#2021-00191
Redwood USA Final PUD/Plat
Project Review for Planning and Zoning Commission

Meeting Date:	March 2, 2022
Request:	1. Final Planned Unit Development for a 304-unit residential rental townhome development; and 2. Final Plat of Subdivision for a 3-lot subdivision.
Location:	Part of 1120 Central Park Drive
Acreage:	48 acres
Zoning:	R-3B PUD – Multi-Family Residential Planned Unit Development
Surrounding Properties:	North: RE – Residential Estate South: R-3B PUD – Multi-Family Residential Planned Unit Development East: R-3 – Multi-Family Residential (Cary) West: B-2 – General Commercial Planned Unit Development
Staff Contact:	Katie Rivard (815.356.3612)

Background:

- The proposed development is located at the northern portion of the multi-family area of the original Lutter Center PUD.
- The Lutter Center PUD and annexation agreement allowed for 600 townhome units on the 67-acre R-3B PUD property. In 2020, the agreement was amended to allow a 280-unit apartment development on the southern 19 acres.
- The petitioner is proposing a residential rental community consisting of 304 ranch townhome units. A Preliminary PUD and Preliminary Plat Subdivision was approved in July 2021.
- The Final PUD is in substantial conformance with the approved Preliminary PUD.
- Variations were approved with Preliminary PUD for front yards setbacks along Central Park Drive, growth management allowance and to allow two freestanding signs with a variation for height and area for one sign.

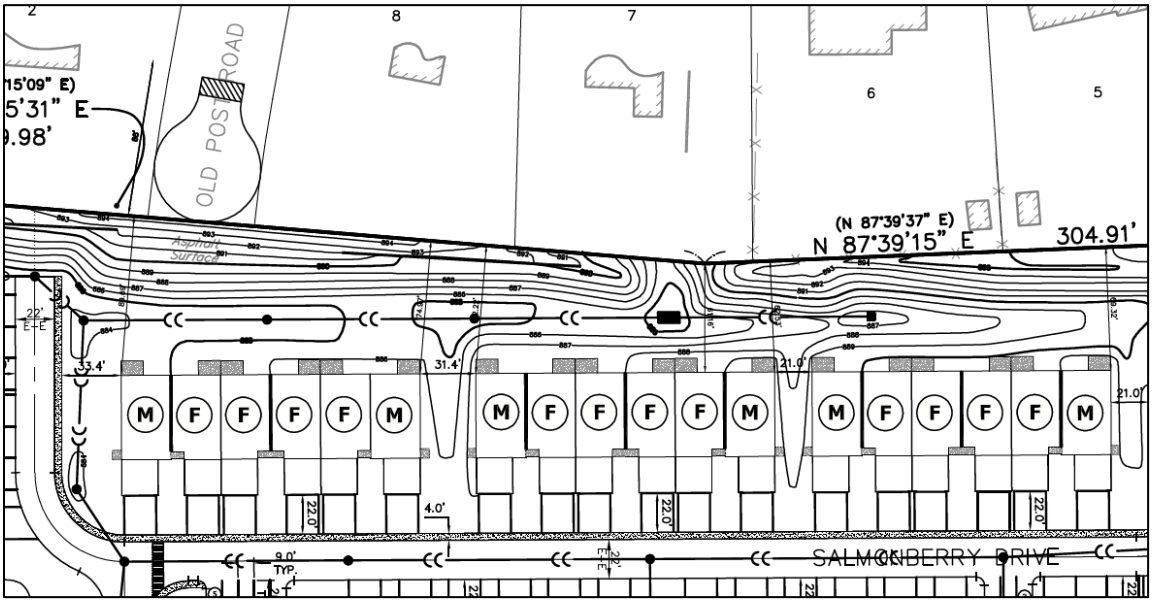
Development Analysis:

LAND USE/ZONING

- The site is currently zoned R-3B PUD – Multi-Family Residential Planned Unit Development. This is the appropriate zoning district for a rental townhome development.
- The current Comprehensive Plan land use designation is High Density Residential. This is the appropriate land use designation for a rental townhome development.
- The property was previously granted Preliminary PUD for 600 townhome units on the full 67 acres. This approval was also grant through an annexation agreement, which is valid through 2025 and was extended through a development agreement to 2030.

SITE

- The proposed development would consist of pods of ranch townhome style units. The pods would range from three to six attached units. There would be a total of 304 units (decreased from 305).
- The development complies with the dimensional requirements of the R-3B zoning district with the exception of the front yard setback.
    - The townhomes that front Central Park Drive received a Variation with Preliminary PUD for a reduced setback of 25 feet instead of the 30-foot district standard. The Petitioner has increased the setback to 26 feet.
    - The setbacks for some of the buildings along the north property line have increased by approximately 10 feet providing additional separation from the adjacent single-family residences.



- The proposed impervious surface coverage is 52.4%, which meets the zoning district requirement of 65%. There has been no changes to the proposed impervious surface coverage.
- The proposed net density is 6.35 (decreased from 6.73) dwelling units per acre for the rental townhome community. The R-3B zoning district allows for 9 dwelling units per acre.
- There are proposed parklets throughout the site which will provide open space for the residents. The parklets include gazebos, benches and little library boxes.
    - The petitioner has provided additional paths and benches throughout each of the parklets. The new paths will connect to the sidewalks. The petitioner will also provided a historic sign in the Central Neighborhood Parklet.

PARKING

- Per the UDO, 687 parking spaces would be required, the petitioner is providing the following parking options for a total of 1,304 parking spaces (decreased from 1,310):
    - Each unit has a 2-car garage
    - Each unit has a 22-foot (increased from 21 feet) "driveway" for guest parking
    - An additional 88 (decreased from 90) guest parking spaces are located along the interior community drive aisles near the open spaces and mail kiosks

SITE LAYOUT – ACCESS

- Central Park Drive would be extended to the edge of the property line and connect to the current stubs.
- The interior community drive aisles are constructed of concrete and include a carriage walk. The total width of the community drive aisles are 26 feet to comply with the requirements of the Fire Rescue Department.
- The interior drive aisles would be posted with "No Parking" signs. Guest parking is provided in the driveways and guest parking spaces throughout the development.
- Sidewalks and paths are proposed throughout the site. The sidewalk crossings over the internal drive aisles are designated with striping to increase the visibility of the crossings.
    - Additional crosswalks were added throughout the site.
- The townhome units are rentals and are not individually parceled like a traditional townhome. Therefore, the interior drive aisles are functioning like a parking lot drive aisle.
- A traffic impact study was completed by Sam Schwartz. The study found that the intersection of Central Park Drive, Lutter Drive and the entrance to the Walmart warrants improvements currently. Improvements to the Three Oaks Road and Lutter Drive intersection are also warranted. The City is planning traffic signals at both intersections. The development would need to provide their proportionate share of the improvements.

LANDSCAPING

- The townhome buildings are accented with foundation landscaping which includes shrubs and perennials. Trees are proposed along the drive aisles and between driveways.
- Street trees are provided along Central Park Drive.
- The petitioner is providing a 20-foot landscape buffer along the north property line and proposed added trees along the east property line for screening. The UDO does not require a landscape buffer between multi-family and attached single-family residential properties.
    - Additional evergreen and shrubs were added at the end of the drive aisles along the east property line for screening of headlights.
    - The existing trees along the north and east property lines will not be preserved as they were identified as either invasive or in poor quality.

BUILDING ELEVATIONS

- The buildings are single-story and there are five model styles.
- The proposed color scheme is similar to The Springs by Continental Properties to the south. The complementary colors create a cohesive neighborhood design.
- The buildings fronting Central Park Drive have front elevations facing the street and the garage access is in the rear. This creates a pedestrian friendly feel to the street.
- The proposed elevations meet the design criteria for multifamily residential.
    - The petitioner is providing pergolas to the rear elevations on multiple units to help break up the long expanse of the 5-6 unit buildings. There would be 2-3 pergolas per building, depending on building length.
- The proposed building materials are stone and vinyl siding.
- The proposed architecture includes the following architectural accents:
    - Dormers;
    - Porch columns in the Craftsman's style;
    - Thick window trim;
    - Varying styles of vinyl siding (horizontal and shake siding);
    - Band boarding;
    - Decorative garage doors in varying styles;
    - Decorative gable vents; and
    - Varying window sizes.

SIGNAGE

- There are two proposed freestanding signs for the development. A variation was approved with Preliminary PUD to allow two freestanding signs with a variation for the Main Entrance sign for height and area. The sign information is listed below.

Sign	Quantity	Height	Area	Base
UDO Standard	1	4 ft.	16 square feet	Solid base at a minimum of 80% of the sign width
Main Entrance Freestanding Sign		**Variation** – 5.40 ft.	**Variation –** 40 square feet	**Meets** – over 100%
North Entrance Freestanding Sign	**Variation**	**Meets –** 3.9 ft.	**Meets –** 12.51 square feet	**Meets** – over 100%

Findings of fact:

PRELIMINARY PLANNED UNIT DEVELOPMENT
The following is a synopsis of the conditions of approval from the Preliminary PUD and the status of their completion.

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Redwood USA LLC, dated 04/13/2021, received 04/20/2021)
   B. Plat of Survey (Cemcon, Ltd, dated 04/15/2021, received 04/20/2021)
   C. Preliminary Plat of Subdivision (Cemcon, Ltd, dated 06/11/2021, received 06/16/2021)
   D. Preliminary Site Plan (Cemcon, Ltd, dated 07/15/2021, received 07/16/2021)
   E. Preliminary Engineering Plan (Cemcon, Ltd, dated 06/11/2021, received 06/16/2021)
   F. Sight Line Exhibit (Cemcon, Ltd, dated 06/11/2021, received 06/16/2021)
   G. Preliminary Stormwater Management Report (Cemcon, Ltd, dated 06/18/2021, received 06/18/2021)
   H. Preliminary Sign Plan (CT Consultants, dated 04/30/2021, received 06/16/2021)
   I. Preliminary Landscape Plan (CT Consultants, dated 04/30/2021, received 06/16/2021)
   J. Colored Renderings (MPG Architects, dated 04/16/2021, received 06/16/2021)
   K. Preliminary Elevations (MPG Architects, dated 06/16/2021, received 06/16/2021)
   L. Preliminary Tree Survey (Gary R Weber Associates, Inc., dated 05/26/2019, received 06/16/2021)
   M. Traffic Study (Sam Schwartz Engineering, dated 06/16/2021)

No comment necessary. This is just the notation of the approved plans.

2. Landscape Plan/Tree Survey:
   A. Provide a list of quantities and species for the final landscape plan that comply with the minimum sizing requirements of the UDO. **Provided.**

B. Provide quantities of trees on the Tree Survey. Based on the quantities of trees and the Tree Preservation Section of the UDO, additional trees may be required. **Provided.**
C. Preserve the existing tree line along the north and east property lines to keep the natural buffer and supplement the area with new tree and shrub planting to enhance the proposed landscape buffers. **The existing trees cannot be preserved as they were identified as either invasive or in poor quality.**
D. Add shrubs and evergreen trees at the end of the drive aisles along the eastern property line for screening of headlights. **Provided.**

3. Architecture:
   A. Work with staff on a way to break up the long rear facades of the five and six unit buildings. **OK.**
   B. Utilize premium vinyl siding, long runs and a thickness of .044 or greater to reduce waving/warping. **OK. Noted on the Architectural Plans.**

4. Site Plan:
   A. Work with staff to incorporate additional amenities to the parklets. **Provided.**
   B. Provide a sidewalk access from the townhomes fronting Central Park Drive to the public sidewalk along Central Park Drive. **Provided.**
   C. Provide a plat of dedication/vacation for the portion of right-of-way for Central Park Drive at the proposed connection location with approval from Continental Properties. **No longer needed.**

5. Work with staff to finalize easement locations for municipal utilities and resolve any conflicts between easements and landscaping. **OK.**

6. Provide a photometric and lighting plan for Final Planned Unit Development that complies with the lighting requirements of the UDO. **Provided. The plan meets the UDO requirements.**

7. The internal drive aisles shall be posted with "No Parking" signs. **This will remain a condition of Final PUD.**

8. Continue to work with the Fire Rescue Department on the design of the sprinkler system for the buildings or fire wall option. **This will remain a condition of Final PUD.**

9. Traffic/Future Roadway Improvements:
   A. The petitioner must contribute their proportionate fair share of the construction costs for the improvements to Central Park Drive/Lutter Drive (6.2% @ $21,700), IL Route 31/James R. Rakow Road/Central Park Drive (2% @ $7,000) and Three Oaks Road/Lutter Drive/Sands Road (4.3% @ $86,693) based on the projected traffic volume increase for the proposed development as determined by the traffic impact study dated 16 June 2021 by Sam Schwartz. **OK. This will remain a condition of Final PUD.**
   B. The petitioner shall provide a Letter of Credit, Bond or Escrow payment for its share of the above mentioned improvements. Cost participation for off-site improvements will be

calculated once final cost estimates have been provided based on the recommendation of the City's traffic engineering consultant as approved by the City's Director of Public Works. In the event that the final cost sharing amount is not determined prior to the time the petitioner is issued a building permit for the site, the petitioner shall provide a Letter of Credit, Bond or Escrow payment in an amount reasonably estimated by the Director of Public Works, by the issuance of a certificate of occupancy for any building on the site. Notwithstanding the foregoing, in the event that the petitioner executes an agreement (which shall be in a form reasonably satisfactory to the Director of Public Works and the City Attorney) to be recorded against the site that ensures the payment of the final cost-sharing amount by the petitioner or petitioner's successor in ownership, the requirement for a Letter of Credit, Bond or Escrow payment shall be waived. **OK. This will remain a condition of Final PUD.**

10. The petitioner shall address all of the review comments and requirements of the Community Development, Public Works, Police and Fire Rescue Departments, as well as the City's stormwater consultant, Christopher B. Burke Engineering and traffic consultant, Sam Schwartz Engineering. **This will remain a condition of Final PUD.**

FINAL PLANNED UNIT DEVELOPMENT

The petitioner is requesting approval of a Final Planned Unit Development to allow a new 304-unit rental townhome development. A Planned Unit Development is a Special Use and Special Uses require separate review because of their potential to impact surrounding properties and the orderly development of the City.

Section 2-400 B General Standards for all special uses in the Unified Ordinance establishes standards for all special uses in Crystal Lake. Briefly, the criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.
   ☐ *Meets* ☐ *Does not meet*

2. The use will not be detrimental to area property values.
   ☐ *Meets* ☐ *Does not meet*

3. The use will comply with the zoning districts regulations.
   ☐ *Meets* ☐ *Does not meet*

4. The use will not negatively impact traffic circulation.
   ☐ *Meets* ☐ *Does not meet*

5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.
   ☐ *Meets* ☐ *Does not meet*

6. The use will not negatively impact the environment or be unsightly.
   ☐ *Meets* ☐ *Does not meet*

7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.
   ☐ *Meets* ☐ *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.
   ☐ *Meets* ☐ *Does not meet*

9. The use will conform to any conditions approved as part of the issued Special Use Permit.
   ☐ *Meets* ☐ *Does not meet*

10. The use will conform to the regulations established for specific special uses, where applicable.
    ☐ *Meets* ☐ *Does not meet*

FINAL PLAT OF SUBDIVISION

The petitioner is requesting a Final Plat of Subdivision for Redwood of Crystal Lake. The subdivision is a three lot subdivision to divide the 48 acres into three areas for construction, the parcels will remain under common ownership.

a) Promote the health, safety, morals, convenience, order, prosperity and welfare of the present and future inhabitants of the City by providing for the orderly growth and development of the City;
   ☐ *Meets* ☐ *Does not meet*

b) Coordinating streets and roads within proposed subdivisions with the City's planned street system, and with other public facilities;
   ☐ *Meets* ☐ *Does not meet*

c) Providing right-of-way easements for streets and utilities;
   ☐ *Meets* ☐ *Does not meet*

d) Avoiding congestion and overcrowding, and encouraging the proper arrangement of streets in relation to existing or planned streets;
   ☐ *Meets* ☐ *Does not meet*

e) Ensuring there is adequate open space and recreation facilities to serve development;
   ☐ *Meets* ☐ *Does not meet*

f) Ensuring there is proper recordation of landownership records;
   ☐ *Meets* ☐ *Does not meet*

g) Installation of any public improvements including water, sewer, storm sewer or detention, parkway trees, and sidewalks;
   ☐ *Meets* ☐ *Does not meet*

h) Burial of overhead utility lines and all new lines and services in appropriate easements; and

☐ *Meets* ☐ *Does not meet*

i) Ensuring the provision of such other matters as the City Council may deem necessary in order to protect the general health, safety, and welfare of the City

☐ *Meets* ☐ *Does not meet*

Comprehensive Land Use Plan 2030 Vision Summary Review:

The Comprehensive Plan designates the subject property as Urban Residential, which allows for existing and future single-family residential uses. The following goal is applicable to this request:

Land Use - Residential

Goal: Encourage a diversity of high quality housing in appropriate locations throughout the city that supports a variety of lifestyles and invigorates community character.

This can be accomplished with the following supporting action:

Supporting Action: Preserve and enhance the character and livability of existing residential area with architectural and development guidelines. Promote safe, clean and well-maintained housing by encouraging regular repair and maintenance of housing.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Redwood USA LLC, dated 10/15/2021, received 10/20/2021)
   B. Plat of Survey (Cemcon, Ltd, dated 04/20/2021, received 10/20/2021)
   C. Topographic Map (Cemcon, Ltd, dated 04/20/2021, received 10/20/21)
   D. Topographic As-Built Survey for Structure 5 (Cemcon, Ltd, dated 04/20/2021, received 02/11/2022)
   E. Final Plat of Subdivision (Cemcon, Ltd, dated 10/18/2021, last revised 01/03/2022, received 02/11/2022)
   F. Final Site Plan (Cemcon, Ltd, dated 12/22/2021, received 02/11/2022)
   G. Final Engineering Plans (Cemcon, Ltd, dated 12/23/2021, last revised 02/21/2022, received 02/21/2022)
   H. Final Stormwater Management Report (Cemcon, Ltd, dated 10/08/2021, last revised 02/10/2022, received 02/11/2022)
   I. Final Landscape Plan and Sign Plan (CT Consultants, dated 10/16/2021, last revised 01/06/2022, received 02/11/2022)
   J. Tree Survey (Gary R. Weber Associates, dated 05/26/2019, received 06/16/2021)

K. Colored Renderings (MPG Architects, dated 04/16/2021, received 10/29/2021)
L. Capewood Renderings (MPG Architects, dated 09/29/2021, received 10/29/2021)
M. Final Floor Plans and Elevations (MPG Architects, dated 10/05/2021, received 10/20/2021)
N. Final Photometric Site Plan (MPG Architects, dated 10/11/2021, received 10/20/2021)
O. Traffic Study (Sam Schwartz Engineering, dated 06/16/2021)

2. All conditions of approval from Ordinance #7730 remain valid, as applicable.

3. Utilize premium vinyl siding, long runs and a thickness of .044 or greater to reduce waving/warping.

4. If the City finds the landscape to be insufficient along the north and east property lines, the petitioner shall work with staff to provide additional landscaping.

5. The petitioner shall work with staff on the final dimensions, height and design of the proposed historic sign.

6. The internal drive aisles shall be posted with "No Parking" signs.

7. Continue to work with the Fire Rescue Department on the design of the sprinkler system for the buildings or fire wall option.

8. Traffic/Future Roadway Improvements:

   A. The petitioner must contribute their proportionate fair share of the construction costs for the improvements to Central Park Drive/Lutter Drive (6.2% @ $21,700), IL Route 31/James R. Rakow Road/Central Park Drive (2% @ $7,000) and Three Oaks Road/Lutter Drive/Sands Road (4.3% @ $86,693) based on the projected traffic volume increase for the proposed development as determined by the traffic impact study dated 16 June 2021 by Sam Schwartz.

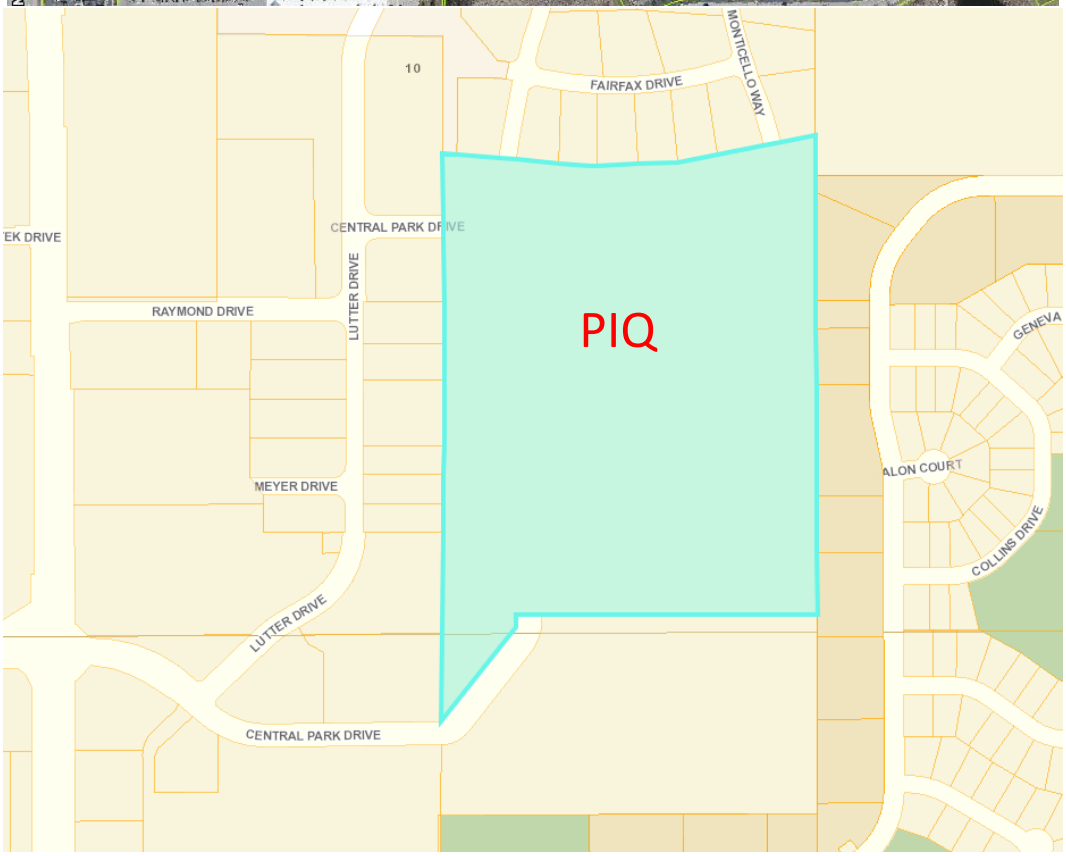
   B. The petitioner shall provide a Letter of Credit, Bond or Escrow payment for its share of the above mentioned improvements. Cost participation for off-site improvements will be calculated once final cost estimates have been provided based on the recommendation of the City's traffic engineering consultant as approved by the City's Director of Public Works. In the event that the final cost sharing amount is not determined prior to the time the petitioner is issued a building permit for the site, the petitioner shall provide a Letter of Credit, Bond or Escrow payment in an amount reasonably estimated by the Director of Public Works, by the issuance of a certificate of occupancy for any building on the site. Notwithstanding the foregoing, in the event that the petitioner executes an agreement (which shall be in a form reasonably satisfactory to the Director of Public Works and the City Attorney) to be recorded against the site that ensures the payment of the final cost-sharing amount by the petitioner or petitioner's successor in ownership, the requirement for a Letter of Credit, Bond or Escrow payment shall be waived.

9. The petitioner shall meet the City Code requirements for public roadways.

10. The petitioner shall address all of the review comments and requirements of the Community Development, Public Works, Police and Fire Rescue Departments, as well as the City's stormwater consultant, Christopher B. Burke Engineering and traffic consultant, Sam Schwartz Engineering.

PIQ MAP – REDWOOD USA LLC
North of 1120 Central Park Drive





City of Crystal Lake
Development Application

Office Use Only
File # PLN-2021-00191

Project Title: Redwood Crystal Lake

Action Requested

- ___ Annexation
- ___ Comprehensive Plan Amendment
- ___ Conceptual PUD Review
- X Final PUD
- ___ Final PUD Amendment
- ___ Final Plat of Subdivision
- ___ Preliminary PUD
- ___ Preliminary Plat of Subdivision
- ___ Rezoning
- ___ Special Use Permit
- ___ Variation
- ___ Other

Petitioner Information

Name: Redwood USA LLC (Kellie McIvor)
Address: 7007 E. Pleasant Valley Road
Independence, OH 44131
Phone:
Fax:
E-mail: kmcivor@byredwood.com

Owner Information (if different)

Name: ChicagoTitle and Trust Land Trust Company as Trustee uner Trust No. 8002363049
Address: 104 S. Wynstone Park Drive
Barrington, IL 60010
Phone: 847-304-4848
Fax:
E-mail: wade@lbandersen.com

Property Information

Project Description: Two-bedroom, 2-bathroom, single-story apartment homes with 2-car attached garges with every home.

Project Address/Location: James R Rakow Rd. behind the Walmart

PIN Number(s): 19-10-476-011

Development Team

Please include address, phone, fax and e-mail

Developer: Redwood USA LLC , Kellie McIvor, 7007 East Pleasant Valley Road, Independence, Ohio 44131; 216-254-8425; kmmcivor@byredwood.com

Architect: James Keys, MPG Architects, 3660 Embassy Parkway, Fairlawn, Ohio 44333; james@mpg-architects.com; 330-666-5770

Attorney: Erin Bowen Welch, Dawda Mann PLC, 39533 Woodward Avenue, Suite 200, Bloomfield Hills, Michigan 48304; 248-642-3903; ewelch@dmms.com

Engineer: Kevin Serafin, CEMCON LTD., 2280 White Oak Circle, Suite 100, Aurora, Illinois 60502; kevins@cemcon.com; 630-862-2100

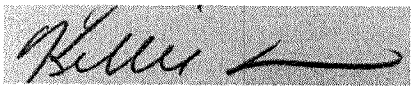
Landscape Architect: Rich Washington, CT Consultants Inc., 8150 Sterling Court, Mentor, Ohio 44060; rwashington@cawrse.com; 440-247-7003

Planner: Mike Schoppe, Schoppe Design Associates Inc., 126 South Main Street, Oswego, Illinois 60543; mike@schoppedesign.net

Surveyor: Kevin Serafin, CEMCON LTD., 2280 White Oak Circle, Suite 100, Aurora, Illinois 60502; kevins@cemcon.com; 630-862-2100

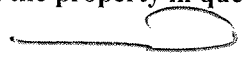
Other: _____

Signatures

Kellie McIvor  11/12/21

PETITIONER: Print and Sign name (*if different from owner*) **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.

 10/15/21

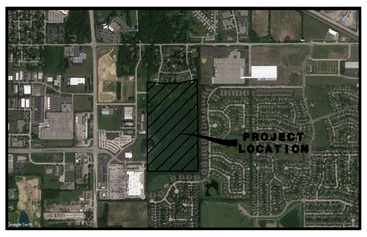
OWNER: Print and Sign name **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

FINAL P.U.D. PLAN

FOR

REDWOOD OF CRYSTAL LAKE



LOCATION MAP



N

60 30 0 60

SCALE: 1 INCH = 60 FEET

PART OF PARCEL INDEX NUMBER
19-10-476-012
CRYSTAL LAKE, ILLINOIS

SITE DATA:

LOT AREA: 47.86± ACRES

INTERNAL ROW: 2.98 ACRES (LOT 5)

UNITS: 304 TOTAL UNITS

UNIT BREAKDOWN:
87 - FORESTWOOD UNITS (29%)
21 - MEADWOOD UNITS (07%)
32 - CAPEWOOD UNITS (10%)
108 - WILLOWOOD UNITS (36%)
56 - HAYDENWOOD UNITS (18%)
304 TOTAL UNITS' = 6.35 UNITS PER ACRE

PHASE 1: 23.03 ACRES
31 - FORESTWOOD UNITS (25%)
03 - MEADWOOD UNITS (02%)
18 - CAPEWOOD UNITS (15%)
44 - WILLOWOOD UNITS (35%)
28 - HAYDENWOOD UNITS (23%)
124 TOTAL UNITS = 5.38 UNITS PER ACRE

PHASE 2: 11.17 ACRES
18 - FORESTWOOD UNITS (22%)
05 - MEADWOOD UNITS (06%)
07 - CAPEWOOD UNITS (08%)
38 - WILLOWOOD UNITS (45%)
16 - HAYDENWOOD UNITS (19%)
84 TOTAL UNITS = 7.52 UNITS PER ACRE

PHASE 3: 13.66 ACRES
38 - FORESTWOOD UNITS (40%)
13 - MEADWOOD UNITS (14%)
07 - CAPEWOOD UNITS (07%)
26 - WILLOWOOD UNITS (27%)
12 - HAYDENWOOD UNITS (12%)
96 TOTAL UNITS = 7.03 UNITS PER ACRE

BUILDING SETBACK: SIDE TO SIDE 20 FT.
REAR TO SIDE 40 FT.
REAR TO REAR 45 FT.
FRONT TO SIDE 60 FT.

PARKING: PROVIDED
GARAGE 608
DRIVEWAY 608
COMMUNITY PARKING 88
TOTAL 1304

LOT COVERAGE: 25.07 AC. 52.4% OF TOTAL

OPEN SPACE: 22.79 AC. 47.6% OF TOTAL

BOTH ACCESS POINTS/ENTRANCES TO BE CONSTRUCTED WITH PHASE 1.

CURBSIDE PICK-UP FOR GARBAGE.

NO ON STREET PARKING.

AREA TABLE		
LOT 1	748,087.66 SQ. FT.	17.17 ACRES
LOT 2	125,291.90 SQ. FT.	2.88 ACRES
LOT 3	486,294.86 SQ. FT.	11.16 ACRES
LOT 4	595,046.88 SQ. FT.	13.66 ACRES
LOT 5 (ROW DED.)	129,942.55 SQ. FT.	2.98 ACRES
TOTAL	2,084,663.85 SQ. FT.	47.86 ACRES

NOTES

LOT NUMBERING HEREON IS CONSISTENT WITH THE PREDEFINED LOT NUMBERING SCHEME FOR THE ENTIRE REDWOOD DEVELOPMENT. THERE IS NO BLOCK 1 AS REQUESTED BY CLIENT.

3/4 INCH IRON PIPE OR MAG NAIL SET AT ALL LOT CORNERS AND POINTS OF CURVATURE UNLESS OTHERWISE NOTED.

ALL MEASUREMENTS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

DIMENSIONS SHOWN ALONG CURVES ARE ARC DISTANCES.

DIMENSIONS ENCLOSED WITH ( ) ARE RECORD DATA. ALL OTHER DIMENSIONS ARE MEASURED.

ALL EASEMENTS ARE HEREBY GRANTED UNLESS OTHERWISE NOTED.

P.E. – INDICATES PUBLIC UTILITY & CITY EASEMENT HEREBY GRANTED. SEE PROVISIONS FOR DETAILS.

BLANKET GENERAL CITY EASEMENT AND UTILITY EASEMENT OVERALL LOT 1, LOT 2, AND LOT 3 WITH AN EXCEPTION OF THE BUILDING ENVELOPE.

B.S.L. – BUILDING SETBACK LINE

THE BEARINGS SHOWN ARE ASSUMED

ALL STORM SEWER WILL BE PRIVATELY MAINTAINED. INCLUDING STORM SEWER WITHIN THE PUBLIC RIGHT OF WAY.

PARCEL DESCRIPTION

PARCEL 1:
LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 10 AND PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 15, ALL IN TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 2, 2020 AS DOCUMENT NO. 2020R0040758, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 2:
NON-EXCLUSIVE DRAINAGE AND DETENTION EASEMENT FOR THE BENEFIT OF PARCEL 1 PURSUANT TO DRAINAGE AND DETENTION EASEMENT AGREEMENT DATED OCTOBER 24, 2005 AND RECORDED NOVEMBER 15, 2005 AS DOCUMENT 2005R0097161, AND THE GRANT OF EASEMENT RECORDED FEBRUARY 2, 2007 AS DOCUMENT 2007R0008218 BY AND BETWEEN LUTTER CENTER, LLC AND WAL-MART REAL ESTATE BUSINESS TRUST.

LINE LEGEND

- SUBDIVISION BOUNDARY LINE (Heavy Solid Line)
- LOT LINE/PROPERTY LINE (Solid Line)
- BUILDING LINE (Long Dashed Lines)
- EASEMENT LINE/LIMITS OF EASEMENT (Short Dashed Lines)
- CENTERLINE (Single Dashed Lines)
- QUARTER SECTION LINE (Double Dashed Lines)
- SECTION LINE (Triple Dashed Lines)
- PHASE LINE/LOT LINE (Heavy Dashed Lines)
- FLOODPLAIN LINE (Heaviest Dashed Lines)

ABBREVIATIONS

N.	- NORTH	L.S.B.	- LANDSCAPE BUFFER
S.	- SOUTH	REC.	- RECORD
E.	- EAST	SEC.	- SECTION
W.	- WEST	L	- ARC LENGTH
NW.	- NORTHWEST	R	- RADIUS
DOC.	- DOCUMENT	R.O.W.	- RIGHT OF WAY
MON.	- MONUMENT	Ac.	- ACRES
O	- ON LINE	S.F	- SQUARE FEET
B-B	- BACK TO BACK	1/4	- QUARTER
B.S.L.	- BUILDING SETBACK	B/C	- BACK OF CURB
E.T.B.E.	- EXCEPTION TO BLANKET EASEMENT	FIP	- FOUND IRON PIPE
		E-E	- EDGE TO EDGE

PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254-8425

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
PH: 630.862.2100 FAX: 630.862.2199
E-Mail: info@cemcon.com Website: www.cemcon.com

DISC NO.: 848008 FILE NAME: FINAL PUD
DRAWN BY: DDD FLD. BK. / PG. NO.: BK./PG.
COMPLETION DATE: 12-22-2021 JOB NO.: 848.008

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PLOT FILE CREATED: 12/28/2021 BY: DAVID DEMAY DRAWING PATH: P:\848008\DWG\ENG\DRAWINGS\EXHIBITS\FINAL PUD.DWG

RED DOGWOOD DRIVE

RED GINGER DRIVE

RED IVY DRIVE

RED OAK DRIVE

RED LILLY DRIVE

RED WILLOW DRIVE

CENTRAL PARK DRIVE

LACEFLOWER DRIVE

RED LILAC DRIVE

MOLET DRIVE

WOODROSE DRIVE

BLACKBERRY DRIVE

SALMONBERRY DRIVE

EAST MONTICELLO WAY

OLD POST ROAD

NORTH NEIGHBORHOOD PARKLET

BENCH ON PAD

MAIL STATION

PAVILLION

SOUTH NEIGHBORHOOD PARKLET

CENTRAL NEIGHBORHOOD PARKLET

2 BENCHES ON PAD

HISTORIC SIGN

LITTLE FREE LIBRARY BOX

MAIN ENTRY SIGN SEE SHEET L-2

TEMPORARY SALES SIGN, SEE SHEET L-2

EXISTING PINES TO REMAIN

EXISTING BASIN

20' LANDSCAPE BUFFER REQUIRED AND SHOWN

SECONDARY ENTRY SIGN SEE SHEET L-2

40' (typ)

SCALE: 1" = 60 '

NORTH

LEGEND

SHADE TREES - 2-1/2" CALIPER
SUMMER SHADE MAPLE, RED SUNSET MAPLE, SKYLINE HONEY LOCUST, FRONTIER ELM, LITTLELEAF LINDEN

ORNAMENTAL TREES - 2-1/2" CALIPER
HAWTHORN, HEDGE MAPLE, MALUS, TREE LILAC

EVERGREEN TREES - 6' HT.
SERBIAN SPRUCE, DOUGLAS FIR, NORWAY SPRUCE, SCOTCH PINE

SHRUBS - LARGE 30"
DENSE YEW, VIBURNUM, BURNING BUSH, WINTERBERRY, JUNIPER, DOGWOOD, LILAC

SHRUBS - SMALL 18"
ITEA, BOXWOOD, JUNIPER, SPIRAEA

GRASSES/PERENNIALS - 1 GAL
DAYLILY, CATMINT, FEATHER REED GRASS, BLACK-EYED SUSAN

BUFFER PLANTINGS AND BERM

LANDSCAPE BUFFER
20' LANDSCAPE BUFFER NORTH PROPERTY LINE

Chapter 650, F1,5b
1,294 LF / 100 = 12.94 MULTIPLIER
Overstory or
evergreen trees (2/100lf) = 26 shown - 26 req
understory trees (6/100lf) = 78 shown - 78 req
shrubs (16/100lf) = 208 shown - 207 req

FINAL

your trusted advisor consultants — engineers architects planners

NO	REVISION	DATE
1	PLANNING COMMISSION COMMENTS	01/06/22

ISSUED FOR:	PRELIM SET
ISSUE DATE:	10/16/21
SCALE:	AS SHOWN
DESIGNED BY:	RW
DRAWN BY:	RW
CHECKED BY:	RW

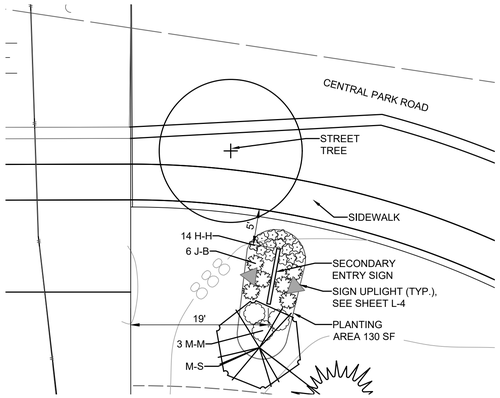
REDWOOD CRYSTAL LAKE, IL

CENTRAL PARK DR.;, CRYSTAL LAKE, IL., MCHENRY COUNTY
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

FINAL SITE LANDSCAPE PLAN

PROJECT NO.	210266
DISCIPLINE	LANDSCAPE
SHEET NAME	L-1
SHEET	1
OF	5

H:\2021\210266\DWG\SHEETS\L_210266-PLANDSCAPES.DWG - L-1 - 2/24/2022 3:13:28 PM - REUBEN SHAW



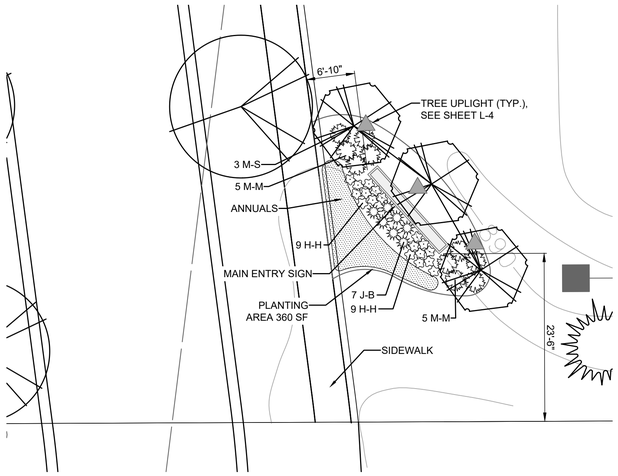
SECONDARY ENTRY PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
14	H-H	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP
6	J-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	18" WIDE	B&B
3	M-M	MISCANTHUS S. 'MORNING LIGHT'	MORNING LIGHT GRASS	CLUMP	CONT.
1	M-S	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2-1/2" CAL.	B&B

SECONDARY ENTRY LANDSCAPE PLAN

1"=10'

NORTH



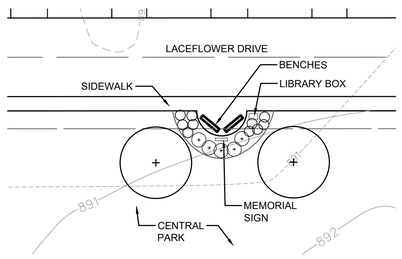
MAIN ENTRY PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
18	H-H	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP
18	J-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	18" WIDE	B&B
5	M-M	MISCANTHUS S. 'MORNING LIGHT'	MORNING LIGHT GRASS	CLUMP	CONT.
3	M-S	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2-1/2" CAL.	B&B

WEST MAIN ENTRY LANDSCAPE PLANS

1"=10'

NORTH



CENTRAL PARK MEMORIAL

SCALE: 1"=20'

NORTH



NOTE: BENCH TO HAVE GREY SLATS AND BLACK LEGS

SITE BENCH



NOTE: BOX TO BE MOUNTED ON 6"X6" POST

LIBRARY BOX



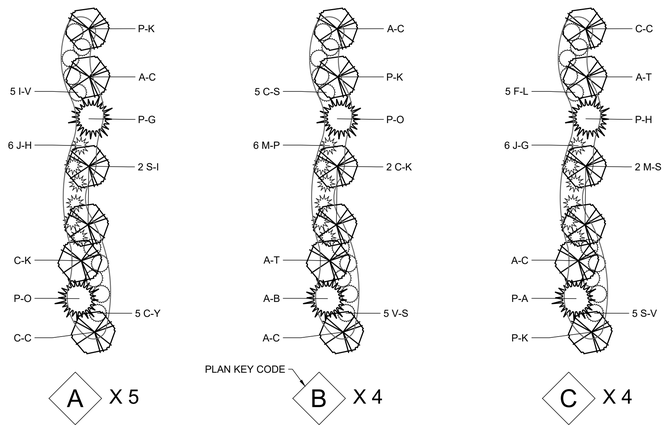
12' X12' PARK PAVILION



NOTES
SIGN SHALL BE A DOUBLE SIDED SIGN PANEL, LOCATED PERPENDICULAR TO THE RIGHT OF WAY.

SECONDARY ENTRY SIGN

NOT TO SCALE



20' BUFFER PLANTING BED MODULES

SCALE: 1"=20'

PLANT MATERIAL LIST

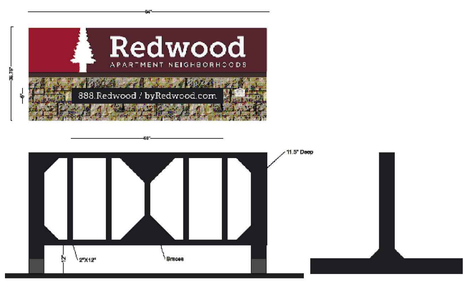
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
SHADE TREES					
16	A-S	ACER PL 'SUMMER SHADE'	SUMMER SHADE MAPLE	2-1/2" CAL.	B&B
40	A-O	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	2-1/2" CAL.	B&B
51	A-R	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	2-1/2" CAL.	B&B
40	G-S	GLEDITSEA I 'SKYLINE'	SKYLINE HONEYLOCUST	2-1/2" CAL.	B&B
41	P-M	PLATANUS ACER. 'MORTON'	EXCLAMATION LONDON PLANETREE	2-1/2" CAL.	B&B
26	Q-R	QUERCUS RUBRA	NORTHERN RED OAK	2-1/2" CAL.	B&B
70	T-G	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2-1/2" CAL.	B&B
57	U-F	ULMUS X 'FRONTIER'	FRONTIER AMERICAN ELM	2-1/2" CAL.	B&B
ORNAMENTAL TREES					
21	A-C	ACER CAMPESTRE	HEDGE MAPLE	2-1/2" CAL.	B&B
8	A-T	ACER TARTARICA	AMUR MAPLE	2-1/2" CAL.	B&B
51	C-K	CRATAEGUS V. 'WINTER KING'	WINTER KING HAWTHORN	2-1/2" CAL.	B&B
26	C-C	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2-1/2" CAL.	B&B
59	M-S	MALUS 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2-1/2" CAL.	B&B
53	P-K	PRUNUS S. KWANZAN	KWANZAN FLOWERING CHERRY	2-1/2" CAL.	B&B
35	S-I	SYRINGA R. 'IVORY SILK'	IVORY SILK TREE LILAC	2-1/2" CAL.	B&B
EVERGREEN TREES					
26	A-B	ABIES CONCOLOR	WHITE FIR	6' HT	B&B
50	P-A	PICEA ABIES	NORWAY SPRUCE	6' HT	B&B
49	P-G	PICEA GLAUCA	WHITE SPRUCE	6' HT	B&B
32	P-H	PINUS HELDREICHII	BOSNIAN PINE	6' HT	B&B
22	P-O	PICEA OMORIKA	SERBIAN SPRUCE	6' HT	B&B
SHRUBS					
65	C-S	CORNUS S. 'CARDINAL'	CARDINAL DOGWOOD	36"	B&B
25	C-Y	CORNUS A. 'BUD'S YELLOW'	BUDS YELLOW TWIG DOGWOOD	36"	B&B
20	F-L	FORSYTHIA X I. 'LYNWOOD GOLD'	LYNWOOD GOLD FORSYTHIA	36"	B&B
52	I-V	ILEX VERTICILLATA	WINTERBERRY	36"	B&B
36	J-G	JUNIPER CH. 'SEA GREEN'	SEA GREEN JUNIPER	24"	B&B
30	J-H	JUNIPER CH. 'HETZII GLAUCA'	HETZ BLUE JUNIPER	24"	B&B
12	J-B	JUNIPER S. 'BROADMOOR'	BROADMOOR JUNIPER	24"	B&B
24	M-P	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	36"	B&B
20	S-V	SPIRAEA X VANHOUTTEI	VAN HOUTTE SPIRAEA	36"	B&B
35	T-D	TAXUS DENSA	DENSE YEW	24"	B&B
50	V-S	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	36"	B&B
PERENNIALS					
24	H-H	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	NO.1	CONT.
60	M-M	MISCANTHUS S. 'MORNING LIGHT	MORNING LIGHT GRASS	NO.2	CONT.



NOTES
1. SIGN SHALL BE DOUBLE SIDED, INTERNALLY ILLUMINATED

MAIN ENTRY SIGN

NOT TO SCALE



TEMPORARY SALES SIGN

NOT TO SCALE

FINAL

engineers
architects
planners
your trusted advisor
consultants

NO	REVISION	DATE
1	PLANNING COMMISSION COMMENTS	01/06/22

ISSUED FOR:	PRELIM SET
ISSUE DATE:	10/18/21
SCALE:	AS SHOWN
DESIGNED BY:	RW
DRAWN BY:	RW
CHECKED BY:	RW

REDWOOD CRYSTAL LAKE, IL
CENTRAL PARK DR., CRYSTAL LAKE, IL, MCHENRY COUNTY
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

ENTRY LANDSCAPE PLANS

PROJECT NO.
210266
DISCIPLINE
LANDSCAPE
SHEET NAME
L-2
SHEET 2 OF 5

MEADOWOOD / FORESTWOOD UNIT A PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
6	HM-PM	HEMEROCALLIS 'PARDON ME'	PARDON ME DAYLILY	#1 CONT.	CLUMP, 18" O.C.
1	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
3	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT	B&B
3	JU-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	15" HT	#3 CONT.
1	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT	#3 CONT.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
3	RU-G	RUDBECKIA HIRTA	BLACK-EYED SUSAN	#1 CONT.	18" O.C.
1	V-C	VIBURNUM O. 'COMPACTUM'	COMPACT EUROPEAN CRANBERRY	18"	#5 CONT.

MEADOWOOD / FORESTWOOD UNIT B PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
3	RO-KO	ROSA 'KNOCK-OUT'	KNOCK OUT ROSE	18" HT.	#3 CONT.
3	SP-NF	SPIRAEA X 'NEON FLASH'	NEON FLASH SPIREA	18"	#3 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

WILLOWOOD UNIT A PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	C-T	CERASTIUM TOMENTOSUM	SNOW IN SUMMER	#2 CONT.	CLUMP, 18" O.C.
12	EU-FC	EUONYMUS FORTUNEI 'COLORATUS'	PURPLELEAF WINTERCREEPER	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
1	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT	#3 CONT.
3	SP-NF	SPIRAEA X 'NEON FLASH'	NEON FLASH SPIREA	18" HT.	#3 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

WILLOWOOD UNIT B PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT	B&B
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT	#3 CONT.
5	SP-LP	SPIRAEA J 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	12" HT.	#3 CONT.
12	V-M	VIBURNUM P.T. 'MARIESII'	MARIES DOUBLEFILE VIBURNUM	30"	B&B

HAYDENWOOD UNIT A PLANT MATERIAL LIST

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
5	C-KF	CALAMAGROSTIS X A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	CLUMP, 18" O.C.
3	C-T	CERASTIUM TOMENTOSUM	SNOW IN SUMMER	#2 CONT.	CLUMP, 18" O.C.
13	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT	#3 CONT.
6	RO-KO	ROSA 'KNOCK-OUT'	KNOCK OUT ROSE	18" HT.	#3 CONT.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	SY-M	SYRINGA 'MEYERI'	PALABIN LILAC	18" HT.	#5 CONT.

HAYDENWOOD UNIT B PLANT MATERIAL LIST

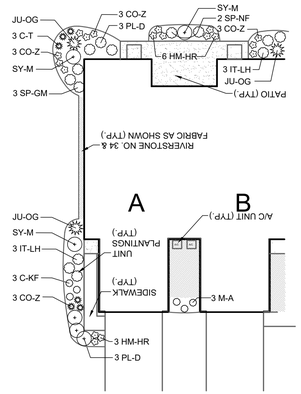
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	BU-GV	BUXUS 'WINTERGREEN'	WINTERGREEN BOXWOOD	18" HT.	#3 CONT.
3	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	HM-HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 CONT.	CLUMP, 18" O.C.
3	IT-LH	ITEA V. 'LITTLE HENRY'	LITTLE HENRY SWEETSPIRE	18" HT.	#3 CONT.
2	JU-OG	JUNIPERUS CH. 'OLD GOLD'	OLD GOLD JUNIPER	15" HT	#3 CONT.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
1	SY-M	SYRINGA 'MEYERI'	PALABIN LILAC	18" HT.	#5 CONT.
1	V-SH	VIBURNUM P.T. 'SHASTA'	SHASTA DOUBLEFILE VIBURNUM	24"	#3 CONT.

CAPEWOOD UNIT A PLANT MATERIAL LIST

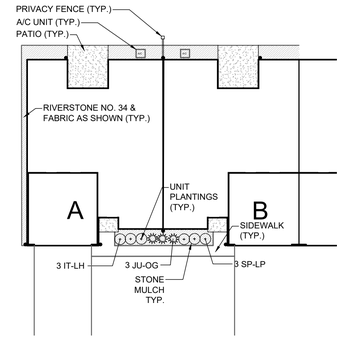
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	CO-Z	COREOPSIS 'ZAGREB'	ZAGREB COREOPSIS	#2 CONT.	CLUMP, 18" O.C.
3	PE-KR	PENNISETUM O. 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#1 CONT.	2' O.C.
1	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	TX-M	TAXUS M. 'DENSIFORMUS'	DENSE YEW	24"	#3 CONT.
4	JU-H	JUNIPERUS SQ. 'HOLGER'	HOLGER JUNIPER	15" HT	B&B

CAPEWOOD UNIT B PLANT MATERIAL LIST

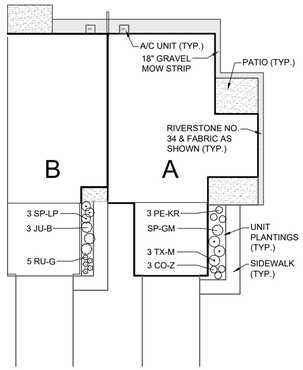
QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
3	JU-B	JUNIPERUS S. 'BROADMOOR'	BROADMOOR JUNIPER	15" HT	#3 CONT.
5	RU-G	RUDBECKIA HIRTA	BLACK-EYED SUSAN	#1 CONT.	18" O.C.
4	SP-GM	SPIRAEA X 'GOLD MOUND'	GOLD MOUND SPIREA	18" HT.	#3 CONT.
3	SP-LP	SPIRAEA J 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	12" HT.	#3 CONT.



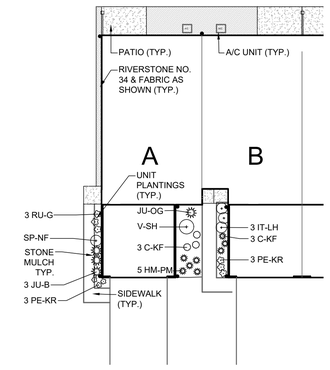
H TYP. HAYDENWOOD LANDSCAPE PLAN



W TYP. WILLOWOOD LANDSCAPE PLAN



C TYP. CAPEWOOD LANDSCAPE PLAN



M F TYP. MEADOWOOD/FORESTWOOD LANDSCAPE PLAN

TYPICAL UNIT LANDSCAPE PLANS

SCALE 1" = 20'

FINAL

engineers
architects
planners
your trusted advisor
consultants

NO	REVISION	DATE
1	PLANNING COMMISSION COMMENTS	01/06/22

ISSUED FOR: PRELIM SET
ISSUE DATE: 10/15/21
SCALE: AS SHOWN
DESIGNED BY: RW
DRAWN BY: RW
CHECKED BY: RW

REDWOOD CRYSTAL LAKE, IL
CENTRAL PARK DR., CRYSTAL LAKE, IL, MCHENRY COUNTY
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

UNIT LANDSCAPE PLANS AND NOTES

PROJECT NO.
210266
DISCIPLINE
LANDSCAPE
SHEET NAME
L-3
SHEET 3 OF 5

SECTION 02900 - LANDSCAPING

PART 1 - GENERAL

A. DESCRIPTION:
1. Work Included: Planting required for this Work is indicated on the Drawings and, in general, includes the planting and other ground cover throughout the Work.

B. QUALITY ASSURANCE:
1. Qualifications of workmen: 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.
2. Codes, Regulations and Standards:
   a. All plants and planting material shall meet or exceed the Specifications of Federal, State and County laws requiring inspection for plant disease and insect control.
   b. Quality and Size: (1) General: Quality and size shall conform with the current edition of "Horticultural Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen. (2) Deciduous Trees: Trees will measure in units of average height in feet above the ground or of an average caliper at a point 6 inches above the ground. (3) Evergreen Trees: Trees will measure in units of an average height in feet above the ground. (4) Plant stock: Each ball shall be of sufficient size to insure successful fibrous feeding roots necessary to insure successful recovery and development of the plant.
   c. Topsoil shall conform with ASTM D 5268-92.

C. SUBMITTALS:
1. Material List: Within 35 days after award of Contract, and before any planting materials are delivered to the job site, submit to the Architect a complete list of nurseries where plants are to be obtained and other types proposed to be installed.
   a. Include complete data on source, size and quality.
   b. Demonstrate complete conformance with the requirements of this Section.
   c. This shall in no way be construed as permitting substitutions for specific items described in the Drawings or these Specifications unless the substitution has been approved in advance by the Architect.
2. Certificates:
   a. All certificates required by law shall accompany shipments.
   b. Upon completion of the installation, deliver all certificates to the Architect.
3. Approval of plants at source does not alter right of rejection at project site.

D. PRODUCT HANDLING:
1. Delivery:
   a. Balled and Burlapped Stock: Care should be taken at all times as to not damage the bark or branches. Plants shall be lifted and handled from the bottom of the ball as much as possible in order to prevent damage to the plant.
   b. Plant stock to be delivered in B & B shall be moved with a compact natural ball of earth so firmly wrapped in burlap, that upon delivery the soil in the ball is still firm and compact about the small feeding roots.
2. Temporary Storage and Protection:
   a. Protect plants at all times from sun or drying winds.
   b. Plants that cannot be planted immediately on delivery shall be kept in the shade, well protected with soil, wood chips, straw or other acceptable material, and shall be kept well watered.
3. Replacements: In the event of damage, immediately make all repairs and replacements necessary for the approval of the architect and at no additional expense to the Owner.

E. PRE-LANDSCAPING SITE PREPARATION - BUILDING CONTRACTOR/SUBS
1. Call in for any utility locations as required and follow all approved safety practices.
2. Remove any construction debris from site before grading. Properly mark all utility boxes, drains, or irrigation fixtures before grading. These are to remain marked through completion of grading process. MARK UP A SITE DETAIL PLAN TO IDENTIFY KEY COMPONENTS.
3. Site should be graded to minus(-) 4" of final grade removing as much rocks and debris as possible.
4. Concrete walks and drives can now be formed and poured following this grade adjustment. Following install of concrete, clean up any concrete debris and construction materials in planting areas. VERIFY UNDERDRAINS ARE IN PLACE AND MARKED.
5. Remove as much of the remaining stabilization seeding plants and weed growth on lawn and planting areas as practical. Loosen existing subsoil to a depth of 4".
6. Backfill exterior concrete and finish grade per plans with a minimum of 4" of screened topsoil that has rock, wood and debris removed (Screened to< = 1") Topsoil will be added at 12" of depth to landscape planting beds. The topsoil will come either from onsite stockpiles or will be provide when necessary. Maintain any drainage swales and define new ones as needed. Remove any high or low spots. VERIFY DEPTH OF PLANT BED TOPSOIL PRIOR TO ACCEPTANCE.
7. Provide a finish grade separation of 2" below slab elevation and maintain minimum slope away from buildings. Topsoil should be brought to finish grade of all patios, walks and driveways. VERIFY METAL FLASHING HAS BEEN PLACED TO PROTECT THE INSULATION ATTACHED TO THE FOUNDATION.
8. Subcontractor to be paid additional fees if soils have to be loaded and trucked from one area of site to another. Per hour equipment charges are to be negotiated in advance with the Project Manager. PROVIDE A LOG TO ACCOUNT FOR TIME AND SIGN OFF BY BOTH CONTRACTOR AND MANAGER.
9. Irrigation will be provided on a separate irrigation plan. Site irrigation needs to be installed and working prior to lawn/landscape establishment.
10. Subcontractor will keep streets and walkways clean during and upon completion of work.
11. Clean up all debris created and dispose of in job site dumpster provided.
12. Notify Redwood Landscape that site is being prepared and landscaper has been scheduled (Minimum of 5 business days before install)

F. SOIL AND SITE PREPARATION FOR SEEDED, HYDRO-SEEDED AND SODDED LAWNS - LANDSCAPE CONTRACTOR
1. Soil testing by a regional agricultural extension office is suggested prior to establishment and should be done during the planning process to the stockpiled or transported topsoil. Soil testing reveals the soil pH and amount of available nutrients such as phosphorus (P) and potassium (K).
2. Call in for any utility locations as required and follow all approved safety practices.

PART 2 - PRODUCTS

A. MATERIALS:
1. Topsoil/Planting Mix:
   a. Lawn Areas: Use on-site stockpiled topsoil. If the quantity of on-site topsoil stockpiled is insufficient to complete the work, provide imported topsoil.
   b. Planting Beds: Use imported topsoil. Contractor to obtain rights and pay all costs for imported topsoil material. Topsoil shall meet the following requirements:
      1) Shall be free from admixture of subsoil, heavy clay, coarse sand, stone, plants roots, sticks, and other foreign material.
      2) Shall be classified in the "Loam" portion of the U.S.D.A. Soil Textural Triangle. For topsoil to be classified as "Loam", that fraction passing through a #10 sieve shall meet the following mechanical analysis:
         a) 8 to 25% clay (less than 0.002 mm particle size).
         b) 30 to 55% sand (2.0 to 0.05 mm particle size)
         c) 30 to 50% silt (0.05 mm to .002 mm particle size).
      3) Contain neither less than 8%, nor more than 20%, organic matter as determined by loss on ignition of samples oven-dried to constant weight at 212 degrees F.
      4) Have a pH level of between 6.2 and 6.8.
      5) All topsoil shall be screened through a 1-1/4" screen.
      6) Submit an analysis of proposed topsoil. Topsoil shall be acceptable to Landscape Architect and Soils Testing Firm.
2. Suggested Seed or Equivalent
   a. Where applicable, seed shall be: Pennington - Smart Seed Pro Athletic Field Mixture
   b. Lawn Seed Mix: A mixture of Water Star Qualified cultivars such as PENN RK4, Rebel Xtreme, Rebel XLR and PENN ATF1258 TTTFs; plus Soprano PRG and Ridgeline KBG. The seed is treated with Myco Advantage and Penkoted for long term sustainability with quicker establishment. This mix is designed to provide a durable playing surface for high-use park settings, a wide range of landscape settings, and home lawns. The Smart Seed Pro Athletic Field Mixture will tolerate extended periods of high temperatures and periods of drought with remarkable color retention.
   c. Detention Basin Seed Mix: Mix shall be a grass like selection of species designed to tolerate fluctuating water levels and poor water quality. Seeding and planting should begin immediately upon completion of the structure while the soil is still friable and before invasive weeds emerge. Plan seeding and planting before the basin is flooded or allow the basin to drain to a few inches before seeding.
   d. SEED MIXES MAY VARY BY LOCATION AND USE. CONTACT REDWOOD LANDSCAPING TO VERIFY CHANGES.
   e. SEED LABELS SHALL BE PROVIDED TO REDWOOD LANDSCAPING FOR VERIFICATION.
   f. Minimum Seed Label Specifications:
      1) Weed seed: any weed seed present is listed by percentage of weight. We really don't want any weed seeds in our seed container, but it is difficult and expensive to catch all weed seeds during the cleaning process. Acceptable limits range from 0.3 to 0.5%.
      2) Noxious weed: Your label should read: NONE FOUND.
      3) Seed is to have been tested less than 12 months before planting date.
3. Sod
   a. Sod shall be of a variety preapproved by Redwood Landscaping for each climatic region. Sod is to be cut no more than 24 hrs. prior to install. Keep delivered sod stacked and watered until it is laid. Time deliveries of sod so that no material is on site more than 24 hrs. before it is installed. No sod shall be laid on a Friday afternoon or weekend without Redwood Landscape's approval so as to coordinate irrigation Maintenance.
4. Lime: Lime shall be ground limestone containing not less than 85% of total carbonates and shall be ground to such a fineness that 50% will pass through a 200-mesh sieve and 90% will pass through a 900-mesh sieve.
5. Fertilizer For Lawns: Fertilizer shall be 22-0-15, uniform in composition, free flowing and suitable for application with approved equipment delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
6. Plants:
   a. Trees, shrubs, and herbaceous plants:
      1) All trees, shrubs and herbaceous plants, deciduous plants or evergreens shall be sound, healthy, vigorous, first-class, freshly dug, nursery grown in a climate similar to or more severe than Ohio.
      2) All plant material shall be free of insects, their eggs, and larvae.
      3) Plants shall be free of mechanical or cultural injury by rodents, and free of noticeable after effects of insects (borers).
      4) Plants shall be true to scientific names. The names used are those of "Standardized Plant Names".
7. Soil Amendments: 'Soil Moist' granular soil moisturizer Polymer Product or equal, as manufactured and distributed by JRM Chemical Inc., Cleveland, Ohio, (216-475-8488).
8. Mulch:
   a. All buffer & tree planting mulch shall be triple shredded, hardwood bark, dark brown in color.
   b. All signage planting mulch shall be triple shredded, hardwood bark, dark brown in color.
   c. All landscape beds at project entries as well as trees planted outside of landscape beds shall have hardwood mulch.
   d. All foundation planting adjacent to units shall be installed with washed rock mulch. Stone mulch shall be 1" native gravel as supplied by DFW Supply (214-649-9975) or approved equal
9. Fertilizer For Plantings: Fertilizer shall be 22-0-15, uniform in composition, free flowing and suitable for application with approved equipment delivered to the site in bags or other convenient containers, each fully labeled, conforming to the applicable State Fertilizer Law, and bearing the name, trade name or trademark, and warranty of the producer.
10. Wood Cellulose Fiber Mulch: Degradable green dyed wood cellulose fiber or 100% recycled long fiber pulp, free from weeds or other foreign matter toxic to seed germination and suitable for hydromulching.
11. Tackifier: Liquid concentrate diluted with water forming a transparent 3-dimensional film like crust permeable to water and air and containing no agents toxic to seed germination.
12. Erosion Control Blanket: S-75 by North American Green as distributed by Meredith Brothers, Phone: (614) 258-4991 or equal.
13. Anti-Desiccant. Emulsion type, film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully-identified containers and mix in accordance with manufacturer's instructions.
14. Herbicide: Round Up, or Kleenup or equal.
15. Wrapping: Tree-wrap tape not less than four inches (4") wide, designed to prevent bore damage and winter freezing.
16. Stakes and Guys: Provide stakes and deadmen of sound new hardwood, treated softwood, or redwood, free of knot holes and other defects. Provide wire ties and guys of 2-strand, twisted, pliable galvanized iron wire not lighter than 12 ga. with zinc-coated turnbuckles. Provide not less than one-half inch (1/2") diameter rubber or plastic hose, cut to required lengths and of uniform color, material and size to protect tree trunks from damage by wire.
17. Soil Separator: Shall be non-woven, water-permeable polyester geotextile, manufactured as a landscaping product.
18. Weed mat: Provide 4.1 oz., woven polypropylene, needle-punched fabric, weed barrier.

PART 3 - EXECUTION

A. SURFACE CONDITIONS:
1. Inspection: Prior to all work in this Section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence.
2. Discrepancies:
   a. In the event of any discrepancies, immediately notify the Architect.
   b. Do not proceed with the installation in the areas of discrepancy until all such discrepancies have been fully resolved.

B. LAYOUT: Shrubs and trees shall be installed within 1'-0" and groundcover shall be installed within 6" of plant location shown on plan.

C. SOIL AND SITE PREPARATION FOR SEEDED, HYDRO-SEEDED AND SODDED LAWNS - LANDSCAPE CONTRACTOR
1. Soil testing by a regional agricultural extension office is suggested prior to establishment and should be done during the planning process to the stockpiled or transported topsoil. Soil testing reveals the soil pH and amount of available nutrients such as phosphorus (P) and potassium (K).
2. Call in for any utility locations as required and follow all approved safety practices.
3. Seed installation: Fall: Seed from August 15 to October 15, Spring: Seed from time ground is workable to July 1.
4. Confirm install with Redwood Landscape 3-5 business days prior to commencement of work each time a lawn is installed. Schedule a preconstruction meeting with Redwood Landscaping and construction prior to install of first lawns on the construction site.
5. Remaining perennial weeds and grasses on site need to be controlled prior to lawn seeding or sodding. Weed control options include using a systemic nonselective herbicide, digging by hand, or tilling/excavation.
6. When preparing the soil, it's important to establish a favorable final grade. Rough grading should include removal of any rock or other debris in excess of 1". Gravel/stone/debris areas should be cleaned up and soil added as needed to restore grade. Avoid burying construction debris, as this could cause problems for the grass later.
7. Eliminate any depressions or raised areas. Provide a finish grade separation of 2" below slab elevation and maintain minimum slope away from buildings. Topsoil should be brought to finish grade of all patios, walks and driveways.
8. Final slopes should be one to two percent away from buildings (1 to 2 feet drop per 100 feet of run) to assure good surface drainage. Maintain established drainage swales and define new ones as required to remove excess water runoff from site.
9. Before seeding or sodding, it's important to thoroughly loosen the soil one last time and to remove any remaining stone and debris.
10. Amend poor soils, such as heavy clay or straight sand, by adding organic matter. Sources include compost, composted organics, peat, and quality topsoil. If major modifications are needed, it is easier to make these prior to establishing the lawn. Required soil amendments should be mixed at the recommend rates into the soil surface prior to lawn establishment. Apply any amendments such as lime as directed by earlier soil testing at this time.
11. Soil preparation should be done when the soil is not too dry or wet as tillage at these times will destroy soil structure, and create problems with air and water holding capacity and drainage after a rain event.
12. Hydro seed, seed, or sod site per standards, using Redwood approved seed mix .. Provide initial starter fertilizer application in hydro seed mix or apply to soils at time of seeding/sod at recommended rates. Install erosion control mats as specified in the landscaping specifications as required.
13. Provide initial irrigation of prepared site and schedule a follow up visit with Redwood landscape/maintenance within 15 days of install for an inspection walk through.
14. Landscape install contractor provides 90 days of follow up and maintenance recommendations and guarantees all work for that same period.

D. HYDRO-SEEDING PROTOCOL
1. Per Seed supplier recommendations and Redwood Landscaping's approval.
2. Erosion Control, Steep Slopes and Low Maintenance areas.
3. Per erosion mat supplier and seed supplier recommendations as well as Redwood Landscaping's approval.
4. Erosion Control Matting Recommendations: Western Excelsior's Excel SR-1 Erosion Control Blanket (ECB) consists of a 100% certified weed free straw matrix stitched to a single net (top). Excel SR-1 is available with photodegradable, synthetic netting (Regular); rapid photodegradable, synthetic netting (Rapid-Go) or all natural, biodegradable netting (All Natural).
5. Variations, alternate products or exceptions are to be cleared through Redwood Landscaping before any changes are made ** Information and/or questions pertaining to Pennington seed or fertilizer products along with Western Excelsior / Wind, Water and Soil matting can be resourced through:
   Scott Fisher
   Pennington Seed Ohio
   Cell: (513)426-4543
   Fax: (513)860-3472
   sfisher@penningtonseed.com

E. Sod
1. Soil preparation should be done as per the specifications in the Soil and Site Preparation for Seeded, Hydro-seeded and Sodded Lawns - Landscape contractor section when the soil is not too dry or wet as tillage at these times will destroy soil structure, and create problems with air and water holding capacity and drainage after a rain event.
2. Sod work can be performed from time ground is workable to the first frost.
3. Add starter fertilizer at the recommended rate to the soil and lightly rake it in prior to laying sod.
4. Water the soil lightly before laying sod. Soil should just be moist and water added incrementally in front of the sod laying process.
5. Start laying the sod on a straight edge such as a driveway. Lay one piece of sod at a time laying each piece snug against each other. Work the seams tightly together without overlapping. Lay the sod like bricks in a staggered or stair step fashion so end seams don't lineup. Cut the sod to size as needed.
6. Use a water-filled roller to help level the sod. Rolling the sod also makes sure there's good contact between the sod and soil so it can root in properly.
7. Water newly laid sod thoroughly each day (if there is no rainfall) for the first 14 days as per maintenance protocols. Slowly cut back on the watering to encourage deep root growth .,. Water will need to be maintained until weather conditions cool and sod is established and fully rooted.
8. Follow up in 6 weeks with an approved maintenance level fertilizer

F. TREE, SHRUB, PERENNIAL AND ANNUAL PLANTINGS
1. Tree and shrub planting shall be done according to the International Society of Arboriculture (ISA) guidelines and landscape plan specs.
2. ISA Guidelines can be found here:
   https://www.isa-arbor.com/education/onlineresources/cadplanningspecification.#Planting
3. Contractor is responsible for verifying plant quantities. If quantities listed in Plant Material List do not correlate with plantings indicated on plan, the quantities indicated on the plan shall govern.
4. All planting operations shall be performed between the dates of March 1 and November 1. All plantings to be performed between the dates of June 1 and August 31 to be will proofed with anti-desiccant.
5. Perennials and small shrub landscape plantings should be installed as follows:
   a. Dig up the soil to aerate it, reduce compaction and remove any weeds. Then dig in some organic matter, such as well-rotted manure or compost.
   b. Planting Depth:Most perennials/shrubs flourish when their crowns are planted at the same depth or slightly higher as they were in the growing container. Test planting depth by laying a tool handle across the planting hole with the perennial placed at the proposed planting depth in the hole. Adjust the soil in the planting hole accordingly. When the crown is even with the tool handle, the plant is at the proper depth.
   c. The hole for each perennial should be twice the size of the container the perennial/shrub comes in. The wider the hole, the better, since plant's roots grow out more easily into loosened, enriched soil. Remove the perennial from the container and lightly loosen the roots so the plant will grow out of its tightly wrapped ball and settle in more quickly.
   d. Refill the hole with enriched soil that has been be amended with organics. Set plants into holes at their original growing level or slightly higher. Never bury a plant deeper than its crown (where the roots and the stems meet) Buried crowns mean suffocated plants! Plant 2 inches higher than ground level if you are going to mulch. Backfill the rest of the hole with enriched soil. Tamp down the soil to remove any large air pockets.
   e. Water well, with a soft trickle of water that lasts long enough to saturate the root ball deep into the soil. Different soil types may need slightly more or less water. Monitor the soil moisture to help you judge when the plant should receive more water.

6. Annuals:
   a. Refer to Redwood Landscape Design Standards Handout for spring, summer and fall seasonal annual and bulb varieties and planting layout.
   b. All annual planting beds shall have a minimum of 10" of "annual bed mix".
   c. "Annual bed mix" shall be processed shredded topsoil with organic compost and fine silica gravel for annuals.
   d. Mulch with 1" of compost mulch or treat soil with a granular pre-emergence herbicide suitable for annual plantings.

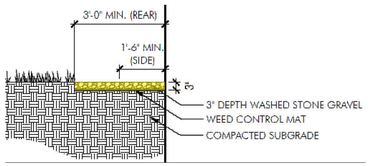
7. Pruning:
   a. Prune all new trees and shrubs in accordance with acceptable standard practices. All cuts over one inch in diameter shall be treated with an approved tree paint. In the same manner, prune existing trees which are to remain if indicated on the landscape plan.

8. Protection:
   a. Protect all plant areas and plants from damage. If any plants are injured, treat and replace as required. Execute no work in or over prepared plant areas, or adjacent to planting without proper safeguards and protection.

G. Maintenance During Installation:
1. Maintain immediately following the accomplishment of planting operations of any plant unit.
2. Spray foliage with water, where required, during the evening after sundown or otherwise as directed. Keep all plantings in a healthy, growing condition by watering, weeding, cultivating, pruning, spraying, trimming and by performing any other necessary operations of maintenance.
3. The Contractor shall be responsible for continued proper care of the lawn areas during the period when the grass is becoming established. The period of maintenance for all lawn area shall extend for sixty (60) days with two (2) mowings required or as long as necessary to establish over the entire lawn areas a uniform stand of grasses as specified, free of weeds and undesirable grasses. After the required maintenance period and upon acceptance of lawn area by the Architect, the Owner will assume maintenance responsibility.
4. Mowing: The lawn seeded area shall be mowed with approved mowing equipment to a height of two inches (2") whenever the average height of grass becomes three inches (3"). If weeds or other undesirable vegetation threaten to smother the planted species, such vegetation shall be mowed, or in the case of exceedingly rank growths, be uprooted, raked and removed from the area.
5. Refertilizing: Areas needing refertilization will be designated by the Architect at least fifteen (15) days prior to the time that the application is required. The fertilizer shall be distributed on the seeded area between August 15 and October 15, during a period when the grass is dry. The fertilizer shall be 10-6-4 grade and shall be applied uniformly at the rate of ten (10) pounds per one thousand (1,000) square feet. Physical condition, packaging and marking of the fertilizer shall be as specified for original seeding.
6. Reseeding: Areas that require reseeding will be designated by the Architect at least fifteen (15) days prior to the period specified for reseeding. Reseeding shall be with the seed specified therein before and shall be drilled at four (4) pounds per one thousand (1,000) square feet in a manner which will cause a minimum of disturbance to the existing stand of grass, and at an angle of not less than fifteen (15) degrees from the direction of the rows of prior seeding.
7. Lawns shall be protected against damage, including erosion and washouts. Damaged areas shall be promptly replanted. Use erosion netting as required.
8. The contractor is responsible to clean the site of all mulching materials and other debris prior to the final inspection.
9. Final Inspection: Inspection of work for lawns will be made after the second cutting; written notice requesting inspection shall be submitted at least ten (10) days prior to anticipated date.
10. Acceptance: Final inspection shall determine acceptance or non-acceptance of lawn areas. Acceptance indicates a complete cover of grasses in all lawn areas, which have been maintained by weeding, reseeding and refertilizing as necessary, watering and mowing as stated above and appears to be in a potential healthy state with weeds, rocks, stones and debris removed and all erosion or ruts repaired. Lawns not maintained or appearing as stated herein shall be unacceptable and shall be reworked as necessary until desired results are obtained.
11. Maintain trees, shrubs and other plants until final acceptance, but in no case less than 60 days after substantial completion of planting.
12. Maintain trees, shrubs and other plants by pruning, cultivating, watering and weeding as required for healthy growth. Restore planting saucers. Tighten and repair stake and guy supports and reset trees and shrubs to proper grades or vertical position as required. Restore or replace damaged wrappings. Spray as required to keep trees and shrubs free of insects and disease.

H. CLEAN-UP
1. Upon completion of the planting, all excess soil, stones and debris which has not previously been cleaned up shall be removed from the site or disposed of as directed by the Architect.
2. Any soil, manure, peat, or similar material which has been brought onto paved areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean at all times.
3. Protect landscape work and materials from damage due to landscape operations, operations by other contractors, trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed.

I. ACCEPTANCE
1. Final Inspection:
   a. Inspection: At the conclusion of the contract work, (exclusive of maintenance and replacement) one inspection will be made by the Architect. Written notice to the Architect requesting such an inspection shall be submitted by the Contractor at least ten days prior to the anticipated date.
   b. The purpose of this inspection will be to determine whether or not the Contractor has completed all the work of the contract.
   c. The condition of the lawns and shrubs will be noted and a determination will be made by the Architect whether maintenance shall continue in any part as specified under 'Maintenance During Installation.'
2. Acceptance Inspection:
   a. At the conclusion of the maintenance during installation period, an inspection will be made by the Architect. Written notice requesting the inspection shall be submitted by the Contractor at least 10 days prior to the anticipated date.
   b. The purpose of the inspection shall be for the acceptance of the contract work including maintenance during installation, but exclusive of replacements.
   c. After the inspection of the Architect, the Contractor shall be notified in writing of acceptance of the work. If there are any deficiencies in the maintenance, during installation, the Contractor will be notified of these deficiencies in writing by the Architect, and the work shall be subject to reinspection before acceptance.
3. Guarantee Period:
   a. Guarantee period shall begin at the issuance of the Certificate of Completion and shall end exactly one year from that date.
   b. At the conclusion of the guarantee period, a final inspection of the work will be made to determine the condition of the plant material. All plant material not in a healthy or 40% defoliated growing condition will be noted.
   c. Remove the material so noted from the site at the direction of the Architect and replace during the following planting season with the materials of like kind and size, and in a manner specified for the original planting at no extra cost.
   d. Guarantee period also applies to replaced material.



GRAVEL MOW STRIP

NOT TO SCALE



LIGHTING LEGEND

▶	SECONDARY ENTRY SIGN	- ONE (1) EACH FACE - KICHLER #15742 BKT - (35° Flood) - 8.5w - LED - #15701 BKTP SHORT SHROUD
■	TREE UPLIGHT	- ONE (1) EACH TREE - KICHLER #15753 BKT - (60° Flood) - 12.4w - LED - #15701 BKTP SHORT SHROUD
▶	SALES SIGN	- ONE (1) EACH FACE (4'W X 8'H) - KICHLER #15742 BKT - (35° Flood) - 8.5w - LED - #15701 BKTP SHORT SHROUD
▶	SALES SIGN	- ONE (1) EACH FACE (2'W X 4'H) - KICHLER #15741 BKT - (10° Spot) - 8.5w - LED - #15701 BKTP SHORT SHROUD

LIGHTING NOTES:

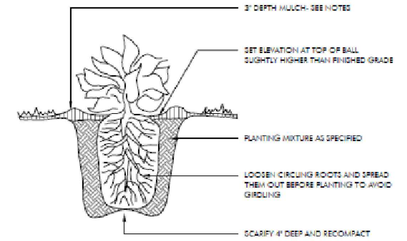
1. LOCATE UPLIGHTS AS SHOWN ON THE PLAN. STAKE FINAL LOCATIONS OF LIGHTS FOR APPROVAL BY THE OWNER OR OWNER'S REPRESENTATIVE.
2. LIGHT SYSTEM BY KICHLER OR OWNER-APPROVED EQUAL.
3. LIGHTING SHALL BE INSTALLED WITH A REMOTE SWITCH CONTROL SYSTEM.
4. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND PER CURRENT ELECTRICAL CODE REQUIREMENTS.
5. CHOOSE TEMPORARY SIGN UPLIGHTING, ACCORDING TO SIGN TYPE USED. (EITHER 2'w X 4'h, OR 4'w X 8'h)

LANDSCAPE LIGHTING

NOT TO SCALE

Perennial Planting

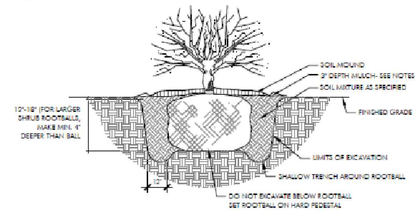
NOTE:
1. ALL MULCH TO BE 1" NATIVE GRAVEL OR APPROVED EQUAL
   DFW STONE SUPPLY
   WWW.DFWSTONESUPPLY. COM
   (214) 649.9975



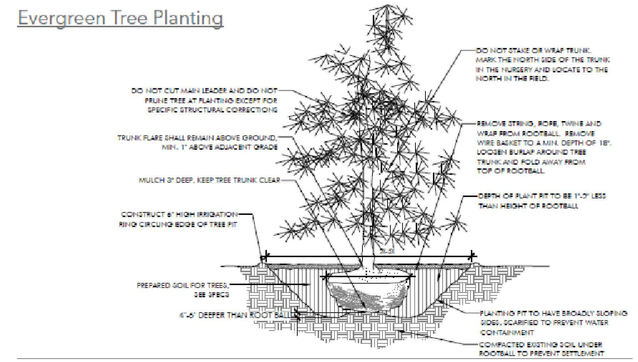
Shrub Planting

NOTES:
1. DO NOT PRUNE SHRUBS DURING INSTALLATION
2. MEASURE ROOTBALL AND SET 1" HIGHER ON HARD PEDESTAL. DO NOT DISTURB AREA UNDERNEATH ROOTBALL
3. ALL MULCH TO BE 1" NATIVE GRAVEL OR APPROVED EQUAL
   DFW STONE SUPPLY
   WWW.DFWSTONESUPPLY. COM
   (214) 649.9975

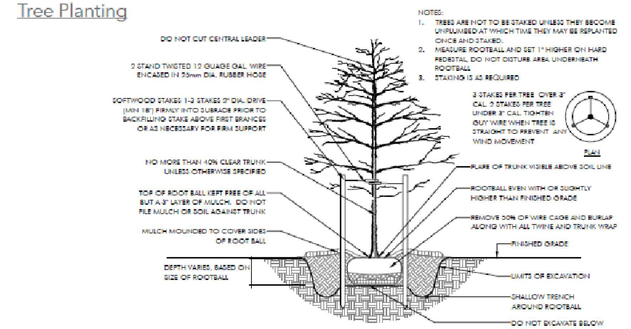
THE AMOUNT OF PRUNING SHALL BE LIMITED TO 1/3 OF THE BRANCHES TO COMPENSATE FOR LOSS OF ROOTS FROM TRANSPLANTING. REMOVE DEAD AND INJURED LIMBS. REMOVE BURLAP AND WIRE OR TWINE FROM TOP AND SIDES OF BALL. CENTER SHRUB IN HOLE. SET TOP OF BALL 1-2" ABOVE FINISH GRADE.



Evergreen Tree Planting



Tree Planting



PLANTING DETAILS

NOT TO SCALE

FINAL

your trusted advisor
consultants — engineers architects planners

NO	REVISION	DATE
1	PLANNING COMMISSION COMMENTS	01/06/22

ISSUED FOR:	PRELIM SET
ISSUE DATE:	10/18/21
SCALE:	AS SHOWN
DESIGNED BY:	RW
DRAWN BY:	RW
CHECKED BY:	RW

REDWOOD CRYSTAL LAKE, IL
CENTRAL PARK DR., CRYSTAL LAKE, IL, MCHENRY COUNTY
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

LANDSCAPE DETAILS

PROJECT NO.
210266
DISCIPLINE
LANDSCAPE
SHEET NAME
L-4
SHEET 4 OF 5

H:\2021\210266\DWG\SHEETS\L_210266-PLANDSCAPES.DWG - L-4 - 2/24/2022 3:13:28 PM - REUBEN SHAW

RED DOGWOOD DRIVE
RED IVY DRIVE
RED GINGER DRIVE
RED OAK DRIVE
RED LILY DRIVE
RED WILLOW DRIVE
CENTRAL PARK DRIVE
LACEFLOWER DRIVE
WOODROSE DRIVE
SALMONBERRY DRIVE
RED LILAC DRIVE
VIOLET DRIVE
BLACKBERRY DRIVE
EAST MONTICELLO WAY
OLD POST ROAD

LEGEND

EXISTING TREES TO BE REMOVED

TREE PROTECTION FENCING AROUND TREES TO BE PRESERVED

SITE DATA

EXISTING TREES

TOTAL TREES	2,819 TREES
TREES 6" CALIPER OR SMALLER	1,732 TREES
TREES 6" CALIPER OR LARGER	1,087 TREES
SPECIES GROUP A FAIR OR BETTER	0 TREES
SPECIES GROUP B FAIR OR BETTER	0 TREES
SPECIES GROUP C FAIR OR BETTER	98 TREES AVG. 11" DBH = 1,078 DBH
SPECIES GROUP D FAIR OR BETTER	272 TREES AVG. 14" DBH = 3,808 DBH

REPLACEMENT TREES

REPLACEMENT GROUP C TREES	1,078 DBH x 10% = 108 DBH = 43 TREES
REPLACEMENT GROUP D TREES	3,808 DBH x 5% = 190 DBH = 76 TREES
PROPOSED 2.5" CAL. SHADE TREES	342 TREES
PROPOSED 2.5' CAL. ORNAMENTAL TREES	134 TREES

30' 0' 60'
SCALE: 1" = 60'
NORTH

H:\2021\21206\DWG\SHEETS\L_210266-PLANDSCAPES.DWG - L-5 - 2/24/2022 3:13:26 PM - REUBEN SHAW

FINAL

your trusted advisor consultants — engineers architects planners

NO	REVISION	DATE
1	PLANNING COMMISSION COMMENTS	01/06/22

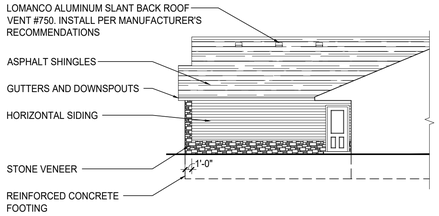
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REDWOOD CRYSTAL LAKE, IL

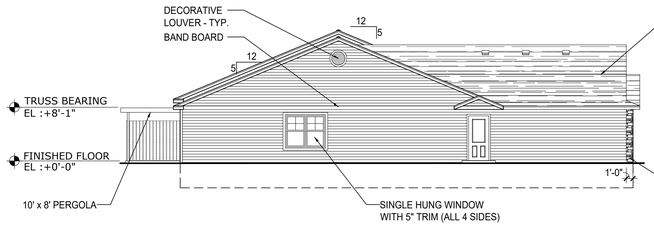
CENTRAL PARK DR., CRYSTAL LAKE, IL, MCHENRY COUNTY
REDWOOD - 7510 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

TREE PRESERVATION PLAN

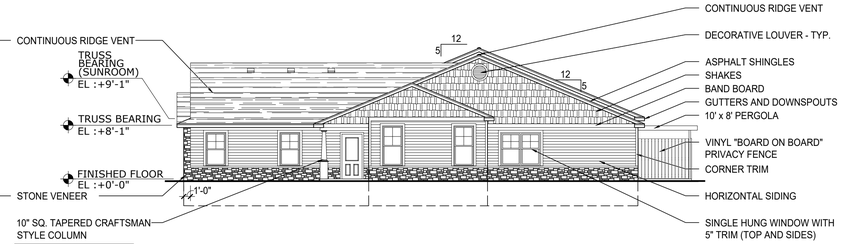
PROJECT NO.
210266
DISCIPLINE
LANDSCAPE
SHEET NAME
L-5
SHEET 5 OF 5



5 PARTIAL SIDE ELEVATION — FORESTWOOD
SCALE: 3/32" = 1'-0"

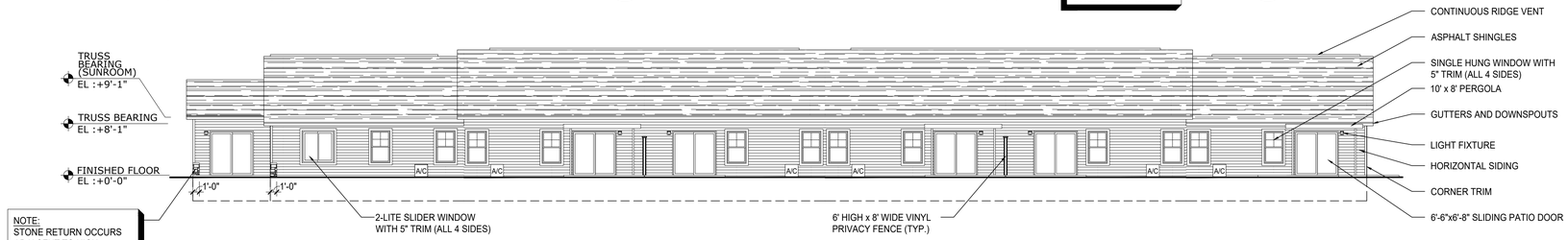


4 STANDARD SIDE ELEVATION — MEADOWOOD
SCALE: 3/32" = 1'-0"



NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY

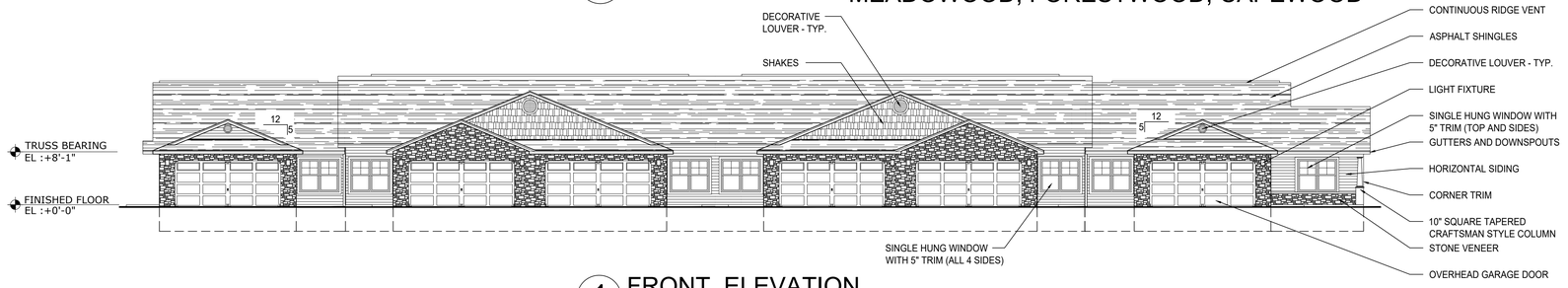
3 HIGH PROFILE SIDE ELEVATION — CAPEWOOD
SCALE: 3/32" = 1'-0"



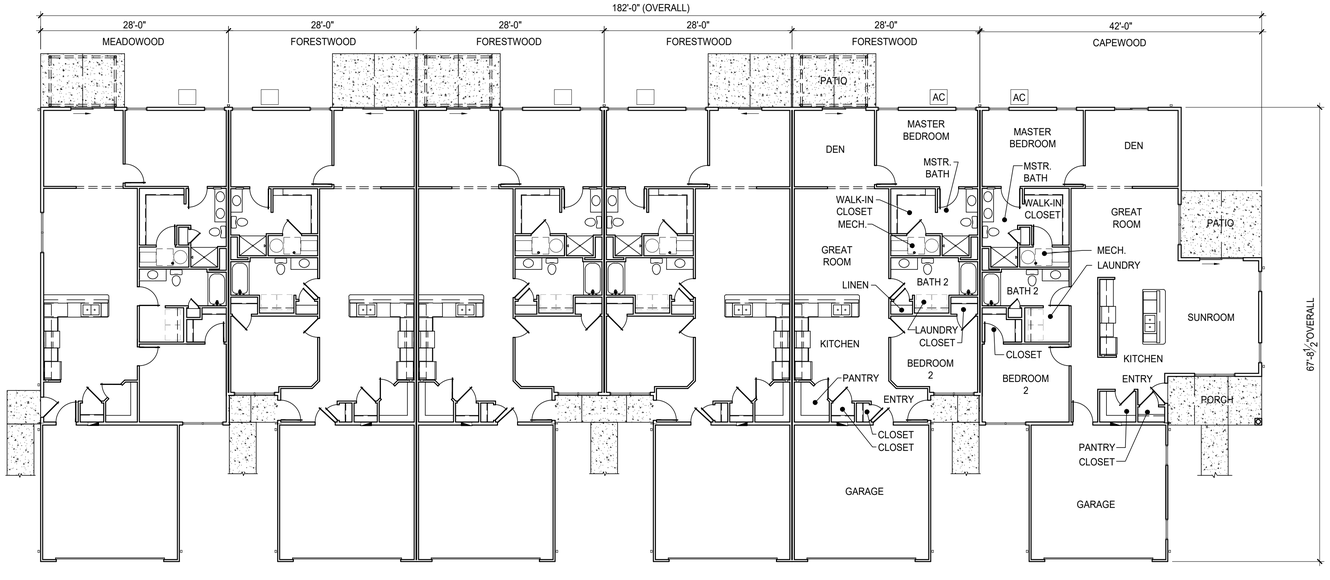
NOTE:
STONE RETURN OCCURS ADJACENT TO HIGH PROFILE SIDE ELEVATION ONLY

NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.

2 REAR ELEVATION
SCALE: 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
ASPHALT SHINGLES	DIMENSIONAL 30 YEAR LAMINATED	WEATHERED WOOD
GUTTERS AND DOWNSPOUTS	PREFINISHED ALUMINUM	WHITE
HORIZONTAL SIDING ROYAL WOODLAND	VINYL	VARIES
SHAKES	VINYL	VARIES
CORNER TRIM	VINYL	WHITE
STONE VENEER	PRESTIGE	OHIO WHITE VEIN
OVERHEAD GARAGE DOOR	RAISED PANEL PAN STEEL	WHITE
SINGLE HUNG	VINYL	STANDARD WHITE WITH COLONIAL PATTERN FLAT GRIDS
6'-6" X 6'-8" SLIDING PATIO DOOR	VINYL	WHITE

NOTE:
ADDRESS FOR EACH UNIT TO BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD.

PRELIMINARY

NOTE!!!
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mpg-architects.com

BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

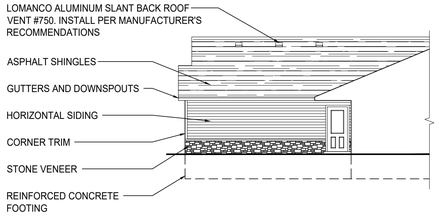
DATE: OCTOBER 5, 2021

REDWOOD CRYSTAL LAKE

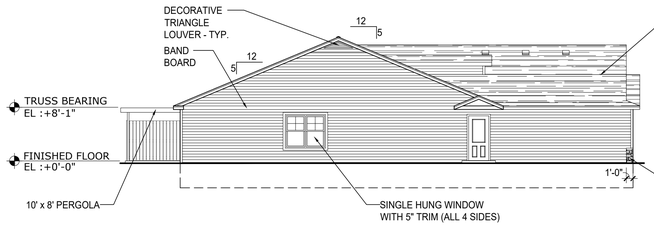
CRYSTAL LAKE, IL

Redwood APARTMENT NEIGHBORHOODS

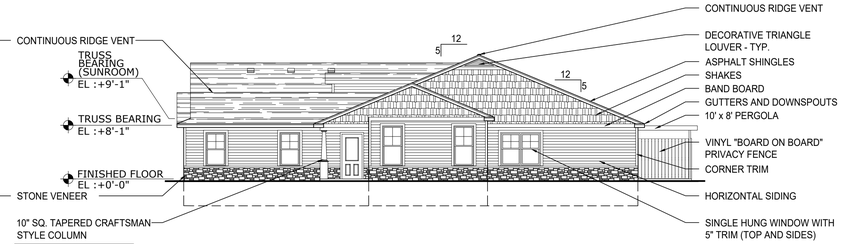
A1.1a



5 PARTIAL SIDE ELEVATION — FORESTWOOD
SCALE: 3/32" = 1'-0"

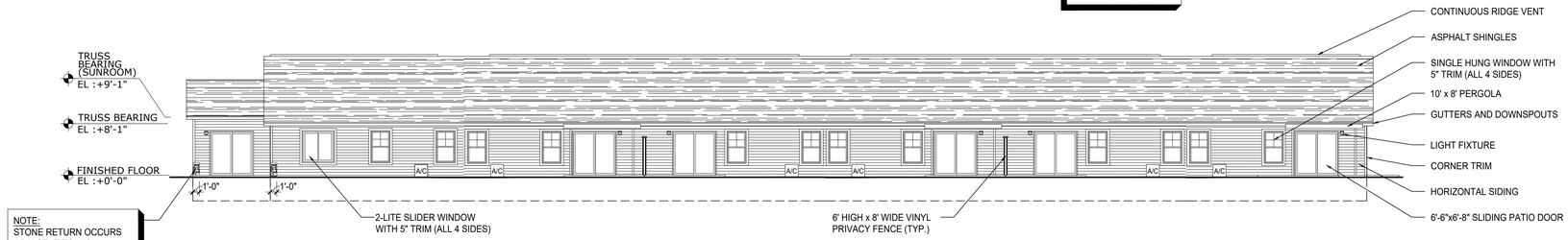


4 STANDARD SIDE ELEVATION — MEADOWOOD
SCALE: 3/32" = 1'-0"



NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY

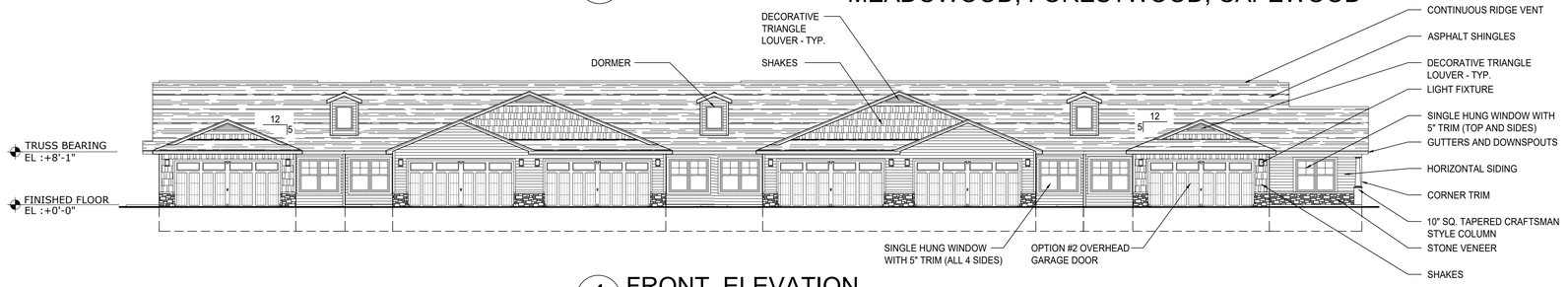
3 HIGH PROFILE SIDE ELEVATION — CAPEWOOD
SCALE: 3/32" = 1'-0"



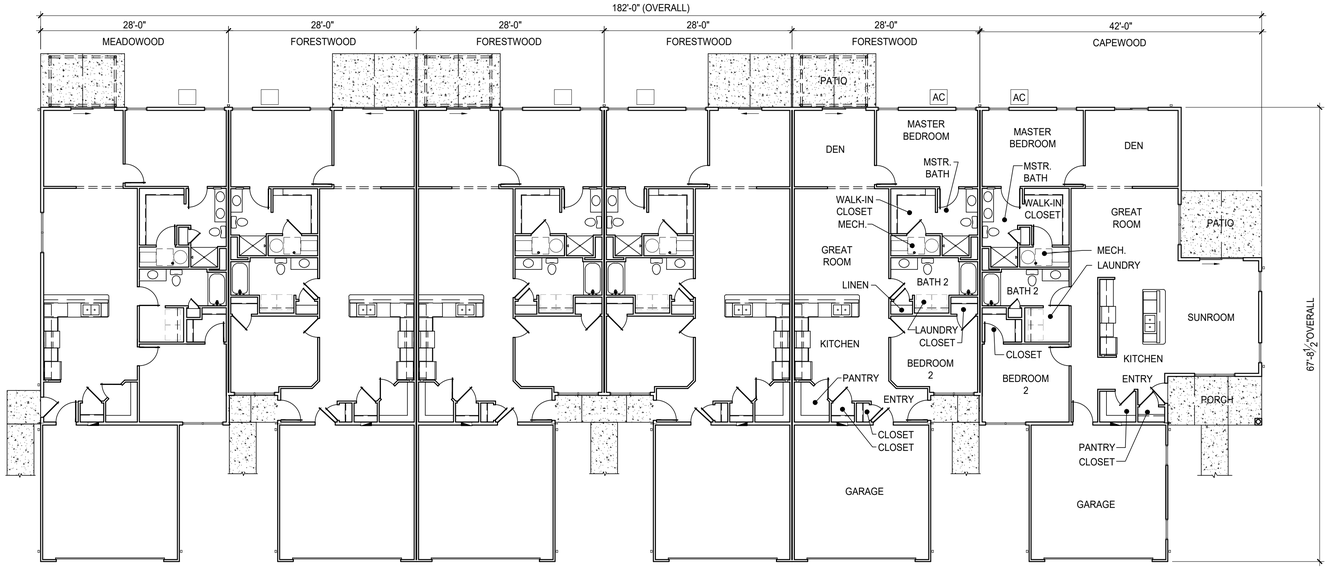
NOTE:
STONE RETURN OCCURS ADJACENT TO HIGH PROFILE SIDE ELEVATION ONLY

NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.

2 REAR ELEVATION
SCALE: 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0"
MEADOWOOD, FORESTWOOD, CAPEWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
ASPHALT SHINGLES	DIMENSIONAL 30 YEAR LAMINATED	WEATHERED WOOD
GUTTERS AND DOWNSPOUTS	PREFINISHED ALUMINUM	WHITE
HORIZONTAL SIDING ROYAL WOODLAND	VINYL	VARIES
SHAKES	VINYL	VARIES
CORNER TRIM	VINYL	WHITE
STONE VENEER	PRESTIGE	OHIO WHITE VEIN
OVERHEAD GARAGE DOOR	RAISED PANEL PAN STEEL	WHITE
SINGLE HUNG	VINYL	STANDARD WHITE WITH COLONIAL PATTERN FLAT GRIDS
6'-6" X 6'-8" SLIDING PATIO DOOR	VINYL	WHITE

NOTE:
ADDRESS FOR EACH UNIT TO BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD.

PRELIMINARY

NOTE!!!
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BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

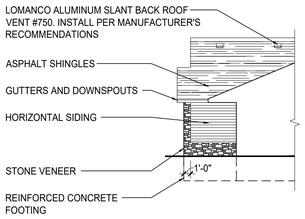
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REDWOOD CRYSTAL LAKE

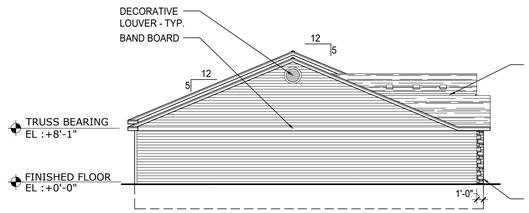
CRYSTAL LAKE, IL

Redwood
APARTMENT NEIGHBORHOODS

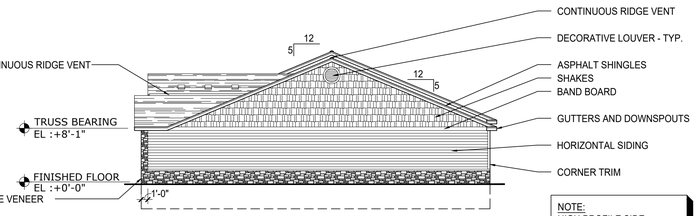
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5 PARTIAL SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD

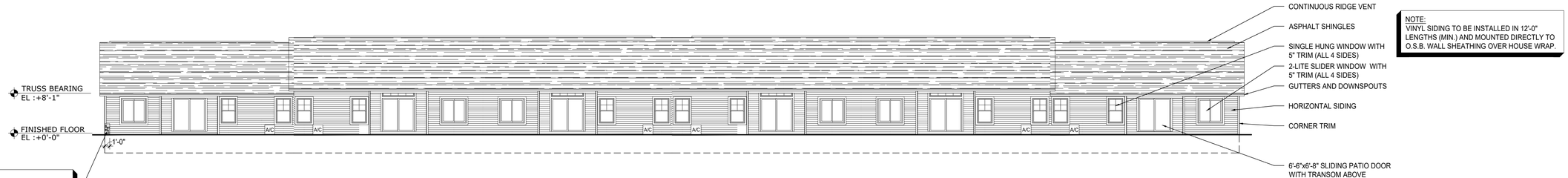


4 STANDARD SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY

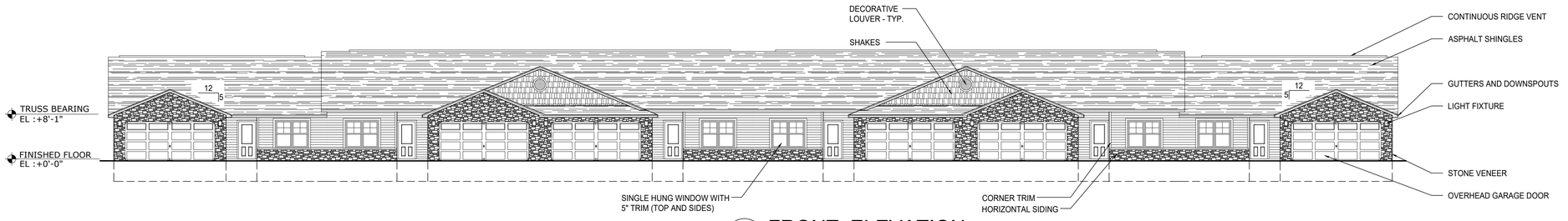
3 HIGH PROFILE SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



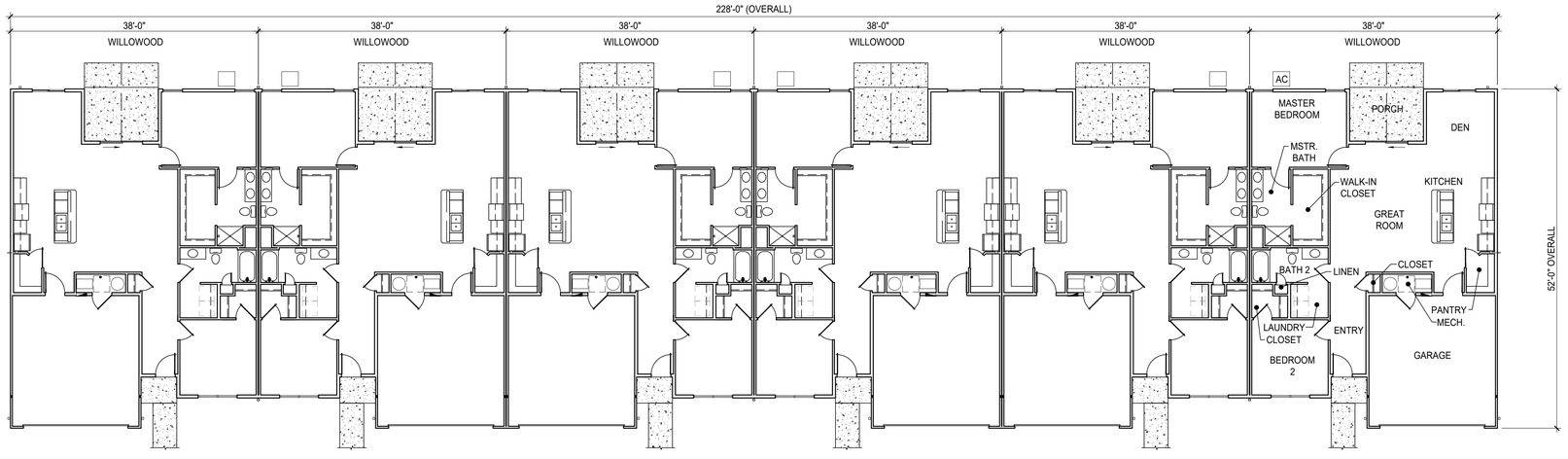
NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.

NOTE:
STONE RETURN OCCURS ADJACENT TO HIGH PROFILE SIDE ELEVATION ONLY

2 REAR ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0" WILLOWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
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CORNER TRIM	VINYL	WHITE
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SINGLE HUNG	VINYL	STANDARD WHITE WITH COLONIAL PATTERN FLAT GRIDS
6'-6" X 6'-8" SLIDING PATIO DOOR	VINYL	WHITE

NOTE:
ADDRESS FOR EACH UNIT TO BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD.

PRELIMINARY

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BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

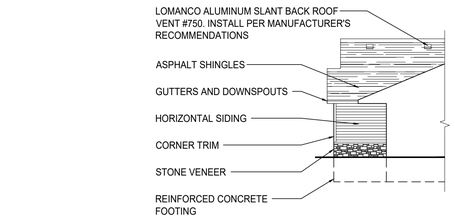
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REDWOOD CRYSTAL LAKE

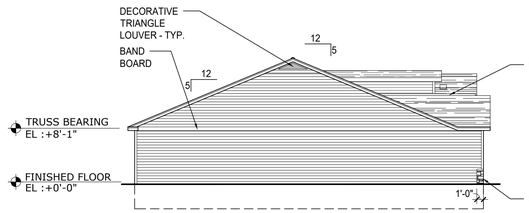
CRYSTAL LAKE, IL

Redwood APARTMENT NEIGHBORHOODS

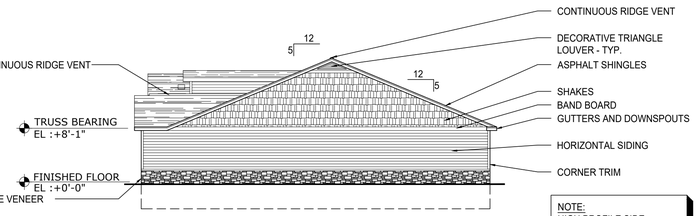
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5 PARTIAL SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD

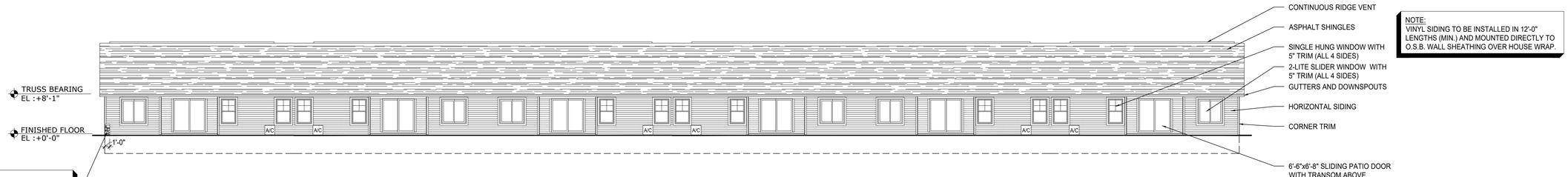


4 STANDARD SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY

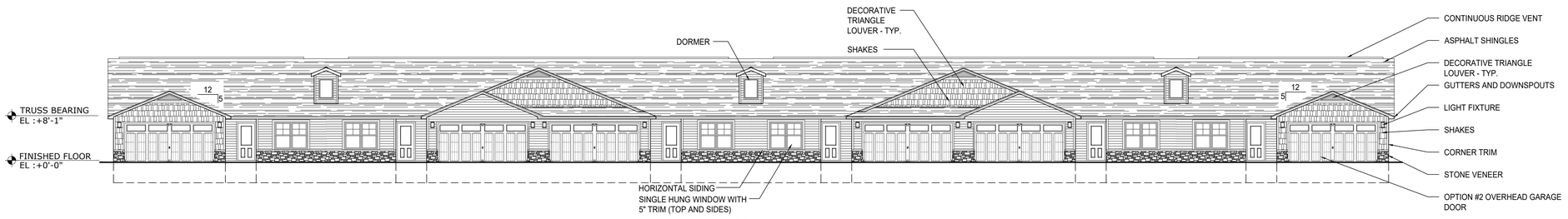
3 HIGH PROFILE SIDE ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



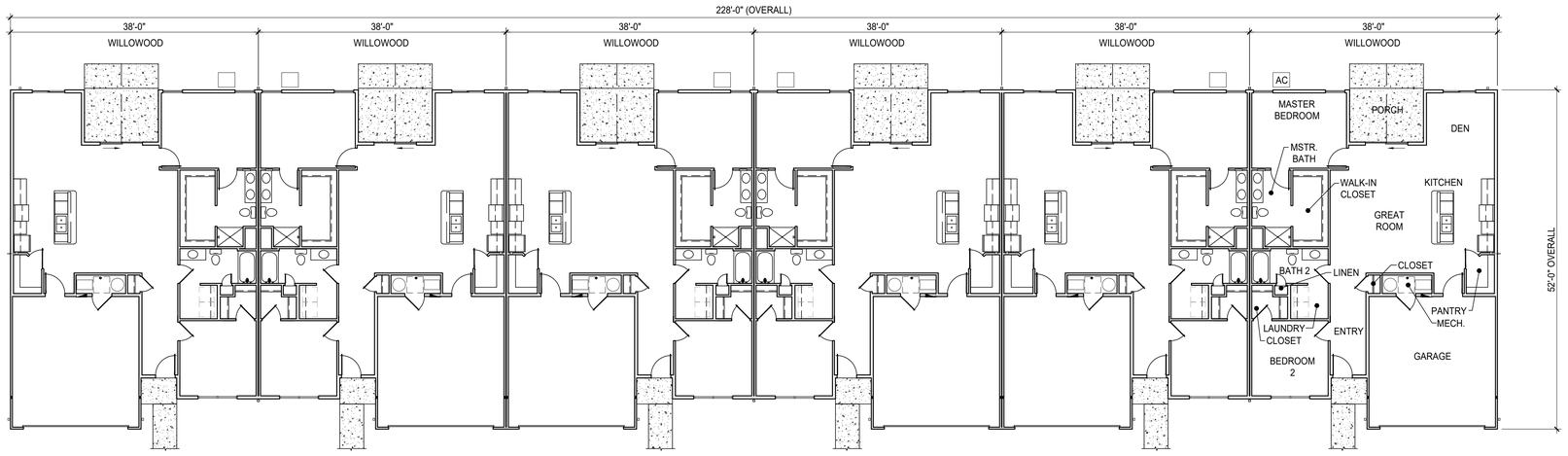
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NOTE:
STONE RETURN OCCURS ADJACENT TO HIGH PROFILE SIDE ELEVATION ONLY

2 REAR ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0" WILLOWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0" WILLOWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
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6'-6" X 6'-8" SLIDING PATIO DOOR	VINYL	WHITE

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ADDRESS FOR EACH UNIT TO BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD.

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BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

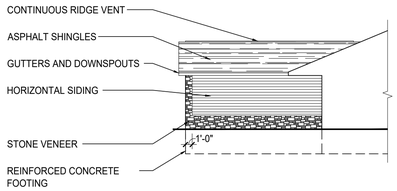
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REDWOOD CRYSTAL LAKE

CRYSTAL LAKE, IL

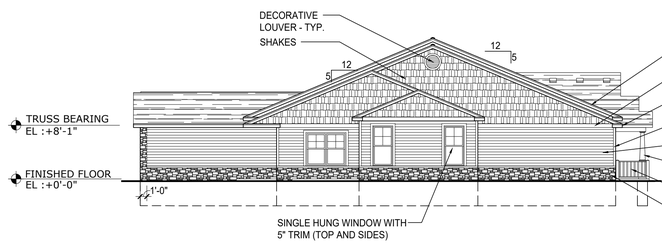
Redwood
APARTMENT NEIGHBORHOODS

A1.2b



5 PARTIAL SIDE ELEVATION
SCALE: 3/32" = 1'-0"

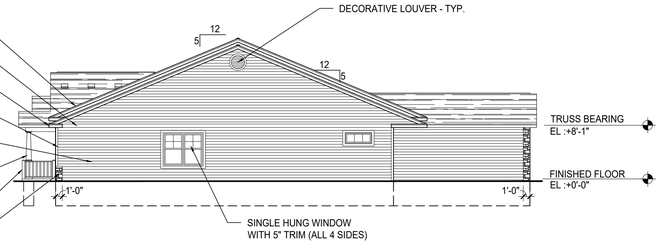
HAYDENWOOD



4 HIGH PROFILE SIDE ELEVATION
SCALE: 3/32" = 1'-0"

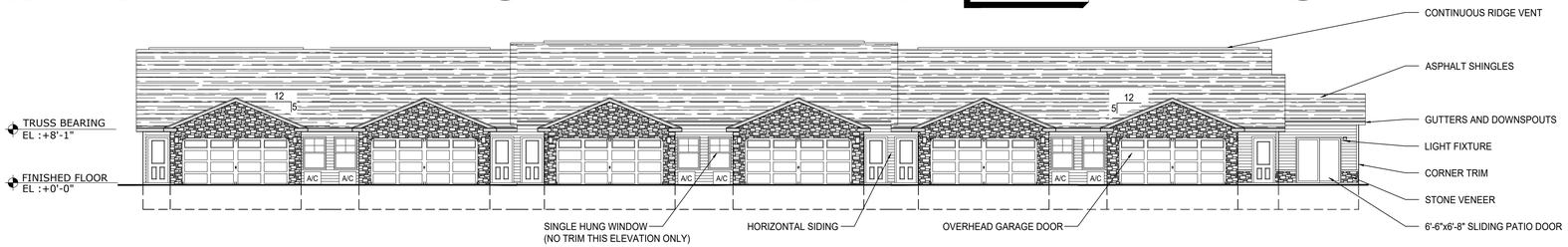
HAYDENWOOD

NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY



3 STANDARD SIDE ELEVATION
SCALE: 3/32" = 1'-0"

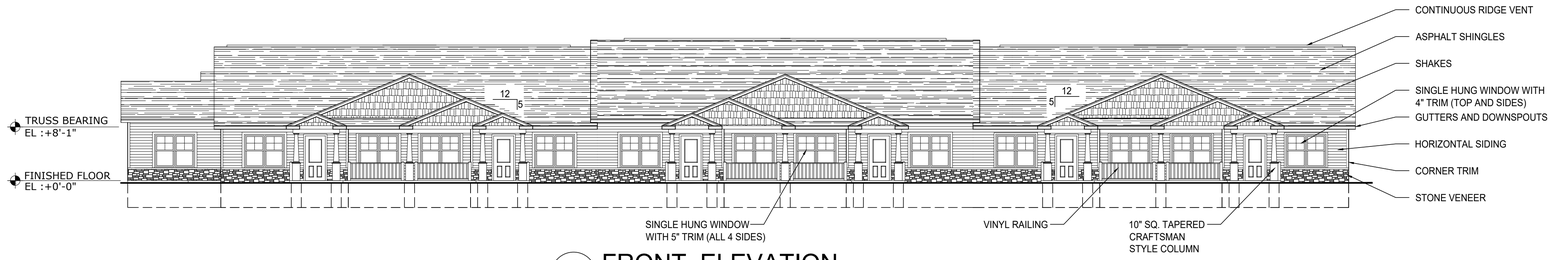
HAYDENWOOD



2 REAR ELEVATION
SCALE: 3/32" = 1'-0"

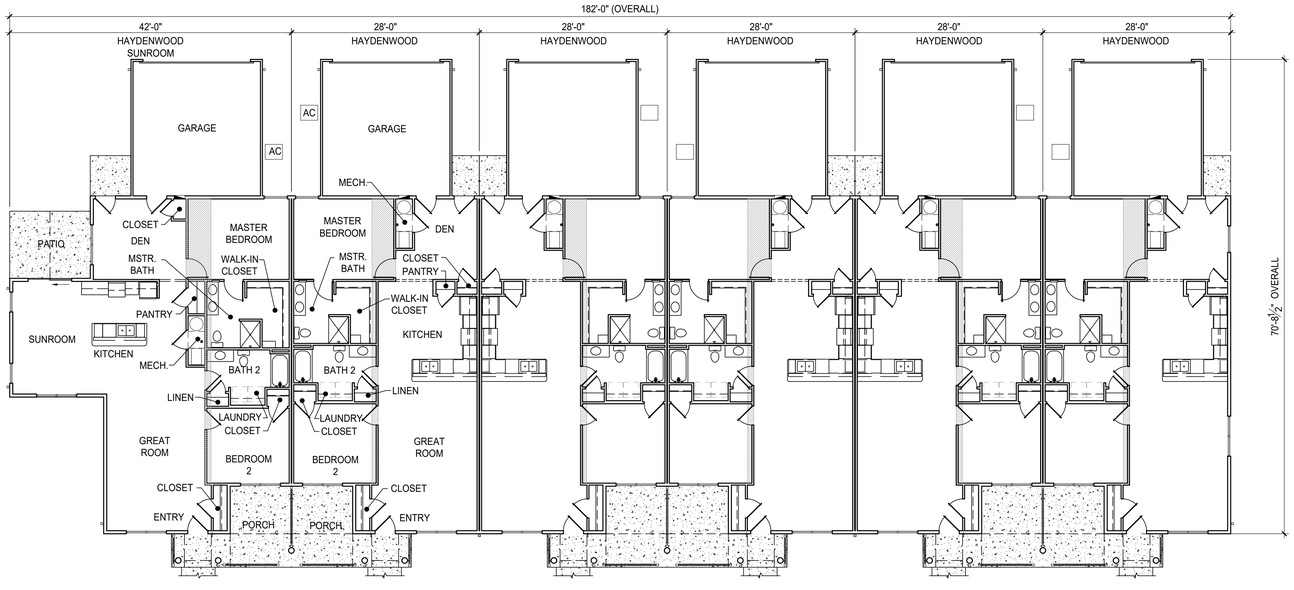
HAYDENWOOD

NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0"

HAYDENWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0"

HAYDENWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
ASPHALT SHINGLES	DIMENSIONAL 30 YEAR LAMINATED	WEATHERED WOOD
GUTTERS AND DOWNSPOUTS	PREFINISHED ALUMINUM	WHITE
HORIZONTAL SIDING ROYAL WOODLAND	VINYL	VARIES
SHAKES	VINYL	VARIES
CORNER TRIM	VINYL	WHITE
STONE VENEER	PRESTIGE	OHIO WHITE VEIN
OVERHEAD GARAGE DOOR	RAISED PANEL PAN STEEL	WHITE
SINGLE HUNG	VINYL	STANDARD WHITE WITH COLONIAL PATTERN FLAT GRIDS
6'-6" X 6'-8" SLIDING PATIO DOOR	VINYL	WHITE

NOTE:
ADDRESS FOR EACH UNIT TO BE PLACED IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD.

PRELIMINARY

NOTE!!!
THIS DRAWING IS NOT FOR CONSTRUCTION

REVISIONS

MPG
MANN • PARSONS • GRAY
ARCHITECTS
3660 Embassy Parkway
Fairlawn, OH 44333
phone 330.666.5770
fax 330.666.8812
mpg-architects.com

BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

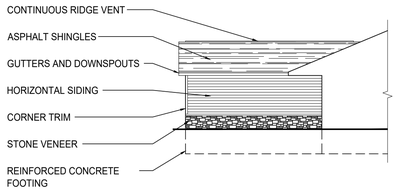
DATE: OCTOBER 5, 2021

REDWOOD CRYSTAL LAKE

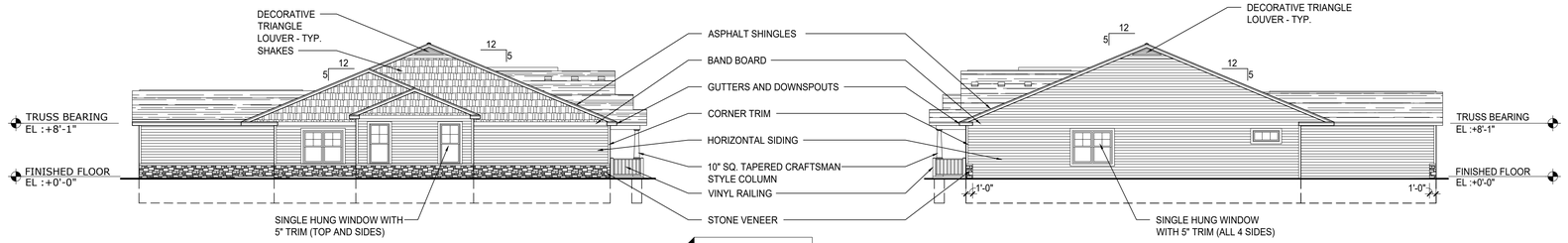
CRYSTAL LAKE, IL

Redwood APARTMENT NEIGHBORHOODS

A1.3a



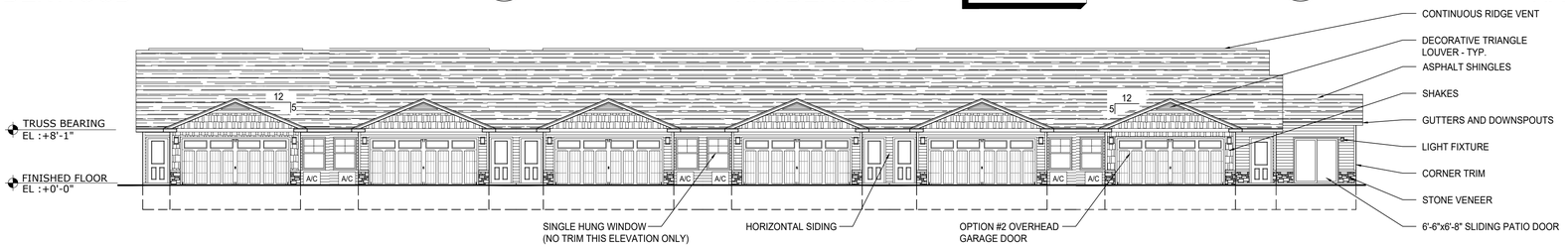
5 PARTIAL SIDE ELEVATION
SCALE: 3/32" = 1'-0" — HAYDENWOOD



4 HIGH PROFILE SIDE ELEVATION
SCALE: 3/32" = 1'-0" — HAYDENWOOD

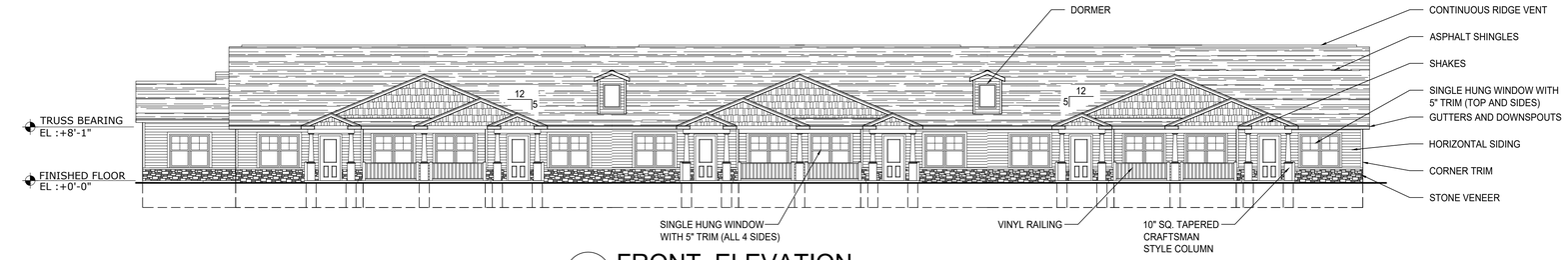
NOTE:
HIGH PROFILE SIDE ELEVATION OCCURS AT STREET VIEW ONLY

3 STANDARD SIDE ELEVATION
SCALE: 3/32" = 1'-0" — HAYDENWOOD

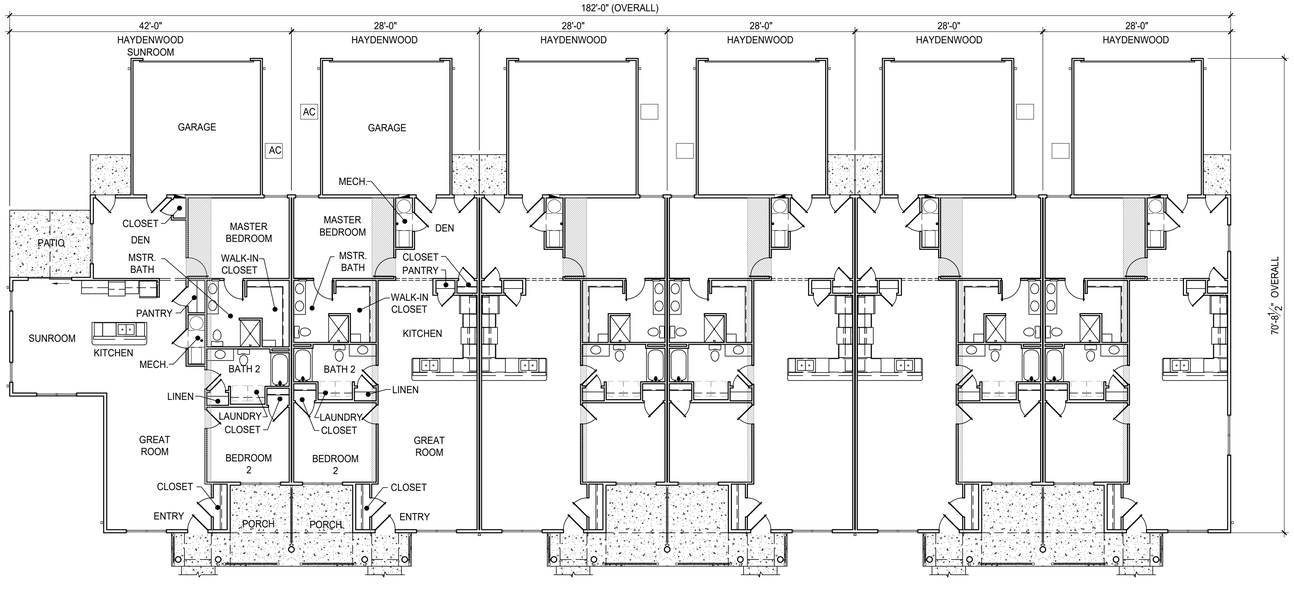


2 REAR ELEVATION
SCALE: 3/32" = 1'-0" — HAYDENWOOD

NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0" — HAYDENWOOD



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0" — HAYDENWOOD

EXTERIOR FINISH MATERIAL SELECTIONS

ITEM:	MATERIAL / STYLE:	COLOR:
DECORATIVE LOUVER	VINYL	WHITE
ASPHALT SHINGLES	DIMENSIONAL 30 YEAR LAMINATED	WEATHERED WOOD
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PRELIMINARY

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mpg-architects.com

BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

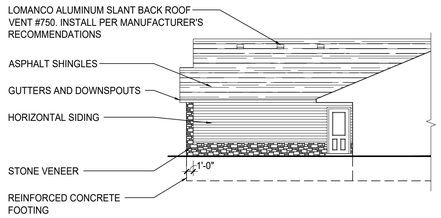
DATE: OCTOBER 5, 2021

REDWOOD CRYSTAL LAKE

CRYSTAL LAKE, IL

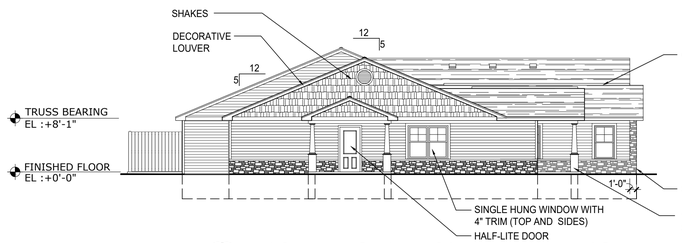
Redwood APARTMENT NEIGHBORHOODS

A1.3b



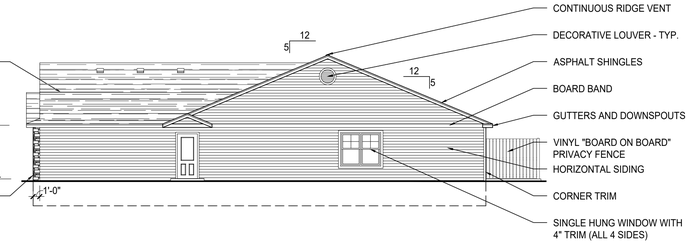
5 PARTIAL SIDE ELEVATION
SCALE: 3/32" = 1'-0"

FORESTWOOD



4 HIGH PROFILE SIDE ELEVATION
SCALE: 3/32" = 1'-0"

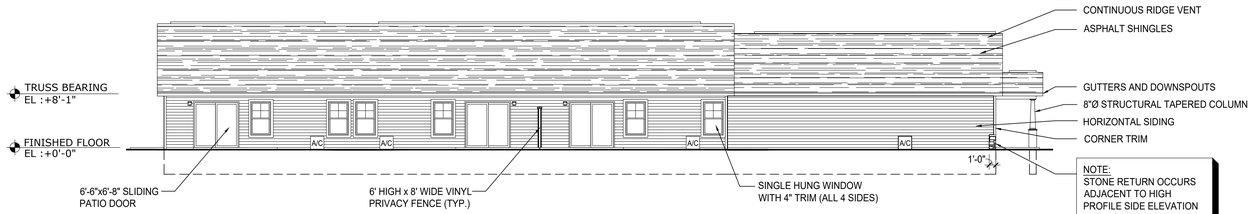
LEASING OFFICE



3 STANDARD SIDE ELEVATION
SCALE: 3/32" = 1'-0"

MEADOWOOD

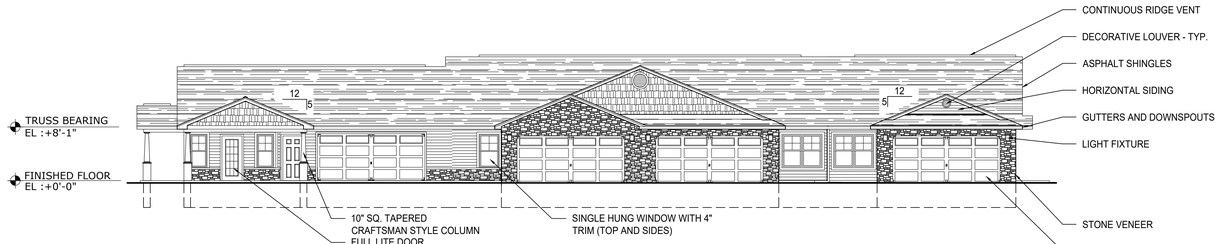
NOTE:
VINYL SIDING TO BE INSTALLED IN 12'-0" LENGTHS (MIN.) AND MOUNTED DIRECTLY TO O.S.B. WALL SHEATHING OVER HOUSE WRAP.



NOTE:
STONE RETURN OCCURS ADJACENT TO HIGH PROFILE SIDE ELEVATION ONLY

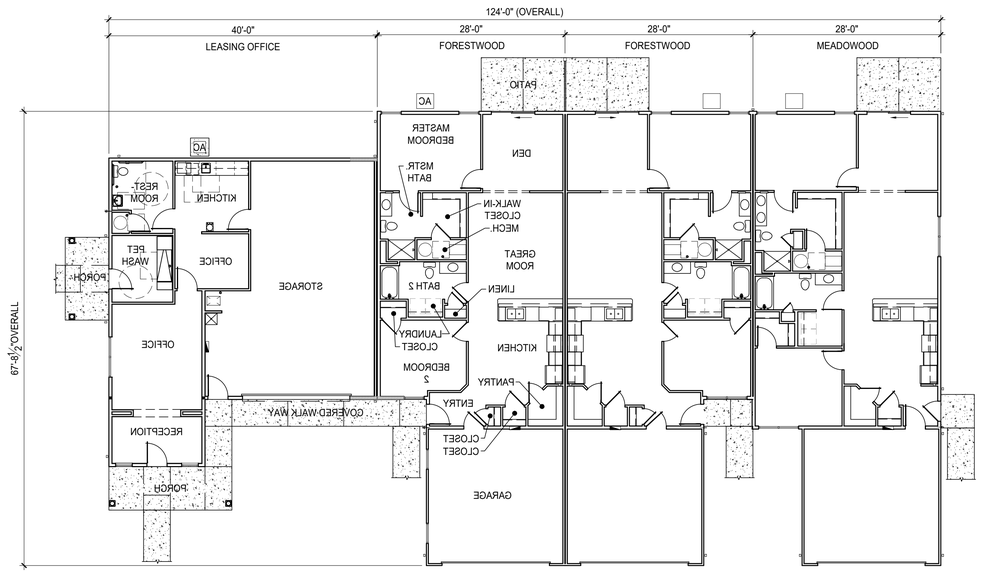
2 REAR ELEVATION
SCALE: 3/32" = 1'-0"

CAPEWOOD, FORESTWOOD, LEASING OFFICE



1 FRONT ELEVATION
SCALE: 3/32" = 1'-0"

CAPEWOOD, FORESTWOOD, LEASING OFFICE



OVERALL FLOOR PLAN
SCALE : 3/32" = 1'-0"

CAPEWOOD, FORESTWOOD, LEASING OFFICE

EXTERIOR FINISH MATERIAL SELECTIONS

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BUILDING FLOOR PLAN AND ELEVATIONS

PROJECT #: 28520

DATE: OCTOBER 5, 2021

REDWOOD CRYSTAL LAKE

CRYSTAL LAKE, IL

Redwood APARTMENT NEIGHBORHOODS

A1.4a



Redwood
APARTMENT NEIGHBORHOODS™

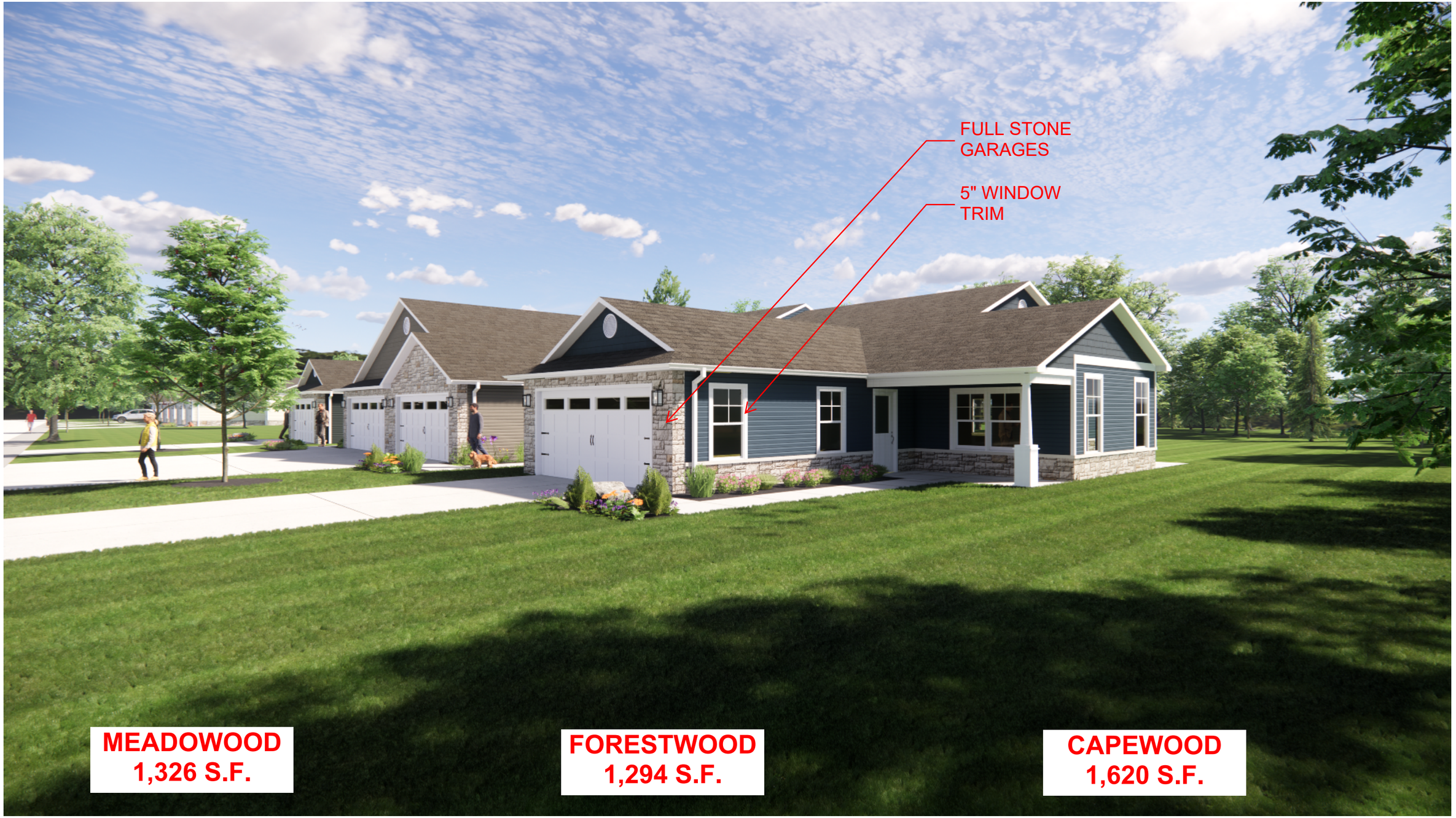
CRYSTAL LAKE, IL

TYPE 2 PERSPECTIVE

MEADOWOOD END

MPG
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ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

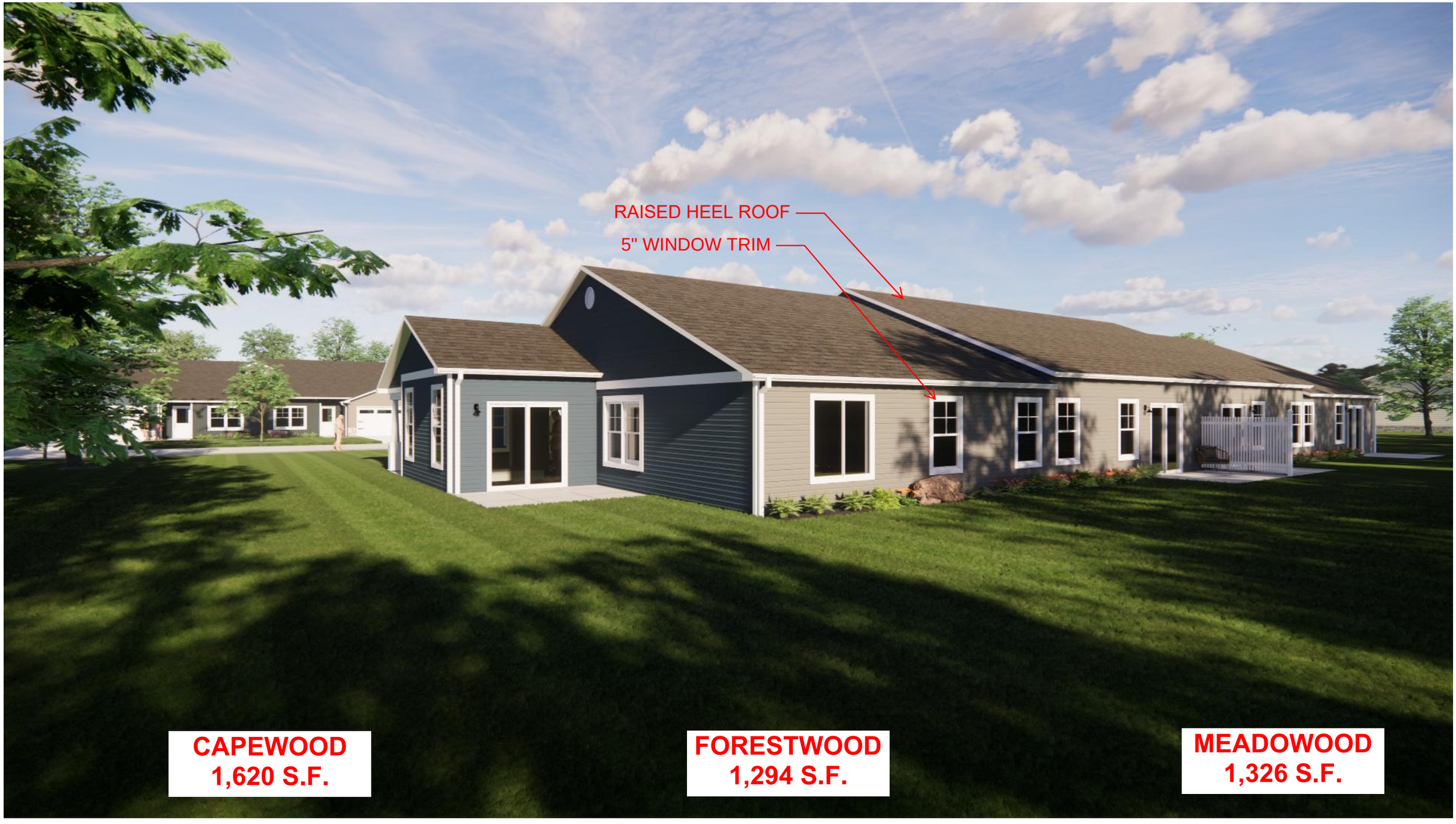
CRYSTAL LAKE, IL

TYPE 2 PERSPECTIVE

CAPEWOOD END

MPG
MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

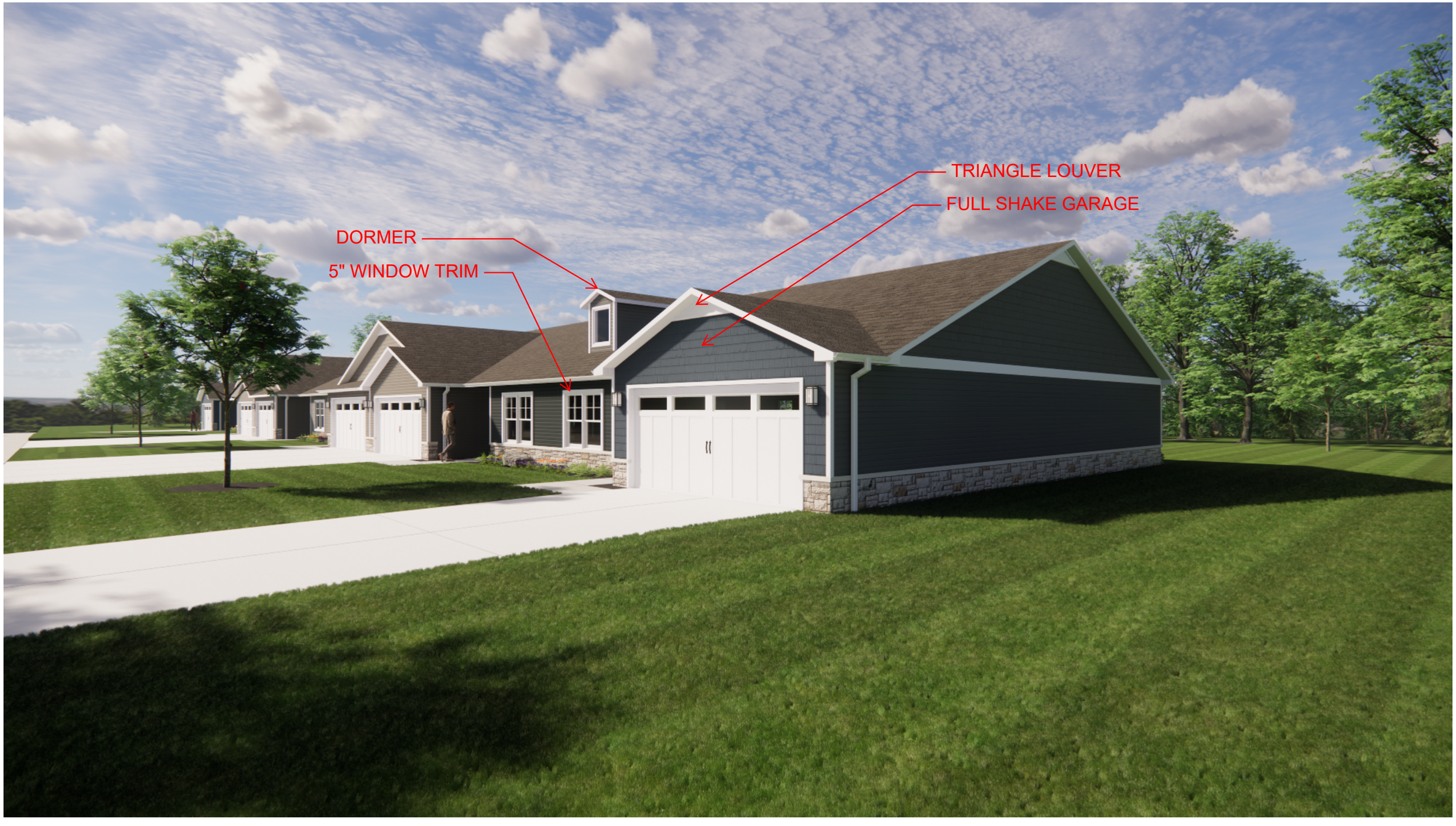
CRYSTAL LAKE, IL

TYPE 2 PERSPECTIVE

REAR CAPEWOOD

MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

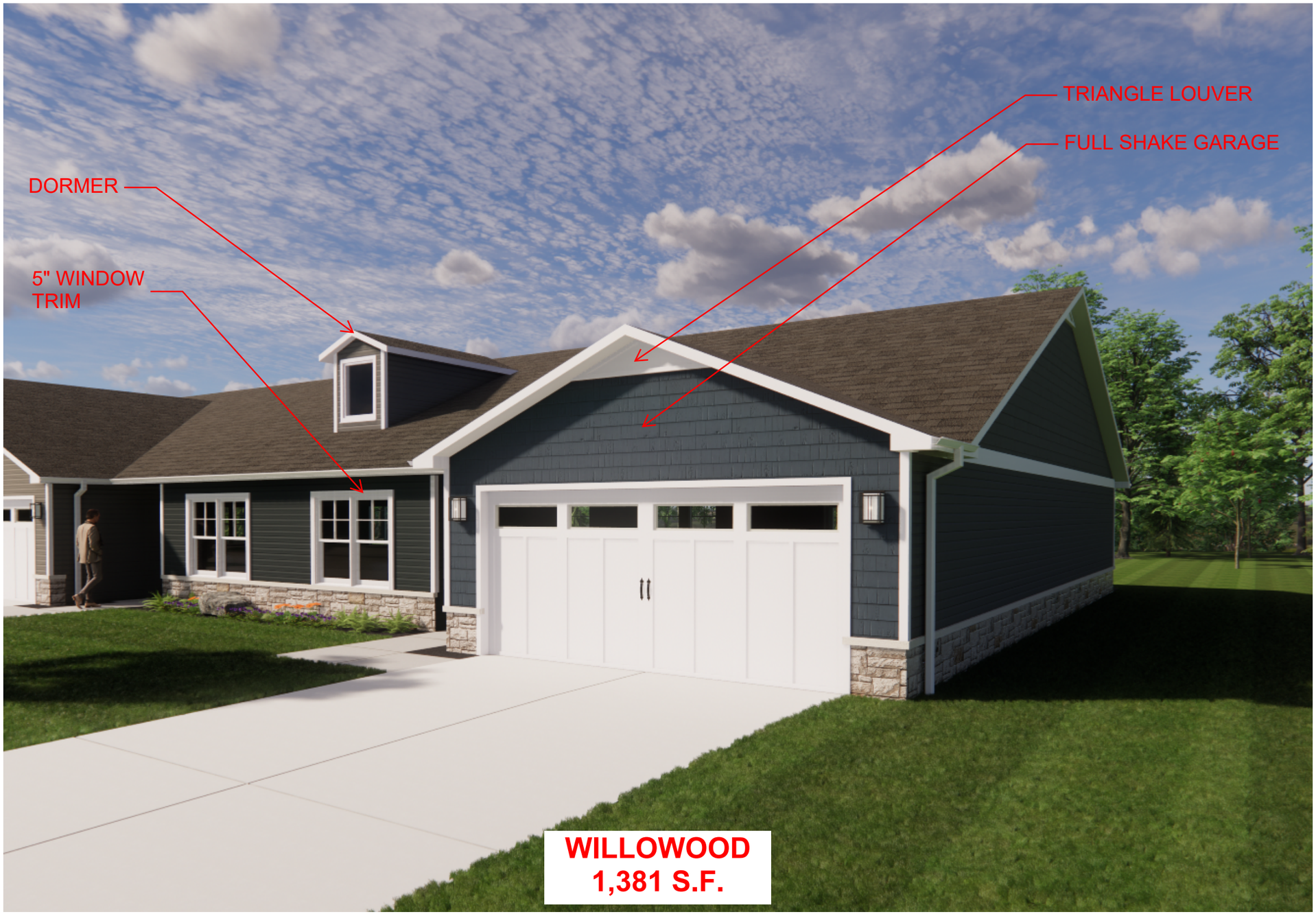
CRYSTAL LAKE, IL

FRONT PERSPECTIVE

WILLOWOOD

MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

CRYSTAL LAKE, IL

FRONT PERSPECTIVE ENLARGED

WILLOWOOD

MPG
MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS

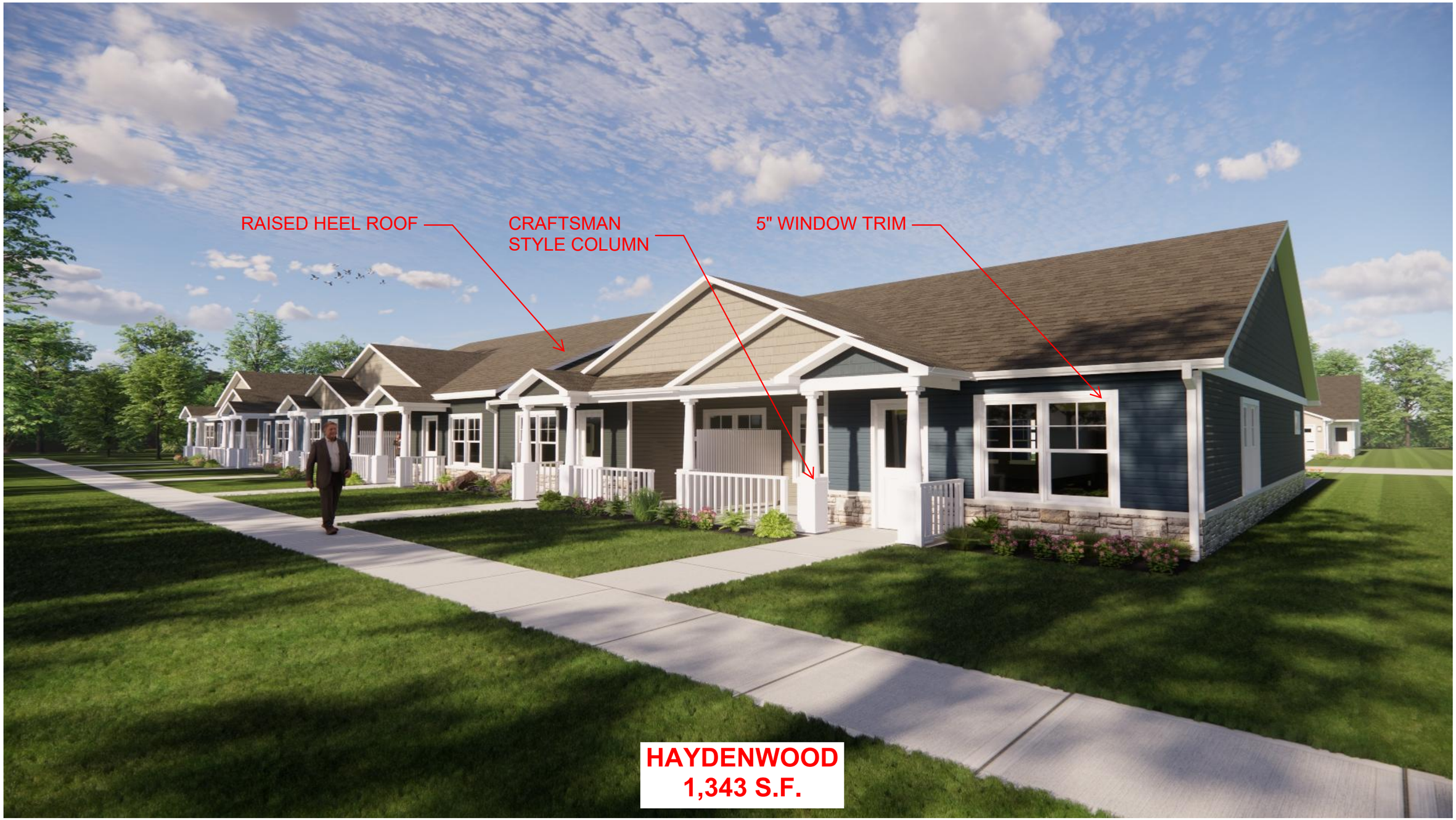
CRYSTAL LAKE, IL

REAR PERSPECTIVE

WILLOWOOD

MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

CRYSTAL LAKE, IL

FRONT PERSPECTIVE

MPG
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DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

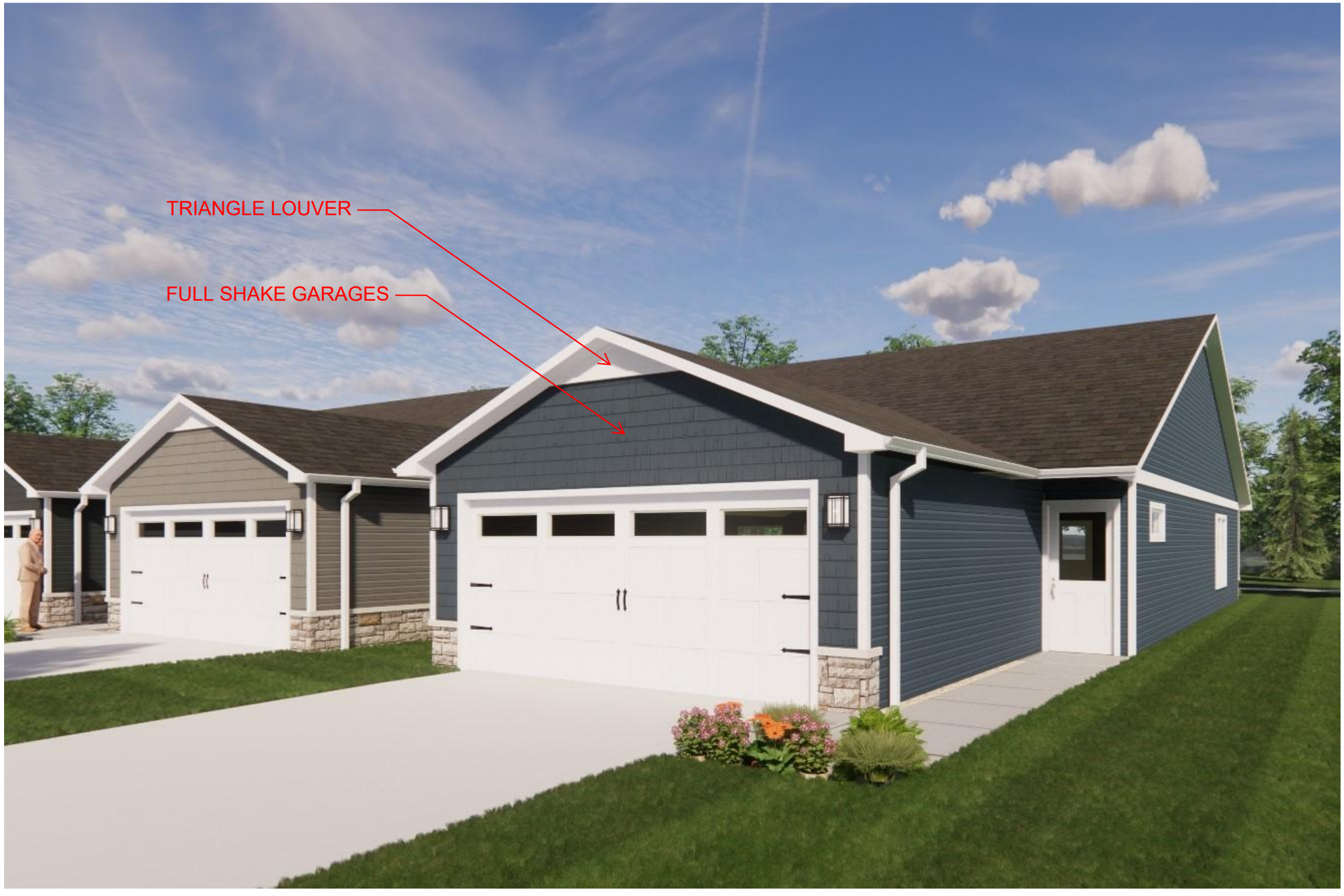
CRYSTAL LAKE, IL

REAR PERSPECTIVE

HAYDENWOOD

MPG
MANN • PARSONS • GRAY
ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

CRYSTAL LAKE, IL

REAR PERSPECTIVE ENLARGED

HAYDENWOOD

MPG
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ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

CRYSTAL LAKE, IL

TYPE 2 PERSPECTIVE

CAPEWOOD END

MPG
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ARCHITECTS

DATE: APRIL 16, 2021



Redwood
APARTMENT NEIGHBORHOODS™

REAR PERSPECTIVE

CAPEWOOD END

CRYSTAL LAKE, IL

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DATE: SEPTEMBER 29, 2021

FINAL SITE DEVELOPMENT PLANS

FOR

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

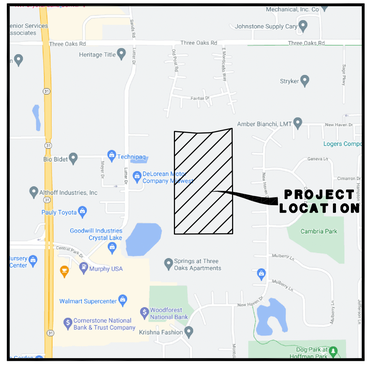
CRYSTAL LAKE, ILLINOIS

WATERMAIN-SANITARY SEWER-STREET-STREET LIGHTING AND DRAINAGE IMPROVEMENTS

LEGEND

EXISTING	PROPOSED	DESCRIPTION
◎	◉	MANHOLE
○	●	CATCH BASIN
□	■	INLET
	⬣	CLEANOUT
	▭	SLOPE INLET BOX
⊣	⊣	HEADWALL
◁	◀	END SECTION
⊂⊂	⊂⊂	STORM SEWER
⊂-⊂	⊂-⊂	SANITARY SEWER
		WATERMAIN
⊗	◔	VALVE & BOX
⊗	◉	WATER VALVE IN VAULT
♉	♉	FIRE HYDRANT
		CONTOURS
(ELEV)	ELEV	ELEVATIONS
⌑	✦	STREET LIGHT
		WATERMAIN PROTECTION
		SILT FENCE INLET PROTECTOR
		TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
		RIP-RAP
	➡	OVERFLOW ROUTE

N



LOCATION MAP

INDEX OF SHEETS

Sheet Number	Sheet Title
01	TITLE
02–03	CONSTRUCTION SPECIFICATIONS – GENERAL NOTES
04	STREET PAVEMENT DESIGN AND DETAILS
⚠ 04A	STREET LIGHTING AND STRIPING AND SIGNAGE PLAN
⚠ 05	OVERALL SANITARY SEWER AND WATERMAIN PLAN
06	OVERALL STORM SEWER PLAN
07–18	DRAINAGE AND GRADING PLAN
19	PLAN & PROFILE: CENTRAL PARK DRIVE – STA. 160+00.00 TO STA. 167+50.00
20	PLAN & PROFILE: CENTRAL PARK DRIVE – STA. 167+50.00 TO STA. 176+50.00
21	PLAN & PROFILE: CENTRAL PARK DRIVE – STA. 176+50.00 TO STA. 184+50.00
22	PLAN & PROFILE: BLACKBERRY DRIVE – STA. 10+00.00 TO STA. 17+50.00
23	PLAN & PROFILE: BLACKBERRY DRIVE – STA. 17+50.00 TO STA. 22+64.66
24	PLAN & PROFILE: SALMONBERRY DRIVE – STA. 29+57.63 TO STA. 37+00.00
25	PLAN & PROFILE: SALMONBERRY DRIVE – STA. 37+00.00 TO STA. 42+63.44
26	PLAN & PROFILE: RED GINGER DRIVE – STA. 44+90.00 TO STA. 48+56.90
27	PLAN & PROFILE: RED IVY DRIVE – STA. 50+00.00 TO STA. 57+00.00
28	PLAN & PROFILE: RED IVY DRIVE – STA. 57+00.00 TO STA. 60+04.17
29	PLAN & PROFILE: RED DOGWOOD DRIVE – STA. 65+00.00 TO STA. 71+51.82
30	PLAN & PROFILE: RED LILAC DRIVE – STA. 75+00.00 TO STA. 81+50.00
31	PLAN & PROFILE: RED LILAC DRIVE – STA. 81+50.00 TO STA. 85+96.76
32	PLAN & PROFILE: VIOLET DRIVE – STA. 90+00.00 TO STA. 94+14.70
33	PLAN & PROFILE: LACEFLOWER DRIVE – STA. 102+04.69 TO STA. 107+48.98
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35	PLAN & PROFILE: RED LILY DRIVE – STA. 120+00.00 TO STA. 122+90.16
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37	PLAN & PROFILE: WOODROSE DRIVE – STA. 135+00.00 TO STA. 143+53.63
38	SANITARY SEWER AND WATERMAIN CONSTRUCTION DETAILS
39	DRAINAGE STRUCTURE DETAILS
⚠ ER1	STORMWATER POLLUTION PREVENTION PLAN – PHASE 1
⚠ ER2	STORMWATER POLLUTION PREVENTION PLAN – PHASE 2
⚠ ER3	STORMWATER POLLUTION PREVENTION PLAN – PHASE 3
⚠ ER4	STORMWATER POLLUTION PREVENTION PLAN NOTES
⚠ ER5	STORMWATER POLLUTION PREVENTION PLAN DETAILS

BENCHMARK/CONTROL POINTS

ELEVATION REFERENCE MARK:
FOUND CUT '+' IN TOP OF THE CONCRETE CURB ON THE SOUTH RIGHT OF WAY LINE OF CENTRAL PARK DRIVE APPROXIMATELY 119 FEET EAST OF THE NORTHEASTENMOST ENTRANCE TO WALMART.
ELEVATION: 888.62 NAVD 88

CONTROL POINTS:

CP #100: FOUND CROSS IN TOP OF CURB IN FRONT OF THE FIRE HYDRANT LOCATED ON THE NORTH SIDE CENTRAL PARK DRIVE ON THE WEST SIDE OF SUBJECT SITE APPROXIMATELY 235' SOUTH OF THE NORTHERLY LINE THEREOF.
NORTHING: 2021191.02
EASTING: 998230.77
ELEVATION: 887.02 NAVD 88

CP #105: SET '+' IN THE NORTHEAST CORNER OF THE CONCRETE TRANSFORMER PAD LOCATED IN REAR THE SOUTHEAST CORNER OF THE PROPERTY LOCATED AT 7765 EAST MONTICELLO WAY.
NORTHING: 2021455.43
EASTING: 999351.94
ELEVATION: 890.70 NAVD 88

NOTES

BOUNDARY INFORMATION BASED ON BOUNDARY SURVEY PERFORMED BY CEMCON, LTD. ON MARCH 9, 2021.

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

PROFESSIONAL ENGINEER'S CERTIFICATION

STATE OF ILLINOIS)
SS.
COUNTY OF DU PAGE)

I, KEVIN T. SERAFIN , A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS TECHNICAL SUBMISSION WAS PREPARED ON BEHALF OF REDWOOD USA, LLC, BY CEMCON, LTD. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

⚠ DATED THIS 11TH DAY OF FEBRUARY, A.D., 2022.

KEVIN T. SERAFIN 062-052118 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

⚠ ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062–052118
⚠ MY LICENSE EXPIRES ON NOVEMBER 30, 2023

PROFESSIONAL DESIGN FIRM LICENSE NUMBER 184–002937
EXPIRES APRIL 30, 2023

NOTE : UNLESS THIS DOCUMENT BEARS THE ORIGINAL SIGNATURE AND IMPRESSED SEAL OF THE DESIGN PROFESSIONAL ENGINEER, IT IS NOT A VALID TECHNICAL SUBMISSION.

FOR UNDERGROUND UTILITY LOCATIONS, CALL
J.U.L.I.E.
TOLL FREE
TEL. 1-800-892-0123 or 811

DATE: _____

RELEASED FOR PLAN REVIEW AND PERMIT PROCESSING ONLY.

IF USED FOR BIDDING PURPOSES, THOSE PARTIES CONCERNED SHALL BE ADVISED THAT REVISIONS MAY BE REQUIRED PRIOR TO PLAN APPROVAL.

NOT ISSUED FOR CONSTRUCTION UNTIL APPROVED BY THE CITY OF CRYSTAL LAKE AND PERMITTED AS REQUIRED.

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PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

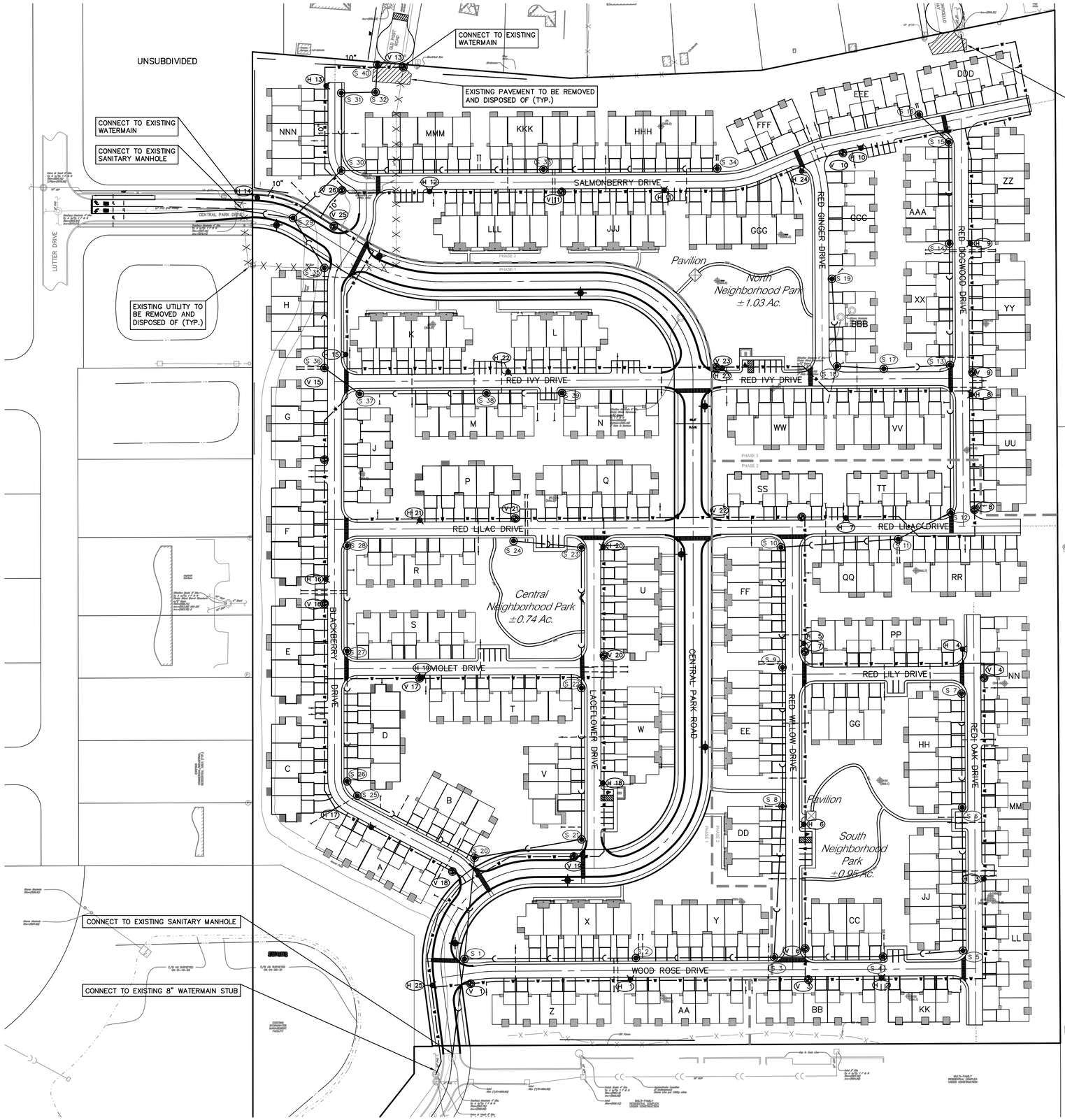
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502–9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: info@cemcon.com Website: www.cemcon.com

REVISIONS

NO.	DATE	SHEETS	NO.	DATE	SHEETS
⚠	01–07–22/DDD	1–37, 39, ER1–ER5			

JOB NO. 848.008
COMPLETION DATE :
12–13–21
SHEET 1 OF 42

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE – FINAL ENGINEERING – 848.008 – AS SUBMITTED: 12–13–21/DDD



LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SANITARY SEWER
		SANITARY MANHOLE
		WATERMAIN
		WATER VALVE IN VAULT
		FIRE HYDRANT
	(S No.)	NUMBERING SYSTEM USED ON PLANS FOR SANITARY MANHOLE IDENTIFICATION
	(H No.)	NUMBERING SYSTEM USED ON PLANS FOR FIRE HYDRANT IDENTIFICATION
	(V No.)	NUMBERING SYSTEM USED ON PLANS FOR VALVE VAULT IDENTIFICATION
	(L No.)	NUMBERING SYSTEM USED ON PLANS FOR LIGHT POLE IDENTIFICATION
		100 WATT H.P.S. (CLEAR) LUMIN. STD. 14.5' MOUNTING HEIGHT
X X X		UTILITY TO BE REMOVED

⚠ NOTE:
- ALL SANITARY SEWER SHALL BE 8 INCH DIA. UNLESS OTHERWISE NOTED.
- ALL WATERMAIN SHALL BE 8 INCH DIA. UNLESS OTHERWISE NOTED.
- EXISTING WATERMAIN FROM NORTHWEST OF THE SITE FROM CENTRAL PARK DRIVE TO OLD POST ROAD CAN'T BE REMOVED AND DISCONNECTED UNTIL PROPOSED WATERMAIN FROM CENTRAL PARK DRIVE TO E. MONTICELLO WAY IS INSTALLED AND OPERATIONAL.
- FOR NEW CONNECTIONS AT EXISTING WATER MAIN VALVES, EXISTING WATER MAIN VALVES MUST BE PRESSURE TESTED. IF EXISTING VALVE FAILS PRESSURE TEST, INSTALLATION OF A NEW WATER MAIN VALVE IS REQUIRED. A LINE STOP WILL BE REQUIRED IF EXISTING VALVE MUST BE REPLACED.

NO.	DATE	DESCRIPTION
⚠1	01-07-22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:

REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254-8425

PREPARED BY:

CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: info@cemcon.com Website: www.cemcon.com

OVERALL SANITARY SEWER WATERMAIN AND STREET LIGHTING PLAN

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12-13-21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERUTIL	FLD. BK./PG.:
DIR: 848008	SCALE: 1" = 80'

SHEET NO. 05 of 42

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N

LEGEND

EXISTING	PROPOSED	DESCRIPTION
◎	◉	MANHOLE
○	●	CATCH BASIN
□	■	INLET
	⬢	CLEANOUT
	▭	SLOPE BOX
⊲	◀	END SECTION
⊲C	C⊳	STORM SEWER
	(No.)	NUMBERING SYSTEM USED ON PLANS FOR DRAINAGE STRUCTURE IDENTIFICATION
	(CNo.)	NUMBERING SYSTEM USED ON PLANS FOR CLEANOUT STRUCTURE IDENTIFICATION
→→	→→	EGRESS COMMON PATH

NO.	DATE	DESCRIPTION
		REVISIONS

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OVERALL STORM SEWER PLAN

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12-13-21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERUTIL	FLD. BK./PG.:
DIR: 848008	SCALE: 1" = 80'

SHEET NO.
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STA. 29+94.8, 30.8' RT.
STM. MH. NO. 39 4'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 879.10
(100YR HGL= 881.26)

STA. 29+96.0, 0.0' LT.
STM. MH. NO. 38 5'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 883.6
INV. = 878.70
(100YR HGL= 880.92)

STA. 30+23.8, 27.3' LT.
STM. MH. NO. 41 5'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 878.36 NW
877.61 E,S
(100YR HGL= 880.70)

103 L.F.–36" R.C.P.
TY. 1 @ 0.38%

117 L.F.–36" R.C.P.
TY. 2 @ 0.35%

83 L.F.–24" R.C.P.
TY. 1 @ 1.08%

31 L.F.–24" R.C.P.
TY. 1 @ 1.29%
(w/ C-443 JOINTS)

37 L.F.–27" R.C.P.
TY. 1 @ 0.92%

10' WIDE BUTT JOINT
SEE DETAIL ON SHEET 4

STM. MH. NO. 42 5'ø
TY. A w/TY. 8 GR.
RIM = 884.2
INV. = 878.00
(100YR HGL= 881.10)

STM. MH. NO. 43 5'ø
TY. A w/TY. 8 GR.
RIM = 884.4
INV. = 878.41
(100YR HGL= 881.55)

RETAINING WALL WILL REQUIRE FENCING. REFER TO LANDSCAPE PLAN.

STM. MH. NO. 40 5'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 880.00
(100YR HGL= 882.16)

UNSUBDIVIDED

95 L.F.–36" R.C.P.
TY. 2 @ 0.59%

STA. 31+23.2, 21.9' LT.
STM. MH. NO. 37 6'ø
TY. A w/TY. 1 FR. & C.L.
RIM = 883.6
INV. = 877.05 N
871.00 SE
(100YR HGL= 878.87)

49 L.F.–48" R.C.P.
TY. 2 @ 0.16%

STA. 31+85.1, 0.0' RT.
STM. MH. NO. 17 6'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 884.2
INV. = 870.92 NW,S
880.20 E
(100YR HGL= 878.77)

77 L.F.–48" R.C.P.
TY. 2 @ 0.16%

INLET NO. 16 2'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 880.10
(100YR HGL= 880.57)

97 L.F.–12" R.C.P.
TY. 1 @ 0.51%

INLET NO. 15 3'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 879.61
(100YR HGL= 880.36)

84 L.F.–12" R.C.P.
TY. 2 @ 0.50%

STA. 21+86.5, 0.0' RT.
STM. MH. NO. 13 6'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 884.6
INV. = 879.19 NW
870.80 N,SW
879.58 E
(100YR HGL= 878.44)

STM. MH. NO. 181 6'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 870.47 SW,NE
877.68 E
(100YR HGL= 877.97)

54 L.F.–48" R.C.P.
TY. 2 @ 0.23%

STM. MH. NO. 180 6'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 870.35
(100YR HGL= 877.76)

130 L.F.–48" R.C.P.
TY. 2 @ 0.25%
(w/ C-443 JOINTS)

71 L.F.–48" R.C.P.
TY. 2 @ 0.24%

STM. MH. NO. 179 6'ø
TY. A w/TY. 8 GR.
RIM = 883.3
INV. = 870.17
(100YR HGL= 877.45)

66 L.F.–48" R.C.P.
TY. 2 @ 0.33%

88 L.F.–48" R.C.P.
TY. 2 @ 1.50%

STA. 20+98.4, 0.00' RT.
CATCH BASIN NO. 11 4'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 884.0
INV. = 879.64
(100YR HGL= 879.70)

77 L.F.–12" R.C.P.
TY. 2 @ 1.17%
(w/ C-443 JOINTS)

INLET NO. 12 2'ø
TY. A w/TY. 8 GR.
RIM = 883.4
INV. = 879.90
(100YR HGL= 880.69)

52 L.F.–12" R.C.P.
TY. 1 @ 1.00%

INLET NO. 14 2'ø
TY. A w/TY. 8 GR.
RIM = 883.6
INV. = 880.10
(100YR HGL= 880.89)

INLET NO. 48 3'ø
TY. A w/TY. 8 GR.
RIM = 885.4
INV. = 882.08
(100YR HGL= 882.77)

INLET NO. 49 2'ø
TY. A w/TY. 8 GR.
RIM = 885.9
INV. = 882.40
(100YR HGL= 882.94)

64 L.F.–12" R.C.P.
TY. 1 @ 0.50%

170 L.F.–30" R.C.P.
TY. 2 @ 0.37%

STA. 33+11.0, 0.0' RT.
STM. MH. NO. 18 5'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 885.6
INV. = 880.65
(100YR HGL= 882.88)

126 L.F.–30" R.C.P.
TY. 1 @ 0.36%

F.F.=885.41 F.F.=886.08 F.F.=886.08 F.F.=886.75 F.F.=886.75 F.F.=886.75
F.F.=887.57 F.F.=888.24 F.F.=888.24
F.F.=885.65 F.F.=885.65 F.F.=885.65 F.F.=885.65
F.F.=885.10 F.F.=885.10
F.F.=886.97 F.F.=886.97 F.F.=887.64 F.F.=887.64 F.F.=888.31 F.F.=888.31
F.F.=885.56 F.F.=885.56 F.F.=886.25 F.F.=886.25 F.F.=886.90 F.F.=886.90
F.F.=888.70 F.F.=888.70

NNN MMM KKK LLL

SALMONBERRY DRIVE
CENTRAL PARK DRIVE
CENTRAL PARK ROAD
BLACKBERRY DRIVE
LUTTER DRIVE
OLD POST ROAD

Valve & Vault 5' Dia.
Ty. A w/Ty. 1 F & G
Rim=(884.18)
T/Pipe=(878.88)
12" DIP

Sanitary Manhole 4' Dia.
Ty. A w/Ty. 1 F & G
Rim=(883.24)
Inv.=(873.97)

Sanitary Manhole 4' Dia.
Ty. A w/Ty. 1 F & G
Rim=(887.46)
Inv.=(878.14)

12" PVC (Per Atlas) 886.35±(M.E.)

Inv.=(892.22)

Electrical Box

Bird House

Old Post Road Pipeline Corridor (Utility Easement)

100'
11'
11'
12'
6" PVC

DRAINAGE & GRADING NOTES

1. ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
2. ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
3. ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
4. EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
5. F.F – INDICATES PROPOSED FINISHED FLOOR ELEVATIONS AND THE LOWEST OPENING IN A CONVENTIONAL FOUNDATION WHERE SURFACE RUNOFF CAN ENTER THE FOUNDATION.
6. THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.5 FEET BELOW THE FINISHED FLOOR ELEVATION UNLESS INDICATED OTHERWISE.
7. G/F – INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. GARAGE FLOOR INDICATED IS AT THE INTERSECTION OF DRIVEWAY & RAIN LIP.
8. – ACCENTED SIDES OF PROPOSED HOUSE FOUNDATIONS ARE INTENDED TO INDICATE THE APPROXIMATE LOCATION WHERE SPECIAL CONSTRUCTION MEASURES MUST BE EMPLOYED IN ORDER TO MINIMIZE SIDE YARD, REAR YARD AND / OR FRONT YARD GRADIENTS (E.G. DROPPED SIDING, STEPPED FOUNDATION, RETAINING WALL, ETC.) –SEE NOTES ABOVE FOR FURTHER DETAILS.
9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
10. – WATERMAIN PROTECTION (SEE SHEET 38 FOR DETAILS.)
11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

KEY MAP

NO.	DATE	DESCRIPTION
1	01–07–22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

PREPARED BY:
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DRAINAGE AND GRADING PLAN 01

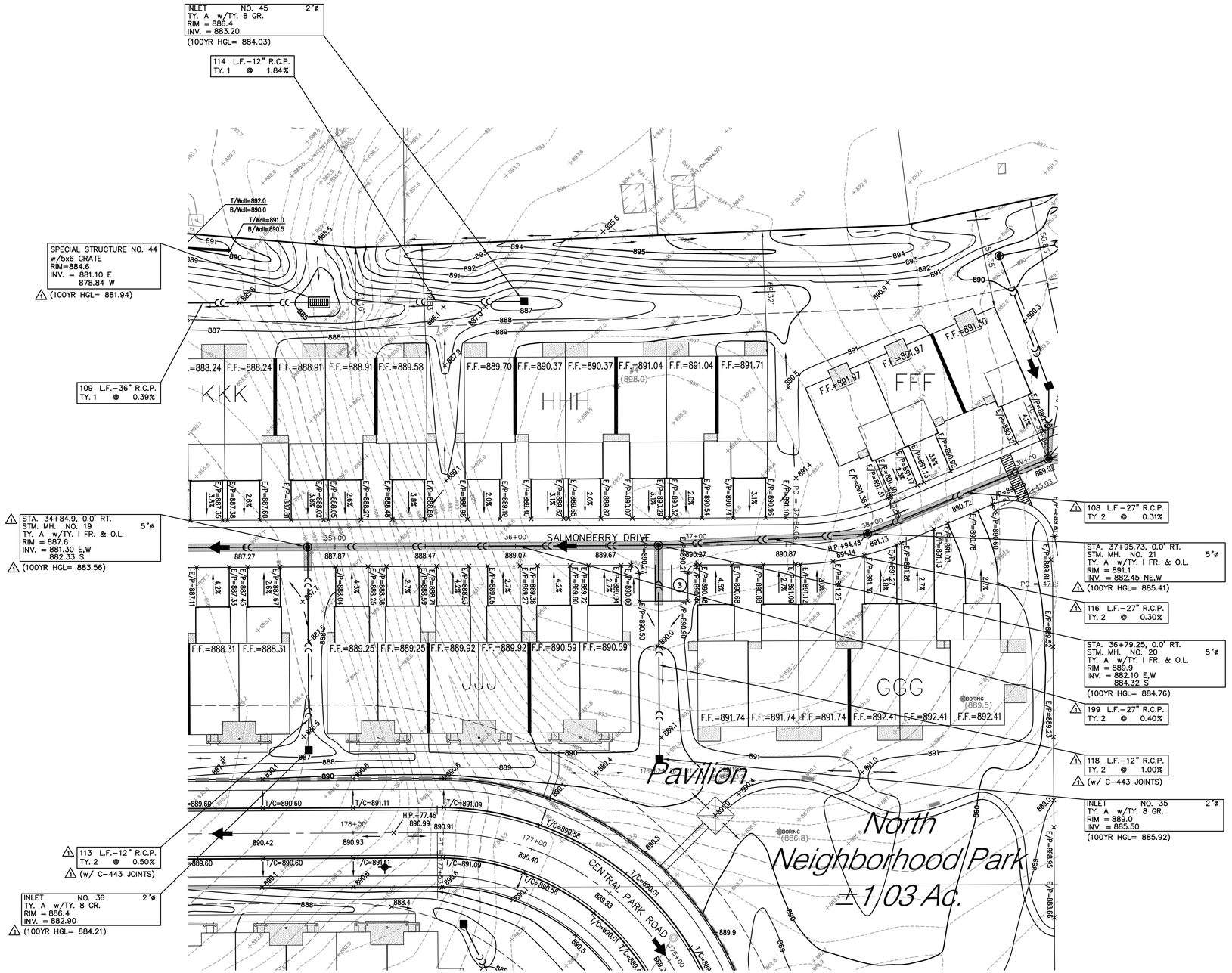
REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

SHEET NO.
07 of 42

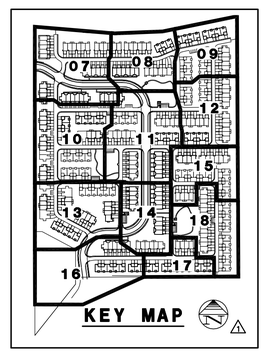
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DRAINAGE & GRADING NOTES

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2. ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
3. ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
4. EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
5. F.F – INDICATES PROPOSED FINISHED FLOOR ELEVATIONS AND THE LOWEST OPENING IN A CONVENTIONAL FOUNDATION WHERE SURFACE RUNOFF CAN ENTER THE FOUNDATION.
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9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
10. – WATERMAIN PROTECTION (SEE SHEET 38 FOR DETAILS.)
11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B-6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B-6.12 CURB



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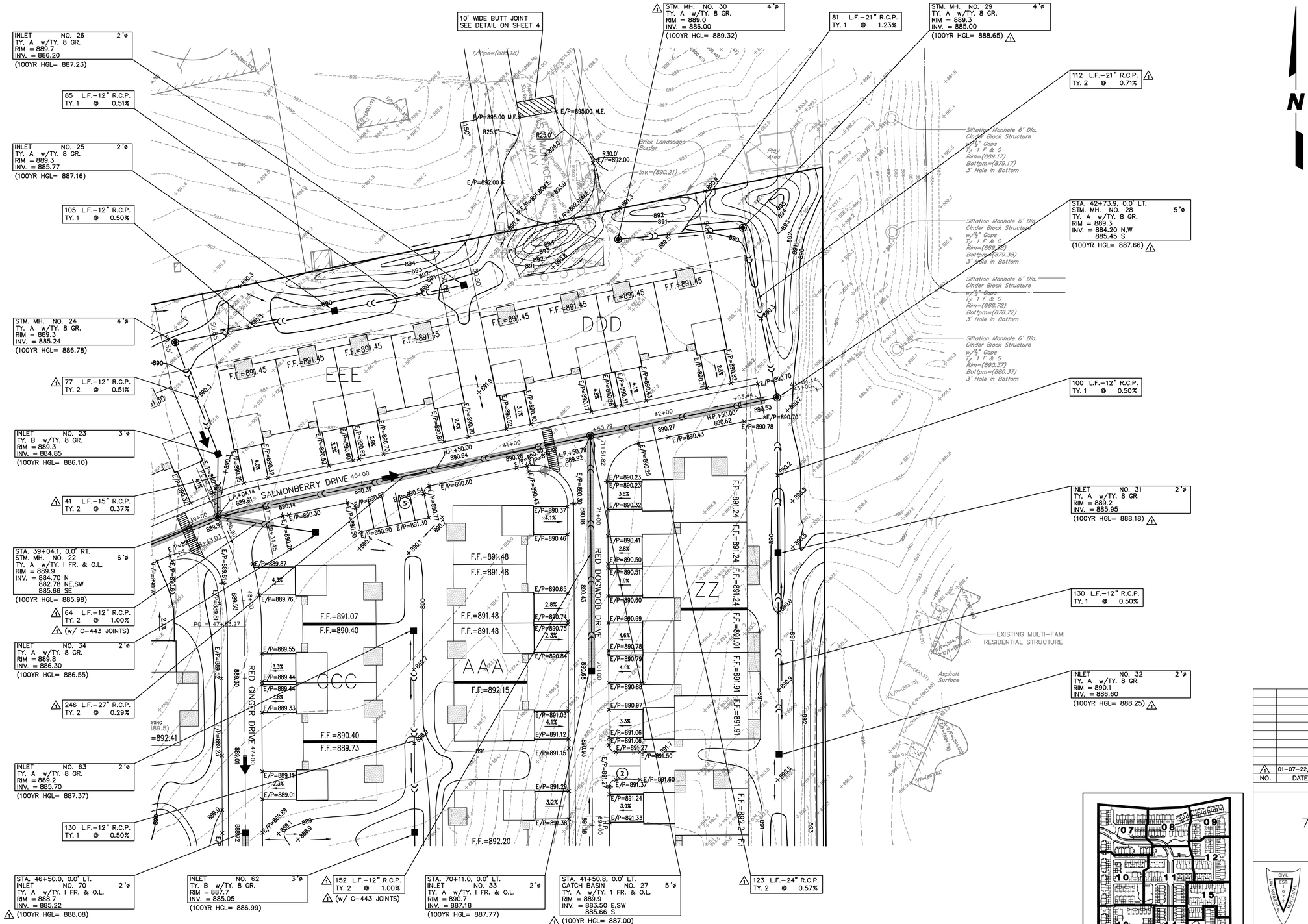
DRAINAGE AND GRADING PLAN 02

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12-13-21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

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15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01-07-22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

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DRAINAGE AND GRADING PLAN 03

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12-13-21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

SHEET NO.
09 of 42

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STM. MH. NO. 178 7'ø
TY. A w/TY. 8 GR.
RIM = 883.1
INV. = 869.95 N,S
871.23 E
(100YR HGL= 877.18)

70 L.F.–36" R.C.P.
TY. 2 @ 0.66%

STM. MH. NO. 182 6'ø
TY. A w/TY. 8 GR.
RIM = 883.1
INV. = 871.69
(100YR HGL= 877.80)

STA. 19+50.0, 0.0' RT.
CATCH BASIN NO. 10 9'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 883.5
INV. = 872.00
(100YR HGL= 878.24)

51 L.F.–36" R.C.P.
TY. 2 @ 0.61%

100 L.F.–36" R.C.P.
TY. 2 @ 0.56%

STA. 51+00.0, 0.0' RT.
STM. MH. NO. 46 6'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 884.8
INV. = 880.03 SW
878.66 E
872.56 W
(100YR HGL= 878.97)

133 L.F.–36" R.C.P.
TY. 2 @ 0.50%

45 L.F.–12" R.C.P.
TY. 2 @ 0.51%

72 L.F.–48" R.C.P.
TY. 2 @ 0.31%

STM. MH. NO. 177 7'ø
TY. A w/TY. 8 GR.
RIM = 883.1
INV. = 869.73
(100YR HGL= 876.64)

76 L.F.–48" R.C.P.
TY. 2 @ 0.30%

SPECIAL STRUCTURE NO. 176
TY. 8 w/6x8 GRATE
RIM=883.0
INV. = 869.50
(100YR HGL= 876.09)

175 L.F.–54" R.C.P.
TY. 3 @ 0.30%

STA. 17+94.4, 0.0' RT.
STM. MH. NO. 8 4'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 888.6
INV. = 884.51
(100YR HGL= 886.11)

103 L.F.–15" R.C.P.
TY. 2 @ 0.98%

STM. MH. NO. 175 7'ø
TY. A w/TY. 8 GR.
RIM = 889.0
INV. = 868.98
(100YR HGL= 874.77)

STA. 15+94.38, 0.0' LT.
STM. MH. NO. 7 5'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 890.8
INV. = 883.50 N
883.00 E,S
(100YR HGL= 885.42)

61 L.F.–54" R.C.P.
TY. 3 @ 0.31%

STM. MH. NO. 174 7'ø
TY. A w/TY. 8 GR.
RIM = 888.0
INV. = 868.79
(100YR HGL= 874.32)

120 L.F.–21" R.C.P.
TY. 2 @ 0.83%

138 L.F.–54" R.C.P.
TY. 3 @ 0.30%

STA. 14+74.39, 0.0' RT.
STM. MH. NO. 6 4'ø
TY. A w/TY. 1 FR. & O.L.
RIM = 891.4
INV. = 882.00
(100YR HGL= 884.46)

Asphalt Surface

1 Basin 3' Dia. (Ty. I F & G Block Barrel Structure aps '88.14) 93.29) NW–SW 93.79) E

10" RCP

4" Steel

10" RCP

RED IVY DRIVE

RED LILAC DRIVE

BLACKBERRY DRIVE

VIOLET DRIVE

TEMPORARY CONSTRUCTION EASEMENT (ADDED) PERDOCK 2020R041915

TEMPORARY CONSTRUCTION EASEMENT (ADDED) PERDOCK 2020R041915

Central Neighborhood Park ±0.74 Ac.

267 L.F.–36" R.C.P.
TY. 2 @ 0.40%

STA. 52+33.4, 0.0' RT.
STM. MH. NO. 47 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 886.5
INV. = 881.85 N
879.32 E,W
(100YR HGL= 881.66)

67 L.F.–18" R.C.P.
TY. 2 @ 0.49%

STM. MH. NO. 73 4'ø
TY. A w/TY. 8 GR.
RIM = 884.0
INV. = 880.36
(100YR HGL= 882.00)

INLET NO. 76 3'ø
TY. B w/TY. 8 GR.
RIM = 885.4
INV. = 881.40
(100YR HGL= 884.32)

95 L.F.–15" R.C.P.
TY. 1 @ 0.36%

INLET NO. 75 3'ø
TY. B w/TY. 8 GR.
RIM = 885.4
INV. = 881.06
(100YR HGL= 883.67)

130 L.F.–15" R.C.P.
TY. 1 @ 0.43%

38 L.F.–18" R.C.P.
TY. 1 @ 0.37%

STM. MH. NO. 74 4'ø
TY. A w/TY. 8 GR.
RIM = 884.0
INV. = 880.50
(100YR HGL= 882.31)

STA: 76+40.23, 0.0' RT.
INLET NO. 9 2'ø
TY. A w/TY. I FR. & O.L.
RIM = 889.4
INV. = 885.91
(100YR HGL= 886.95)

140 L.F.–12" R.C.P.
TY. 1 @ 1.00%

INLET NO. 81 3'ø
TY. A w/TY. 8 GR.
RIM = 888.1
INV. = 884.40
(100YR HGL= 886.74)

92 L.F.–15" R.C.P.
TY. 2 @ 1.00%

STM. MH. NO. 80 4'ø
TY. A w/TY. 8 GR.
RIM = 888.3
INV. = 883.68
(100YR HGL= 886.09)

113 L.F.–18" R.C.P.
TY. 2 @ 0.38%

30 L.F.–18" R.C.P.
TY. 2 @ 0.83%

STM. MH. NO. 79 4'ø
TY. A w/TY. 8 GR.
RIM = 888.0
INV. = 883.25
(100YR HGL= 885.61)



DRAINAGE & GRADING NOTES

1. ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
2. ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
3. ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
4. EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
5. F.F – INDICATES PROPOSED FINISHED FLOOR ELEVATIONS AND THE LOWEST OPENING IN A CONVENTIONAL FOUNDATION WHERE SURFACE RUNOFF CAN ENTER THE FOUNDATION.
6. THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.5 FEET BELOW THE FINISHED FLOOR ELEVATION UNLESS INDICATED OTHERWISE.
7. G/F – INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. GARAGE FLOOR INDICATED IS AT THE INTERSECTION OF DRIVEWAY & RAIN LIP.
8. – ACCENTED SIDES OF PROPOSED HOUSE FOUNDATIONS ARE INTENDED TO INDICATE THE APPROXIMATE LOCATION WHERE SPECIAL CONSTRUCTION MEASURES MUST BE EMPLOYED IN ORDER TO MINIMIZE SIDE YARD, REAR YARD AND / OR FRONT YARD GRADIENTS (E.G. DROPPED SIDING, STEPPED FOUNDATION, RETAINING WALL, ETC.) –SEE NOTES ABOVE FOR FURTHER DETAILS.
9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
10. – WATERMAIN PROTECTION (SEE SHEET 38 FOR DETAILS.)
11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01–07–22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502–9675
Ph: 630.862.2100 Fax: 630.862.2199
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DRAINAGE AND GRADING PLAN 04

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

SHEET NO.
10 of 42

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PLOT FILE CREATED: 2/21/2022 10:13 AM BY DAVID DEMAY DRAWING LAST SAVED: 2/18/2022 11:45 AM BY DAVDD DRAWING PATH: P:\848008\DWG\ENG\DRAWINGS\FINAL DRAFTING\OVERGRADE.DWG

INLET NO.182 2'ø
TY. A w/TY. 8 GR.
RIM = 887.6
INV. = 884.43
(100YR HGL= 884.73)

44 L.F.–12" R.C.P.
TY. 1 @ 0.52%

116 L.F.–30" R.C.P.
TY. 2 @ 0.35%

STA. 82+32.0, 0.0' RT.
STM. MH. NO. 089 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 890.2
INV. = 883.20 E,W
887.04 S
(100YR HGL= 887.04)

EXISTING STRUCTURE TO BE REMOVED

INLET NO. 71 2'ø
TY. A w/TY. I FR. & O.L.
RIM = 887.2
INV. = 883.70
(100YR HGL= 884.50)

49 L.F.–12" R.C.P.
TY. 2 @ 1.00%
(w/ C-443 JOINTS)

160 L.F.–12" R.C.P.
TY. 1 @ 0.51%

INLET NO. 72 2'ø
TY. A w/TY. 8 GR.
RIM = 887.6
INV. = 884.20
(100YR HGL= 884.70)

81 L.F.–12" R.C.P.
TY. 1 @ 0.63%

EXISTING STRUCTURE TO BE REMOVED

164 L.F.–27" R.C.P.
TY. 2 @ 0.52%

STA. 55+00.0, 0.0' LT.
STM. MH. NO. 50 8'ø
TY. A w/TY. I FR. & O.L.
RIM = 887.1
INV. = 883.69 NW
880.39 E,W
(100YR HGL= 882.93)

INLET NO. 78 2'ø
TY. A w/TY. 8 GR.
RIM = 885.6
INV. = 882.10
(100YR HGL= 885.15)

71 L.F.–12" R.C.P.
TY. 1 @ 0.51%

INLET NO. 77 2'ø
TY. A w/TY. 8 GR.
RIM = 885.5
INV. = 881.74
(100YR HGL= 884.89)

68 L.F.–12" R.C.P.
TY. 1 @ 0.50%

86 L.F.–30" R.C.P.
TY. 2 @ 0.33%

STA. 89+29.3, 0.0' RT.
CATCH BASIN NO. 88 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 890.3
INV. = 882.92
(100YR HGL= 886.66)

115 L.F.–30" R.C.P.
TY. 2 @ 0.45%

STA. 79+14.6, 0.0' LT.
STM. MH. NO. 87 6'ø
TY. A w/TY. I FR. & O.L.
RIM = 889.8
INV. = 882.40
(100YR HGL= 886.14)

223 L.F.–30" R.C.P.
TY. 2 @ 0.44%

58 L.F.–12" R.C.P.
TY. 1 @ 1.00%

STM. MH. NO. 107 4'ø
TY. A w/TY. 8 GR.
RIM = 889.3
INV. = 886.46
(100YR HGL= 887.48)

STA. 105+26.0, 0.0' LT.
INLET NO. 86 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 891.2
INV. = 881.40 N,S
885.86 E
(100YR HGL= 884.79)

119 L.F.–15" R.C.P.
TY. 2 @ 0.50%

STA. 171+00.0, 14.0' LT.
CATCH BASIN NO. 108 3'ø
TY. A w/R-3281-A FR. & GR.
RIM =(T/C) 890.8
INV. = 887.04
(100YR HGL= 888.46)

25 L.F.–12" R.C.P.
TY. 1 @ 1.00%

STA. 171+00.0, 14.0' RT.
INLET NO. 109 2'ø
TY. A w/R-3281-A FR. & GR.
RIM =(T/C) 890.8
INV. = 887.29
(100YR HGL= 888.48)

INLET NO. 104 2'ø
TY. A w/TY. 8 GR.
RIM = 890.7
INV. = 887.20
(100YR HGL= 888.66)

61 L.F.–12" R.C.P.
TY. 2 @ 0.51%

STA. 114+94.7, 0.0' LT.
STM. MH. NO. 103 4'ø
TY. A w/TY. I FR. & O.L.
RIM = 891.6
INV. = 886.89
(100YR HGL= 888.65)

STA. 57+80.2, 0.0' RT.
STM. MH. NO. 52 6'ø
TY. A w/TY. I FR. & O.L.
RIM = 887.8
INV. = 884.40 N
881.65 E,W
882.29 S
(100YR HGL= 885.88)

38 L.F.–18" R.C.P.
TY. 2 @ 0.37%

STM. MH. NO. 64 4'ø
TY. A w/TY. 8 GR.
RIM = 887.5
INV. = 882.43
(100YR HGL= 886.05)

STA. 56+16.2, 0.0' RT.
STM. MH. NO. 51 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 887.7
INV. = 883.21 N
880.80 E,W
(100YR HGL= 883.95)

82 L.F.–18" R.C.P.
TY. 2 @ 0.38%

STM. MH. NO. 65 4'ø
TY. A w/TY. 8 GR.
RIM = 887.5
INV. = 882.74 E,N
883.50 W
(100YR HGL= 886.41)

100 L.F.–15" R.C.P.
TY. 1 @ 0.68%

INLET NO. 68 3'ø
TY. A w/TY. 8 GR.
RIM = 887.5
INV. = 884.18
(100YR HGL= 886.61)

64 L.F.–15" R.C.P.
TY. 1 @ 0.50%

INLET NO. 69 3'ø
TY. A w/TY. 8 GR.
RIM = 888.0
INV. = 884.50
(100YR HGL= 886.63)

STA. 82+32.0, 0.0' RT.
STM. MH. NO. 91 7'ø
TY. A w/TY. I FR. & O.L.
RIM = 891.0
INV. = 883.65
(100YR HGL= 887.44)

108 L.F.–27" R.C.P.
TY. 2 @ 0.36%

117 L.F.–30" R.C.P.
TY. 2 @ 0.38%

36 L.F.–12" R.C.P.
TY. 1 @ 1.00%

INLET NO.090 2'ø
TY. A w/TY. 8 GR.
RIM = 890.9
INV. = 887.40
(100YR HGL= 888.06)

STM. MH. NO. 94 4'ø
TY. A w/TY. 8 GR.
RIM = 889.7
INV. = 884.30
(100YR HGL= 888.20)

64 L.F.–24" R.C.P.
TY. 2 @ 0.41%
(w/ C-443 JOINTS)

STA. 116+00.0, 0.0' LT.
STM. MH. NO. 93 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 890.5
INV. = 884.04 E,N
885.85 S
(100YR HGL= 887.90)

105 L.F.–12" R.C.P.
TY. 2 @ 0.99%

RED IVY DRIVE
RED LILAC DRIVE
LACEFLOWER DRIVE
VIOLET DRIVE
CENTRAL PARK ROAD
RED WILLOW DRIVE
RED LILY DRIVE

Central Neighborhood Park ±0.74 Ac.

Siltation Manhole 6' Dia. Cinder Block Structure w/ 5" Gaps (w/ T & G) Rim=(880.89) Bottom=(891.49) 3" Hole in Bottom

Siltation Manhole 6' Dia. Cinder Block Structure w/ 5" Gaps (w/ T & G) Rim=(880.89) Bottom=(891.49) 3" Hole in Bottom

F.F.=888.70 F.F.=888.70 F.F.=888.70 F.F.=888.70 F.F.=888.70

F.F.=889.30 F.F.=889.30 F.F.=889.30 F.F.=889.30 F.F.=889.30 F.F.=889.52

F.F.=891.10 F.F.=891.10 F.F.=891.10 F.F.=891.10 F.F.=891.10 F.F.=891.10

F.F.=892.30 F.F.=892.30 F.F.=892.30 F.F.=892.30 F.F.=892.30

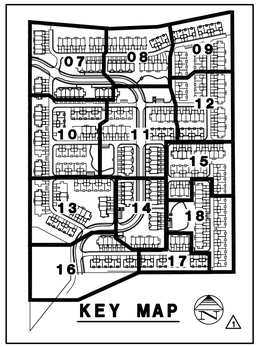
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F.F.=891.90 F.F.=891.90

F.F.=891.6 F.F.=891.6 F.F.=891.6 F.F.=891.6

F.F.=893.07

F.F.=892.0



N

DRAINAGE & GRADING NOTES

1. ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
2. ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
3. ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
4. EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
5. F.F – INDICATES PROPOSED FINISHED FLOOR ELEVATIONS AND THE LOWEST OPENING IN A CONVENTIONAL FOUNDATION WHERE SURFACE RUNOFF CAN ENTER THE FOUNDATION.
6. THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.5 FEET BELOW THE FINISHED FLOOR ELEVATION UNLESS INDICATED OTHERWISE.
7. G/F – INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. GARAGE FLOOR INDICATED IS AT THE INTERSECTION OF DRIVEWAY & RAIN LIP.
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9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
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14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01-07-22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502–9675
Ph: 630.862.2100 Fax: 630.862.2199
E–Mail: info@cemcon.com Website: www.cemcon.com

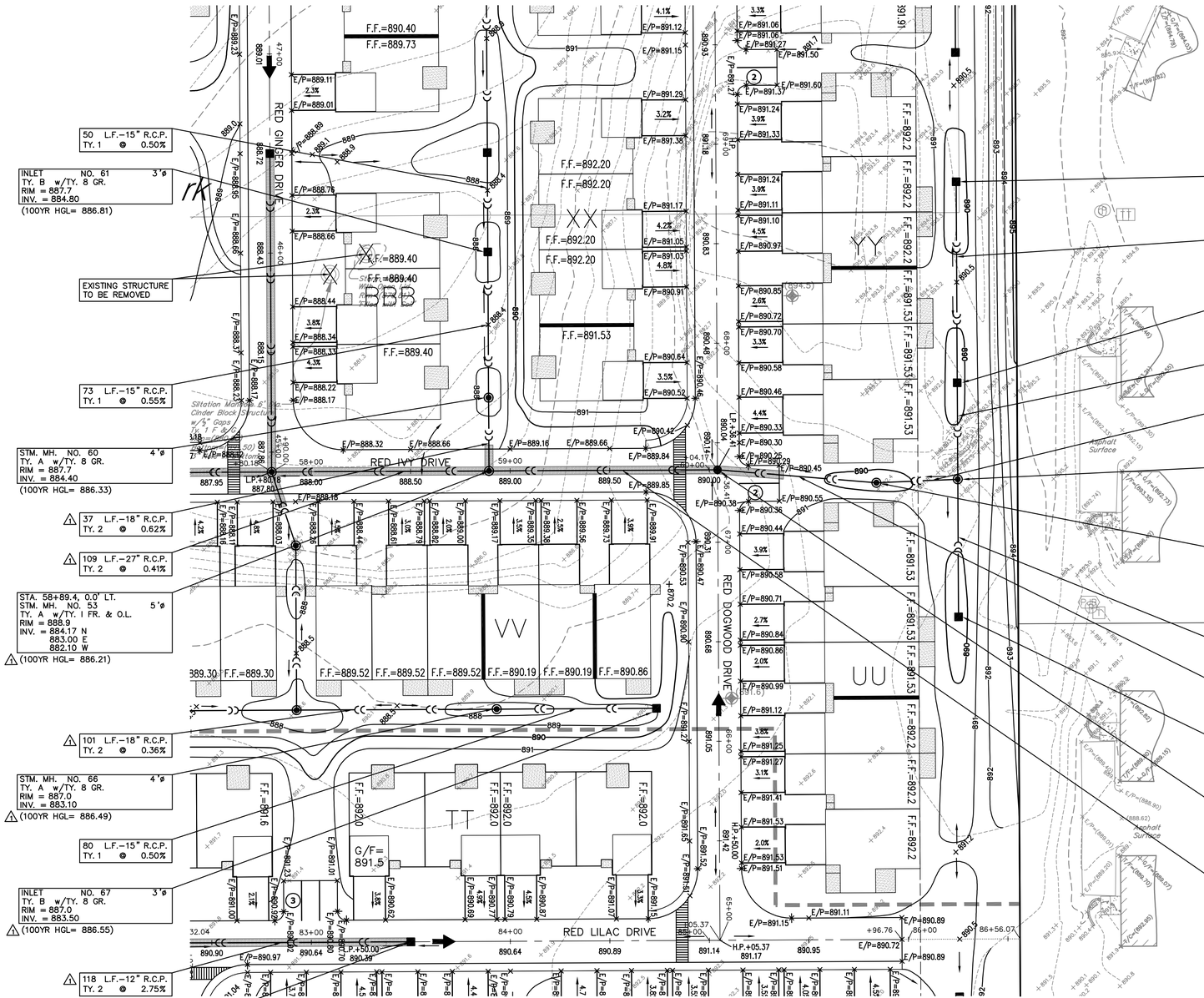
DRAINAGE AND GRADING PLAN 05

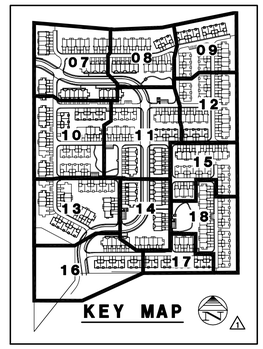
REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21	SHEET NO. 11 of 42
DSGN. BY: KTS	DRN. BY: JNL/DDD	
FILE NAME: OVERGRADE	FLD. BK./PG.: ---	
DIR: 848008	SCALE: 1" = 30'	

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N

DRAINAGE & GRADING NOTES

1. ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
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17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01–07–22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:

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7007 EAST PLEASANT VALLEY ROAD
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PREPARED BY:
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DRAINAGE AND GRADING PLAN 06

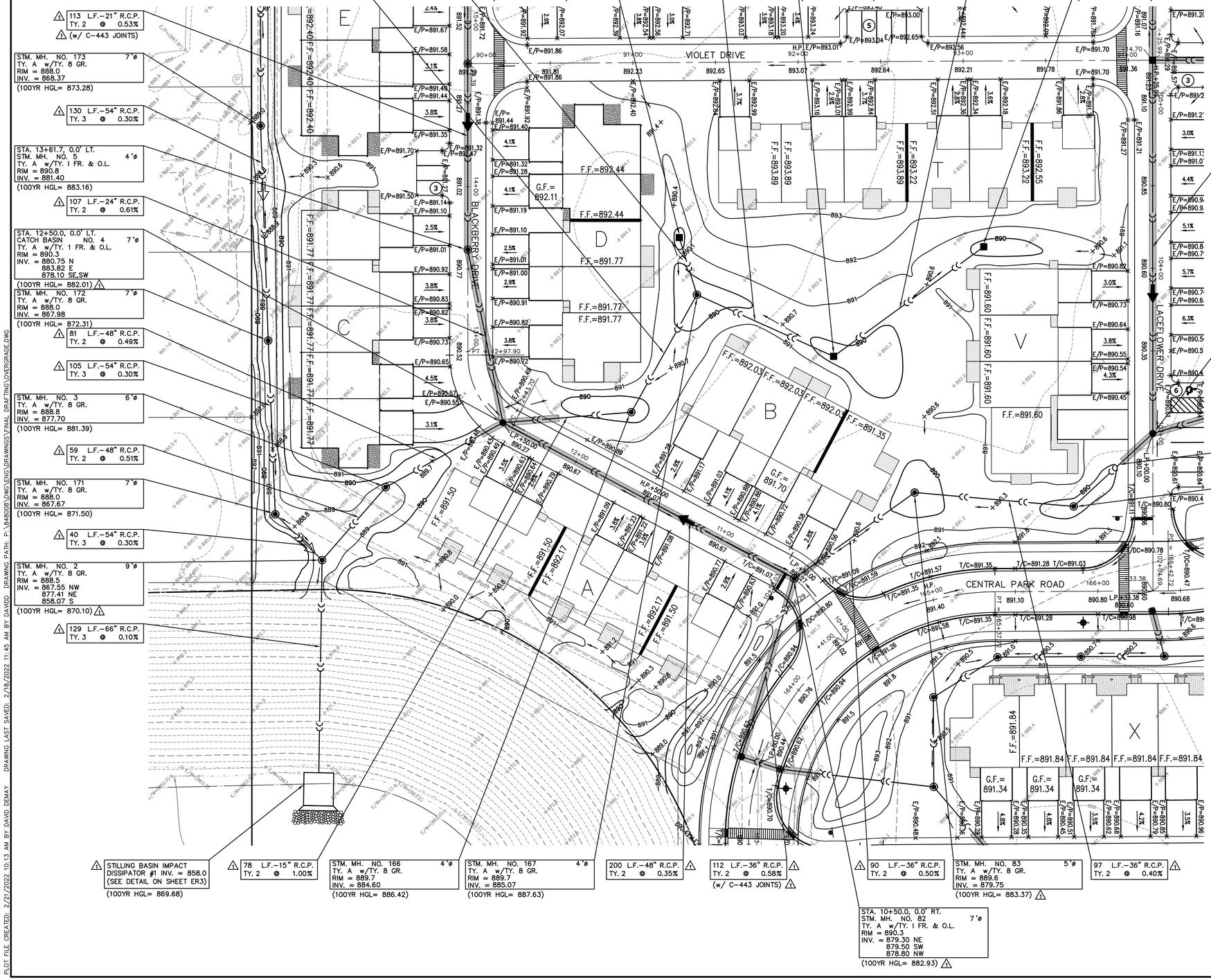
REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

SHEET NO. 12 of 42

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PLOT FILE CREATED: 2/21/2022 10:13 AM BY DAVID DEMAY DRAWING LAST SAVED: 2/18/2022 11:45 AM BY DAVID DRAWING PATH: P:\848008\ENG\DRAWINGS\FINAL DRAFTING\OVERGRADE.DWG



DRAINAGE & GRADING NOTES

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9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
10. – WATERMAIN PROTECTION (SEE SHEET 38 FOR DETAILS.)
11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01-07-22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502–9675
Ph: 630.862.2100 Fax: 630.862.2199
E–Mail: info@cemcon.com Website: www.cemcon.com

DRAINAGE AND GRADING PLAN 07

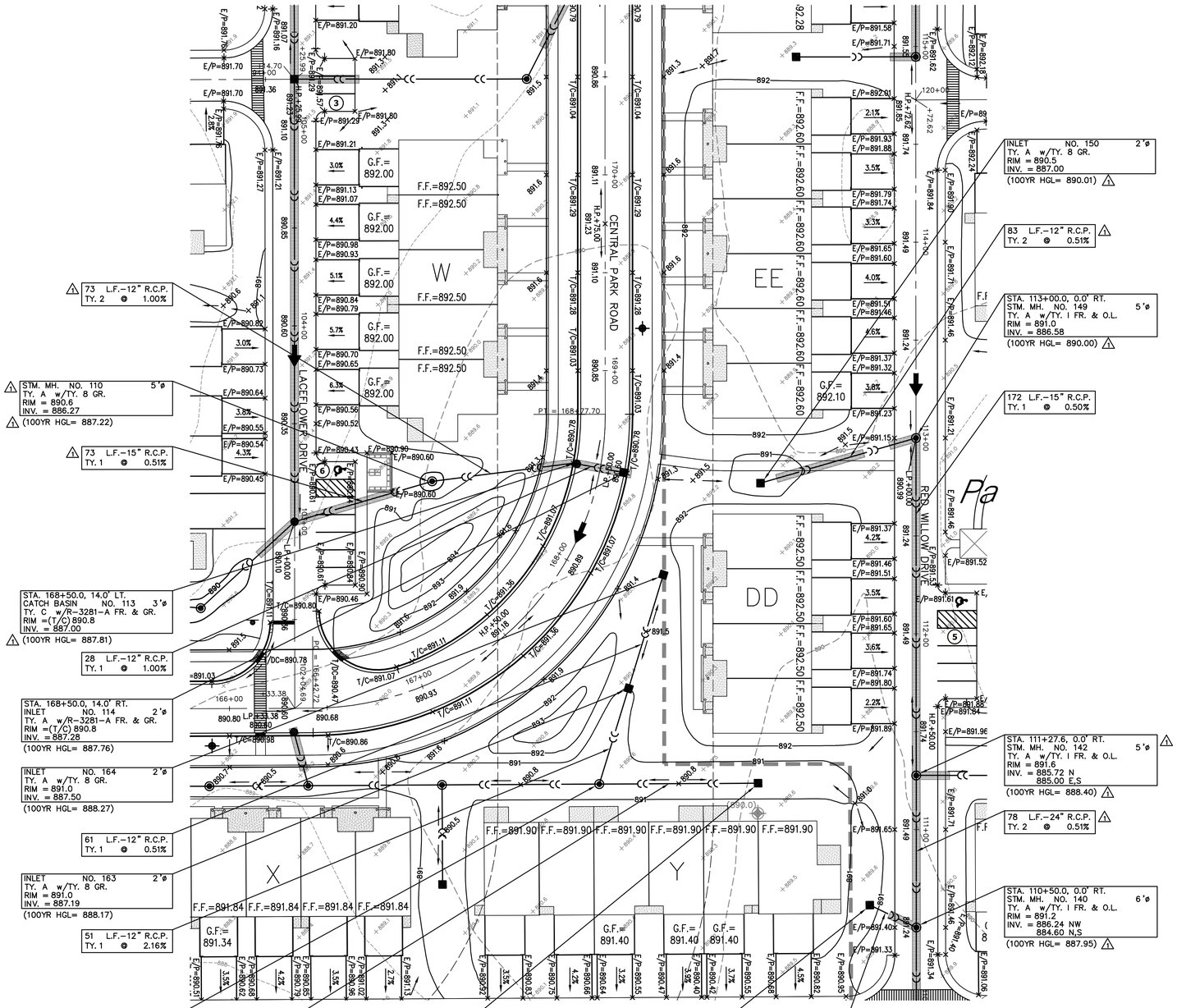
REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

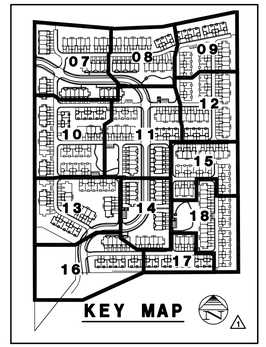
JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
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SHEET NO. 13 of 42

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DRAINAGE & GRADING NOTES

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DRAINAGE AND GRADING PLAN 08

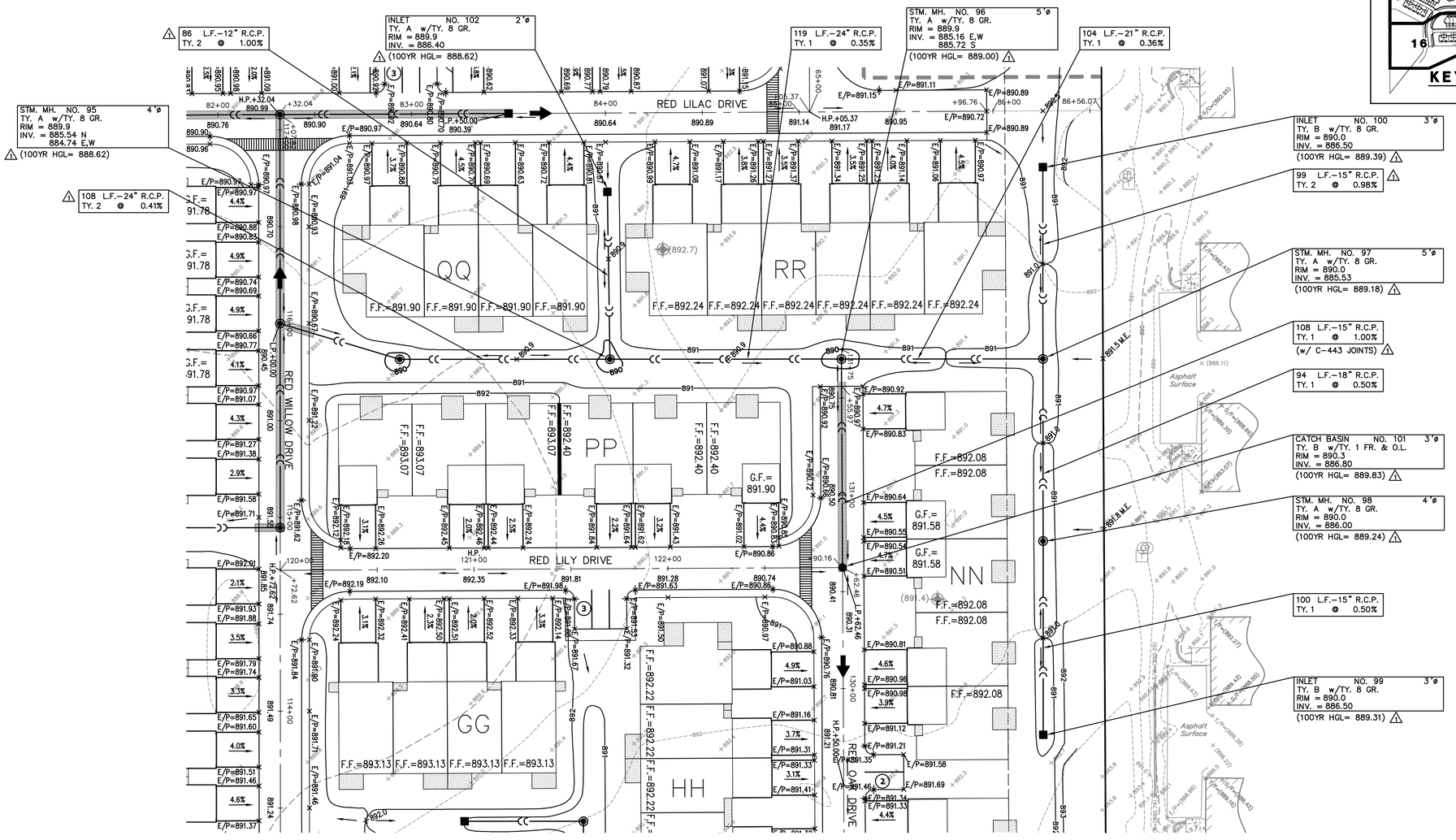
REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
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DRAINAGE AND GRADING PLAN 09

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12-13-21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: ---
DIR: 848008	SCALE: 1" = 30'

SHEET NO. 15 of 42

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STA. 163+50.0, 14.0' LT.
CATCH BASIN NO. 115 6'ø
TY. A w/R-3281-A FR. & GR.
RIM =(T/C) 890.5
INV. = 880.15
(100YR HGL= 883.63)

STM. MH. NO. 155 4'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 884.91
(100YR HGL= 886.29)

STM. MH. NO. 156 4'ø
TY. A w/TY. 8 GR.
RIM = 891.0
INV. = 885.07
(100YR HGL= 886.55)

STM. MH. NO. 157 4'ø
TY. A w/TY. 8 GR.
RIM = 890.7
INV. = 885.25
(100YR HGL= 886.82)

STA. 166+33.38, 14.0' RT.
CATCH BASIN NO. 165 2'ø
TY. A w/R-3281-A FR. & GR.
RIM =(T/C) 891.0
INV. = 887.52
(100YR HGL= 888.02)

STM. MH. NO. 158 5'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 887.26 N
885.43 E,W
(100YR HGL= 887.07)

STM. MH. NO. 159 4'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 885.77
(100YR HGL= 887.58)

55 L.F.–18" R.C.P.
TY. 2 @ 0.40%

45 L.F.–18" R.C.P.
TY. 2 @ 0.36%

51 L.F.–18" R.C.P.
TY. 2 @ 0.35%

51 L.F.–18" R.C.P.
TY. 2 @ 0.35%

26 L.F.–12" R.C.P.
TY. 1 @ 1.00%

68 L.F.–15" R.C.P.
TY. 2 @ 0.50%

51 L.F.–12" R.C.P.
TY. 2 @ 1.43%

INLET NO. 160 2'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 886.50
(100YR HGL= 887.59)

STA. 137+81.90, 0.0' LT.
STM. MH. NO. 119 6'ø
TY. A w/TY. I FR. & O.L.
RIM = 890.8
INV. = 882.50 E
882.21 S
881.50 W
(100YR HGL= 885.05)

168 L.F.–27" R.C.P.
TY. 2 @ 0.60%

CENTRAL PARK ROAD

WOOD ROSE DRIVE

F.F.=891.84 F.F.=891.84 F.F.=891.84 F.F.=891.84 F.F.=891.84

F.F.=891.90 F.F.=891.90 F.F.=891.90 F.F.=

G.F.= 891.34 G.F.= 891.34 G.F.= 891.34 G.F.= 891.40

G.F.= 891.28 G.F.= 891.28 G.F.= 891.28 G.F.= 891.48 G.F.= 891.48

F.F.=891.78 F.F.=891.78 F.F.=891.78 F.F.=891.78 F.F.=891.78 F.F.=891.78 F.F.=891.78

F.F.=891.98 F.F.=891.98 F.F.=891.98 F.F.=891.98

E/P=890.48 E/P=890.35 E/P=890.35 E/P=890.36 E/P=890.38 E/P=890.62 E/P=890.51 E/P=890.68 E/P=890.79 E/P=890.85 E/P=890.96 E/P=890.07 E/P=890.13 E/P=890.92 E/P=890.83 E/P=890.75 E/P=890.66 E/P=890.64 E/P=890.55 E/P=890.47

E/P=890.33 E/P=890.24 E/P=890.33 E/P=890.44 E/P=890.45 E/P=890.65 E/P=890.87 E/P=891.02 E/P=890.93 E/P=890.83 E/P=890.64 E/P=890.35 E/P=890.54 E/P=890.45

E/P=890.34 E/P=890.26 E/P=890.37 E/P=890.48 E/P=890.49 E/P=890.69 E/P=890.91 E/P=891.06 E/P=891.07 E/P=890.97 E/P=890.87 E/P=890.68 E/P=890.39 E/P=890.58 E/P=890.59 E/P=890.70 E/P=890.81 E/P=890.92 E/P=890.93 E/P=890.84 E/P=890.75 E/P=890.66 E/P=890.57 E/P=890.48

44 L.F.–21" R.C.P.
TY. 2 @ 0.32%
(w/ C-443 JOINTS)

STM. MH. NO. 120 4'ø
TY. A w/TY. 8 GR.
RIM = 889.4
INV. = 882.35
(100YR HGL= 885.29)

55 L.F.–21" R.C.P.
TY. 2 @ 0.27%

STM. MH. NO. 124 4'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 882.85
(100YR HGL= 886.39)

97 L.F.–18" R.C.P.
TY. 2 @ 0.36%

132 L.F.–36" R.C.P.
TY. 2 @ 0.38%

STM. MH. NO. 121 5'ø
TY. A w/TY. 8 GR.
RIM = 889.8
INV. = 882.50 E,N
884.24 W
(100YR HGL= 885.58)

105 L.F.–12" R.C.P.
TY. 2 @ 1.00%

INLET NO. 122 2'ø
TY. A w/TY. 8 GR.
RIM = 889.8
INV. = 885.29
(100YR HGL= 885.84)

101 L.F.–12" R.C.P.
TY. 2 @ 1.00%

INLET NO. 123 2'ø
TY. A w/TY. 8 GR.
RIM = 889.8
INV. = 886.30
(100YR HGL= 886.65)

26 L.F.–36" R.C.P.
TY. 2 @ 0.50%

STA. 163+50.0, 14.0' RT.
STM. MH. NO. 116 5'ø
TY. A w/R-3281-A FR. & GR.
RIM =(T/C) 890.5
INV. = 880.28
(100YR HGL= 883.78)

STORMWATER MANAGEMENT EASEMENT
PER DOC. 2007R0008218

96 L.F.–36" R.C.P.
TY. 2 @ 0.50%

EXISTING STORMWATER MANAGEMENT FACILITY

STM. MH. NO. 117 5'ø
TY. A w/TY. 8 GR.
RIM = 890.0
INV. = 884.69 N
880.76 SE,W
(100YR HGL= 884.33)

58 L.F.–36" R.C.P.
TY. 2 @ 0.41%

STA. 136+50.0, 0.0' LT.
STM. MH. NO. 118 5'ø
TY. A w/TY. I FR. & O.L.
RIM = 890.0
INV. = 881.00
(100YR HGL= 884.58)

TEMPORARY CONSTRUCTION EASEMENTS PER DOC. 2007R0041915

MULTI-FAMILY RESIDENTIAL COMPLEX UNDER CONSTRUCTION

Fence

Inlet Rim (1/C=886.60)

Inlet Rim (1/C=886.99)

Sanitary Manhole 4' Dia. Ty. A w/Ty. 1 F & G Rim=(887.76) Inv.=(868.96)

Valve & Vault 5' Dia. Ty. A w/Ty. 1 F & G Rim=(887.68) T/Pipe=(881.68)

Valve & Vault 5' Dia. Ty. A w/Ty. 1 F & G Rim=(887.43) T/Pipe=(881.68)

Sanitary Manhole Rim=(886.54)

Inlet Rim=(876.21)

Catch Basin 4' Dia. Ty. A w/Ty. 1 F & G Rim=(888.13) Inv.=(883.08)

Inlet Rim=(886.43)

Approximate Location of Underground Storm Line per Utility Atlas

Approximate Location of Underground Storm Line per Utility Atlas

NOTE:
ASPHALT ROADWAY UNDER CONSTRUCTION AT TIME OF FIELD SURVEY. PAVEMENT ELEVATIONS SHOWN ARE NOT FINISHED ASPHALT LAYER.

E/W AS SURVEYED ON 04-20-21

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KEY MAP

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REVISIONS

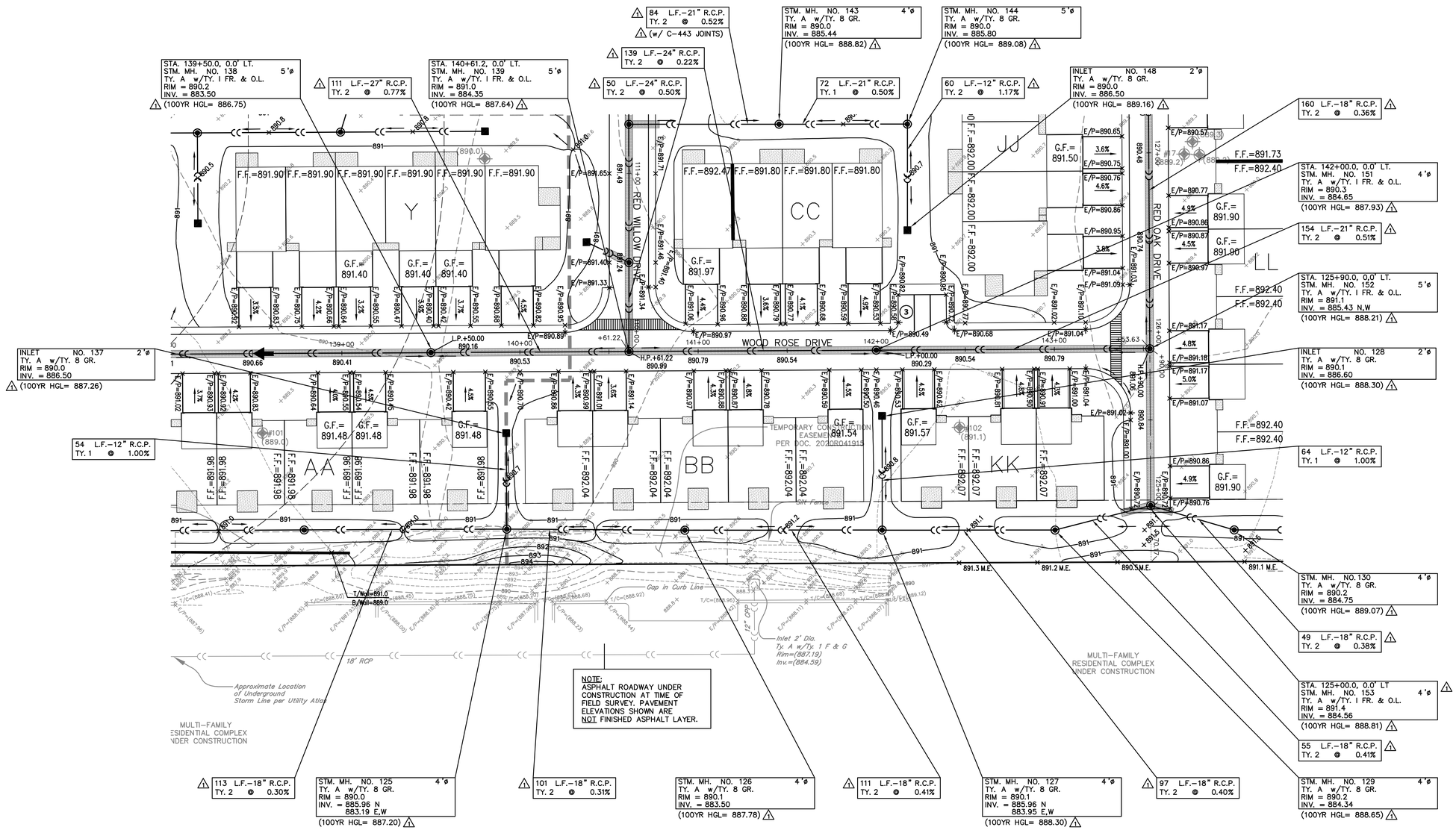
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
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DRAINAGE AND GRADING PLAN 10

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

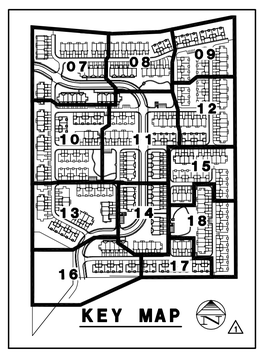
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DIR: 848008	DRN. BY: JNL/DDD	DATE: 12-13-21	SCALE: 1" = 30'	16 of 42

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11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB



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PREPARED FOR:
REDWOOD USA, LLC
7007 EAST PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131
(216) 254–8425

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
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REVISIONS

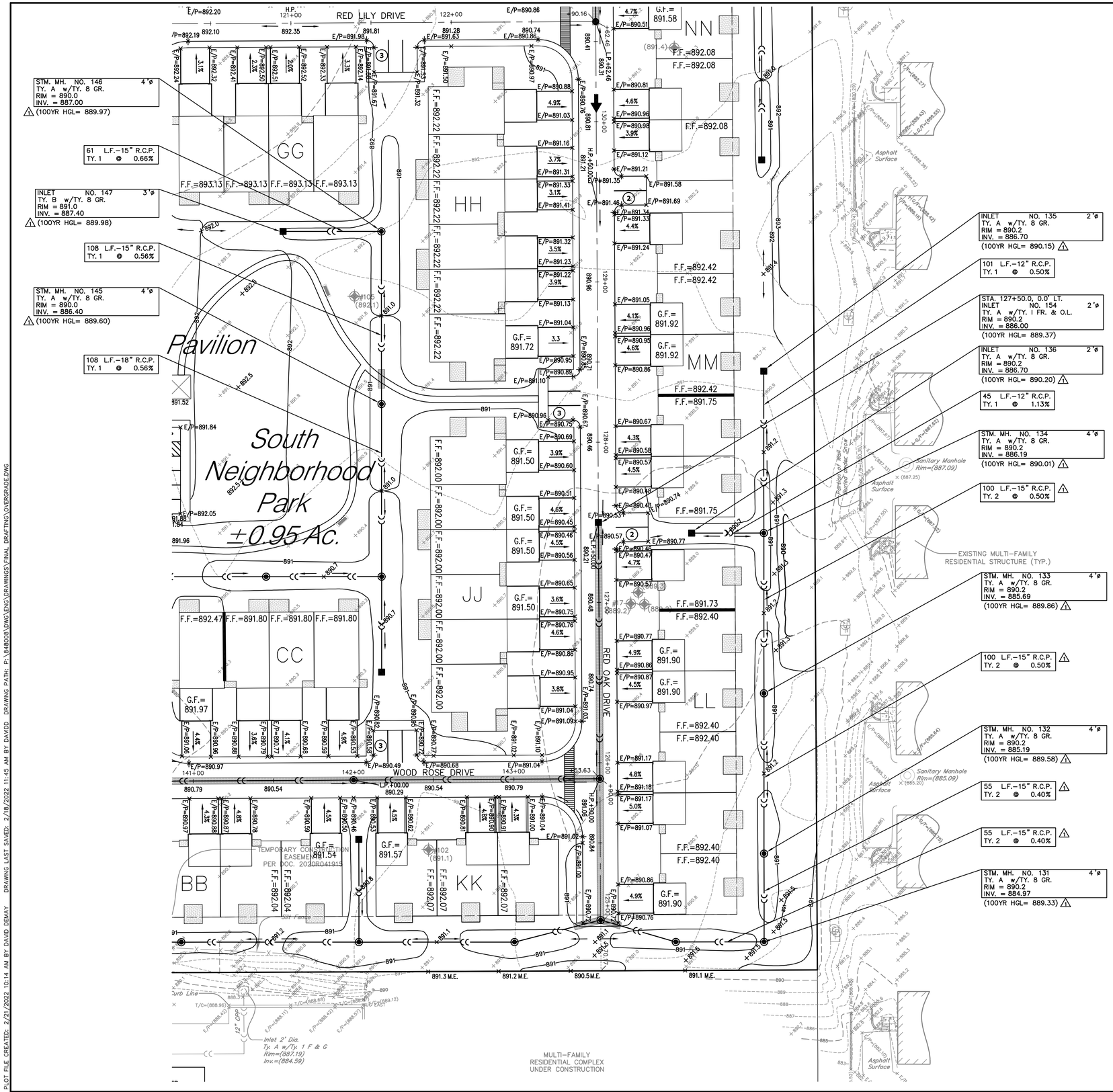
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
1	01-07-22/DDD	REVISED PER CITY REVIEW DATED 11/03/21			

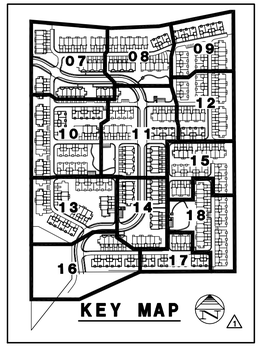
DRAINAGE AND GRADING PLAN 11

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

FILE NAME: OVERGRADE	DSGN. BY: KTS	JOB NO.: 848.008	FLD. BK./PG.:	SHEET NO.
DIR: 848008	DRN. BY: JNL/DDD	DATE: 12–13–21	SCALE: 1" = 30'	17 of 42

PLOT FILE CREATED: 2/21/2022 10:14 AM BY DAVID DEMAY DRAWING LAST SAVED: 2/16/2022 11:45 AM BY DAVID DRAWING PATH: P:\848008\DWG\ENG\DRAWINGS\FINAL DRAFTING\OVERGRADE.DWG





N

DRAINAGE & GRADING NOTES

1. ELEVATIONS SHOWN FOR ALL CURB INLETS, CATCH BASINS, AND MANHOLES ARE TOP OF CURB.
2. ALL CURBS SHALL BE BACKFILLED TO WITHIN 6 INCHES OF THE TOP OF CURB.
3. ALL BACK YARD SWALES SHALL BE CUT OR FILLED 6 INCHES BELOW FINISHED GRADE.
4. EXISTING DRAINAGE TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE PRESERVED OR REPAIRED IN ACCORDANCE WITH SPECIFICATION (SEE SHEET 2).
5. F.F – INDICATES PROPOSED FINISHED FLOOR ELEVATIONS AND THE LOWEST OPENING IN A CONVENTIONAL FOUNDATION WHERE SURFACE RUNOFF CAN ENTER THE FOUNDATION.
6. THE FINISHED TOPSOIL ELEVATION AT THE FOUNDATION SHOULD GENERALLY BE 0.5 FEET BELOW THE FINISHED FLOOR ELEVATION UNLESS INDICATED OTHERWISE.
7. G/F – INDICATES THE PROPOSED GARAGE FLOOR ELEVATION. THE PLACEMENT OF THE GARAGE / DRIVEWAY IS CRITICAL WHEN AND WHERE SHOWN ON THIS PLAN. GARAGE FLOOR INDICATED IS AT THE INTERSECTION OF DRIVEWAY & RAIN LIP.
8. – ACCENTED SIDES OF PROPOSED HOUSE FOUNDATIONS ARE INTENDED TO INDICATE THE APPROXIMATE LOCATION WHERE SPECIAL CONSTRUCTION MEASURES MUST BE EMPLOYED IN ORDER TO MINIMIZE SIDE YARD, REAR YARD AND / OR FRONT YARD GRADIENTS (E.G. DROPPED SIDING, STEPPED FOUNDATION, RETAINING WALL, ETC.) –SEE NOTES ABOVE FOR FURTHER DETAILS.
9. LOT DIMENSIONS SHOWN ON THIS PLAN MAY NOT NECESSARILY CORRESPOND TO THE PLATTED DIMENSIONS. REFER TO THE FINAL RECORDED PLAT OF SUBDIVISION.
10. – WATERMAIN PROTECTION (SEE SHEET 38 FOR DETAILS.)
11. – INDICATES THE LOCATION AND DIRECTION OF AN OVERLAND FLOOD ROUTE THAT MUST BE RESPECTED IN ALL FINAL GRADING OPERATIONS.
12. – INDICATES 100 YEAR STORM FLOWS CONTAINED IN STORM SEWER..
13. – DENOTES AREA WHERE GRANULAR TRENCH BACKFILL IS REQUIRED.
14. (ELEV.) – INDICATES EXISTING ELEVATION.
15. – DENOTES EXISTING UTILITY TO BE REMOVED.
16. ALL REAR YARD STORM SEWERS ARE TO BE OFFSET 5 FEET FROM LOT LINE UNLESS OTHERWISE NOTED.
17. – INDICATES EDGE OF PAVEMENT
18. – INDICATES BACK OF B–6.12 CURB
19. – INDICATES BACK OF REVERSE PITCH B–6.12 CURB

NO.	DATE	DESCRIPTION
1	01–07–22/DDD	REVISED PER CITY REVIEW DATED 11/03/21

REVISIONS

PREPARED FOR:

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INDEPENDENCE, OH 44131
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PREPARED BY:
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DRAINAGE AND GRADING PLAN 12

REDWOOD CRYSTAL LAKE CENTRAL PARK DRIVE

JOB NO.: 848.008	DATE: 12–13–21
DSGN. BY: KTS	DRN. BY: JNL/DDD
FILE NAME: OVERGRADE	FLD. BK./PG.: –––
DIR: 848008	SCALE: 1" = 30'

SHEET NO.
18 of 42

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PLOT FILE CREATED: 2/21/2022 10:14 AM BY DAVID DEMAY DRAWING LAST SAVED: 2/18/2022 11:45 AM BY DAVIDD DRAWING PATH: P:\848008\DWG\ENG\DRAWINGS\FINAL DRAFTING\OVERGRADE.DWG

TREE ASSESSMENT RESULTS

AREA 1 (±151,880S.F.)

Botanical Name	Common Name	Species Percentage	Size Range (DBH)	Condition
Acer negundo	Box Elder	5%	4"-14"	Fair
Acer saccharinum	Silver Maple	2%	2"- 6"	Poor
Juniperus virginiana	Red Cedar	2%	2"- 4"	Poor
Morus alba	White Mulberry	1%	3"- 6"	Fair
Prunus serotina	Black Cherry	5%	4"-9"	Fair
Rhamnus cathartica	Common Buckthorn	85%	2"-8"	Poor

AREA 2 (±295,770 S.F.)

Botanical Name	Common Name	Species Percentage	Size Range (DBH)	Condition
Acer negundo	Box Elder	25%	6"-22"	Fair
Acer saccharinum	Silver Maple	2%	2"- 6"	Poor
Juniperus virginiana	Red Cedar	1%	2"- 4"	Poor
Morus alba	White Mulberry	2%	3"- 6"	Fair
Prunus serotina	Black Cherry	5%	4"-9"	Fair
Rhamnus cathartica	Common Buckthorn	65%	2"-8"	Poor

AREA 3 (±74,176 S.F.)

Botanical Name	Common Name	Species Percentage	Size Range (DBH)	Condition
Acer negundo	Box Elder	35%	6"-22"	Fair
Acer saccharinum	Silver Maple	2%	2"- 6"	Poor
Juniperus virginiana	Red Cedar	1%	2"- 4"	Poor
Populus Deltoides	Eastern Cottonwood	2%	14"- 32"	Fair
Prunus serotina	Black Cherry	10:%	4"-9"	Fair
Rhamnus cathartica	Common Buckthorn	55%	2"-8"	Poor

AREA 4 (±103,618 S.F.)

Botanical Name	Common Name	Species Percentage	Size Range (DBH)	Condition
Acer negundo	Box Elder	25%	6"-22"	Fair
Acer saccharinum	Silver Maple	10%	2"- 8"	Poor
Juniperus virginiana	Red Cedar	1%	2"- 4"	Poor
Populus Deltoides	Eastern Cottonwood	2%	14"- 32"	Fair
Prunus serotina	Black Cherry	15%	4"-16"	Fair
Pyrus calleryana	Invasive Pear	10%	2"- 4"	Poor
Rhamnus cathartica	Common Buckthorn	38%	2"-8"	Poor

AREA 5 (±237,212 S.F.)

Botanical Name	Common Name	Species Percentage	Size Range (DBH)	Condition
Acer negundo	Box Elder	35%	6"-22"	Fair
Acer saccharinum	Silver Maple	25%	2"- 12"	Poor
Juniperus virginiana	Red Cedar	3%	2"- 4"	Poor
Populus Deltoides	Eastern Cottonwood	2%	2"-5"	Fair
Prunus serotina	Black Cherry	10:%	4"-9"	Fair
Rhamnus cathartica	Common Buckthorn	35%	2"-8"	Poor



0 50' 100' 200' 300'
SCALE: 1"=100'

NORTH

811 Know what's below. Call before you dig.

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 WEST LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197

CIVIL ENGINEER
CEMCON
2280 WHITE OAK CIR. #100
AURORA, ILLINOIS 60502

REDWOOD OF CRYSTAL LAKE

CRYSTAL LAKE, ILLINOIS

TREE ASSESSMENT

REVISIONS

DATE	05.26.19
PROJECT NO.	RAN2103
DRAWN	NDS
CHECKED	CMP
SHEET NO.	1 OF 1

FINAL PLAT OF SUBDIVISION FOR

REDWOOD OF CRYSTAL LAKE

BEING A PART OF THE SOUTHEAST QUARTER OF SECTION 10 AND PART OF THE NORTH HALF OF SECTION 15, ALL IN TOWNSHIP 43 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN MCHENRY COUNTY, ILLINOIS.

NOTE:
KEYMAP FOR BOUNDARY ONLY. SEE FOLLOWING SHEETS FOR PARTICULARS.

SUBMITTED BY AND RETURN TO:
CITY OF CRYSTAL LAKE
100 WEST WOODSTOCK STREET
CRYSTAL LAKE, IL 60014

PARCEL INDEX NUMBER
19-10-476-012
VACANT LAND
CRYSTAL LAKE, ILLINOIS.

TOTAL AREA OF SUBDIVISION
47.857 ACRES
(MORE OR LESS)



SITE LOCATION

VICINITY MAP

N

100 50 0 100

SCALE: 1 INCH = 100 FEET

LEGEND

- SUBDIVISION BOUNDARY LINE (Heavy Solid Line)
- LOT LINE/PROPERTY LINE (Solid Line)
- ADJACENT LOT LINE/PROPERTY LINE (Light Solid Line)
- EASEMENT LINE/LIMITS OF EASEMENT (Short Dashed Lines)
- CENTERLINE (Single Dashed Lines)
- QUARTER SECTION LINE (Double Dashed Lines)
- SECTION LINE (Triple Dashed Lines)
- SET CONCRETE MONUMENT

LOT AREA SUMMARY TABLE	
LOT NO.	AREA (S.F.)
1	748,088
2	125,292
3	486,295
4	595,047
5	129,943

NOTES

3/4 INCH IRON PIPE SET AT ALL LOT CORNERS AND POINTS OF CURVATURE UNLESS OTHERWISE NOTED.

ALL MEASUREMENTS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.

DIMENSIONS ENCLOSED WITH ( ) ARE RECORD DATA. ALL OTHER DIMENSIONS ARE MEASURED.

ALL EASEMENTS ARE HEREBY GRANTED UNLESS OTHERWISE NOTED.

MUNICIPAL UTILITY EASEMENT (M.U.E.) HEREBY GRANTED. SEE PROVISIONS CONTAINED HEREIN.

PUBLIC UTILITY EASEMENT (P.U.E.) HEREBY GRANTED. SEE PROVISIONS CONTAINED HEREIN.

THE MEASURED BEARINGS SHOWN ARE BASED ON THE SOUTH LINE OF THE SUBJECT SITE BEING S 87°36'33" W.

FIP = FOUND IRON PIPE (Ø AS SHOWN)
FIR = FOUND IRON ROD (Ø AS SHOWN)

A BLANKET MUNICIPAL UTILITY EASEMENT AND PUBLIC UTILITY EASEMENT ARE HEREBY GRANTED OVER ALL OF LOTS 1 THROUGH 4 EXCEPT AS NOTED.

THE PROPOSED STORM SEWER WITHIN THE AREAS OF THE PURPORTED RIGHT OF WAY ARE TO BE PRIVATELY MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

UNSUBDIVIDED PER DOC. 2004R0112157

UNSUBDIVIDED PER DOC. 2004R0112157

DOUGHBOY SUBDIVISION PER DOC. 2007R0031995

OLD POST ROAD HERETOFORE DEDICATED PER DOC. 88R021123

MONTICELLO SUBDIVISION UNIT 2 PER DOC. 88R021123

E. MONTICELLO WAY HERETOFORE DEDICATED PER DOC. 88R021123

FIR 5/8" 0.13' S TO BE REPLACED WITH CONCRETE MONUMENT

(S 85°15'09" E) S 85°15'31" E 509.98'

(N 87°39'37" E) N 87°39'15" E 304.91'

(N 78°25'46" E) N 78°25'24" E 479.63'

CENTRAL PARK DRIVE HERETOFORE DEDICATED PER DOC. 2007R0011999

STORMWATER MANAGEMENT EASEMENT PER DOC. 2007R0011999

OUTLOT A

LOT 4

LOT 5

LOT 1

LOT 2

LOT 3

THREE OAKS SUBDIVISION PER DOC. 2020R0040758

LOT 238 CAMBRIA UNIT 3 PER DOC. 2001R0012178

1652.17'

S 00°18'48" E (S 00°18'26" E)

TEMPORARY SECONDARY EMERGENCY ACCESS EASEMENT PER DOC. 2020R040758

TEMPORARY CONSTRUCTION EASEMENT PER DOC. 2020R041915

1959.54'

(N 00°01'23" W) N 00°01'23" W

LUTTER INDUSTRIAL PARK PER DOC. 912463

OUTLOT 4 LUTTER CENTER SUBDIVISION UNIT 1 PER DOC. 2007R0008220

STORMWATER MANAGEMENT EASEMENT PER DOC. 2005R0097161 & 2007R0008218

TEMPORARY CONSTRUCTION EASEMENTS PER DOC. 2020R041915

S 89°45'31" W (N 89°45'53" E) 1004.15'

(N 03°19'04" W) S 03°19'27" E 1.00'

(N 89°45'53" E) S 89°45'31" W 29.07'

(N 00°01'01" W) S 00°01'23" E 43.23'

S 38°23'47" W (N 38°24'09" E) 415.18'

CENTRAL PARK DRIVE

LOT 239 CAMBRIA UNIT 8 PER DOC. 2001R0038428

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www.cemcon.com

DISC NO.: 848008 FILE NAME: SUBPLAT-1
DRAWN BY: AJB FLD. BK. / PG. NO.: D98\39-42, 46-50
COMPLETION DATE: 10-18-21 JOB NO.: 848.008
REVISED 01-03-21\AJB PER VILLAGE COMMENTS DATED 11-04-21 AND 11-08-21

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UNSUBDIVIDED PER DOC. 2004R0112157

2 DOUGHBOY SUBDIVISION PER DOC. 2007R0031995

OLD POST ROAD (60') R.O.W. HERETOFORE DEDICATED PER DOC. 88R021123

8 | 7 | 6 MONTICELLO SUBDIVISION UNIT 2 PER DOC. 88R021123

UNSUBDIVIDED PER DOC. 2004R0112157

CENTRAL PARK DRIVE HERETOFORE DEDICATED PER DOC. 2007R0011999

STORMWATER MANAGEMENT EASEMENT PER DOC. 2007R0011999

OUTLOT A LUTTER INDUSTRIAL PARK PER DOC. 912463

111.14' | 136.50' | S 85°15'31" E | N 85°15'31" W 73.83' | 262.34' | N 87°39'15" E 304.91'

47.17' | 39.61' | 12.76' | N 89°58'46" E 91.00' | 10' | N 88°36'41" E 55.30' | S 88°36'41" W 54.70' | 55.87' | 44.64'

M.U.E. | L12 | L13 | L14 | 10'

N 89°42'59" E 188.00' | 91.00' | 188.00' S 89°42'59" W | 11.38' | 1.00'

221.20' | N 00°01'14" W 160.00' | 160.00' | S 00°01'14" E | N 00°01'14" W 179.89' | 164.88' | S 00°01'14" E 126.79' | N 00°00'00" E | S 00°00'00" W 121.21' | N 00°17'01" W 91.00' | S 00°17'01" E 91.00' | N 00°17'01" W 91.00' | S 00°17'01" E 91.00'

NON-EASEMENT AREA | NON-EASEMENT AREA | NON-EASEMENT AREA | NON-EASEMENT AREA

L1 | L2 | L3 | L4 | L5

12.75' | 91.00' S 89°58'46" W | 43.00' | LOT 4

N 89°42'59" E 594.10'

L6 | L7 | L8 | L9 | L10 | L11 | M.U.E.

L=100.77' R=180.00 | 60' | S 89°42'59" W 598.76' | 22.29'

N 89°42'59" E 192.00' | 11.00' | N 89°42'59" E 178.00'

R=120.00 L=67.20' | N 57°57'37" W 83.50' | 103.40' | S 57°57'37" E 103.40'

L=126.93' R=225.00 | 192.00' S 89°42'59" W | 178.00' S 89°42'59" W | S 89°42'59" W 249.66'

8.88' | 9.70' | 9.70' | 40.53' | 52.69'

LOT 5 | ROAD HEREBY DEDICATED FOR PUBLIC ROAD PURPOSES

11.91' | N 89°58'37" E 91.00' | 42.84' | L15 | L16 | R=285.00 L=160.78' | 9.70' | 9.70' | N 89°42'59" E 249.66' | 8.10' | R=180.00 L=283.51'

10' | N 89°42'59" E 201.00' | N 89°42'59" E 178.00' | R=120.00 L=189.01'

N 00°01'23" W 150.00' | 150.00' S 00°01'23" E | NON-EASEMENT AREA | NON-EASEMENT AREA | NON-EASEMENT AREA

N 00°17'01" W 165.72' | 113.96' | N 00°17'01" W 91.00' | 91.00' S 00°17'01" E | N 00°17'01" W 91.00' | 91.00' S 00°17'01" E

M.U.E. | 10' | 2.86' | 2.86' | 37.80' | 2.86' | 10'

S 89°42'59" W 201.00' | S 89°42'59" W 178.00'

11.91' | S 89°58'37" W 91.00' | 25.29' | M.U.E. | S 89°42'59" W 527.98' | 60.00'

ROAD (PRIVATE) | 47.14' | 47.14'

L17 | L18 | L19 | 52.33'

N 89°58'37" E 71.00' | 21.00' | N 89°42'59" E 200.00' | 36.95' | N 89°42'59" E 162.00' | 20.35'

N 00°01'23" W 150.00' | 150.00' S 00°01'23" E | NON-EASEMENT AREA | NON-EASEMENT AREA

N 00°17'01" W 71.00' | 71.00' S 00°17'01" E | N 00°17'01" W 71.00' | 71.00' S 00°17'01" E

200.00' S 89°42'59" W | 36.95' | 162.00' S 89°42'59" W | 20.05'

MATCH LINE-SEE SHEET 3

MATCH LINE-SEE SHEET 4

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

LINE TABLE		
LINE	BEARING	LENGTH
L1	N 45°01'14" W	17.40'
L2	S 45°01'14" E	13.34'
L3	N 45°24'39" E	9.42'
L4	N 45°24'39" E	13.53'
L5	S 45°01'14" E	27.36'
L6	N 45°24'39" E	56.76'
L7	S 45°24'39" W	53.88'
L8	N 45°01'14" W	13.38'
L9	N 45°01'14" W	8.23'
L10	N 44°58'46" E	50.65'
L11	S 44°58'46" W	48.35'
L12	N 03°34'50" E	33.53'
L13	S 03°34'50" W	42.50'
L14	N 85°15'31" W	41.80'
L15	N 32°16'55" E	29.45'
L16	S 32°16'55" W	27.15'
L17	N 45°00'00" E	51.58'
L18	S 45°00'00" W	51.61'
L19	S 00°17'01" W	43.02'

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REVISED 01-03-22\AJB PER VILLAGE COMMENTS DATED 11-04-21 AND 11-08-21

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LINE TABLE		
LINE	BEARING	LENGTH
L1	N 84°00'47" E	32.31'
L2	S 84°00'47" W	33.81'
L3	S 11°33'33" E	31.93'

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

E. MONTICELLO WAY
HERETOFORE DEDICATED
PER DOC. 88R021123

3

4

5

N 78°25'24" E 319.93'

149.70'

(60')
R.O.W.

10'

L3

M.U.E.

N 11°33'33" W 41.92'

N 78°26'27" E 82.92'

N 78°26'27" E 82.92'

N 78°26'27" E 162.00'

S 11°33'33" E

M.U.E.

S 11°33'33" E 66.00'

1.95'

129.00'

109.00'

10'

162.00'
S 78°26'27" W

N 87°39'15" E
304.91'

51.41'

39.83'

36.85'

N 78°26'27" E 162.50'

S 11°33'33" E 71.00'

N 11°33'33" W 66.00'

NON-EASEMENT AREA

NON-EASEMENT AREA

N 11°33'33" W 71.00'

162.50'
S 78°26'27" W

N 66°51'43" E
124.00'

S 23°08'17" E
71.00'

0.94'

91.00'

S 00°17'01" E

N 23°08'17" W
71.00'

124.00'
S 66°51'43" W

NON-EASEMENT AREA

26.41'

43.00'

43.00'

N 78°26'27" E 300.19'

M.U.E.

S 78°26'27" W 201.77'

N 89°41'12" E 60.00'

11.21'

S 78°26'27" W 97.47'

N 89°41'12" E 58.37'

31.70'

33.26'

7.00'

M.U.E.

N 69°45'42" E 138.13'

N 69°45'42" E 138.13'

L1

L2

M.U.E.

N 89°41'12" E 21.99'
71.00'

159.81'

N 00°18'48" W

S 00°18'48" E 162.00'

NON-EASEMENT AREA

N 00°18'48" W 190.51'

NON-EASEMENT AREA

197.00'

S 00°18'48" E

N 89°42'59" E 197.00'

52.96'

91.00'

S 00°17'01" E

N 00°18'48" W 162.00'

NON-EASEMENT AREA

162.00'

S 00°18'48" E

21.99'

71.00'
S 89°41'12" W

21.70'

21.70'

N 89°41'12" E
71.00'

43.01'

411.20'

N 00°18'48" W

3.99'

S 89°41'12" W 91.00'

31.70'

N 89°41'12" E 91.00'

807.02'

S 00°18'48" E

197.00'
S 89°42'59" W

53.01'

71.00'
S 89°41'12" W

30.69'

30.69'

N 89°41'12" E
71.00'

21.99'

N 00°18'48" W 124.00'

NON-EASEMENT AREA

124.00'

S 00°18'48" E

N 00°18'48" W 162.00'

NON-EASEMENT AREA

162.00'

S 00°18'48" E

N 00°18'48" W 207.00'

NON-EASEMENT AREA

207.00'

S 00°18'48" E

21.99'

71.00'
S 89°41'12" W

43.01'

N 89°42'59" E 149.68'

M.U.E.

S 89°42'59" W 144.91'

S 45°17'34" E 56.58'

N 45°17'34" W 56.58'

N 89°42'59" E 222.93'

M.U.E.

10.00'

91.00'
S 89°41'12" W

31.70'

31.70'

N 89°41'12" E 91.00'

19.98'

S 89°42'59" W 227.12'

35.01'

N 89°42'59" E 357.00'

138.14'

N 00°02'24" W

N 00°17'01" W
91.00'

NON-EASEMENT AREA

91.00'

S 00°17'01" E

N 00°54'21" W 222.42'

M.U.E.

207.00'

S 00°18'48" E

NON-EASEMENT AREA

S 89°42'59" W 357.00'

36.19'

5.86'

S 89°42'59" W 429.53'

88.71'

N 00°18'48" W

S 89°41'12" W
91.00'

122.70'

31.70'

LOT 238
CAMBRIA UNIT 3
PER DOC. 2001R0012178

MATCH LINE - SEE SHEET 2

MATCH LINE - SEE SHEET 6

PREPARED BY:

CEMCON, Ltd.

Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100 Aurora, Illinois
60502-9675 PH: 630.862.2100 FAX: 630.862.2199
www.cemcon.com

DISC NO.: 848008 FILE NAME: SUBPLAT-1
DRAWN BY: AJB FLD. BK. / PG. NO.: D98\39-42, 46-50
COMPLETION DATE: 10-18-21 JOB NO.: 848.008
REVISED 01-03-21\AJB PER VILLAGE COMMENTS DATED 11-04-21 AND 11-08-21

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MATCH LINE-SEE SHEET 2

MATCH LINE SEE SHEET 3

MATCH LINE-SEE SHEET 3

MATCH LINE-SEE SHEET 5

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

ROAD (PRIVATE)

NON-EASEMENT AREA

M.U.E.

LOT 1

LOT 5

ROAD HEREBY DEDICATED FOR PUBLIC ROAD PURPOSES

(60') R.O.W.

LUTTER INDUSTRIAL PARK PER DOC. 912463

1

2

3

4

5

6

PREPARED BY:
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MATCH LINE-SEE SHEET 4

NON-EASEMENT AREA

200.00'
N 62°08'26" W

7.00'

M.U.E.

L1 L2 L3 L4

71.00'
S 27°51'34" W

L=305.43'
R=180.00'

20.63'

ROAD
HEREBY DEDICATED FOR
PUBLIC ROAD PURPOSES

5.99'

N 89°42'59" E
105.00'

R=180.00'
L=251.98'

25.64'

9.70'

N 89°41'12" E 192.00'

N 89°41'12" E
197.00'

R=20.00'
L=20.62'

LOT 1

LOT 5

N 00°18'48" W
91.00'

NON-EASEMENT AREA

S 00°18'48" E
91.00'

N 00°18'48" W
91.00'

NON-EASEMENT AREA

S 00°18'48" E
91.00'

192.00'
S 89°41'12" W

22.72'

197.00'
S 89°41'12" W

43.00'

LOT 2

43.00'

10'

15.28'

L5

N 89°41'12" E 501.34'

M.U.E.

M.U.E.

L6

41.93'

S 89°41'12" W 799.33'

11.07'

N 89°41'12" E 200.00'

N 89°41'12" E 200.00'

7.00'

N 00°18'48" W
71.00'

NON-EASEMENT AREA

S 00°18'48" E
71.00'

N 00°18'48" W
71.00'

NON-EASEMENT AREA

S 00°18'48" E
71.00'

200.00'
S 89°41'12" W

200.00'
S 89°41'12" W

33.04'

19.85'

20.01'

20.11'

447.41'
S 89°45'31" W

STORMWATER MANAGEMENT EASEMENT
PER DOC. 2005R0097161
& 2007R0008218

S 07°30'15" E
111.82'

N 07°30'15" W
93.18'

S 89°45'31" W
28.81'

S 00°01'23" E
43.23'

OUTLOT 4
LUTTER CENTER SUBDIVISION
UNIT 1
PER DOC. 2007R0008220

N 00°01'22" W
1678.34'

415.16'
S 38°23'47" W

CENTRAL PARK DRIVE
(R.O.W. VARIES)
HERETOFORE DEDICATED
PER DOC. 2020R0040758

LOT 1

MATCH LINE-SEE SHEET 6

N

30 15 0 30
SCALE: 1 INCH = 30 FEET

LINE TABLE		
LINE	BEARING	LENGTH
L1	S 24°04'55" E	20.79'
L2	N 24°04'55" W	19.21'
L3	N 45°13'52" W	9.40'
L4	S 45°13'52" E	7.53'
L5	N 82°29'45" E	43.46'
L6	S 82°29'45" W	42.83'

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MATCH LINE -SEE SHEET 3

LINE TABLE		
LINE	BEARING	LENGTH
L1	N 84°00'47" E	32.31'
L2	S 84°00'47" W	33.81'
L3	S 11°33'33" E	31.93'

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

MATCH LINE-SEE SHEET 4

MATCH LINE SEE SHEET 5

LOT 239
CAMBRIA UNIT 8
PER DOC. 2001R0038428

LOT 3

LOT 1

PREPARED BY:

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OWNER'S CERTIFICATE

STATE OF OHIO)
SS.
COUNTY OF ___)

THIS IS TO CERTIFY THAT REDWOOD USA, LLC, AN OHIO LIMITED LIABILITY COMPANY, IS THE OWNER OF PARCEL OF LAND DESCRIBED ON THE PLAT HEREON AND SHOWN HEREON AS SUBDIVIDED, THAT THEY HAVE CAUSED SAID LAND TO BE SURVEYED, SUBDIVIDED AND STAKED AND PLATTED AS SHOWN HEREON, FOR THE PURPOSE OF HAVING THIS PLAT RECORDED BY LAW; AND TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF SUCH SUBDIVISION OR PART THEREOF, OR THAT IF SUCH WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH WATERS INTO PUBLIC AREAS, OR DRAINS WHIC THE SUBDIVIDER HAS A RIGHT TO USE, AND THAT SUCH SURFACE WATERS WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIUCCD OF DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION, IN WITNESS WHERE WE HAVE HEREUNDER SET OUR HANDS OF.

THIS IS TO ALSO CERTIFY THAT REDWOOD USA, LLC, AS OWNER OF THE PROPERTY DESCRIBED AS REDWOOD OF CRYSTAL LAKE, PHASE 1 AND LEGALLY DESCRIBED ON THE PLAT OF THE SAME NAME, WE HAVE DETERMINED TO THE BEST OF OUR KNOWLEDGE THE SCHOOL DISTRICT IN WHICH EACH OF THE FOLLOWING LOTS LIE.

LOT NUMBER	SCHOOL DISTRICT
1	GRADE AND MIDDLE SCHOOL DISTRICT #47 HIGH SCHOOL DISTRICT NO. 155

DATED THIS _____ DAY OF _____, A.D., 20_____.

BY: REDWOOD USA, LLC
7007 E. PLEASANT VALLEY ROAD
INDEPENDENCE, OH 44131

NAME: _____

TITLE: _____

NOTARY'S CERTIFICATE

STATE OF OHIO)
SS.
COUNTY OF _____)

I, _____, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT

_____, THE_____

OF REDWOOD USA, LLC , WHO IS/ARE PERSONALLY KNOWN TO ME TO BE THE SAME WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE FOREGOING CERTIFICATE, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT HE/SHE/THEY DID SIGN AND DELIVER THIS INSTRUMENT AS A FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES HEREIN SET FORTH.

GIVEN UNDER MY HAND AND NOTARIAL SEAL

THIS _____ DAY OF _____, A.D., 20___.

_____
NOTARY PUBLIC

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF MCHENRY)

APPROVED BY THE CITY COUNCIL OF THE CITY OF CRYSTAL LAKE, ILLINOIS

THIS _____ DAY OF _____, 20___.

_____
MAYOR

_____
ATTEST: CITY CLERK

CRYSTAL LAKE PLANNING AND ZONING COMMISSION CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF MCHENRY)

I, _____, AS CHAIRMAN OF THE CRYSTAL LAKE PLANNING AND ZONING COMMISSION, DO HEREBY CERTIFY THAT

ON THIS _____ DAY OF _____, A.D., 20_____, THIS PLAT OF SUBDIVISION WAS DULY APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE.

_____
CHAIRMAN

_____
PLEASE TYPE/PRINT NAME

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF MCHENRY)

THIS INSTRUMENT WAS FILED FOR RECORD IN THE RECORD IN THE RECORDER'S OFFICE OF MCHENRY COUNTY, ILLINOIS,

ON THE _____ DAY OF _____, A.D., 20___ AT _____ O'CLOCK ___.M. AND RECORDED IN MAP BOOK _____ PAGE _____, AS DOCUMENT NO._____

BY: _____
MCHENRY COUNTY RECORDER

COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF MCHENRY)

I, _____, AS COUNTY CLERK OF MCHENRY COUNTY, ILLINOIS, DO HEREBY CERTIFY THAT THERE ARE NO DELINQUENT GENERAL TAXES, NO UNPAID OR FORFEITED TAXES, AND NO REDEEMABLE TAX SALES AGAINST ANY OF THE LAND DEPICTED HEREON.

I FURTHER CERTIFY THAT I HAVE RECEIVED ALL STATUTORY FEES IN CONNECTION WITH THE ANNEXED PLAT.

WITNESS MY HAND AND SEAL THIS _____ DAY OF _____ , A.D., 20___.

_____
COUNTY CLERK OF MCHENRY COUNTY, ILLINOIS

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
SS
COUNTY OF DUPAGE)

THIS IS TO CERTIFY THAT I, THE UNDERSIGNED, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED AND SUBDIVIDED THE FOLLOWING DESCRIBED PROPERTY:

PARCEL 1:
LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 10 AND PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 15, ALL IN TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 2, 2020 AS DOCUMENT NO. 2020R0040758, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 2:
NON-EXCLUSIVE DRAINAGE AND DETENTION EASEMENT FOR THE BENEFIT OF PARCEL 1 PURSUANT TO DRAINAGE AND DETENTION EASEMENT AGREEMENT DATED OCTOBER 24, 2005 AND RECORDED NOVEMBER 15, 2005 AS DOCUMENT 2005R0097161, AND THE GRANT OF EASEMENT RECORDED FEBRUARY 2, 2007 AS DOCUMENT 2007R0008218 BY AND BETWEEN LUTTER CENTER, LLC AND WAL-MART REAL ESTATE BUSINESS TRUST.

I FURTHER CERTIFY THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY, AND THAT CONCRETE MONUMENTS AT OPPOSING SUBDIVISION CORNERS AND 5/8" IRON BARS AT ALL LOT CORNERS AND POINT OF CHANGE IN ALIGNMENT WILL BE SET AS REQUIRED BY THE PLAT ACT (ILLINOIS REVISED STATUTES 2005, 765ILCS 205/1)

I FURTHER CERTIFY THAT THE ABOVE DESCRIBED PROPERTY IS LOCATED IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN, AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP COMMUNITY PANEL 17111C0334J DATED NOVEMBER 16, 2006.

I FURTHER CERTIFY THAT THIS SUBDIVISION LIES WITHIN THE CORPORATE LIMITS OF THE CITY OF CRYSTAL LAKE, ILLINOIS.

GIVEN UNDER MY HAND AND SEAL

THIS _____ DAY OF _____, A.D., 20_____.

_____
JEFFREY R. PANKOW
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3483
MY REGISTRATION EXPIRES ON NOVEMBER 30, A.D., 2022
PROFESSIONAL DESIGN FIRM LICENSE NO. 184-002937
EXPIRES ON APRIL 30, 2023

SURFACE WATER STATEMENT

STATE OF ILLINOIS)
SS
COUNTY OF DUPAGE)

TO THE BEST OF OUR KNOWLEDGE AND BELIEF THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE CONSTRUCTION OF THIS SUBDIVISION OR ANY PART THEREOF, OR, THAT IF SUCH SURFACE WATER DRAINAGE WILL BE CHANGED, REASONABLE PROVISION HAS BEEN MADE FOR COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO PUBLIC AREAS, OR DRAINS WHICH WILL BE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD FOR DAMAGE TO THE ADJOINING PROPERTY BECAUSE OF THE CONSTRUCTION OF THE SUBDIVISION.

_____
OWNER OR ATTORNEY

_____
PLEASE TYPE/PRINT NAME

_____
ENGINEER

_____
PLEASE TYPE/PRINT NAME

MUNICIPAL UTILITY EASEMENT (M.U.E.)

NON-EXCLUSIVE EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH DOMESTIC WATER, SANITARY SEWER AND STORMWATER DRAINAGE IS HEREBY RESERVED FOR AND GRANTED TO THE CITY OF CRYSTAL LAKE, ILLINOIS, THEIR SUCCESSORS AND ASSIGNS, TO INSTALL, OPERATE, MAINTAIN, RELOCATE, RENEW AND REMOVE FACILITIES USED IN CONNECTION WITH SEWER AND WATER MAINS, IN, UNDER, ACROSS, ALONG, AND UPON THE SURFACE OF THE PROPERTY SHOWN ON THE PLAT WITHIN THE AREAS MARKED AS "MUNICIPAL UTILITY EASEMENT" (MUE) AND THOSE PARTS DESIGNATED ON THE PLAT AS DEDICATED FOR PUBLIC STREET, TOGETHER WITH THE RIGHT TO CUT, TRIM, OR REMOVE TREES, BUSHES, AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE PROPERTY FOR ALL SUCH PURPOSES, EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUNICIPAL UTILITY EASEMENT (MUE) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

1. THE SURFACE OF THE MUE MAY BE GRASS, SOD, OR PAVEMENT TO ALLOW FOR DRIVEWAYS OR PARKING. MINOR LANDSCAPING AS SHOWN ON THE APPROVED LANDSCAPE PLAN MAY BE PERMITTED.

II, CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE MUE WHICH IS LOCATED ON SUCH PARTY'S PROPERTY SO THAT IT IS IN GOOD CONDITION FOR ITS INTENDED PURPOSE AS A MUE WHICH MAINTENANCE MAY INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING AND MOWING OF ALL LAWNS OR PAVEMENT RESTORATION.

NO TITLEHOLDER OF ANY PART OR PORTION OF THE MUE (OR ANY PARTY ACTING ON BEHALF OF THE TITLEHOLDER) SHALL:

III. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE MUE, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN OR APPROVED ENGINEERING PLANS FOR THE SITE, OR

IV. ALTER, MODIFY OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE MUE.

THE CITY SHALL MAINTAIN THE SEWER AND WATER MAINS LOCATED WITHIN THE MUE UP TO AND INCLUDING THE SHUT OFF VALVES, THE MANHOLES, FIRE HYDRANTS AND THE SANITARY SEWER MAIN, BUT NOT INCLUDING THE SERVICE CONNECTIONS AND LATERALS (REFERRED TO AS THE "SYSTEM"), THE CITY'S DUTIES WILL INCLUDE ALL NECESSARY WORK UP TO AND INCLUDING THE BACKFILL STAGE IN THE EVENT OF REPAIR AND REPLACEMENT WORK ON THE SYSTEM.

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE MUE WILL BE RESPONSIBLE FOR PROMPT, QUALITY RESTORATION OF ALL SURFACE AND ABOVE-GRADE IMPROVEMENTS MEETING OR EXCEEDING THE ORIGINAL CONSTRUCTION REQUIREMENTS OF ALL AREAS IN THE MUE THAT WERE DAMAGED BY THE CITY IN THE PROCESS OF REPAIRING, REPLACING OR CONSTRUCTING THE SYSTEM. THE CITY AGREES TO EXERCISE REASONABLE CARE IN REPAIRS MADE SO AS NOT TO CAUSE UNNECESSARY DAMAGES.

PUBLIC UTILITY EASEMENT (P.U.E.)

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH UTILITY SERVICES IS HEREBY RESERVED FOR AND GRANTED TO: COMMONWEALTH EDISON, COMCAST CABLE, NICOR GAS AND AT&T TELEPHONE, THEIR RESPECTIVE SUCCESSORS AND ASSIGNS, JOINTLY AND SEVERALLY, HEREIN AFTER REFERRED TO AS "UTILITY COMPANIES". UTILITY COMPANIES SHALL HAVE THE RIGHT TO INSTALL, OPERATE, MAINTAIN, AND REMOVE, FROM TIME TO TIME, FACILITIES USED IN CONNECTION WITH UTILITY SERVICES, OVER, UNDER, ACROSS, ALONG AND UPON THE SURFACE OF THE PROPERTY SHOWN AS A PUBLIC UTILITY EASEMENT (PUE) AND THE PROPERTY DESIGNATED ON THE PLAT FOR STREETS AND ALLEYS, WHETHER PUBLIC OR PRIVATE, TOGETHER WITH THE RIGHT TO INSTALL REQUIRED SERVICE CONNECTIONS OVER OR UNDER THE SURFACE OF EACH LOT. UTILITY COMPANIES SHALL HAVE THE RIGHT TO CUT, TRIM OR REMOVE TREES, BUSHES AND ROOTS AS MAY BE REASONABLY REQUIRED INCIDENT TO THE RIGHTS HEREIN GIVEN, AND THE RIGHT TO ENTER UPON THE SUBDIVIDED PROPERTY FOR ALL SUCH PURPOSES. OBSTRUCTIONS SHALL NOT BE PLACED IN A PUE WITHOUT THE PRIOR WRITTEN CONSENT OF THE RESPECTIVE UTILITY COMPANY. AFTER INSTALLATION OF ANY SUCH FACILITIES, THE GRADE OF THE SUBDIVIDED PROPERTY SHALL NOT BE ALTERED IN A MANNER SO AS TO INTERFERE WITH THE PROPER OPERATION AND MAINTENANCE THEREOF.

ONLY PERPENDICULAR CROSSINGS OF THE MUNICIPAL UTILITY EASEMENT ARE PERMITTED BY THE UTILITY COMPANIES.

STORMWATER MANAGEMENT EASEMENT (SME):

EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE STORMWATER MANAGEMENT EASEMENT (SME) SHALL CONCLUSIVELY BE DEEMED TO HAVE COVENANTED AND AGREED, JOINTLY AND SEVERALLY, TO:

i. CARE FOR AND MAINTAIN THE SURFACE OF THAT PORTION OF THE SME WHICH IS LOCATED ON SUCH PARTY'S PROPERTY AS A WELL LANDSCAPED, HIGH-QUALITY PARCEL (WHICH MAINTENANCE SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, THE REGULAR SEEDING, WATERING, AND MOWING OF ALL LAWNS), AND

ii. KEEP ALL SURFACE OPENINGS OF THE DRAINAGE PIPES UNDERLYING THE SME FREE OF ALL GRASS CLIPPINGS, LEAVES, OR OTHER RELATED OR FOREIGN MATERIALS.

NO INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE TO ALL OR ANY PART OF THE SME SHALL:

i. INSTALL, CONSTRUCT, ERECT, PLACE OR PLANT ANY BUILDING, STRUCTURES, IMPROVEMENTS OR VEGETATION (OTHER THAN GRASS OR CITY APPROVED PLANTINGS) UPON THE SME INCLUDING, BUT NOT LIMITED TO, FENCES, WALLS, PATIOS, SHEDS, POSTS, TREES, PLANTS OR SHRUBBERY, EXCEPT AS SHOWN ON THE APPROVED LANDSCAPE PLAN, OR

ii. ALTER, MODIFY, OR CHANGE IN ANY WAY THE TOPOGRAPHY OR ELEVATIONS OF THE SME, OR

iii. OBSTRUCT, ALTER, OR MODIFY THE ESTABLISHED DRAINAGE PATTERN FROM OR OVER THE SME.

MAINTENANCE OF THE STORM SEWERS AND STORM STRUCTURES WITHIN THE SME SHALL BE THE SOLE RESPONSIBILITY OF EACH INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PURSUANT TO THE REQUIREMENTS CONTAINED HEREIN.

IF THE CITY DETERMINES THAT THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE IS IN DEFAULT OF SAID MAINTENANCE OBLIGATIONS AND UPON FIVE (5) DAYS NOTICE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE SERVED BY CERTIFIED MAIL, THE CITY AND ITS SUCCESSORS AND ASSIGNS SHALL BE GRANTED AN EASEMENT OVER THE AREA DESCRIBED ON THIS DEED RESTRICTION FOR THE RIGHT, PRIVILEGE AND AUTHORITY, WITHOUT OBLIGATION, TO PERFORM SAID MAINTENANCE AND REPAIRS. THE CITY MAY ENTER UPON THE EASEMENT FOR THE PURPOSE OF EMERGENCY REPAIRS.

THE CHARGE OF THE EMERGENCY REPAIRS AND/OR MAINTENANCE IS THE RESPONSIBILITY OF THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. THE CITY MAY, AT ITS SOLE ELECTION, RECORD NOTICE OF LIEN WITH THE RECORDER OF DEEDS FOR MCHENRY COUNTY AS DESCRIBED ABOVE AGAINST THE SUBJECT REAL PROPERTY. SAID LIEN SHALL INCLUDE THE APPLICABLE EXPENSE TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE PLUS ATTORNEY'S FEES AND COURT COSTS. UPON PAYMENT OF SAID LIEN, THE CITY SHALL ISSUE THE APPROPRIATE RELEASE OF LIEN TO THE INDIVIDUAL ENTITY OR OTHER PARTY ACCEPTING TITLE. IT SHALL NOT BE THE OBLIGATION OF THE CITY TO RECORD THE RELEASE OF THE LIEN BUT SHALL BE THE OBLIGATION OF THE PARTY PROCURING THE RELEASE.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100 Aurora, Illinois
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A.L.T.A./N.S.P.S.
LAND TITLE SURVEY

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION
CRYSTAL LAKE, IL



SITE LOCATION

VICINITY MAP

LINE/SYMBOL/ABBREVIATION LEGEND

- BOUNDARY LIMITS
- ADJACENT PROPERTY OR R.O.W. LINE
- EASEMENT LIMITS
- OHW — OVERHEAD WIRES
- G — UNDERGROUND GAS LINE
- STM — UNDERGROUND STORM LINE
- SAN — UNDERGROUND SANITARY LINE
- WAT — UNDERGROUND WATER LINE
- X — FENCE
- CABLE TV PEDESTAL
- STORM MANHOLE
- CATCH BASIN
- INLET
- FLARED END SECTION
- DRAIN
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- VALVE VAULT
- GAS METER
- GAS VALVE
- GAS MARKER POST
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- UTILITY POLE
- GUY WIRE
- SIGN
- FIBER OPTIC MARKER POST
- TELEPHONE JUNCTION BOX
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- UTILITY PEDESTAL CLUSTER W/NUMBER
- CONCRETE SURFACE
- R.O.W. — RIGHT OF WAY
- B–B — BACK–TO–BACK
- E–E — EDGE–TO–EDGE
- DEPRESSED CURB

PARCEL DESCRIPTION

PARCEL 1:
LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 10 AND PART OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 15, ALL IN TOWNSHIP 43 NORTH, RANGE 8, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 2, 2020 AS DOCUMENT NO. 2020R0040758, IN MCHENRY COUNTY, ILLINOIS.

PARCEL 2:
NON–EXCLUSIVE DRAINAGE AND DETENTION EASEMENT FOR THE BENEFIT OF PARCEL 1 PURSUANT TO DRAINAGE AND DETENTION EASEMENT AGREEMENT DATED OCTOBER 24, 2005 AND RECORDED NOVEMBER 15, 2005 AS DOCUMENT 2005R0097161, AND THE GRANT OF EASEMENT RECORDED FEBRUARY 2, 2007 AS DOCUMENT 2007R0008218 BY AND BETWEEN LUTTER CENTER, LLC AND WAL–MART REAL ESTATE BUSINESS TRUST.

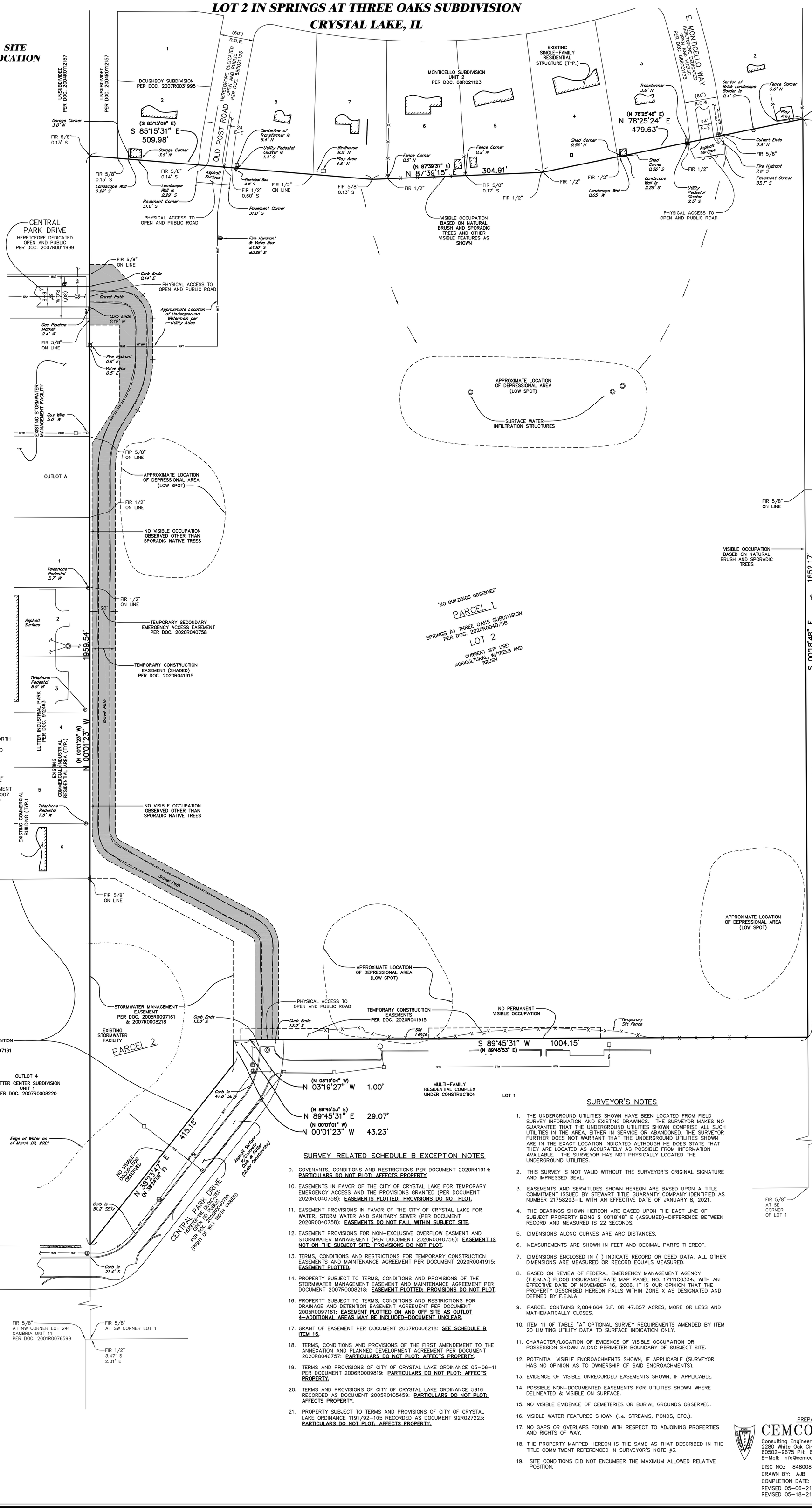
SURVEYOR'S CERTIFICATE

TO: STEWART TITLE GUARANTY COMPANY
ATA NATIONAL TITLE GROUP, FIRST AMERICAN TITLE COMPANY
REDWOOD USA, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 8, 9, 11, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON MARCH 9, 2021.

DATE OF PLAT OR MAP: _____, 2021.

_____
PETER A. BLAESER
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3072
MY REGISTRATION EXPIRES ON NOVEMBER 30, 2022
PROFESSIONAL DESIGN FIRM LICENSE NUMBER 184–002937
EXPIRES APRIL 30, 2021



SURVEY–RELATED SCHEDULE B EXCEPTION NOTES

9. COVENANTS, CONDITIONS AND RESTRICTIONS PER DOCUMENT 2020R41914: PARTICULARS DO NOT PLOT; AFFECTS PROPERTY.
10. EASEMENTS IN FAVOR OF THE CITY OF CRYSTAL LAKE FOR TEMPORARY EMERGENCY ACCESS AND THE PROVISIONS GRANTED (PER DOCUMENT 2020R0040758): EASEMENTS PLOTTED; PROVISIONS DO NOT PLOT.
11. EASEMENT PROVISIONS IN FAVOR OF THE CITY OF CRYSTAL LAKE FOR WATER, STORM WATER AND SANITARY SEWER (PER DOCUMENT 2020R0040758): EASEMENTS DO NOT FALL WITHIN SUBJECT SITE.
12. EASEMENT PROVISIONS FOR NON–EXCLUSIVE OVERFLOW EASMENT AND STORMWATER MANAGEMENT (PER DOCUMENT 2020R0040758): EASEMENT IS NOT ON THE SUBJECT SITE; PROVISIONS DO NOT PLOT.
13. TERMS, CONDITIONS AND RESTRICTIONS FOR TEMPORARY CONSTRUCTION EASEMENTS AND MAINTENANCE AGREEMENT PER DOCUMENT 2020R0041915: EASEMENT PLOTTED.
14. PROPERTY SUBJECT TO TERMS, CONDITIONS AND PROVISIONS OF THE STORMWATER MANAGEMENT EASEMENT AND MAINTENANCE AGREEMENT PER DOCUMENT 2007R0008218: EASEMENT PLOTTED; PROVISIONS DO NOT PLOT.
16. PROPERTY SUBJECT TO TERMS, CONDITIONS AND RESTRICTIONS FOR DRAINAGE AND DETENTION EASEMENT AGREEMENT PER DOCUMENT 2005R0097161: EASEMENT PLOTTED ON AND OFF SITE AS OUTLOT 4–ADDITIONAL AREAS MAY BE INCLUDED–DOCUMENT UNCLEAR.
17. GRANT OF EASEMENT PER DOCUMENT 2007R0008218: SEE SCHEDULE B ITEM 15.
18. TERMS, CONDITIONS AND PROVISIONS OF THE FIRST AMENDEMENT TO THE ANNEXATION AND PLANNED DEVELOPMENT AGREEMENT PER DOCUMENT 2020R0040757: PARTICULARS DO NOT PLOT; AFFECTS PROPERTY.
19. TERMS AND PROVISIONS OF CITY OF CRYSTAL LAKE ORDINANCE 05–06–11 PER DOCUMENT 2006R0009819: PARTICULARS DO NOT PLOT; AFFECTS PROPERTY.
20. TERMS AND PROVISIONS OF CITY OF CRYSTAL LAKE ORDINANCE 5916 RECORDED AS DOCUMENT 2005R0105459: PARTICULARS DO NOT PLOT; AFFECTS PROPERTY.
21. PROPERTY SUBJECT TO TERMS AND PROVISIONS OF CITY OF CRYSTAL LAKE ORDINANCE 1191/92–105 RECORDED AS DOCUMENT 92R027223: PARTICULARS DO NOT PLOT; AFFECTS PROPERTY.

SURVEYOR'S NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
2. THIS SURVEY IS NOT VALID WITHOUT THE SURVEYOR'S ORIGINAL SIGNATURE AND IMPRESSED SEAL.
3. EASEMENTS AND SERVITUDES SHOWN HEREON ARE BASED UPON A TITLE COMMITMENT ISSUED BY STEWART TITLE GUARANTY COMPANY IDENTIFIED AS NUMBER 21758293–IL WITH AN EFFECTIVE DATE OF JANUARY 8, 2021.
4. THE BEARINGS SHOWN HEREON ARE BASED UPON THE EAST LINE OF SUBJECT PROPERTY BEING S 00°18'48" E (ASSUMED)–DIFFERENCE BETWEEN RECORD AND MEASURED IS 22 SECONDS.
5. DIMENSIONS ALONG CURVES ARE ARC DISTANCES.
6. MEASUREMENTS ARE SHOWN IN FEET AND DECIMAL PARTS THEREOF.
7. DIMENSIONS ENCLOSED IN ( ) INDICATE RECORD OR DEED DATA. ALL OTHER DIMENSIONS ARE MEASURED OR RECORD EQUALS MEASURED.
8. BASED ON REVIEW OF FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP PANEL NO. 17111C0334J WITH AN EFFECTIVE DATE OF NOVEMBER 16, 2006, IT IS OUR OPINION THAT THE PROPERTY DESCRIBED HEREON FALLS WITHIN ZONE X AS DESIGNATED AND DEFINED BY F.E.M.A.
9. PARCEL CONTAINS 2,084,664 S.F. OR 47.857 ACRES, MORE OR LESS AND MATHEMATICALLY CLOSES.
10. ITEM 11 OF TABLE "A" OPTIONAL SURVEY REQUIREMENTS AMENDED BY ITEM 20 LIMITING UTILITY DATA TO SURFACE INDICATION ONLY.
11. CHARACTER/LOCATION OF EVIDENCE OF VISIBLE OCCUPATION OR POSSESSION SHOWN ALONG PERIMETER BOUNDARY OF SUBJECT SITE.
12. POTENTIAL VISIBLE ENCROACHMENTS SHOWN, IF APPLICABLE (SURVEYOR HAS NO OPINION AS TO OWNERSHIP OF SAID ENCROACHMENTS).
13. EVIDENCE OF VISIBLE UNRECORDED EASEMENTS SHOWN, IF APPLICABLE.
14. POSSIBLE NON–DOCUMENTED EASEMENTS FOR UTILITIES SHOWN WHERE DELINEATED & VISIBLE ON SURFACE.
15. NO VISIBLE EVIDENCE OF CEMETERIES OR BURIAL GROUNDS OBSERVED.
16. VISIBLE WATER FEATURES SHOWN (i.e. STREAMS, PONDS, ETC.).
17. NO GAPS OR OVERLAPS FOUND WITH RESPECT TO ADJOINING PROPERTIES AND RIGHTS OF WAY.
18. THE PROPERTY MAPPED HEREON IS THE SAME AS THAT DESCRIBED IN THE TITLE COMMITMENT REFERENCED IN SURVEYOR'S NOTE #3.
19. SITE CONDITIONS DID NOT ENCUMBER THE MAXIMUM ALLOWED RELATIVE POSITION.

PREPARED BY:
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2280 White Oak Circle, Suite 100 Aurora, Illinois
60502–9675 PH: 630.862.2100 FAX: 630.862.2199
E–Mail: info@cemcon.com Website: www.cemcon.com

DISC NO.: 848008 FILE NAME: ALTA
DRAWN BY: AJB FLD. BK. / PG. NO.: D98\39–42, 46–50
COMPLETION DATE: 04–20–21 JOB NO.: 848.008
REVISED 05–06–21\AJB PER ATTORNEY REVIEW
REVISED 05–18–21\AJB REVISED SURVEYOR'S NOTES

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PLOT FILE CREATED: 5/18/2021 BY: TONY BLUS
DRAWING PATH: P:\848008\SURVEY\DRAWINGS\PLATS\ALTA.DWG

TOPOGRAPHIC MAP

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION

CRYSTAL LAKE, IL

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

LINE/SYMBOL/ABBREVIATION LEGEND

- BOUNDARY LIMITS
- ADJACENT PROPERTY OR R.O.W. LINE
- EASEMENT LIMITS
- OHW — OVERHEAD WIRES
- G — UNDERGROUND GAS LINE
- STM — UNDERGROUND STORM LINE
- SAN — UNDERGROUND SANITARY LINE
- W — UNDERGROUND WATER LINE
- E — UNDERGROUND ELECTRIC LINE
- P — UNDERGROUND PHONE LINE
- FO — UNDERGROUND FIBER OPTIC LINE
- X — FENCE
- BRUSH/TREE LINE
- CABLE TV PEDESTAL
- STORM MANHOLE
- CATCH BASIN
- INLET
- FLARED END SECTION
- DRAIN
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- VALVE VAULT
- GAS METER
- GAS VALVE
- GAS MARKER POST
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- UTILITY POLE
- GUY WIRE
- SIGN
- FIBER OPTIC MARKER POST
- TELEPHONE JUNCTION BOX
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- UTILITY PEDESTAL CLUSTER W/NUMBER
- CONCRETE SURFACE
- R.O.W. RIGHT OF WAY
- B–B BACK–TO–BACK
- E–E EDGE–TO–EDGE
- CONIFEROUS TREE w/TRUNK DIAM.
- DECIDUOUS TREE w/TRUNK DIAM.
- DEPRESSED CURB
- (800.5) SOIL BORING W/GROUND ELEVATION

NOTES

BOUNDARY INFORMATION BASED ON BOUNDARY SURVEY PERFORMED BY CEMCON, LTD. ON MARCH 9, 2021.

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

BENCHMARK/CONTROL POINTS

ELEVATION REFERENCE MARK:
FOUND CUT '+' IN TOP OF THE CONCRETE CURB ON THE SOUTH RIGHT OF WAY LINE OF CENTRAL PARK DRIVE APPROXIMATELY 119 FEET EAST OF THE NORTHEASTENMOST ENTRANCE TO WALMART.
ELEVATION: 888.62 NAVD 88

CONTROL POINTS:

CP #100: FOUND CROSS IN TOP OF CURB IN FRONT OF THE FIRE HYDRANT LOCATED ON THE NORTH SIDE CENTRAL PARK DRIVE ON THE WEST SIDE OF SUBJECT SITE APPROXMATELY 235' SOUTH OF THE NORTHERLY LINE THEREOF.
NORTHING: 2021191.02
EASTING: 998230.77
ELEVATION: 887.02 NAVD 88

CP #105: SET '+' IN THE NORTHEAST CORNER OF THE CONCRETE TRANSFORMER PAD LOCATED NREAR THE SOUTHEAST CORNER OF THE PROPERTY LOCATED AT 7765 EAST MONTICELLO WAY.
NORTHING: 2021455.43
EASTING: 999351.94
ELEVATION: 890.70 NAVD 88

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DISC NO.: 848008 FILE NAME: TOPO
DRAWN BY: AJB FLD. BK. / PG. NO.: D98\39–42, 46–50
COMPLETION DATE: 04–20–21 JOB NO.: 848.008

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TOPOGRAPHIC MAP

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION

CRYSTAL LAKE, IL

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

EXISTING SINGLE-FAMILY RESIDENTIAL STRUCTURE (TYP.)

Valve & Vault 5' Dia.
Tk. A w/Tp. 1 F & G
Rim=(891.18)
T/Pipe=(885.18)

EAST MONTICELLO WAY

Asphalt Surface

Brick Landscape Border

Inv.=(890.21)

Play Area

CP #105

Siltation Manhole 6' Dia.
Cinder Block Structure
w/½" Gaps
Tk. 1 F & G
Rim=(889.17)
Bottom=(879.17)
3' Hole in Bottom

Siltation Manhole 6' Dia.
Cinder Block Structure
w/½" Gaps
Tk. 1 F & G
Rim=(889.38)
Bottom=(878.38)
3' Hole in Bottom

Siltation Manhole 6' Dia.
Cinder Block Structure
w/½" Gaps
Tk. 1 F & G
Rim=(888.72)
Bottom=(878.72)
3' Hole in Bottom

Siltation Manhole 6' Dia.
Cinder Block Structure
w/½" Gaps
Tk. 1 F & G
Rim=(890.37)
Bottom=(880.37)
3' Hole in Bottom

#5 (885.6)

(889.5)

(886.8)

(894.5)

(884.1)

(891.6)

Storm Manhood With Open Lid
Rim=(879.81)
Filled with Soil

Siltation Manhole 6' Dia.
Cinder Block Structure
w/½" Gaps
Tk. 1 F & G
Rim=(890.90)
Bottom=(891.50)
3' Hole in Bottom

EXISTING MULTI-FAMILY RESIDENTIAL STRUCTURE (TYP.)

Asphalt Surface

Asphalt Surface

Asphalt Surface

LINE/SYMBOL/ABBREVIATION LEGEND

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- VALVE VAULT
- GAS METER
- GAS VALVE
- GAS MARKER POST
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
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- GUY WIRE
- SIGN
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- R.O.W. RIGHT OF WAY
- B-B BACK-TO-BACK
- E-E EDGE-TO-EDGE
- CONIFEROUS TREE w/TRUNK DIAM.
- 12" DECIDUOUS TREE w/TRUNK DIAM.
- DEPRESSED CURB
- (800.5) SOIL BORING W/GROUND ELEVATION

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TOPOGRAPHIC MAP

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION
CRYSTAL LAKE, IL

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

TEMPORARY CONSTRUCTION EASEMENT (SHADED) PER DOC. 2020R041915

STORMWATER MANAGEMENT EASEMENT PER DOC. 2007R0008218

EXISTING STORMWATER MANAGEMENT FACILITY

EXISTING COMMERCIAL/INDUSTRIAL RESIDENTIAL AREA (TYP.)

Gravel Path

CENTRAL PARK DRIVE

TEMPORARY CONSTRUCTION EASEMENTS PER DOC. 2020R041915

Silt Fence

#101 (889.0)

Proposed FES Location Per Utility Atlas (Open Pit-Filled w/Water)

Inlet Rim=(875.21)

Inlet Rim (T/C=886.60)

Inlet Rim (T/C=886.99)

Inlet Rim=(886.43)

Catch Basin 4' Dia. Tx A w/Tx 1 F & G Rim=(886.13) Inv=(883.08)

Approximate Location of Underground Storm Line per Utility Atlas

Sanitary Manhole 4' Dia. Tx A w/Tx 1 F & G Rim=(887.78) Inv=(868.96)

Valve & Vault 5' Dia. Tx A w/Tx 1 F & G Rim=(887.68) T/Pipe=(881.68)

Valve & Vault 5' Dia. Tx A w/Tx 1 F & G Rim=(887.43) T/Pipe=(881.68)

Sanitary Manhole Rim=(886.54)

Approximate Location of Underground Storm Line per Utility Atlas

Inlet Rim (T/C=884.68) No Curb

Sanitary Manhole Rim=(884.55)

Valve & Vault Rim=(888.22)

Valve & Vault Rim=(888.75)

Sanitary Manhole Rim=(887.69)

Sanitary Manhole Rim=(888.36)

Sanitary Manhole Rim=(888.55)

SITE BENCHMARK REFERENCE

MULTI-FAMILY RESIDENTIAL COMPLEX UNDER CONSTRUCTION

NOTE:
ASPHALT ROADWAY UNDER CONSTRUCTION AT TIME OF FIELD SURVEY. PAVEMENT ELEVATIONS SHOWN ARE NOT FINISHED ASPHALT LAYER.

LINE/SYMBOL/ABBREVIATION LEGEND

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COMPLETION DATE: 04-20-21 JOB NO.: 848.008

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TOPOGRAPHIC MAP

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION
CRYSTAL LAKE, IL

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

(892.7)

(891.4)

#105
(892.1)

(890.0)

(889.3)

#17
(889.2)

(889.2)

#102
(891.1)

TEMPORARY CONSTRUCTION EASEMENTS PER DOC. 2020R041915

Silt Fence

Gap in Curb Line

12" CPP

Inlet 2' Dia.
Ty. A w/Ty. 1 F & G
Rim=(887.19)
Inv.=(884.59)

NOTE:
ASPHALT ROADWAY UNDER CONSTRUCTION AT TIME OF FIELD SURVEY. PAVEMENT ELEVATIONS SHOWN ARE NOT FINISHED ASPHALT LAYER.

MULTI-FAMILY RESIDENTIAL COMPLEX UNDER CONSTRUCTION

EXISTING MULTI-FAMILY RESIDENTIAL STRUCTURE (TYP.)

Asphalt Surface

Sanitary Manhole
Rim=(887.09)

Sanitary Manhole
Rim=(885.09)

Portion of Well Buried under Snow

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- CATCH BASIN
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- GAS VALVE
- GAS MARKER POST
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- ELECTRIC TRANSFORMER
- UTILITY POLE
- GUY WIRE
- SIGN
- FIBER OPTIC MARKER POST
- TELEPHONE JUNCTION BOX
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- UTILITY PEDESTAL CLUSTER W/NUMBER
- CONCRETE SURFACE
- R.O.W. RIGHT OF WAY
- B–B BACK–TO–BACK
- E–E EDGE–TO–EDGE
- CONIFEROUS TREE w/TRUNK DIAM.
- DECIDUOUS TREE w/TRUNK DIAM.
- DEPRESSED CURB
- (800.5) SOIL BORING W/GROUND ELEVATION

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TOPOGRAPHIC MAP

LOT 2 IN SPRINGS AT THREE OAKS SUBDIVISION
CRYSTAL LAKE, IL

Approved As-built survey storage table provided from the Crystal Lake

Detention Basin Volume Calculation

#Units=Elevation,ft,Area,ft2,Volume,acft

#	Elev ft	Area ft2	Cumml Avg acft
	887.0000	344001.8139	145.4906
	886.0000	333998.8559	137.7083
	885.0000	324575.2964	130.1489
	884.0000	315353.0834	122.8035
	883.5000	310811.4122	119.2095
	883.0000	306330.2862	115.6676
	882.0000	297517.1573	108.7364
	881.0000	288854.9198	102.0057
	880.0000	280395.9867	95.4716
	879.0000	272097.7707	89.1299
	878.0000	263930.2870	82.9771
	877.0000	255943.2100	77.0098
	876.0000	248050.4377	71.2247
	875.0000	240298.1013	65.6193
	874.0000	232658.8330	60.1905
	873.0000	225181.7016	54.9352
	872.0000	217821.5943	49.8502
	871.0000	210605.2488	44.9325
	870.0000	203503.3364	40.1792
	869.0000	196521.4495	35.5876
	868.0000	189674.3957	31.1547
	867.0000	182980.7090	26.8772
	866.0000	176377.6242	22.7523
	865.0000	169693.7351	18.7799
	864.0000	162987.4931	14.9613
	863.0000	156575.7106	11.2932
	862.0000	150119.6799	7.7728
	861.0000	142486.8970	4.4142
	860.0000	119561.9713	1.4063
	859.0000	1091.1558	0.0214
	858.0000	495.8334	0.0031
	857.4500	0.8204	0.0000

CEMCON AS-BUILT Structure 5

BASIN STAGE/ STORAGE RELATIONSHIP

ELEV.	AREA (S.F.)	AREA (AC.)	INCREM. VOLUME (AC.-Ft.)	CUMULATIVE VOLUME (Ac-Ft)
863.2	160100	3.675	0.000	**0.000**
864.0	164890	3.785	2.984	**2.984**
865.0	171780	3.944	3.864	**6.849**
866.0	178470	4.097	4.020	**10.869**
867.0	185256	4.253	4.175	**15.044**
868.0	192131	4.411	4.332	**19.376**
869.0	199090	4.570	4.491	**23.866**
870.0	206140	4.732	4.651	**28.518**
871.0	213310	4.897	4.815	**33.332**
872.0	220600	5.064	4.981	**38.313**
873.0	227910	5.232	5.148	**43.461**
874.0	235320	5.402	5.317	**48.778**
875.0	242890	5.576	5.489	**54.268**
876.0	250590	5.753	5.664	**59.932**
877.0	258374	5.931	5.842	**65.774**
878.0	266270	6.113	6.022	**71.796**
879.0	274320	6.298	6.205	**78.001**
880.0	282570	6.487	6.392	**84.393**
881.0	290880	6.678	6.582	**90.976**
882.0	299490	6.875	6.777	**97.752**
883.0	308340	7.079	6.977	**104.729**
883.5	312920	7.184	3.566	**108.295**
884.0	317220	7.282	3.617	**111.911**
885.0	326280	7.490	7.386	**119.298**
886.0	335520	7.702	7.596	**126.894**
887.0	344510	7.909	7.806	**134.700**

ELEV.	Cemcon As-built AREA (S.F.)	Manhard As-built AREA (S.F.)
858		500
859		1090
860		119560
861		142490
862		150120
863.2	160100	156580
864	164890	162990
865	171780	169690
866	178470	176380
867	185256	182980
868	192131	189670
869	199090	196520
870	206140	203500
871	213310	210610
872	220600	217820
873	227910	225180
874	235320	232660
875	242890	240300
876	250590	248050
877	258374	255940
878	266270	263930
879	274320	272100
880	282570	280400
881	290880	288850
882	299490	297520
883	308340	306330
883.5	312920	310810
884	317220	315350
885	326280	324580
886	335520	334000
887	344510	344000

PER DOC. 2020R040758

EXISTING COMMERCIAL/INDUSTRIA RESIDENTIAL AREA (TYP

Gravel Path

Storm Manhole Rim=(888.51)

Storm Manhole Rim=(887.02)

Storm Manhole Rim=(888.34)

Storm Manhole Rim=(887.52)

Storm Manhole Rim=(887.14)

E/W AS SURVEYED ON 01-10-22

E/W AS SURVEYED ON 04-20-21

STORMWATER MANAGEMENT EASEMENT PER DOC. 2007R0008218

EXISTING STORMWATER MANAGEMENT FACILITY

12" PVC

8" PVC

8" DIP

12" DIP

Inlet Rim (T/C=886.60)

Sanitary Manhole 4' Dia. Ty. A w/Ty. 1 F & G Rim=(887.76) Inv.=(868.96)

Valve & Vault 5' Dia. Ty. A w/Ty. 1 F & G Rim=(887.68) T/Pipe=(881.68)

Valve & Vault 5' Dia. Ty. A w/Ty. 1 F & G Rim=(887.43) T/Pipe=(881.68)

Sanitary Manhole Rim=(886.54)

CENTRAL PARK DRIVE

Approximate Location of Underground Storm Line per Utility Atlas

Inlet Rim (T/C=884.68) 'No Curb'

Sanitary Manhole Rim=(884.55)

Valve & Vault Rim=(886.22)

Valve & Vault Rim=(888.75)

Sanitary Manhole Rim=(888.36)

Sanitary Manhole Rim=(888.55)

Sanitary Manhole Rim=(887.69)

SITE BENCHMARK REFERENCE

N

30 15 0 30

SCALE: 1 INCH = 30 FEET

LINE/SYMBOL/ABBREVIATION LEGEND

- BOUNDARY LIMITS
- ADJACENT PROPERTY OR R.O.W. LINE
- EASEMENT LIMITS
- OHW — OVERHEAD WIRES
- G — UNDERGROUND GAS LINE
- STM — UNDERGROUND STORM LINE
- SAN — UNDERGROUND SANITARY LINE
- W — UNDERGROUND WATER LINE
- E — UNDERGROUND ELECTRIC LINE
- P — UNDERGROUND PHONE LINE
- FO — UNDERGROUND FIBER OPTIC LINE
- X — FENCE
- BRUSH/TREE LINE
- CABLE TV PEDESTAL
- STORM MANHOLE
- CATCH BASIN
- INLET
- FLARED END SECTION
- DRAIN
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- VALVE VAULT
- GAS METER
- GAS VALVE
- GAS MARKER POST
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- UTILITY POLE
- GUY WIRE
- SIGN
- FIBER OPTIC MARKER POST
- TELEPHONE JUNCTION BOX
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- UTILITY PEDESTAL CLUSTER W/NUMBER
- CONCRETE SURFACE
- R.O.W. RIGHT OF WAY
- B-B BACK-TO-BACK
- E-E EDGE-TO-EDGE
- CONIFEROUS TREE w/TRUNK DIAM.
- DECIDUOUS TREE w/TRUNK DIAM.
- DEPRESSED CURB
- (800.5) SOIL BORING W/GROUND ELEVATION

PREPARED BY:

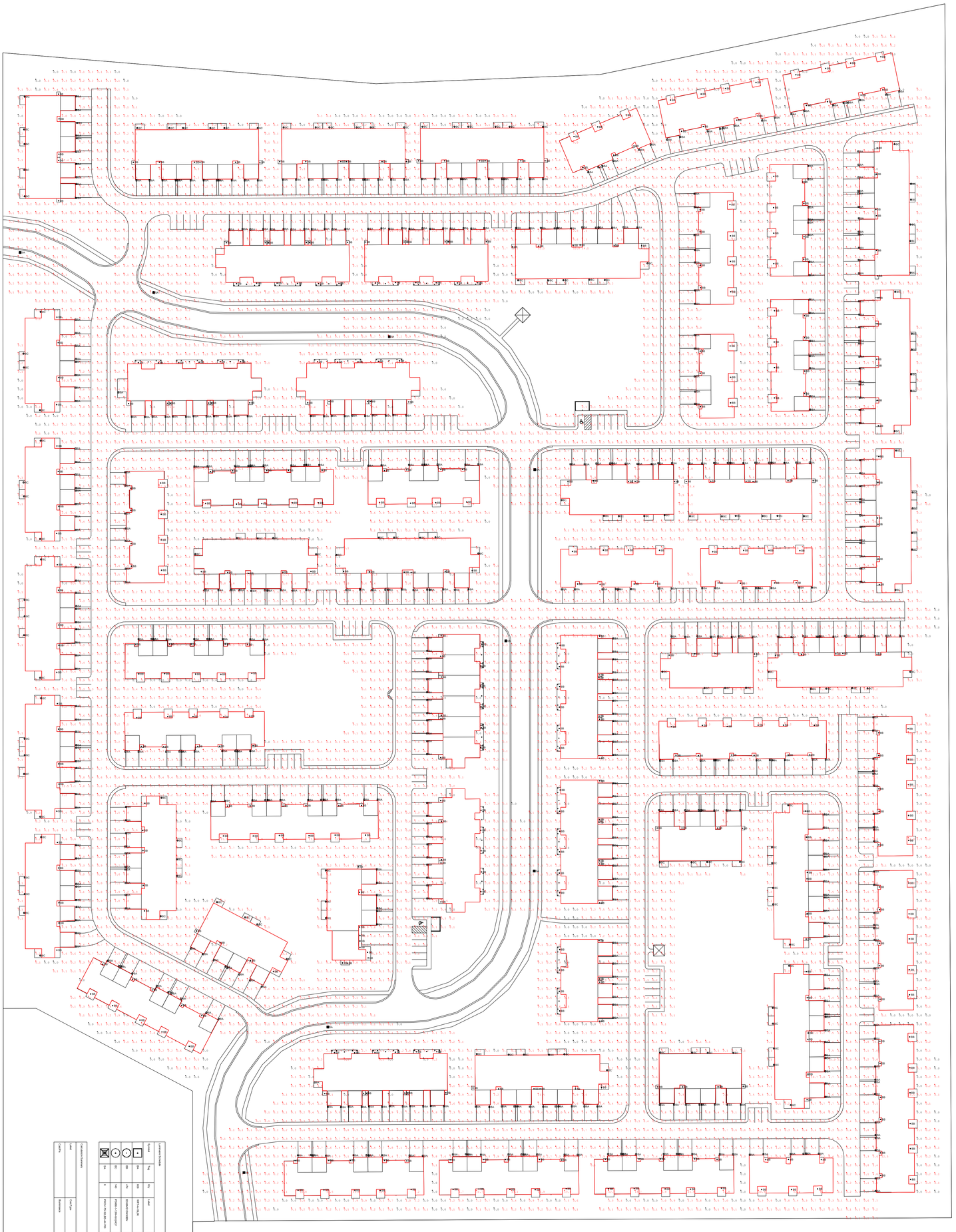
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COMPLETION DATE: 04-20-21 JOB NO.: 848.008

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PHOTOMETRIC SITE PLAN

SCALE: N.T.S.

N

PS-1

1 OF 1

PHOTOMETRIC SITE PLAN

PROJECT #: 28520

DATE: OCTOBER 11, 2021

REDWOOD CRYSTAL LAKE

CRYSTAL LAKE, IL

Redwood APARTMENT NEIGHBORHOODS

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REVISIONS

PRELIMINARY

NOTE!!!
THIS DRAWING IS NOT
FOR CONSTRUCTION



TRAFFIC IMPACT STUDY

Proposed Residential Development – Crystal Lake, Illinois

June 16, 2021

Prepared for the City of Crystal Lake
on behalf of Redwood USA

City of Crystal Lake
100 W. Woodstock St.
Crystal Lake, Illinois 60014

Sam Schwartz

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APPENDIX 29

Executive Summary

A traffic impact study was conducted for a proposed residential development on an undeveloped 48-acre parcel located along Central Park Drive east of Lutter Drive in Crystal Lake, Illinois. The proposed development would include 305 dwelling units with a total of 1,303 parking spaces—comprised of two garage spaces and two driveway spaces per unit, plus additional 83 parking spaces for community parking. Based on the most recent site plan provided by the developer—and in accordance with longstanding plans by the City of Crystal Lake—Central Park Drive would be extended through the proposed development and would meet Lutter Drive at an existing roadway stub located approximately one quarter mile south of Three Oaks Road. The westbound approach of this new T intersection is referred to herein as "Central Park Drive (North)" to differentiate it from the existing Central Park Drive/Lutter Drive intersection.

This study reflects an update to a May 2020 traffic impact analysis performed by Sam Schwartz for the residential development located immediately south of the subject parcel. In that previous report, Sam Schwartz documented that a traffic signal is warranted under existing conditions at the intersection of Central Park Drive/Lutter Drive. At the direction of City staff and in accordance with the City's capital improvement plan, the future traffic analyses in this study assume that a signal will be installed at this location and at the intersection of Three Oaks Road/Lutter Drive/Sands Road. Geometric improvements were also assumed at Three Oaks Road/Lutter Drive/Sands Road based on a concept plan prepared by Gewalt Hamilton Associates and provided by City staff.

It is anticipated that area traffic operation will be generally satisfactory after completion of the proposed development. At the intersection of Lutter Drive/Central Park Drive (North), it is recommended that the new westbound approach be striped with separate left- and right-turn lanes and a single receiving lane; minor-leg stop control should also be posted. Access intersections within the development should operate under minor-leg stop control and should be striped to indicate the minor-approach lane configuration and to provide stop bars and crosswalks.

Sam Schwartz has identified the relative increase in traffic attributable to the proposed residential development as compared to existing volumes at the study intersections shown in ***Table 1*** on the following page. Similar comparison tables were previously completed for nearby developments to facilitate discussions between the City and area developers regarding future area improvements that would provide benefits to existing and future users.

Table 1. Projected Traffic Volume Increase due to Proposed Development

Intersection	Total Intersection Traffic Volume PM Peak Hour (vehicles per hour)		Percent Increase
	Existing	Existing + Residential Development	
IL Route 31 / James R. Rakow Road / Central Park Drive	4,050	4,130	2.0%
Central Park Drive / Lutter Drive	1,205	1,280	6.2%
Three Oaks Road / Lutter Drive / Sands Road	1,495	1,560	4.3%