL BE TESTED FOR WATERTIGHTNESS BY EITHER ASTM C969 - STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES OR ASTM C 1244 - STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE PRESSURE (VACUUM) TEST.
7. SANITARY SEWER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO ARCHITECTURAL PLANS MAY EXIST, THEREFORE, CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SERVICE AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS. FIELD LOCATION OF ALL SERVICE STUBS TO BE VISIBLY DEMARKED, SUPPLIED BY CONTRACTOR, AND SHOWN ON RECORD DRAWINGS.

## G. WATER MAIN

1. ALL WATER MAINS, SERVICES, AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS).
2. WATER MAINS SHALL BE:
   a. DUCTILE IRON PIPE CONFORMING TO ANSI A 21.51 (AWWA C151), CLASS 52 PER ANSI A 21.50 (AWWA C150), SEAL COATED OR CEMENT LINED PER ANSI A21.4 (AWWA C104), WITH RUBBER RING (SLIP SEAL OR PUSH ON) JOINTS OR MECHANICAL FOR RESTRAINED JOINTS. or;
   b. POLYVINYL CHLORIDE PIPE CONFORMING TO AWWA C900 AND ASTM D 2241. MATERIAL SHALL BE DESIGNATED CLASS 12454B (CPVC 1120), CLASS 12454C (PVC 1120) IN CONFORMANCE WITH ASTM D1784. FOR PUSH ON TYPE JOINTS, GASKETS AND SEALS SHALL BE FLEXIBLE ELASTOMERIC TYPE CONFORMING TO ASTM D3139 AND F477. ALL FITTINGS SHALL BE DUCTILE IRON FOR RESTRAINED MECHANICAL JOINTS, MANUFACTURED SPECIFICALLY FOR USE WITH AWWA C900 PVC, AND MEET THE STANDARDS OF ASTM F1674. THE PIPE SHALL BE RATED AT AWWA PRESSURE CLASS 165 PSI OR GREATER AT 73.4 DEGREES F. ALL PIPING SHALL HAVE A DIMENSION RATIO NOT LARGER THAN SDR 25. ALL PIPING SHALL BEAR THE NSF SEAL OF APPROVAL AND MEET NSF 61 CERTIFICATION. THE PIPING SHALL BE VISIBLY MARKED WITH THE SPECIFIC SDR RATING NUMBER AND PRESSURE CLASS RATING IN PSI. TRACER WIRE REQUIRED WITH ALL PVC WM AND SHALL CONFORM TO COPPERHEAD SOLOSHOT (OR APPROVED EQUAL) 12 AWG HIGH STRENGTH COPPER CLAD STEEL CONDUCTOR (HS-CCS) WITH TEST STATIONS AT EACH VALVE VAULT (EXCEPT WHERE CLUSTERED AT INTERSECTIONS).
   c. ALL WATER SERVICES (2.5" DIA. AND SMALLER) SHALL BE COPPER WATER TUBE TYPE K OR GREATER SOFT TEMPER, FOR UNDERGROUND SERVICE AND CONFORMING TO ASTM B88 AND ASTM B251. THE PIPE SHALL BE MARKED WITH THE MANUFACTURER'S NAME OR TRADEMARK AND A MARK INDICATIVE OF THE TYPE OF PIPE. THE OUTSIDE DIAMETER OF THE PIPE SHALL CONFORM TO ASTM B251 TABLE 2. FITTINGS FOR SERVICE PIPE SHALL BE BRASS AND OF THE COMPRESSION TYPE FOR TYPE K TUBING. ONE PIECE SHALL BE USED FROM THE MAIN TO THE CURB STOP AND ONE PIECE FROM THE CURB STOP TO THE METER SPREAD FOR LENGTHS OF 100 FEET OR LESS.
3. A MINIMUM OF 5'-6" OF COVER SHALL BE MAINTAINED OVER THE WATER MAIN AND SERVICES AT ALL TIMES, UNLESS SPECIAL PROVISIONS HAVE BEEN MADE.
4. GRANULAR PIPE BEDDING MATERIAL SHALL BE CA-11 AND SHALL BE INSTALLED PER ASTM D2321. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
5. SELECTED GRANULAR BACKFILL, CA-7, SHALL BE USED WHERE THE TOP OF THE TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS AND SIDEWALKS.
6. ALL WATER VAULTS SHALL HAVE THE WORD "WATER" CAST INTO THE LID.
7. VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO THE RESPECTIVE STANDARDS OF THE LATEST AWWA C500, AWWA C509 AND AWWA C515 STANDARDS. ALL MATERIALS USED IN THE MANUFACTURE OF WATERWORKS GATE VALVES SHALL CONFORM TO THE AWWA STANDARDS DESIGNED FOR EACH MATERIAL LISTED. ALL VALVES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE SSWS.
8. WATER MAINS SHALL BE PRESSURE TESTED, LEAK TESTED AND CHLORINATED IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENTS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.
9. WATER SERVICE FOR THE PROPOSED BUILDINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL PLANS FOR SIZE AND LOCATION. LATER REVISIONS TO THE ARCHITECTURAL PLANS MAY EXIST, THEREFORE, CONTRACTOR SHALL VERIFY LOCATION AND SIZE OF WATER SERVICES AS SHOWN ON ENGINEERING PLANS IS CONSISTENT WITH ARCHITECTURAL PLANS. NOTIFY ENGINEER OR OWNER IF DISCREPANCY EXISTS. FIELD LOCATION OF ALL SERVICE STUBS TO BE VISIBLY DEMARKED, SUPPLIED BY CONTRACTOR, AND SHOWN ON RECORD DRAWINGS
10. WATER MAINS SHALL BE LOCATED AT LEAST 10-FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER, STORM SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION. WATER MAINS MAY BE LOCATED CLOSER THAN 10-FEET TO A SEWER LINE WHEN:
    a. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10-FEET AND
    b. THE WATER MAIN INVERT IS AT LEAST 18-INCHES ABOVE THE CROWN OF THE SEWER; AND
    c. THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER. WHEN IT IS IMPOSSIBLE TO MEET THE CONDITIONS ABOVE, BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WITH SLIP-ON OR MECHANICAL JOINTS. THE SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.
11. WATER MAIN SHALL BE SEPARATED FROM STORM AND SANITARY SEWERS AS FOLLOWS:
    a. WATER MAINS SHALL BE SEPARATED FROM A SEWER SO THAT ITS INVERT IS A MINIMUM OF 18-INCHES ABOVE THE CROWN OF THE SEWER WHEREVER WATER MAINS CROSS A STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF WATER MAIN LOCATED WITHIN 10-FEET HORIZONTALLY OF ANY SEWER CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER or
    b. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINTS OF PIPE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION WHEN IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN a) ABOVE OR THE WATER MAIN PASSES UNDER A SEWER or
    c. A VERTICAL SEPARATION OF 18-INCHES BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN or
    d. CONSTRUCTION OF WATER MAIN QUALITY PIPE SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER IS AT LEAST 10-FEET.
12. FIRE HYDRANTS SHALL CONFORM TO THE AMERICAN WATER WORKS ASSOCIATION STANDARD C-502 AND SHALL BE OF A MAKE THAT HAS BEEN ADOPTED BY THE MUNICIPALITY AS A STANDARD. HYDRANTS SHALL BE DESIGNED FOR A MINIMUM WORKING PRESSURE OF ONE HUNDRED FIFTY (150) PSI AND A TEST PRESSURE OF THREE HUNDRED (300) PSI. HYDRANT BODY CASTING SHALL BE MANUFACTURED OF CAST IRON OR DUCTILE IRON. ALL NOZZLES SHALL BE MANUFACTURED OF AN ACCEPTABLE GRADE OF BRONZE AND ACCURATELY THREADED IN ACCORDANCE WITH "NATIONAL STANDARD HOSE COUPLING THREAD SPECIFICATIONS." THE HYDRANT SHALL OPEN BY TURNING LEFT (COUNTER-CLOCKWISE) AND SHALL BE SO MARKED. HYDRANTS SHALL BE OF THE "BREAK-AWAY" OR "TRAFFIC" BASE DESIGN.
13. SMALL SERVICE LINE APPURTENANCES SHALL BE IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS AND AS FOLLOWS:
    a. CURB STOP: CURB STOPS SHALL BE FABRICATED OF BRASS AND SHALL BE PROVIDED WITH OUTLETS SUITABLE FOR COPPER CONNECTIONS. CURB STOPS SHALL BE OF THE ROUND-WAY TYPE. CURB STOPS SHALL BE EQUIPPED WITH CONDUCTIVE COMPRESSION CONNECTIONS. FLARED OR SWEAT CONNECTIONS ARE NOT ALLOWED.
    b. CORPORATION STOP: CORPORATION STOPS SHALL BE FABRICATED OF BRASS AND SHALL BE PROVIDED WITH OUTLETS SUITABLE FOR COPPER CONNECTIONS. CURB STOPS SHALL BE EQUIPPED WITH CONDUCTIVE COMPRESSION CONNECTIONS. FLARED OR SWEAT CONNECTIONS ARE NOT ALLOWED.
    c. CURB BOX: CURB BOX SHALL BE SCREW TYPE WITH THE BASE THREADED TO ATTACH TO THE CURB STOP, OR SHALL BE "BUFFALO" OR "ARCH" TYPE AND OF SUCH CONSTRUCTION THAT IT SHALL BE CAPABLE OF EXTENSION TO FINISH GRADE. THE TOP OF THE CURB BOX SHALL BE FURNISHED WITH THE WORD "WATER" ON THE LID.

## H. STORM SEWER

1. ALL STORM SEWERS, SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL MUNICIPAL REQUIREMENTS, THE IDOT SS AND THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
2. STORM SEWERS SHALL BE:
   a. REINFORCED CONCRETE PIPE, ASTM C-76, MINIMUM CLASS III WITH MASTIC JOINTS OR O-RING JOINTS IN ACCORDANCE TO ASTM C-443.O-RING JOINTS ARE REQUIRED FOR 10 FEET CLEAR ON EITHER SIDE OF THE WATERMAIN WHEN THE STORM SEWER IS CROSSING OVER THE WATERMAIN (MASTIC NOT PERMITTED IN THESE CASES). REFER TO CROSSING TABLES FOR THESE INSTANCES.
   b. POLYVINYL CHLORIDE PIPE (PVC) PIPE, SDR 26, PER ASTM D-3034 WITH ELASTOMERIC JOINTS IN ACCORDANCE WITH ASTM D-3212;
   c. HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M252 FOR THREE (3) INCHES TO TEN (10) INCHES AND AASHTO M294 FOR TWELVE (12) INCHES TO SIXTY (60) INCHES.
3. GRANULAR PIPE BEDDING MATERIAL SHALL BE CA-11 PER VILLAGE OF SUGAR GROVE CODE OF ORDINANCE. GRANULAR BEDDING SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
4. SELECTED GRANULAR BACKFILL, CA-7 PER VILLAGE OF SUGAR GROVE CODE OF ORDINANCE, SHALL BE USED WHERE THE TOP OF TRENCH LIES UNDER OR WITHIN 24-INCHES OF ALL PAVEMENTS, CURB AND GUTTERS, DRIVEWAYS OR SIDEWALKS.

## I. LANDSCAPING

1. ALL DISTURBED AREAS SHALL BE RESTORED WITH 6-INCHES OF TOPSOIL AND SEEDED. SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 250 (SEEDING) OF THE IDOT SS. SEEDING MIXTURE SHALL BE CLASS 1 LAWN MIXTURE, UNLESS OTHERWISE INDICATED.
2. EROSION CONTROL BLANKET SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 251 (MULCH) OF THE IDOT SS. EROSION CONTROL BLANKET SHALL BE EXCELSIOR DS-150 OR SC-150 DEPENDING ON THE INTENDED USE.

**THE VILLAGE OF SUGAR GROVE STANDARD NOTES & FOX METRO WATER RECLAMATION DISTRICT SPECIFICATIONS SHALL TAKE PRECEDENCE IF ANY CONFLICTING NOTES ARE INCLUDED**


**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com
MACKIE CONSULTANTS


LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# PROJECT SPECIFICATIONS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS



PROJECT NUMBER: 4930


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## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR GENERAL NOTES

1. A preconstruction meeting shall be held prior to the start of any construction, including the installation of tree protection and soil erosion control measures. The Contractor shall notify the Village Engineer a minimum of 10 days in advance of starting any work. The Village Engineer will coordinate the preconstruction meeting with the Village Staff, Fire District, Police Department, Park District, Township, and Kane County Department of Transportation. The Developer/Owner, the General Contractor, and all major subcontractors shall attend the meeting.

2. In addition to the formal preconstruction meeting at the beginning of the project, a preconstruction meeting shall be held on site before each major work item (i.e. underground work, curbs and gutter, paving, etc.). The General Contractor and the foreman to complete the work shall attend the meeting at a minimum. The Village Engineer shall be contacted 48 hours in advance of the meeting so that the meeting can be coordinated with the appropriate Public Works staff members and other agencies. J.U.L.I.E. markings should be recent and visible at the time of the meeting.

3. The IDOT "Standard Specifications for Road and Bridge Construction" latest edition and revisions, the "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition and revisions thereto, these improvement plans and details, special provisions and codes and ordinances of the Village of Sugar Grove, Illinois shall govern applicable portions of this project. If conflicts arise, the strictest of the requirements shall govern.

4. Locations of utilities shown on plans are approximate only, and are not necessarily complete. Contractor shall make his own investigations as to location and elevation of all existing underground structures, cables, utilities and pipe lines.

5. If existing utility lines of any nature are encountered which conflict in location with new construction, the contractor shall notify the project engineer and Village so that the conflict may be resolved.

6. The contractor shall be responsible for the protection of all private and public utilities even though they may not be shown on the plans. Any utility that is damaged during construction shall be repaired or replaced to the satisfaction of the project engineer, the Village, and/or the utility company by the contractor at his own expense.

7. The contractor shall notify J.U.L.I.E. (1-800-892-0123) at least ten days prior to construction so that each utility company can stake out any underground improvements that they may have which might interfere with the proposed construction.

8. The contractor shall be required to make arrangements for the proper bracing, shoring and other required protection of all roadways, structures, poles, cables and pipe lines, before construction begins. The contractor shall be responsible for any damage to the streets or roadways and associated structures and shall make repairs as necessary to the satisfaction of the Village Engineer and Village at the contractor's own expense.

9. The contractor shall obtain, erect, maintain and remove all signs, barricades, flagmen and other control devices as may be necessary for the purpose of regulating, warning or guiding traffic. Placement and maintenance of all traffic control devices shall be in accordance with the applicable parts of Article 107.14 of the IDOT Standard Specifications, the "Standard Specifications for Traffic Control Items".

10. The contractor shall be responsible for providing safe and healthful working conditions throughout the construction of the proposed improvements.

11. Before acceptance and release of the surety by the Village and final payment, all work shall be inspected and approved by the Village Engineer.

12. The contractor will have in his possession on the job site at all times a copy of the Village approved plans and specifications during construction.

13. The contractor shall restore any area disturbed to a condition equal to or better than its original use and to the satisfaction of the Village Engineer. This shall include finish grading, excess stone removal establishment of a vegetative cover (seeding or sod), general cleanup and pavement replacement.

14. No unprotected excavation shall remain open over any weekend. Overnight open excavations shall be satisfactorily protected and meet all OSHA requirements.

15. With the exception of curb inlets, utility structures shall not be constructed in paved areas, including roadways, sidewalks, curb and gutter, and/or trails.

16. Trench backfill shall be provided at all utility trenches and removal of utility trenches in all paved areas and 2 feet beyond, including roadways, curbs and gutter, sidewalk, trails, and driveways. Initial trench backfill and bedding shall be graded CA-7 stone. The Village Engineer can approve the option to use flowable fill (CLSM) IDOT Mix #2 in lieu of the stone. The final trench backfill shall be CA-6 crushed aggregate and shall be compacted in place to ninety five percent (95%) of maximum density at optimum moisture as determined by the modified standard proctor test.

17. Curb protection is required at all times.

18. Tree protection shall be installed on site prior to the start of any construction.

19. Prior to the start of underground utilities, the site shall be rough graded to within 1 foot of the final grade.

20. Marking Of Valve Vaults, Buffalo Boxes And Manholes: All main line valve vaults, buffalo boxes and manholes shall be marked at the time of construction with a four inch by four inch (4" x 4") hardwood post neatly installed vertically with a minimum three feet (3') bury and a minimum four feet (4') exposed. The top one foot (1') of the post shall be painted as follows: blue for water and green for sanitary sewers.

21. All final adjustments of castings will be accomplished by the use of concrete (or other approved material) adjusting rings set in butyl rope joint sealant; mortar joints will not be allowed. Height of adjusting rings shall not exceed eight inches (8") or exceed two (2) rings.

22. At a minimum, all parkways within the dedicated street right of way shall be graded, foreign materials removed, topsoil placed to a minimum thickness of four inches (4"), erosion control blanket placed, and seeded (Class 1A minimum unless otherwise specified) or sodded in an approved manner. Sidewalks, trails, and parkway trees shall be properly installed and approved prior to acceptance and release of sureties.

23. Absolutely no substitutions or variances will be permitted to any of the Village of Sugar Grove Standard Notes or Ordinances unless approved otherwise by the Village IN WRITING prior to commencing construction activity.

## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR WATER MAIN CONSTRUCTION

1. All water main construction shall be in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition and revisions thereto, these improvement plans and details, special provisions and in accordance with codes and ordinances of the Village of Sugar Grove, Illinois. In case of conflict with Village codes, drawings, and these standard notes, the Village Engineer shall be contacted to confirm which is correct.

2. All water main shall be Ductile Iron Pipe Class 52 with either mechanical or push-on joints with brass wedges and shall conform to ANSI A21.51, AWWA C151 and ANSI A21.11, AWWA C111. Pipe shall be manufactured in the United States.

3. All fittings shall be Compact Ductile Iron and shall conform to ANSI/AWWA C153/421.53-84. Fittings shall be U.L. Listed Class 350, Tyler, Griffin or approved equal. Fittings shall be manufactured in the United States.

4. All pipe and fittings shall be cement lined in accordance with ANSI/AWWA C104/421.4.

5. All fittings shall be mechanical joint and installed with retainer glands unless otherwise shown on the drawings.

6. Long radius curves, either horizontal or vertical, may be laid with standard pipe by deflections at the joints. Maximum deflections at pipe joints and laying radius for the various pipe lengths shall be in accordance with ANSI/AWWA C600. When rubber gasketed pipe is laid on a curve, the pipe shall be jointed in a straight alignment and then deflected to the curved alignment. Trenches shall be made wider on curves for this purpose.

7. Sleeves shall be Rockwell D.I. Coupling Type 441, Tyler Union or equal. Sleeves shall be provided at locations shown on the plans or as required. The cost of sleeves is considered as incidental to the cost of the project.

8. All gate valves shall have a non-rising stem, shall have a standard operating nut and shall open in a counter-clockwise direction. Gate valves shall be American Flow Control Series 2500 Ductile Iron Resilient Wedge Gate Valves in accordance with AWWA C-515 Standard. All gate valves shall be installed in precast PCC valve vaults.

9. All Valve Boxes shall be heavy wall high density polyethylene American Flow Control Trench Adapters. Lids to be marked "Water". Open graded (CA-7) limestone shall be utilized to backfill around the operating nut on all valve boxes to prevent mud from penetrating the valve boxes.

10. All hydrants shall be in accordance with Section Four (4) of AWWA C502-54 standard and shall be an American Flow Control/Waterous Pacer Model No. WB-67-250 (break away style traffic design) with one 4 ½" steamer nozzle and two 2 ½" hose outlets, of which the threads conform with the standards of the Village of Sugar Grove, Illinois. All hydrants shall have an auxiliary gate valve. Hydrant installations shall have 5.5' depth of cover. Fire hydrants shall be placed 3 foot from the back of curb to the center of the hydrant, or where there is no curb and gutter, the face of the pumper nozzle shall be located five feet (5') from the paved road edge. Center line of pumper nozzle shall be eighteen inches (18") to twenty inches (20") above finish grade line (sidewalk to curb).

11. All fire hydrants shall be factory painted. Potable water fire hydrants shall be red, and raw water fire hydrants shall be green. The exact colors shall be approved by the Village Engineer. Fire hydrants shall be flagged.

12. All mechanical joint fittings, valves and hydrants shall be restrained with retainer glands. Retainer glands shall be UNI-FLANGE SERIES 1400 Wedge Action retainer gland or approved equal.

13. All pressure taps to an existing Village main shall be made with an American Flow Control Series 2800 Compact Ductile Iron Mechanical Joint Tapping Sleeve and an American Flow Control Series 2500 Ductile Iron Resilient Wedge Tapping Valve (MJ x FL) and shall be constructed in a five (5') foot minimum diameter valve vault. All taps shall be performed by the Contractor after payment of applicable connection fees and shall be witnessed by the Village. The Village Engineer should be notified 48 hours in advance of any tap.

14. All tees, bends, valves, and fire hydrants shall be adequately supported with a concrete block base, and supported laterally with precast concrete thrust blocking (not poured-in-place) against undisturbed earth.

15. All water mains shall have a minimum depth of cover of 5.5' from the finish grade to the top of pipe or as noted on plans.

16. Where feasible, all vertical water main adjustments shall be accomplished by deflection, not bends in the water main.

17. All water services shall be minimum one (1") inch diameter type "K" copper pipe with compression connections. Larger services are allowed upon proper justification and approval by Village Engineer. No joints will be allowed between the corporation stop and the curb stop. Material and installation will be in general accordance with AWWA C800. The underground water service pipe and the building sewer shall be not less than ten feet (10') apart horizontally and shall be separated by undisturbed or compacted earth.

18. The buffalo boxes shall be set in the parkway between the back of curb and the sidewalk. Long services shall be set at the mid-point between the back of curb. Short services shall be set one foot off of the sidewalk.

19. The Contractor shall obtain, erect, maintain and remove all signs, barricades, flagmen and other control devices as may be necessary for the purpose of regulating, warning or guiding traffic. Placement and maintenance of all traffic control devices shall be in accordance with the applicable parts of Article 107.14 of the Standard Specifications and the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways. Contractor shall furnish a traffic control plan for IDOT or Village approval if required.

20. All work and materials shall be in accordance with code requirements.

21. The Contractor shall restore any area disturbed to a condition equal to or better than its original use. This shall include finish grading, establishment of a vegetative cover (seeding or sod), general cleanup and pavement replacement.

22. The Contractor shall be responsible for providing safe and healthful working conditions throughout the construction of the proposed improvements.

23. Before acceptance by the Village all work shall be inspected and approved by the Village or its representatives.

24. Easements for the existing utilities, both public and private, and utilities within public rights-of-way are shown on the plans according to available records. The contractor shall be responsible for determining the exact location in the field of these utility lines and their protection from damage due to construction operations. If existing utility lines of any nature are encountered which conflict in location with new construction, the contractor shall notify the engineer so that the conflict may be resolved.

25. Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains in accordance with Title 35; Environmental Protection Agency Subtitle F: Public Water Supplies, Chapter II: Environmental Protection Agency, Parts 651-654 Technical Policy Statements, Section 653.119.

26. Whenever possible, a water main must be laid at least ten feet horizontally from any existing or proposed drain or sewer line. Should local conditions exist which would prevent a lateral separation of ten feet, a water main may be laid closer than ten feet to a storm or sanitary sewer provided that the water main invert is at least eighteen inches above the crown of the sewer, and is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer. If it is impossible to obtain proper horizontal or vertical separation as described above, then the sewer must also be constructed of water main type material (ductile iron pipe with slip-on or mechanical joints, prestressed reinforced concrete pipe with ASTM C-443 joints, etc.) and pressure tested to the maximum expected surcharge head to assure water tightness before backfilling.

27. Whenever water mains must cross house sewers, storm sewers or sanitary sewers, the water main shall be laid at such an elevation that the invert of the water main is eighteen inches above the crown of the drain or sewer. This vertical separation must be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. This must be measured as the normal distance from the water main to the drain or sewer. If it is impossible to obtain the proper vertical separation as described above or if it is necessary for the water main to pass under a sewer or drain, then the sewer must be constructed of water main type material (as noted in item 26). This construction must extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten feet. In making such crossings, center a length of water main pipe over/under the sewer to be crossed so that the joints will be equidistant from the sewer and as remote therefrom as possible. Where a water main must cross under a sewer, a vertical separation of eighteen inches between the invert of the sewer and the crown of the water main shall be maintained, along with means to support the larger sized sewer lines to prevent their settling and breaking the water main.

28. Valve vault frames shall be IDOT Type 1 (Standard 604001) and all lids shall have "Sugar Grove" and "Water" cast into them.

29. Valve vaults shall be adjusted with a maximum two (2) adjusting rings to a maximum of eight (8") inches. Rings shall be precast concrete or other material approved by the Village Engineer.

30. Hydrostatic Tests - The Contractor shall perform Hydrostatic Tests in accordance with Division IV, Section 41 of the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition, and applicable provisions of AWWA C-600 and C-603. The water mains shall be pressure tested at 150 PSI. Allowable leakage shall be as set forth in AWWA C-600 latest edition. The maximum allowable leakage shall be based off of the first 1,000 feet of pipe (i.e. if 2,000 feet of pipe is being tested, the allowable leakage will be based on the first 1,000 feet only.) The duration of the test shall be for two hours minimum, and the maximum pressure drop during this two hour period is a cumulative 2 psi. To meet the testing requirements, the water main shall satisfy the pressure drop and the allowable leakage requirements. The gauge will be zeroed out before the pressure test begins. In addition, the pressure gauge used in the hydrostatic test shall be in 2 psi increments or less and have a minimum of a 3½" diameter face.

31. Disinfection of the Water Mains - Upon completion and satisfactory pressure testing of the newly laid water mains, the water mains shall be disinfected in accordance with the American Water Works Association, Procedure Designation, AWWA C-651, latest edition. The Contractor is responsible for collecting samples and having bacteriological testing performed as required by the IEPA. The Contractor shall furnish to the Village the required documentation, test results, etc., required by the IEPA for placing the water mains or service lines in service and/or securing an operating permit.

32. Water valves and fire hydrants shall be operated by Village of Sugar Grove Personnel, only.

33. The Developer/Contractor shall contact the Village Engineer to schedule operation of valves, flush and fill, pressure test, chlorination, and sampling. The Village Engineer will contact the Village accordingly. The Developer/Contractor shall provide 48 hours notice prior to performing any of these work items. The following activities must be scheduled with the Village Engineer on independent days:
    - ✓ Flush and fill (Water main/service shall then be pre-tested.)
    - ✓ Pressure Test (The gauge shall be zeroed out before the start of the test.)
    - ✓ Chlorination
    - ✓ 1st Day of Sampling
    - ✓ 2nd Day of Sampling (Consecutive day after 1st Day of Sampling)

34. The Village shall witness all service taps greater than 1" in diameter. Accordingly, the Developer/Contractor shall contact the Village Engineer 48 hours in advance of the tap.

35. Fox Metro Water Reclamation District shall be contacted by the Developer/Contractor to observe the construction of all water service lines to a building/house. Their observation is required from the service valve to the building/house.

36. All water main shall be pre-pressure tested prior to the actual pressure test the Village Engineer and/or the Village witnesses.

## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR SANITARY SEWER CONSTRUCTION

1. All sanitary manhole frames shall be Fox Metro Water Reclamation District (FMWRD) approved type, and all manhole lids shall have "Sugar Grove" and "Sanitary" cast into them.
2. All sanitary sewers are subject to the requirements, specifications, and standards of Fox Metro Water Reclamation District (FMWRD).
3. At the cost of the Developer/Contractor, all sanitary sewers shall be air and mandrel (deflection) tested per FMWRD specifications. Likewise, all sanitary manholes shall be air tested by FMWRD specifications. The Village Engineer shall witness all testing and shall be contacted 48 hours in advance of all testing. The Village Engineer will forward all test results to FMWRD upon passing results of the entire system. FMWRD is responsible for the televising of the sewer lines at the expense of the contractor.
4. The location of the ends of all sanitary sewer service locations shall be neatly marked by wooden posts and shall be tied to each property corner with the location being included in the record drawings. The top 1' of the marker shall be painted green.
5. All final adjustments of castings will be accomplished by the use of concrete or other approved material adjusting rings set in butyl rope joint sealant; mortar joints will not be allowed. Height of adjusting rings shall not exceed two (2) rings or eight inches (8"). Any adjustments made after testing may require further testing.

## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR STREETLIGHT CONSTRUCTION

1. Power Supply Connection: Connections to power supply shall be made by Commonwealth Edison or the Village's approved electrical provider.

2. Conduit: All driveways, street, and sidewalk crossovers shall have a minimum of one and one-half inch (1 1/2") galvanized rigid steel conduit used as raceways for underground cable. Heavy duty PVC or A85 conduit will be allowed if it is encased in a three inch (3") minimum concrete collar. All conduits and raceways shall be marked on the as-built drawings.

3. Underground Cable: All trenched underground cable shall be placed in unit duct and buried at least thirty-six inches (36") below the normal finished grade. A red plastic marking tape shall be placed in the trench fifteen inches (15") below finished grade where the unit duct is trenched. All conduits and ducts shall be marked on the as-built drawings.

4. Splices: All cable on the underground cable section shall be continuous and no splicing shall be made underground. All necessary splices shall be made above ground level.

5. Underground Cable/Unit Duct Location: Underground cable shall be installed in a trench not more than two feet (2') from the "back" edge of the curb except that in no case shall the underground cable be installed under a sidewalk.

6. Fusing: All ungrounded feeders shall be fused at or below their rated capacity. Each standard shall contain proper fusing in series with each ungrounded conductor to protect the luminaire located on that pole. Streetlights with multiple luminaires shall have separate fuses for each luminaire.

7. Guarantee: The developer shall supply to the Village an inventory equal to at least ten percent (10%) of the number of poles, luminaires, photocells, ballasts, etc., installed along public streets and for public parking lots for the subdivision. This inventory shall be used to replace lighting system components that fail or are damaged after expiration of the guarantee period. The inventory shall be delivered to the Village of Sugar Grove Public Works at the start of the lighting construction.

8. No above ground structures unless approved by the Village Engineer.

9. Maintain a minimum of 5' horizontal separation and 2' vertical separation with Village utilities. Additional separation may be required by the Village Engineer depending on the depth of the utilities.


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
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# PROJECT SPECIFICATIONS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 39 OF 42

PROJECT NUMBER: 4930

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## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR STORM SEWER CONSTRUCTION

**1. General**

a) All work and material shall be in accordance with Village ordinances, Village Standard Specifications for Improvements, and the "Standard Specifications for Water and Sewer Main Construction In Illinois" (latest edition). In case of conflict, the more stringent of the requirements shall apply.

b) The stormwater drainage system shall be separate and independent of the sanitary sewer system.

c) All storm sewer structures, other than curb inlets and curb catch basins shall be marked at the time of construction with a 4" x 4" hardwood post neatly installed vertically with a minimum 4 feet bury and a minimum 4 feet exposed. The top 1 foot of the post shall be neatly painted green.

**2. Storm Sewer**

a) Storm sewer within or adjacent to the right of way shall be constructed of reinforced concrete pipe (RCP) conforming to the ASTM designation C-76, Class III or better. Other materials for storm sewers may be used in special cases upon the written approval of the Village Engineer. Any flexible pipe storm sewer systems so approved by the Village Engineer shall be subject to mandrel testing, for all sections, 30 days following installation.

b) Joints for all concrete storm sewers shall be of the bituminous mastic type, except when otherwise required by the Illinois Environmental Protection Agency or the Village Engineer.

c) All storm sewers that encroach within fifteen feet (15') of any building foundation shall be 'O'-ring, or other rubber, gasketed joints as per the ASTM C-443 specification.

d) Existing groundwater drain tiles encountered on site shall be connected to storm sewers with the use of a manhole or shall be restored to operating condition at the direction of the Village Engineer. Existing groundwater drain tiles that enter the site from other properties shall be connected to the new storm sewer system with the use of a manhole.

e) All closed storm structure lids shall have "Sugar Grove" and "Storm" cast into them and shall be the concealed pick hole type.

**3. Manholes, Frames and Lids**

a) All manholes, catch basins, and inlets shall be reinforced precast concrete and shall be sealed with Butyl rope joint sealant unless approved otherwise by the Village Engineer in high groundwater or high moisture soil areas.

b) Storm sewer structures shall be sized such that a minimum of 12 inches of precast concrete structure is provided between all pipe openings. In paved areas, manhole castings shall be IDOT Type 1 Neenah R-1713 frame and lid, EJIW 1050, or approved equal. In non-paved areas, where closed lids are needed, use Neenah R-4340-B, EJIW 6512, or approved equal.

c) In areas of hot-mix asphalt pavement, the space around the casting, a minimum of 18" from the casting, shall be filled with Class PP-2 concrete to a minimum depth of 10 inches and matching the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. In areas of concrete pavement, the space around the casting, a minimum of 18" from the casting, shall be filled with Class PP-2 concrete to a minimum depth of 10 inches and matching the elevation of the finished pavement surface.

d) All catch basins and inlets will be backfilled with CA-7 crushed limestone or crushed gravel to allow for sub-grade seepage. If sub-grade conditions are excessively wet, excessively sensitive to moisture or special conditions exist, a capped perforated pipe stubbed from the structure may be required.

e) For M-3.12 curb and gutter under ponding or continuous grade conditions, inlet and/or catch basin frames and grates shall be Neenah R-3501-P, EJIW 7525, or approved equal. For B-6.12 curb and gutter under ponding conditions, inlet and/or catch basin frames and grates shall be Neenah R-3281-A with Type M1 grate, EJIW 7210 with Type M1 grate, or approved equal. For B-6.12 curb and gutter under continuous grade conditions, inlet and/or catch basin frames and grates shall be Neenah R-3281-AL, EJIW 7210 with Type M4 vane grate & T1 back or approved equal. When additional grate capacity is needed in ponding conditions to handle the tributary flow, additional inlet structures shall be utilized. In cases where storm sewer inlets are used in depressed barrier curb areas, use Neenah No. R-3506-B, or approved equal. In rear yards and all other turf applications (except roadside ditch drainage applications) catch basins shall use use Neenah R-4340-B, EJIW 6512, or approved equal. Roadside ditch drainage structures shall be evaluated on a case by case basis.

f) No more than two (2) pre-cast concrete or other approved material adjusting rings, not exceeding 8 inches thickness, may be used for curb inlets or curb catch basins. In all other storm sewer applications, not more than 2 precast concrete or other approved materialadjusting rings shall be used, totaling no more than 8 inches, on any structure.

**4. Sump Pumps & Service Lines**

a) All sump pump systems shall discharge to the public storm sewer system. Perforated pipe shall not be used within 10 feet of a foundation wall. Sump pump discharges to a closed pipe system shall be provided with an outside air break to facilitate flow.

b) The connection to the storm sewer shall be through a structure. Stubs shall be provided as appropriate for all lots and shall extend at a minimum to the easement line to avoid excavation issues with other buried utilities. All pipe used for sump pump discharge collector lines shall be perforated PVC (SDR-35) or ADS N-12 of the size specified by the Engineer.

c) All individual sump pump lines shall be connected to a storm structure or sump pump discharge collector line structure. Sump pump collection lines shall be 6 inches diameter minimum. Sump pump discharge collector lines shall have a cleanout/inlet structure at the upstream end and shall have a cleanout/inlet structure every 300 feet maximum. Sump pump cleanout structures shall be 2 foot diameter structures and will not be allowed to pick up surface drainage. The frame and lid shall be Neenah No. R-1706-1 or approved equal.

d) The minimum depth of cover for sump pump service lines is 30".

e) All sump pump service stubs shall be marked at the time of construction with a 2" x 4" wood post neatly installed vertically with the bottom set at the invert elevation of the capped stub, a minimum 3 feet bury and a minimum 4 feet exposed. The top 1 foot of the post shall be neatly painted green.

f) A sump pump discharge anti-freeze device IRCR405.1 or approved equal shall be provided.

## VILLAGE OF SUGAR GROVE
## STANDARD NOTES FOR STREET PAVING AND CONSTRUCTION

1. All street pavements shall be constructed in accordance with the design criteria for the various classes as established in the "Bureau of Design and Environment Manual" and "Highway Standards" of the State of Illinois Department of Transportation, latest edition. Construction materials and methods shall meet the requirements of the "Standard Specifications for Road and Bridge Construction", latest edition. The thickness of the pavements for Major Collectors and Arterials shall be determined in accordance with the current Illinois Department of Transportation "Manual for Structural Design of Portland Cement Concrete Pavement" and the "Manual of Instructions For The Structural Design Of Bituminous Concrete Pavements", or as required by the jurisdictional authority.

2. Prior to the construction of any roadway pavement, all of the major underground work shall be completely installed in place.

3. The Village Engineer shall be notified 48 hours prior to the pouring of the curb and gutter in order to review the aggregate base and string line/formwork of the curb and gutter. The curb and gutter within the parking lot shall be machine placed and shall be completed in a monolithic installation unless previously approved by the Village Engineer.

4. All concrete shall be protected when required due to weather conditions per the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, including any revisions.

5. Proofrolls are required on the sub-grade, aggregate base, hot mix asphalt base, and the binder course, and shall be witnessed by the Village Engineer. The Village Engineer shall be provided a minimum of 48 hours advanced notice prior to the proofroll. Each proofroll shall be at the cost of the Contractor and shall be to the satisfaction of the Village Engineer as follows:
   a. A loaded truck provided by the Contractor shall be driven over the area to be tested at a speed pattern and number of cycles to be determined by the Village Engineer. The test truck shall be the common tractor trailer type with no more than five (5) axles with a total of eighteen (18) wheels loaded to a net weight of no less than twenty two (22) tons. The load ticket shall be provided the Village Engineer for record.
   b. Any unstable or damaged subgrade, aggregate sub-base, or binder course shall be removed and replaced to the satisfaction of the Village Engineer at no cost to the Village.
   c. The Village Engineer is responsible for indicating whether the proofroll passes or fails. The Contractor is responsible for determining how to fix any unsatisfactory areas.

6. The Village Engineer shall be notified 48 hours prior to the start of any paving.

7. Final placement of hot mix asphalt surface course shall be delayed for a minimum of one full winter after binder installation and 70% of the adjacent, private improvements are in place unless otherwise approved by the Village and Village Engineer. The maximum delay for surface course is three (3) years after installation of the binder, unless otherwise approved by the Village Board under the recommendation of the Village Engineer. Before the placement of the surface course, all underground utility punch list items for final inspection shall be completed and approved. Also, the binder course patches must be completed, and the curb and gutter repaired as required by the Village Engineer. The parkway landscaping and restoration must be completed to avoid having equipment marring the surface.

8. On all streets where new pavements meet existing hot mix asphalt or Portland cement concrete pavements, a butt joint with a transitional length of not less than ten feet (10') will be required. The subgrade shall be graded parallel to the final surface grade and as such shall drain to the curb lane and to the inlets and catch basins. Positive drainage must be accomplished on the compacted sub-grade or the placement of base material will not be allowed. Certification by the Village Engineer verifying proper subgrade drainage will be required prior to any additional roadwork.

9. The hot mix asphalt base course, leveling binder, binder course, and surface course mixtures shall be laid on a surface, which is dry and only when weather conditions meet all standards stated in the IDOT Standard Specifications for Road and Bridge Construction. The hot mix asphalt base course, leveling binder and binder courses shall be placed only when the temperature in the shade is at least forty degrees Fahrenheit (40°F), when the temperature in the shade for the previous twenty four (24) hours is at least thirty two degrees Fahrenheit (32°F) and when the forecast is for rising temperatures. The surface course shall be placed only when the temperature in the shade is at least forty-five degrees Fahrenheit (45°F), when the temperature in the shade for the previous twenty four (24) hours is at least forty degrees Fahrenheit (40°F), and when the forecast is for rising temperatures.

10. After any binder course surface variations have been corrected to the satisfaction of the Village Engineer and immediately prior to placing hot mix asphalt surface course, the pavement shall be thoroughly cleaned, flushed and primed with bituminous materials (SS-1) at a rate not to exceed one-tenth (0.1) gallon per square yard. When bituminous materials (SS-1) are applied under traffic conditions, sanding at the approximate rate of four (4) pounds per square yard will be required.

11. All hot mix asphalt shall be delivered and handled so that the hot mix asphalt immediately behind the paver screen is at or above two hundred seventy degrees Fahrenheit (270°F). All asphalt delivered to the project shall be covered when the temperature is at or below seventy degrees Fahrenheit (70°F).

12. The mix design shall be submitted the Village Engineer 48 hours in advance of paving.

13. All testing for both concrete placement and hot mix asphalt paving shall be per IDOT specifications. The asphalt laying pattern must be approved by the Village Engineer or his representative in order to minimize transverse joints. A certified nuclear density technician must be on site to set the asphalt pavement rolling pattern and confirm compaction densities. The technician shall revise the rolling pattern as deemed necessary. The technician shall stop the paving operation if the required densities are not being met. Density test results will be submitted to the Village Engineer within one week of completion of the paving operation. The Contractor shall be responsible for Quality Control testing. The Village shall be responsible for Quality Assurance testing. Therefore, at the time of asphalt paving, a representative from the Contractor's testing agency and a representative from the Village's testing agency shall be present at the asphalt plant prior to paving and on site at the start of paving. The Village Engineer reserves the right to stop paving and/or concrete operations if the Contractor does not have a qualified tester on site at the start of the paving and/or concrete operations.

14. All paving shall be done with paving machines utilizing electronic grade control and a string line shoe on wheels of a minimum length of fifteen feet (15').

15. All rollers shall be per IDOT specifications.

16. All hot mix asphalt plants being used by the contractor shall be approved by IDOT. In addition, all paving contractors performing work within the right of way shall furnish an IDOT Certificate of Eligibility to the Village prior to the start of paving.

17. Load tickets shall be furnished to the Village Engineer at the time of paving.

18. The nose of all islands in the roadway shall be tapered per IDOT standards as to not hinder snowplow operations.

19. The Village Engineer may approve lime stabilization, when soils are compatible as determined by a geotechnical engineer. The lime shall be mixed to a minimum depth of 16 inches and meet the Illinois Department of Transportation's guidelines for Lime Stabilized Soil Mixture as outlined in the "Standard Specifications for Road and Bridge Construction", latest edition. Drainage Fabric will not be required if Lime Stabilization, in accordance with IDOT Standard Specifications, is utilized for soil sub-base modification.


Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101


| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

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|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# PROJECT SPECIFICATIONS
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 40 OF 42

PROJECT NUMBER: 4930

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ILLINOIS FIRM LICENSE 184-002694

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**Fox Metro**
Water Reclamation District
1135 South Lake Street • Montgomery, Illinois 60538
Engineering Inquiries (630) 301-6882
Inspections (630) 301-6811 • FAX (630) 897-6094

Rev: 7/6/2023

MANHOLE / SEWER PIPE MATERIALS AND INSTALLATION SPECIFICATIONS
FOR **DEVELOPER CONSTRUCTION** OF SANITARY SEWERS
FOX METRO WATER RECLAMATION DISTRICT

1. PIPE & FITTINGS

Pipes and fittings used in sanitary sewer construction shall be polyvinyl chloride (PVC). PVC pipe and fittings dated over one year old shall not be permitted for use. **No solvent-welded joints shall be allowed outside of the foundation wall of any building.**

The types of PVC pipe and fittings that shall be used in the District include:

- Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings (ASTM – SDR series): Conforming to ASTM Numbers D-1784 (cell classification), D-3034, D-3212 (joint spec), and F-477 (gaskets).
- Poly Vinyl Chloride (PVC) Pressure Rated Pipe and Fittings (ASTM - SDR series): Conforming to ASTM Numbers D-1784 (cell classification), D-2241, D-3139 (joint spec), and F-477 (gaskets).
- Poly Vinyl Chloride (PVC) Pressure Rated Pipe and Fittings (AWWA DR-series): Conforming to AWWA C-900 and ASTM Numbers D-1784 (cell classification), D-3139 (joint spec), F-477 & F-913 (gaskets).

All PVC plastic pipe and fittings shall have a cell classification of 12454 as defined in ASTM D-1784 and shall have minimum pipe stiffness as shown below in Table 1. The required Standard Dimension Ratio (SDR) or Dimension Ratio (DR) for PVC pipe and fittings shall be selected based on the depth of cover, as also shown in the table below:

Table 1

| Depth of Cover | Pipe Diameter | Minimum Thickness | National Standard | Minimum Pipe Stiffness |
|---|---|---|---|---|
| >or=3.5' - 20' | 6" - 12" | SDR 26 | ASTM D-3034 | 115 |
| *>20' - 25' | *6" - 12" | *SDR 21 | *ASTM D-2241 | *224 |
| >26' & up | 6" – 14" | DR-18 | AWWA C-900 | 364 |

*4/5/2023: Per a nation-wide shortage of D-2241 pvc, this might not be available. Where SDR 21 D-2241 is not available, DR 18 C-900 pipe shall be used at depths > 20'.

Fittings in sizes through fourteen (14) inches shall have elastomeric joints and minimum socket depths as specified in each respective section shown above. The District reserves the right to approve/reject all pipes and fittings on a case-by-case basis.

2. PIPE BEDDING MATERIAL, HAUNCHING, SUITABLE SOILS, AND TRENCH BACKFILL

Bedding stone shall be thoroughly haunched to provide uniform support under the new pipe. Said bedding material, as outlined in ASTM D-2321, shall be certified by the manufacturer and approved by the District before installation, and possess the following characteristics:

- Gradation: Shall meet the IDOT gradation of CA-7, Class 1A, or any material(s) pre-approved by the District during the plan-review process (* See just below).
- Description: Shall be crushed stone or crushed gravel, *containing no more than 5% fine material, as produced by mechanical means.
- Plasticity Index of Undisturbed Earth/Trench Base Soil: Shall meet a plasticity index of 0 to 4 percent as determined by the method given in AASHTO T 90.
- Specific Gravity of Undisturbed (dry) Trench Base Material: Shall have a specific gravity of greater than 2.45.
- Initial Trench Backfill Material: Please refer to the requirements of the municipality having first jurisdiction over all applicable above or below-grade infrastructure.

**LABORATORY TEST**

The District reserves the right to require a contractor to submit certified copies of all reports of tests conducted by an independent laboratory before the installation of PVC plastic pipe. Tests shall be conducted in accordance with the Standard Method of Test for "External Loading Properties of Plastic Pipe by Parallel-Plate Loading" per ASTM D2412.

**PIPE INSTALLATION AND FIELD TESTING**

1. INSTALLATION

If the invert of any overhead sewer exceeds two (2) feet above the building's footing, plate compaction of the CA-7 Class 1A aggregate shall be required in twelve (12) inch lifts.

Trench widths should be stable or supported, and provide a width sufficient, but no greater than necessary to ensure working room to properly and safely place haunching and other embedment materials. The minimum trench width shall be 32" plus the outside diameter of the pipe and the maximum trench width shall be 48" plus the outside diameter of the pipe.

Pipe sizes shall be a minimum of eight (8) inches for public sewers and six (6) inches for building sewers.

Pipes shall be laid in a manner that provides uniform support over the entire length. No blocking of any kind shall be used to adjust the pipe to grade except when embedment concrete is used. The bedding shall be a minimum of six (6) inches in depth. The bedding material shall be placed and worked all around the pipe by hand (haunched) to provide uniform support, then around and over the crown of the pipe by a minimum of twelve inches (12"). The granular embedment material shall be placed and consolidated along the full width of the trench. The contractor shall be required to install the pipe in such a manner that the diametric deflection of the pipe shall not exceed five (5) percent.

PVC transition fittings shall be used in all new construction when joining PVC pipes of different outside dimensions, or for pvc to pvc connections, where no necessary hub/and or bell exists.

All new construction service connections to new mains shall be with a tee/wye fitting with a six (6) inch branch. Where no tee/wye exists, an Inserta Tee brand fitting shall be required. All connections to the main shall be constructed at a (max.) forty-five (45) degree angle or 1/1 rise/run pitch.

Cast iron enclosures shall be required for all sanitary sewer service cleanouts located in any paved surface or in any location where cleanouts may be damaged by heavy equipment.

All cleanouts shall be full-sized, be located 5' from the building's foundation, and spaced no greater than one hundred (100) feet apart.

Either 4" X 6" rubber or non-shear couplings shall be used to connect the building drain to the building sewer. If using a rubber fitting, the four-inch pipe shall be inserted six (6) to twelve (12) inches inside of the six-inch building sewer.

Whether any grease removal system (GRS) is newly constructed or retrofitted to an existing building, all District guidelines about the minimum slope and cover depth for sanitary construction shall be strictly adhered to.

All building drains/sewers shall be overhead or "hung" through the wall of any basement.

2. TESTING

Before final acceptance, all public sewers shall be tested in accordance with Section 31-1.12 of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

The cost of all testing shall be borne by the developer or the contractor.

All pipelines shall be constructed of polyvinyl chloride (PVC) and shall be subject to air exfiltration, deflection, and Closed-Circuit Televising testing.

Air exfiltration testing shall be performed using the State of Illinois' guidelines and shall be directed and witnessed by an inspector for the municipality having first jurisdiction.

The deflection test shall be performed using an approved mandrel or other device permitted by the District. Testing shall occur no sooner than thirty (30) days after backfilling and shall consist of measuring the pipe for vertical ring deflection. Maximum ring deflection of the pipeline under load shall be limited to five (5) percent of the internal pipe diameter. All pipes exceeding this deflection shall be considered to have reached the limit of its serviceability and shall be re-laid or replaced by the contractor at their sole expense.

All sanitary sewer (public or private) with a diameter of eight (8) inches or greater shall be televised by the District. Said televising work is scheduled once all air & vacuum testing has been received by the District. Any defects in said sewer shall be excavated, then repaired at the contractor's or developer's expense. Caution should be taken before constructing roads, curbs, sidewalks, or any other infrastructure, whether it is above or below the ground surface. It is the responsibility of the utility contractor and the developer to contact the District before installing any of these utilities or infrastructure. Repairs to defective sanitary sewers shall be performed regardless of the status of other construction or extraneous expenses.

**MANHOLE INSTALLATION AND FIELD TESTING**

1. INSTALLATION

All manhole castings, adjusting rings, and manhole sections shall be set in butyl rope. The inside barrel section of the manhole, adjusting rings, and frame shall not be mortared. However, the area between the pipe and flow channel shall be filled with cement mortar to provide a flush smooth surface.

Each manhole cone and barrel section joint shall also be externally sealed with a *6" or **9" wide (min.) sealing band of rubber and mastic (see "REPAIRS" below). The band shall have an outer layer of rubber or polyethylene with an under layer of rubberized mastic (with a protective film), meeting the requirements of ASTM C-877, **type II or *type III.



Pipe connections to all manhole openings (casted or core-drilled) shall be constructed with a flexible rubber watertight connector conforming to ASTM C-923, "Standard Specifications for Resilient Connectors between Reinforced Concrete Manhole Structures and Pipes".

A maximum of eight (8) inches of adjusting rings (2 total rings) are allowed. The frame, chimney, and top "lip" of the cone section shall be required to be sealed with a chimney seal. Only "Infi-Shield", "Adaptor-Seal", Cretex X-85, or an approved equal will be allowed.

When a new manhole is approved to be constructed on an existing public sewer, only non-shear couplers shall be installed. This work shall be inspected by the municipality having first jurisdiction or by the District.

After any manhole is at finished grade, and with adjusting rings and chimney seals in place, each structure shall be vacuum tested from the top of the casting. Any lift holes shall be plugged with a non-shrinking grout. No grout shall be placed in any horizontal joint of any manhole for any reason. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole. A vacuum of ten (10) inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to nine (9) inches of mercury (Hg) for the following time periods for each size manhole:

*Forty-eight inches (48") in diameter - sixty (60) seconds

*Sixty inches (60") in diameter – seventy-five (75) seconds

*Manhole testing will be in accordance with ASTM-1244-93 or in accordance with District requirements. In case of conflict, the more stringent requirement will apply (e.g. where deeper manholes are constructed). Should the manhole fail the vacuum test, the structure shall be disassembled to a point that said leak can be repaired with butyl rope. After the repair is complete, the manhole shall be re-tested until a satisfactory result is obtained.

**REPAIRS & REHABILITATION OF EXISTING PIPES AND MANHOLES**

1. PIPES

Pipe connections of those made from dissimilar materials or of pvc with differing outside diameters where no hub exists shall be made with a non-shear coupling.

Existing non-pvc building sewers or "stubs" shall not be used in connection with new buildings where a District connection permit is requested. In such cases, said building sewer or "stub" will either need to be removed to within one foot (1') of the public sewer and then replaced with appropriate pvc material or lined with a cured-in-place pipe (CIPP) meeting the requirements of ASTM F1216, D5813, D790, and D2990. Said CIPP shall be installed using the inversion method only, utilizing hot water or steam to cure all liners.

Building sewers shall be permanently abandoned using one of the following two methods.

1.) Removed to within one (1) foot of the public sewer and plugged using a mechanical plug and mortar. This is the preferred method. If this is not feasible, see item two below.

2.) The building sewer connection shall be sealed within the public sewer with a four (4) foot minimum length cured-in-place pipe (C.I.P.P.) liner with hydrophilic gaskets.

Where a newly constructed public sewer needs to be repaired due to damage having occurred during construction, only pvc transition fittings shall be required (no non-shear couplings). Only repair clamps conforming to ANSI/NSF-61 shall be allowed. When the damage occurs within thirty (30) feet of a manhole, the contractor shall remove and replace the damaged main from the nearest joint to the manhole.

2. MANHOLES

Each manhole, which has been disturbed around the full circumference of the structure, including being raised or lowered, should be cleaned and dried before re-sealing. Each cone and barrel section joint shall require a double-layer of butyl rope and also be externally sealed with a *6" or **9" wide (min.) sealing band of rubber and mastic. The band shall have an outer layer of rubber or polyethylene with an under layer of rubberized mastic (with a protective film), meeting the requirements of ASTM C-877, **type II or *type III.

A maximum of eight (8) inches of adjusting rings (2 total rings) is allowed in any repair. The frame and chimney of the cone section shall be required to be sealed with a chimney seal. Only "Infi-Shield", "Adaptor-Seal", Cretex X-85, or approved equal will be allowed.

**Fox Metro**
Water Reclamation District
1135 South Lake Street • Montgomery, Illinois 60538
Engineering Inquiries (630) 301-6882
Inspections (630) 301-6811 • FAX (630) 897-6094

Rev: 7/6/2023

# CONTRACTOR NOTICE

## Developer Construction

## Fox Metro Water Reclamation District

IMPORTANT – PLEASE READ!!

The following list represents costly problems or violations that commonly occur during or after construction. Our goal is to make all parties aware of these problems and hopefully reduce unnecessary delays, expenses, and fines.

To perform new construction or repair work on any private sanitary or water service, the following must be completed before work may commence:

- A $25,000 license & permit bond made out to "Fox Metro Water Reclamation District" must be received and approved before any new construction or repair work. Please instruct your insurance company to call out the work to be performed as "sanitary sewer construction" or "sanitary sewer excavation".
- A District permit for new construction or a repair permit needs to be issued.
- An inspection is required by the District. To save a $50 same-day inspection fee, please provide twenty-four (24) hour notice.

1. All public sanitary sewer construction must have an IEPA permit **and** plan approval letter on file at the District before commencing construction. To verify this, please provide our office with a 48-hour start notification.
2. To prevent unnecessary water, mud, or aggregates from entering into the existing sanitary system, all new sanitary construction must be securely plugged and maintained by the contractor. These plug(s), located per the approved plan, may only be removed after permission has been obtained from the municipality or the District. All construction drainage must be properly removed from the new sanitary sewer system.
3. All newly proposed private building sewer construction must have a connection permit from the District. In addition, this work shall be inspected by the District. Please call (630) 301-6811 by 3:00 pm the day before the requested inspection time. No building sewers shall be installed until all proposed public sewers have been tested and approved by the District.
4. All domestic water service installations (except for the Village of Oswego and the City of Yorkville) are to be inspected by the District. Any final connection(s) to any building, made by any plumber or excavator, shall also be inspected by the District. **Do not backfill this connection before a completed District inspection.**
5. All sanitary manholes are to be sealed (exterior of chimney & barrels) and vacuum tested from the **top of the frame**. Any disruption of these manholes will break the seal(s), requiring a costly resealing and retesting process. Please stay clear of all manholes.

For questions regarding permitting and construction, call the District's engineering department at (630) 301-6882. For questions regarding inspections or to report violations, open manholes, or other construction issues, please call (630) 301-6811.



**Mackie Consultants, LLC**
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

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| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
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| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# FOX METRO SPECIFICATIONS & GENERAL NOTES
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 41 OF 42

PROJECT NUMBER: 4930

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Water Reclamation District
1135 South Lake Street • Montgomery, Illinois 60538
Engineering Inquiries (630) 301-6882
Inspections (630) 301-6811 • FAX (630) 897-6094

Rev. 8/15/2023

Fox Metro Water Reclamation District
Sanitary Sewer Installation Rules and Regulations

Fox Metro Water Reclamation District has first jurisdiction in the tributary metropolitan sewer area as per Sewer Use Ordinance #885 and all discharges to the sanitary system will be controlled and monitored by Fox Metro Water Reclamation District.

**Bonding**

1. To perform sanitary sewer service installation or repairs you must provide a twenty-five thousand-dollar ($25,000.00) license & permit bond to "Fox Metro Water Reclamation District" (District), as the oblige. On this bond, it shall be indicated that the contractor performs work such as: "sanitary sewer excavation" or "sanitary sewer construction". The bonded contractor is required to install or repair all sanitary sewers according to District specifications (also refer to Standard Specifications for Water and Sewer Main Construction in Illinois and "77 Illinois Administrative code, part 890, Illinois Plumbing Code", latest edition).

**Violations and Illegal Discharges**

2. Failure to comply with District Ordinances may result in penalties not to exceed three thousand dollars ($3,000.00) **for each violation**. These fines may double with each occurrence by the same company, individual, or contractor. The following list does not represent all possible violations, but includes some of the most common violations:

   a. Construction using unapproved plans
   b. Construction of a new sewer without a District connection permit
   c. Repair of an existing sewer without a District repair permit
   d. Construction/repair of sanitary sewers or water supply lines without a District inspection
   e. Construction/repair of sanitary sewers without an approved License and Permit bond
   f. Construction of public sewers without 48-hour notice
   g. Construction of sewers without required I.E.P.A. permit and District approval letter
   h. *Release of groundwater, aggregates, or mud into the public sewer system
   i. *Release of groundwater or overland drainage into an unsecured system



3. *All new sanitary construction must be securely plugged per the approved plans. This plug must be maintained at all times by the contractor to prevent unnecessary flow or discharge into the existing sanitary system. This plug may only be removed only with the approval of Fox Metro or by the governing municipality, and after all construction drainage has been properly removed.

4. *No groundwater, runoff, or surface water is allowed to enter any sanitary sewer system before, during, or after any sanitary sewer service work, mainline construction, or repair. In addition, draining or pumping ground or surface water into any sanitary sewer system is strictly prohibited.

5. *No aggregate, dirt, clay, debris, or foreign materials are allowed to enter any sanitary sewer system. Any individual, contractor, or company causing said material to enter an existing sanitary sewer system shall clean and remove this debris from the system at their expense, and under the supervision of the District and/or the governing municipality. Furthermore, should it be determined that this material caused a system surcharge or backup resulting in property loss or damage, this same responsible party, individual, or company shall make proper restitution, restoration, clean up, and disinfection as may be required for proper health and safety.

6. *Footing tiles, sump pumps, under-floor drains, downspouts, yard drains or any other connections for draining groundwater, runoff, or surface water directly or indirectly into sanitary sewers are expressly prohibited and subject to fines and treatment costs.

   *PLEASE PAY PARTICULAR ATTENTION TO ITEMS G & H, AS WELL AS TO ITEMS 1 THROUGH 6. UNDER NO CIRCUMSTANCES WILL THE DISTRICT ANY AGGREGATES, MUD, CLAY, OR GROUND WATER TO ENTER THE SANITARY SEWER SYSTEM. FAILURE TO COMPLY MAY RESULT IN MAXIMUM FINES, AS WELL AS POSSIBLE CLEANING AND TREATMENT COSTS. REPEAT OFFENDERS MAY BECOME SUBJECT TO REVOCATION OF THEIR BOND AND DENIAL OF FUTURE WORK IN THE DISTRICT'S SERVICE AREA. FOR ANY QUESTIONS, CALL THE ENGINEERING DEPARTMENT AT (630) 301-6882.

**Inspections**

7. All construction involving any sanitary building sewers, including new construction and repairs, and *water services (see just below) shall be inspected by the District.

8. *The District performs all water service inspections for the City of Aurora and the Villages of Montgomery, Sugar Grove, and North Aurora, and shall consist of the following:

   a. All domestic water connections shall be a minimum of one (1) inch in diameter and shall be Type K copper. All domestic water connections larger than two (2) inches in diameter may require D.I.P., as well as chlorination and testing witnessed by a Professional Engineer from the municipality in which the service is being constructed.

   b. Each water service shall be in its trench with ten (10) feet (minimum) of horizontal separation from the sanitary service or main, and be at a minimum depth of five (5) feet. Where this is not possible, refer to the District's sewer and water separation detail and the Illinois Plumbing Code.

   c. Water shut-offs shall be placed outside of driveways, curbs, sidewalks, or any surfaced area.

   d. If water service is not included in the design of a new building where a District permit was issued for the sanitary sewer, a separate "Water Inspection Request" form is required from the District. However, before construction, permitting and specifications relating to such installations for water services shall be directed from the City or Village having first jurisdiction.

9. The sanitary sewer contractors for all public sewer extension projects shall notify the District twenty-four (24) hours before the start of work at the phone number provided on the District's Plan Approval Letter or at (630) 301–6882. For service connections, call the day before the desired inspection time between the hours of 7:00 a.m. and 3:00 p.m. at (630) 301-6811.

10. Inspections scheduled on the same day shall be charged a fifty-dollar ($50) fee. To avoid additional fees, if you are running late or wish to cancel an inspection, a minimum of a one-hour notification is required.

11. A fifty-dollar ($50) fee may be charged for return inspections (not including multi-family), failed inspections, failure to cancel, or those which are incomplete at the scheduled time.

12. Holiday and weekend inspections may be available for a minimum fee of $150, which is due before the inspection. To inquire, please call 630-301-6811 during the hours of 7:00 a.m. – 3:00 p.m. Monday – Friday.

13. When calling for an inspection, a District permit number is always required. An inspection cannot be scheduled without this number.

14. Exterior sanitary sewer repairs require a no-charge repair permit. After you receive this permit, you may call to schedule an inspection.

15. After-hours emergency inspection of any repairs: call 630-327-8919.



**Construction**

16. Full-sized exterior cleanouts are required for all new building sewers.

17. Any building constructed with a basement shall have overhead building drains and building sewers.

18. All construction, including bedding stone, fittings, pipe, chimney & manhole seals, and testing must meet District specifications.

19. If any public water or public sewer is damaged or broken during excavation, you must notify the municipality having first jurisdiction immediately. Any broken or damaged municipal utility will require repair approval and inspection by that municipality. In addition, a repair permit and inspection by the District shall be required for any damaged water or sanitary service.

20. All public sewer main construction must have an IEPA permit **and** plan approval letter on file with the District's engineering department before commencing any construction. Please call 630-301-6882 to verify that these items are on file.

21. A final-approved set of plans and specifications must be kept on the job site. Failure to comply with this provision may result in a fine and/or be considered cause to stop the job.

22. Any change from approved plans, specifications, or additions must be requested and become subject to approval by the District and municipality having first jurisdiction.

23. Where a new building is constructed on any lot where the building sewer or "stub" is made of non-pvc materials, said service shall be removed and replaced to the public main or CIPP lined using only specifications approved by the District.

24. No solvent-welded joints shall be allowed outside of the foundation wall.

25. The District must be contacted to check the sewer main before any individual or company rods a building sewer. This only applies in "backup" situations to insure the main sewer is not surcharged.

26. To verify the proper point at which to core-drill into any public sewer, especially an interceptor, the contractor shall call the District twenty-four (24) hours in advance at (630) 301-6811 to schedule a pre-drill inspection.

27. no "crown" connections are allowed for any sanitary sewer mainline or service tie-in. All new connections are to be located at a point or angle no higher than forty-five (45) degrees or 1/1 from the horizontal point of the existing sewer.

28. All sanitary sewers shall be tested in accordance with Section 31–1.11 of the "Standard Specifications for Water and Sewer Main Construction in Illinois". In addition, all manholes shall be vacuum tested (Manhole testing will be in accordance with ASTM-1244-93 or in accordance with the District's requirements) from the top of the casting. In case of testing specification conflict, where deeper manholes are constructed, the more stringent requirement shall apply.

29. All existing sanitary interceptor (mains 15" in diameter or greater) manhole frames located within any proposed development will be required to be adjusted to grade. Under no circumstances may the amount of adjusting rings exceed eight (8) inches (two rings total). Extreme care should be taken when working near all sanitary manholes.

30. Landscaping within any District easement is prohibited without review and subsequent plan approval by the District. All Field Department personnel needs to be able to access the entire length of any interceptor easement to maintain the integrity of the sanitary sewer system or deal with emergencies. Unless approved by the District, the easement shall be graded so that the ground surface does not exceed a six (6) percent gradient in any direction.

Questions relating to any District specification, rule/regulation, or those regarding a specific project, should be directed to the engineering department at 630-301-6882.



Fox Metro
Water Reclamation District
1135 South Lake Street • Montgomery, Illinois 60538
Engineering Inquiries (630) 301-6882
Inspections (630) 301-6811 • FAX (630) 897-6094

Rev: 7/6/2023

GENERAL NOTES
FOR **DEVELOPER CONSTRUCTION** OF SANITARY SEWERS
FOX METRO WATER RECLAMATION DISTRICT

1. All sanitary sewer construction shall be performed in accordance with "Fox Metro Water Reclamation District Sewer Use Ordinance No. 885", the "Standard Specifications for Water and Sewer Main Construction in Illinois", and "77 Illinois Administrative Code, part 890, Illinois Plumbing Code", latest edition.

2. Final-approved set of plans must be kept on the job site. Failure to do so may result in a fine and can be considered as cause to stop the job.

3. Contractors for all sanitary public sewer extension projects shall notify the District's Engineering Department twenty-four (24) hours before the start of work. Notification shall be done via telephone at (630) 301–6882 or by email at submittals@foxmetro.org.

4. For service connection inspections, call 630-301-6811 by 3:00 p.m. the day before the requested inspection time.

5. To prevent any possible infiltration, inflow, or debris from entering the downstream sanitary system, a factory–made plug shall be placed in the manhole by the contractor, as indicated on the final-approved plans. The placement of the plug(s) shall not interrupt the service of any user. This plug is to be removed only upon approval by the District or the city/village, and only after any construction drainage and/or debris has been properly removed. Under no circumstances is overland surface drainage allowed to drain into the sanitary system.

6. All sanitary sewers shall be tested by Section 31–1.12 of the "Standard Specifications for Water and Sewer Main Construction in Illinois", including all manholes shall be vacuum tested (manhole testing will be in accordance with ASTM-1244-93 or in accordance with District requirements). In case of testing specification conflict, where deeper manholes are constructed, the more stringent requirement will apply.

7. When connecting to an existing public sewer where a tee or wye is not provided, an *"Inserta Tee"* fitting must be installed. The minimum distance between fittings is four (4) feet from center to center.

8. Installation of a tee/wye on an existing main is prohibited. The angle of any new connection shall not exceed 1/1 or 45 degrees.

9. Only "Infi-Shield", "Adaptor-Seal", Cretex X-85, and "Wrapid Seal" or approved equal chimney seals shall be installed on all manholes.

10. Only PVC transition fittings shall be used in all new construction when joining PVC pipes that are damaged, disturbed during construction, or have different outside diameters. Refer to Fox Metro's "Manhole/Sewer Pipe Specifications" for information relating to repairs of mains damaged during construction.

11. All existing sanitary interceptor (15" in diameter or greater) manhole frames located within any proposed development will be required to be adjusted to grade. Under no circumstances may the vertical height of the adjusting rings exceed eight (8) inches (two total). Extreme care should be taken when working near all sanitary manholes.

12. Approved cast iron or concrete cleanout enclosures are required over the top of all cleanout covers in areas deemed necessary by the District.

13. Ductile iron and cast-iron pipe are not allowed for the use of gravity sewers in the District.

14. Landscaping within any District easement is prohibited without review and subsequent plan approval.

15. District easements shall be graded so that the ground surface does not exceed a six (6) percent gradient in all directions.

16. All building drains/sewers shall be overhead or "hung" through the basement wall of any new building.

17. All sanitary risers shall be constructed to a depth of no greater than six (6) to seven (7) feet at the right of way/property line. If a conflict arises between a sanitary sewer and a water line, IEPA water & sewer separation requirements take precedence.

18. Whether any grease removal system is newly constructed or "retrofitted" to an existing building, a minimum of 1% slope and 3.5' of cover for pipes are required.

19. Minimum design slopes shall be 1.00% for six (6) inch building sewers, .40% for eight (8) inch sewers, and .28% for ten (10) inch sewers with all other design slopes conforming to the requirements of the "Standard Specifications for Water and Sewer Main Construction in Illinois".

20. All manhole barrel sections (including those sections of existing manholes that have been exposed during construction) shall be required to be externally sealed with a *6" or **9" wide (min.) wrap meeting the requirements of ASTM C-877, **type II or *type III.



21. All sags, leaks, pipe defects, or other related issues with any newly televised sanitary sewer shall be repaired by the contractor at the discretion of the District. Approval of repairs will need to be confirmed in writing by the appropriate municipality, or re-televised by the District. At the District's discretion, connection permits may be withheld if confirmation of completed repairs cannot be obtained.

22. Any contractor, who consistently fails to perform by the District's standards and specifications as provided on the plans, may be prohibited from performing work in the District. The District reserves the right to revoke or disallow any contractor's bond.

23. The District shall televise all sewers eight (8) inches in diameter or greater. To access each manhole, the developer is responsible for providing a smooth, level area of sufficient width along the sanitary sewer system.

24. During televising, if any newly constructed public sewer requires "heavy cleaning", additional charges may be incurred by the developer.

25. Full-sized cleanouts are required on all building sewers.



Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

LENNAR
1700 EAST GOLF ROAD, SUITE 1100
SCHAUMBURG, IL 60173
PHONE: 224-293-3100
FAX: 224-293-3101

| DATE | DESCRIPTION OF REVISION | BY |
|---|---|---|
| 06-27-2025 | REVISIONS PER VILLAGE COMMENTS | LZ |
| 06-23-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 06-13-2025 | REVISIONS PER IDOT COMMENTS & IDNR-OWR COORDINATION | LZ |
| 06-03-2025 | REVISIONS PER FOX METRO COMMENTS | LZ |
| 05-30-2025 | REVISIONS PER VILLAGE AND FOX METRO COMMENTS | LZ |
| 04-21-2025 | REVISION TO MULTIUSE PATH PER WETLAND COMMENTS | LZ |

| | |
|---|---|
| DESIGNED | LZ |
| DRAWN | JD |
| APPROVED | MTL |
| DATE | 04/04/2025 |
| SCALE | N.T.S. |

# FOX METRO SPECIFICATIONS & GENERAL NOTES
# BRIGHTON RIDGE
# SUGAR GROVE, ILLINOIS

SHEET 42 OF 42
PROJECT NUMBER: 4930
© MACKIE CONSULTANTS LLC, 2025
ILLINOIS FIRM LICENSE 184-002694

6/27/2025 12:51:9 PM
N:\4930\Engineering\Plan\Final\Brighton Ridge Subdivision\41-42-Fox Metro Specifications and GeneralNotes.pdf

# Final Landscape Plan

# BRIGHTON RIDGE

## Sugar Grove, Illinois

June 23, 2025

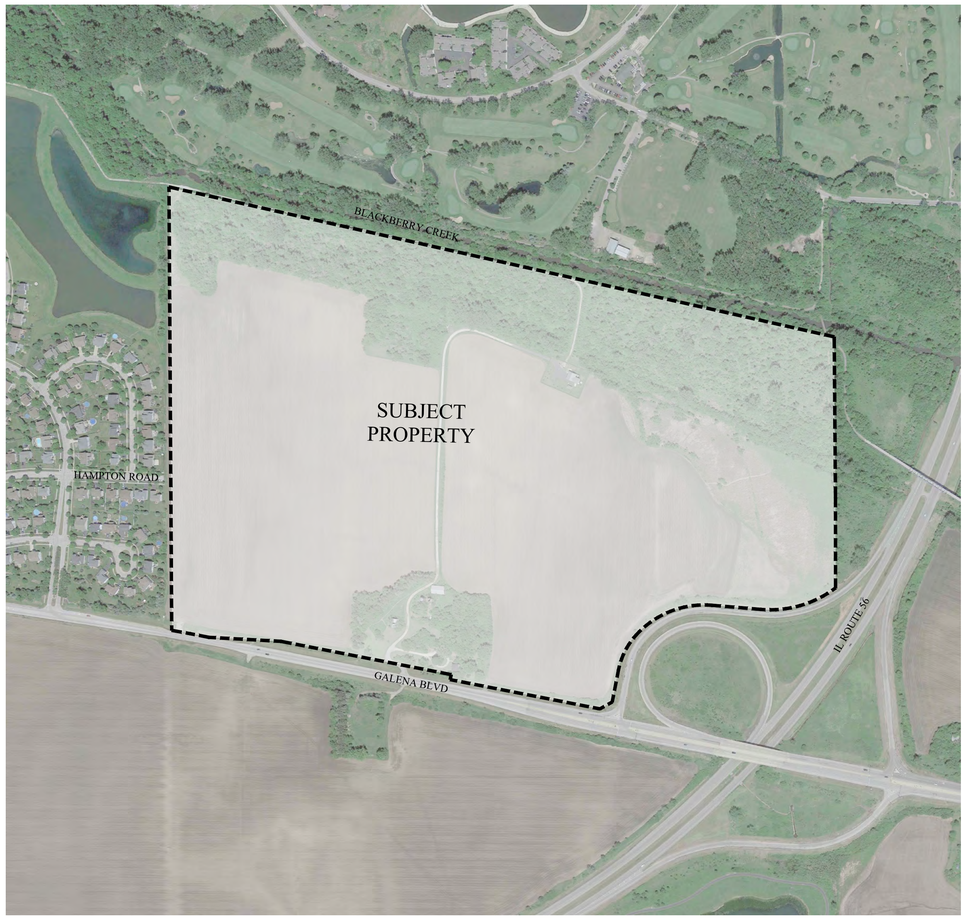
## CONSULTANTS:


LANDSCAPE ARCHITECT:

GARY R. WEBER ASSOCIATES, INC
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187

CIVIL ENGINEER:

MACKIE CONSULTANTS, LLC
9575 W HIGGINS ROAD, SUITE 500
ROSEMONT, ILLINOIS 60018

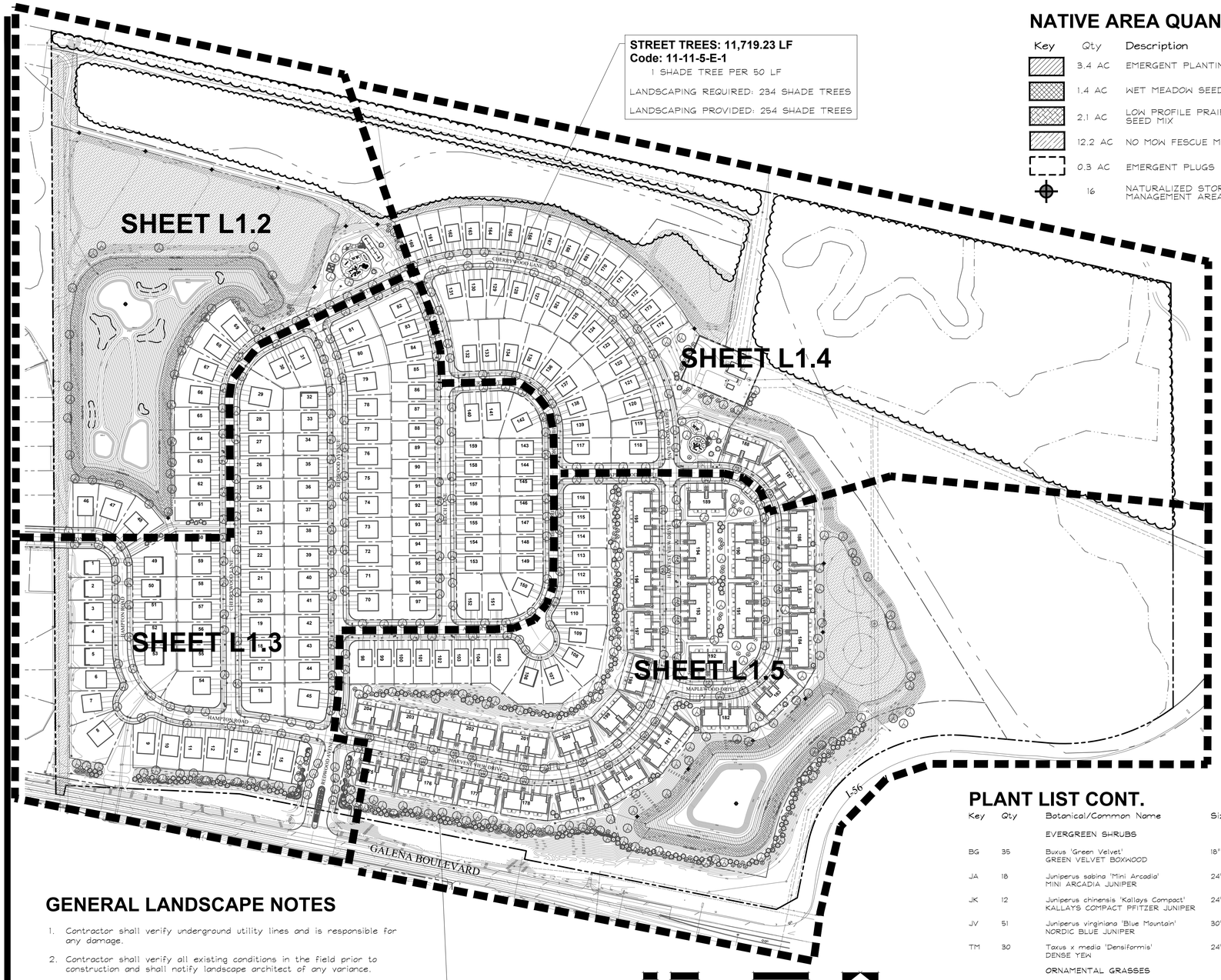

LOCATION MAP

SCALE: 1"=350'

## INDEX OF SHEETS


| SHEET NO. | DESCRIPTION |
|---|---|
| L1.0 | COVER SHEET |
| L1.1 | OVERALL LANDSCAPE PLAN |
| L1.2 | LANDSCAPE PLAN |
| L1.3 | LANDSCAPE PLAN |
| L1.4 | LANDSCAPE PLAN |
| L1.5 | LANDSCAPE PLAN |
| L1.6 | PARK AND MONUMENT PLAN |
| L1.7 | MONUMENT DETAILS |
| L1.8 | TYPICAL FOUNDATION PLAN |
| L1.9 | TYPICAL FOUNDATION PLAN |
| L1.10 | TYPICAL FOUNDATION PLAN |
| L1.11 | SEED & SOD EXHIBIT |
| L1.12 | PARK AMENITIES |
| L1.13 | PARK LAYOUT PLAN |
| L1.14 | PARK DETAILS |
| L1.15 | PLAYGROUND AMENITY DETAILS |
| L1.16 | LANDSCAPE SPECIFICATIONS |
| L1.17 | LANDSCAPE SPECIFICATIONS |


LENNAR®




## NATIVE AREA QUANTITIES

| Key | Qty | Description |
|---|---|---|
| | 3.4 AC | EMERGENT PLANTINGS |
| | 1.4 AC | WET MEADOW SEED MIX |
| | 2.1 AC | LOW PROFILE PRAIRIE SEED MIX |
| | 12.2 AC | NO MOW FESCUE MIX |
| | 0.3 AC | EMERGENT PLUGS |
| | 16 | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |

## PLANT LIST

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | SHADE TREES | | |
| AA | 24 | Acer x freemanii 'Redpointe' REDPOINTE MAPLE | 2 1/2" Cal. | |
| AA3 | 8 | Acer x freemanii 'Redpointe' REDPOINTE MAPLE | 3" Cal. | |
| AF | 29 | Acer x freemanii 'Marmo' MARMO FREEMAN MAPLE | 2 1/2" Cal. | |
| AH | 22 | Aesculus x arnoldiana 'Autumn Splendor' AUTUMN SPLENDOR HORSECHESTNUT | 2 1/2" Cal. | |
| AM | 17 | Acer miyabei 'Morton' STATE STREET MAPLE | 2 1/2" Cal. | |
| AS | 29 | Acer saccharum 'Green Mountain' GREEN MOUNTAIN SUGAR MAPLE | 2 1/2" Cal. | |
| CO | 24 | Celtis occidentalis COMMON HACKBERRY | 2 1/2" Cal. | |
| GD | 13 | Gymnocladus dioicus 'Espresso-JFS' ESPRESSO KENTUCKY COFFEETREE | 2 1/2" Cal. | |
| PM | 21 | Platanus x acerifolia 'Morton Circle' EXCLAMATION! LONDON PLANETREE | 2 1/2" Cal. | |
| GT | 28 | Gleditsia triacanthos var. inermis 'Skycole' SKYLINE HONEYLOCUST | 2 1/2" Cal. | |
| QB | 24 | Quercus bicolor SWAMP WHITE OAK | 2 1/2" Cal. | |
| QB3 | 6 | Quercus bicolor SWAMP WHITE OAK | 3" Cal. | |
| QI | 25 | Quercus imbricaria SHINGLE OAK | 2 1/2" Cal. | |
| QM | 25 | Quercus macrocarpa BURR OAK | 2 1/2" Cal. | |
| QR | 19 | Quercus rubra RED OAK | 2 1/2" Cal. | |
| TA | 27 | Tilia americana 'Redmond' REDMOND AMERICAN LINDEN | 2 1/2" Cal. | |
| TT | 24 | Tilia tomentosa 'Sterling' STERLING SILVER LINDEN | 2 1/2" Cal. | |
| UA | 15 | Ulmus japonica x wilsoniana 'Morton' ACCOLADE ELM | 2 1/2" Cal. | |
| UM | 22 | Ulmus 'Morton Glossy' TRIUMPH ELM | 2 1/2" Cal. | |
| UC | 15 | Ulmus carpinifolia 'New Horizon' NEW HORIZON SMOOTHLEAF ELM | 2 1/2" Cal. | |
| | | ORNAMENTAL TREES | | |
| AG | 17 | Amelanchier x grandiflora APPLE SERVICEBERRY | 6' Ht. | Clump Form |
| AG8 | 5 | Amelanchier x grandiflora APPLE SERVICEBERRY | 8' Ht. | Clump Form |
| BN | 7 | Betula nigra 'Cully' HERITAGE RIVER BIRCH | 6' Ht. | Multi-Stem |
| BP | 24 | Betula populifolia 'Whitespire' WHITESPIRE GRAY BIRCH | 6' Ht. | Multi-Stem |
| CA | 13 | Carpinus caroliana AMERICAN HORNBEAM | 6' Ht. | Multi-Stem |
| CC | 21 | Cercis canadensis EASTERN REDBUD | 6' Ht. | Multi-Stem |
| CC8 | 9 | Cercis canadensis EASTERN REDBUD | 8' Ht. | Multi-Stem |
| CT | 23 | Crataegus crusgalli var. inermis THORNLESS COCKSPUR HAWTHORN | 2" Cal. | Single Stem |
| MJ | 7 | Malus x 'Jeflite' STARLITE CRABAPPLE | 2" Cal. | Single Stem |
| MS | 10 | Malus 'Donald Wyman' DONALD WYMAN FLOWERING CRABAPPLE | 6' Ht. | Single Stem |
| SP | 20 | Syringa pekinensis 'Morton' CHINA SNOW PEKING LILAC | 6' Ht. | Multi-Stem |
| SR | 13 | Syringa reticulata 'Ivory Silk' IVORY SILK JAPANESE TREE LILAC | 6' Ht. | Multi-Stem |
| SR8 | 6 | Syringa reticulata 'Ivory Silk' IVORY SILK JAPANESE TREE LILAC | 8' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| JM | 10 | Juniperus chinensis 'Mountbatten' MOUNTBATTEN JUNIPER | 6' Ht. | |
| PA | 56 | Picea abies NORWAY SPRUCE | 8' Ht. | |
| PA12 | 6 | Picea abies NORWAY SPRUCE | 12' Ht. | |
| PF | 48 | Pinus flexilis 'Vanderwolf' VANDERWOLF LIMBER PINE | 7' Ht. | |
| PG | 52 | Picea glauca var. densata BLACK HILLS SPRUCE | 8' Ht. | |
| PO | 31 | Picea omorika SERBIAN SPRUCE | 8' Ht. | |
| PO12 | 4 | Picea omorika SERBIAN SPRUCE | 12' Ht. | |
| PS | 46 | Pinus strobus EASTERN WHITE PINE | 8' Ht. | |
| | | DECIDUOUS SHRUBS | | |
| CS | 56 | Cornus sericea 'Bailey' BAILEY'S REDTWIG DOGWOOD | 36" Tall | 5' O.C. |
| FG | 59 | Fothergilla gardenii DWARF FOTHERGILLA | 24" Tall | 3' O.C. |
| HA | 20 | Hydrangea arborescens 'Abetwo' INCREDIBALL HYDRANGEA | 24" Tall | 3' O.C. |
| HS | 40 | Hydrangea serrata 'MAK20' TUFF STUFF MOUNTAIN HYDRANGEA | 24" Tall | 3' O.C. |
| VJ | 46 | Viburnum x juddii JUDD VIBURNUM | 36" Tall | 4' O.C. |

## PLANT LIST CONT.

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | EVERGREEN SHRUBS | | |
| BG | 35 | Buxus 'Green Velvet' GREEN VELVET BOXWOOD | 18" Wide | 30" O.C. |
| JA | 18 | Juniperus sabina 'Mini Arcadia' MINI ARCADIA JUNIPER | 24" Wide | 36" O.C. |
| JK | 12 | Juniperus chinensis 'Kallays Compact' KALLAYS COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| JV | 51 | Juniperus virginiana 'Blue Mountain' NORDIC BLUE JUNIPER | 30" Wide | 5' O.C. |
| TM | 30 | Taxus x media 'Densiformis' DENSE YEW | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| PL | 66 | Panicum virgatum 'Heavy Metal' HEAVY METAL SWITCHGRASS | #1 | 24" O.C. |
| SH | 16 | Sporobolus heterolepis PRAIRIE DROPSEED | #1 | 18" O.C. |
| SS | 27 | Schizachyrium scoparium 'Standing Ovation' STANDING OVATION LITTLE BLUESTEM | #1 | 24" O.C. |
| | | PERENNIALS | | |
| AB | 502 | Allium 'Summer Beauty' SUMMER BEAUTY ONION | #1 | 18" O.C. |
| CN | 119 | Calamintha nepeta ssp. 'Nepeta' LESSER CALAMINT | #1 | 18" O.C. |
| GE | 39 | Geranium 'Johnson's Blue' JOHNSON'S BLUE GERANIUM | #1 | 18" O.C. |
| PD | 61 | Penstemon digitalis 'Huskers Red' HUSKERS RED PENSTEMON | #1 | 24" O.C. |

MISC. MATERIALS

| | | |
|---|---|---|
| 269 | SHREDDED HARDWOOD MULCH | C.Y. |
| 41,653 | SOD | S.Y. |
| 7.4 | TURF SEED & EROSION CONTROL BLANKET | AC. |

## GENERAL LANDSCAPE NOTES

1. Contractor shall verify underground utility lines and is responsible for any damage.
2. Contractor shall verify all existing conditions in the field prior to construction and shall notify landscape architect of any variance.
3. Material quantities shown are for contractors convenience only. The Contractor must verify all material and supply sufficient materials to complete the job per plan.
4. The landscape architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements of variety, size and quality.
5. Work shall conform to American Standard for Nursery Stock, State of Illinois Horticultural Standards, and Local Municipal requirements.
6. Contractor shall secure and pay for all permits, fees, and inspections necessary for the proper execution of this work and comply with all codes applicable to this work.
7. See General Conditions and Specifications for landscape work for additional requirements.
8. Temporary irrigation will be provided to establish landscape throughout the required maintenance period.
9. Replacement trees must be maintained in a healthy growing condition for a minimum of three (3) years after planting.
10. All sod/grass areas shall be in compliance with erosion control requirements and capable of being cut or mowed.

**LANDSCAPE EASEMENTS: 1689.49 LF**
**Code: 11-11-5-E-2b**

PER 100 LF STREET ABUTTING R.O.W, 3 SHADE TREES, 3 ORNAMENTAL TREES, 5 EVERGREEN TREES, AND 20 SHRUBS ARE REQUIRED

LANDSCAPING REQUIRED:
51 SHADE
51 ORNAMENTAL
85 EVERGREEN
338 SHRUBS

LANDSCAPING PROVIDED:
51 SHADE
64 ORNAMENTAL
89 EVERGREEN
365 SHRUBS

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
MACKIE CONSULTANTS
9575 W. HIGGINS
SUITE #500
ROSEMONT, IL 60018

# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

# OVERALL LANDSCAPE PLAN

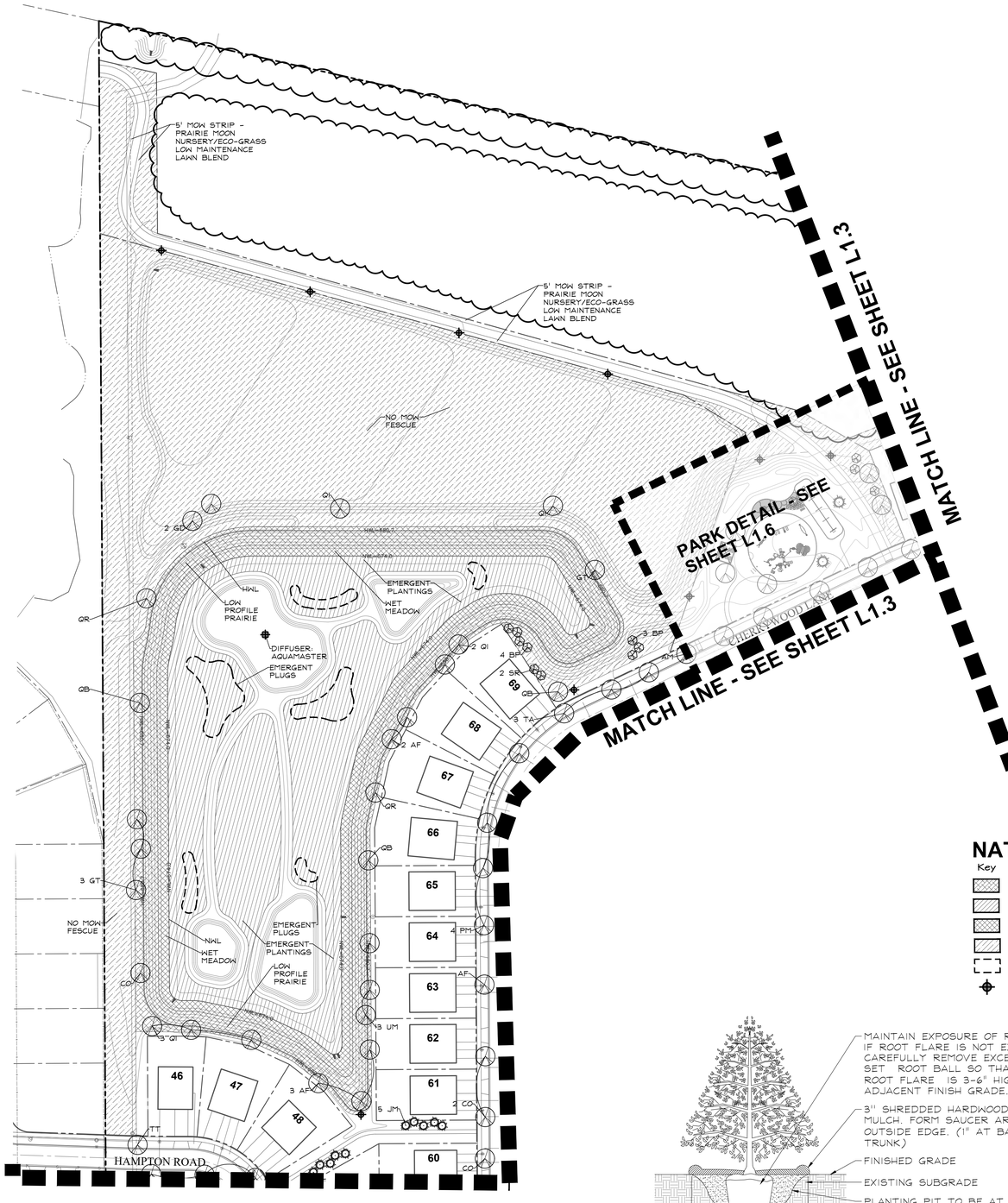
| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

**REVISIONS**

| | |
|---|---|
| **DATE** | 04.04.2025 |
| **PROJECT NO.** | LN23167 |
| **DRAWN** | EAN/MAC |
| **CHECKED** | ZL |
| **SHEET NO.** | L1.1 |

Know what's below. Call before you dig.

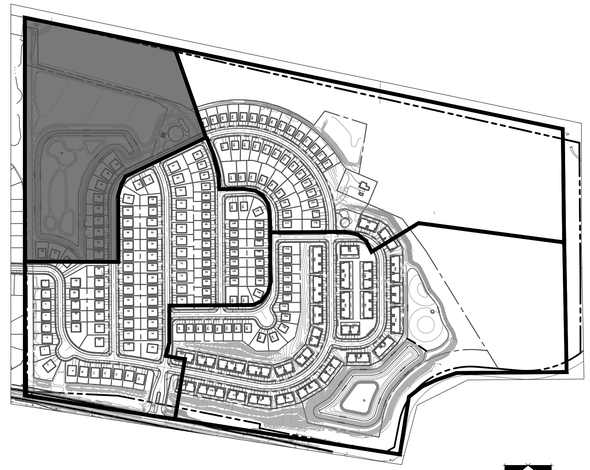
KREIS
PLOT CONFIG




**MATCH LINE - SEE SHEET L1.3**

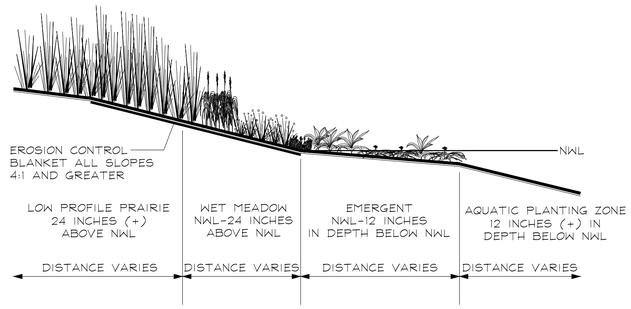
0 40' 80' 160' 320'
SCALE: 1"=80'

NORTH



**KEY MAP**
SCALE: 1"=420' NORTH

## PLANTING DETAILS



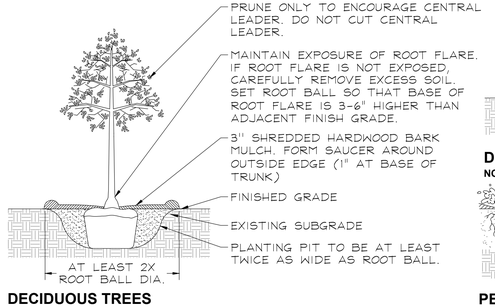

**NATURALIZED STORMWATER BASIN SECTION**
NOT TO SCALE

## NATIVE LEGEND

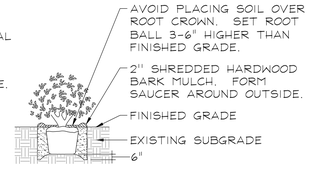
| Key | Description |
|---|---|
| | LOW PROFILE PRAIRIE SEED MIX |
| | EMERGENT PLANT MIX |
| | WET MEADOW SEED MIX |
| | NO MOW FESCUE MIX |
| | EMERGENT PLUGS |
| | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |



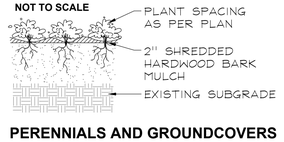

**EVERGREEN TREES**
NOT TO SCALE




**DECIDUOUS TREES**
NOT TO SCALE




**DECIDUOUS AND EVERGREEN SHRUBS**
NOT TO SCALE




**PERENNIALS AND GROUNDCOVERS**
NOT TO SCALE

GR WA
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ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
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ROSEMONT, IL 60018

# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

# LANDSCAPE PLAN - NORTHWEST

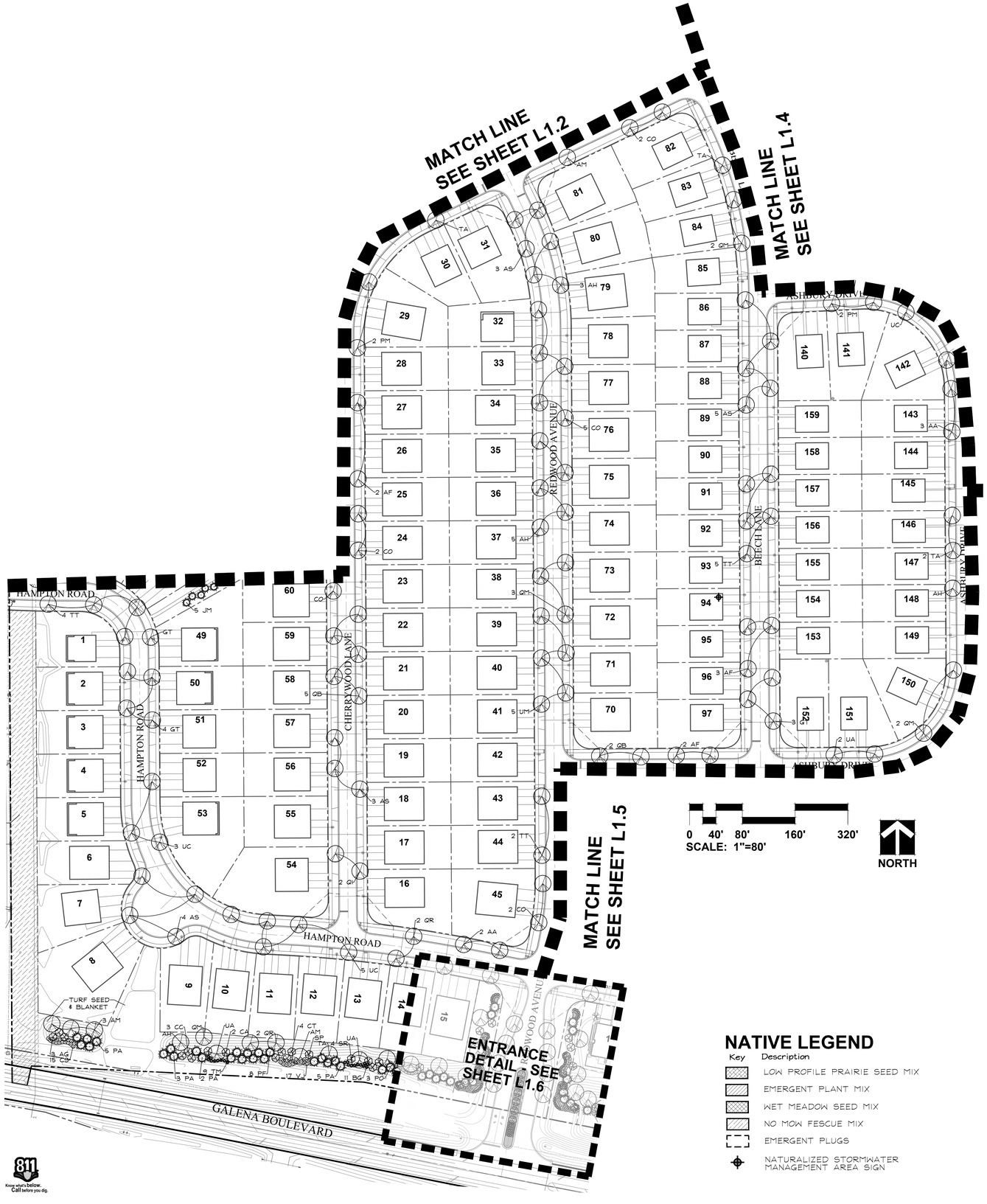
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|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

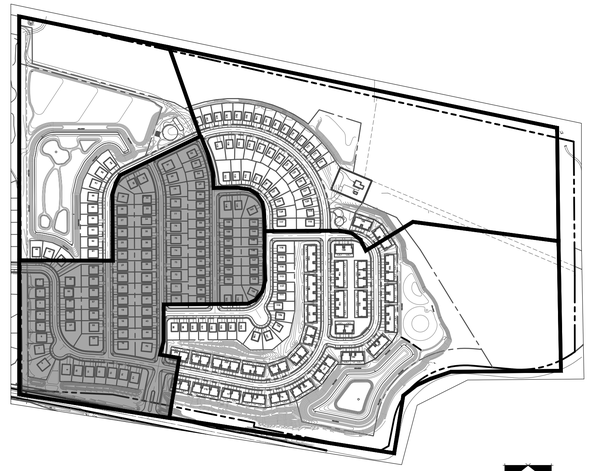
REVISIONS

| | |
|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.2 |

811 Know what's below. Call before you dig.

XREFS:
PLOT CONFIG:



**KEY MAP**
**SCALE: 1"=420' NORTH**

## NATIVE LEGEND

| Key | Description |
|---|---|
| | LOW PROFILE PRAIRIE SEED MIX |
| | EMERGENT PLANT MIX |
| | WET MEADOW SEED MIX |
| | NO MOW FESCUE MIX |
| | EMERGENT PLUGS |
| | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |

## NATIVE SEED MIXTURES

### Temporary Cover Crop

Cover crops shall be installed in all planting areas containing dry mesic, mesic, and wet mesic soils to, stabilize soils, and combat weed pressure during the germination and establishement of the native seeding area.

| Botanical Name | Common Name | lbs / AC |
|---|---|---|
| **Spring Cover Crop** | | |
| *Avena sativa* | Seed Oats | 40.000 |
| **Fall or Dormant Cover Crop** | | |
| *Avena sativa* | Seed Oats | 40.000 |

### Emergent Plant Seed and Plug Mixture

Stormwater basin bottoms from NWL to 12" below NWL

| Botanical Name | Common Name | lbs / AC | Plugs / AC. |
|---|---|---|---|
| *Acorus americanus* | Sweet Flag | 0.500 | 494 |
| *Alisma subcordatum* | Water Plantain | 1.250 | |
| *Carex stricta* | Tussock Sedge | 0.060 | |
| *Eleocharis obtusa* | Blunt Spike Rush | 0.250 | 494 |
| *Iris virginica shrevei* | Blue Flag | 0.500 | 988 |
| *Juncus effusus* | Common Rush | 0.500 | 494 |
| *Leersia oryzoides* | Rice Cut Grass | 1.250 | |
| *Pontederia cordata* | Pickerel Weed | 0.250 | 988 |
| *Sagittaria latifolia* | Common Arrowhead | 1.250 | 494 |
| *Scirpus fluviatilis* | River Bulrush | 0.500 | 988 |
| *Scirpus cyperinus* | Wool Grass | 0.250 | 494 |
| *Schoenoplectus tabernaemontani* | Softstem Bulrush | 0.500 | 988 |
| *Sparganium eurycarpum* | Bur Reed | 1.000 | 988 |
| | **Total Emergent Wetland Mix** | **8.060** | **7410** |

### Wet Meadow Seed Mixture

Lower slopes of basin

| Botanical Name | Common Name | lbs / AC |
|---|---|---|
| **Grasses / Sedges** | | |
| *Carex bebbii* | Bebbs Oval Sedge | 0.250 |
| *Carex bicknellii* | Bicknells Sedge | 0.125 |
| *Carex brevior* | Plains Oval Sedge | 0.250 |
| *Carex cristatella* | Crested Oval Sedge | 0.060 |
| *Carex molesta* | Field Oval Sedge | 0.250 |
| *Carex normalis* | Spreading Oval Sedge | 0.015 |
| *Carex scoparia* | Pointed Broom Sedge | 0.190 |
| *Carex stipata* | Common Fox Sedge | 0.060 |
| *Carex vulpinoidea* | Brown Fox Sedge | 0.250 |
| *Elymus virginicus* | Virginia Wild Rye | 3.000 |
| *Glyceria striata* | Fowl Manna Grass | 0.130 |
| *Juncus dudleyi* | Dudleys Rush | 0.020 |
| *Juncus torreyi* | Torreys Rush | 0.031 |
| *Panicum virgatum* | Switch Grass | 3.000 |
| *Scirpus atrovirens* | Dark Green Bulrush | 0.060 |
| *Scirpus cyperinus* | Wool Grass | 0.030 |
| | **Total Grasses / Sedges** | **7.721** |
| **Wildflowers/Broadleaves** | | |
| *Asclepias incarnata* | Swamp Milkweed | 0.125 |
| *Bidens cernua* | Nodding Bur Marigold | 0.190 |
| *Boltonia asteroids* | False Aster | 0.031 |
| *Eupatorium perfoliatum* | Common Boneset | 0.015 |
| *Euthamia grammifolia* | Grassleaved Goldenrod | 0.300 |
| *Helenium autumnale* | Sneezeweed | 0.063 |
| *Hibiscus laevis* | Halberd-leaved Rose Mallow | 0.380 |
| *Iris virginica shrevei* | Blue Flag Iris | 1.000 |
| *Lobelia siphilitica* | Great Blue Lobelia | 0.031 |
| *Mimulus ringens* | Monkey Flower | 0.031 |
| *Physostegia virginiana* | Obedient Plant | 0.031 |
| *Pycnanthemum virginianum* | Common Mountain Mint | 0.063 |
| *Solidago rigida* | Stiff Goldenrod | 0.125 |
| *Symphyotrichium novae-angliae* | New England Aster | 0.250 |
| *Vernonia fasciculata* | Common Ironweed | 0.380 |
| *Verbena hastata* | Blue Vervain | 0.380 |
| *Zizia aurea* | Golden Alexanders | 0.500 |
| | **Total Forbs** | **3.895** |
| | **Total Wet Meadow Seed Mix** | **11.616** |

### Low Profile Prairie with Flowers Seed Mix

Upper basin slopes

| Botanical Name | Common Name | lbs / AC |
|---|---|---|
| **Grasses** | | |
| *Bouteloua curtipendula* | Side Oats Grama | 8.000 |
| *Panicum virgatum* | Prairie Switch Grass | 0.125 |
| *Elymus canadenesis* | Prairie Wild Rye | 1.000 |
| *Schizachyrium scoparium* | Little Bluestem | 6.000 |
| | **Total Grasses** | **15.125** |
| **Wildflowers/Broadleaves** | | |
| *Allium cernuum* | Nodding Wild Onion | 0.190 |
| *Amorpha canscens* | Lead Plant | 0.125 |
| *Asclepias tuberosa* | Butterflyweed | 0.500 |
| *Astragalus canadensis* | Canada Milk Vetch | 0.063 |
| *Coreopsis palmata* | Prairie Coreopsis | 0.025 |
| *Chamaecrista fasciculate* | Partridge pea | 0.188 |
| *Dalea purpurea* | Purple Prairie Clover | 0.560 |
| *Echinacea pallida* | Pale Purple Coneflower | 1.000 |
| *Echinacea purpurea* | Purple Coneflower | 0.500 |
| *Eryngium yuccifolium* | Rattlesnake Master | 0.125 |
| *Heliopsis helianthoides* | False Sunflower | 1.000 |
| *Lespedeza capitata* | Round-Headed Bush Clover | 0.125 |
| *Liatris aspera* | Rough Blazing Star | 0.250 |
| *Liatris pycnostachya* | Prairie Blazing Star | 0.188 |
| *Monarda fistulosa* | Prairie Bergamot | 0.063 |
| *Parthenium integrifolium* | Wild Quinine | 0.016 |
| *Penstemon digitalis* | Foxglove Beard Tongue | 0.125 |
| *Petalostemum candidum* | White Prairie Clover | 0.125 |
| *Petalostemum purpureum* | Purple Prairie Clover | 0.156 |
| *Potentilla arguta* | Prairie Cinquefoil | 0.031 |
| *Pycnanthemum tenuifolium* | Slender Mountain Mint | 0.031 |
| *Ratibida pinnata* | Yellow Coneflower | 0.125 |
| *Rudbeckia hirta* | Black-Eyed Susan | 0.500 |
| *Rudbeckia subtomentosa* | Sweet Black-Eyed Susan | 0.063 |
| *Rudbeckia triloba* | Brown-eyed Susan | 0.500 |
| *Solidago rigida* | Stiff Goldenrod | 0.250 |
| *Symphyotrichum laeve* | Smooth Blue Aster | 0.063 |
| *Symphyotrichum novae-angliae* | New England Aster | 0.250 |
| *Tradescantia ohiensis* | Common Spiderwort | 0.063 |
| *Verbena stricta* | Hoary Vervain | 0.125 |
| *Zizia aurea* | Golden Alexanders | 0.500 |
| | **Total Forbs** | **7.825** |
| | **Total Low Profile Prairie Seed Mix** | **22.950** |


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LAND PLANNING
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402 WEST LIBERTY DRIVE
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CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

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# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

# LANDSCAPE PLAN - SOTUHWEST

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

**REVISIONS**

| | |
|---|---|
| **DATE** | 04.04.2025 |
| **PROJECT NO.** | LN23167 |
| **DRAWN** | EAN/MAC |
| **CHECKED** | ZL |

**SHEET NO.**

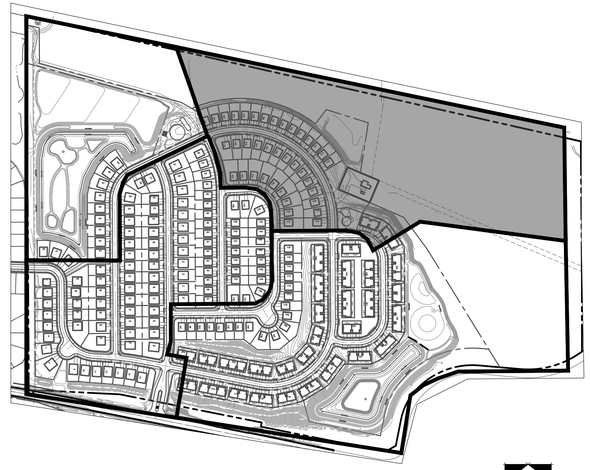
**L1.3**

811 Know what's below. Call before you dig.

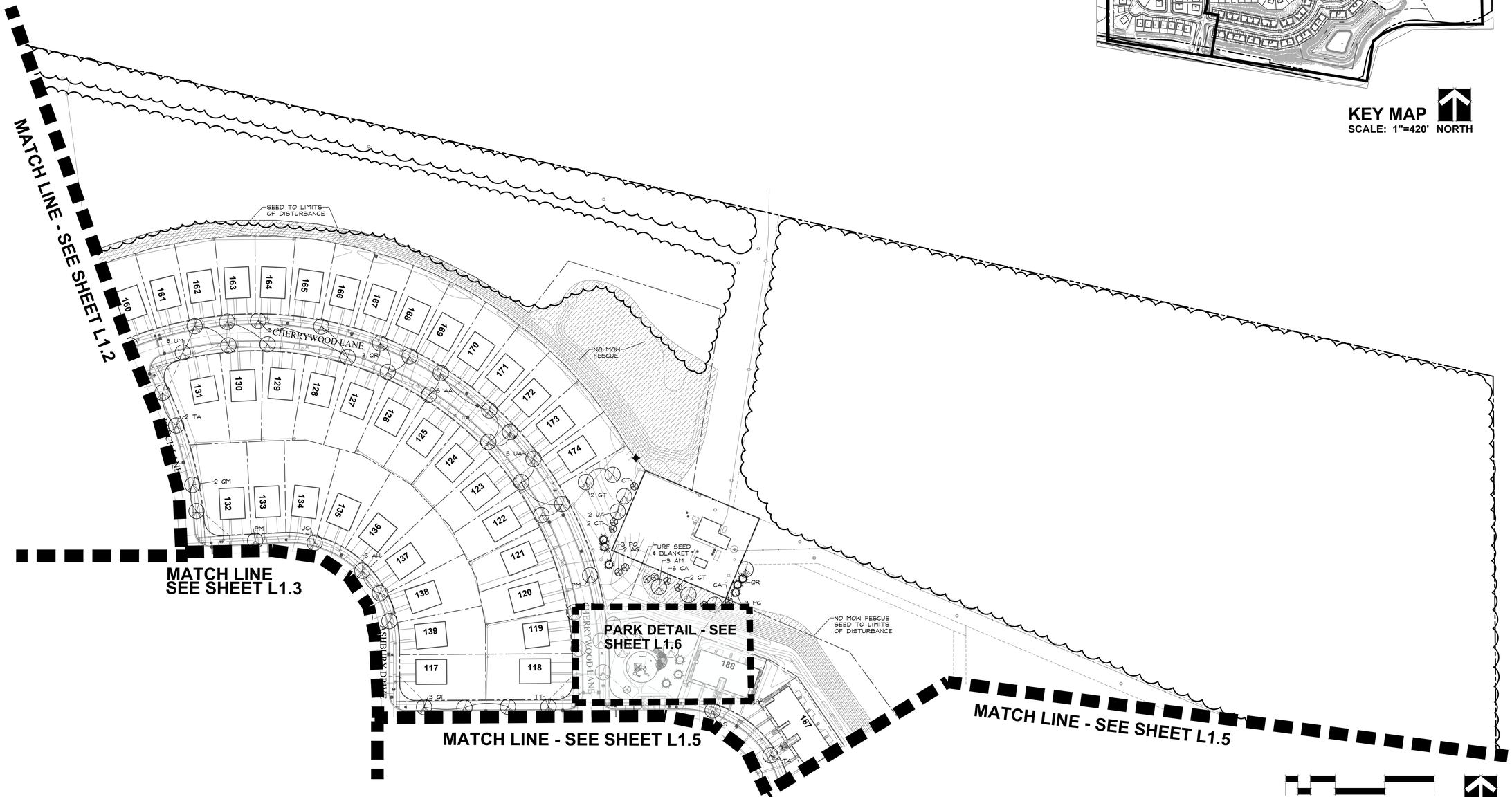
PLOT DRAWN:

## NATIVE LEGEND

| Key | Description |
|---|---|
| | LOW PROFILE PRAIRIE SEED MIX |
| | EMERGENT PLANT MIX |
| | WET MEADOW SEED MIX |
| | NO MOW FESCUE MIX |
| | EMERGENT PLUGS |
| | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |



KEY MAP
SCALE: 1"=420' NORTH




0 40' 80' 160' 320'
SCALE: 1"=80'
NORTH


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LAND PLANNING
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# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

## LANDSCAPE PLAN - NORTHEAST

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

REVISIONS

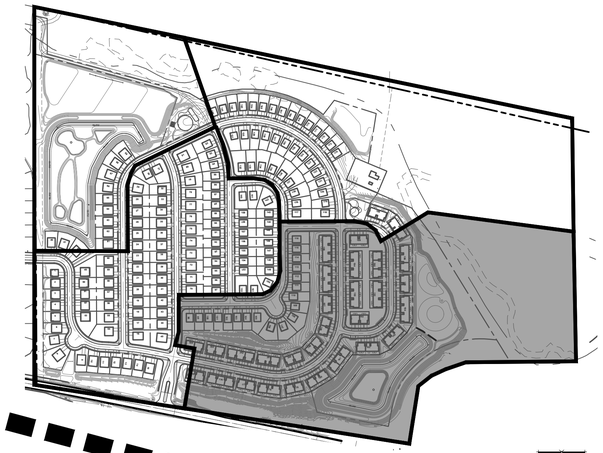
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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.4 |

Know what's below. Call before you dig.

XREFS
PLOT CONFIG

## NATIVE LEGEND

| Key | Description |
|---|---|
| | LOW PROFILE PRAIRIE SEED MIX |
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| | WET MEADOW SEED MIX |
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| | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |



KEY MAP
SCALE: 1"=420' NORTH

MATCH LINE - SEE SHEET L1.4

MATCH LINE - SEE SHEET L1.3

MAPLEWOOD DRIVE

HARVEST VIEW DRIVE

GALENA BOULEVARD

I-56

NO MOW FESCUE SEED TO LIMITS OF DISTURBANCE

NO MOW FESCUE

TURF SEED & BLANKET

SOD LIMIT

LOW PROFILE PRAIRIE

EMERGENT PLANTINGS

DIFFUSER AQUAMASTER

WET MEADOW

HWL

NWL

0 40' 80' 160' 320'
SCALE: 1"=80'

NORTH


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CLIENT
LENNAR
1700 GOLF ROAD
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SCHAUMBURG, IL 60173

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# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

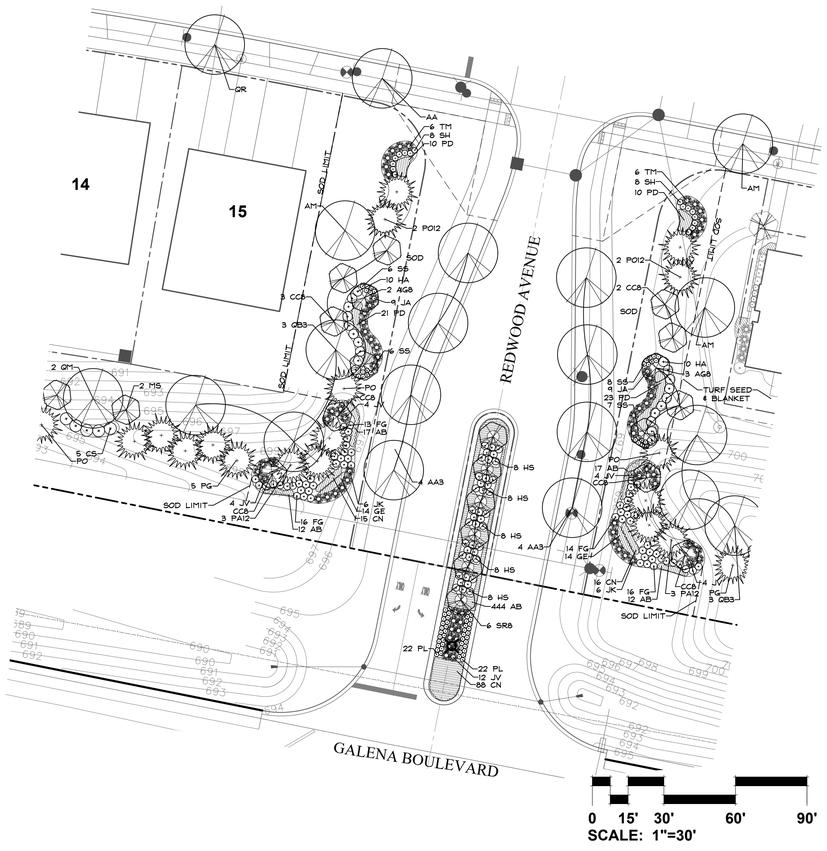
## LANDSCAPE PLAN - SOUTHEAST

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

REVISIONS

| | |
|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.5 |

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## PARKS PLANT LIST

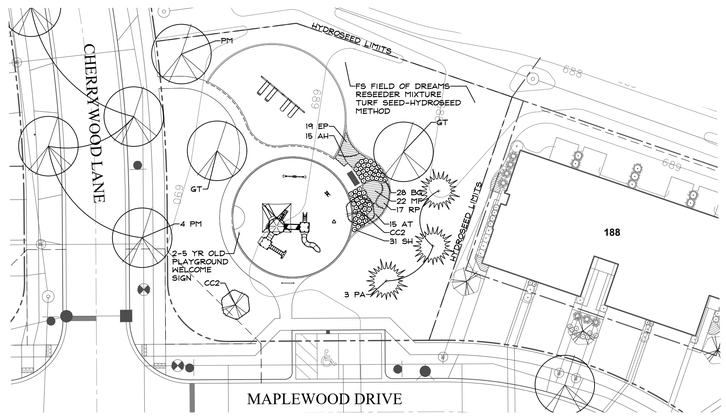
| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | SHADE TREES | | |
| AM | 1 | Acer miyabei 'Morton'<br>STATE STREET MAPLE | 2 1/2" Cal. | |
| PM | 7 | Platanus x acerifolia 'Morton Circle'<br>EXCLAMATION! LONDON PLANETREE | 2 1/2" Cal. | |
| GT | 5 | Gleditsia triacanthos var. inermis 'Skycole'<br>SKYLINE HONEYLOCUST | 2 1/2" Cal. | |
| QB | 4 | Quercus bicolor<br>SWAMP WHITE OAK | 2 1/2" Cal. | |
| | | ORNAMENTAL TREES | | |
| CC | 3 | Cercis canadensis<br>EASTERN REDBUD | 6' Ht. | Multi-Stem |
| CC2 | 3 | Cercis canadensis<br>EASTERN REDBUD | 2-2 1/2" Cal. | Single-Stem |
| | | EVERGREEN TREES | | |
| PA | 5 | Picea abies<br>NORWAY SPRUCE | 8' Ht. | |

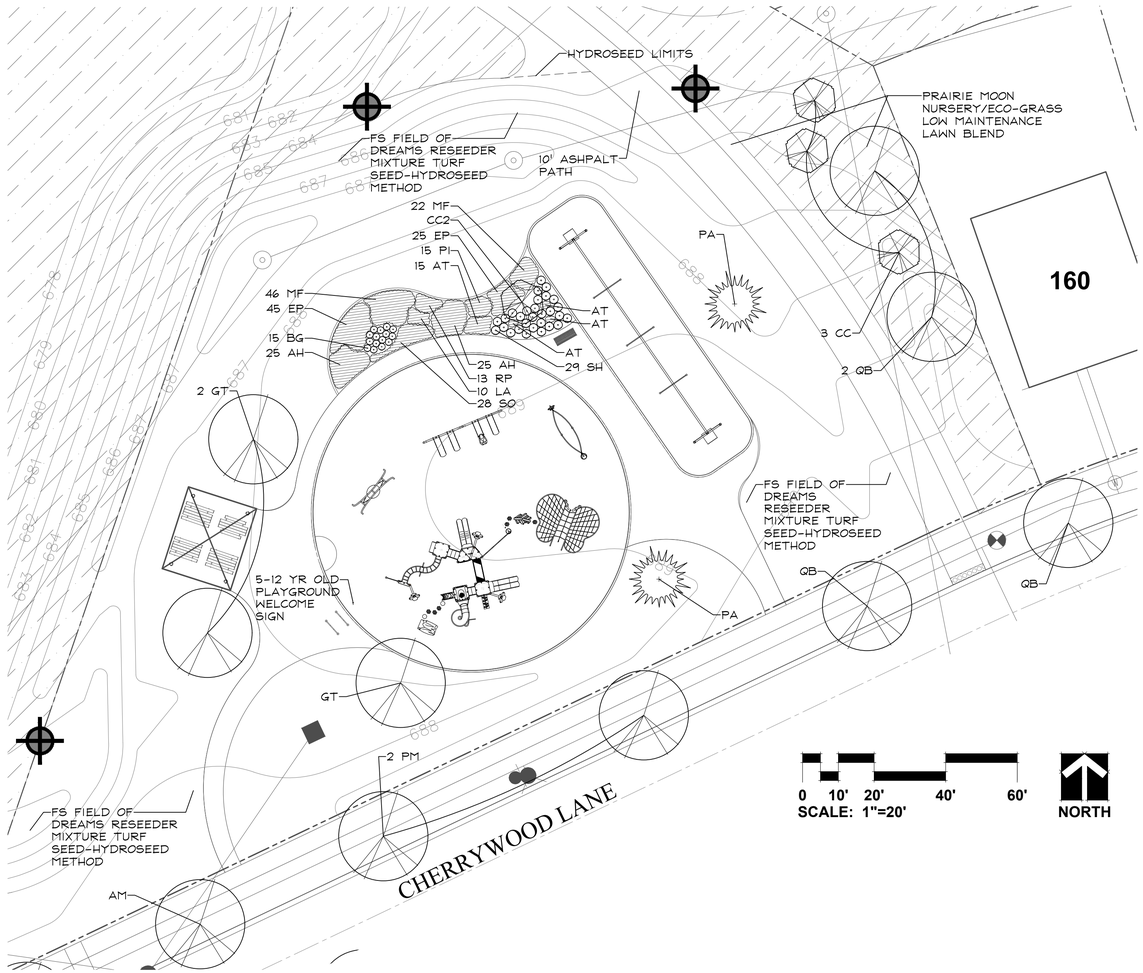
## PARKS NATIVE SPECIES PLANT LIST

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| CC2 | 2 | Cercis canadensis<br>EASTERN REDBUD | 2-2 1/2" Cal. | Single Stem |
| | | ORNAMENTAL GRASSES | | |
| BG | 43 | Bouteloua gracilis 'Honeycomb'<br>HONEYCOMB BLUE GRAMA GRASS | #1 | 18" O.C. |
| SH | 60 | Sporobolus heterolepis<br>PRAIRIE DROPSEED | #1 | 18" O.C. |
| | | PERENNIALS | | |
| AH | 65 | Amsonia hubrichtii<br>NARROW LEAF BLUE STAR | #1 | 18" O.C. |
| AT | 33 | Asclepias tuberosa<br>BUTTERFLY WEED | #1 | 18" O.C. |
| EP | 89 | Echinacea pallida<br>PALE PURPLE CONEFLOWER | #1 | 18" O.C. |
| SO | 28 | Symphyotrichum oblongifolium<br>AROMATIC ASTER | #1 | 18" O.C. |
| LA | 10 | Liatris aspera<br>ROUGH BLAZING STAR | #1 | 18" O.C. |
| MF | 90 | Monarda fistulosa<br>WILD BERGAMONT | #1 | 18" O.C. |
| PI | 15 | Parthenium integrifolium<br>WILD QUININE | #1 | 18" O.C. |
| RP | 30 | Ratibida pinnata<br>GRAY-HEADED CONEFLOWER | #1 | 18" O.C. |

## NATIVE LEGEND

| Key | Description |
|---|---|
| | LOW PROFILE PRAIRIE SEED MIX |
| | EMERGENT PLANT MIX |
| | WET MEADOW SEED MIX |
| | NO MOW FESCUE MIX: PRAIRIE MOON NURSERY ECO-GRASS LOW MAINTENANCE LAWN BLEND |
| | EMERGENT PLUGS |
| | NATURALIZED STORMWATER MANAGEMENT AREA SIGN |




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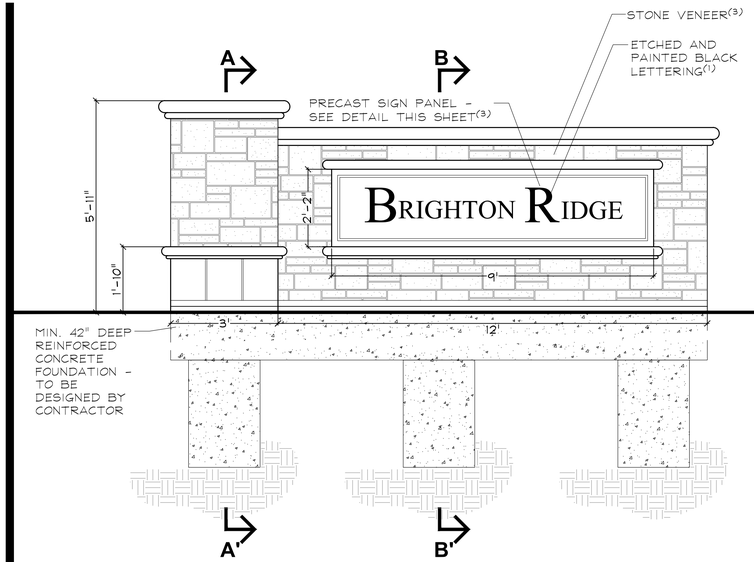
## PARK AND LANDSCAPE DETAILS

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |
| REVISIONS | |

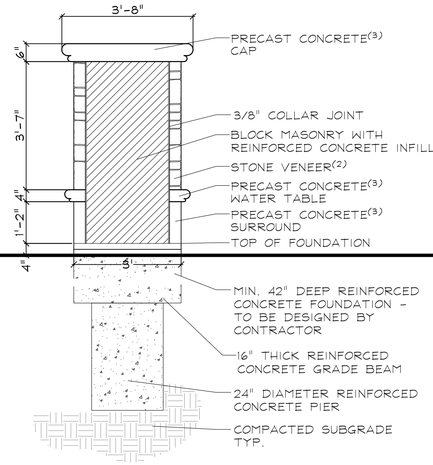
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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.6 |

Know what's below. Call before you dig.

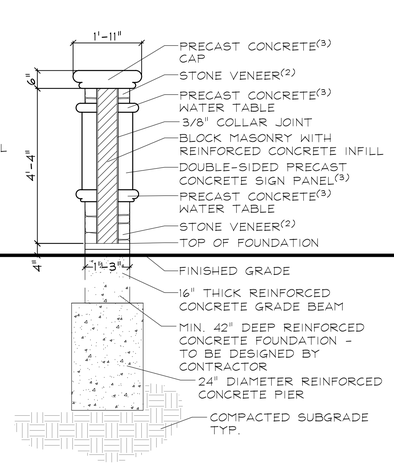
XREFS:
PLOT DOMAIN:



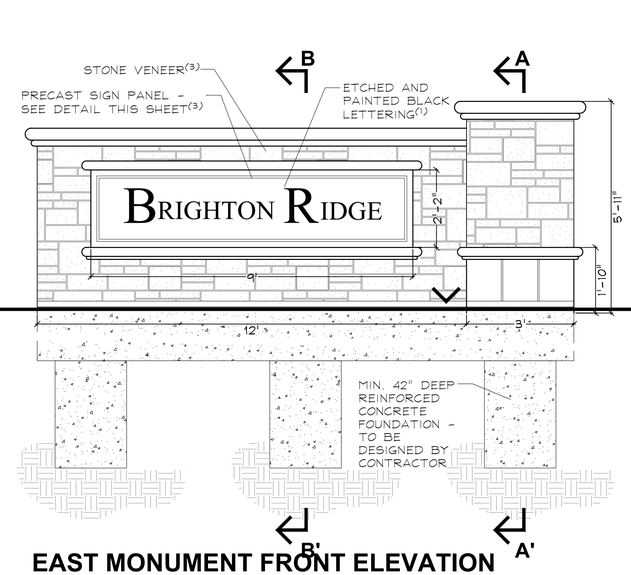

## WEST MONUMENT FRONT ELEVATION
SCALE: 1/2"=1'-0"



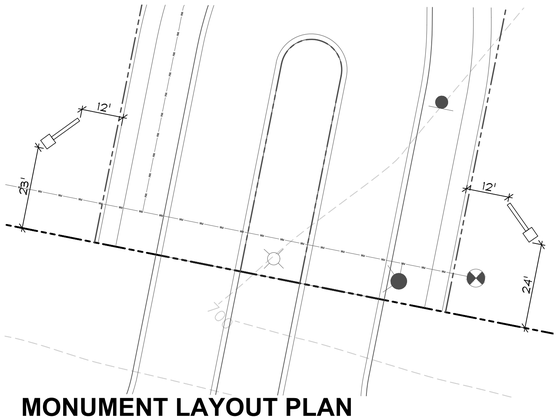

## ELEVATION A-A'




## SECTION B-B'



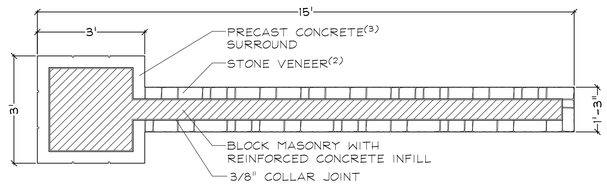

## EAST MONUMENT FRONT ELEVATION




## MONUMENT LAYOUT PLAN
SCALE: 1"=20'




## SIGN PANEL DETAIL
SCALE: 1"=1'-0"




## MONUMENT PLAN
SCALE: 1/2"=1'-0"

(1) FONT: GOUDY OLD STYLE
"B": 12" HEIGHT AND "R": 12" HEIGHT
"RIGHTON": 8" HEIGHT
"IDGE": 8" HEIGHT
ETCHED AND PAINTED BLACK

(2) STONE VENEER: BUECHEL STONE - AGED PARCHMENT TAILORED BLEND DIMENSIONAL STONE
SUBMIT COLOR & GROUT SAMPLE TO DEVELOPER & LANDSCAPE ARCHITECT.

(3) PRE-CAST CONCRETE COLOR: WHITE BY CUSTOM CAST STONE OR APPROVED EQUAL.
CAPS AND PANEL: SMOOTH FACE
SUBMIT COLOR SAMPLE TO DEVELOPER & LANDSCAPE ARCHITECT.

# ENTRANCE MONUMENT SPECIFICATIONS

1.0 DESCRIPTION OF WORK

A. The work consists of all labor, materials, work and equipment necessary and required to complete monuments, fence and foundations as shown on drawings or specified herein, including, but not limited to:

1. Submission of color and material samples
2. Submission of shop drawings
3. Submission of construction schedule
4. Verification of existing conditions and underground utilities
5. Secure and pay for all permits, fees, inspections and schedule all inspections related to work, including J.U.L.I.E. locates.
6. Comply with all applicable codes

2.0 QUALITY ASSURANCE

A. Construction shall conform to ©Building Code Requirements for Engineered Brick Masonry,. BIA, latest edition.

B. All brick and stone shall be finest architectural grade free of cracks, chips, defects, etc.

C. Installation shall be by a company continuously and regularly employed in the installation of brick and stone monuments for a period of at least 5 consecutive years.

D. No masonry shall be laid when the temperature is expected to fall below 40 degrees F, unless suitable means, submitted in writing to the owner, are provided to heat materials and protect the work. Protect work from cold and frost and insure that mortar will harden without freezing. No additives shall be used, unless approved in writing by the owner.

E. All corners of monuments and piers are to be staked by engineer and verified by the contractor.

3.0 JOB CONDITIONS

A. Examine and evaluate grades, and soils. Provide soil testing and verify soils structural integrity. Observe the conditions under which work is to be performed and notify the owner of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

B. Utilities: Review underground utility location maps and plans; Notify J.U.L.I.E.; demonstrate an awareness of utility locations; and certify acceptance of liability for the protection of utilities during course of work. Contractor shall be responsible for any damage to utilities or property.

C. All streets and curbs must be cleaned at the end of each working day.

D. All OSHA requirements for safety must be adhered to at all times.

4.0 GUARANTEES

A. Guarantee monuments 1 year from final acceptance on owner's representative on workmanship and materials.

B. Where failures have occurred resulting from the concrete not meeting the specified design strength, or workmanship, it shall be the responsibility of the subcontractors in connection with the supplier to take whatever corrective actions are necessary to eliminate the problem. In addition, it shall be their responsibility to make restitution for their resulting repair work created by the problem.

5.0 SUBMITTALS

A. Construction Schedule: After award of the Contract, the Contractor shall prepare and submit to the owner or an owner authorized representative an estimated construction progress schedule for the work, including sub-schedules of related activities which are essential to its progress, as well as lead-time for materials.

1. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Schedule to represent a continuous flow of construction activities so that there are no days of non-activity on site.

B. Product Samples: Submit samples of stone, architectural pre-cast, mortars and sealants, slate, light fixtures, tile, and ornamental fencing for the owner's design conformance review prior to delivery to site.

C. Product Data: Submit product data for stone, limestone, architectural pre-cast, mortars and joint sealants, slate, tile, light fixtures, and ornamental fencing.

D. Provide certificate of insurance per the owner's requirements.

E. Provide names and contact information for any subcontractors and suppliers.

F. Shop Drawings:

1. Prepare and submit to the Owner's Representative for design conformance review complete cutting and setting drawings for all masonry work:
2. Submit one (1) set prints with following items in detail:
   a) Sizes
   b) Sections
   c) Dimensions and numbering of stone and brick.
   d) Arrangements of joints and bond.
3. Show jointing as indicated on the contract drawings, unless modification is reviewed for design conformance by Owner's Representative prior to preparation of shop drawings.
4. Establish jointing in accordance with industry standards and practices where not indicated on contract drawings.

6.0 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Loading and Shipment:

1. Pack carefully for transportation, with exercise of all customary and reasonable precautions against damage in transit, all brick, and limestone to be used for the work.
2. Load and ship all brick and cut stone in a sequence mutually agreed upon by the General Contractor and the material supplier.

B. Unloading and Storage:

1. Receive and unload at site all brick and stone with necessary care in handling to avoid damage or soiling.
2. Store brick and stone clear of ground on non-staining skids. Wood containing tannin, chemical treatment, or excessive amounts of resin shall not be used.
3. Cover brick and stone with waterproof, clean canvas, or polyethylene for protection from construction or natural elements.

7.0 INSTALLATION

A. Mortar:

1. Cement: white, non-staining masonry cement, conforming to ASTM-C91.
2. Sand: Clean, sharp, and washed, capable of passing a No. 16 sieve, and in conformance with ASTM-C144. Carefully select sand for use in pointing mortar for color to match limestone. For pointing mortar, select a white sand.
3. Lime: Hydrated, conforming to ASTM-C207, Type S.
4. Water: Clear, non-alkaline, potable and free of oils, salts, and other harmful elements.

B. Foundation

Concrete mix air entrainment, compressive strength at twenty-eight (28) days, and slump are to be designed and specified by the contractor's structural engineer.

C. Mortar Beds:

1. Lay brick with full mortar coverage on horizontal and vertical joints in all courses.
2. Provide sufficient mortar on ends of brick to completely fill head joints.
3. Rack closure into place with head joints thrown against two adjacent bricks in place.

D. Mortar Joints: Horizontal and vertical face joints:

1. Nominal thickness: 3/8 inch.
2. Construct uniform joints.
3. Shove vertical joints tight.
4. Tool concave joints in exposed surfaces when thumbprint hard.
5. Width, depth, and tooling of all mortar joints shall be consistent and shall not vary more than 1/8".
6. Movement joints: Keep clean of all mortar and debris.

E. Flashing:

1. Install complete and continuous under stone copings and other projections.
2. Lap joints 6". Seal entire contact surface with mastic.
3. Provide a mortar wash at the base of the cavity, underneath the through-wall flashing, pitching out.
4. Cover flashing with mortar.

F. Weepholes

1. Provide 3/8" cotton rope weeps. Rope weeps shall extend thru the veneer face and inside the cavity, lying on top and along the bottom length of the flashing. Cut rope flush with wall face.
2. Maximum spacing: rope weeps: 16 inches o.c., at wall base; 16 inches o.c. at lintels above openings.
3. Keep weepholes and area above flashing free of mortar droppings.

8.0 CLEAN UP AND PROTECTION

A. All material shall be washed with fiber brushes, soap powder, and clean water or Owner reviewed mechanical cleaning process.

B. Sand blasting, wire brushes, or acids shall not be used. Exceptions may be considered if reviewed by the Owner or an Owner authorized representative.

C. During work, store materials and equipment as directed by the owner.

D. Protect work and materials from damage due to operations by other trades and trespassers. Maintain protection during installation.

9.0 INSPECTION AND ACCEPTANCE

A. The Owner and or the Owner's representative reserves the right to inspect materials and workmanship at the site prior to, during construction, or at the time of inspection for compliance with these specifications.

B. Notify the Owner's representative when completed, for final design conformance review.

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
MACKIE CONSULTANTS
9575 W. HIGGINS
SUITE #500
ROSEMONT, IL 60018

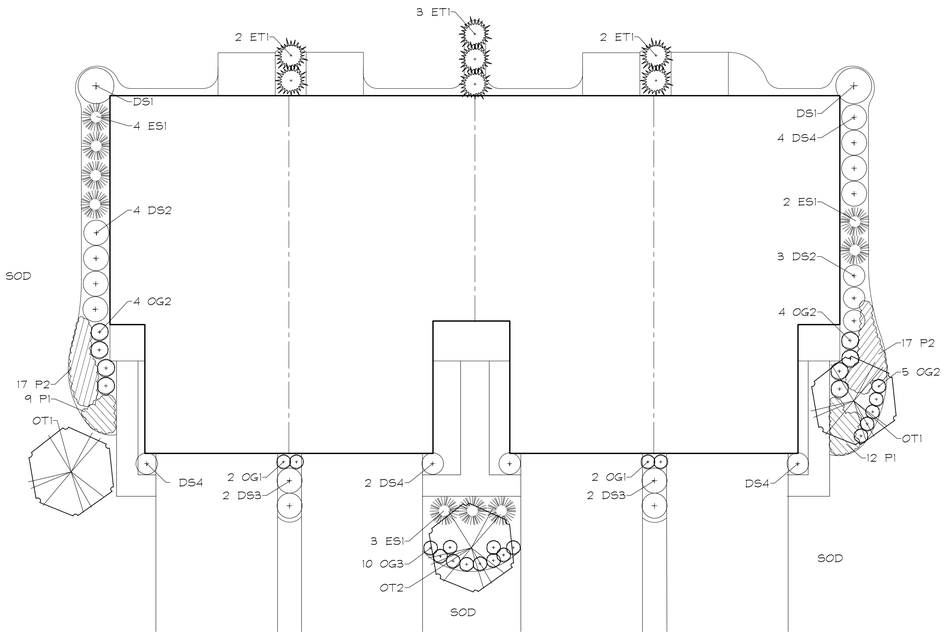
# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

## MONUMENT DETAILS

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |
| REVISIONS | |

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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.7 |

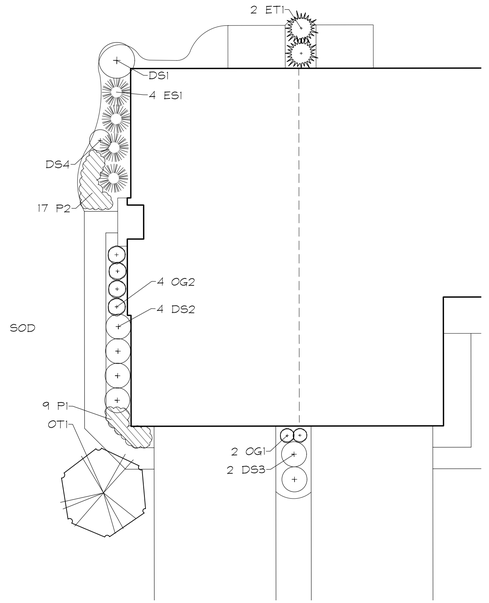
XREFS:
PLOT COMMD:




## TYPICAL 4-UNIT TOWNHOME FOUNDATION PLAN

SCALE: 1"=10'

0' 5' 10' 20' 30'




## ALTERNATE END 4 UNIT PLAN

SCALE: 1"=10'

0' 5' 10' 20' 30'

## 4-UNIT TOWNHOME PLANT LIST - A
### (BLDGS. 185, 188, 192, 199, 200, 203 & 204)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Malus 'Jeulelcole' RED JEWEL CRABAPPLE | 6' Ht. | Multi-Stem |
| OT2 | 1 | Syringa reticulata 'Ivory Silk' IVORY SILK JAPANESE TREE LILAC | 2" Cal. | Single-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 7 | Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Cotinus coggygria 'NCCO1' REDOSIER DOGWOOD | 36" Tall | 5' O.C. |
| DS2 | 7 | Hydrangea paniculata 'ILVOBO' BOBO HYDRANGEA | 24" Tall | 4' O.C. |
| DS3 | 4 | Diervilla 'GSX88541' KODIAK RED BUSH HONEYSUCKLE | 24" Tall | 4' O.C. |
| DS4 | 8 | Aronia melanocarpa 'Morton' IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 9 | Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 4 | Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 13 | Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 10 | Sporobolus heterolepis PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 21 | Allium 'Summer Beauty' SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 34 | Stachys officinalis 'Hummelo' BETONY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 7.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

## 4-UNIT TOWNHOME PLANT LIST - B
### (BLDGS. 175, 177, 179, 197 & 198)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Amelanchier x grandiflora APPLE SERVICEBERRY | 6' Ht. | Multi-Stem |
| OT2 | 1 | Cercis canadensis EASTERN REDBUD | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 7 | Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Syringa patula 'Miss Kim' MISS KIM LILAC | 30" Tall | 5' O.C. |
| DS2 | 7 | Weigela florida 'Bramwell' FINE WINE WEIGELA | 24" Tall | 3' O.C. |
| DS3 | 4 | Hydrangea paniculata 'SMHPLQF' LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| DS4 | 8 | Aronia melanocarpa 'Morton' IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 9 | Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 4 | Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 13 | Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 10 | Sporobolus heterolepis PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 21 | Allium 'Summer Beauty' SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 34 | Stachys officinalis 'Hummelo' BETONY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 7.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

## ALTERNATE END 4 UNIT TOWNHOME PLANT LIST - A
### (BLDGS. 188, 192, & 204)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 1 | Malus 'Jeulelcole' RED JEWEL CRABAPPLE | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 2 | Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 1 | Cotinus coggygria 'NCCO1' REDOSIER DOGWOOD | 36" Tall | 5' O.C. |
| DS2 | 4 | Hydrangea paniculata 'ILVOBO' BOBO HYDRANGEA | 24" Tall | 4' O.C. |
| DS3 | 2 | Diervilla 'GSX88541' KODIAK RED BUSH HONEYSUCKLE | 24" Tall | 4' O.C. |
| DS4 | 1 | Aronia melanocarpa 'Morton' IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 4 | Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 2 | Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 4 | Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 9 | Allium 'Summer Beauty' SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 17 | Stachys officinalis 'Hummelo' BETONY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 2.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

## ALTERNATE END 4 UNIT TOWNHOME PLANT LIST - B
### (BLDGS. 175 & 189)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 1 | Amelanchier x grandiflora APPLE SERVICEBERRY | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 2 | Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 1 | Syringa patula 'Miss Kim' MISS KIM LILAC | 30" Tall | 5' O.C. |
| DS2 | 4 | Weigela florida 'Bramwell' FINE WINE WEIGELA | 24" Tall | 3' O.C. |
| DS3 | 2 | Hydrangea paniculata 'SMHPLQF' LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| DS4 | 1 | Aronia melanocarpa 'Morton' IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 4 | Juniperus x pfitzeriana 'Kallay's Compact' KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 2 | Calamagrostis x acutiflora 'Karl Foerster' FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 4 | Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 9 | Allium 'Summer Beauty' SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 17 | Stachys officinalis 'Hummelo' BETONY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 2.0 | SHREDDED HARDWOOD MULCH | C.Y. | |


GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
MACKIE CONSULTANTS
9575 W. HIGGINS
SUITE #500
ROSEMONT, IL 60018


# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

# TYPICAL TOWNHOME FOUNDATION PLANS

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| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

REVISIONS

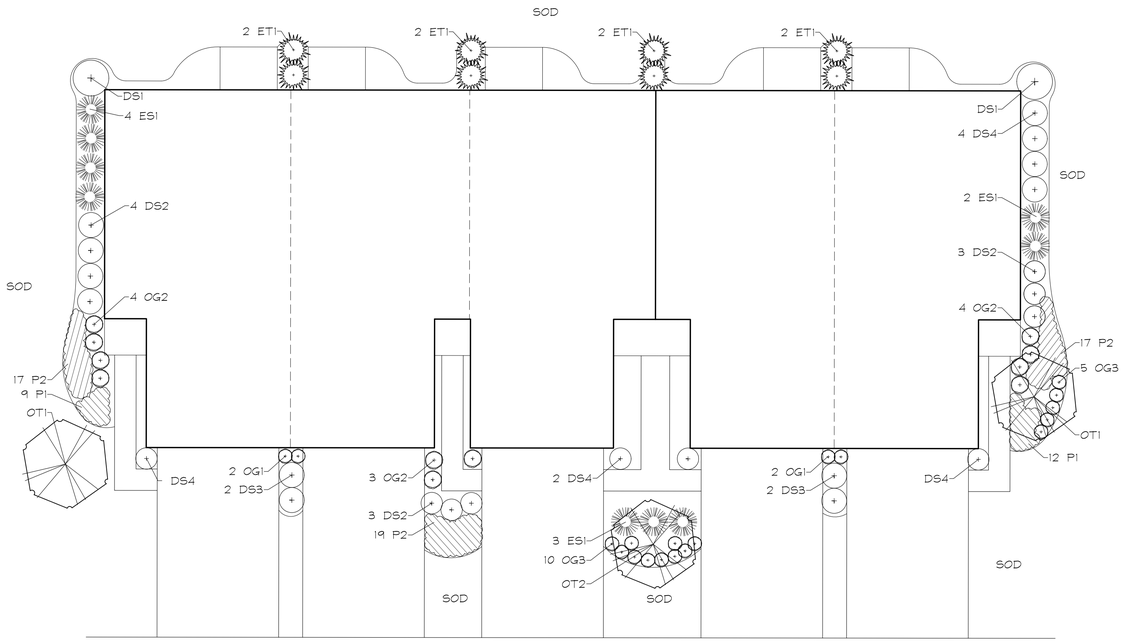
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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |

SHEET NO.

**L1.8**

XREFS:

PLOT CONFIG:




## TYPICAL 5-UNIT TOWNHOME FOUNDATION PLAN

SCALE: 1"=10'

0' 5' 10' 20' 30'

## 5-UNIT TOWNHOME PLANT LIST - A
### (BLDGS. 180, 183, 187 & 201)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Malus 'Jewelcole'<br>RED JEWEL CRABAPPLE | 6' Ht. | Multi-Stem |
| OT2 | 1 | Syringa reticulata 'Ivory Silk'<br>IVORY SILK JAPANESE TREE LILAC | 2" Cal. | Single-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 8 | Thuja occidentalis 'Smaragd'<br>EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Cotinus coggygria 'NCCO1'<br>REDOSIER DOGWOOD | 36" Tall | 5' O.C. |
| DS2 | 10 | Hydrangea paniculata 'ILVOBO'<br>BOBO HYDRANGEA | 24" Tall | 4' O.C. |
| DS3 | 4 | Diervilla 'GSX88541'<br>KODIAK RED BUSH HONEYSUCKLE | 24" Tall | 4' O.C. |
| DS4 | 8 | Aronia melanocarpa 'Morton'<br>IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 9 | Juniperus x pfitzeriana 'Kallay's Compact'<br>KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 4 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 11 | Pennisetum alopecuroides 'Hameln'<br>DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 15 | Sporobolus heterolepis<br>PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 21 | Allium 'Summer Beauty'<br>SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 53 | Stachys officinalis 'Hummelo'<br>BETONY | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 7.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

## 5-UNIT TOWNHOME PLANT LIST - B
### (BLDGS. 178 & 182)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Amelanchier x grandiflora<br>APPLE SERVICEBERRY | 6' Ht. | Multi-Stem |
| OT2 | 1 | Cercis canadensis<br>EASTERN REDBUD | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 8 | Thuja occidentalis 'Smaragd'<br>EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Syringa patula 'Miss Kim'<br>MISS KIM LILAC | 30" Tall | 5' O.C. |
| DS2 | 10 | Weigela florida 'Bramwell'<br>FINE WINE WEIGELA | 24" Tall | 3' O.C. |
| DS3 | 4 | Hydrangea paniculata 'SMHPLGF'<br>LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| DS4 | 8 | Aronia melanocarpa 'Morton'<br>IRIQUOIS BEAUTY BLACK CHOKEBERRY | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 9 | Juniperus x pfitzeriana 'Kallay's Compact'<br>KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 4 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 11 | Pennisetum alopecuroides 'Hameln'<br>DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 15 | Sporobolus heterolepis<br>PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 21 | Hemerocallis 'Happy Returns'<br>HAPPY RETURNS DAYLILY | #1 | 18" O.C. |
| P2 | 53 | Agastache 'Blue Fortune'<br>ANISE HYSSOP | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 7.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

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LAND PLANNING
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LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
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# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

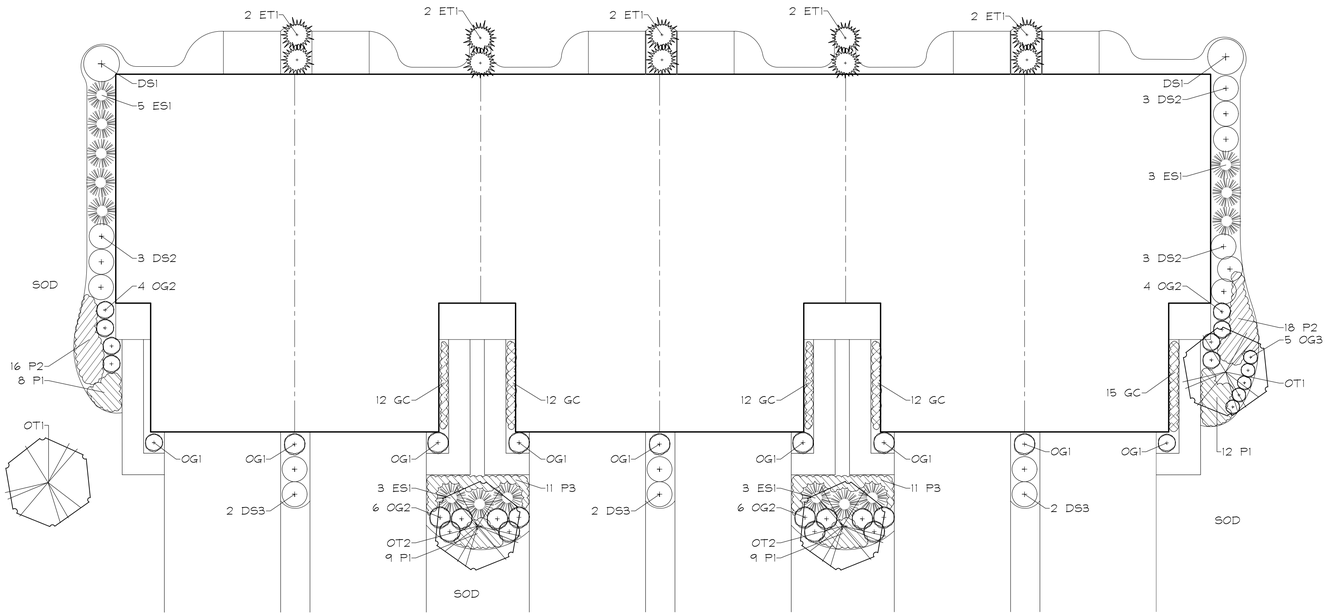
# TYPICAL TOWNHOME FOUNDATION PLANS

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|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |
| REVISIONS | |

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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.9 |

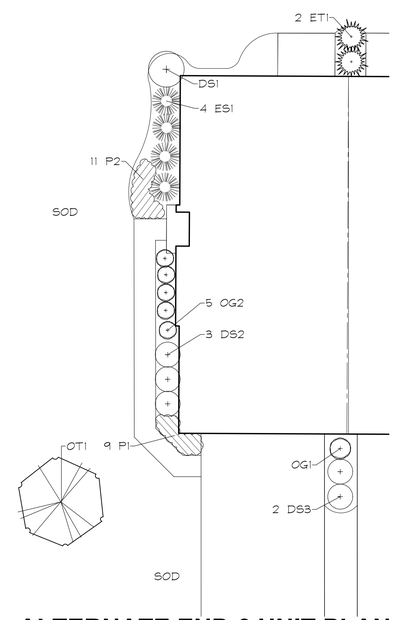
XREFS:

PLOT CONFIG:




## TYPICAL 6-UNIT TOWNHOME FOUNDATION PLAN

0 5' 10' 20' 30'
SCALE: 1"=10'




## ALTERNATE END 6 UNIT PLAN

0' 5' 10' 20' 30'
SCALE: 1"=10'

## 6-UNIT TOWNHOME PLANT LIST - A
### (BUILDING 181, 184, 186, 193, 194, 196 & 202)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Malus 'Jeulelcole'<br>RED JEWEL CRABAPPLE | 6' Ht. | Multi-Stem |
| OT2 | 2 | Syringa reticulata 'Ivory Silk'<br>IVORY SILK JAPANESE TREE LILAC | 2" Cal. | Single-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 10 | Thuja occidentalis 'Smaragd'<br>EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Cotinus coggygria 'NCCOI'<br>REDOSIER DOGWOOD | 36" Tall | 5' O.C. |
| DS2 | 9 | Hydrangea paniculata 'ILVOBO'<br>BOBO HYDRANGEA | 24" Tall | 4' O.C. |
| DS3 | 6 | Diervilla 'GSX88541'<br>KODIAK RED BUSH HONEYSUCKLE | 24" Tall | 4' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 14 | Juniperus x pfitzeriana 'Kallay's Compact'<br>KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 9 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 20 | Pennisetum alopecuroides 'Hameln'<br>DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 5 | Sporobolus heterolepis<br>PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 38 | Allium 'Summer Beauty'<br>SUMMER BEAUTY ONION | #1 | 18" O.C. |
| P2 | 34 | Stachys officinalis 'Hummelo'<br>BETONY | #1 | 18" O.C. |
| P3 | 22 | Geranium 'Brookside'<br>BROOKSIDE GERANIUM | #1 | 18" O.C. |
| GC | 63 | Pachysandra terminalis 'Green Carpet'<br>GREEN CARPET PACHYSANDRA | #SP4 | 12" O.C. |
| | | MISC. MATERIALS | | |
| | 10 | SHREDDED HARDWOOD MULCH | C.Y. | |

## 6-UNIT TOWNHOME PLANT LIST - B
### (BLDGS. 176, 190, 191 & 195)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 2 | Amelanchier x grandiflora<br>APPLE SERVICEBERRY | 6' Ht. | Multi-Stem |
| OT2 | 2 | Cercis canadensis<br>EASTERN REDBUD | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 10 | Thuja occidentalis 'Smaragd'<br>EMERALD GREEN ARBORVITAE | 5' Ht. | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 2 | Syringa patula 'Miss Kim'<br>MISS KIM LILAC | 30" Tall | 5' O.C. |
| DS2 | 9 | Weigela florida 'Bramwell'<br>FINE WINE WEIGELA | 24" Tall | 3' O.C. |
| DS3 | 6 | Hydrangea paniculata 'SMHPLQF'<br>LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 14 | Juniperus x pfitzeriana 'Kallay's Compact'<br>KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 9 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 20 | Pennisetum alopecuroides 'Hameln'<br>DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| OG3 | 5 | Sporobolus heterolepis<br>PRAIRIE DROPSEED | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 38 | Hemerocallis 'Happy Returns'<br>HAPPY RETURNS DAYLILY | #1 | 18" O.C. |
| P2 | 34 | Agastache 'Blue Fortune'<br>ANISE HYSSOP | #1 | 18" O.C. |
| P3 | 22 | Geranium 'Brookside'<br>BROOKSIDE GERANIUM | #1 | 18" O.C. |
| GC | 63 | Pachysandra terminalis 'Green Carpet'<br>GREEN CARPET PACHYSANDRA | #SP4 | 12" O.C. |
| | | MISC. MATERIALS | | |
| | 10 | SHREDDED HARDWOOD MULCH | C.Y. | |

## ALTERNATE END 6-UNIT TOWNHOME PLANT LIST - A
### (BLDGS. 190, 191 & 195)

| Key | Qty | Botanical/Common Name | Size | Remarks |
|---|---|---|---|---|
| | | ORNAMENTAL TREES | | |
| OT1 | 1 | Amelanchier x grandiflora<br>APPLE SERVICEBERRY | 6' Ht. | Multi-Stem |
| | | EVERGREEN TREES | | |
| ET1 | 2 | Thuja occidentalis 'Smaragd'<br>EMERALD GREEN ARBORVITAE | 5' Tall | 4' O.C. |
| | | DECIDUOUS SHRUBS | | |
| DS1 | 1 | Syringa patula 'Miss Kim'<br>MISS KIM LILAC | 30" Tall | 5' O.C. |
| DS2 | 3 | Weigela florida 'Bramwell'<br>FINE WINE WEIGELA | 24" Tall | 3' O.C. |
| DS3 | 2 | Hydrangea paniculata 'SMHPLQF'<br>LITTLE QUICK FIRE HYDRANGEA | 24" Tall | 3' O.C. |
| | | EVERGREEN SHRUBS | | |
| ES1 | 4 | Juniperus x pfitzeriana 'Kallay's Compact'<br>KALLAY'S COMPACT PFITZER JUNIPER | 24" Wide | 4' O.C. |
| | | ORNAMENTAL GRASSES | | |
| OG1 | 5 | Calamagrostis x acutiflora 'Karl Foerster'<br>FEATHER REED GRASS | #1 | 30" O.C. |
| OG2 | 1 | Pennisetum alopecuroides 'Hameln'<br>DWARF FOUNTAIN GRASS | #1 | 24" O.C. |
| | | PERENNIALS | | |
| P1 | 9 | Hemerocallis 'Happy Returns'<br>HAPPY RETURNS DAYLILY | #1 | 18" O.C. |
| P2 | 11 | Agastache 'Blue Fortune'<br>ANISE HYSSOP | #1 | 18" O.C. |
| | | MISC. MATERIALS | | |
| | 2.0 | SHREDDED HARDWOOD MULCH | C.Y. | |

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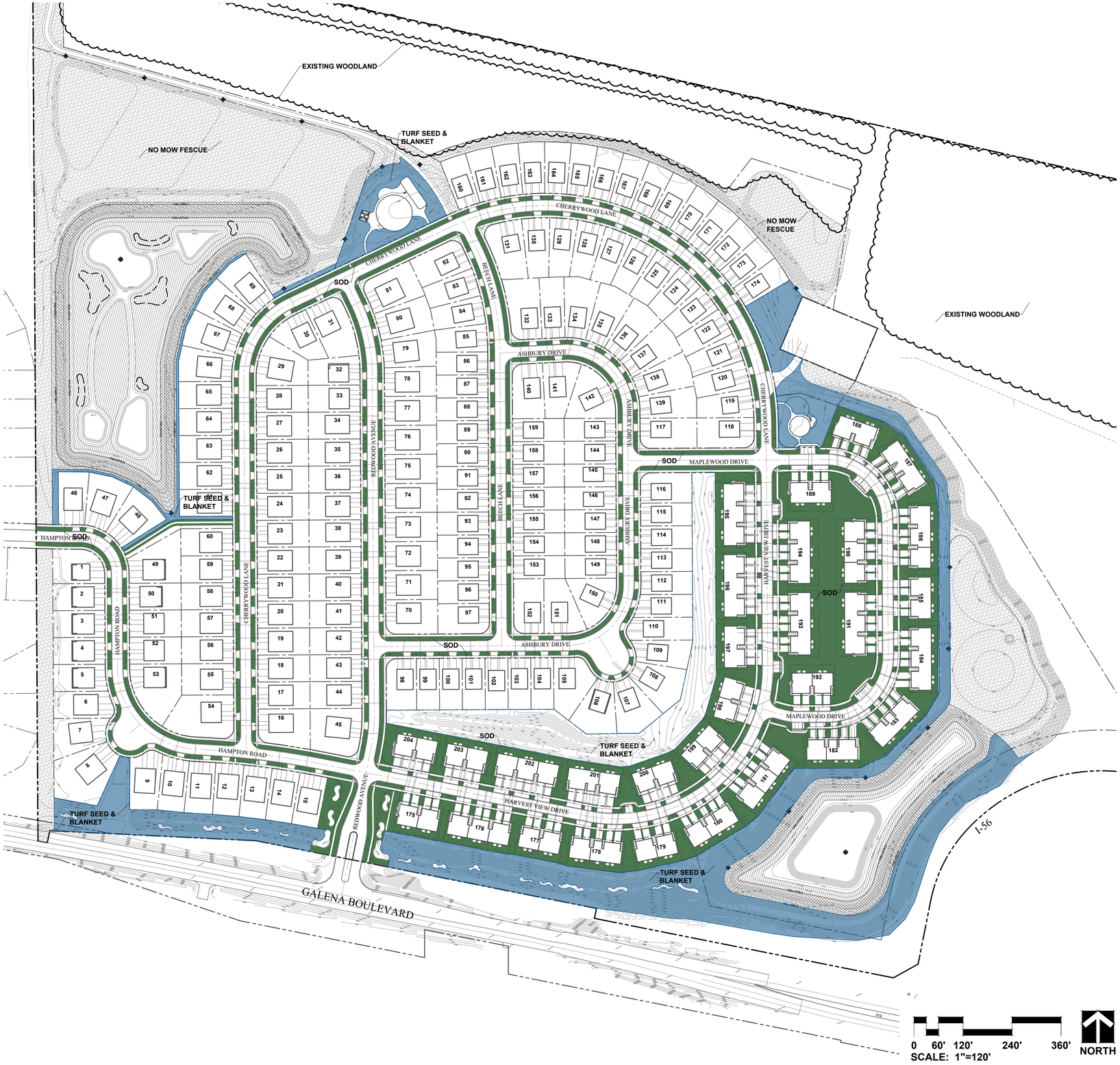
# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

# TYPICAL TOWNHOME FOUNDATION PLANS

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |
| REVISIONS | |

| | |
|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | L1.10 |

XREFS:
PLOT CONFIG:




## SEED & SOD LEGEND

- SOD
- TURF SEED & BLANKET
- NO MOW FESCUE
- LOW PROFILE PRAIRIE
- WET MEADOW
- EMERGENT PLANTINGS

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# BRIGHTON RIDGE

SUGAR GROVE, ILLINOIS

## SEED & SOD EXHIBIT

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

REVISIONS

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|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |

SHEET NO.

L1.11

XREFS:

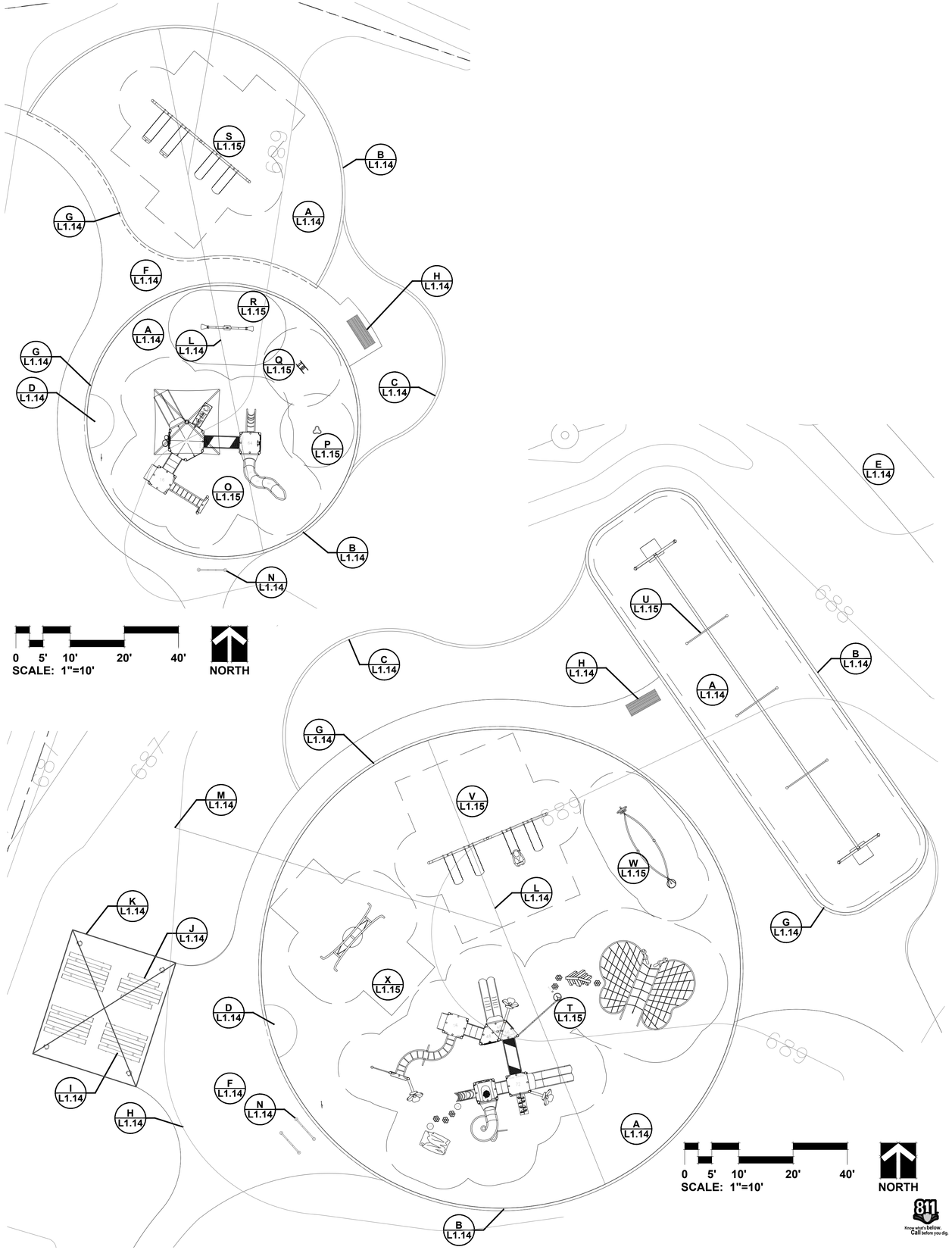
PLOT CONFIG:

## PARK AMENITY SCHEDULE

| KEY | ITEM | MANUFACTURER | MODEL | QUANTITY | COMMENTS |
|---|---|---|---|---|---|
| A L1.14 | ENGINEERED WOOD FIBER SURFACING | | | 11,747 S.F. | |
| B L1.14 | CONCRETE CURB | | | 331 L.F. | |
| C L1.14 | CONCRETE BED EDGE | | | 153 L.F. | |
| D L1.14 | CONCRETE RAMP | | | 2 | |
| E L1.14 | 10' ASPHALT PATH | | | 13,334 S.F. | 10' WIDE |
| F L1.14 | CONCRETE WALK | | | 4,988 S.F. | |
| G L1.14 | THICKENED EDGE | | | 489 L.F. | |
| H L1.14 | BENCH | DUMOR | 58-60 | 3 | |
| I L1.14 | 8' PICNIC TABLE | BELSON OUTDOORS | PC-8AA | 3 | GALVANIZED STEEL |
| J L1.14 | ACCESSIBLE PICNIC TABLE | BELSON OUTDOORS | PC-HAA | 1 | GALVANIZED STEEL |
| K L1.14 | PICNIC SHELTER | POLIGON | MAR-20X24 | 1 | ROOF COLOR: SLATE<br>FRAME COLOR:WHITE<br>ROOF TYPE: MULTI-RIB |
| L L1.14 | PLAY SURFACE DRAIN | | | 300 L.F. | 4" PVC PERFORATED DRAIN TILE |
| M L1.14 | LAWN DRAIN | | | 1 EACH | 4" PVC TEE WITH GRATE CAP |
| N L1.14 | STAINLESS STEEL BIKE RACK | MADRAX | CHP-5-SF-S | 3 | STAINLESS STEEL |

## PARK AMENITY SCHEDULE

| KEY | ITEM | MANUFACTURER | MODEL | QUANTITY | COMMENTS |
|---|---|---|---|---|---|
| O L1.15 | 2-5 PLAY STRUCTURE | NU-TOYS | | 1 | |
| P L1.15 | SADDLE SPINNER | NU-TOYS | 152179A | 1 | |
| Q L1.15 | DIGIRIDER BUTTERFLY | NU-TOYS | 233057B | 1 | |
| R L1.15 | SEE SAW 2-SEATS | NU-TOYS | 148636A | 1 | |
| S L1.15 | SWING SET | NU-TOYS | | 1 | |
| T L1.15 | 5-12 PLAY STRUCTURE | NU-TOYS | | 1 | |
| U L1.15 | ZIPKROOZ | NU-TOYS | 194663C | 1 | |
| V L1.15 | SWING SET | NU-TOYS | | 1 | |
| W L1.15 | GYRO SPINNER | NU-TOYS | 201549A | 1 | |
| X L1.15 | OODLE SWING | NU-TOYS | 177333A | 1 | |




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## PARK AMENTITY PLANS

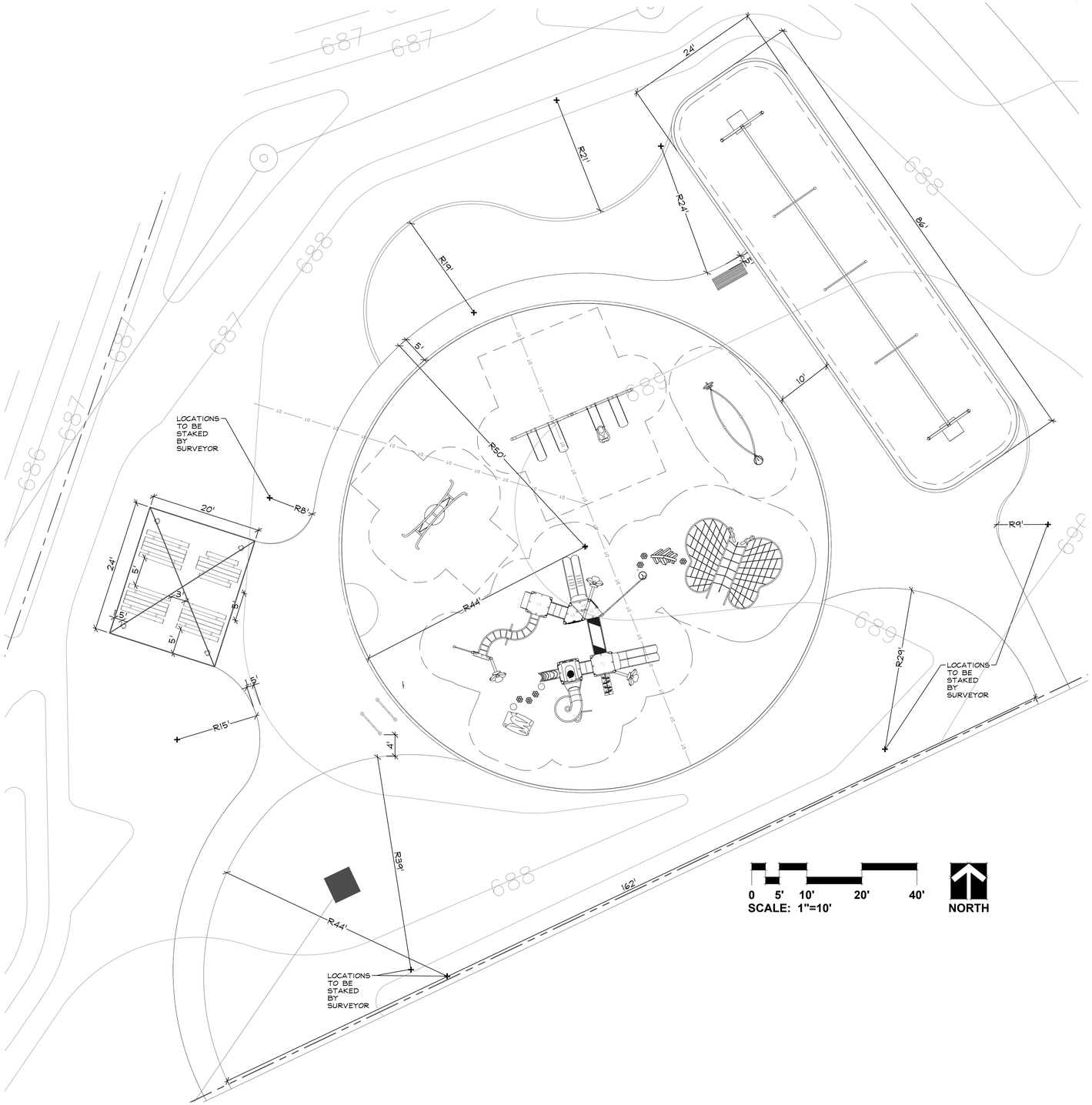
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| 1 | 05.13.2025 |
| REVISIONS | |

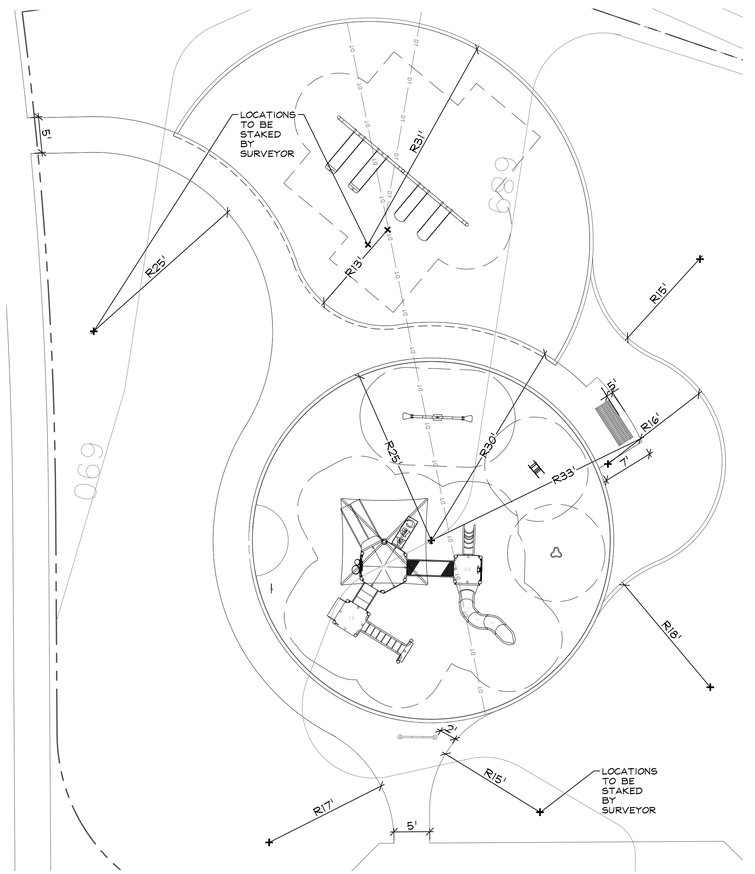
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|---|---|
| DATE | 04.04.2025 |
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L1.12

Know what's below. Call before you dig.

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PLOT CONFIG




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## PARK LAYOUT PLANS

| | |
|---|---|
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| 1 | 05.13.2025 |

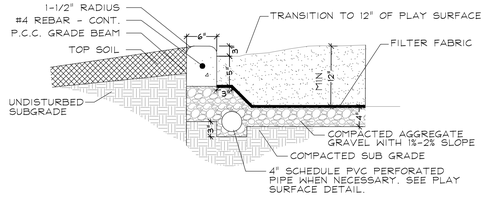
**REVISIONS**

| | |
|---|---|
| **DATE** | 04.04.2025 |
| **PROJECT NO.** | LN23167 |
| **DRAWN** | EAN/MAC |
| **CHECKED** | ZL |
| **SHEET NO.** | |

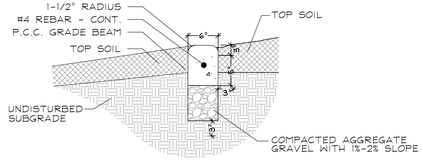
**L1.13**

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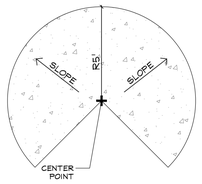
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PLOT CONFIG



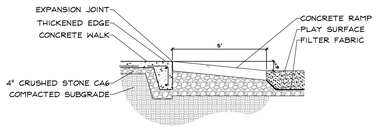

## B L1.14 CONCRETE CURB AND SURFACING DETAIL
NOT TO SCALE

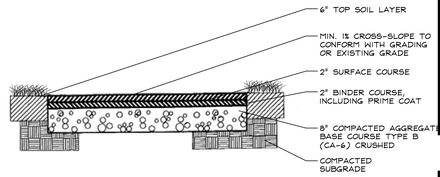



## C L1.14 CONCRETE BED EDGE DETAIL
NOT TO SCALE

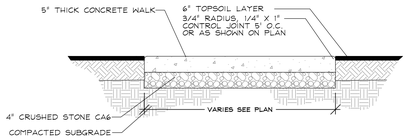



## D L1.14 RAMP DETAIL
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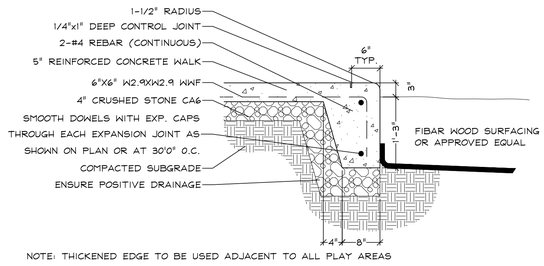



## E L1.14 10' ASPHALT PATH DETAIL
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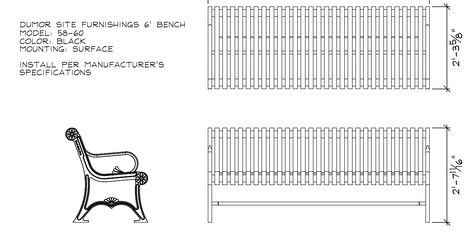



## F L1.14 CONCRETE WALK DETAIL
NOT TO SCALE

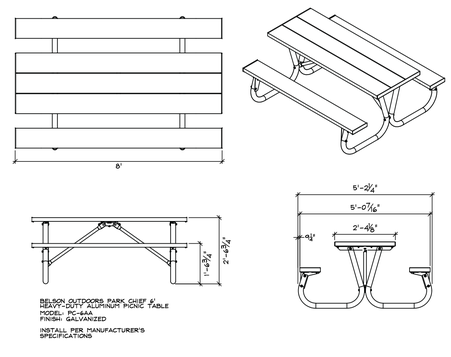



NOTE: THICKENED EDGE TO BE USED ADJACENT TO ALL PLAY AREAS

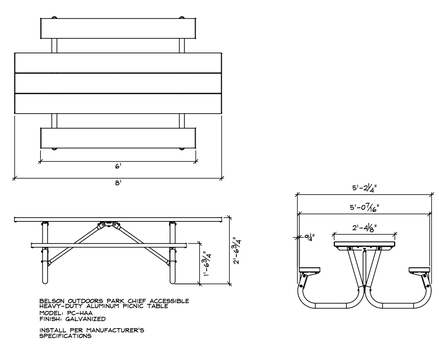
## G L1.14 THICKENED EDGE DETAIL
NOT TO SCALE



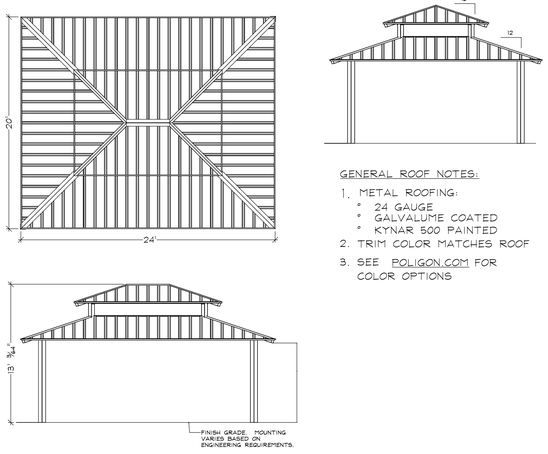

## H L1.14 BENCH DETAIL
NOT TO SCALE



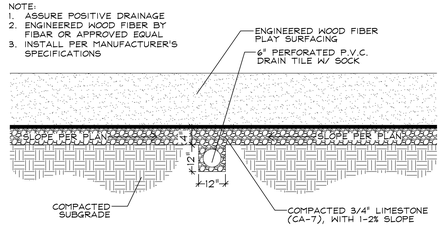

## I L1.14 8' PICNIC TABLE DETAIL
NOT TO SCALE



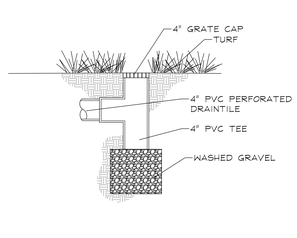

## J L1.14 ACCESSIBLE PICNIC TABLE DETAIL
NOT TO SCALE



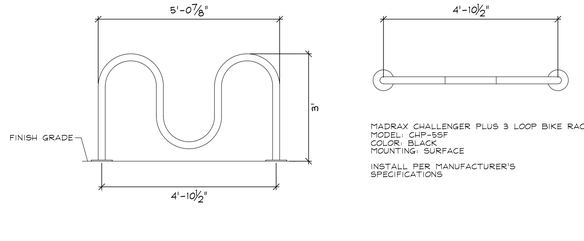

## K L1.14 PICNIC SHELTER
NOT TO SCALE




## A L1.14 L L1.14 E.W.F. SURFACING W/ DRAIN DETAIL
NOT TO SCALE




## M L1.14 TURF PVC DRAIN DETAIL
NOT TO SCALE




## N L1.14 STAINLESS STEEL BIKE RACK DETAIL
NOT TO SCALE

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# PARK AMENTITY DETAILS

| | |
|---|---|
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| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

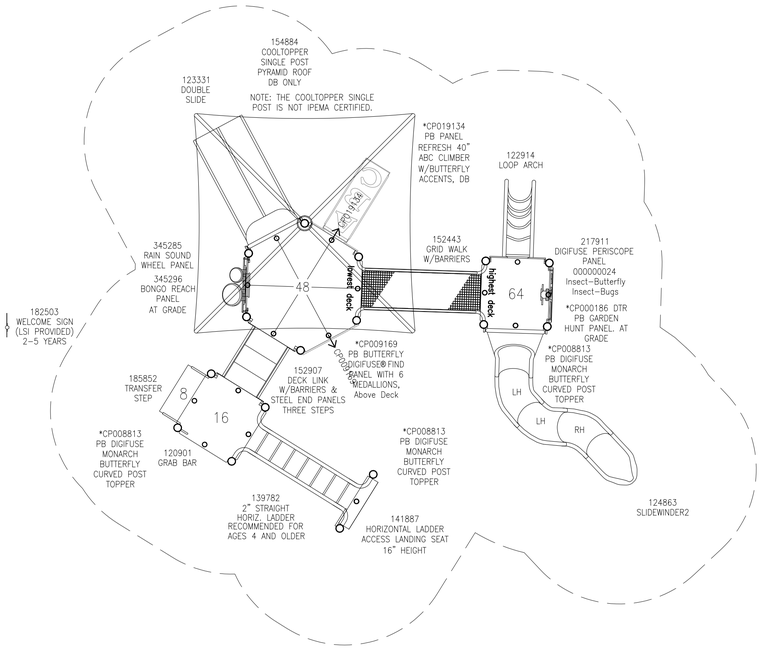
**REVISIONS**

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| **DATE** | 04.04.2025 |
| **PROJECT NO.** | LN23167 |
| **DRAWN** | EAN/MAC |
| **CHECKED** | ZL |

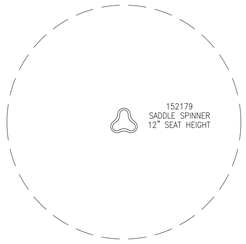
**SHEET NO.**
**L1.14**

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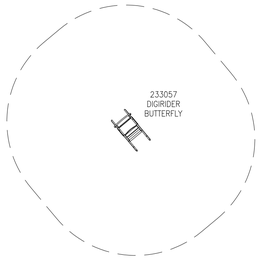
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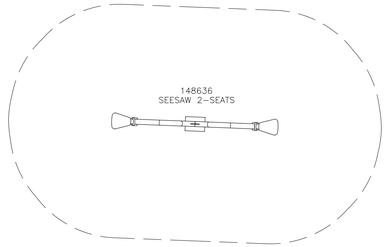

**O L1.15 2-12 PLAY STRUCTURE**
NOT TO SCALE



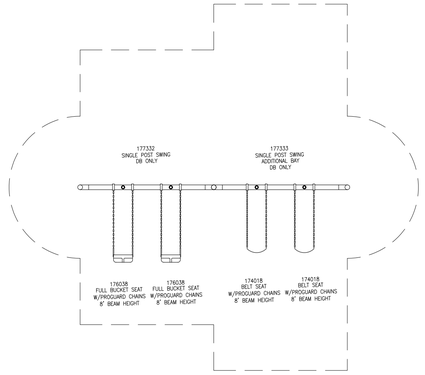

**P L1.15 SADDLE SPINNER**
NOT TO SCALE



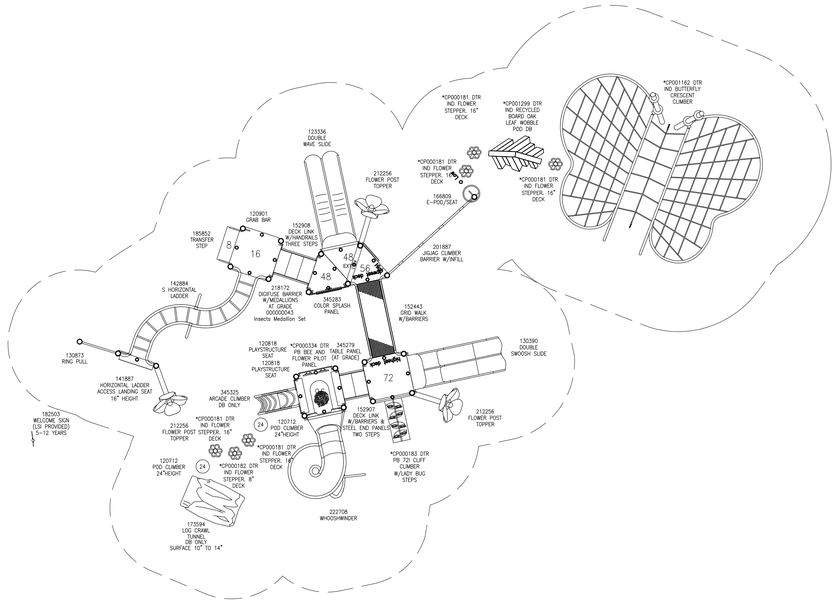

**Q L1.15 DIGIRIDER BUTTERFLY**
NOT TO SCALE



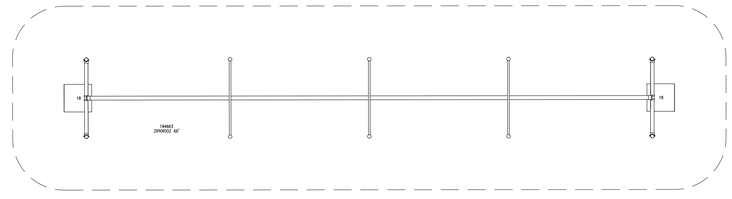

**R L1.15 SEESAW 2-SEATS**
NOT TO SCALE



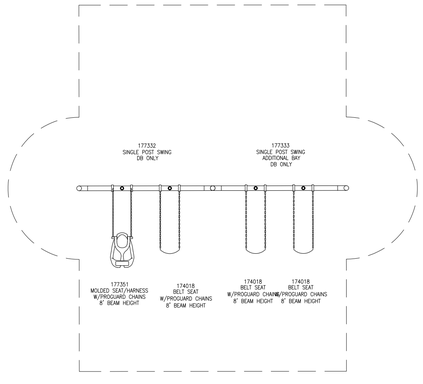

**S L1.15 SWING SET DETAILS**
NOT TO SCALE



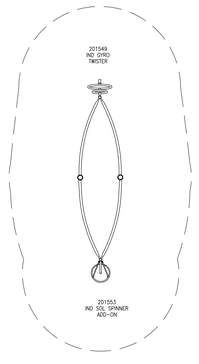

**T L1.15 5-12 PLAY STRUCTURE**
NOT TO SCALE



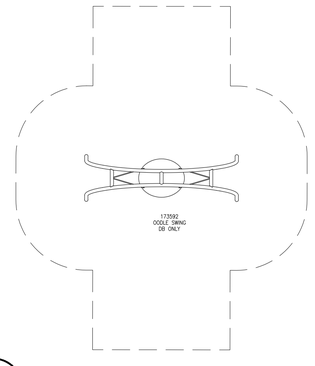

**U L1.15 ZIPKROOZ**
NOT TO SCALE




**V L1.15 SWING SET DETAILS**
NOT TO SCALE




**W L1.15 GYRO SPINNER**
NOT TO SCALE




**X L1.15 OODLE SWING**
NOT TO SCALE

GARY R. WEBER
ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
MACKIE CONSULTANTS
9575 W. HIGGINS
SUITE #500
ROSEMONT, IL 60018

# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

## PLAYGROUND AMENTITY DETAILS

| | |
|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |

REVISIONS

| | |
|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |

SHEET NO.
L1.15

XREFS

PLOT CONFIG

## I. GENERAL SPECIFICATIONS

### A. Scope of Work

1. This work shall consist of preparing the planting beds, seedbed or ground surface, and furnishing, transporting and placing plants, mulch, seed, sod, fertilizer and other materials required in the specified operations.
2. Planting required for this work is indicated on the Landscape Plans and, in general consists of the following:
   a. The establishment of trees, shrubs, perennials, annuals, lawn and natural areas as shown on the Landscape Plans;
   b. The provision of post-planting management as specified herein;
   c. Any remedial operations necessary for conformance with The Landscape Plans as specified in this document;
   d. The design, furnishing and installation of a complete underground sprinkler system at locations noted on plan.

### B. General

1. Permits

   The Landscape Contractor shall be responsible for obtaining any permits required for the completion of the work and shall be responsible for the cost of the same.

2. Field Verification

   Upon notice to begin work the Landscape Contractor shall verify all existing conditions of the site and shall report any conditions that will impede the beginning of work to the Landscape Architect in writing. The Landscape Contractor shall examine areas, conditions, grades, soils and water levels under which work is to be performed and notify the Landscape Architect of conditions detrimental to the proper and timely completion of the work.

3. Existing Utilities

   The Landscape Contractor shall verify location of all underground utilities before construction. Contact J.U.L.I.E at 1.800.892.0123; 48 hours prior to digging. Notification of any disturbance of existing utilities shall be given to the Landscape Architect immediately. Should uncharted or incorrect utilities be encountered, notify the Landscape Architect immediately.

4. Inspections of Project

   During the construction period, all phases of work shall be available for inspections by the Landscape Architect. All plant material shall be subject to inspection and approval, and the Landscape Architect reserves the right to reject any plants which fail to meet the standards of this inspection. The Landscape Architect reserves the right to inspect nursery stock either at place of growth or at site for compliance with requirements of variety, size and quality.

### C. Quality Assurance

1. The Landscape Contractor shall provide at least one person who shall be present at all times during execution of this portion of the work and who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct all work performed under this Section and shall comply with work site requirements.
2. The Landscape Contractor must verify with the Landscape Architect at the commencement of work that he has the most current set of plans for the project and that one set of the current plans, clearly marked "Field Set", must be on the jobsite at all times.
3. The Landscape Contractor shall provide protection for structures, utilities, roads, trees and vegetation from damages caused by settlement, undermining, washout and other hazards created by landscape operations.
4. The Landscape Contractor shall provide and maintain fences, planking, guard lights, barricades, warning signs and guards as necessary for protection of material storage, curbs, sidewalks, streets, drives and adjoining property.
5. Any damage to utilities, structures, plantings, or lawns which result from the Landscape Contractor's course of work will be repaired at the Landscape Contractor's expense, to the satisfaction of the Landscape Architect, in a reasonably timely manner with as little inconvenience to the Owner as possible.
6. Existing trees, shrubs and plant material to remain shall be protected. Damage to existing plants which result from the Landscape Contractor's course of work shall be repaired by a qualified nurseryman or replaced with approved material per village ordinance at the expense of the Landscape Contractor.
7. All planting techniques and methods shall be consistent with the latest edition of "Horticulture Standards of Nurseryman" and as detailed on the drawings.
8. Landscape Contractor shall maintain all relevant erosion control devises destroyed or disrupted during landscape installation. Erosion control devises include measures shown on the approved erosion control plans, plus any additional measures deemed necessary by the Owner or public agency having jurisdiction over erosion control. Erosion control devices include, but are not limited to, silt fence, straw bales, erosion control logs, filter fabric in storm structures, filter baskets ditch checks and siltation basins.

### D. Substitutions

1. Substitution from the approved plans will be accepted only when satisfactory evidence in writing is submitted to the Landscape Architect,showing that the plant specified is not available.
2. Landscape Contractor shall submit request for approval to substitute plant material available and shall include Common and Botanical names and size of substitute material.
3. Only those substitutions of equivalent size and having essential characteristics similar to the originally specified material will be approved.
4. Acceptance or rejection of substitute plant materials will be issued in writing by the Landscape Architect, following approval by Lennar and the governing Municipality or Regulatory Agency.
5. Any unauthorized substitutions will be removed and replaced by the Landscape Contractor at the expense of the Landscape Contractor.

### E. Submittals

1. Nursery List: In Bid Proposal Form Landscape Contractor shall identify a list of area nurseries from where nursery stock for the job will be obtained.
2. Materials List: Before any plant materials are delivered to the job site, submit to the Landscape Architect a complete list of all plants and other items to be installed and the nursery sources.
3. Certification of Inspection: Shall accompany each shipment of plants as may be required by law for transportation. File certificates with the Landscape Architect prior to acceptance of the material. Inspection by Federal or State authorities at place of growth does not preclude rejection of the plants at the site.
4. Planting Schedule: Submit proposed planting schedule with dates for review and inspection of plants by the Landscape Architect prior to planting.
5. Soil Tests: Submit two (2) copies of soils test of existing topsoil with recommendations for soil amendments for Landscape Architect's review.
6. Seed: Submit seed vendor's certification for required grass seed mixture, indicating percentage by weight, and percentage of purity, germination, and weed seed for each grass species and date tested.
7. Sod: Submit sod grower's certification of grass species. Identify source location in Bid Proposal Form.
8. Mulch and Erosion Control Blankets: Submit two (2) samples of shredded hardwood bark mulch, erosion control blankets, and all other products and materials as specified on plans to Landscape Architect for review and written approval.
9. Maintenance Instructions: Submit to the Landscape Architect typewritten instructions recommending procedures to be established by the Owner for the maintenance of landscape work after preliminary acceptance of plantings and turf areas. Submit prior to beginning of warranty period. Instructions shall include: watering, fertilizing, spraying, mulching and pruning for plant material and trimming groundcover. Instructions for watering, fertilizing and mowing grass areas shall be submitted prior to request for preliminary inspection for acceptance.

### F. Product Handling

1. Delivery and Storage
   a. Deliver all items to the site in their original containers with all labels intact and legible at the time of inspection.
   b. Immediately remove from the site all plants which are not true to name and all materials which do not comply with the provisions of these Specifications.
   c. Use all means necessary to protect plant materials before, during, and after installation and to protect the installed work and materials of all other trades.
   d. Cover all plant material transported in open vehicles with a protective covering to prevent windburn.
2. Time of Planting
   a. All planting shall be performed during favorable weather conditions and only during normal and accepted planting seasons when satisfactory growing conditions exist.
   b. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by the Landscape Architect. The Landscape Contractor assumes full and complete responsibility for such plantings and operations.

### G. Materials

1. Plant Material

   Provide plants typical of their species or variety with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sunscald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces.
   a. Balled and burlapped plants shall have a firm natural ball of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls are not acceptable
   b. Tree spade transplanting is acceptable for plants 6" caliper and larger after acceptance of plant by the Landscape Architect. Tree spade must be of a size generally accepted in the trade to safely move the tree size.
   c. Container grown stock shall be grown in a container for a sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
      (i) No plants shall be loose in the container.
      (ii) Container stock shall not be pot bound.
      (iii) All container plants used on the project shall conform to the sizes indicated on the plant list and on the drawings.
   d. No evidence of wounds and/or pruning cuts shall be permitted unless approved by the Landscape Architect.
   e. When specified by caliper, provide shade and ornamental trees with a single main trunk. When specified by height, provide shade and ornamental trees as multi-stemmed plants with not less than three main trunks and side branches that are generous and well twigged.
   f. Evergreen trees shall be branched to the ground unless otherwise specified and accepted.
   g. Provide plants matched in form when arranged in groups.
   h. All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of two years. Comply with sizing and grading standards of the latest edition of "American Standards of Nursery Stock" A plant shall be dimensioned as it stands in its natural position. No plants shall be loose in the container.
      (i) Shade Tree and Ornamental Tree caliper shall be measured at a point on the trunk six (6) inches above natural ground line for trees up to and including four (4) inches in diameter, and at a point twelve (12) inches above the natural ground line for trees over four (4) inches in diameter.
      (ii) Height of Evergreen Trees is measured from the natural ground line to the first lateral branch closest to the top.
      (iii) Height of Clump Ornamental Trees is measured from the natural ground line to the beginning last year's growth.
      (iv) Shrub and small plants shall meet the requirements for spread and/or height indicated on the plant list and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required.
2. Sub-drainage Systems
   a. Provide piping types and sizes indicated. Provide matching reducers, adapters, couplings, fittings and accessory components to ensure continuity of the sub-drainage system.
      i) Plastic tubing shall be ASTM F405, corrugated Polyethylene drainage tubing, perforated or solid as required.
      ii) Sub-drainage fill shall be AASHTO M43 (3/8" to 3/4") clean uniformly graded stone or gravel.
      iii) Sub-drainage filter fabric shall be DuPont "Typar" or other non-woven porous polypropylene fabric approved by the Landscape Architect.
3. Grass Seed
   a. All seeds shall be guaranteed by the vendor to be true to name and variety.
   b. Seed mixtures shall be fresh, clean new crop with a tolerance for purity and germination established by the Official Seed Analysts of North America. Seed will not contain any noxious weed seeds.
   c. Seed mixtures shall be proportioned by weight and shall be as specified on the drawings. If no seed mix is specified, the following general turf seed mix shall be used:
      65% Improved Kentucky Bluegrass (minimum three (3) varieties)
      25% Improved Perennial Ryegrass (minimum two (2) varieties with endophytes)
      10% Creeping Red Fescue

      If this general turf seed mix is used, the Landscape Contractor must submit the vendor's seed varieties, composition and application rate to the Landscape Architect for approval prior to ordering.
4. Erosion Control Blanket
   a. North American Green seed blanket matting shall be used. Secure with 4" biostakes.
5. Sod

   Sod used shall be an approved blend of improved Kentucky Bluegrass (such as: Midnight, Allure, Viva, Washington and Liberty) with a mineral back that is adapted to the locality of work. It shall be either nursery grown or field grown and be well rooted. The consistency of adherent soil shall be such that it will not break, crumble, or tear during handling and placing of the sod. Landscape Architect reserves the right to reject unacceptable sod.
   a. Each piece of sod shall be well covered with turf grass, shall not be less than two (2) years old, shall be free from noxious weeds and other objectionable plants, and shall not contain substances injurious to growth.
   b. All sod used shall comply with state and federal laws with respect to inspection for plant diseases and insect infestation.
   c. Each sod shipment shall be accompanied by an invoice from the vendor giving quantity and certifying that the sod received meets all requirements contained in these specifications.
6. Seed Fertilizer
   a. Fertilizer for seeded areas shall be a granular non-burning product from a commercial source composed of not less than 50% organic slow acting, guaranteed analysis professional fertilizer, uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer types and ratios shall be as follows:
      i) Starter fertiilizer with an approximate analysis of 13-25-12 at the rate of 4 lbs. per 1,000 S.F. or similar composition approved by the Landscape Architect.
      ii) Post emergent fertilizer with an approximate analysis of 25-0-5 at a rate of 4 lbs. per 1,000 S.F. or similar composition approved by the Landscape Architect.
7. Sod Fertilizer
   a. Fertilizer for sod areas shall be a granular non-burning professional product from a commercial source, uniform in composition, free flowing and suitable for application with approved equipment. Fertilizer ratio shall be a ratio of 13-25-12 at the rate of 4 lbs. per 1,000 S.F.
8. Plant Fertilizer
   a. Fertilizer for plants shall be a granular non-burning standard commercial grade product, uniform in composition, free flowing and suitable for application with approved equipment and an analysis of 14-14-14 at the rate of 6 lbs. per 1,000 S.F.
9. Native Planting Mixtures

   Provide fresh, clean, new crop of the species and proportions as specified. Native seed and live plant material shall be obtained from a reputable supplier (approved by Landscape Architect) that has collected from sources west of the Mississippi River within the same EPA Level III Ecoreqion as the project site (Central Corn Belt Plains). Any material sourced from outside this ecoregion must be approved by the Landscape Architect prior to installation.

   For each species, the amount of seed indicated on the specifications shall mean the total amount of pure live seed (PLS) per acre. Seed tags and PLS testing information shall be provided to the Landscape Architect prior to seeding.

   It is the sole responsibility of the Native Landscape Contractor to provide approved seed that meets industry-standard PLS requirements.
10. Mulch
    a. Mulch for tree and shrub planting beds shall be dark shredded hardwood bark mulch, six month old, not larger than 4" in length and 1/2" in width, free of woodchips and sawdust. Submit sample to Landscape Architect for approval.
    b. Mulch for perennial flower, annual flower and groundcover planting beds shall be pinebark fines. Submit sample to Landscape Architect for approval.
11. Topsoil
    a. Topsoil shall be available adjacent to the community site for use on project or in backfill mixes as specified. Initial fine grading to be done by Excavation Contractor.
    b. Touch up movement and placement of this topsoil shall be at the sole expense of the Landscape Contractor.
    c. Topsoil stockpile placement will be coordinated with Excavator to ensure easy access to Contractor.
12. Planting Bed Soil Mixture (Perennial, Annual and Groundcover Beds)
    a. Provide planting soil mixture consisting of equal parts cooled mushroom compost and pinebark fines (Same as Midwest Trading CM30 mix) at 1 C.Y. per 100 S.F. incorporated into all perennial, annual and groundcover areas. Planting pits shall be excavated and filled with friable topsoil (stockpiled at site) to a depth of 8" prior to adding and incorporating planting bed soil mixture.
13. Accessories
    a. Water: Water provided by the Landscape Contractor shall be free of substances harmful to plant growth. All necessary hose piping, tank truck and other methods of transportation shall be supplied by the Landscape Contractor.
    b. Downspout Splash Areas:
       i) Downspout splash areas in lawns shall be 24" concrete splash blocks.
       ii) Downspout splash areas in mulch shall be washed gravel sub-base 0.5-0.75" diameter and 3-4" diameter granite cobblestone surface with geotextile filter fabric lining sides and bottom of trench.
    c. Sand: Sand shall be coarse "torpedo" sand.
    d. Pea gravel: Pea gravel shall be 1/8" to 1/4" washed gravel.
    e. Retaining Walls: Retaining walls must always be installed in strict compliance with manufacture's recommendations for sizing and reinforcement
       i) Retaining wall material shall be as specified on the drawings or as approved by the Landscape Architect
    f. Anti-Desiccant: Anti-Desiccant shall be an applicable emulsion which forms a transparent protective film over plant surface, permeable enough to permit transpiration. (Wilt-Pruf, manufactured by Nursery Specialty Products, Inc. or approved equal).
    g. Herbicide: Herbicide shall be a granular form of herbicide applied in shrub and ground cover beds in strict accordance with the manufacturer's directions and recommendations. Acceptable products are "Treflan", "Ronstar" or approved equal.

### H. Installation and Execution

1. Inspection
   a. Prior to all work of this Section, carefully inspect the installed work of all other trades and verify that such work is complete to the point where this installation may properly commence. Verify that planting may be completed in accordance with the original design and the referenced standards. Work will commence only when satisfactory conditions exist.
   b. Check that grading, including spreading of topsoil and all other sub-surface work in lawn areas have been completed and accepted by Lennar. Start of work in this section shall constitute acceptance of grade. Lawn irrigation system must be completed and in operation before seeding and sodding begins.
   c. Saturate and fill tree and shrub pits with water to test drainage before planting. Provide gravel drains and venting tubes at pits, which are more than half full of water after 24 hours.
   d. Landscape Contractor shall notify the Landscape Architect prior to plant installation. The Landscape Architect, at his discretion, may inspect all plant material and layout prior to planting.
2. Preparation

   Trees, Shrubs, Perennials, Annuals and Groundcovers
   a. Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.
   b. Locate plants as indicated or as approved in the field by the Landscape Architect after staking by the Landscape Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate locations have been selected by the Landscape Architect.
   c. Excavate circular plant pits with tapered sides as shown on the drawing details. In general, all plant pits shall have a rounded bottom with the depth of the pit equal to the depth of the ball to be planted. The diameter of the pit shall be a minimum of two (2) times the width of the ball.
   d. Excavate all clay and debris to 8" depth beneath all perennial, ornamental grass, annual flower, and groundcover beds. Backfill with 12" amended topsoil, thus resulting in all these areas being elevated or crowned by 4" wherever site drainage allows.

   Seeding and Sodding
   a. Seed and sod bed preparation shall not be started until all stones, boulders, debris, and similar material larger than 1 inch in diameter have been removed. The area to be seeded shall be worked to a minimum depth of 6 inches with a disk or other equipment, reducing all soil particles to a size not larger than 1 inch in the largest dimension. Bed prep shall occur on the contour, where possible. The prepared surface shall be relatively free from all weeds, stones, roots, sticks, rivulets, gullies, crusting and caking. Do not overwork or powder final seedbed.
   b. Upon completion of the above, any rocks or stones larger than one (1) inch in diameter shall be removed from the surface prior to seeding. If excessive amount of rocks are present in native soil Contractor should contact the Landscape Architect immediately.
   c. Landscape Contractor shall remove all debris and dispose of such material legally off-site.
   d. The areas to be seeded shall be assumed to be at final grades established by Excavator. The Landscape Contractor, however, shall be responsible for the proper drainage of the entire area. The Landscape Contractor shall fine grade all turf areas including any grading necessary to eliminate ponding of water, ruts or ridges. Limit preparation to areas which will be grassing within 48 hours.
   e. Immediately prior to the seed and sod bed preparation, specified fertilizer nutrients shall be uniformly spread at the following rate:
      i) 5 lbs. per 1000 S.F.
   f. Final surface of topsoil immediately before seeding shall be within plus or minus 1/2" of required elevation, with no pockets or low spots in which water can collect. Restore prepared areas to specific condition if eroded, settled, or otherwise disturbed after fine grading and prior to seeding or sodding. Finish grade surface with a drag or rake, Round out all breaks in grade, smooth down all lumps and ridges, fill in all holes and crevices.
   g. In the event of settlement, re-adjust the work to required finish grade.
3. Planting

   Plant nursery stock immediately upon delivery to the site and approval by the Landscape Architect. If immediate planting is not possible a holding area on-site must be established in a location approved by Lennar. All plant material in the holding area must have the rootball heeled in damp mulch and be protected from excessive sun and wind. The Landscape Contractor must operate and maintain the holding area in a neat and orderly appearance.

   All planting shall be performed during favorable weather conditions and only during normal and accepted planting seasons when satisfactory growing conditions exist. The planting operations shall not be performed during times of extreme drought, when ground is frozen or during times of other unfavorable climatic conditions unless otherwise approved by the Landscape Architect. The Contractor assumes full and complete responsibility for such plantings and operations.

   Trees and Shrubs
   a. Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb and faced to give best appearance or relationship to each other or adjacent structure. Set plant material 2" above the adjacent grade. The Contractor is responsible for planting to correct grades and alignment and all plants shall be set so that when settled will bear the same relationship to finished grade as they did before being transported.
   b. Remove all non-biodegradable strings and twine from top of ball. Remove non-biodegradable burlap from to 1/3 of ball after the tree is set in the planting hole. The wire basket should remain. Fold the top portion of the wire basket into the hole.
   c. Any topsoil excavated from plant pits shall be used in the backfill soil mixture. No filling will be permitted around trunks or stems. Backfill the pit with topsoil. Do not use frozen or muddy mixture for backfilling. Form a ring of soil around the edge of each planting pit to retain water.
   d. After setting plants in pit to proper grade compact 6" of soil around base of ball. Fill the entire planting hole with water and allow to soak in. Gradually backfill remaining space around the ball or roots and compact the soil thoroughly using water to eliminate all voids and thoroughly soak the plant root ball.
   e. Within 24 hours of planting slowly re-water the plant thoroughly soaking the root ball again.
   f. Install enough topsoil to insure finished grades are met after settling.
   g. All excess soil, other than topsoil, excavated from pits, shall be removed from the holes and left on site in locations designated by Lennar.
   h. After planting apply specified commercial pre-emergent herbicide per manufacturer's directions to all shrub beds.

   Perennials, Ornamental Grasses, Annual Flowers and Groundcovers
   a. Where perennials, ornamental grasses, annual flowers and groundcovers are specified on the plans, prepare entire plant bed incorporating a 1 C.Y. layer of planting soil mixture per 100 S.F. Incorporate commercial 14-14-14 fertilizer into prepared soil mixture at a approximate rate of 6 lbs. per 1000 S. F.
   b. Space plants in accordance with dimensions indicated on the plans. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 18" of the trunks of trees and shrubs or at edge of plant ball whichever is closest. Plant to within 12" of edge of bed.
   c. After planting apply specified commercial pre-emergent herbicide per manufacturer's directions to all planting beds. Confirm herbicide compatibility with all plant material in beds and notify the Landscape Architect immediately if a conflict exists.

   Seeding
   a. Install seed under favorable weather conditions unless approved by the Landscape Architect. The conditions of the guarantee apply regardless of the date of installation. The generally accepted times for seeding are:
      Spring - April 1st to June 15th
      Fall - September 15th to just before first frost
   b. Seed indicated areas within contract limits and areas adjoining contract limits disturbed as a result of construction operations.
   c. Seed with specified seed mix at rate specified on the drawings or at a rate of 5 lbs. per 1000 S.F.
   d. Broadcast Seeding: Using a broadcast seeder, sow seed evenly over entire area by sowing equal quantities in two directions at right angles to each other. Do not seed when wind speed exceeds five (5) miles per hour. Seeding by hand is not allowed.
   e. Following seeding the area shall be lightly raked to incorporate seed into top 1/8" to 1/4" of soil. Remove all stones and other debris greater than 1 inch in any dimension which are visible shall be removed and disposed of legally off-site. Areas shall then be smoothed by rolling with a hand roller.
   f. Mechanical Seeding: Using a "Brillion-type" seeder and cultipacker, sow seed evenly over entire area sowing equal quantities in two directions at right angles to each other. Using this method raking and rolling is not required.
   g. Following seeding, all seed areas will be covered with specified erosion control seed matting and stapled in place.
   h. Following seeding, raking and matting, the entire area shall be watered by use of lawn sprinklers or other means approved by the Landscape Architect. Landscape Contractor shall assure initial watering continues until the equivalent of two inches of water has been applied to entire seed surface, at a rate which will not dislodge the seed.
   i. Landscape Contractor shall assure watering is repeated thereafter as frequently as required to prevent drying of the surface and to ensure proper establishment.
   j. Landscape Contractor shall mow the lawn area as soon as top growth reaches a 3 inch height. Cut back to 2 inch height. Not more than 33% of grass leaf shall be removed at any single mowing. The contract shall include a minimum of 3 (three) mowings. Repeat mowing as required to maintain specific height until Landscape Architect issues preliminary acceptance of completed work.
   k. It shall be the Landscape Contractor's responsibility to determine and implement whatever procedures deemed necessary to establish the turf as part of the work. Reseed bare areas and provide erosion control as necessary until complete establishment achieved.
   l. Areas of seed installation will not be accepted unit it meets the growth coverage specifications detailed by Illinois Department of Transportation.

   Sodding
   a. Transport sod in either a closed van or in properly covered open trucks.
   b. Maintain sod in a moist condition from cutting until placement. Any sod that has dried out, or excessively heated will be rejected and shall be immediately removed and legally disposed of off-site by the Landscape Contractor. Replacement of rejected sod shall be at the expense of the Landscape Contractor.
   c. Sod shall be placed within 24 hours of cutting. Do not use sod cut for more than 24 hours without the approval of the Landscape Architect.
   d. Sod shall be placed when the ground is in a workable condition and temperatures are less than 90oF. Do not lay dormant sod or install sod on saturated or frozen soil or during an extended drought.
   e. The sod shall be placed on the prepared surface with the edges in close contact and alternate courses staggered. Lay sod to form a solid mass with tightly-fitted joints. Butt ends and sides of sod strips. Do not overlay edges. Stagger strips to offset joints in adjacent courses. Remove excess sod to avoid smothering of adjacent grass. Provide sod pad top flush with adjacent curbs, sidewalks, drains, and seeded areas.
   f. In ditches, the sod shall be placed with the longer dimension perpendicular to the flow of water in the ditch. On slopes, install preliminary row of sod in a straight line, starting at the bottom of the slope, the sod shall be placed with the longer dimension parallel to the contours of the ground. Place subsequent rows parallel to and lightly against previously installed row. The exposed edges of sod shall be buried flush with the adjacent soil.
   g. All sod shall be rolled with a light drum roller to ensure contact with sub-grade, uniformity and foster root knitting.
   h. The sod shall be staked on all slopes of 3:1 or steeper to prevent slippage. Sod shall be staked with ±2 stakes per square yard of sod as necessary to stabilize with at least one stake for each piece of sod.
   i. Sodded areas shall be watered to ensure proper establishment. Sod shall be watered thoroughly with fine spray immediately after laying and not be allowed to dry out. Any sod that has shrunk shall be replaced. Landscape Contractor shall assure initial watering continues until the equivalent of two inches of water has been applied to entire sod surface, at a rate which will not dislodge the sod.
   j. Landscape Contractor shall assure watering is repeated thereafter as frequently as required to prevent drying of the surface and watering shall continue through preliminary acceptance to ensure proper establishment.
   k. Landscape Contractor shall mow the lawn area as soon as top growth reaches a 3 inch height. Cut back to 2 inch height. Not more than 40% of grass leaf shall be removed at any single mowing. The contract shall include a minimum of 3 (three) mowings. Repeat mowing as required to maintain specific height until Landscape Architect issues preliminary acceptance of completed work.

   Native Seeding and Planting
   a. The period for planting prairie seed shall be between April 1st and June 15th, or as soon thereafter as the soil is free of frost and in workable condition, and from September 15 to freeze up. If these dates are adjusted, it shall be the responsibility of the Landscape Contractor to ensure establishment of the seed.
   b. Remove existing grass, vegetation and turf. Dispose of such material legally off-site. Do not turn over into soil being prepared for lawns.
   c. If present, compacted soils shall be disked or raked prior to seeding. Remedial measures for the access area may at the direction of the Wetland Consultant, involve ripping from 12-18 inches of the soil horizon prior to disking.
   d. Prior to seeding, planting areas shall have at least twelve inches of clean un-compacted topsoil. Clumps, clods, stones of 2" diameter, roots and other extraneous matter shall be removed and disposed of legally offsite.
   e. Granular mycorrhizal inoculants shall be installed with the seed mix at a rate of 40 lbs\acre. Inoculant can be banded under seed, worked into seed or added into spray tanks. NATIVE AREAS SHALL NOT RECEIVE FERTILIZER.
   f. Contractor shall be solely responsible for the proper handling and storage of the seed according to the best seed handling and storage practices, including fungicide treatments and stratification considerations. Owner shall make no compensation for damage to the seed because of improper storage, cleaning, threshing or screening operations.

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CLIENT
LENNAR
1700 GOLF ROAD
SUITE 1122
SCHAUMBURG, IL 60173

ENGINEER
MACKIE CONSULTANTS
9575 W. HIGGINS
SUITE #500
ROSEMONT, IL 60018

# BRIGHTON RIDGE
SUGAR GROVE, ILLINOIS

## LANDSCAPE SPECS

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|---|---|
| 3 | 06.23.2025 |
| 2 | 05.30.2025 |
| 1 | 05.13.2025 |
| REVISIONS | |

| | |
|---|---|
| DATE | 04.04.2025 |
| PROJECT NO. | LN23167 |
| DRAWN | EAN/MAC |
| CHECKED | ZL |
| SHEET NO. | |

L1.16

PLOT DWG: VIEFIL

## I. GENERAL SPECIFICATIONS CONTINUED

g. Seeding operations, including installation of erosion control matting, must be accomplished within 24 hours of any area which is fine graded. Fine grade, plant and cover only areas small enough to be completed within the required time frame.

h. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for the installation of native seed. For areas where site conditions preclude the use of specialized equipment, seed may be installed through hand broadcasting and followed by light raking. Hand broadcast seed shall be spread at twice the specified rate. Other methods of seed installation may be used with prior approval from the Landscape Architect.

i. Do not seed when wind velocity exceeds five (5) miles per hour. Equipment shall be operated in a manner to insure even distribution of seed and complete coverage of the entire area to be seeded.

j. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. In general, the optimum seeding depth is 0.25 inch below the soil surface. Areas where the seed has not been incorporated into the soil to the proper depths will not be accepted, and no compensation for materials or labor for the rejected work will be made by the owner.

k. Seed mixture shall be as specified on the drawings or the specified Prairie planting mixture. Sow not less than specified rate.

l. If a broadcast method of seeding is used, the following requirements shall be met. Within twelve hours, if conditions permit or as soon thereafter as is practical rake prairie seed lightly into top 1/4" of soil, roll at right angles to the run-off with an approved type roller to compact the seedbed and place the seed in contact with the soil.

m. If a drill-seed method is used, rolling of the seedbed will not be required.

n. After the seeding, raking and rolling operations are completed, water with a fine spray and install specified erosion control blanket per manufacturer's specifications over the entire prairie area.

o. The Landscape Contractor shall monitor all seeded areas to insure at least one inch of water per week from a combination of watering and natural rainfall and shall mow plantings to a height of 6-10 inches for the enhancement of native species until preliminary acceptance by the Landscape Architect.

p. It shall be the Landscape Contractor's responsibility to determine and implement whatever procedures deemed necessary to establish the turf as part of the work.

q. Wet mesic and emergent areas shall be planted and seed allowed to germinate (if possible), prior to the flooding with significant amounts of water. Any areas of significant permanent water located within the planting area will receive live plugs in lieu of seed.

r. After seeding operation is completed, install erosion control blanket per manufacturer's specifications.

s. Emergent plugs, if used, shall be planted in natural groupings within designed areas containing saturated soils or inundation. Plants within groupings shall be planted at 2 foot centers.

t. Emergent plugs shall not be planted less than the specified rate and shall be protected with goose enclosures surrounding all natural groupings of plugs.

4. Preparation of Reconditioned Naturalized Areas

The Contractor chosen for the enhancement and maintenance of native areas must be experienced in the restoration, installation, and management of said areas. They must have a minimum of five years' experience in the field and shall be able to identify non-native and native plants by genus and species. It is imperative that a qualified Native Landscape Contractor perform the initial installation and maintenance.

A basic work procedure is outlined below. The contractor is required to evaluate all existing conditions prior to bidding the work. Any proposed changes to the work plan shall be submitted to the Landscape Architect as required under Section 1.3 (A)(B)

a. Woody Vegetation Removal

i. All woody, non-planted species shall be removed from basin slopes and bottoms for existing ponds

ii. Contractor will cut all woody species to be removed with hand tools including, but not, limited to gas powered chainsaws, gas powered clearing saws, bow saws, and loppers.

iii. All stumps shall be cut flat with no sharp points and to within two inches of surrounding grade. Stumps shall be painted with Garlon 4, or equivalent, immediately after cutting.

iv. A supply of chemical absorbent shall be kept on-site. Spills shall be properly cleaned up and reported immediately to the owner.

v. The contractor shall maintain copies at the project site of all current pesticide applicator's licenses, herbicide labels, and MSDS's (Material Safety Data Sheets) for all chemicals utilized during completion of work.

vi. Cut brush piles shall be disposed of off site legally. No cut brush shall be burned within city limits.

vii. A prescribed burn can be conducted on existing basins as per the Maintenance Section 3.4. Following burn, over-seed lower slopes and bottoms of existing basins with Wet Meadow species as necessary (see section 2.4B)

viii. Spot treat invasive and undesirable herbaceous species on existing basin slopes with glycophosphate to remove undesirable species in planted areas. Undesirable species are included, but not limited to, species list in 1.5C Guarantees.

ix. Over-seed slopes of existing basins with low profile prairie grasses (see section 2.4C) as necessary. Seeding protocol should follow Section 3.2D 8-12 noted below.

x. If adequate top soil is not present, top soil can be added to slopes with approval of Landscape Architect.

Repair: Repair any damages caused by Contractor during completion of the work. Said damages may include but are not limited to tire ruts in the ground, damage to lawn areas, damage to trails, etc. In the event any vegetation to be preserved is damaged, notify the owner within 24 hours. The Contractor will be liable for remedying damages to plant materials to the satisfaction of the owner.

5. Reconditioning Existing Turf

a. Recondition existing turf damaged by Contractor's operations, including storage of materials or equipment and movement of construction vehicles.

b. Provide fertilizer, seed and soil amendments as specified for new lawns and as required to provide a satisfactory reconditioned lawn. Provide topsoil as required to fill low areas and meet new finished grades.

c. Prior to over-seeding cultivate or rototill bare and compacted areas thoroughly to a depth of four (4) inches. Remove all rocks, stones, turf clumps and other debris larger than one (1) inch in diameter and rake smooth.

d. Remove diseased or unsatisfactory lawn areas. Do not bury into soil. Remove topsoil containing foreign materials resulting from contractor's operations, including oil drippings, stone, gravel and other construction materials.

e. Where substantial, but thin lawn remains, rake, aerate if compacted, and cultivate soil, fertilize and seed.

f. Water newly seeded areas. Maintain adequate soil moisture as specified for new lawns, until new grass is established.

6. Mulching

Trees and Shrubs

a. Apply the specified mulch to a depth of two (2) inches, evenly spread over the entire area of each tree basin and shrub bed. Maintain exposed root flare at all times. Thoroughly water mulched bed areas. After watering, rake mulch to provide a uniform finished surface.

Perennials, Ornamental Grasses, Annual Flowers and Groundcovers

a. Apply the specified mulch to a depth of one (1) inch, evenly spread over the entire area of each planting bed using care to keep foliage exposed. Thoroughly water mulched bed areas.

7. Pruning

a. Prune branches of deciduous stock, after planting, to preserve the natural character appropriate to the particular plant requirements. Remove or cut back dead and badly bruised branches, broken and tangled branches, damaged and unsymmetrical growth of the new wood, suckers, water sprout growth and unnatural growth habits. No plants will be sheared for any reason.

b. Prune with clean, sharp tools.

c. Prune trees and evergreens at the direction of the Landscape Architect and in accordance with standard horticulture practice to preserve the natural character of the plant.

d. In general, tree pruning requires removing 1/4 to 1/3 of the leaf bearing buds. Prune multiple leader plants to preserve the leader which best promote the symmetry of the plant. Do not apply paint to pruning marks.

8. Care of Existing Trees

a. Selectively prune existing trees in construction limits as required, at the direction of the Landscape Architect. Remove shoots, dead, rubbing and damaged branching.

b. Clean up miscellaneous organic debris within construction limits and dispose of legally off-site.

9. Clean-up

a. The Landscape Contractor shall store materials and equipment, during landscape work, where directed by the landscape architect.

b. The Landscape Contractor shall thoroughly clean the project area daily during the progress of work and upon completion of the work.

c. Landscape Contractor shall keep pavement clean and all work areas and adjoining areas in an orderly condition. The Landscape Contractor shall remove and clean any excess dirt or mud left on the streets adjacent to the site as a result of this work daily. The Landscape Contractor shall be liable for any future charges incurred to clean streets affected by his work.

d. No storing of rubbish or debris will be allowed on the site.

e. No debris shall be buried at the site.

f. No landscaping debris is allowed on the site dumpsters.

g. The Landscape Contractor shall protect the property of the owner and the work of other contractors.

h. The Landscape Contractor shall be directly responsible for all damage caused by the Landscape Contractor's activities and shall remove and properly dispose of all resultant dirt, rubbish, debris and other waste materials resulting from the work daily.

10. Inspections

In addition to normal progress inspections, the Landscape Contractor shall schedule and conduct the following inspections, giving the Landscape Architect at least 48 hours prior notice of readiness for inspection.

a. Inspection of plants and containers prior to planting.

b. Inspection of plant locations to verify compliance with the current revisions of the Landscape Plans and As-Built Drawings.

c. Preliminary acceptance inspection after completion of planting. Schedule this inspection sufficiently in advance and in cooperation with the Landscape Architect so that the inspection may be conducted in a timely manner.

d. Final acceptance inspection at the end of the maintenance period provided that all previous deficiencies have been corrected.

e. All other inspections necessary for replacement warranty work and completion of the project.

**I. Maintenance and Monitoring**

1. Traditional Landscaping: Landscape Contractor shall maintain all planting, starting with the planting operations and continuing until all planting for that portion of the project is complete and through preliminary acceptance in writing from the Landscape Architect.

a. Maintenance of plants and planting beds shall include resetting plants to proper grades or upright position, restoring planting saucers, tightening and repair of guy wires and stakes, weeding, cultivating, pruning, application of appropriate insecticides and fungicides necessary to keep the plant materials in a healthy growing condition and to keep the planted areas neat and attractive.

b. Maintenance of lawn areas shall be as specified, including spot weeding, mowing, application of weed and insect controls and reseeding necessary to promote proper establishment the lawn areas.

c. Contractor shall water all sod and plantings for the first two weeks following installation.

2. Native Planting Areas: The Owner shall notify the City upon completion of plantings. The Owner's Environmental Specialist shall inspect the plantings and provide the City with a copy of the planting locations, species, and quantities for verification by applicable regulatory authority.

a. Native planting areas shall be maintained as specified below, continue for the three full (3) years after preliminary installation acceptance, and meet annual establishment performance criteria:

i. First Season - With the exception of the emergent area, native seeding areas should be mowed to a height of 6" to control annual nonnative and invasive species early in the growing season. Mowing, including weed whipping, should be conducted during prior to weed seed production. Mowing height and timing may need to be adjusted per target species. Small quantities of undesirable plant species, shall be controlled by hand pulling prior to the development and maturity of the plant. Hand removal shall include the removal of all above-ground and below-ground stems, roots and flower masses prior to development of seeds. Herbicide should be applied as necessary by a trained and licensed operator that is competent in the identification of native and nonnative herbaceous plants. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

ii. Second Season - Control of undesirable plant species during the second growing season shall consist primarily of precise herbicide application. Mowing and weed whipping shall be conducted as needed during the early growing season and as needed to a height of 6 to 8 inches to prevent annual weeds from producing seed. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

iii. Third Year - Seasonal mowing and herbicide will continue as above but should be reduced over time. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary. At the completion of the third growing season (dependent on fuel availability; dominance of graminoid species; and favorable weather conditions), fire may be introduced to the planted areas as a management tool.

b. General performance criteria is outlined below. Contractor is responsible to ensure native areas meet Federal, County and local requirements as necessary.

i. 1st Full Growing Season: 90% of cover crop shall be established. There shall be no bare areas greater than two (2) square feet in seeded areas. At least 25% of vegetation coverage shall be native, non-invasive species. At least 50% of the emergent species, if planted as plugs shall be alive and apparent.

ii. 2nd Full Growing Season: All areas with the exception of emergent zones shall exhibit full vegetative cover. At least 50% of the vegetation coverage shall be native, non-invasive species.

iii. 3rd Full Growing Season: At least 75% of vegetation coverage shall be native, non-invasive species. Non-native species shall constitute no more than 25% relative aerial coverage of the planted area. Invasive species for this project shall include the following: Ambrosia artemisiifolia & trifida (Common & Giant Ragweed), Cirsium arvense (Canada Thistle), Dipsacus laciniatus (Cut-leaved Teasel), Dipsacus sylvestris (Common Teasel), Lythrum salicaria (Purple Loosestrife), Melilotus sp. (Sweet Clover), Phalaris arundinacea (Reed Canary Grass), Phragmites australis (Giant Reed), Fallopia japonica (Japanese Knotweed), Rhamnus cathartica & frangula (Common & Glossy Buckthorn), Typha sp. (Broadleaf, Narrowleaf, and Hybrid Cattail) Lonicera sp. (Honeysuckle).

c. Long Term Wetland and Prairie Management/Maintenance

A Long -Term Operation and Maintenance Plan is included in the Home Owner's Association covenants with guidelines and schedules for burning, mowing, application of herbicide, debris/litter removal and inspection schedule for storm structures and sediment removal.

i. State and local permits shall be required prior to controlled burning. Burning shall be conducted by trained professionals experienced in managing smoke in urban environments. Prior to a controlled burn, surrounding property owners as well as local fire and police departments shall be notified. A burn plan detailing preferred wind direction and speed, location of fire breaks, and necessary personnel and equipment shall be prepared and utilized in planning and burn implementation.

ii. The initial burn shall be dependent on fuel availability which is directly related to the quantity and quality of grasses contained within the plant matrix. Timing of the burn shall be determined based on results of the annual monitoring indicating species composition of the management area and other analysis of management goals. Generally, burns shall be scheduled from spring to fall on a rotational basis. Burn frequency shall also be dependent on the species composition within the management area. Generally, a new prairie restoration area shall be burned annually for two years after the second or third growing season after planting and then every 2-3 years thereafter, burning 50-75% of the area.

iii. Owner to provide all supplemental watering and proper care and maintenance of all plant materials, seed and sod areas (except for native planting areas) after preliminary acceptance of the Landscape Contractor's work.

**J. Preliminary Acceptance**

1. When the preliminary landscape work is completed, including maintenance, the Landscape Architect will, upon request, make a preliminary inspection of initial installation to determine acceptability.

2. The inspection for preliminary acceptance of the initial installation will be for general conformance to establishment of turf areas, specified size, character and quality of plant materials, workmanship and maintenance and shall not relieve the Landscape Contractor of responsibility for full conformance of the contract documents, including correct species.

3. It shall be the responsibility of the Landscape Contractor to verify all work is completed for the initial installation and maintained as per plan prior to notifying the Landscape Architect for preliminary inspection.

4. For preliminary acceptance of the initial installation all plant material shall be in a healthy growing condition. Any plants, lawn areas, workmanship, etc. not meeting the standards will be rejected and the Landscape Contractor will be instructed to make the necessary corrections immediately before preliminary acceptance of the initial installation will be granted.

5. Seeded areas will be inspected for acceptance after the first mowing by the Landscape Contractor and will be satisfactory provided requirements, including maintenance, have been complied with and a uniform healthy close stand of the specified grass is established, free of weeds, bare spots exceeding 5 by 5 inches, undesirable grass species, disease, insects and surface irregularities.

6. Sodded areas will be inspected for acceptance after the first mowing by the Landscape Contractor and will be satisfactory provided requirements, including maintenance, have been complied with and when all areas show a uniform stand of the specified grass in a healthy, well-rooted, even-colored, viable lawn condition, free of weeds, undesirable grass species, open joints, bare areas, disease, insects and irregular surfaces.

7. The Landscape Contractor shall assume liability for the correction of his work and liability for any other charges incurred due to the correction of his work. The cost of follow-up inspections of the initial installation required to receive acceptance will be charged to the Landscape Contractor.

8. Upon the receipt of written acceptance of the preliminary inspection of the initial installation the Owner will be responsible for maintenance.

9. The warranty period will begin upon receipt of written acceptance of the preliminary inspection for initial installation from the Landscape Architect.

10. After preliminary acceptance of the initial installation and receipt of notification in writing from the Landscape Architect, the Landscape Architect will recommend the release of payment, less retainers deemed necessary by the Owner, for the completed work.

11. The release of all fees will be at the discretion of Lennar upon receipt of written invoice from the Landscape Contractor.

**K. Warranty Agreement**

1. The Landscape Contractor shall provide a replacement warranty for all plant material and shall guarantee all work free of any defect in quality or workmanship for a minimum period of one (1) year or until final inspection and written acceptance by the Landscape Architect.

a. Warranties of native plantings are excluded from this section and shall conform to the specified establishment performance criteria.

2. The warranty period will be from the date of the Landscape Architect's written preliminary acceptance of the initial installation and will continue through the end of the following years growing season upon the final inspection and written acceptance of the work.

3. The warranty shall provide against defects including death, unsatisfactory growth, and provides the material to be in good, healthy and flourishing condition, except for defects resulting from neglect by the owner, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Contractor's control. For verification of such defects, neglect, abuse or damage by others the Landscape Contractor must notify the Landscape Architect in writing immediately upon identifying said occurrences.

4. Annual increases in the size of required replacements shall serve to maintain the continuity of the landscape design. At the time of the scheduled replacements, the required landscape replacement material shall be increased in size from the original plan to match the new growth size of the surrounding plants.

5. The Landscape Contractor shall make as many periodic inspections as necessary, at no extra cost to the Owner during the warranty period to determine what changes, if any, should be made to the Owner's maintenance program. The Landscape Contractor shall submit, in writing to the Landscape Architect, any recommended changes.

6. During the warranty period, should the appearance of any plant die, indicate weakness and/or probability of dying, the Landscape Contractor shall immediately begin replacement of said plants with new and healthy plants of the same type and size as soon as weather conditions permit and within a specified planting period after notification of such occurrences from the Landscape Architect without additional cost to the Owner.

7. The Landscape Contractor shall make all necessary repairs of damage due to plant replacements. Such repairs shall be done at no extra cost to the Owner.

8. Replacements shall be in accordance with and subject to all requirements of landscape installation, mulching, maintenance, warranty and acceptance procedures.

9. The Contractor is responsible for the watering and maintenance necessary to ensure establishment of the replacement plants until the Landscape Architect inspects the replacement plants and issues preliminary acceptance in writing.

10. The Landscape Contractor, prior to notifying Landscape Architect for preliminary acceptance, shall maintain the replacement plants for a period of 45 days at no additional cost to the owner.

11. The Landscape Contractor shall notify the Landscape Architect in writing, upon completion of replacements and extended maintenance period, for preliminary acceptance and written notification of new warranty period.

12. The Landscape Contractor, upon written preliminary acceptance of the replacements, shall warranty all replacements until the end of the following growing season and written final acceptance. The Landscape Contractor shall notify the Landscape Architect in writing at the end of the warranty period of replacement plants for final inspection and acceptance.

13. The Landscape Contractor shall remove tree wrapping, tree guy wires, stakes and tags from all established plants prior to contacting the Landscape Architect for final acceptance inspection. Tags, tree wrap, guy wires and stakes shall remain on all replacements until completion of additional warranty period.

14. All subsequent inspections required due to unacceptability of the replacements will be at the cost of the Contractor.

**L. Final Acceptance**

1. Inspection of all work will be made by the Landscape Architect at the end of the warranty periods upon written request of the Landscape Contractor.

2. The Landscape Architect shall prepare and submit, to Lennar and the Landscape Contractor, a list of warranty replacement items to be completed before final acceptance shall be deemed to have occurred. The failure to include any items on such list does not alter the responsibility of the Landscape Contractor to complete all work in accordance with the contract.

3. The Landscape Contractor shall complete all warranty replacement work as deemed necessary by the Landscape Architect, shall verify completion of all work required to satisfy the contract and shall notify the Landscape Architect upon completion of all work for review and final acceptance.

4. The Landscape Architect will perform a final inspection of the completed work with the Landscape Contractor and a representative from Lennar. At that time if all work is satisfactory, a written statement will be issued by the Landscape Architect that will constitute final acceptance of completed work to date.

5. After the final inspection and acceptance of the work, the Landscape Architect will notify Lennar in writing and will recommend release of fees in retention for the completed work, except for retention fees deemed necessary by Lennar and the Landscape Architect for work still under additional warranty.

6. The Landscape Architect will make a follow-up inspection of all additional warranty replacements at the written request of the Landscape Contractor and issue a written report accepting satisfactory completion of the warranty obligations and request release of the remaining retention fees.

7. The release of all retention fees will be at the discretion of Lennar after receipt of written notification from the Landscape Architect and upon receipt of written invoice from the Landscape Contractor.

8. The written final acceptance of all work following any necessary replacements shall terminate the Landscape Contractor's plant warranty period.

## II. DAMAGES: STREET AND SITE

1. The Landscape Contractor shall be responsible for any damages to streets, curbs or site improvements as a result of his work or his employees. The Landscape Contractor shall be responsible for any future charges resulting from the repair/replacement of damage.

2. Curb damage will be billed to the contractor at fault at a rate of $25.00/lineal foot with a ten foot minimum

3. Subcontractor shall not park on any asphalt or concrete driveways at any time. Violators will be fined $500 per occurrence.

## IV. TRADITIONAL LANDSCAPE MAINTENANCE

**A. Turf Maintenance**

1. Mowing

a. All litter (i.e. paper, cans and bottles) will be removed from turf and plant bed areas prior to mowing.

b. All lawn areas will be mowed weekly to a height of 3" from April through November, or as needed. No more than 1/3 of the grass blade is to be removed per cutting. Mowing height may be seasonally adjusted depending upon weather conditions in order to reduce stress and promote healthy turf.

c. Mowing patterns shall be altered on a weekly basis wherever possible. Mowing patterns shall create straight lines for a more manicured appearance.

d. Clippings shall be bagged and removed when clipping buildup is such that the excess clipping lay in an unsightly matted condition on the lawn.

e. The turf shall be cut in such a manner as to avoid blowing clippings toward structures, patios, air conditioners, and planting beds.

f. If the turf could potentially be damaged by equipment due to weather, mowing should not be performed.

g. Turf bordering vertical surfaces such as foundations, fences, and utility boxes shall be trimmed to match the mowing height.

h. Clippings shall be removed from all pavement areas.

2. Edging

a. Turf areas adjacent to walks, driveways and curbing will be mechanically edged monthly in a uniform manner.

b. Shrub beds and tree rings shall be neatly and uniformly edged twice per year; once during the spring cleanup, and again in August or September weather permitting.

3. Fertilizer & Weed Control

a. Pesticides must be applied by a licensed individual.

b. Notice shall be given to the homeowners association or owner's representative 1 week prior to any pesticide application.

c. The lawn shall be fertilized three (3) times with a high quality granular or liquid formula. The applications should be made approximately in April, May and September. Timing, frequency and rate of application shall be adjusted to meet the development's current needs and conditions

d. A pre-emergent weed control application for annual grass prevention shall be incorporated into the first turf fertilization in spring.

e. The entire turf area will be treated one (1) time with a post emergent broad leaf weed control at the appropriate time of year. Spot treatment should be done as necessary.

f. Flags shall be posted throughout the community following each fertilizer application. Remove flags once the application is dry or as directed by the product's label.

**B. Planting Bed Maintenance**

1. Pruning

a. Trees, shrubs and evergreens should be pruned, trimmed or sheared at the appropriate time for each species to maintain the plant's proper form. Methods and timing shall conform to standard horticultural practices. The initial spring pruning will include:

1. Removal of dead or injured limbs.

2. Removal of branches that are touching structures.

3. Shaping and internal thinning of the plant to allow for its natural form and habit.

b. Shrubs will be pruned two (2) additional times at the appropriate time so as not to interfere with flowering.

c. Trees over 6" in diameter will not be pruned other than removal of low branches hazardous to pedestrian traffic and sucker growth which may occur.

d. Groundcovers should be pruned twice during the season to maintain a neat appearance.

e. Ornamental grasses should be trimmed during the spring cleanup.

f. All pruning debris shall be removed from the site by the contractor immediately after the work is complete.

2. Fertilizer & Weed Control

a. Pesticides must be applied by a licensed individual.

b. Notice shall be given to the homeowner's association 1 week prior to any pesticide application.

c. Pre-emergent weed control shall be applied at the beginning of the growing season.

d. Post emergent applications or hand pulling shall be used on any weeds that appear throughout the season.

e. Trees, shrubs and groundcover shall be fertilized one (1) time during the season. The application rate will be determined by the specific needs of the plant material.

**C. Spring & Fall Cleanup**

1. Spring Cleanup

a. Lawn areas and planting beds will be raked as necessary to remove leaves, dead branches, litter and debris.

b. All mulch beds shall be cultivated to break up any existing compaction in the mulch.

c. Fresh mulch should be applied to any bare spots in the planting beds.

d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.

e. Debris generated during the cleanup shall be disposed of legally off site.

2. Fall Cleanup

a. All lawn areas will have leaves removed either by raking or through the mowing process so as to prevent leaf buildup on the turf on a weekly basis.

b. All planting beds will have leaves and debris removed at the end of the season.

c. Perennials without winter interest shall be cut back.

d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.

e. Debris generated during the cleanup shall be disposed of legally off site.

## IV. PERSONAL CONDUCT / SAFETY

1. Consumption of alcoholic beverages or drugs on the job site is strictly prohibited.

2. Any offensive or obnoxious behavior (loud radio, profanity, etc.) is strictly prohibited.

3. Reckless operation of vehicles or equipment by Subcontractor's employees while in the subdivision will not be tolerated.

4. Hard hats to be worn by all employees at all times.

5. Failure to comply with Lennar's Safety Policy, OSHA or any other presiding safety institution could result in fines starting at $100.00 per occurrence.

6. Subcontractor to provide a competent person trained in OSHA requirements on site at all times.

Landscape Contractor Name _____

Landscape Contractor Company_____

Landscape Contractor Signature_____ Date_____

GR WA
GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

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