#2024-93 Bard Estates (Derbyshire) Townhomes
1201 Bard Road – Final PUD and Plat of Subdivision for a Townhome Development
Project Review for Planning and Zoning Commission

Meeting Date:	June 19, 2024
Requests:	Final Planned Unit Development and Final Plat of Subdivision for a 48-unit townhome development.
Location:	1201 Bard Road
Acreage:	Approximately 5 acres
Existing Zoning:	R-3B PUD Multi-Family Residential
Surrounding Properties:	North: R-2 Single Family Residential South: R-1 PUD Single Family Residential East: B-1 PUD Neighborhood Commercial and east of Huntley Road R-1 PUD Single Family Residential West: E Estate (City Fire Station and Water Tower) and R-3B PUD Multi-Family Residential
Staff Contact:	Elizabeth Maxwell (815.356.3615)

Background:

- The property is vacant and zoned R-3B Multi-Family Residential, which supports townhomes. It was originally part of the Bartley Square Development which was a mixed-use development with B-1 commercial on the corner and multi-family townhomes behind.
- The Preliminary PUD and Plat of Subdivision were approved November 21, 2023. The Preliminary PUD granted zoning approval for 48 townhome units with the site layout and elevations.
- Each unit would be available for ownership.

Development Analysis:

General

- Requests: A Final Planned Unit Development and Final Plat of Subdivision to construct 48 townhome units. Final PUD is required to ensure the plans are compliant with the preliminary approval.
- Zoning: The site is zoned R-3B PUD Multi-Family Residential and received preliminary approvals.

- Land Use: The land use map shows the area as High Density Residential. This land use designation is appropriate for this use.

- Site Plan:
  - The site is broken up into three pods of buildings each with an access to a public roadway. The northern pod is made up of two six-unit buildings off Bard Road. The south two pods each with two six-unit buildings can be accessed via Huntley Road or from Crabapple Drive.
  - The Preliminary PUD had a condition to connect the southern pods out to Huntley Road. That is illustrated in this plan.
  - Amenities are centralized to the neighborhood with a dog park, tot lot, playing courts, gazebo, and open space.
  - The proposed development complies with the setback and density requirements.
  - Detention is provided on the south portion of the site. The proposed plans meet the City's stormwater ordinance.
  - Utilities will be extended through the site to loop the water main, provide fire hydrants and sprinkler systems to each building. They will also provide storm sewer lines and sanitary sewer lines.

- Landscape Plan:
  - The plan meets the tree replacement requirements and the buffer to the single family residential zoning to the south.
  - Each building will have landscaping planted around the foundation for the homeowners.
  - A condition from the Preliminary PUD requested additional landscape at the end of the auto courts to better screen them. This plan illustrates that additional planting.
  - The future commercial property adjacent to the subject property would need to provide a 40-foot buffer between their use and this lot. In order to provide some additional protection to the residents, a small buffer is on the residential side.

- Elevations:
  - The townhomes feature two color schemes. The first is a light grey color with white trim and a medium shade red brick along the first floor. The second color scheme is white with white trim.
  - The siding is horizontal Hardiboard siding and smooth textured Hardiboard siding. The petitioner provided materials with the final PUD elevations.
  - The rear elevation garages project out two feet on some of the units to break up that rear elevation. There are also projections on the side elevations.
  - The elevations **meet** the design standards.

- Plat of Subdivision:
  - A plat of subdivision showing the eight townhome lots and two outlots has been provided.
  - Since each building is for sale a final plat of condominium subdivision further delineating each unit as a separate lot is required.

Findings of Fact:

Final Planned Unit Development

The petitioner is requesting approval of a Final Planned Unit Development to allow the construction of a 48 townhome unit development. A Final Planned Unit Development is required to be in substantial conformance with the approved Preliminary Planned Unit Development. **In review of the plans and conditions of approval, the Final PUD is in substantial conformance.**

Final Plat of Subdivision

The petitioner is requesting Final Plat approval for ten lots. There are eight townhome lots and two outlots that will be owned by the HOA. A Final Plat of Subdivision with the Condominium division of the units will be provided. Final Plats are required to meet the following requirements:

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 High Density Residential, which allows for existing and future multi-family living. 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.

Supporting Actions: Provide for a reasonable rate of residential growth especially infill growth and mixed-use development which take advantage of existing City services.

Housing – Multi-Family Housing

Goal: Provide an appropriate mix of multi-family housing to add density to appropriate areas and allow for mixed use development.

Supporting Actions: Promote the construction of a variety of multi-family housing products.

Success Indicator: Number of new multi-family housing permits broken into categories for apartments, townhomes, and condominiums.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, it should be with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
   A. Application (Kerrick, received 11/02/22)
   B. Site Plan (Advantage Consulting Engineers, dated 04/09/24, received 04/26/24)
   C. Landscape Plan (Gary Weber dated 01/19/24, received 04/26/24)
   D. Engineering Plans (Advantage Consulting, dated 04/01/24, received 04/26/24)
   E. Final Plat of Subdivision (Vanderstappen, dated 03/13/24, received 04/26/24)
   F. Elevations (Unnamed, undated, received 04/26/24)

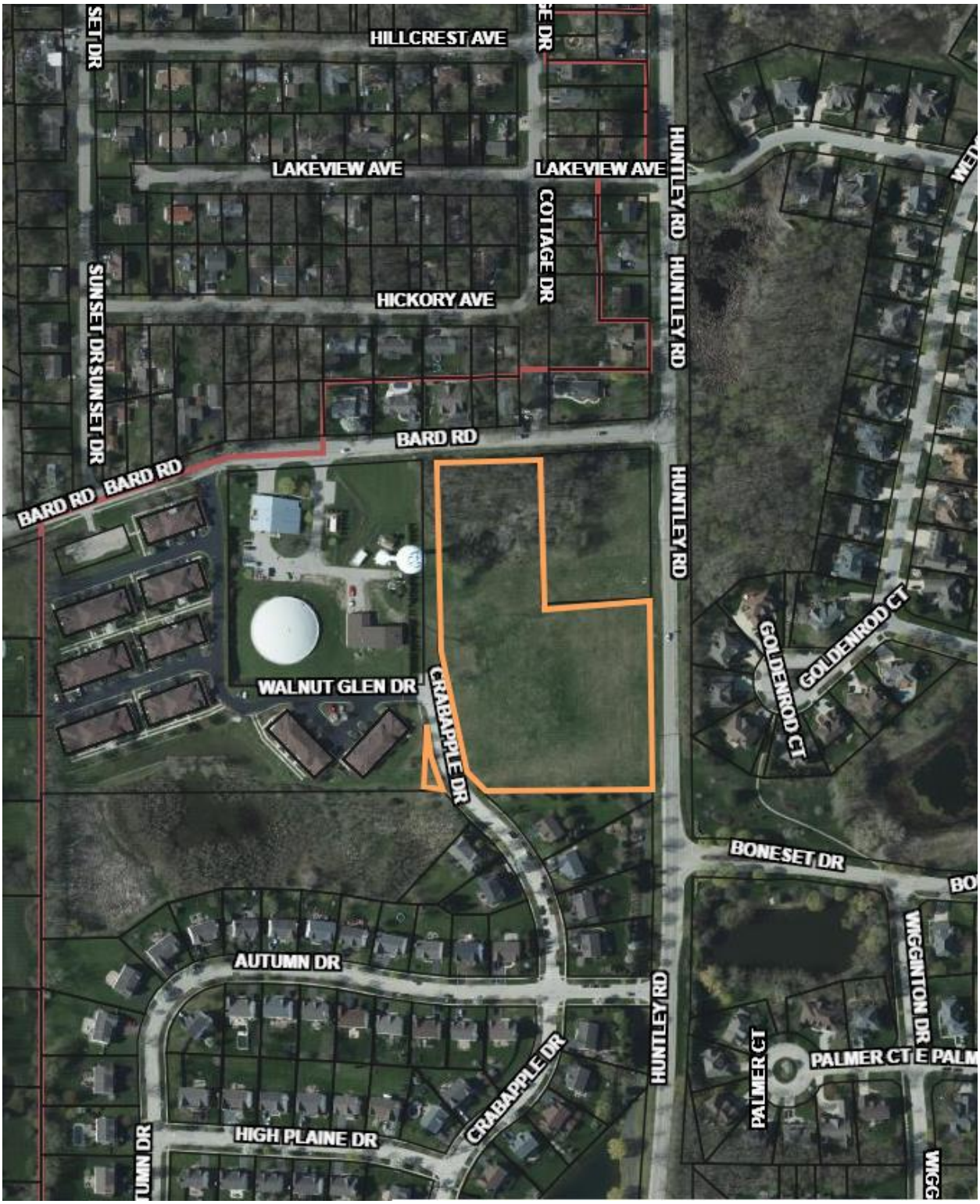
2. Plat of Subdivision
   A. Provide a Final Plat of Subdivision with Condominium Ownership designation for review and approval.
   B. Provide the Covenants, Conditions, and Restrictions for staff review.

3. Provide a new sanitary manhole north of the intersection of Crabapple Drive and Walnut Glen Drive in the parkway with a new 12" sanitary pipe from the new manhole along the internal driveway to the existing 24" sanitary on Huntley Road.

4. Two color schemes have been provided, work with staff to determine the color scheme sequencing.

5. The petitioner shall address all of the review comments and requirements of the City Departments of, Fire Rescue, Public Works and Engineering, and Community Development and the City's Stormwater Consultant.

PIQ MAP
1201 Bard Road



City of Crystal Lake
Development Application
Ownership Sign-off Acknowledgement Form

The following information is related to a development application. As the owner of the property in question, I (we) acknowledge that the information provided in the submittal was reviewed and approved.

Owner Information

Name: Current title holder is Chicago Title Land Trust Co., Trust 79-191, Sandra Kerrick, an owner

Address: 710-3 St. Andrews Lane

Crystal Lake, IL 60014

Phone: 815-477-0830

E-mail: skerrick@waggonerlawfirm.com

Project Name & Description: CRYSTAL POINTE ROW HOMES

48 two-story townhomes with 134-car parking, including 96

individual garages with a dog park, pickle board court, children's playground, gazebo

and recreation area

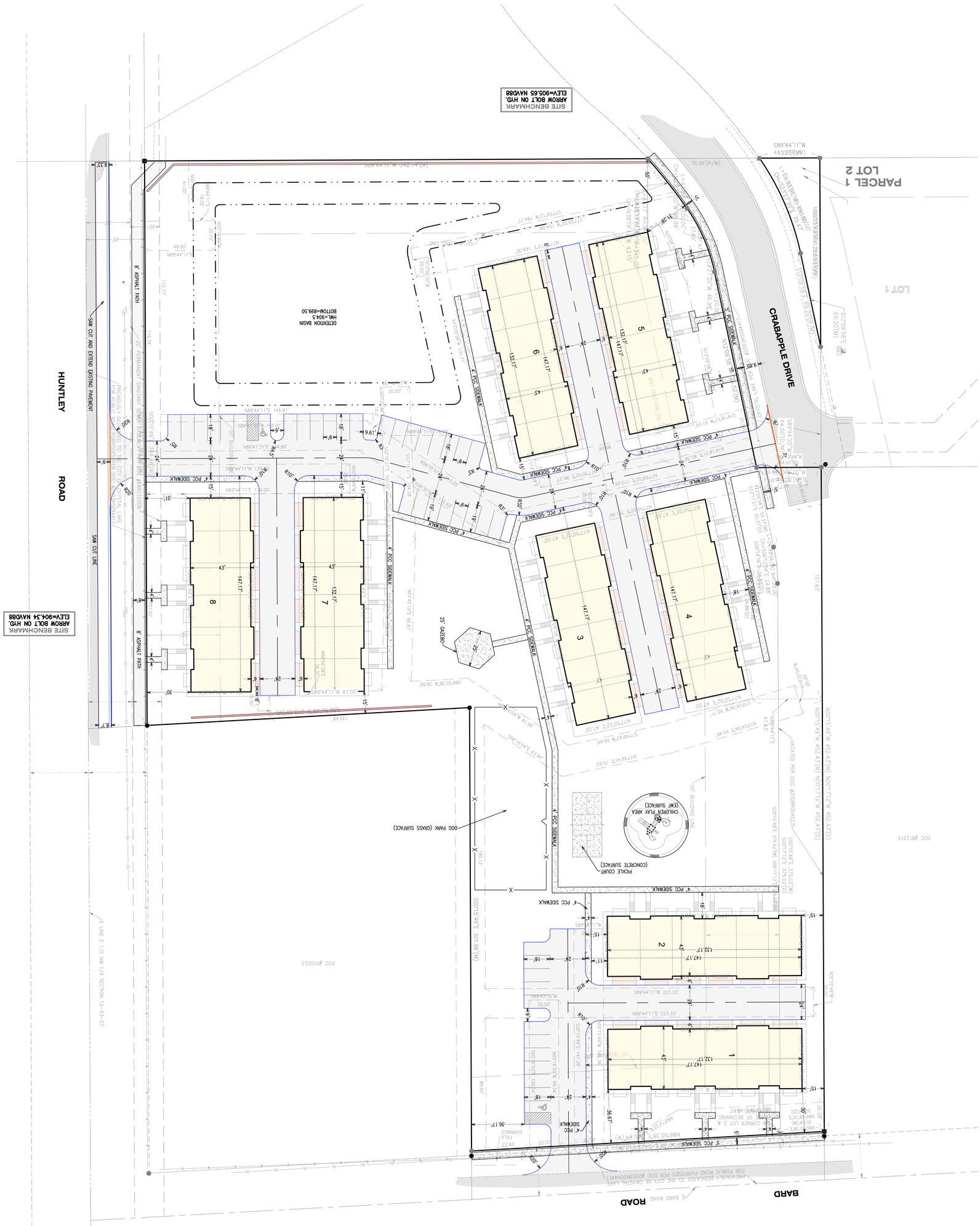
Project Address/Location: Southwest of Bard and Huntley Roads, on both roads

Signature

Sandra Kerrick Sandra Kerrick November 10, 2022

Owner: Print and Sign name Date

NOTE: If the property is held in a 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.



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EQUITY TRUST CO.
CUSTODIAN FBO
KRISTA MONTI IRA

APRIL 9, 2024
JOB: 23-014

SHEET:
SP1
1 OF 1

SITE PLAN

THE RESIDENCES OF CRYSTAL POINTE
CRYSTAL LAKE, IL

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET - SUITE 17 - LEMONT, ILLINOIS 60439
630-520-2467
www.aceng.us

NO.	DATE	REMARKS

Final Landscape Plan
DERBYSHIRE

Crystal Lake, IL

January 19, 2024

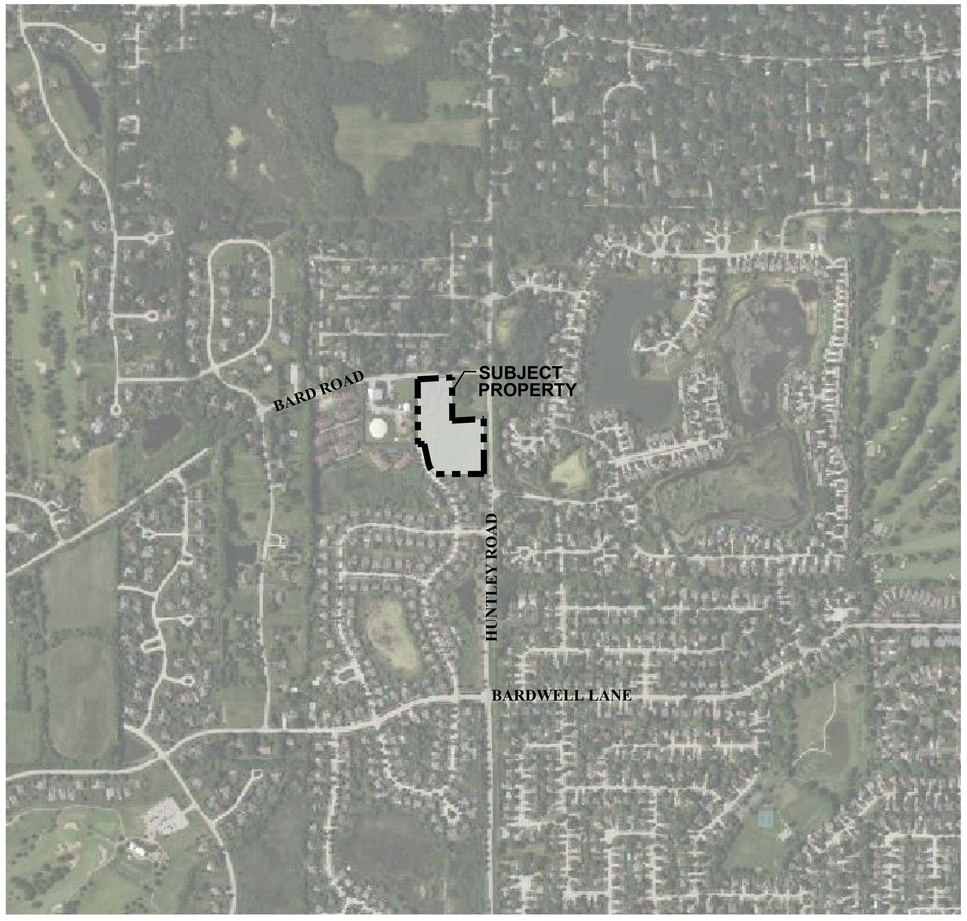
CONSULTANTS:

LANDSCAPE ARCHITECT:

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

CONSULTANT:

ADVANTAGE CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17
LEMONT, IL 60439



LOCATION MAP
SCALE: 1"=500'

INDEX OF SHEETS

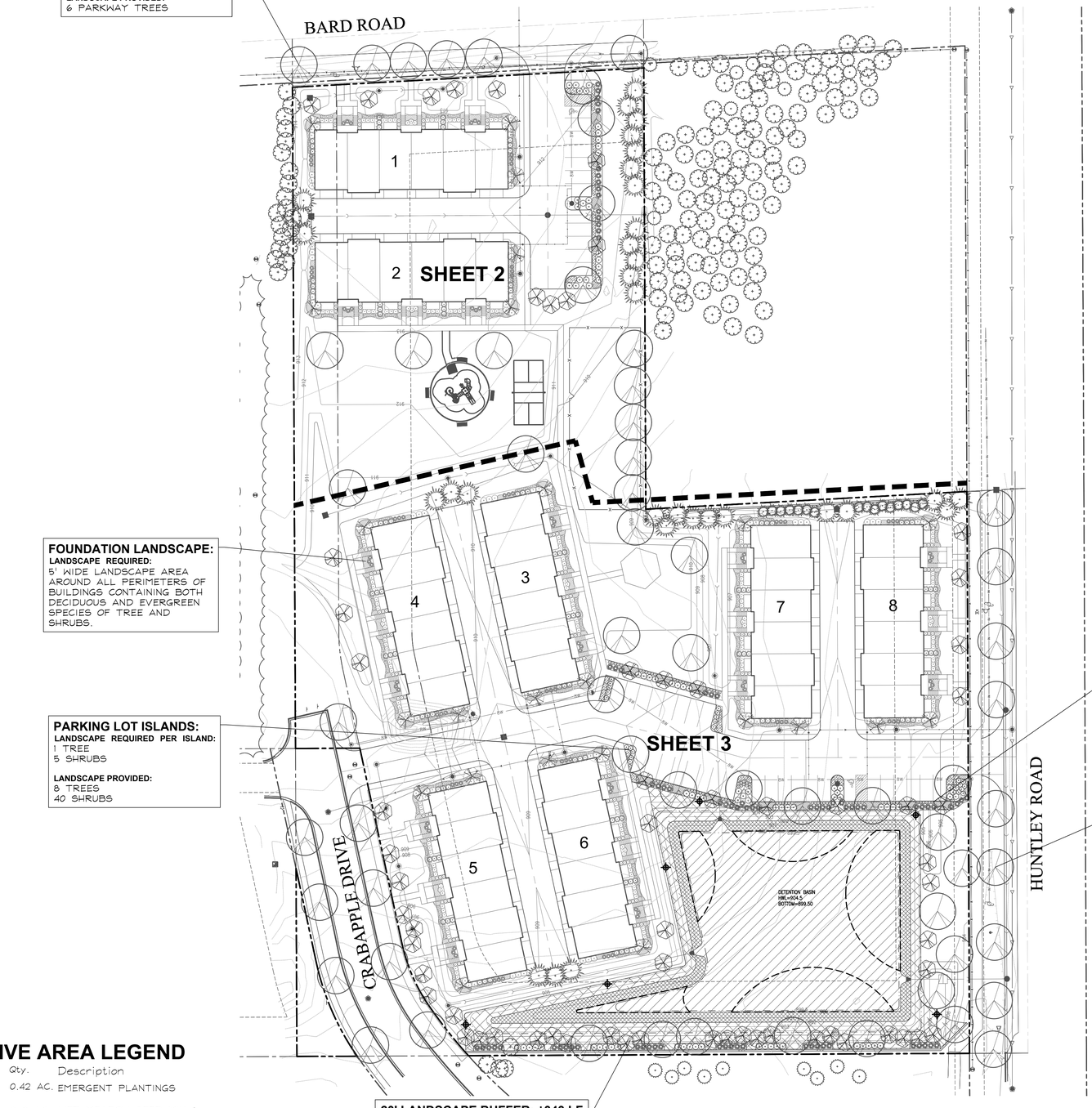
SHEET NO.	DESCRIPTION
0	COVER SHEET
1	OVERALL LANDSCAPE PLAN
2	LANDSCAPE PLAN
3	LANDSCAPE PLAN
4	FOUNDATION LANDSCAPE PLAN
5	TREE PRESERVATION PLAN
6	TREE INVENTORY
7	PARK PLAN
8	LANDSCAPE SPECIFICATIONS

PLANT LIST

Key	Qty	Botanical/Common Name	Size	Remarks
		SHADE TREES		
AS	11	Acer x saccharum 'Green Mountain' GREEN MOUNTAIN SUGAR MAPLE	2 1/2" Cal.	
CO	8	Celtis occidentalis COMMON HACKBERRY	2 1/2" Cal.	
GT	7	Gleditsia triacanthos var. inermis 'Skycole' SKYLINE HONEYLOCUST		2 1/2" Cal.
LT	3	Liriodendron tulipifera TULIPTREE	2 1/2" Cal.	
PM	10	Platanus x acerifolia 'Morton Circle' EXCLAMATION! LONDON PLANETREE	2 1/2" Cal.	
QM	7	Quercus macrocarpa BUR OAK	2 1/2" Cal.	
QR	3	Quercus rubra RED OAK	2 1/2" Cal.	
TC	11	Tilia cordata 'Greenspire' GREENSPIRE LITTLELEAF LINDEN	2 1/2" Cal.	
		ORNAMENTAL TREES		
AG	13	Amelanchier x grandiflora APPLE SERVICEBERRY	6' Ht.	Multi-Stem
BN	12	Betula nigra 'Cully' HERITAGE RIVER BIRCH	6' Ht.	Multi-Stem
CC	9	Cercis canadensis EASTERN REDBUD	6' Ht.	Multi-Stem
CM	7	Cornus mas CORNELIANCHERRY DOGWOOD	6' Ht.	Multi-Stem
MP	14	Malus 'Prairifire' PRAIRIFIRE CRABAPPLE	6' Ht.	Multi-Stem
SR	8	Syringa reticulata 'Ivory Silk' IVORY SILK JAPANESE TREE LILAC	6' Ht.	Multi-Stem
		EVERGREEN TREES		
PA	8	Picea abies NORWAY SPRUCE	8' Ht.	
PP	8	Picea pungens COLORADO SPRUCE	8' Ht.	
PS	16	Pinus strobus EASTERN WHITE PINE	8' Ht.	
TN	16	Thuja occidentalis 'Nigra' DARK GREEN ARBORVITAE	8' Ht.	
		DECIDUOUS SHRUBS		
HP	7	Hydrangea paniculata 'SMHPLGF' LITTLE QUICK FIRE HYDRANGEA	24" Tall	3' O.C.
PH	12	Physocarpus opulifolius 'Seward' SUMMER WINE NINEBARK	30" Tall	4' O.C.
PO	15	Physocarpus opulifolius 'Seward' SUMMER WINE NINEBARK	30" Tall	4' O.C.
RA	45	Rhus aromatica 'Gro-low' GRO-LOW SUMAC	24" Wide	3' O.C.
SP	8	Syringa patula 'Miss Kim' MISS KIM LILAC	24" Tall	4' O.C.
VJ	10	Viburnum x juddii JUDD VIBURNUM	36" Tall	4' O.C.
WF	10	Weigela florida 'Alexandra' WINE & ROSES WEIGELA	36" Tall	4' O.C.
		EVERGREEN SHRUBS		
JK	50	Juniperus chinensis 'Kallays Compact' KALLAYS COMPACT PFITZER JUNIPER	24" Wide	4' O.C.
TM	31	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		PERENNIALS AND ORNAMENTAL GRASSES		
AB	156	Allium 'Summer Beauty' SUMMER BEAUTY ONION	#1	18" O.C.
HH	139	Hemerocallis 'Happy Returns' HAPPY RETURNS DAYLILY	#1	18" O.C.
HR	90	Hemerocallis 'Little Wine Cup' LITTLE WINE CUP DAYLILY	#1	18" O.C.
NM	194	Nepeta racemosa 'Walker's Low' WALKER'S LOW CATMINT	#1	18" O.C.
SH	82	Sporobolus heterolepis PRAIRIE DROPSEED	#1	24" O.C.
		MISC. MATERIALS		
	42	SHREDDED HARDWOOD MULCH	C.Y.	
	2,308	SOD	S.Y.	
	1.20	TURF SEED & EROSION CONTROL BLANKET	AC.	

GENERAL NOTES

1. Contractor shall verify underground utility lines and is responsible for any damage.
2. Contractor shall verify all existing conditions in the field prior to construction and shall notify landscape architect of any variance.
3. Material quantities shown are for contractors convenience only. The Contractor must verify all material and supply sufficient materials to complete the job per plan.
4. The landscape architect reserves the right to inspect trees and shrubs either at place of growth or at site before planting, for compliance with requirements of variety, size and quality.
5. Work shall conform to American Standard for Nursery Stock, State of Illinois Horticultural Standards, and Local Municipal requirements.
6. Contractor shall secure and pay for all permits, fees, and inspections necessary for the proper execution of this work and comply with all codes applicable to this work.
7. See General Conditions and Specifications for landscape work for additional requirements.



PARKWAY TREES: ±220 LF
LANDSCAPE REQUIRED PER 40 LF:
1 PARKWAY TREE = 6

LANDSCAPE PROVIDED:
6 PARKWAY TREES

FOUNDATION LANDSCAPE:
LANDSCAPE REQUIRED:
5' WIDE LANDSCAPE AREA AROUND ALL PERIMETERS OF BUILDINGS CONTAINING BOTH DECIDUOUS AND EVERGREEN SPECIES OF TREE AND SHRUBS.

PARKING LOT ISLANDS:
LANDSCAPE REQUIRED PER ISLAND:
1 TREE
5 SHRUBS

LANDSCAPE PROVIDED:
8 TREES
40 SHRUBS

PARKING LOT PERIMETER LANDSCAPING: 288 LF
LANDSCAPE REQUIRED PER 40 LF:
1 TREE = 8
5 SHRUBS = 36

LANDSCAPE PROVIDED:
9 TREES
45 SHRUBS

PARKWAY TREES: ±360 LF
LANDSCAPE REQUIRED PER 40 LF:
1 PARKWAY TREE = 9

LANDSCAPE PROVIDED:
9 OVERSTORY TREES

20' LANDSCAPE BUFFER: ±343 LF
LANDSCAPE REQUIRED PER 100 LF:
2 OVERSTORY TREES = 7
6 UNDERSTORY TREES = 21
16 SHRUBS = 55

LANDSCAPE PROVIDED:
6 OVERSTORY TREES (NEW)
1 OVERSTORY TREE (EXISTING)
21 UNDERSTORY TREES
55 SHRUBS

NATIVE AREA LEGEND

Key	Qty.	Description
	0.42 AC.	EMERGENT PLANTINGS
	0.12 AC.	WET MEADOW SEED MIX & EROSION CONTROL BLANKET
	0.23 AC.	LOW PROFILE PRAIRIE SEED MIX & EROSION CONTROL BLANKET
	6 EA.	NATIVE AREA SIGN

0 20' 40' 80' 120'
SCALE: 1"=40'

NORTH

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

GR WA
GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197
www.grwainc.com

CLIENT
EQUITY TRUST COMPANY F/B/O PAUL SWANSON IRA
401 E. PROSPECT AVE., SUITE 201
MT. PROSPECT, IL 60056

ENGINEER
ADVANTAGE CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17
LEMONT, IL 60439

DERBYSHIRE
CRYSTAL LAKE, IL 60014

LANDSCAPE PLAN

1	01.19.2024
REVISIONS	

DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	1 OF 8

XREFS
PLOT CONFIG

NATIVE SEED MIXTURES

Temporary Cover Crop

Cover crops shall be installed in all planting areas containing dry mesic, mesic, and wet mesic soils to, stabilize soils, and combat weed pressure during the germination and establishement of the native seeding area.

Botanical Name	Common Name	lbs / AC
Spring Cover Crop		
Avena sativa	Seed Oats	30.000
Fall or Dormant Cover Crop		
Tricticum aestivum	Regreen	10.000

Emergent Wetland Plant Mix

Stormwater basin bottoms in areas with 6" of water

Botanical Name	Common Name	lbs / AC	Plugs / AC.
Acorus americanus	Sweet Flag	0.500	494
Alisma subcordatum	Water Plantain	1.250	
Iris virginica shrevei	Blue Flag	0.500	494
Juncus effusus	Common Rush	0.500	
Leersia oryzoides	Rice Cut Grass	1.250	494
Pontederia cordata	Pickerel Weed	0.250	494
Sagittaria latifolia	Common Arrowhead	1.250	494
Scirpus acutus	Hardstem Bulrush	0.500	988
Scirpus fluviatilis	River Bulrush	1.000	494
Scirpus pungens	Chairmaker's Rush	0.250	
Scirpus validus	Great Bulrush	0.500	988
Sparganium eurycarpum	Bur Reed	1.000	494
	Total Emergent Wetland Mix	**8.750**	**5434**

Wet Meadow Seed Mixture

Lower slopes of basin

Botanical Name	Common Name	lbs / AC
Grasses / Sedges		
Carex bebbii	Bebbs Oval Sedge	0.250
Carex bicknellii	Bicknells Sedge	0.125
Carex brevior	Plains Oval Sedge	0.250
Carex cristatella	Crested Oval Sedge	0.060
Carex molesta	Field Oval Sedge	0.250
Carex normalis	Spreading Oval Sedge	0.015
Carex scorparia	Pointed Broom Sedge	0.190
Carex stipata	Common Fox Sedge	0.060
Carex vulpinoidea	Brown Fox Sedge	0.250
Elymus virginicus	Virginia Wild Rye	3.000
Glyceria striata	Fowl Manna Grass	0.130
Juncus dudleyi	Dudleys Rush	0.020
Juncus torreyi	Torreys Rush	0.031
Panicum virgatum	Switch Grass	3.000
Scirpus atrovirens	Dark Green Bulrush	0.060
Scirpus cyperinus	Wool Grass	0.030
	Total Grasses / Sedges	**7.721**
Wildflowers/Broadleaves		
Asclepias incamata	Swamp Milkweed	0.125
Bidens cernua	Nodding Bur Marigold	0.190
Boltonia asteroids	False Aster	0.031
Chamaecrista fasciculate	Partridge pea	0.188
Euthamia grammifolia	Grassleaved Goldenrod	0.300
Eupatorium perfoliatum	Common Boneset	0.015
Helenium autumnale	Sneezeweed	0.063
Iris virginica shrevei	Blue Flag Iris	1.000
Lobelia siphilitica	Great Blue Lobelia	0.031
Mimulus ringens	Monkey Flower	0.031
Symphyotrichium novae-angliae	New England Aster	0.250
Pycnanthemum virginianum	Common Mountain Mint	0.063
Rudbeckia fulgida var. sullvantii	Showy Black-Eyed Susan	0.250
Zizia aurea	Golden Alexanders	0.500
	Total Forbs	**3.037**
	Total Wet Meadow Seed Mix	**10.758**

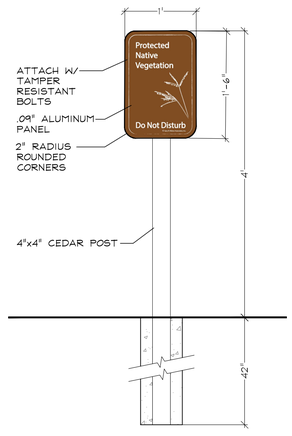
Low Profile Prairie with Flowers Seed Mix

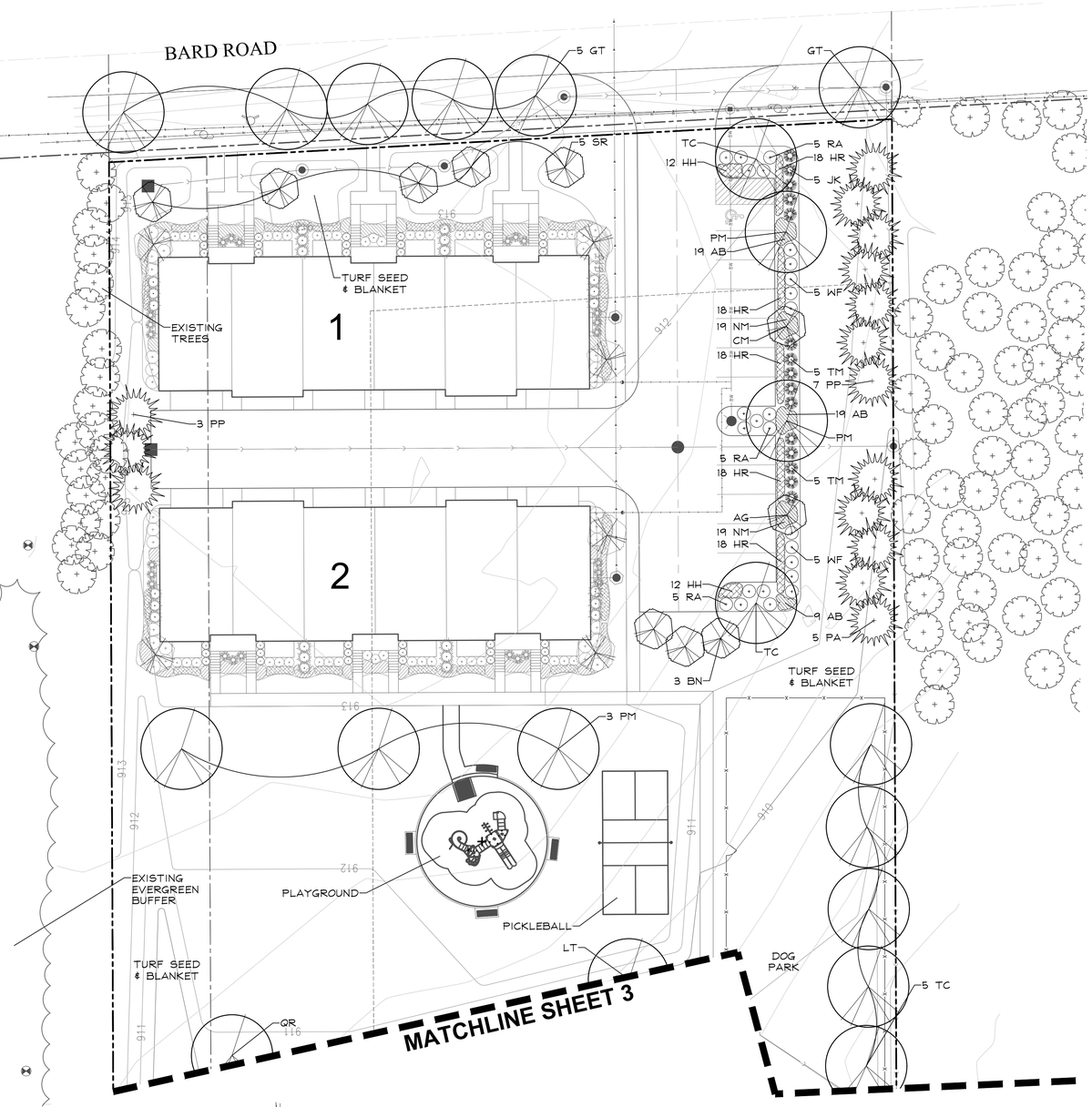
Upper basin slopes

Botanical Name	Common Name	lbs / AC
Grasses		
Bouteloua curtipendula	Side Oats Grama	8.000
Panicum virgatum	Prairie Switch Grass	0.125
Elymus trachycaulus	Slender Wheatgrass	2.000
Elymus canadenesis	Prairie Wild Rye	1.000
Schizachyrium scoparium	Little Bluestem	6.000
	Total Grasses	**17.125**
Wildflowers/Broadleaves		
Allium cernuum	Nodding Wild Onion	0.190
Amorpha canscens	Lead Plant	0.125
Asclepia canadensis	Whorled Milkweed	0.063
Asclepias tuberosa	Butterflyweed	0.500
Astragalus canadensis	Canada Milk Vetch	0.063
Coreopsis palmata	Prairie Coreopsis	0.025
Echinacea pallida	Pale Purple Coneflower	1.000
Echinacea purpurea	Purple Coneflower	0.500
Eryngium yuccifolium	Rattlesnake Master	0.125
Lespedeza capitata	Round-Headed Bush Clover	0.125
Liatris aspera	Rough Blazing Star	0.250
Liatris pycnostachya	Prairie Blazing Star	0.188
Monarda fistulosa	Prairie Bergamot	0.063
Parthenium integrifolium	Wild Quinine	0.016
Penstemon digitalis	Foxglove Beard Tongue	0.125
Petalostemum candidum	White Prairie Clover	0.125
Petalostemum purpureum	Purple Prairie Clover	0.156
Potentilla arguta	Prairie Cinquefoil	0.031
Pycnanthemum tenuifolium	Slender Mountain Mint	0.031
Ratibida pinnata	Yellow Coneflower	0.125
Rudbeckia fulgida var. sullivantii	Showy Black-Eyed Susan	0.500
Rudbeckia hirta	Black-Eyed Susan	0.500
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	0.063
Symphoytrichum leave	Smooth Blue Aster	0.063
Tradescantia ohiensis	Common Spiderwort	0.063
Verbena stricta	Hoary Vervain	0.125
Zizia aurea	Golden Alexanders	0.500
	Total Forbs	**5.640**
	Total Low Profile Prairie Seed Mix	**22.765**

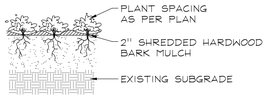
SIGN NOTES:

1. SIGN BACKGROUND COLOR:
   C=40, M=70, Y=100, K=28
   SIGN FONT AND GRAPHIC COLOR: WHITE
2. FONT STYLE: MYRIAD PRO
   FONT SIZE: 116 PT.
3. SIGN ARTWORK SHALL BE PROVIDED BY GARY R. WEBER ASSOCIATES, INC.
4. CONTRACTOR TO SUBMIT SHOP DRAWING AND COLOR SAMPLE FOR THE PROTECTED NATIVE VEGETATION SIGN FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO FABRICATION AND INSTALLATION.

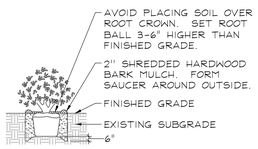




PLANTING DETAILS

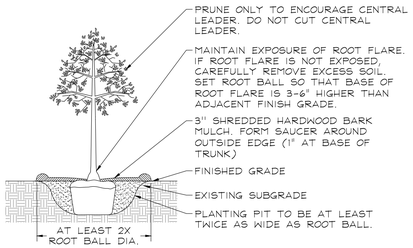


PERENNIALS AND GROUNDCOVERS
NOT TO SCALE

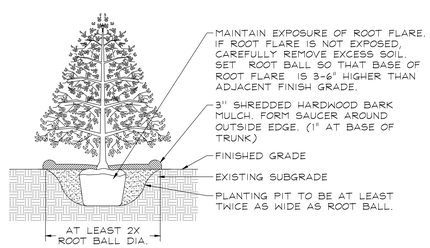


DECIDUOUS AND EVERGREEN SHRUBS
NOT TO SCALE

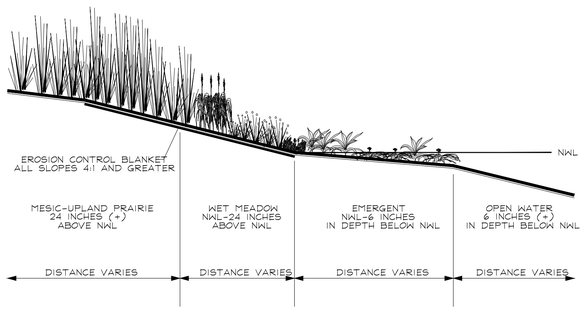
NATURALIZED AREA SIGNAGE
NOT TO SCALE



DECIDUOUS TREES
NOT TO SCALE



EVERGREEN TREES
NOT TO SCALE



PLANT COMMUNITY SECTION
NOT TO SCALE

0 10' 20' 40' 80'
SCALE: 1"=20'

NORTH

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LEMONT, IL 60439

DERBYSHIRE
CRYSTAL LAKE, IL 60014

LANDSCAPE PLAN

1	01.19.2024
REVISIONS	

DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	**2 OF 8**

Know what's below. Call before you dig.

PLOT CONFIG
XREFS

MATCHLINE SHEET 2

MATCHLINE SHEET 2

3 PS
3 AG
EXISTING EVERGREEN BUFFER
TURF SEED & BLANKET
4
3
GAZEBO
SOD
6 PP
2 PM
2 LT
5 SH
3 TM
6 SH
4 SP
23 AB
23 NM
5 RA
AS
22 HH
4 SP
6 SH
3 AG
23 NM
5 SH
3 TM
5 RA
18 HH
7 TN
2 PS
9 TN
4 MP
3 PA
4 QM
SOD
7
8
12 HH
TC
5 RA
11 HH
22 NM
4 PH
6 SH
14 HH
10 SH
TC
5 RA
CM
5 SH
AG
6 SH
4 JK
22 AB
CC
22 NM
6 JK
PM
6 SH
22 AB
19 HH
5 RA
10 JK
6 SH
AG
3 SH
22 NM
4 PH
CM
PM
6 SH
22 AB
6 SH
4 JK
22 NM
AG
4 PH
PM
20 AB
7 HP
19 HH
TC
5 RA
22 NM
CM
PM
4 JK
3 QM
AS
2 BN
2 BN
3 CO
3 CM
4 CO
CRABAPPLE DRIVE
TURF SEED & BLANKET
SOD
5
6
TURF SEED & BLANKET
3 MP
3 MP
5 AS
3 PS
2 CC
TURF SEED & BLANKET
SOD
3 AG
NATIVE AREA SIGN, TYPICAL, SEE, DETAIL SHEET 4
EMERGENT PLANTINGS
DETENTION BASIN HWL=904.5 BOTTOM=899.50
WET MESIC SEEDING
LOW-PROFILE PRAIRIE
EMERGENT PLUGS, TYP.
WET MESIC SEEDING
LOW-PROFILE PRAIRIE
TURF SEED & BLANKET
CO
3 JK
5 PO
3 CC
5 TM
5 VJ
3 SR
5 JK
5 PO
2 QR
5 TM
5 BN
5 VJ
TC
5 JK
3 CC
5 PO
4 MP
GT 5 TM
HUNTLEY ROAD

NATIVE AREA LEGEND

Key	Description
	EMERGENT PLANTINGS
	WET MEADOW SEED MIX & EROSION CONTROL BLANKET
	LOW PROFILE PRAIRIE SEED MIX & EROSION CONTROL BLANKET
⊕	NATIVE AREA SIGN

0 10' 20' 40' 80'
SCALE: 1"=20'

NORTH

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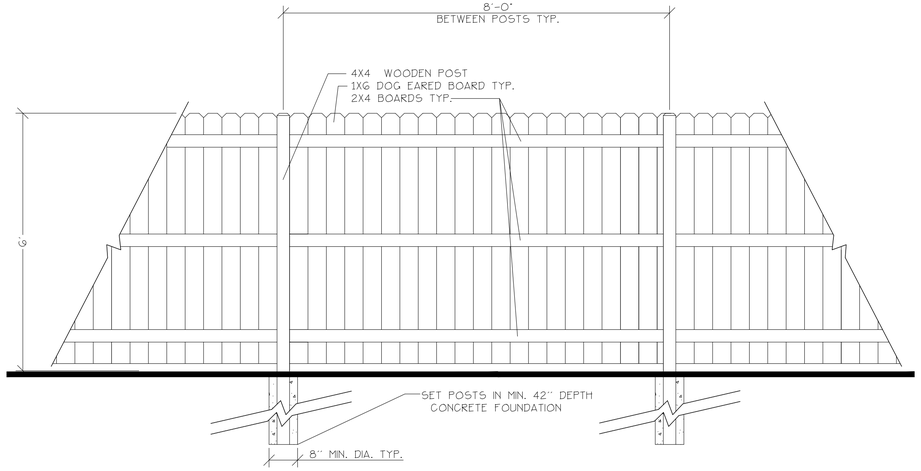
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LANDSCAPE PLAN

1	01.19.2024
REVISIONS	

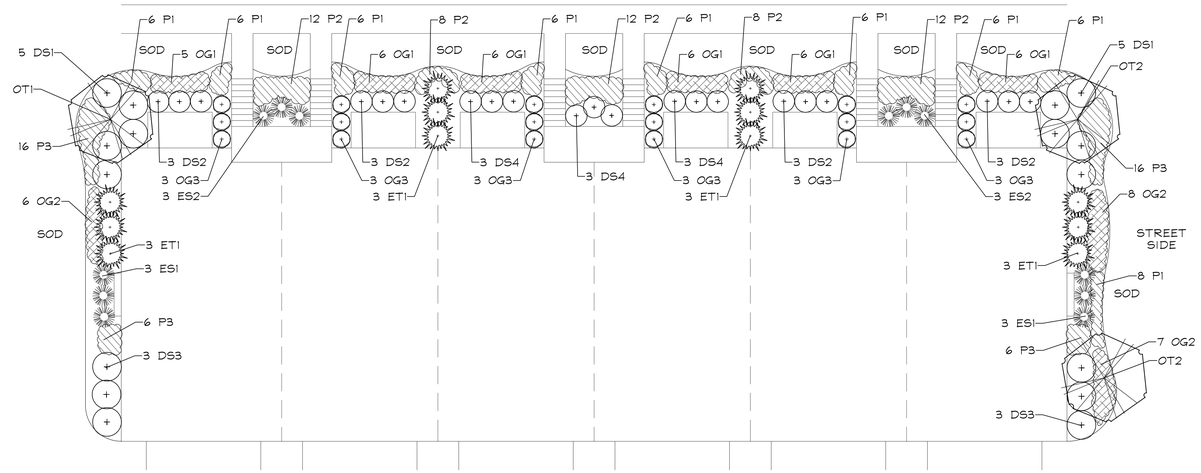
DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	3 OF 8

W8816
PLOT CONFIG:



6' BOARD ON BOARD FENCE
NOT TO SCALE

3' DECORATIVE FENCE
NOT TO SCALE



TYPICAL ROW FOUNDATION LANDSCAPE DETAIL
SCALE: 1"=10'

ROW HOME - PLANT LIST A
(BUILDING 1, 3, 6, & 8)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	1	Amelanchier grandiflora APPLE SERVICEBERRY	6' Tall	Clump form
OT2	2	Cercis canadensis EASTERN REDBUD	6' Tall	Clump form
		EVERGREEN TREES		
ET1	12	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	4' Tall	4' O.C.
		DECIDUOUS SHRUBS		
DS1	10	Hydrangea paniculata 'Bulk' QUICKFIRE HYDRANGEA	30" Tall	4' O.C.
DS2	12	Fothergilla gardenii DWARF FOTHERGILLA	24" Tall	3' O.C.
DS3	6	Aronia melanocarpa 'Morton' IROQUOIS BEAUTY CHOKEBERRY	30" Tall	4' O.C.
DS4	9	Rosa 'Radcon' DOUBLE PINK KNOCKOUT ROSE	24" Tall	3' O.C.
		EVERGREEN SHRUBS		
ES1	6	Juniperus sabina 'Blue Forest' BLUE FOREST JUNIPER	24" Wide	3' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		PERENNIALS		
P1	56	Hosta 'Sum and Substance' SUM AND SUBSTANCE HOSTA	#1	18" O.C.
P2	52	Huechera 'Cherry Truffles' CHERRY TRUFFLE CORALBELLS	#1	18" O.C.
P3	44	Hemerocallis 'Happy Returns' HAPPY RETURNS DAYLILY	#1	18" O.C.
		ORNAMENTAL GRASSES		
OG1	36	Pennisetum alopecuroides 'Hameln' DWARF FOUNTAIN GRASS	#1	24" O.C.
OG2	21	Sporobolus heterolepis PRAIRIE DROPSEED	#1	24" O.C.
OG3	18	Calamagrostis acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
		MISC. MATERIALS		
	X	SHREDDED HARDWOOD MULCH	C.Y.	

ROW HOME - PLANT LIST B
(BUILDING 2, 4, 5, & 7)

Key	Qty	Botanical/Common Name	Size	Remarks
		ORNAMENTAL TREES		
OT1	1	Malus x 'Red Jewel' RED JEWEL CRABAPPLE	6' Tall	Clump form
OT2	2	Magnolia stellata 'Royal Star' ROYAL STAR MAGNOLIA	6' Tall	Clump form
		EVERGREEN TREES		
ET1	12	Thuja occidentalis 'Smaragd' EMERALD GREEN ARBORVITAE	4' Tall	4' O.C.
		DECIDUOUS SHRUBS		
DS1	10	Syringa patula 'Miss Kim' MISS KIM LILAC	30" Tall	4' O.C.
DS2	12	Hydrangea arborescens 'Abetwo' INCREDIBALL HYDRANGEA	24" Tall	3' O.C.
DS3	6	Viburnum carlesii KOREAN SPICE VIBURNUM	30" Tall	4' O.C.
DS4	9	Rosa 'Radcon' DOUBLE PINK KNOCKOUT ROSE	24" Tall	3' O.C.
		EVERGREEN SHRUBS		
ES1	6	Pinus mugo 'Slowmound' DWARF MOUNTAIN PINE	24" Wide	3' O.C.
ES2	6	Taxus x media 'Densiformis' DENSE YEW	24" Wide	4' O.C.
		PERENNIALS		
P1	56	Hosta 'Patriot' PATRIOT HOSTA	#1	18" O.C.
P2	52	Salvia nemorosa 'May Night' MAY NIGHT SALVIA	#1	18" O.C.
P3	44	Hemerocallis 'Little Wine Cup' LITTLE WINE CUP DAYLILY	#1	18" O.C.
		ORNAMENTAL GRASSES		
OG1	36	Sesleria autumnalis AUTUMN MOOR GRASS	#1	24" O.C.
OG2	21	Panicum virgatum 'Northwind' NORTHWIND SWITCHGRASS	#1	24" O.C.
OG3	18	Calamagrostis acutiflora 'Karl Foerster' FEATHER REED GRASS	#1	30" O.C.
		MISC. MATERIALS		
	X	SHREDDED HARDWOOD MULCH	C.Y.	

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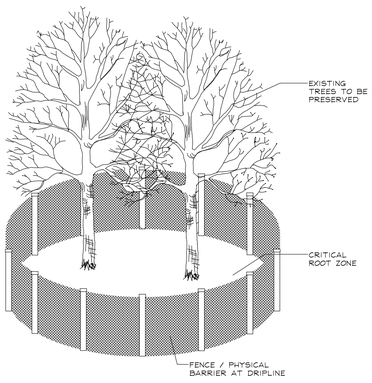
FOUNDATION LANDSCAPE PLAN

1 01.19.2024
REVISIONS

DATE 08.16.2023
PROJECT NO. PSW2308
DRAWN CLE
CHECKED DHS
SHEET NO.
4 OF 8

Know what's below. Call before you dig.

XREFS:
PLOT CONFIG:



TREE PRESERVATION DETAIL

(NOT TO SCALE)
SEE NOTES

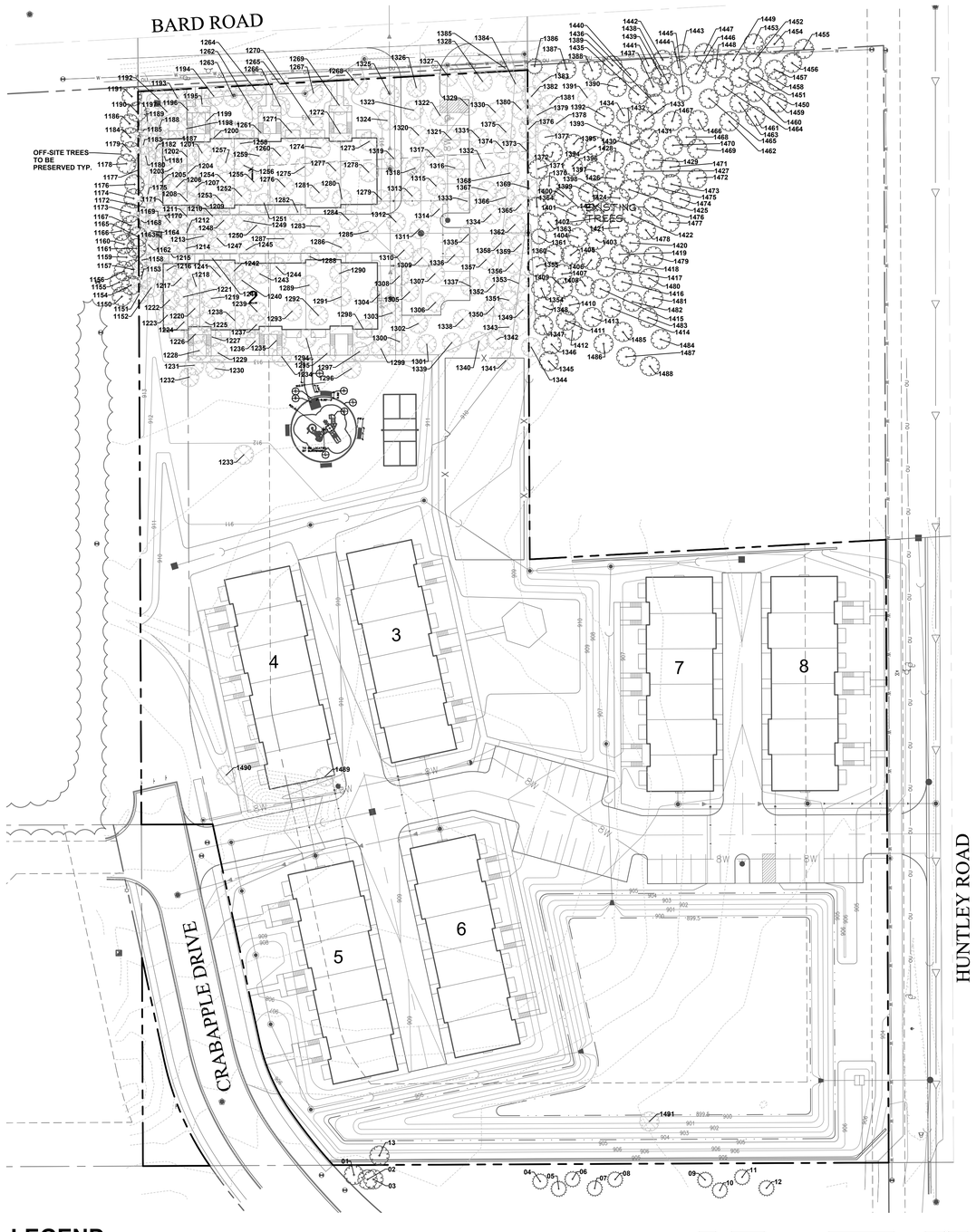
REQUIRED TREE REPLACEMENTS

65.6 CALIPER INCHES OF REPLACEMENT

LOCATION OF REQUIRED REPLACEMENT TREES TO BE SHOWN ON FINAL LANDSCAPE PLAN

TREE PRESERVATION NOTES

1. 48'' high snow fence or wood barriers shall extend to the dripline of the tree or tree mass whenever possible, shall be installed before construction begins, and should not be removed until the completion of construction.
2. All accidental damage to existing trees that are to be preserved shall be promptly treated as required in accordance with recognized horticultural practices and the instructions of the professional Arborist, Landscape Architect or Horticulturist.
3. Broken or badly bruised branches shall be removed with a clean cut. If recommended by the professional Arborist, Landscape Architect or Horticulturist.
4. Care shall be exercised by the contractors to protect all overhead limbs and branches from damage by contact with material, machinery or equipment and by damage from engine exhaust.
5. Contractors shall protect trees and vegetation against spills or discharge of fuels,lubricating oils, hydraulic fluids, anti-freeze and coolants, calcium chloride, lime and all other similar hydrocarbons, organic chemicals, and other materials which can be harmful.
6. When underground utilities are proposed within 5' of a preserved tree trunk, they must be augered if possible.



LEGEND

1234 TREE TO BE PRESERVED

1234 TREE TO BE REMOVED

0 20' 40' 80' 120'
SCALE: 1"=40'

NORTH

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TREE PRESERVATION PLAN

1	01.19.2024
REVISIONS	

DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	5 OF 8

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

PLOT CONFIG:
XREFS:

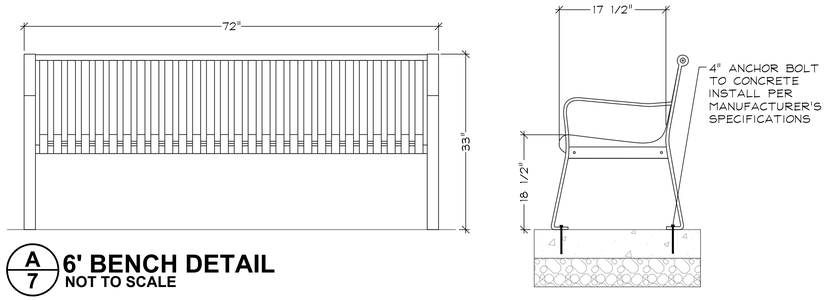
TREE INVENTORY
DATE: 4/7/2023
PROJECT NAME: The Residences of Crystal Pointe
CLIENT: ProJADES
GRWA PROJECT NUMBER: PSW2308

1) Trees measured at 4.5 above the ground - DBH (diameter Breast Height)
2) All trees 2" DBH and above tagged. Shrubs were not tagged.
3) Health Rating:

Rating	Description	Criteria
1	Excellent	Less than 10% dead wood, typical growth for species, no observed defects
2	Good to Fair	Less than 20% dead wood, minor defects, sound structure, no decay
3	Fair	Less than 30% dead wood, minor crown die-back, minor trunk damage or cavities
4	Fair to Poor	Approximately 30-50% dead wood, lacking full crown, minor disease evidence, trunk damage
5	Poor	Over 50% dead wood, lacking full crown, disease or decayevident, structural damage/cavities
6	Dead	Less than 10% living wood, greater than 50% missing bark, adventitious growth only, decay

TOTAL TREES REVIEWED: 355

TAG NO.	SCIENTIFIC NAME	COMMON NAME	DBH (inches)	HEALTH	RATING	NOTES	PROPOSED ACTION	REPLACEMENT VALUE (CAL. IN.)
1150	*Acer negundo*	Box Elder	7	Poor	4	Strong lean	Preserve	0
1151	*Acer negundo*	Box Elder	5,2	Poor	4	Strong lean, split risk, included bark	Remove	0
1152	*Ulmus pumila*	Siberian Elm	10	Poor	4	Split risk @ 10'	Remove	0
1153	*Acer negundo*	Box Elder	4	Poor	4	Strong lean	Remove	0
1154	*Acer negundo*	Box Elder	2	Poor	4	Lean, crowded	Preserve	0
1155	*Ulmus pumila*	Siberian Elm	8	Fair	3	Unbalanced	Preserve	0
1156	*Acer negundo*	Box Elder	6	Poor	4	Strong lean, unbalanced	Preserve	0
1157	*Acer negundo*	Box Elder	6	Poor	4	Lean, unbalanced	Preserve	0
1158	*Acer negundo*	Box Elder	8	Poor	4	Strong lean, crowded	Remove	0
1159	*Ulmus pumila*	Siberian Elm	8	Poor	4	30% dead branches, crown lean	Preserve	0
1160	*Acer negundo*	Box Elder	5,1	Poor	4	1"leader dead, strong lean	Preserve	0
1161	*Acer negundo*	Box Elder	3	Poor	4	Unbalanced, 40% dead branches, crowded	Preserve	0
1162	*Malus sp.*	Crabapple	5	Poor	4	Crowded, included bark, slight crown lean	Remove	0
1163	*Acer negundo*	Box Elder	9	Poor	4	Strong lean, dead leaning on, 20% dead branches, unbalanced, crown lean	Remove	0
1164	*Acer negundo*	Box Elder	4	Poor	4	Strong lean, dead leaning on, 30% dead branches	Remove	0
1165	*Acer negundo*	Box Elder	6	Poor	4	Strong lean, dead leaning on, 30% dead branches	Preserve	0
1166	*Acer negundo*	Box Elder	17,12	Poor	4	Strong lean, 30% dead branches, crown lean	Preserve	0
1167	*Acer negundo*	Box Elder	13,8,7	Poor	4	Split risk, strong lean, adventitious growth	Preserve	0
1168	*Acer negundo*	Box Elder	11	Poor	4	Strong lean, 40% dead branches	Remove	0
1169	*Acer negundo*	Box Elder	7	Poor	4	Lean, crown lean, dead leaning on, 20% dead branches	Remove	0
1170	*Morus alba*	White Mulberry	10	Poor	4	50% dead branches, unbalanced	Remove	0
1171	*Acer negundo*	Box Elder	11,11,11	Poor	5	Split,cavity, strong lean, 80% dead	Remove	0
1172	*Acer negundo*	Box Elder	5	Poor	4	Crown lean, from, 70% dead branches	Remove	0
1173	*Acer negundo*	Box Elder	8	Dead	6		Remove	0
1174	*Acer negundo*	Box Elder	4,3	Poor	4	Strong lean, shear cracks	Preserve	0
1175	*Acer negundo*	Box Elder	6	Poor	4	Strong lean, cavity	Remove	0
1176	*Acer negundo*	Box Elder	9	Poor	4	Strong lean, crowded	Preserve	0
1177	*Morus alba*	White Mulberry	14,6,4	Poor	5	Hollow trunk, strong lean, split risk, 60% dead branches	Remove	0
1178	*Acer negundo*	Box Elder	4,3	Poor	4	Cavity at base, strong lean	Preserve	0
1179	*Fraxinus pennsylvanica*	Green Ash	4	Poor	4	EAB, lean, grown around fence	Preserve	0
1180	*Acer negundo*	Box Elder	12,6	Poor	5	Hollow, 80% dead, strong lean	Remove	0
1181	*Acer saccharinum*	Silver Maple	9	Fair	3	Unbalanced, 30% Dead branches	Remove	0.9
1182	*Acer negundo*	Box Elder	10	Dead	6		Remove	0
1183	*Acer negundo*	Box Elder	6	Poor	5	80% Dead, Crowded	Remove	0
1184	*Juglans nigra*	Black Walnut	5	Fair	3	Unbalanced	Preserve	0
1185	*Acer negundo*	Box Elder	6	Poor	4	Strong crown lean, Lean, 60% Dead	Remove	0
1186	*Acer negundo*	Box Elder	9	Dead	6		Remove	0
1187	*Acer negundo*	Box Elder	13, 11	Poor	4	40% Dead branches, Grown around fence, Crown lean	Remove	0
1188	*Acer negundo*	Box Elder	7	Poor	4	Strong lean, Crown lean, 30% Dead branches	Remove	0
1189	*Fraxinus pennsylvanica*	Green Ash	4	Poor	5	EAB, Shear crack, Strong lean, 80% Dead branches	Remove	0
1190	*Ulmus pumila*	Siberian Elm	10	Poor	4	Split risk at 10', Unbalanced	Preserve	0
1191	*Acer negundo*	Box Elder	14	Poor	4	Strong lean, Crown lean, 60% Dead branches	Preserve	0
1192	*Acer negundo*	Box Elder	11, 8	Poor	4	Split risk, Cavity at base	Remove	0
1193	*Unknown*	Unknown	9	Dead	6		Remove	0
1194	*Juglans nigra*	Black Walnut	19	Good	2		Remove	1.9
1195	*Juglans nigra*	Black Walnut	6	Fair	3	Unbalanced	Remove	0.6
1196	*Acer negundo*	Box Elder	8, 6	Poor	5	80% Dead	Remove	0
1197	*Acer negundo*	Box Elder	16	Dead	6		Remove	0
1198	*Juglans nigra*	Black Walnut	11	Fair	3	Crowded by 1199	Remove	1.1
1199	*Populus deltoides*	Eastern Cottonwood	15	Fair	3	Slight lean	Remove	1.5
1200	*Populus deltoides*	Eastern Cottonwood	14	Fair	3	Slight lean	Remove	1.4
1201	*Acer negundo*	Box Elder	5	Poor	4	60% Dead branches, Lean	Remove	0
1202	*Acer negundo*	Box Elder	2	Poor	5	70% Dead branches	Remove	0
1203	*Acer negundo*	Box Elder	5, 2	Poor	4	60% Dead branches	Remove	0
1204	*Juglans nigra*	Black Walnut	6	Fair	3	Lean	Remove	0.6
1205	*Populus deltoides*	Eastern Cottonwood	10	Poor	4	Strong crown lean	Remove	0
1206	*Populus deltoides*	Eastern Cottonwood	9	Fair	3	Slight lean	Remove	0.9
1207	*Populus deltoides*	Eastern Cottonwood	9	Poor	4	Crown lean (Twist)	Remove	0
1208	*Populus deltoides*	Eastern Cottonwood	9, 8	Poor	4	Lean, V-joint	Remove	0
1209	*Populus deltoides*	Eastern Cottonwood	9	Poor	4	Lean, Crown lean	Remove	0
1210	*Populus deltoides*	Eastern Cottonwood	6	Poor	4	40% Dead branches, Crown lean	Remove	0
1211	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Lean	Remove	0.7
1212	*Populus deltoides*	Eastern Cottonwood	8	Fair	3	Lean	Remove	0.8
1213	*Populus deltoides*	Eastern Cottonwood	6	Dead	6		Remove	0
1214	*Populus deltoides*	Eastern Cottonwood	12	Poor	4	60% Dead branches on lower part of trunk	Remove	0
1215	*Populus deltoides*	Eastern Cottonwood	5	Poor	4	Strong lean	Remove	0
1216	*Populus deltoides*	Eastern Cottonwood	8	Dead	6		Remove	0
1217	*Juglans nigra*	Black Walnut	3	Good	2	Slight crown lean	Remove	0
1218	*Juglans nigra*	Black Walnut	11, 11	Fair	3	V-joint, Straight, 20% Dead branches	Remove	1.1
1219	*Acer negundo*	Box Elder	10	Poor	4	Lean, Peeling bark, Adventitious growth	Remove	0
1220	*Juglans nigra*	Black Walnut	12	Poor	4	Strong crown lean, 20% Dead branches	Remove	0
1221	*Juglans nigra*	Black Walnut	10	Poor	4	Unbalanced, Strong crown lean, Crowded by 1220	Remove	0
1222	*Acer negundo*	Box Elder	4	Poor	4	Strong lean, 60% Dead branches	Remove	0
1223	*Acer negundo*	Box Elder	8, 5	Poor	4	60% Dead branches, Strong lean	Remove	0
1224	*Acer negundo*	Box Elder	4, 4, 3	Poor	5	Horizontal growth, 40% Dead branches	Remove	0
1225	*Acer negundo*	Box Elder	6	Poor	4	Unbalanced, Lean, 30% Dead branches	Remove	0
1226	*Acer negundo*	Box Elder	10	Poor	4	60% Dead branches, Lean	Remove	0
1227	*Acer negundo*	Box Elder	8	Poor	4	Crown lean, 20% Dead branches	Remove	0
1228	*Acer negundo*	Box Elder	9	Dead	6		Remove	0
1229	*Acer negundo*	Box Elder	24, 11, 9, 8	Poor	5	Poor form, Split risk, Cavity at crotch, Strong lean	Remove	0
1230	*Acer negundo*	Box Elder	17	Poor	4	Unbalanced, Strong lean, Split Risk at 6'	Remove	0
1231	*Acer negundo*	Box Elder	8	Poor	4	Strong lean, 20% Dead branches	Remove	0
1232	*Acer negundo*	Box Elder	10	Poor	4	Unbalanced, Lean, 20% Dead branches	Remove	0
1233	*Morus alba*	White Mulberry	15, 10, 5	Poor	4	Split Risk, Self crowding, 30% Dead branches	Remove	0
1234	*Acer negundo*	Box Elder	10, 8, 6	Poor	4	Strong lean, Crown lean, 30% Dead branches	Remove	0
1235	*Acer negundo*	Box Elder	7, 6, 6, 5	Poor	4	Strong lean, 30% Dead branches	Remove	0
1236	*Acer negundo*	Box Elder	9	Poor	4	40% Dead branches	Remove	0
1237	*Acer negundo*	Box Elder	22, 14	Poor	4	Split risk, Strong lean, Cavity at crotch	Remove	0
1238	*Acer negundo*	Box Elder	5	Poor	4	Strong lean, Crowded by 1237	Remove	0
1239	*Acer negundo*	Box Elder	12	Poor	4	Strong lean, Crown lean, 20% Dead branches	Remove	0
1240	*Acer negundo*	Box Elder	11, 4	Poor	4	Lean, Strong crown lean, Crowded	Remove	0
1241	*Acer negundo*	Box Elder	8	Poor	4	Strong lean, 20% Dead branches	Remove	0
1242	*Acer negundo*	Box Elder	8	Poor	4	Strong lean, 40% Dead branches	Remove	0
1243	*Acer negundo*	Box Elder	11, 12	Poor	4	Adventitious growth, Crown lean, 60% Dead branches, Split risk	Remove	0
1244	*Acer negundo*	Box Elder	9	Poor	4	Crowded, Crown lean, 30% Dead branches	Remove	0
1245	*Ulmus pumila*	Siberian Elm	11	Poor	4	Broken crown	Remove	0
1246	*Acer negundo*	Box Elder	4	Poor	4	Adventitious growth, Strong crown lean, Lean	Remove	0
1247	*Juglans nigra*	Black Walnut	11	Good	2	Slight lean	Remove	1.1
1248	*Juglans nigra*	Black Walnut	5	Good	2	Slightly crowded by 1249	Remove	0
1249	*Juglans nigra*	Black Walnut	14	Fair	3	Slight lean, 20% Dead branches	Remove	1.4
1250	*Juglans nigra*	Black Walnut	6, 5, 5, 4	Poor	4	Split risk, Adventitious growth, 30% Dead branches	Remove	0
1251	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Slight lean	Remove	1
1252	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Slight lean	Remove	1
1253	*Populus deltoides*	Eastern Cottonwood	6	Poor	4	Lean, Crown lean	Remove	0
1254	*Populus deltoides*	Eastern Cottonwood	6	Poor	5	70% Dead branches	Remove	0
1255	*Gleditsia triacanthos*	Honey Locust	4	Fair	3	Healing trunk scar	Remove	0
1256	*Populus deltoides*	Eastern Cottonwood	8	Poor	4	40% Dead branches, Peeling bark	Remove	0
1257	*Populus deltoides*	Eastern Cottonwood	10, 9	Poor	4	V-joint, 60% Dead branches	Remove	0
1258	*Populus deltoides*	Eastern Cottonwood	6	Fair	3	Lean	Remove	0.6
1259	*Populus deltoides*	Eastern Cottonwood	11	Poor	4	Crown lean, 50% Dead branches	Remove	0
1260	*Populus deltoides*	Eastern Cottonwood	9	Poor	4	Lean, 50% Dead branches	Remove	0
1261	*Populus deltoides*	Eastern Cottonwood	6	Poor	5	Peeling bark, 80% Dead branches	Remove	0
1262	*Acer negundo*	Box Elder	3	Poor	5	Lean, Crown lean, 80% Dead branches, Vines	Remove	0
1263	*Unknown*	Unknown	4	Dead	6		Remove	0
1264	*Unknown*	Unknown	2	Dead	6		Remove	0
1265	*Juglans nigra*	Black Walnut	11	Fair	3	Lean	Remove	1.1
1266	*Acer negundo*	Box Elder	10, 6	Dead	6		Remove	0
1267	*Acer negundo*	Box Elder	10	Dead	6		Remove	0
1268	*Acer negundo*	Box Elder	6	Dead	6		Remove	0
1269	*Acer negundo*	Box Elder	8, 5	Dead	6		Remove	0
1270	*Juglans nigra*	Black Walnut	7	Poor	5	Topped near powerlines	Remove	0
1271	*Juglans nigra*	Black Walnut	8	Poor	5	Partially topped near powerlines, Unbalanced	Remove	0
1272	*Acer saccharinum*	Silver Maple	35	Dead	6		Remove	0
1273	*Acer negundo*	Box Elder	4	Dead	6	Crowded, 60% Dead branches, Lean	Remove	0
1274	*Juglans nigra*	Black Walnut	10	Fair	3	Slight crown lean	Remove	1
1275	*Juglans nigra*	Black Walnut	9	Fair	3	Lean	Remove	0.9
1276	*Juglans nigra*	Black Walnut	6	Good	2	Slighty unbalanced	Remove	0.6
1277	*Juglans nigra*	Black Walnut	6	Good	2		Remove	0.6
1278	*Juglans nigra*	Black Walnut	12	Fair	3	10% Dead branches, Fungus	Remove	1.2
1279	*Juglans nigra*	Black Walnut	13	Fair	3	Lean, 10% Dead branches	Remove	1.3
1280	*Acer negundo*	Box Elder	6, 7, 6	Poor	4	Slight lean, 60% Dead branches	Remove	0
1281	*Populus deltoides*	Eastern Cottonwood	17	Poor	5	Hollow, 30% Dead branches	Remove	0
1282	*Juglans nigra*	Black Walnut	10	Fair	3	Slight Crown lean	Remove	1
1283	*Acer negundo*	Box Elder	8, 7	Poor	5	70% Dead branches, 7" Leader dead, Peeling bark	Remove	0
1284	*Acer negundo*	Box Elder	2	Dead	6		Remove	0
1285	*Juglans nigra*	Black Walnut	12	Good	2	Prune 4" lower branch	Remove	1.2
1286	*Acer negundo*	Box Elder	6, 5, 2	Poor	4	Split risk, Strong lean, 50% Dead branches	Remove	0
1287	*Populus deltoides*	Eastern Cottonwood	20, 17	Poor	4	V-joint, Split risk	Remove	0
1288	*Acer negundo*	Box Elder	3	Poor	4	Lean, 20% Dead branches	Remove	0
1289	*Acer negundo*	Box Elder	7	Fair	3	30% Dead branches, Slight lean	Remove	0.35
1290	*Acer negundo*	Box Elder	2, 2	Poor	4	40% Dead branches, Lean, Split risk	Remove	0
1291	*Acer negundo*	Box Elder	2	Fair	3	Lean	Remove	0
1292	*Acer negundo*	Box Elder	7	Poor	4	Lean, 30% Dead branches	Remove	0
1293	*Acer saccharinum*	Silver Maple	5	Fair	3	Slight lean	Remove	0
1294	*Acer negundo*	Box Elder	7, 6, 2	Poor	4	Split risk, Strong lean, 30% Dead branches	Remove	0
1295	*Gleditsia triacanthos*	Honey Locust	9	Good	2	Slightly unbalanced	Remove	0.45
1296	*Acer negundo*	Box Elder	8, 2	Poor	4	Lean, Adventitious growth, 40% Dead branches	Remove	0
1297	*Acer negundo*	Box Elder	6, 3	Poor	4	Cavity, Lean	Remove	0
1298	*Acer negundo*	Box Elder	8	Fair	3	Cavity, Lean	Remove	0.4
1299	*Acer negundo*	Box Elder	3	Poor	4	Lean, Unbalanced	Remove	0
1300	*Acer negundo*	Box Elder	8, 3	Poor	4	Strong Lean, 30% Dead branches	Remove	0
1301	*Populus deltoides*	Eastern Cottonwood	4	Fair	3	Lean	Remove	0
1302	*Populus deltoides*	Eastern Cottonwood	18	Poor	4	Unbalanced, Lean, 30% Dead branches	Remove	0
1303	*Populus deltoides*	Eastern Cottonwood	14	Fair	3	Lean, 20% Dead branches	Remove	1.4
1304	*Populus deltoides*	Eastern Cottonwood	8	Poor	4	Lean, Slight crown lean, 40% Dead branches	Remove	0
1305	*Populus deltoides*	Eastern Cottonwood	9	Poor	4	Crown lean, 60% Dead branches	Remove	0
1306	*Populus deltoides*	Eastern Cottonwood	2	Fair	3	Lean	Remove	0
1307	*Populus deltoides*	Eastern Cottonwood	4	Fair	3	Lean	Remove	0
1308	*Populus deltoides*	Eastern Cottonwood	12	Fair	3	Lean	Remove	1.2
1309	*Populus deltoides*	Eastern Cottonwood	11	Fair	3	30% Dead branches	Remove	1.1
1310	*Populus deltoides*	Eastern Cottonwood	9	Good	2	30% Dead branches in lower part, Straight	Remove	0.9
1311	*Juglans nigra*	Black Walnut	11	Good	2	Slighty unbalanced	Remove	1.1
1312	*Juglans nigra*	Black Walnut	14	Fair	3	Unbalanced, Slight lean	Remove	1.4
1313	*Juglans nigra*	Black Walnut	12	Good	2		Remove	1.2
1314	*Juniperus virginiana*	Eastern Red Cedar	4, 20' Tall	Poor	4	Crown lean, 70% Dead branches	Remove	0
1315	*Ulmus pumila*	Siberian Elm	3	Dead	6		Remove	0
1316	*Populus deltoides*	Eastern Cottonwood	13	Fair	3	30% Dead branches	Remove	1.3
1317	*Populus deltoides*	Eastern Cottonwood	11	Fair	3	Slight lean	Remove	1.1
1318	*Acer negundo*	Box Elder	6	Poor	4	Strong lean, 70% Dead branches	Remove	0
1319	*Populus deltoides*	Eastern Cottonwood	5	Fair	3	Lean, 30% Dead branches	Remove	0
1320	*Juglans nigra*	Black Walnut	12	Good	2	Lean	Remove	1.2
1321	*Juglans nigra*	Black Walnut	10	Good	2		Remove	1
1322	*Juglans nigra*	Black Walnut	8	Fair	3	Slight crown lean	Remove	0.8
1323	*Juglans nigra*	Black Walnut	9	Good	2	Slighty unbalanced	Remove	0.9
1324	*Acer negundo*	Box Elder	3, 3	Dead	6		Remove	0
1325	*Juglans nigra*	Black Walnut	2	Fair	3	Crowded by 1326, Slight crown lean	Remove	0
1326	*Juglans nigra*	Black Walnut	16	Good	2		Remove	1.6
1327	*Acer saccharinum*	Silver Maple	30	Dead	6		Remove	0
1328	*Acer saccharinum*	Silver Maple	25	Dead	6		Remove	0
1329	*Juglans nigra*	Black Walnut	8	Good	2	Slighty unbalanced	Remove	0.8
1330	*Juglans nigra*	Black Walnut	4	Good	2		Remove	0
1331	*Juglans nigra*	Black Walnut	15	Fair	3	Slight lean, Slighty unbalanced	Remove	1.5
1332	*Juglans nigra*	Black Walnut	9	Fair	3	Lean	Remove	0.9
1333	*Populus deltoides*	Eastern Cottonwood	12	Fair	3	Lean, Crown lean	Remove	1.2
1334	*Populus deltoides*	Eastern Cottonwood	16	Fair	3	30% Dead branches in lower part	Remove	1.6
1335	*Ulmus pumila*	Siberian Elm	13	Poor	5	70% Dead branches	Remove	0
1336	*Acer negundo*	Box Elder	7, 7, 2	Poor	4	Crowded by buckthorn, Split risk, Cavity at crotch	Remove	0
1337	*Acer negundo*	Box Elder	6, 4	Poor	5	80% Dead branches	Remove	0
1338	*Populus deltoides*	Eastern Cottonwood	15	Good	2	30% Dead branches in lower part	Remove	1.5
1339	*Acer negundo*	Box Elder	2	Poor	4	Strong lean	Remove	0
1340	*Acer negundo*	Box Elder	6	Poor	4	Strong lean, Unbalanced, Crowded	Remove	0
1341	*Acer negundo*	Box Elder	5	Poor	4	Strong lean	Remove	0
1342	*Gleditsia triacanthos*	Honey Locust	10	Good	2		Remove	0.5
1343	*Acer negundo*	Box Elder	7, 5	Poor	4	Cavity, Strong lean, 40% Dead	Remove	0
1344	*Acer negundo*	Box Elder	6	Poor	4	60% Dead branches, Lean	Remove	0
1345	*Acer negundo*	Box Elder	6	Poor	4	Lean, 50% Dead branches	Remove	0
1346	*Acer negundo*	Box Elder	8	Fair	3	Lean, 30% Dead branches	Remove	0
1347	*Acer negundo*	Box Elder	7, 6	Poor	5	Adventitious growth only	Preserve	0
1348	*Populus deltoides*	Eastern Cottonwood	6	Fair	3	Slight lean	Preserve	0
1349	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Slight lean	Remove	1
1350	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Slight lean	Remove	1
1351	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Slight lean	Remove	0.7
1352	*Populus deltoides*	Eastern Cottonwood	6	Fair	3	Slight lean	Remove	0.6
1353	*Populus deltoides*	Eastern Cottonwood	7	Dead	6		Remove	0
1354	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Slight lean	Preserve	0
1355	*Populus deltoides*	Eastern Cottonwood	5	Dead	6		Preserve	0
1356	*Populus deltoides*	Eastern Cottonwood	6	Dead	6		Remove	0
1357	*Populus deltoides*	Eastern Cottonwood	3	Dead	6		Remove	0
1358	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Slight lean, 30% Dead branches	Remove	0.7
1359	*Populus deltoides*	Eastern Cottonwood	8	Fair	3	Slight lean, Slight crown lean	Remove	0.8
1360	*Populus deltoides*	Eastern Cottonwood	12	Good	2	Slight crown lean	Preserve	0
1361	*Juniperus virginiana*	Eastern Red Cedar	3, 15' Tall	Fair	3	Crowded	Preserve	0
1362	*Populus deltoides*	Eastern Cottonwood	4	Poor	4	70% Dead branches	Remove	0
1363	*Populus deltoides*	Eastern Cottonwood	3	Poor	5	80% Dead branches	Remove	0
1364	*Populus deltoides*	Eastern Cottonwood	2	Dead	6		Preserve	0
1365	*Populus deltoides*	Eastern Cottonwood	11	Good	2	Slight lean	Remove	1.1
1366	*Populus deltoides*	Eastern Cottonwood	12	Good	2	10% Dead branches	Remove	1.2
1367	*Populus deltoides*	Eastern Cottonwood	2	Poor	5	60% Dead branches	Remove	0
1368	*Populus deltoides*	Eastern Cottonwood	7	Fair	4	Slight lean	Remove	0
1369	*Populus deltoides*	Eastern Cottonwood	8	Poor	5	50% Dead branches	Remove	0
1370	*Populus deltoides*	Eastern Cottonwood	3	Dead	6		Preserve	0
1371	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Slighty unbalanced	Preserve	0
1372	*Populus deltoides*	Eastern Cottonwood	6	Fair	3	Lean	Preserve	0
1373	*Populus deltoides*	Eastern Cottonwood	5	Dead	6		Preserve	0
1374	*Populus deltoides*	Eastern Cottonwood	10, 8	Poor	4	Split risk, Lean	Remove	0
1375	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Slight lean	Remove	0.7
1376	*Populus deltoides*	Eastern Cottonwood	3	Poor	4	Strong lean, 40% Dead branches	Remove	0
1377	*Juniperus virginiana*	Eastern Red Cedar	25' Tall	Fair	3	30% Dead branches	Remove	4.2
1378	*Ulmus americana*	American Elm	16	Poor	4	U-joint, Unbalanced, 30% Dead branches	Remove	0
1379	*Juglans nigra*	Black Walnut	5	Poor	4	Crowded by 1378, Crown lean	Remove	0
1380	*Juglans nigra*	Black Walnut	10	Poor	4	Strong lean	Remove	0
1381	*Acer saccharinum*	Silver Maple	26	Dead	6		Remove	0
1382	*Acer saccharinum*	Silver Maple	27	Dead	6		Remove	0
1383	*Juglans nigra*	Black Walnut	10	Good	2	Slighty unbalanced	Remove	1
1384	*Acer negundo*	Box Elder	4	Poor	5	80% Dead branches	Remove	0
1385	*Juniperus virginiana*	Eastern Red Cedar	15, 40' Tall	Poor	4	Adjacent to powerlines, 20% Dead branches, Trunk scar	Remove	0
1386	*Juniperus virginiana*	Eastern Red Cedar	18, 40' Tall	Poor	4	Trunk scar, Crowded	Preserve	0
1387	*Juglans nigra*	Black Walnut	2	Good	2		Preserve	0
1388	*Juglans nigra*	Black Walnut	10	Fair	3	Crown lean	Preserve	0
1389	*Juglans nigra*	Black Walnut	9	Good	2	Slight lean	Preserve	0
1390	*Juglans nigra*	Black Walnut	6	Poor	4	Lean, Strong crown lean	Preserve	0
1391	*Juglans nigra*	Black Walnut	10	Poor	4	Strong crown lean, 30% Dead branches	Remove	0
1392	*Juglans nigra*	Black Walnut	12	Fair	3	Lean	Preserve	0
1393	*Juglans nigra*	Black Walnut	7	Dead	6		Preserve	0
1394	*Quercus macrocarpa*	Bur Oak	33	Dead	6		Preserve	0
1395	*Ulmus americana*	American Elm	12	Poor	4	Crowded by 1394, Crown lean, 30% Dead branches	Preserve	0
1396	*Populus deltoides*	Eastern Cottonwood	6	Dead	6		Preserve	0
1397	*Juglans nigra*	Black Walnut	12	Good	2	Lean	Preserve	0
1398	*Populus deltoides*	Eastern Cottonwood	7	Fair	3	Slight lean	Preserve	0
1399	*Populus deltoides*	Eastern Cottonwood	10	Fair	3	Lean, 20% Dead branches	Preserve	0
1400	*Acer negundo*	Box Elder	5, 5	Poor	4	Strong lean, Split risk	Preserve	0
1401	*Populus deltoides*	Eastern Cottonwood	5	Fair	3	Burl at base	Preserve	0
1402	*Populus deltoides*	Eastern Cottonwood	10	Poor	4	50% Dead branches, Unbalanced	Preserve	0
1403	*Populus deltoides*	Eastern Cottonwood	13	Good	2	20% Dead branches in lower part	Preserve	0
1404	*Acer negundo*	Box Elder	7	Poor	4	Adventitious growth, Lean, Crown lean, 30% Dead branches, Crowded	Preserve	0
1405	*Acer negundo*	Box Elder	6	Poor	4	Strong lean	Preserve	0
1406	*Populus deltoides*	Eastern Cottonwood	13	Fair	3	30% Dead branches in lower part	Preserve	0
1407	*Populus deltoides*	Eastern Cottonwood	8, 7, 4	Poor	4	Split risk, 70% Dead branches, 4" Leader dead	Preserve	0
1408	*Acer negundo*	Box Elder	7, 2	Poor	4	2" Leader dead, 40% Dead branches	Preserve	0
1409	*Juglans nigra*	Black Walnut	16	Fair	3	Unbalanced	Preserve	0
1410	*Acer negundo*	Box Elder	7	Dead	6		Preserve	0
1411	*Acer negundo*	Box Elder	3	Poor	5	60% Dead Branches, Adventitious growth	Preserve	0
1412	*Acer negundo*	Box Elder	10, 7	Poor	4	Split risk, Included bark	Preserve	0
1413	*Acer negundo*	Box Elder	6	Poor	4	Lean, Cavity, 20% Dead branches	Preserve	0
1414	*Acer negundo*	Box Elder	5	Poor	5	80% Dead branches	Preserve	0
1415	*Acer negundo*	Box Elder	7	Dead	6		Preserve	0
1416	*Acer negundo*	Box Elder	6	Poor	4	U-joint, Lean, 40% Dead branches	Preserve	0
1417	*Populus deltoides*	Eastern Cottonwood	4	Dead	6		Preserve	0
1418	*Populus deltoides*	Eastern Cottonwood	13	Fair	3	Lean	Preserve	0
1419	*Populus deltoides*	Eastern Cottonwood	8	Fair	3	Lean	Preserve	0
1420	*Acer negundo*	Box Elder	5	Poor	5	70% Dead branches	Preserve	0
1421	*Acer negundo*	Box Elder	8	Poor	4	30% Dead branches, Lean, Crowded	Preserve	0
1422	*Populus deltoides*	Eastern Cottonwood



A/7 6' BENCH DETAIL
NOT TO SCALE

PLAY LOT GENERAL NOTES:

1. CONCRETE WALK.
SCORE WALK IN 5' MODULES OR AS SHOWN AND PROVIDE 1/2" EXPANSION JOINTS AT 30' INTERVALS OR AS SHOWN.
2. CONCRETE WALK. EXCAVATE TO SUBGRADES INDICATED AND INSTALL NEW CONC. PITCH WALKWAY AT A MIN. 2% IN THE DIRECTION OF THE DRAINAGE PATTERN SHOWN. BACKFILL WALK WITH TOPSOIL & BLEND INTO SURROUNDING GRADE.
3. ALL CONCRETE CURVES SHALL BE SMOOTH AND CONTINUOUS AS SHOWN IN THE DRAWINGS. SHARP BENDS OR KINKS IN THE PAVEMENT SHALL BE REMOVED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
4. DASHED LINE AROUND APPARATUS COMPONENTS AND INDEPENDENT PLAY COMPONENTS REPRESENTS THE MINIMUM REQUIRED SAFETY ZONE (USE ZONE) CLEARANCE OF 6'-0" UNLESS OTHERWISE NOTED.
5. THE REQUIRED USE ZONE IN FRONT OF ALL SLIDE EXIT CHUTES SHALL EXTEND A MINIMUM DISTANCE OF THE HEIGHT OF THE SLIDE (ABOVE THE PLAYGROUND SURFACE) + 4'-0".
6. FOR PLAY APPARATUS CLUSTERS AND INDEPENDENT PLAY COMPONENTS, SEE THE APPARATUS SCHEDULE FOR ITEM DESCRIPTIONS.
7. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LINES AND IS RESPONSIBLE FOR ANY DAMAGE.
8. CONTRACTER SHALL SURVEY AND LAYOUT SIDEWALK AND CURB.
9. CONTRACTER SHALL INSTALL TEMPORARY PROTECTION FENCING WHILE UNDER CONSTRUCTION
10. CONTRACTER SHALL GRADE AND EXCAVATE AREAS NECESSARY TO INSTALL THE HARDSCAPE AND PLAY EQUIPMENT AS DETAILED.
11. CONTRACTOR SHALL GUARANTEE ALL CONCRETE FOR TWO YEARS.
12. CONTRACTOR TO VERIFY POSITIVE DRAINAGE IN ALL AREAS WITHIN LIMITS OF WORK.

SITE FURNISHINGS & PLAY LOT APPARATUS SCHEDULE

	ITEM	MODEL	MANUFACTURER	QUANTITY	COMMENTS/CONTACT
A/7	6' BENCH	CBPB-6SB-BK	BELSON OUTDOORS	4	BELSON OUTDOORS 1(800)-323-5664 COLOR PACKAGE: BLACK
B/7	CONCRETE RAMP			1	
C/7	CONCRETE WALK			200 S.F.	
D/7	CONCRETE THICKENED EDGE			15 L.F.	
E/7	CONCRETE CURB			115 L.F.	
F/7	ENGINEERED WOOD FIBER FALL SURFACE			1,257 S.F.	

PLAYGROUND EQUIPMENT SCHEDULE

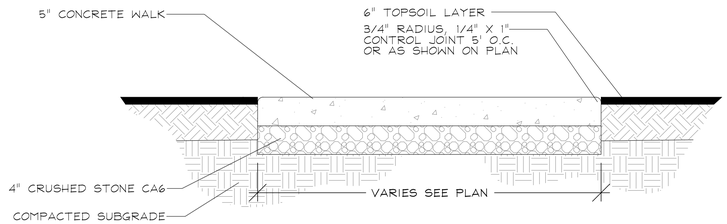
NOTE: INSTALL PER MANUFACTURER'S SPECIFICATION.

	ITEM	MODEL	MANUFACTURER	QUANTITY	COMMENTS/CONTACT
G	PLAY STRUCTURE		LANDSCAPE STRUCTURES	1	NUTOYS LEISURE PRODUCTS 1(800) 526-6197 CODE: S9E22BEC2

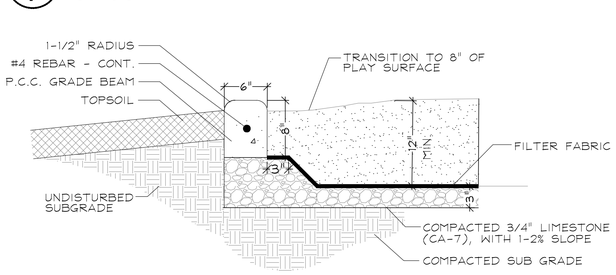
GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
402 W. LIBERTY DRIVE
WHEATON, ILLINOIS 60187
PHONE: 630-668-7197
www.grwainc.com

CLIENT
EQUITY TRUST COMPANY F/B/O PAUL SWANSON IRA
401 E. PROSPECT AVE., SUITE 201
MT. PROSPECT, IL 60056

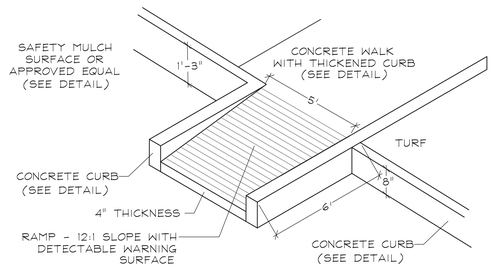
ENGINEER
ADVANTAGE CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17
LEMONT, IL 60439



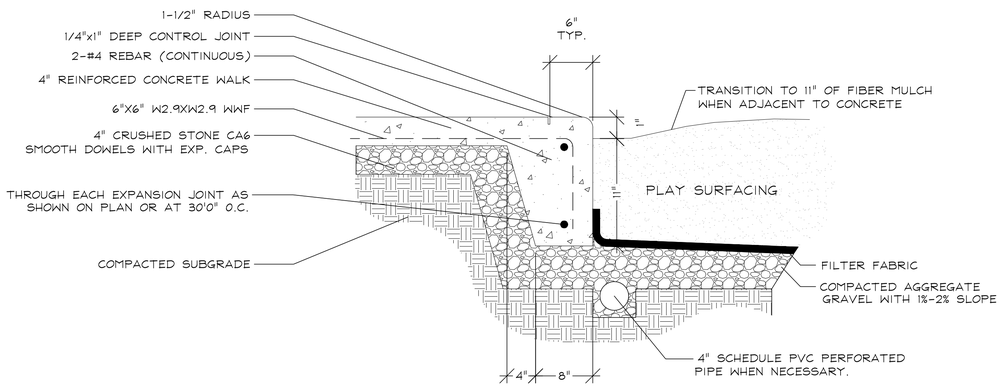
C/7 CONCRETE WALK
NOT TO SCALE



E/7 CONCRETE CURB DETAIL
NOT TO SCALE

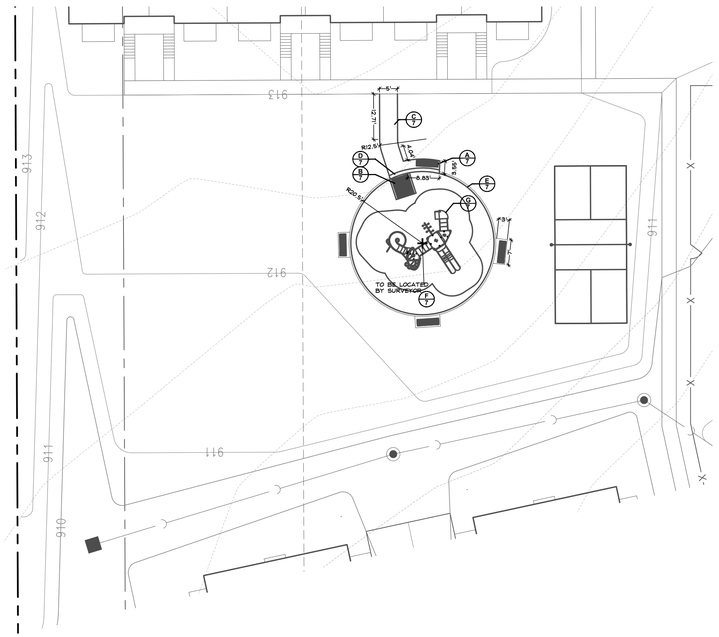


B/7 CONCRETE CURB DETAIL
NOT TO SCALE



NOTE: THICKENED EDGE TO BE USED ADJACENT TO ALL PLAY AREAS

D/7 F/7 THICKENED EDGE AND PLAY SURFACE
NOT TO SCALE



0 5' 10' 20' 30'
SCALE: 1"=20'
NORTH

DERBYSHIRE
CRYSTAL LAKE, IL 60014
PARK PLAN

1	01.19.2024
REVISIONS	

DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	

7 OF 8

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

XREFS:
PLOT CONFIG:

LANDSCAPE WORK PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

The work shall consist of furnishing, transporting and installing all seeds, plants and other materials required for:

1. The establishment of trees, shrubs, perennial, annual and lawn areas as shown on Landscape Plan;
2. The provision of post-planting management as specified herein;
3. Any remedial operations necessary in conformance with the plans as specified in this document;
4. Permits which may be required.

1.2 QUALITY ASSURANCE

A. Work shall conform to State of Illinois Horticultural Standards and local municipal requirements.

B. Quality Control Procedures:

1. Ship landscape materials with certificates of inspection as required by governmental authorities. Comply with governing regulations applicable to landscape materials.

2. Do not make substitutions. If specified landscape material is not obtainable, submit to Landscape Architect proof of non-availability and proposal for use of equivalent material.

3. Analysis and Standards: Package standard products with manufacturer's certified analysis.

1.3 SUBMITTALS

A. Planting Schedule

Submit three (3) copies of the proposed planting schedule showing dates for each type of planting

B. Maintenance Instruction - Landscape Work

Submit two (2) copies of typewritten instructions recommending procedures to be established by the Owner for the maintenance of landscape work for one full year. Submit prior to expiration of required maintenance periods.

Instructions shall include: watering, fertilizing, spraying, mulching and pruning for plant material and trimming groundcover. Instructions for watering, fertilizing and mowing grass areas shall be provided ten (10) days prior to request for inspection for final acceptance. Landscape Architect shall receive copies of all instructions when issued.

C. Submit two (2) copies of soil test of existing topsoil with recommendations for soil additive requirement to Landscape Architect for review and written approval.

D. Submit two (2) samples of shredded hardwood bark mulch, erosion control blankets, and all other products and materials as specified on plans to Landscape Architect for review and written approval.

E. Nursery packing lists indicating the species and quantities of material installed must be provided to the Owner and/or City upon request.

1.4 JOB CONDITIONS

A. Examine and evaluate grades, soils and water levels. Observe the conditions under which work is to be performed and notify Landscape Architect of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

B. Utilities: Review underground utility location maps and plans; notify local utility location service; demonstrate an awareness of utility locations; and certify acceptance of liability for the protection of utilities during course of work. Contractor shall be responsible for any damage to utilities or property.

C. Excavation: When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions or obstructions, notify Landscape Architect before planting.

1.5 GUARANTEES

A. Guarantee seeded and sodded areas through the specified maintenance period and until final acceptance.

B. Guarantee trees, shrubs, groundcover and perennials for a period of one year after date of acceptance against defects including death and unsatisfactory growth, except for defects resulting from neglect by Owner, abuse or damage by others or unusual phenomena or incidents which are beyond Landscape Installer's control.

LANDSCAPE WORK PART 2 - PLANT MATERIALS

2.1 LAWN SOD

Provide strongly rooted sod, not less than two (2) years old and free of weeds and undesirable native grasses. Provide only sod capable of growth and development when planted (viable, not dormant) and in strips not more than 18" wide x 4' long. Provide sod composed of a 5-way blend of Kentucky Bluegrass such as: Midnight, Allure, Viva, Washington, Liberty.

2.2 LAWN SEED MIXTURE

Grass Seed: Provide fresh, clean, new crop seed complying with the tolerance for purity and germination established by the Official Seed Analysts of North America. Provide seed of the grass species, proportions and maximum percentage of weed seed, as specified.

A. Lawn Seed Mixture - 5 lbs./1,000 sq. ft.
- 50% Kentucky Bluegrass 98/85
- 15% Cutter Perennial Ryegrass
- 10% Spartan Hard Fescue
- 10% Edge Perennial Ryegrass
- 10% Express Perennial Ryegrass
- 5% Pennlawn Creeping Red Fescue

B. Temporary Lawn Seed Mixture - 5 lbs./1,000 sq.ft.
- 40% Kentucky Bluegrass 98/85
- 40% Perennial Ryegrass
- 20% Annual Ryegrass

2.3 NATIVE PLANTING MIXTURES

Provide fresh, clean, new crop of the species and proportions as specified. Native seed and live plant material shall be obtained from a reputable supplier (approved by Landscape Architect) that has collected from sources east of the Mississippi River within the same EPA Level III Ecoregion as the project site (Central Corn Belt Plains). Any material sourced from outside this ecoregion must be approved by the Landscape Architect prior to installation.

For each species, the amount of seed indicated on the specifications shall mean the total amount of pure live seed (PLS) per acre. Seed tags and PLS testing information shall be provided to the Landscape Architect prior to seeding.

It is the sole responsibility of the Native Landscape Contractor to provide approved seed that meets industry-standard PLS requirements.

2.3 GROUNDCOVERS, PERENNIALS AND ANNUALS

Provide plants established and well-rooted in removable containers or integral peat pots and with not less than the minimum number and length of runners required by ANSI Z60.1 for the pot size shown or listed.

2.4 TREES AND SHRUBS

A. Name and Variety: Provide nursery grown plant material true to name and variety.

B. Quality: Provide trees, shrubs and other plants complying with the recommendations and requirements of ANSI Z60.1 "Standard for Nursery Stock" and as further specified.

C. Deciduous Trees: Provide trees of height and caliper listed or shown and with branching configuration recommended by ANSI Z60.1 for type and species required. Provide single stem trees except where special forms are shown or listed. Provide balled and burlapped (B&B) deciduous trees.

D. Deciduous Shrubs: Provide shrubs of the height shown or listed and with not less than the minimum number of canes required by ANSI Z60.1 for the type and height of shrub required. Provide balled and burlapped (B&B) deciduous shrubs.

E. Coniferous Evergreen: Provide evergreens of the sizes shown or listed. Dimensions indicate minimum spread for spreading and semi-spreading type evergreens and height for other types. Provide quality evergreens with well-balanced form complying with requirements for other size relationships to the primary dimension shown. Provide balled and burlapped (B&B) evergreen trees and containerized shrubs.

F. Inspection: All plants shall be subject to inspection and review at the place of growth or upon delivery and conformity to specification requirements as to quality, right of inspection and rejection upon delivery at the site or during the progress of the work for size and condition of balls or roots, diseases, insects and latent defects or injuries. Rejected plants shall be removed immediately from the site.

2.5 PLANTING SOIL MIXTURE

Provide planting soil mixture consisting of clean uncompacted topsoil (stockpiled at site) for all planting pits, perennial, annual and groundcover areas. Topsoil shall be conditioned based on any recommendations resulting from the soil test in 1.3.C.

2.6 EROSION CONTROL

A. Lawn Seed Areas Erosion Control Blanket: North American Green DS75, or equivalent approved equal.

B. Native Areas Erosion Control Blanket: North American Green S150, or equivalent approved equal.

2.7 MULCH

Provide mulch consisting of shredded hardwood. Provide sample to Landscape Architect for approval prior to ordering materials.

LANDSCAPE WORK PART 3 - EXECUTION

3.1 PLANTING SCHEDULE

At least thirty (30) days prior to the beginning of work in each area, submit a planting schedule for approval by the Landscape Architect.

3.2 PLANTINGS

A. Sodding New Lawns

1. Remove existing grass, vegetation and turf. Dispose of such material legally off-site, do not turn over into soil being prepared for lawns.

2. Till to a depth of not less than 6"; apply soil amendments as needed; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, remove lumps, clods, stones over 1" diameter, roots and other extraneous matter. Dispose of such material legally off-site.

3. Sodded areas shall receive an application of commercial fertilizer at the rate of 10 lbs. per 1,000 sq. ft. and shall have an analysis of 16-8-8.

4. Lay sod within 24 hours from time of stripping.

5. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass.

6. Water sod thoroughly with a fine spray immediately after planting.

B. Seeding New Lawns

1. Remove existing grass, vegetation and turf. Dispose of such material legally off-site. Do not turn over into soil being prepared for lawns.

2. Till to a depth of not less than 6"; apply soil amendments; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, remove lumps, clods, stones over 1" diameter, roots and other extraneous matter. Dispose of such material legally off-site.

3. Seeded lawn areas shall receive an application of commercial fertilizer at the rate of 5 lbs. per 1,000 sq. ft. and shall be 6-24-24. Fertilizer shall be uniformly spread and mixed into the soil to a depth of 1" inches.

4. Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage.

5. Sow seed using a spreader or seeding machine. Do not seed when wind velocity exceeds five (5) miles per hour. Distribute seed evenly over entire area by sowing equal quantity in two directions at right angles to each other.

6. Sow not less than specified rate.

7. Rake lawn seed lightly into top 1" of soil, roll lightly and water with a fine spray.

8. After the seeding operation is completed, spray a wood fiber mulch (Conweb 2000 with tacifier or approved equal) over the entire grassed area at the rate of 2,000 lbs. per acre. Use a mechanical spray unit to insure uniform coverage. Exercise care to protect buildings, automobiles and people during the application of the mulch.

C. Seeding Native Areas

1. The period for planting prairie seed shall be from April 1 to May 15 or November 1 to just before the first frost. Seeding outside of these timeframes must be approved by the landscape architect. Native seed planted outside of specified timeframes must have at least 60 days of growth prior to frost. Dormant seeding in winter is possible if soil conditions allow.

2. The General Contractor and Native Landscape Contractor shall be responsible for performing all work necessary to achieve and maintain an acceptable seedbed prior to seeding. All areas must be properly prepared before seeding begins. Equipment having low unit pressure ground contact shall be utilized within the planting areas.

3. If present, compacted soils shall be disked or raked prior to seeding. Remedial measures for the access area may, at the direction of the Wetland Consultant, involve ripping from 12 to 18 inches of the soil horizon prior to disking.

4. Prior to seeding, planting areas shall have at least twelve inches of clean un-compacted topsoil. Clumps, clods, stones over 2" diameter, roots and other extraneous matter shall be removed and disposed of legally off-site.

5. Granular mycorrhizal inoculants shall be installed with the seed mix at a rate of 40lbs/ acre. Inoculant can be banded under seed, worked into seed or added into spray tanks. Native areas shall not receive fertilizer.

6. Contractor shall be solely responsible for the proper handling and storage of the seed according to the best seed handling and storage practices, including fungicide treatments and stratification considerations. Owner shall make no compensation for damage to the seed because of improper storage, cleaning, threshing, or screening operations.

7. Except where site conditions preclude their use, seeding shall be performed using a Truax drill, Truax Trillion seeder, or comparable equipment designed specifically for installation of native seed. For areas where site conditions preclude the use of specialized equipment, seed may be installed through hand broadcasting and followed by light raking. Hand broadcast seed shall be spread at twice the specified rate. Other methods of seed installation may be used with prior approval from the Landscape Architect.

8. Prior to starting work, all seeding equipment shall be calibrated and adjusted to sow seeds at the proper seeding rate. In general, the optimum seeding depth is 0.25 inch below the soil surface. Areas where the seed has not been incorporated into the soil to the proper depths will not be accepted, and no compensation for materials or labor for the rejected work will be made by the Owner.

9. Seeding and soil tracking/firming shall not be done during periods of rain, severe drought, high winds, excessive moisture, frozen ground, or other conditions that preclude satisfactory results.

10. Wet mesic and emergent areas shall be planted, and seed allowed to germinate (if possible), prior to flooding with significant amounts of water. Any areas of significant permanent water located within the planting area will receive live plugs in lieu of seed.

11. After the seeding operation is completed, install erosion control blanket per manufacturer's specifications.

12. Emergent plugs shall be planted in natural groupings within designed areas containing saturated soils or shallow inundation. Plants within groupings shall be planted at 2 foot centers.

13. Emergent plugs shall not be planted less than the specified rate and shall be protected with goose exclosures surrounding all natural groupings of plugs.

E. Groundcover and Perennial Beds

Groundcover, perennials, and annuals shall be planted in continuous beds of planting soil mixture a minimum of 8" deep. Install per spacing indicated on plan.

F. Trees and Shrubs

1. Set balled and burlapped (B&B) stock plumb and in center of pit or trench with top of ball at an elevation that will keep the root flare exposed upon backfill and mulching. Remove burlap from top and sides of balls; retain on bottoms. When set, place additional topsoil backfill around base and sides of ball and work each layer to settle backfill and eliminate voids and air pockets. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill.

2. Dish top of backfill to allow for mulching. Provide additional backfill berm around edge of excavations to form shallow saucer to collect water.

3. Mulch pits, trenches and planted areas. Provide not less than 2" thickness of mulch and work into top of backfill and finish level with adjacent finish grades. Maintain exposed root flare at all times.

4. Prune only injured or dead branches from flowering trees, if any. Protect central leader of tree during shipping and pruning operations. Prune shrubs to retain natural character in accordance with standard horticultural practices.

5. Remove and replace excessively pruned or ill-formed stock resulting from improper pruning.

6. The Contractor shall be wholly responsible for assuring that all trees are planted in a vertical and plumb position and remain so throughout the life of this contract and guarantee period. Trees may or may not be staked and guyed depending upon the individual preference of the Contractor; however, any bracing procedure(s) must be approved by the Owner prior to its installation.

3.3 LANDSCAPE MAINTENANCE

A. Turf Maintenance

1. Mowing
   a. All litter (i.e. paper, cans and bottles) will be removed from turf and plant bed areas prior to mowing.
   b. All lawn areas will be mowed weekly to a height of 3" from April through November, or as needed. No more than 1/3 of the grass blade is to be removed per cutting. Mowing height may be seasonally adjusted depending upon weather conditions in order to reduce stress and promote healthy turf.
   c. Mowing patterns shall be altered on a weekly basis wherever possible. Mowing patterns shall create straight lines for a more manicured appearance.
   d. Clippings shall be bagged and removed when clipping buildup is such that the excess clipping lay in an unsightly matted condition on the lawn.
   e. The turf shall be cut in such a manner as to avoid blowing clippings toward structures, patios, air conditioners, and planting beds.
   f. If the turf could potentially be damaged by equipment due to weather, mowing should not be performed.
   g. Turf bordering vertical surfaces such as foundations, fences, and utility boxes shall be trimmed to match the mowing height.
   h. Clippings shall be removed from all pavement areas.

2. Edging
   a. Turf areas adjacent to walks, driveways and curbing will be mechanically edged monthly in a uniform manner.
   b. Shrub beds and tree rings shall be neatly and uniformly edged twice per year; once during the spring cleanup, and again in August or September weather permitting.

3. Fertilizer & Weed Control
   a. Pesticides must be applied by a licensed individual.
   b. Notice shall be given to the homeowners association or owner's representative 1 week prior to any pesticide application.
   c. The lawn shall be fertilized three (3) times with a high quality granular or liquid formula. The applications should be made approximately in April, May and September. Timing, frequency and rate of application shall be adjusted to meet the development's current needs and conditions
   d. A pre-emergent weed control application for annual grass prevention shall be incorporated into the first turf fertilization in spring.
   e. The entire turf area will be treated one (1) time with a post emergent broad leaf weed control at the appropriate time of year. Spot treatment should be done as necessary.
   f. Flags shall be posted throughout the community following each fertilizer application. Remove flags once the application is dry or as directed by the product's label.

B. Planting Bed Maintenance

1. Pruning
   a. Trees, shrubs and evergreens should be pruned, trimmed or sheared at the appropriate time for each species to maintain the plant's proper form. Methods and timing shall conform to standard horticultural practices. The initial spring pruning will include:
      1. Removal of dead or injured limbs.
      2. Removal of branches that are touching structures.
      3. Shaping and internal thinning of the plant to allow for its natural form and habit.
   b. Shrubs will be pruned two (2) additional times at the appropriate time so as not to interfere with flowering.
   c. Trees over 6" in diameter will not be pruned other than removal of low branches hazardous to pedestrian traffic and sucker growth which may occur.
   d. Groundcovers should be pruned twice during the season to maintain a neat appearance.
   e. Ornamental grasses should be trimmed during the spring cleanup.
   f. All pruning debris shall be removed from the site by the contractor immediately after the work is complete.

2. Fertilizer & Weed Control
   a. Pesticides must be applied by a licensed individual.
   b. Notice shall be given to the homeowner's association 1 week prior to any pesticide application.
   c. Pre-emergent weed control shall be applied at the beginning of the growing season.
   d. Post emergent applications or hand pulling shall be used on any weeds that appear throughout the season.
   e. Trees, shrubs and groundcover shall be fertilized one (1) time during the season. The application rate will be determined by the specific needs of the plant material.

C. Spring & Fall Cleanup

1. Spring Cleanup
   a. Lawn areas and planting beds will be raked as necessary to remove leaves, dead branches, litter and debris.
   b. All mulch beds shall be cultivated to break up any existing compaction in the mulch.
   c. Fresh mulch should be applied to any bare spots in the planting beds.
   d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.
   e. Debris generated during the cleanup shall be disposed of legally off site.

2. Fall Cleanup
   a. All lawn areas will have leaves removed either by raking or through the mowing process so as to prevent leaf buildup on the turf on a weekly basis.
   b. All planting beds will have leaves and debris removed at the end of the season.
   c. Perennials without winter interest shall be cut back.
   d. Monitor plant health and notify homeowner's association or owner's representative of any dead plants.
   e. Debris generated during the cleanup shall be disposed of legally off site.

3.4 NATIVE LANDSCAPED AREAS

CONTINUED MONITORING & MAINTENANCE

A. Monitoring

The Owner shall notify the County upon completion of plantings. The Owner's Environmental Specialist shall inspect the plantings and provide the County with a copy of the planting locations, species, and quantities for verification by the County.

The Owner's Environmental Specialist shall inspect the plantings at least twice per year during the three-year term of the Establishment and Maintenance Cash Bond or Letter of Credit, to determine compliance with the minimum annual performance criteria (See 1.5C Guarantees). A monitoring report will be provided to the County by January 31st following each inspection.

B. Maintenance:

First Season

With the exception of the emergent area, native seeding areas should be mowed to a height of 6" to control annual nonnative and invasive species early in the growing season. Mowing, including weed whipping, should be conducted during prior to weed seed production. Mowing height and timing may need to be adjusted per target species. Small quantities of undesirable plant species, shall be controlled by hand pulling prior to the development and maturity of the plant. Hand removal shall include the removal of all above-ground and below-ground stems, roots and flower masses prior to development of seeds. Herbicide should be applied as necessary by a trained and licensed operator that is competent in the identification of native and nonnative herbaceous plants. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

Second Season

Control of undesirable plant species during the second growing season shall consist primarily of precise herbicide application. Mowing and weed whipping shall be conducted as needed during the early growing season and as needed to a height of 6 to 8 inches to prevent annual weeds from producing seed. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary.

Third Season:

Seasonal mowing and herbicide will continue as above but should be reduced over time. Debris and litter shall be removed from the native areas and storm structures shall be inspected and maintained as necessary. At the completion of the third growing season (dependent on fuel availability; dominance of graminoid species; and favorable weather conditions), fire may be introduced to the planted areas as a management tool.

State and local permits shall be required prior to controlled burning. Burning shall be conducted by trained professionals experienced in managing smoke in urban environments. Prior to a controlled burn, surrounding property owners as well as local fire and police departments shall be notified. A burn plan detailing preferred wind direction and speed, location of fire breaks, and necessary personnel and equipment shall be prepared and utilized in planning and burn implementation.

The initial burn shall be dependent on fuel availability which is directly related to the quantity and quality of grasses contained within the plant matrix. Timing of the burn shall be determined based on results of the annual monitoring indicating species composition of the management area and other analysis of management goals. Generally, burns shall be scheduled from spring to fall on a rotational basis. Burn frequency shall also be dependent on the species composition within the management area. Generally, a new prairie restoration area shall be burned annually for two years after the second or third growing season after planting and then every 2-3 years thereafter, burning 50-75% of the area.

C. Long Term Wetland and Prairie Management/Maintenance

A final compliance report and Long-Term Operation and Maintenance Plan shall be submitted by the Developer/Owner's Environmental Specialist no less than 60 days prior to the expiration of any landscape Cash Bond or Letter of Credit posted for the native areas. Final acceptance and release shall be determined by the County/City/USACE upon inspection of the site to verify compliance.

The Long -Term Operation and Maintenance Plan shall be written to include guidelines and schedules for burning, mowing, application of herbicide, debris/litter removal and inspection schedule for storm structures and sediment removal.

3.5 CLEAN UP AND PROTECTION

A. During landscape work, store materials and equipment where directed. Keep pavements clean and work areas and adjoining areas in an orderly condition.

B. Protect landscape work and materials from damage due to landscape operations, operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed by Landscape Architect.

3.5 CLEAN UP AND PROTECTION

A. During landscape work, store materials and equipment where directed. Keep pavements clean and work areas and adjoining areas in an orderly condition.

B. Protect landscape work and materials from damage due to landscape operations, operations by other trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged landscape work as directed by Landscape Architect.

3.6 INSPECTION AND ACCEPTANCE

A. The Landscape Architect reserves the right to inspect seeds, plants, trees and shrubs either at place of growth or at site before planting for compliance with requirements for name, variety, size, quantity, quality and mix proportion.

B. Supply written affidavit certifying composition of seed mixtures and integrity of plant materials with respect to species, variety and source.

C. Notify the Landscape Architect within five (5) days after completing initial and/or supplemental plantings in each area.

D. When the landscape work is completed, including maintenance, the Landscape Architect will, upon request, make a final inspection to determine acceptability. After final acceptance, the Owner will be responsible for maintenance.

GRWA
GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
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ENGINEER
ADVANTAGE CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17
LEMONT, IL 60439

DERBYSHIRE
CRYSTAL LAKE, IL 60014

LANDSCAPE SPECIFICATIONS

1	01.19.2024
REVISIONS	

DATE	08.16.2023
PROJECT NO.	PSW2308
DRAWN	CLE
CHECKED	DHS
SHEET NO.	

8 OF 8

PLOT COMING 9:16:23


























Untitled Map
Legend
Google Earth


Untitled Map
Legend
Google Earth


Untitled Map
Legend
Google Earth

Vanderstappen
Land Surveying, Inc.
www.vandersinc.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"Always faithful to the property line"

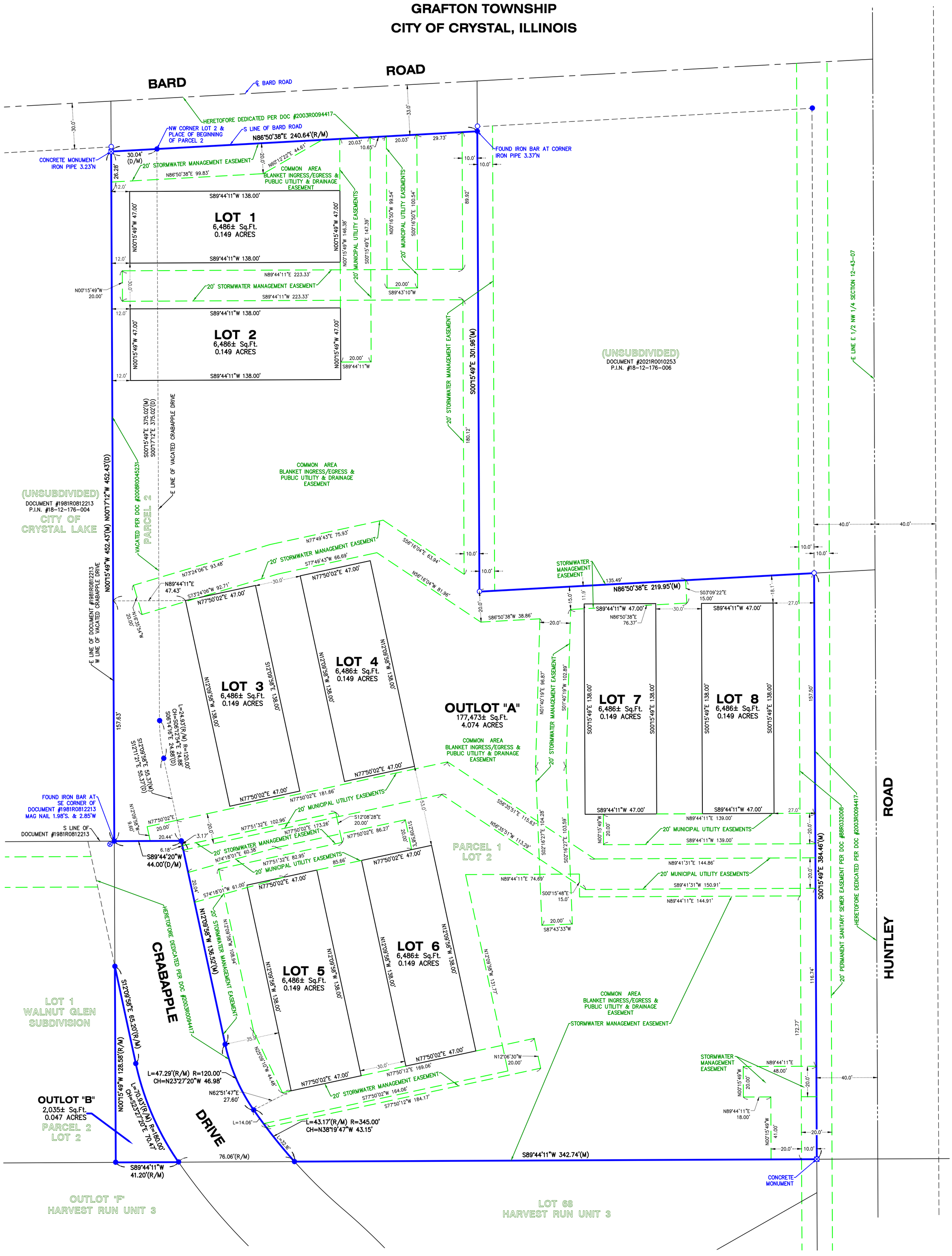
FINAL PLAT OF SUBDIVISION
DERBYSHIRE TOWNHOMES SUBDIVISION

A resubdivision of Lot 2 of Walnut Glen Subdivision and part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7 East of the Third Principal Meridian, in McHenry County, Illinois

ZONED R3B PUD

GRAFTON TOWNSHIP

CITY OF CRYSTAL, ILLINOIS



CLIENT: PROJADES, LLC
DRAWN BY: TVA CHECKED BY: APG
SCALE: 1"=30' SEC. 12 T. 43 R. 7 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 18-12-179-005
JOB NO.: 230777 I.D. FPS
FIELDWORK COMP.: _____ BK. ____ PG. ____
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: _____

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1.	9/06/23	ORIGINALLY PLATTED	TVA
2.	3/13/24	REVISED PER CITY REVIEW	TVA

DERBYSHIRE TOWNHOMES SUB'D | SHEET NO. 1 OF 2

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Vanderstappen
Land Surveying, Inc.
www.vandersinc.com
1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
"Always faithful to the property line"

FINAL PLAT OF SUBDIVISION
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A resubdivision of Lot 2 of Walnut Glen Subdivision and part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7 East of the Third Principal Meridian, in McHenry County, Illinois

ZONED R3B PUD
GRAFTON TOWNSHIP
CITY OF CRYSTAL, ILLINOIS

OWNER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

This is to certify that Projades, LLC are the owner/owner's of the land described on this plat hereon drawn and shown as subdivided; that he (they) has (have) caused said land to be surveyed, resubdivided, staked and platted as shown hereon, for the purposes therein set forth as allowed and provided by statute, the resubdivision to be known as "Derbyshire Townhomes Subdivision", City of Crystal Lake, McHenry County, Illinois and does hereby acknowledge and adopt same, and to the best of my (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 surface water drainage will be changed, reasonable provision has been made for the collection and diversion of such surface waters into public areas, or drains which 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 likelihood of damage to the adjoining property because of the construction of the subdivision. In witness where I (we) have hereunder set my (our) hand (s) of Seal (s),

this _____ day of _____, 2024A.D.

_____ _____
President (print name of signer)

NOTARY'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, _____, the undersigned, a Notary Public in and for the county and

state aforesaid, do hereby certify that _____, President of Projades, LLC, is personally known to me to be the same person or persons whose name or names are subscribed to the foregoing instrument as, _____ respectively appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act of said company for the uses and purposes therein set forth and said secretary did also then and there affix the said corporate seal of said company to the said instrument as his or her own free voluntary act, and as his or her own free voluntary act, and as the free and voluntary act of said company for the uses and purposes set forth.

Given under my hand and notarial seal, this _____ day of_____, 2024 A.D.

_____ _____ _____
Notary Public My Commission Expires

SCHOOL CERTIFICATE

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

To the best of our knowledge and belief, Derbyshire Townhomes Subdivision as hereby created and shown on this Plat of Subdivision are within the School District(s) and know as:

Crystal Lake Consolidated School District #47
Community High School District #155

OWNER: Projades, LLC a limited liability corporation

In witness where I, (we) have hereunder set my (our) hand (s) of

Dated this _____ day of _____, 2024 A.D.

_____ _____
President (print name of signer)

NOTARY CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, _____, the undersigned, a Notary Public in and for the county and

state aforesaid, do hereby certify that _____, President of Projades, LLC, is personally known to me to be the same person or persons whose name or names are subscribed to the foregoing instrument as, _____ respectively appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act of said company for the uses and purposes therein set forth and said secretary did also then and there affix the said corporate seal of said company to the said instrument as his or her own free voluntary act, and as his or her own free voluntary act, and as the free and voluntary act of said company for the uses and purposes set forth.

Given under my hand and notarial seal, this _____ day of_____, 2024 A.D.

_____ _____ _____
Notary Public My Commission Expires

MUNICIPAL UTILITY MAINTENANCE AGREEMENT

This Agreement made as of this _____ day of _____, by and between the City of Crystal Lake, an Illinois municipal corporation, referred to herein as "CITY" and _____, referred herein as "RESPONSIBLE PARTY", for the property as described hereon, which is located within the City of Crystal Lake, Illinois (said property hereinafter referred to as "Premises").

WHEREAS, the term "Municipal Utilities" shall be defined as the following:

1. Water mains and service lines, located in easements designated as Municipal Utility Easements, up to and including the service valve and
2. Sanitary Sewer Mains, located in easements designated as Municipal Utility Easements, up to and including the manhole.

WHEREAS, the RESPONSIBLE PARTY is responsible for all Municipal Utilities located in those areas on the RESPONSIBLE PARTY's Premises outside of dedicated street rights-of-way and within the Municipal Utility Easements.

WHEREAS, the City and the RESPONSIBLE PARTY have held negotiations and reached agreement on the proper role of both parties regarding the maintenance of certain Municipal Utilities. The Municipal Utilities considered for maintenance by the CITY are those located in the portion of the RESPONSIBLE PARTY's Premises described as the "Municipal Utility Easement" in the Plat of Subdivision (hereinafter referred to as the "Easement Document") and recorded with the Recorder's Office for the County of McHenry, State of Illinois as

Document Number _____.

NOW, THEREFORE, the CITY and RESPONSIBLE PARTY hereby agree to the following terms and conditions:

1. The CITY will maintain those Municipal Utilities described in the Easement Document as Municipal Utility Easement 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.
2. The surface of the Municipal Utility Easement as shown on the Plat may be grass, sod, or pavement only (other minor landscaping as shown on a landscape plan approved by the CITY might be permitted). No fences, trees or structures will be permitted within those areas identified on the Plat for the Municipal Utility Easement.
3. The RESPONSIBLE PARTY will be responsible for prompt, quality restoration of all surface and above-grade improvements meeting or exceeding the original construction requirements of all areas on the RESPONSIBLE PARTY's respective premises damaged by the CITY in the process of repairing, replacing or constructing Municipal Utilities. The CITY agrees to exercise reasonable care in repairs made so as not to cause the RESPONSIBLE PARTY to incur unnecessary damages. Items subject to restoration by the RESPONSIBLE PARTY include but are not limited to the following (whether located in easements or dedicated rights-of-way): private lighting cable or conduits, pavements, curb and gutter, irrigation systems, trees, shrubs, sod or other landscaping.
4. This Agreement is to run with the land and shall be binding upon and inure to the benefit of the RESPONSIBLE PARTY, their successors, and assigns.

Accepted By:
City of Crystal Lake

By: _____
(Signature)

Date: _____

Name: _____
(Print)

Title: _____
(Print)

Accepted By:
Responsible Party: Projades, LLC

By: _____
(Signature)

Date: _____

Name: _____
(Print)

Representing: _____
(Print)

PUBLIC UTILITY EASEMENT PROVISION

An easement for serving the subdivision and other property with electric and communications services is hereby reserved for and granted to:

Commonwealth Edison Company,
Cable Television Company or Franchises
and
AT&T, Grantees

their respective successors and assigns, jointly and severally, to install, operate, maintain, and remove, from time to time, facilities used in connection with overhead and underground transmission and distribution of electricity and sounds and signals in, over, under, across, along and upon the surface of the property shown within the dotted or dashed lines on the plat and marked "Easement" or "PUE", the property designated in the Declaration of Condominium and/or on this plat as "Common Elements", and the property designated on the plat as a "Common area or areas", 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 and common area or areas to serve improvements thereon, or on adjacent lots, and common area or areas, 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 over grantees' facilities or in, upon or over the property within the dotted lines marked "Easement" or "PUE" without the prior written consent of grantees. 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.
The term "Common Elements" shall have that meaning set forth for such term in Section 2(e) of "An act in relation to condominiums" (Illinois Revised Statutes, Ch. 30, par. 302(e)), as amended from time to time.

The term "common area or areas" is defined as a lot, parcel, or area of real property, the beneficial use and enjoyment of which is reserved in whole as an appurtenance to the separately owned lots, parcels or areas within the planned development, even though such areas may be otherwise designated on the plat by terms such as "outlots", "common elements", "open space", "open area", "common ground", "parking and common area". The terms "common area or areas" and "Common Elements" includes real property surfaced with interior driveways and walkways, but excludes real property physically occupied by a building, Service Business District or structures such as a pool or retention pond, or mechanical equipment.

Relocation of facilities will be done by Grantees at cost of Grantor/Lot Owner, upon written request.

An easement is hereby reserved for and granted to NICOR, its successors and assigns to install, operate, maintain, repair, replace and remove facilities used in connection with the transmission and distribution of natural gas in, over, under, across, along and upon the surface of the property shown within the dotted or dashed lines on the plat and marked "Easement", "Common Area or Areas", and streets and alleys, whether public or private, and the property designated in the Declaration of Condominium and/or on this plat as "Common Elements", together with the right to install required service connections over or under the surface of each lot and "Common Area or Areas" to serve improvements thereon, or on adjacent lots, and Common Area or Areas, and to serve other property, adjacent or otherwise, and the right to remove obstructions, including but not limited to, trees, bushes, roots and fences, as may be reasonably required incident to the rights herein given, and the right to enter upon the property for all such purposes. Obstructions shall not be placed over NICOR's facilities or in, upon or over the property identified on this plat for utility purposes without prior written consent of NICOR. After installation of any such facilities, the grade of the property shall not be altered in a manner so as to interfere with the proper operation and maintenance thereof.
The term "Common Elements" shall have that meaning set forth for such term in Section 605/2(e) of the "Condominium Property Act" (Illinois Compiled Statutes, Ch. 765, Sec. 605/2(e)), as amended from time to time.
The term "common area or areas" is defined as a lot, parcel, or area of real property, including real property surfaced with interior driveways and walkways, the beneficial use and enjoyment of which is reserved in whole as an appurtenance to the separately owned lots, parcels or areas within the property, even though such areas may be designated on this plat by other terms.

NICOR GAS EASEMENT PROVISION

An easement is hereby reserved for and granted to NORTHERN ILLINOIS GAS COMPANY, an Illinois Corporation, doing business as NICOR GAS COMPANY, its successors and assigns (hereafter "Nicor") to install, operate, maintain, repair, replace and remove, facilities used in connection with the transmission and distribution of nature gas in, over, across, along and upon the surface of the property shown on this plat marked "Easements", "Utility Easement", "Public Utility Easement" "P.U.E.", Public Utility & Drainage Easement", "P.U. & D.E.", "Common Areas or Areas" (or similar designations), street and alleys, whether public or private, and the property designated in the Declaration of Condominium and/or on this Plat as "Common Elements" together with the right to install required service connections over or under the surface of each lot and Common Area or Areas to serve improvements thereon, or on adjacent lots, and Common Area or Areas, and to serve other property, adjacent or otherwise, and the right to remove obstructions, including but not limited to, trees, bushes, roots and fences, as may be reasonably required incident to the right herein given, and the right to enter upon the property for all such purposes. Obstructions shall not be placed over Nicor facilities or in, upon or over the property identified on this plat for utility purposes without the prior written consent of Nicor. After installation of any such facilities, the grade of the property shall not be altered in a manner, so as to, interfere with the proper operation and maintenance thereof.

The term "Common Elements" shall have the meaning set forth for such term in Section 605/2(e) of the Condominium Property Act" (Illinois Compiled Statutes, Ch. 765, Sec. 605/2(e)), as amended from time to time.

The term "Common Area or Areas" is defined as a lot, parcel or area of real property, including real property surfaced with interior driveways and walkways, the beneficial use and enjoyment of which is reserved in whole as an appurtenance to the separately owned lots, parcels or areas within the property, even though such areas may be designated on this plat by other terms.

MUNICIPAL UTILITY EASEMENT PROVISION

Municipal Utility Easement (MUE): An easement for serving the subdivision and other property with domestic water, sanitary sewer and storm water 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" (M.U.E.) 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 maintain the surface of that portion of the Municipal Utility Easement which is located on such party's property so that it is in good condition for its intended purpose as a Municipal Utility Easement (which maintenance shall include, but shall not be limited to, the regular seeding, watering and mowing of all lawns). No titleholder of any part or portion of the Municipal Utility Easement (or any party acting on behalf of the titleholder) shall:

i. Install, construct, erect, place or plant any building, structures, improvements or vegetation (other than grass or approved plantings) upon the Municipal Utility Easement, 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 Municipal Utility Easement.

Said easements may be used for driveways and parking. However, the grade of the subdivided property shall not be altered in any manner so as to interfere with the proper operation and maintenance thereof, or with the surface drainage thereon. The property owner and or the property owner association are completely responsible for landscape and/or paving restoration, should maintenance of the utility be required.

The City of Crystal Lake is responsible of repairing water services between the water main, to and including the buffalo box. The property owner and/or the property owner's association are responsible for the restoration of the surface after any such water service repair.

Only perpendicular crossings of the M.U.E. are permitted by public utilities. The M.U.E.'s are exclusive of the blanket easement.

STORMWATER MANAGEMENT EASEMENT (SME) PROVISION

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 Stormwater Management Easement 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 Stormwater Management Easement free of all grass clippings, leaves, or other related or foreign materials.

No titleholder of any part or portion of the Stormwater Management Easement (or any party acting on behalf of the titleholder) shall:

i. Construct, install, direct, or place or plant any building, structures, improvements or vegetation (other than grass or approved plantings) upon the Stormwater Management Easement including, but not limited to, fences, walls, patios, sheds or posts, or

ii. Alter, modify, or change in any way the topography or elevations of the Stormwater Management Easement.

Maintenance of the storm sewers and storm structures within the Stormwater Management Easement shall be the sole responsibility of the Association pursuant to the covenants contained herein.
The planting of shrubs, hedges, bushes, flowers, ornamental grasses, and lawn by any owner shall be permitted subject to a landscape plan approved by the City of Crystal Lake. However, the replacement of these items due to damage or removal resulting from repair of the stormwater management basin by the homeowner's association of the City of Crystal Lake and it successors and assigns shall be the responsibility of the owner.
If the City of Crystal Lake determines that the homeowner's association is in default of said maintenance obligations and upon fifteen (15) days notice to the homeowner's association served by certified mail, the City of Crystal Lake 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 of Crystal Lake 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 homeowner's association plus attorney's fees and court costs. Upon payment of said lien, the City of Crystal Lake shall issue the appropriate release of lien to the homeowner's association. It shall not be the obligation of the City of Crystal Lake to record the release of the lien but shall be the obligation of the party procuring the release

COUNTY CLERK'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, _____, County Clerk in McHenry County, Illinois do hereby certify that there are no delinquent general taxes, no unpaid current general taxes, no unpaid forfeited taxes, and no redeemable tax against any of the land included in the Plat.

I further certify that I have received all statutory fees in connection with the Plat.

Given under my hand and seal of the County at Woodstock, Illinois, this _____ day of _____, 2024 A.D.

_____
McHenry County Clerk

RECORDER'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

This instrument filed for record in the Recorder's office of McHenry County, Illinois, on this _____ day of _____, 2024 A.D., at ___ o'clock __M. and recorded as

Document Number: _____

_____
County Recorder

CITY COUNCIL CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

Plat approved by the City Council of Crystal Lake, Illinois, this _____ day of _____, A.D., 2023 A.D.

Signed this _____ day of _____ 2024 A.D.

_____ _____
Mayor Attest: City Clerk

PLANNING AND ZONING COMMISSION CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

Approved by the Planning and Zoning Commission of the City of Crystal Lake, Illinois, this _____ day of _____, 2024 A.D.

_____
Chairman

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)
) SS
COUNTY OF McHENRY)

I, Terry L. Van Alstine, an Illinois Registered Land Surveyor, do hereby certify that we have surveyed and subdivided the following described property, and that the Plat as drawn represents said survey and subdivision thereof;

Parcel 1: Lot 2 in Walnut Glen Subdivision of part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7, East of the Third Principal Meridian, according to the Plat thereof recorded July 17, 2003 as Document No. 2003R0094417, in McHenry County, Illinois.

Parcel 2: Part of Crabapple Drive (Vacated per Ordinance Document No. 2008R045231) as originally dedicated per Document No. 2003R056448 and depicted in the Final Plat of Walnut Glen Subdivision, being a Subdivision of part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7 East of the Third Principal Meridian, according to the Plat thereof recorded July 17, 2003R0094417, described as follows: Beginning at the Northwest corner of Lot 2 in said Walnut Glen Subdivision; thence South 00 degrees 17 minutes 12 seconds East along the East line of said Crabapple Drive, 375.02 feet; thence Southeasterly 24.93 feet along said East line, being a curve to the left having a radius of 120.00 feet, the chord of bears South 06 degrees 14 minutes 16 seconds East, 24.88 feet; thence South 12 degrees 11 minutes 21 seconds East along said East line, 55.37 feet to the South line of property described in Document No. 812213, extended East; thence South 89 degrees 42 minutes 48 seconds West along said South line extended, 44.00 feet to the Southeast corner of said property lands; thence North 00 degrees 17 minutes 12 seconds West along the East line thereof and the West line of said Crabapple Drive 452.43 feet to the South line of Bard Road as dedicated in said Walnut Glen Subdivision; thence North 86 degrees 49 minutes 15 seconds East along said South line 30.04 feet to the Place of Beginning, in McHenry County, Illinois.

I, further certify, that Derbyshire Townhomes Subdivision contains: 5.312 Acres, 231,396± Sq.Ft.

I, further certify, that the property, as described, lies within the corporate limits of the City of Crystal Lake, Illinois, which has adopted a comprehensive plan.

I, further certify; that based upon examination of the Flood Insurance Rate Map of McHenry County, Illinois, Panel #17111C0326J with an effective date of November 16, 2006 indicates subject property residing within Zone "X" an area determined to be outside the 0.2% chance of annual flooding.

I, further certify; that upon completion of construction, concrete monuments, as shown, and 5/8" iron bars are/will be set at all lot corners and points of change in alignment, as required by the Plat Act (765 ILCS 205/1).

I, further certify; that these professional service conforms to the current Illinois Minimum Standards applicable to a Boundary Survey, as it applies to a Final Plat of Subdivision. All distances are given in feet and decimal thereof.

Given under my hand and seal at, Woodstock, Illinois this the 13th., day of March, 2024.

_____
Illinois Registered Professional Land Survey No. 035-3055
Vanderstappen Land Surveying, Inc.
Design Firm No. 184-002792
Expires: April 30, 2025

N

CLIENT: PROJADES, LLC
DRAWN BY: TVA CHECKED BY: APG
SCALE: 1"=30' SEC. 12 T. 43 R. 7 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 18-12-179-005
JOB NO.: 230777 I.D. FPS
FIELDWORK COMP.: _____ BK. ____ PG. ____
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: _____

Developer & Owner:
Projades, LLC
33 West Higgins Road
Barrington, Illinois 60010
Phone: 841-670-6710

Mail To:
Ram Prashantha
Projades, LLC
33 West Higgins Road
Barrington, Illinois 60010

REVISIONS

NO.	DATE	DESCRIPTION	BY
1.	9/06/23	ORIGINALLY PLATTED	TVA
2.	3/13/24	REVISED PER CITY REVIEW	TVA

DERBYSHIRE TOWNHOMES SUB'D SHEET NO. 2 OF 2

Y:\PLATS\2023\0600-0799\230777_V-230777\230777-FPS-GRID.dwg-Layout2-3/13/2024 4:38 PM

ISSUED FOR PERMIT

FINAL SITE IMPROVEMENT PLANS

FOR

BARD ESTATES

BARD ROAD & HUNTLEY ROAD
CRYSTAL LAKE, ILLINOIS

CALL J.U.L.I.E. 1-800-892-0123
WITH THE FOLLOWING:
COUNTY MCHENRY
CITY, TOWNSHIP CRYSTAL LAKE,GRAFTON
SEC. & SEC. NO. SEC 12, T43N, R7E

48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN. & HOLIDAYS

DEVELOPER

PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

ADVANTAGE NOTE

ADVANTAGE CONSULTING ENGINEERS IS TO BE NOTIFIED AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION. STAKING REQUESTS FIVE (5) DAYS NOTICE BETWEEN SEPTEMBER 15th AND DECEMBER 15th AND SHALL BE INCLUDED IN THE PRECONSTRUCTION MEETINGS

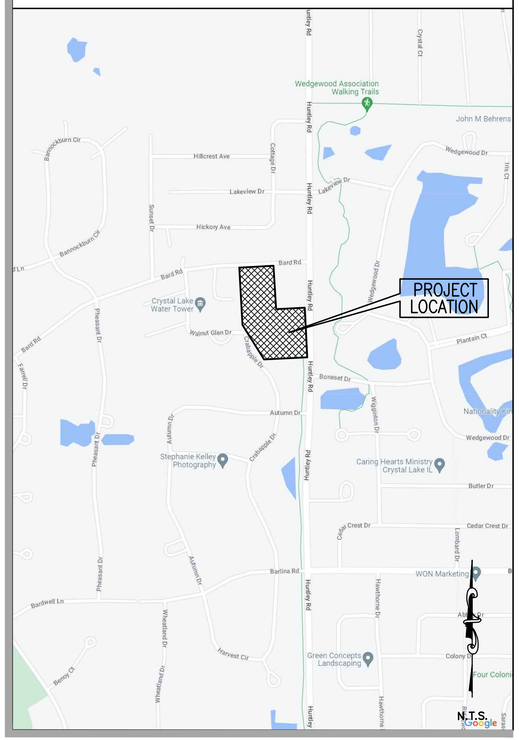
THESE PLANS ARE COLOR CODED. CONTRACTOR/REVIEWER WILL NEED TO PRINT IN COLOR OR VIEW PDF.

BENCHMARK

ELEVATION:
DESCRIPTION: SEE SHEET EX1 FOR BENCHMARK INFORMATION

EXISTING TOTAL SITE AREA: 5.3 ACRES
PROPOSED PROJECT AREA: 5.3 ACRES

LOCATION MAP



INDEX

SHEET #	SHEET I.D.	SHEET DESCRIPTION
1	C1	COVER SHEET
2	TS1	GENERAL NOTES AND TYPICAL SECTIONS
3	EX1	EXISTING CONDITIONS PLAN
4	L1	GEOMETRIC PLAN
5	G1	GRADING PLAN
6	U1	UTILITY PLAN
7-8	SE1-SE2	STORM WATER POLLUTION PREVENTION PLAN
9	SE3	SOIL EROSION AND SEDIMENT CONTROL PLAN
10	S1	SPECIFICATIONS
11-13	D1-D3	DETAILS
14	DR1	DRAINAGE EXHIBIT - PROPOSED CONDITION
15	DR2	DRAINAGE EXHIBIT - EXISTING CONDITION
16	DR3	DRAINAGE EXHIBIT - INLET AREA MAP

REVISIONS

ORIGINAL PLAN DATE: AUGUST 21, 2023

#	SHEET #	REMARKS	DATE
1	ALL	REVISED PER VILLAGE	01/05/24
2	ALL	REVISED PER VILLAGE	04/01/24

ENGINEER
WILLIAM J ZALEWSKI, P.E.
BILLZ@ACENG.US

ILLINOIS REGISTRATION NO.: 062-046121
EXPIRATION DATE: 11/30/2025

PROFESSIONAL DESIGN FIRM NO.: 184-007386
EXPIRATION DATE: 4/30/2025

04/01/2024
DATE

WILLIAM J. ZALEWSKI
062-46121
REGISTERED PROFESSIONAL
ENGINEER OF ILLINOIS

THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED VOID WITHOUT THE SIGNATURE , SEAL, AND EXPIRATION DATE OF SEAL OF THE ENGINEER

ACE

23-014
BARD EST
APR 01, 2024

ADVANTAGE CONSULTING ENGINEERS
80 MAIN STREET - SUITE 17 - LEMONT, ILLINOIS 60439
847-260-4758
www.aceng.us

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GRAPHIC SCALE 1"= 30'

0 15' 30' 60'

BENCHMARKS

SEE PLAN VIEW ON THIS SHEET

NOTE
EXISTING TOPOGRAPHIC SURVEY & BOUNDARY PREPARED BY:
DEVELOPER

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17 - LEMONT, ILLINOIS 60439
630-503-2467
www.adengr.us

EXISTING CONDITIONS

BARD ESTATES
CRYSTAL LAKE, IL

PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

AUGUST 21, 2023
JOB: 23-014

SHEET:
EX1
3 OF 16

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PROJADES 33 W HIGGINS ROAD, SUITE 723-725 SOUTH BARRINGTON, IL 60010	GEOMETRIC PLAN BARD ESTATES CRYSTAL LAKE, IL	ADVANTAGE CONSULTING ENGINEERS 80 MAIN STREET - SUITE 17 - LEMONT, ILLINOIS 60439 630-520-2467 www.aceng.us

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

AUGUST 21, 2023
JOB: 23-014
SHEET: L1
4 OF 16

GRAPHIC SCALE 1"= 30'

0 15' 30' 60'

GRADING NOTES

1. ALL SPOT ELEVATIONS SHOWN AT CURB ARE TOP OF CURB/SIDEWALK ELEVATIONS.
2. ALL ELEVATIONS SHOWN ON PLANS ARE FINISHED GRADE ELEVATIONS.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE DURING CONSTRUCTION.
5. ALL PROPOSED GRADES SHALL MATCH EXISTING GRADES AT THE PROPERTY LINE.
6. SEE SPECIFICATIONS FOR SUBGRADE AND STRUCTURAL FILL COMPACTION REQUIREMENTS.
7. THE CROSS SLOPE ON ALL SIDEWALKS SHALL NOT EXCEED 1.5%.
8. ALL WORK SHALL CONFORM TO THE 2018 EDITION OF THE STATE OF ILLINOIS ACCESSIBILITY CODE AND/OR THE 2010 EDITION OF THE AMERICANS WITH DISABILITY ACT (ADA) WHICHEVER IS MORE RESTRICTIVE.

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET - SUITE 17 - LEMONT, ILLINOIS 60439
630-500-2467
www.adengr.us

GRADING PLAN

BARD ESTATES
CRYSTAL LAKE, IL

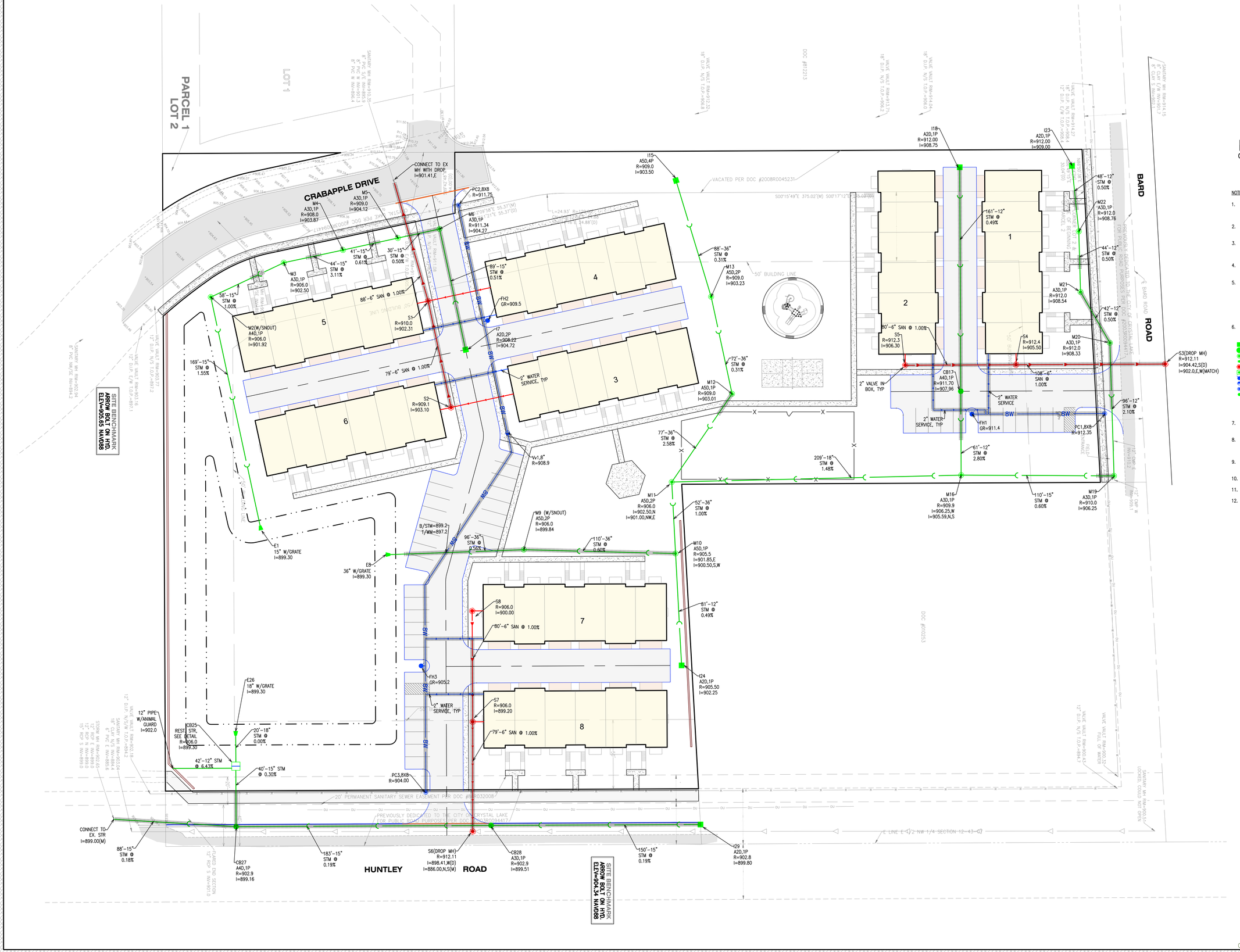
PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

AUGUST 21, 2023
JOB: 23-014

SHEET:
G1

5 OF 16

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GRAPHIC SCALE 1"= 30'

0 15' 30' 60'

NOTES FOR OVERALL UTILITY PLAN:

1. ALL 12" AND 15" STORM SEWERS SHALL BE RCP CL IV, ALL OTHER STORM SEWERS TO BE RCP CL III UNLESS NOTED OTHERWISE.
2. ALL SANITARY SEWER SHALL BE PVC SDR 26 UNLESS NOTED OTHERWISE.
3. ALL WATER MAIN SHALL BE D.I.P. CLASS 52 UNLESS NOTED OTHERWISE. WATER MAIN SHALL BE BETWEEN 6 FEET AND 8 FEET TO TOP OF PIPE.
4. THE UNDERDRAIN SHALL BE PERFORATED PVC SDR 26 OR ADS N-12.
5. THE FRAME & GRATE/LID FOR STORM STRUCTURES SHALL BE AS FOLLOWS:

   1P: NEENAH R-1713, TYPE G OPEN GRATE
   1C: NEENAH R-1713, TYPE B CLOSED LID
   2P: NEENAH R-2580-C FRAME & TYPE G OPEN GRATE
   4P: SPECIAL GRATE
6. UTILITY STRUCTURE SYMBOL LEGEND:

   M36: MANHOLE, STRUCTURE # 36
   I: INLET
   CB: CATCH BASIN
   M: MANHOLE
   E: FLARED END SECTION WITH RIP RAP
   S: SANITARY MANHOLE
   NP: NYLOPLAST
   FH: FIRE HYDRANT
   Vv: VALVE VAULT
   PC: PRESSURE CONNECTION
   CO: CLEAN OUT
   UD: PERFORATED UNDERDRAIN
   A40,1P: TYPE A, 4' DIA., TYPE OF FRAME AND GRATE/LID.
7. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES FOR CONNECTION OF PROPOSED UTILITIES.
8. CONTRACTOR SHALL COORDINATE ANY ROAD CLOSURES FOR OPEN CUT UTILITY WORK WITH THE APPROPRIATE AUTHORITIES.
9. FOLLOWING JULIE LOCATE, CONTRACTOR TO VERIFY CROSSINGS BY POTHOLE ALL CROSSINGS.
10. = TRENCH BACKFILL
11. PIPE CROSSING
12. ALL SANITARY SEWER AND STORM SEWERS ARE PRIVATE AND TO BE MAINTAINED BY HOA.

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET - SUITE 17 - LEMONT, ILLINOIS 60439
630-500-2467
www.adengr.us

UTILITY PLAN

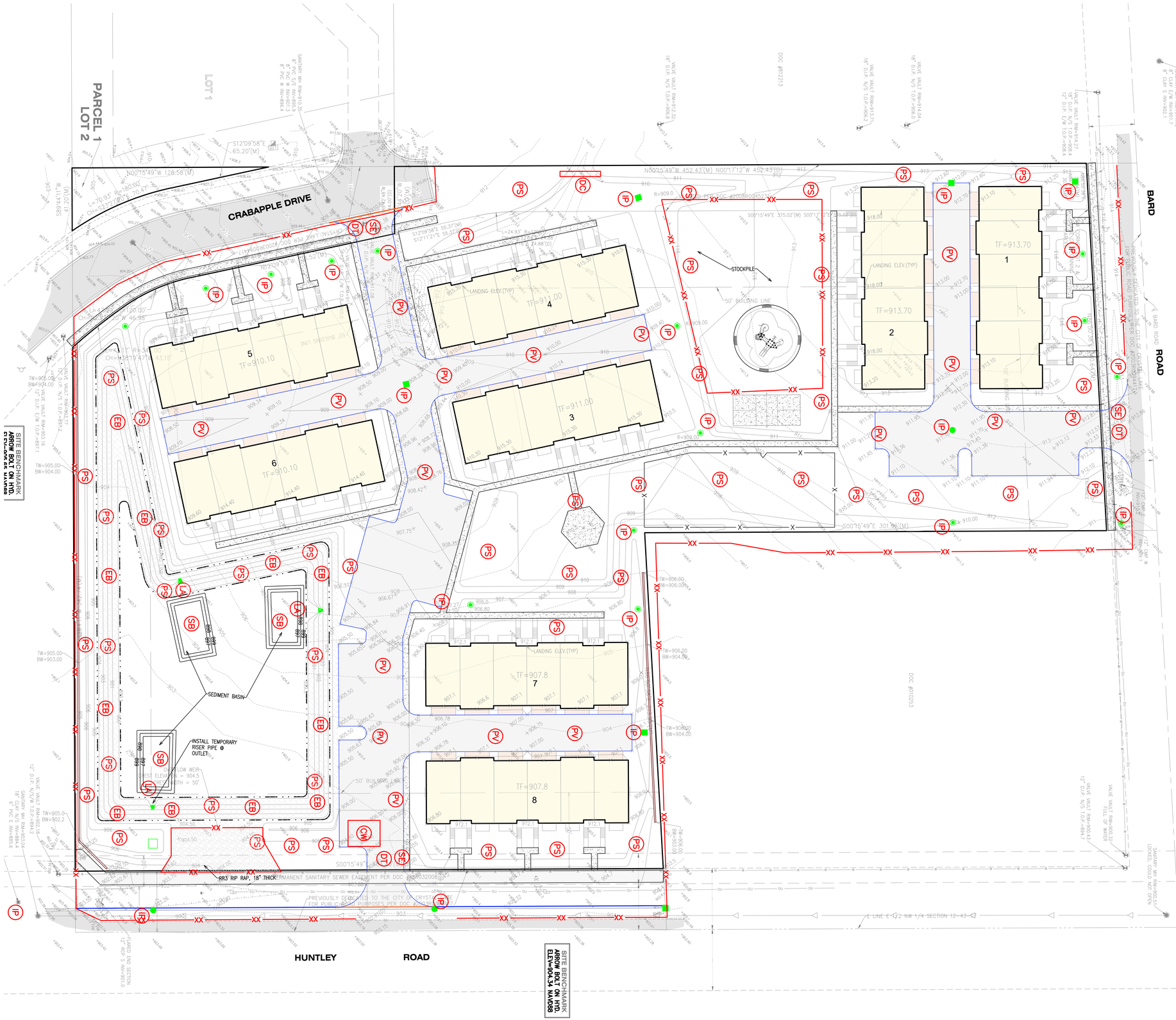
BARD ESTATES
CRYSTAL LAKE, IL

PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

AUGUST 21, 2023
JOB: 23-014

SHEET:
U1
6 OF 16

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EROSION CONTROL LEGEND

- SE — STABILIZED CONSTRUCTION ENTRANCE
- DT — DUST CONTROL
- PV — PAVING
- PS — PERMANENT SEEDING
- CW — CONCRETE WASHOUT
- IP — INLET PROTECTION
- LA — LINED APRON
- DC — DITCH CHECK
- SB — SEDIMENT BASIN
- XX — SILT FENCE OR SILTWORM

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION.
2. EARTHWORK CONTRACTOR SHALL MAINTAIN PROPER SITE DRAINAGE DURING CONSTRUCTION.
3. EARTHWORK CONTRACTOR RESPONSIBLE FOR DUST CONTROL.
4. EARTHWORK CONTRACTOR RESPONSIBLE FOR MAINTAINING THE PUBLIC ROADWAYS CLEAN AND FREE OF DIRT AND DEBRIS AT ALL TIMES.
5. OTHER EROSION CONTROL MEASURES SHALL BE IMPLEMENTED SHOULD AN INSPECTION OF THE SITE INDICATE A DEFICIENCY.

CRYSTAL LAKE – STANDARD SOIL EROSION AND SEDIMENT CONTROL NOTES

1. Control measures shall meet the minimum standards and specifications of the Illinois Urban Manual unless stated otherwise. [Amended 11-17-2020 by Ord. No. 7671]
2. Soil disturbance shall be conducted in such a manner as to minimize erosion. Areas of the development site that are not to be disturbed shall be protected from construction traffic or other disturbance until final stabilization is achieved.
3. Soil stabilization measures shall consider the time of year, development site conditions and the use of temporary or permanent measures.
4. Stabilization by seeding shall include topsoil placement and fertilization, as necessary.
5. Native seed mixtures shall include rapid-growing annual grasses or small grains to provide initial, temporary soil stabilization.
6. Off-site property shall be protected from erosion and sedimentation. Velocity dissipation devices shall be placed at concentrated discharge locations and along the length of any outfall channel, as necessary to prevent erosion.
7. Sediment control measures shall be installed prior to the disturbance of tributary areas.
8. Stabilization of disturbed areas shall be initiated immediately whenever any clearing, grading, excavating or other earth-disturbing activities have permanently ceased on any portion of the development site, or temporarily ceased on any portion of the development site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas shall be initiated within one working day of permanent or temporary cessation of earth-disturbing activities and shall be completed as soon as possible, but not later than 14 calendar days from the initiation of stabilization work in an area. Exceptions to these time frames are specified below:

   a. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable; and

   b In areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method may be used.

9. Disturbance of steep slopes shall be minimized. Areas or embankments having slopes steeper than 3:1 shall be stabilized with staked-in-place sod, erosion control blankets in combination with seeding, or an equivalent control measure.
10. Perimeter control measures shall be provided downslope and perpendicular to the flow of runoff from disturbed areas, where the tributary area is greater than 5,000 square feet, and where runoff will flow in a sheet flow manner. Perimeter erosion control shall also be provided at the base of soil stockpiles.
11. The stormwater management system shall be protected from erosion and sedimentation downslope from disturbed areas. Inlet protection that reduces sediment loading, while allowing runoff to enter the inlet, shall be required for all storm sewers. Check dams, or an equivalent control measure, shall be required for all channels. Filter fabric inlet protection and straw bale ditch checks are not acceptable control measures.
12. If dewatering services are used, discharges shall be routed through an effective sediment control measure (e.g., sediment trap or an equivalent control measure). The enforcement officer shall be notified prior to the commencement of dewatering activities.
13. All temporary soil erosion and sediment control measures shall be removed within 30 days after final stabilization of the development site is achieved or after the temporary measures are no longer necessary. Trapped sediment shall be removed and disturbed areas shall be permanently stabilized.
14. Stockpiled soil and materials shall be removed from flood hazard areas at the end of each work day. Soil and materials stockpiled in WMC or buffer areas shall be placed on timber mats, or an equivalent control measure.
15. Effective control measures shall be utilized to minimize the discharge of pollutants from the development site. At a minimum, control measures shall be implemented in order to:

   a Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash water; and

   b Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, vehicle fluids, sanitary waste, and other materials present on the development site to precipitation and to stormwater.

16. Adequate receptacles shall be provided for the depositing of all construction material debris generated during the development process. The applicant shall not cause or permit the dumping, depositing, dropping, throwing, discarding or leaving of construction material debris upon or into any development site, channel, or WMC. The development site shall be maintained free of construction material debris.
17. The enforcement officer may require additional or alternate soil erosion and sediment control measures, based on development-site-specific considerations and the effectiveness of the installed control measures.

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17 - LEMONT, ILLINOIS 60439
630-500-2467
www.adengr.us

SOIL EROSION AND SEDIMENT CONTROL PLAN

BARD ESTATES
CRYSTAL LAKE, IL

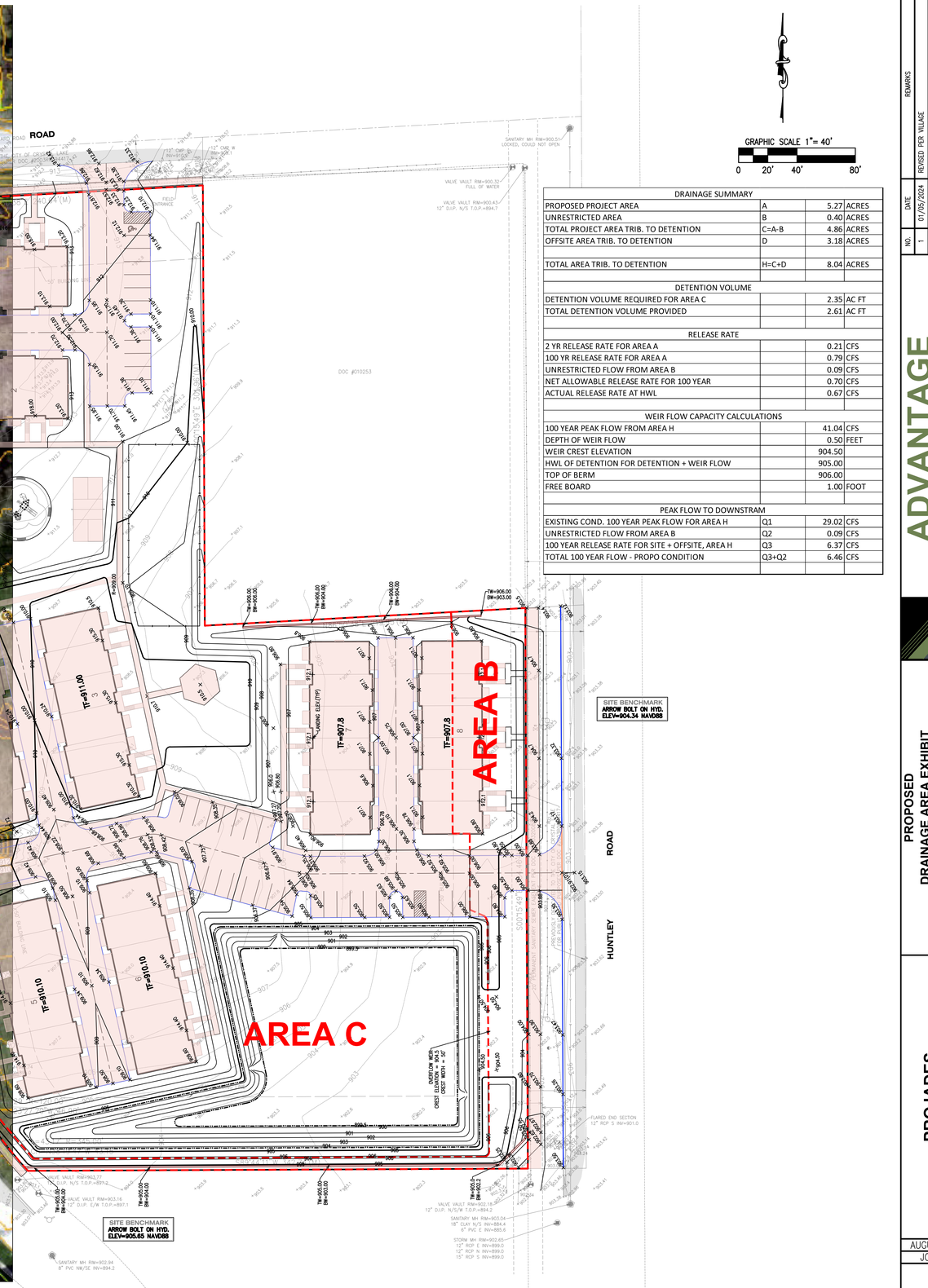
PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

AUGUST 21, 2023
JOB: 23-014

SHEET:
SE3
9 OF 16

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GRAPHIC SCALE 1"= 40'

0 20' 40' 80'

DRAINAGE SUMMARY			
PROPOSED PROJECT AREA	A	5.27	ACRES
UNRESTRICTED AREA	B	0.40	ACRES
TOTAL PROJECT AREA TRIB. TO DETENTION	C=A-B	4.86	ACRES
OFFSITE AREA TRIB. TO DETENTION	D	3.18	ACRES
TOTAL AREA TRIB. TO DETENTION	H=C+D	8.04	ACRES
DETENTION VOLUME			
DETENTION VOLUME REQUIRED FOR AREA C		2.35	AC FT
TOTAL DETENTION VOLUME PROVIDED		2.61	AC FT
RELEASE RATE			
2 YR RELEASE RATE FOR AREA A		0.21	CFS
100 YR RELEASE RATE FOR AREA A		0.79	CFS
UNRESTRICTED FLOW FROM AREA B		0.09	CFS
NET ALLOWABLE RELEASE RATE FOR 100 YEAR		0.70	CFS
ACTUAL RELEASE RATE AT HWL		0.67	CFS
WEIR FLOW CAPACITY CALCULATIONS			
100 YEAR PEAK FLOW FROM AREA H		41.04	CFS
DEPTH OF WEIR FLOW		0.50	FEET
WEIR CREST ELEVATION		904.50	
HWL OF DETENTION FOR DETENTION + WEIR FLOW		905.00	
TOP OF BERM		906.00	
FREE BOARD		1.00	FOOT
PEAK FLOW TO DOWNSTRAM			
EXISTING COND. 100 YEAR PEAK FLOW FOR AREA H	Q1	29.02	CFS
UNRESTRICTED FLOW FROM AREA B	Q2	0.09	CFS
100 YEAR RELEASE RATE FOR SITE + OFFSITE, AREA H	Q3	6.37	CFS
TOTAL 100 YEAR FLOW - PROPO CONDITION	Q3+Q2	6.46	CFS

NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

ADVANTAGE
CONSULTING ENGINEERS
80 MAIN STREET, SUITE 17 - LEMONT, ILLINOIS 60439
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PROPOSED
DRAINAGE AREA EXHIBIT

BARD ESTATES
CRYSTAL LAKE, IL

PROJADES
33 W HIGGINS ROAD, SUITE 723-725
SOUTH BARRINGTON, IL 60010

AUGUST 21, 2023
JOB: 23-014

SHEET:
DR1
14 OF 16

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SOUTH BARRINGTON, IL 60010

EXISTING DRAINAGE AREA EXHIBIT

BARD ESTATES
CRYSTAL LAKE, IL

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NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

SHEET: **DR2** 15 OF 16

JOB: 23-014

AUGUST 21, 2023

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SOUTH BARRINGTON, IL 60010

INLET AREA EXHIBIT

BARD ESTATES
CRYSTAL LAKE, IL

ADVANTAGE
CONSULTING ENGINEERS
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630-520-2467
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NO.	DATE	REMARKS
1	01/05/2024	REVISED PER VILLAGE
2	04/01/2024	REVISED PER VILLAGE

AUGUST 21, 2023
JOB: 23-014
SHEET: DR3
16 OF 16

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DEMO	2	1	2														
SITE WORK	14		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
UTILITY	6		1	2	3	4	5	6									
EARCH WORK	8					1	2	3	4	5	6	7	8				
ROADS	2													1	2	3	
LANDSCAPE	2																
BUILDING 1 -2																	
- TEAM MEETING																	
- DEMOLITION - SIGHT PREP																	
- COMED	3																
- WATER	1																
- SEWER	1																
- EXCAVATION/GRADE	1																
- FOOTING / FOUNDATION / DRAINTILE	3																
- TOP OF FOUNDATION (SURVEY)																	
- WATER AND SEWER INSTALL	1																
- FRAMING (KNEE + HOUSE)	3																
- STEEL	1																
- ROOF	1																
- NICOR CONNECTION	1																
- WINDOWS /PATIO DOORS	1																
- STONES AND BRICKS	2																
- SIDING & EXT. TRIM	2																
- GUTTERS/DOWNSPOUTS	1																
- FRAMING (DECK)	2																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
DEMO																		
SITE WORK																		
UTILITY																		
EARCH WORK																		
ROADS																		
LANDSCAPE																		
BUILDING 1 -2																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED		1	2	3														
- WATER					1													
- SEWER					1													
- EXCAVATION/GRADE	1																	
- FOOTING / FOUNDATION / DRAINTILE	1	2	3															
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL				1														
- FRAMING (KNEE + HOUSE)		1	2	2	2	3												
- STEEL		1	1	1														
- ROOF					1		1											
- NICOR CONNECTION				1														
- WINDOWS /PATIO DOORS						1												
- STONES AND BRICKS						1	2											
- SIDING & EXT. TRIM								1	2									
- GUTTERS/DOWNSPOUTS									1									
- FRAMING (DECK)										1	2							

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
DEMO																		
SITE WORK																		
UTILITY																		
EARCH WORK																		
ROADS																		
LANDSCAPE																		
BUILDING 1 -2																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED																		
- WATER																		
- SEWER																		
- EXCAVATION/GRADE																		
- FOOTING / FOUNDATION / DRAINTILE																		
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL																		
- FRAMING (KNEE + HOUSE)																		
- STEEL																		
- ROOF																		
- NICOR CONNECTION																		
- WINDOWS /PATIO DOORS																		
- STONES AND BRICKS																		
- SIDING & EXT. TRIM																		
- GUTTERS/DOWNSPOUTS																		
- FRAMING (DECK)																		

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
DEMO												
SITE WORK												
UTILITY												
EARCH WORK												
ROADS												
LANDSCAPE												
BUILDING 1 -2												
- TEAM MEETING												
- DEMOLITION - SIGHT PREP												
- COMED												
- WATER												
- SEWER												
- EXCAVATION/GRADE												
- FOOTING / FOUNDATION / DRAINTILE												
- TOP OF FOUNDATION (SURVEY)												
- WATER AND SEWER INSTALL												
- FRAMING (KNEE + HOUSE)												
- STEEL												
- ROOF												
- NICOR CONNECTION												
- WINDOWS /PATIO DOORS												
- STONES AND BRICKS												
- SIDING & EXT. TRIM												
- GUTTERS/DOWNSPOUTS												
- FRAMING (DECK)												

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- DECK AND RAILING	2																
- PLUMBING	2																
- HVAC	2																
- ELECTRICAL	2																
- FIRE SPRINKLER	2																
- INSULATION	1																
- FIREPLACE (ELECTRIC)	1																
- DRYWALL	1																
- PAINT/STAIN	2																
- TILES	2																
- VANITY	1																
- FLOOR (HARD/LVT)	1																
- DOORS	1																
- TRIMS	1																
- CABINETS	1																
- COUNTER TOP	2																
- SHOWER DOOR	1																
- CARPET	1																
- STAIRS	1																
- SIDWALKS/DRIVEWAY	1																
- LANDSCAPING	1																
- APPLIANCES	1																
- CLEANUP AND OTHER TESTS	1																
- INSPECTIONS AND OC	1																
BUILDING 3-4																	
- TEAM MEETING																	

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**
- DECK AND RAILING											1	2						
- PLUMBING			1			1	1							2				
- HVAC						1	1							2				
- ELECTRICAL							1	2						2				
- FIRE SPRINKLER								1						2				
- INSULATION									1									
- FIREPLACE (ELECTRIC)									1									
- DRYWALL										1	1							
- PAINT/STAIN											1		2					
- TILES											1	2						
- VANITY												1						
- FLOOR (HARD/LVT)											1							
- DOORS											1							
- TRIMS												1						
- CABINETS												1						
- COUNTER TOP												1	2					
- SHOWER DOOR													1					
- CARPET													1					
- STAIRS												1						
- SIDWALKS/DRIVEWAY													1					
- LANDSCAPING													1					
- APPLIANCES													1					
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		
BUILDING 3-4																		
- TEAM MEETING																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**
- DECK AND RAILING																		
- PLUMBING																		
- HVAC																		
- ELECTRICAL																		
- FIRE SPRINKLER																		
- INSULATION																		
- FIREPLACE (ELECTRIC)																		
- DRYWALL																		
- PAINT/STAIN																		
- TILES																		
- VANITY																		
- FLOOR (HARD/LVT)																		
- DOORS																		
- TRIMS																		
- CABINETS																		
- COUNTER TOP																		
- SHOWER DOOR																		
- CARPET																		
- STAIRS																		
- SIDWALKS/DRIVEWAY																		
- LANDSCAPING																		
- APPLIANCES																		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		
BUILDING 3-4																		
- TEAM MEETING																		

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- DECK AND RAILING												
- PLUMBING												
- HVAC												
- ELECTRICAL												
- FIRE SPRINKLER												
- INSULATION												
- FIREPLACE (ELECTRIC)												
- DRYWALL												
- PAINT/STAIN												
- TILES												
- VANITY												
- FLOOR (HARD/LVT)												
- DOORS												
- TRIMS												
- CABINETS												
- COUNTER TOP												
- SHOWER DOOR												
- CARPET												
- STAIRS												
- SIDWALKS/DRIVEWAY												
- LANDSCAPING												
- APPLIANCES												
- CLEANUP AND OTHER TESTS												
- INSPECTIONS AND OC												
BUILDING 3-4												
- TEAM MEETING												

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- DEMOLITION - SIGHT PREP																	
- COMED	3																
- WATER	1																
- SEWER	1																
- EXCAVATION/GRADE	1																
- FOOTING / FOUNDATION / DRAINTILE	3																
- TOP OF FOUNDATION (SURVEY)																	
- WATER AND SEWER INSTALL	1																
- FRAMING (KNEE + HOUSE)	3																
- STEEL	1																
- ROOF	1																
- NICOR CONNECTION	1																
- WINDOWS /PATIO DOORS	1																
- STONES AND BRICKS	2																
- SIDING & EXT. TRIM	2																
- GUTTERS/DOWNSPOUTS	1																
- FRAMING (DECK)	2																
- DECK AND RAILING	2																
- PLUMBING	2																
- HVAC	2																
- ELECTRICAL	2																
- FIRE SPRINKLER	2																
- INSULATION	1																
- FIREPLACE (ELECTRIC)	1																
- DRYWALL	1																
- PAINT/STAIN	2																
- TILES	2																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
- DEMOLITION - SIGHT PREP																		
- COMED																		
- WATER												1	2	3				
- SEWER															1			
- EXCAVATION/GRADE															1			
- FOOTING / FOUNDATION / DRAINTILE											1							
- TOP OF FOUNDATION (SURVEY)											1	2	3					
- WATER AND SEWER INSTALL																		
- FRAMING (KNEE + HOUSE)														1				
- STEEL												1	2	2	2	3		
- ROOF												1	1	1				
- NICOR CONNECTION															1		1	
- WINDOWS /PATIO DOORS														1				
- STONES AND BRICKS																1		
- SIDING & EXT. TRIM																1	2	
- GUTTERS/DOWNSPOUTS																		1
- FRAMING (DECK)																		
- DECK AND RAILING																		
- PLUMBING																		
- HVAC													1			1	1	
- ELECTRICAL																1	1	
- FIRE SPRINKLER																	1	2
- INSULATION																		1
- FIREPLACE (ELECTRIC)																		
- DRYWALL																		
- PAINT/STAIN																		
- TILES																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
- DEMOLITION - SIGHT PREP																		
- COMED																		
- WATER																		
- SEWER																		
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- SIDING & EXT. TRIM																		
- GUTTERS/DOWNSPOUTS	2																	
- FRAMING (DECK)	1																	
- DECK AND RAILING		1	2															
- PLUMBING			1	2														
- HVAC						2												
- ELECTRICAL						2												
- FIRE SPRINKLER						2												
- INSULATION						2												
- FIREPLACE (ELECTRIC)	1																	
- DRYWALL	1																	
- PAINT/STAIN		1	1															
- TILES			1		2													

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- DEMOLITION - SIGHT PREP												
- COMED												
- WATER												
- SEWER												
- EXCAVATION/GRADE												
- FOOTING / FOUNDATION / DRAINTILE												
- TOP OF FOUNDATION (SURVEY)												
- WATER AND SEWER INSTALL												
- FRAMING (KNEE + HOUSE)												
- STEEL												
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- NICOR CONNECTION												
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- STONES AND BRICKS												
- SIDING & EXT. TRIM												
- GUTTERS/DOWNSPOUTS												
- FRAMING (DECK)												
- DECK AND RAILING												
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- ELECTRICAL												
- FIRE SPRINKLER												
- INSULATION												
- FIREPLACE (ELECTRIC)												
- DRYWALL												
- PAINT/STAIN												
- TILES												

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- VANITY	1																
- FLOOR (HARD/LVT)	1																
- DOORS	1																
- TRIMS	1																
- CABINETS	1																
- COUNTER TOP	2																
- SHOWER DOOR	1																
- CARPET	1																
- STAIRS	1																
- SIDWALKS/DRIVEWAY	1																
- LANDSCAPING	1																
- APPLIANCES	1																
- CLEANUP AND OTHER TESTS	1																
- INSPECTIONS AND OC	1																
BUILDING 5-6																	
- TEAM MEETING																	
- DEMOLITION - SIGHT PREP																	
- COMED	3																
- WATER	1																
- SEWER	1																
- EXCAVATION/GRADE	1																
- FOOTING / FOUNDATION / DRAINTILE	3																
- TOP OF FOUNDATION (SURVEY)																	
- WATER AND SEWER INSTALL	1																
- FRAMING (KNEE + HOUSE)	3																
- STEEL	1																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
- VANITY																		
- FLOOR (HARD/LVT)																		
- DOORS																		
- TRIMS																		
- CABINETS																		
- COUNTER TOP																		
- SHOWER DOOR																		
- CARPET																		
- STAIRS																		
- SIDWALKS/DRIVEWAY																		
- LANDSCAPING																		
- APPLIANCES																		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		
BUILDING 5-6																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED																		
- WATER																		
- SEWER																		
- EXCAVATION/GRADE																		
- FOOTING / FOUNDATION / DRAINTILE																		
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL																		
- FRAMING (KNEE + HOUSE)																		
- STEEL																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**
- VANITY			1	2														
- FLOOR (HARD/LVT)				1														
- DOORS			1															
- TRIMS			1															
- CABINETS				1														
- COUNTER TOP				1														
- SHOWER DOOR				1	2													
- CARPET					1													
- STAIRS					1													
- SIDWALKS/DRIVEWAY				1														
- LANDSCAPING					1													
- APPLIANCES					1													
- CLEANUP AND OTHER TESTS					1													
- INSPECTIONS AND OC																		
BUILDING 5-6																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED					1	2	3											
- WATER								1										
- SEWER								1										
- EXCAVATION/GRADE				1														
- FOOTING / FOUNDATION / DRAINTILE				1	2	3												
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL							1											
- FRAMING (KNEE + HOUSE)					1	2	2	2	3									
- STEEL					1	1	1											

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- VANITY												
- FLOOR (HARD/LVT)												
- DOORS												
- TRIMS												
- CABINETS												
- COUNTER TOP												
- SHOWER DOOR												
- CARPET												
- STAIRS												
- SIDWALKS/DRIVEWAY												
- LANDSCAPING												
- APPLIANCES												
- CLEANUP AND OTHER TESTS												
- INSPECTIONS AND OC												
BUILDING 5-6												
- TEAM MEETING												
- DEMOLITION - SIGHT PREP												
- COMED												
- WATER												
- SEWER												
- EXCAVATION/GRADE												
- FOOTING / FOUNDATION / DRAINTILE												
- TOP OF FOUNDATION (SURVEY)												
- WATER AND SEWER INSTALL												
- FRAMING (KNEE + HOUSE)												
- STEEL												

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- ROOF	1																
- NICOR CONNECTION	1																
- WINDOWS /PATIO DOORS	1																
- STONES AND BRICKS	2																
- SIDING & EXT. TRIM	2																
- GUTTERS/DOWNSPOUTS	1																
- FRAMING (DECK)	2																
- DECK AND RAILING	2																
- PLUMBING	2																
- HVAC	2																
- ELECTRICAL	2																
- FIRE SPRINKLER	2																
- INSULATION	1																
- FIREPLACE (ELECTRIC)	1																
- DRYWALL	1																
- PAINT/STAIN	2																
- TILES	2																
- VANITY	1																
- FLOOR (HARD/LVT)	1																
- DOORS	1																
- TRIMS	1																
- CABINETS	1																
- COUNTER TOP	2																
- SHOWER DOOR	1																
- CARPET	1																
- STAIRS	1																
- SIDWALKS/DRIVEWAY	1																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
- ROOF																		
- NICOR CONNECTION																		
- WINDOWS /PATIO DOORS																		
- STONES AND BRICKS																		
- SIDING & EXT. TRIM																		
- GUTTERS/DOWNSPOUTS																		
- FRAMING (DECK)																		
- DECK AND RAILING																		
- PLUMBING																		
- HVAC																		
- ELECTRICAL																		
- FIRE SPRINKLER																		
- INSULATION																		
- FIREPLACE (ELECTRIC)																		
- DRYWALL																		
- PAINT/STAIN																		
- TILES																		
- VANITY																		
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- DOORS																		
- TRIMS																		
- CABINETS																		
- COUNTER TOP																		
- SHOWER DOOR																		
- CARPET																		
- STAIRS																		
- SIDWALKS/DRIVEWAY																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
- ROOF								1		1								
- NICOR CONNECTION							1											
- WINDOWS /PATIO DOORS									1									
- STONES AND BRICKS									1	2								
- SIDING & EXT. TRIM											1	2						
- GUTTERS/DOWNSPOUTS												1						
- FRAMING (DECK)													1	2				
- DECK AND RAILING														1	2			
- PLUMBING						1			1	1							2	
- HVAC									1	1							2	
- ELECTRICAL										1	2						2	
- FIRE SPRINKLER											1						2	
- INSULATION												1						
- FIREPLACE (ELECTRIC)												1						
- DRYWALL													1	1				
- PAINT/STAIN														1		2		
- TILES														1	2			
- VANITY															1			
- FLOOR (HARD/LVT)														1				
- DOORS														1				
- TRIMS															1			
- CABINETS															1			
- COUNTER TOP															1	2		
- SHOWER DOOR																1		
- CARPET																1		
- STAIRS															1			
- SIDWALKS/DRIVEWAY																1		

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- ROOF												
- NICOR CONNECTION												
- WINDOWS /PATIO DOORS												
- STONES AND BRICKS												
- SIDING & EXT. TRIM												
- GUTTERS/DOWNSPOUTS												
- FRAMING (DECK)												
- DECK AND RAILING												
- PLUMBING												
- HVAC												
- ELECTRICAL												
- FIRE SPRINKLER												
- INSULATION												
- FIREPLACE (ELECTRIC)												
- DRYWALL												
- PAINT/STAIN												
- TILES												
- VANITY												
- FLOOR (HARD/LVT)												
- DOORS												
- TRIMS												
- CABINETS												
- COUNTER TOP												
- SHOWER DOOR												
- CARPET												
- STAIRS												
- SIDWALKS/DRIVEWAY												

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- LANDSCAPING	1																
- APPLIANCES	1																
- CLEANUP AND OTHER TESTS	1																
- INSPECTIONS AND OC	1																
BUILDING 7-8																	
- TEAM MEETING																	
- DEMOLITION - SIGHT PREP																	
- COMED	3																
- WATER	1																
- SEWER	1																
- EXCAVATION/GRADE	1																
- FOOTING / FOUNDATION / DRAINTILE	3																
- TOP OF FOUNDATION (SURVEY)																	
- WATER AND SEWER INSTALL	1																
- FRAMING (KNEE + HOUSE)	3																
- STEEL	1																
- ROOF	1																
- NICOR CONNECTION	1																
- WINDOWS /PATIO DOORS	1																
- STONES AND BRICKS	2																
- SIDING & EXT. TRIM	2																
- GUTTERS/DOWNSPOUTS	1																
- FRAMING (DECK)	2																
- DECK AND RAILING	2																
- PLUMBING	2																
- HVAC	2																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
- LANDSCAPING																		
- APPLIANCES																		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		
BUILDING 7-8																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED																		
- WATER																		
- SEWER																		
- EXCAVATION/GRADE																		
- FOOTING / FOUNDATION / DRAINTILE																		
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL																		
- FRAMING (KNEE + HOUSE)																		
- STEEL																		
- ROOF																		
- NICOR CONNECTION																		
- WINDOWS /PATIO DOORS																		
- STONES AND BRICKS																		
- SIDING & EXT. TRIM																		
- GUTTERS/DOWNSPOUTS																		
- FRAMING (DECK)																		
- DECK AND RAILING																		
- PLUMBING																		
- HVAC																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**
- LANDSCAPING																1		
- APPLIANCES																1		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		
BUILDING 7-8																		
- TEAM MEETING																		
- DEMOLITION - SIGHT PREP																		
- COMED																		**1**
- WATER																		
- SEWER																		
- EXCAVATION/GRADE																	**1**	
- FOOTING / FOUNDATION / DRAINTILE																	**1**	**2**
- TOP OF FOUNDATION (SURVEY)																		
- WATER AND SEWER INSTALL																		
- FRAMING (KNEE + HOUSE)																		**1**
- STEEL																		**1**
- ROOF																		
- NICOR CONNECTION																		
- WINDOWS /PATIO DOORS																		
- STONES AND BRICKS																		
- SIDING & EXT. TRIM																		
- GUTTERS/DOWNSPOUTS																		
- FRAMING (DECK)																		
- DECK AND RAILING																		
- PLUMBING																		
- HVAC																		

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- LANDSCAPING												
- APPLIANCES												
- CLEANUP AND OTHER TESTS												
- INSPECTIONS AND OC												
BUILDING 7-8												
- TEAM MEETING												
- DEMOLITION - SIGHT PREP												
- COMED	2	3										
- WATER			1									
- SEWER			1									
- EXCAVATION/GRADE												
- FOOTING / FOUNDATION / DRAINTILE	3											
- TOP OF FOUNDATION (SURVEY)												
- WATER AND SEWER INSTALL		1										
- FRAMING (KNEE + HOUSE)	2	2	2	3								
- STEEL	1	1										
- ROOF			1		1							
- NICOR CONNECTION		1										
- WINDOWS /PATIO DOORS				1								
- STONES AND BRICKS				1	2							
- SIDING & EXT. TRIM						1	2					
- GUTTERS/DOWNSPOUTS							1					
- FRAMING (DECK)								1	2			
- DECK AND RAILING									1	2		
- PLUMBING	1			1	1							2
- HVAC				1	1							2

BARD ESTATES [VSP]		7/15	7/22	7/29	8/5	8/12	8/19	8/26	9/2	9/9	9/16	9/23	9/30	10/7	10/14	10/21	10/28
LAND DEVELOPMENT	WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- ELECTRICAL	2																
- FIRE SPRINKLER	2																
- INSULATION	1																
- FIREPLACE (ELECTRIC)	1																
- DRYWALL	1																
- PAINT/STAIN	2																
- TILES	2																
- VANITY	1																
- FLOOR (HARD/LVT)	1																
- DOORS	1																
- TRIMS	1																
- CABINETS	1																
- COUNTER TOP	2																
- SHOWER DOOR	1																
- CARPET	1																
- STAIRS	1																
- SIDWALKS/DRIVEWAY	1																
- LANDSCAPING	1																
- APPLIANCES	1																
- CLEANUP AND OTHER TESTS	1																
- INSPECTIONS AND OC	1																

BARD ESTATES [VSP]	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/3
LAND DEVELOPMENT	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
- ELECTRICAL																		
- FIRE SPRINKLER																		
- INSULATION																		
- FIREPLACE (ELECTRIC)																		
- DRYWALL																		
- PAINT/STAIN																		
- TILES																		
- VANITY																		
- FLOOR (HARD/LVT)																		
- DOORS																		
- TRIMS																		
- CABINETS																		
- COUNTER TOP																		
- SHOWER DOOR																		
- CARPET																		
- STAIRS																		
- SIDWALKS/DRIVEWAY																		
- LANDSCAPING																		
- APPLIANCES																		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		

BARD ESTATES [VSP]	3/10	3/17	3/24	3/31	4/7	4/14	4/21	4/28	5/5	5/12	5/19	5/26	6/2	6/9	6/16	6/23	6/30	7/7
LAND DEVELOPMENT	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
- ELECTRICAL																		
- FIRE SPRINKLER																		
- INSULATION																		
- FIREPLACE (ELECTRIC)																		
- DRYWALL																		
- PAINT/STAIN																		
- TILES																		
- VANITY																		
- FLOOR (HARD/LVT)																		
- DOORS																		
- TRIMS																		
- CABINETS																		
- COUNTER TOP																		
- SHOWER DOOR																		
- CARPET																		
- STAIRS																		
- SIDWALKS/DRIVEWAY																		
- LANDSCAPING																		
- APPLIANCES																		
- CLEANUP AND OTHER TESTS																		
- INSPECTIONS AND OC																		

BARD ESTATES [VSP]	7/14	7/21	7/28	8/4	8/11	8/18	8/25	9/1	9/8	9/15	9/22	9/29
LAND DEVELOPMENT	53	54	55	56	57	58	59	60	61	62	63	64
- ELECTRICAL					1	2						2
- FIRE SPRINKLER						1						2
- INSULATION							1					
- FIREPLACE (ELECTRIC)							1					
- DRYWALL								1	1			
- PAINT/STAIN									1		2	
- TILES									1	2		
- VANITY										1		
- FLOOR (HARD/LVT)									1			
- DOORS									1			
- TRIMS										1		
- CABINETS										1		
- COUNTER TOP										1	2	
- SHOWER DOOR											1	
- CARPET											1	
- STAIRS										1		
- SIDWALKS/DRIVEWAY											1	
- LANDSCAPING											1	
- APPLIANCES											1	
- CLEANUP AND OTHER TESTS												
- INSPECTIONS AND OC												

Bards Estate

Parking Lots/Drives

04/23/2024

Job Number: **994826**

Prepared by: CO

Powered by Wisconsin Lighting Lab, Inc.

NOTES

18' Poles, Footing
115w DRX Post Top Fixtures

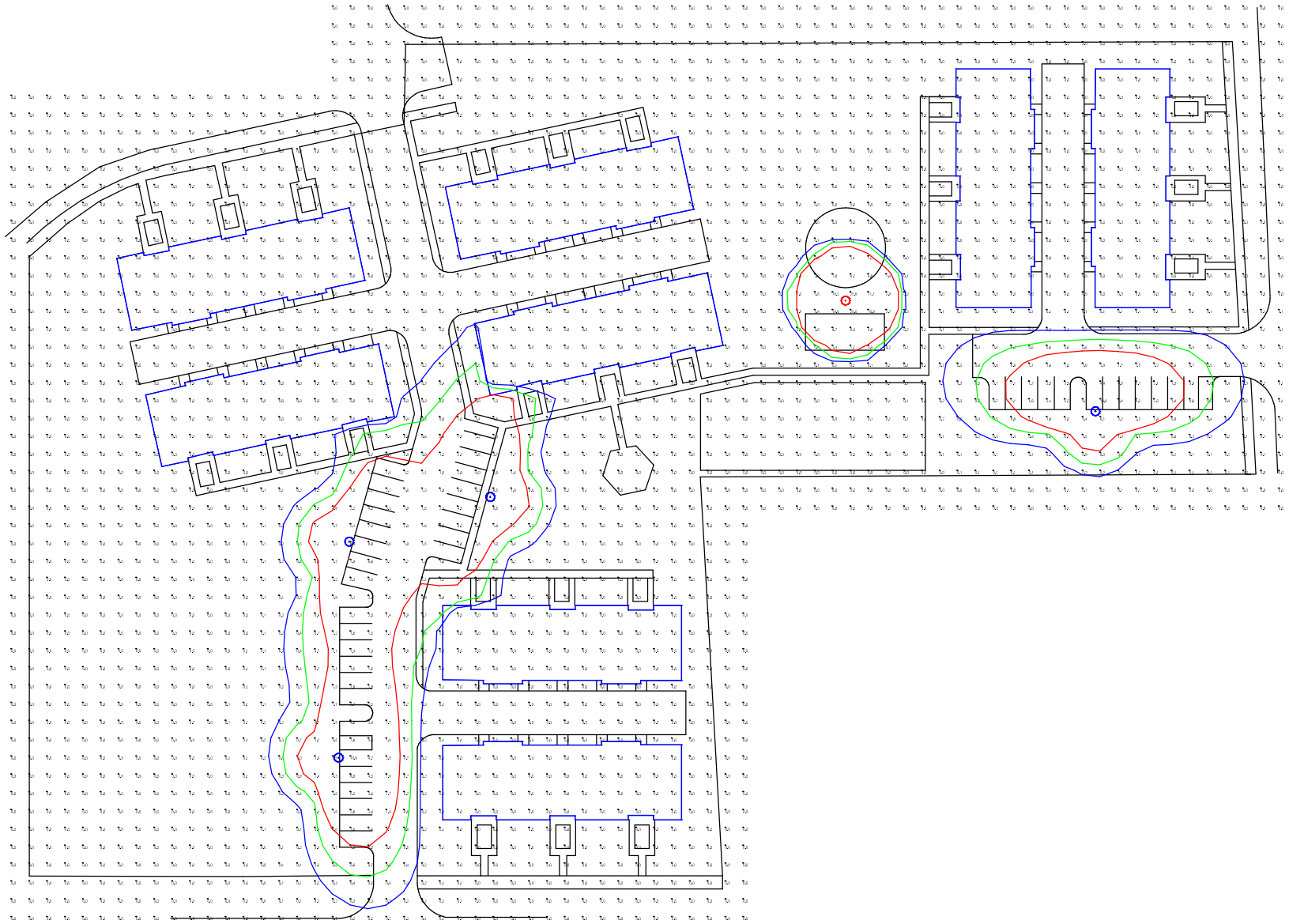
*Luminaire testing data is based on Illuminating Engineering Society (IES) standards under simulated and laboratory conditions. This design is based on information supplied by others, and individual field measurements may vary from computer-simulated calculations due to variables like (but not limited to) variation in electrical voltage, environmental conditions and other variable field characteristics. Typical field foot candle measurements may vary +/- 10%. For sports lighting, field measurements should be taken in accordance with IESNA RP-6-15. Conformance to facility and local codes is the responsibility of the owner and their representatives. This layout may not meet CA Title 24 and/or other local energy codes. If specific compliance is required, those details must be provided to your factory design representative.

**Satisfactory performance and safe use of LED sports lighting fixtures is dependent upon light poles, brackets, anchorage and other structural components being of adequate design and condition. The total combined Effective Projected Area (EPA) and weight of all fixtures, brackets and attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole. For sports lighting retrofit applications, it is the customer's responsibility to have a qualified inspector and/or engineer confirm the structural adequacy of the existing light poles assemblies. We are happy to quote new light poles and brackets if you have concerns about your existing materials.bonded

Specifications subject to change without notice.

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Photometric



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Fixture Schedule

Symbol	Qty	Label	LLF	Lum. Watts	Lum. Lumens
	5	WD-DRX-155-30-XX-3W	0.900	155	19156

Isoline Legend

Illuminance (Fc)

Color	Value
	0.25
	0.5
	1

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Extended Area	Illuminance	Fc	0.28	25.8	0.0	N.A.	N.A.

Specifications subject to change without notice.

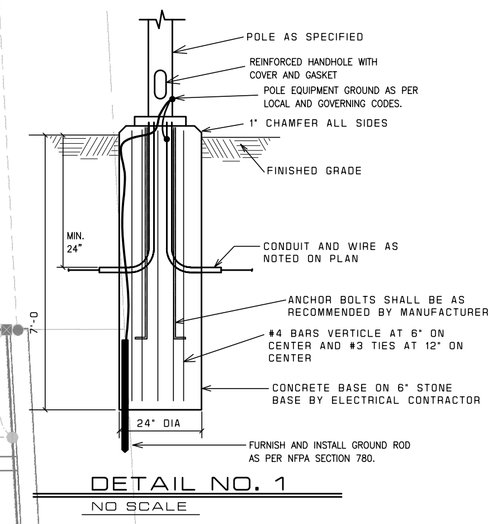
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ELECTRICAL SPECIFICATIONS

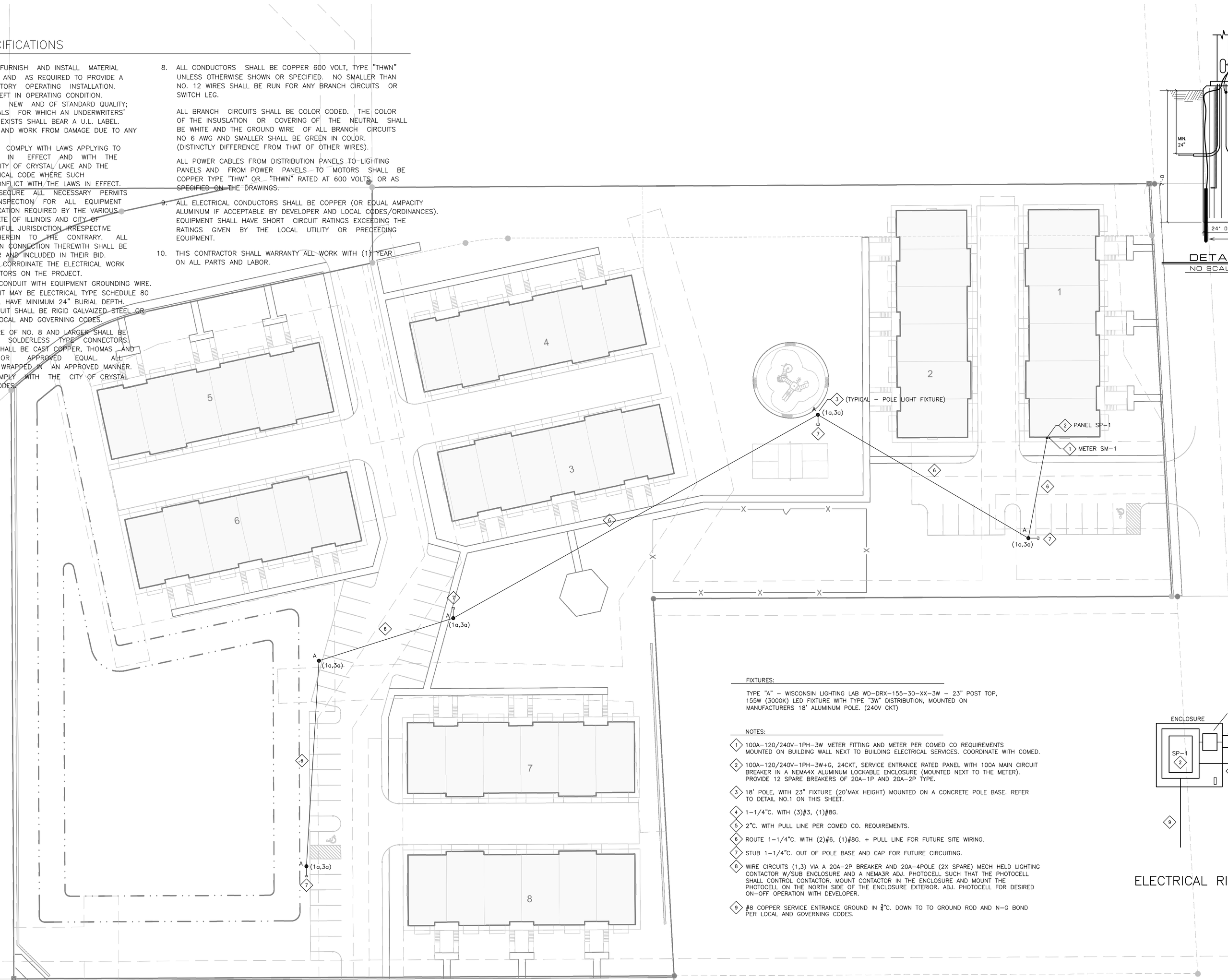
1. THIS CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL INDICATED ON DRAWINGS AND AS REQUIRED TO PROVIDE A COMPLETE AND SATISFACTORY OPERATING INSTALLATION. INSTALLATION SHALL BE LEFT IN OPERATING CONDITION.
2. ALL MATERIALS SHALL BE NEW AND OF STANDARD QUALITY; NO REJECTS. ALL MATERIALS FOR WHICH AN UNDERWRITERS' LABORATORIES STANDARD EXISTS SHALL BEAR A U.L. LABEL. PROTECT ALL EQUIPMENT AND WORK FROM DAMAGE DUE TO ANY CAUSE.
3. THE INSTALLATION SHALL COMPLY WITH LAWS APPLYING TO ELECTRICAL INSTALLATION IN EFFECT AND WITH THE REGULATIONS OF THE CITY OF CRYSTAL LAKE AND THE STATE OF ILLINOIS ELECTRICAL CODE WHERE SUCH REGULATIONS DO NOT CONFLICT WITH THE LAWS IN EFFECT. THIS CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND CERTIFICATES OF INSPECTION FOR ALL EQUIPMENT INCLUDED IN THE SPECIFICATION REQUIRED BY THE VARIOUS DEPARTMENTS OF THE STATE OF ILLINOIS AND CITY OF CRYSTAL LAKE HAVING LAWFUL JURISDICTION IRRESPECTIVE OF ANY STATEMENTS HEREIN TO THE CONTRARY. ALL FEES AND ASSESSMENTS IN CONNECTION THEREWITH SHALL BE PAID BY THIS CONTRACTOR AND INCLUDED IN THEIR BID.
4. THIS CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE OTHER CONTRACTORS ON THE PROJECT.
5. ALL WIRING SHALL BE IN CONDUIT WITH EQUIPMENT GROUNDING WIRE. ALL BELOW GRADE CONDUIT MAY BE ELECTRICAL TYPE SCHEDULE 80 PVC. ALL CONDUITS SHALL HAVE MINIMUM 24" BURIAL DEPTH. ALL ABOVE GROUND CONDUIT SHALL BE RIGID GALVAIZED STEEL OR IMC AS ACCEPTABLE BY LOCAL AND GOVERNING CODES.
6. ALL CONNECTIONS IN WIRE OF NO. 8 AND LARGER SHALL BE MADE WITH MECHANICAL SOLDERLESS TYPE CONNECTORS. CONNECTORS AND LUGS SHALL BE CAST COPPER, THOMAS AND BETTS, "TIGHT BIND" OR APPROVED EQUAL. ALL CONNECTIONS ARE TO BE WRAPPED IN AN APPROVED MANNER.
7. ALL EQUIPMENT SHALL COMPLY WITH THE CITY OF CRYSTAL LAKE ORDINANCES AND CODES.
8. ALL CONDUCTORS SHALL BE COPPER 600 VOLT, TYPE "THWN" UNLESS OTHERWISE SHOWN OR SPECIFIED. NO SMALLER THAN NO. 12 WIRES SHALL BE RUN FOR ANY BRANCH CIRCUITS OR SWITCH LEG.

   ALL BRANCH CIRCUITS SHALL BE COLOR CODED. THE COLOR OF THE INSULATION OR COVERING OF THE NEUTRAL SHALL BE WHITE AND THE GROUND WIRE OF ALL BRANCH CIRCUITS NO 6 AWG AND SMALLER SHALL BE GREEN IN COLOR. (DISTINCTLY DIFFERENCE FROM THAT OF OTHER WIRES).

   ALL POWER CABLES FROM DISTRIBUTION PANELS TO LIGHTING PANELS AND FROM POWER PANELS TO MOTORS SHALL BE COPPER TYPE "THW" OR "THWN" RATED AT 600 VOLTS, OR AS SPECIFIED ON THE DRAWINGS.
9. ALL ELECTRICAL CONDUCTORS SHALL BE COPPER (OR EQUAL AMPACITY ALUMINUM IF ACCEPTABLE BY DEVELOPER AND LOCAL CODES/ORDINANCES). EQUIPMENT SHALL HAVE SHORT CIRCUIT RATINGS EXCEEDING THE RATINGS GIVEN BY THE LOCAL UTILITY OR PRECEEDING EQUIPMENT.
10. THIS CONTRACTOR SHALL WARRANTY ALL WORK WITH (1) YEAR ON ALL PARTS AND LABOR.



DETAIL NO. 1
NO SCALE



FIXTURES:

TYPE "A" – WISCONSIN LIGHTING LAB WD-DRX-155-30-XX-3W – 23" POST TOP, 155W (3000K) LED FIXTURE WITH TYPE "3W" DISTRIBUTION, MOUNTED ON MANUFACTURERS 18' ALUMINUM POLE. (240V CKT)

NOTES:

1. 100A-120/240V-1PH-3W METER FITTING AND METER PER COMED CO REQUIREMENTS MOUNTED ON BUILDING WALL NEXT TO BUILDING ELECTRICAL SERVICES. COORDINATE WITH COMED.
2. 100A-120/240V-1PH-3W+G, 24CKT, SERVICE ENTRANCE RATED PANEL WITH 100A MAIN CIRCUIT BREAKER IN A NEMA4X ALUMINUM LOCKABLE ENCLOSURE (MOUNTED NEXT TO THE METER). PROVIDE 12 SPARE BREAKERS OF 20A-1P AND 20A-2P TYPE.
3. 18' POLE, WITH 23" FIXTURE (20'MAX HEIGHT) MOUNTED ON A CONCRETE POLE BASE. REFER TO DETAIL NO.1 ON THIS SHEET.
4. 1-1/4"C. WITH (3)#3, (1)#8G.
5. 2"C. WITH PULL LINE PER COMED CO. REQUIREMENTS.
6. ROUTE 1-1/4"C. WITH (2)#6, (1)#8G. + PULL LINE FOR FUTURE SITE WIRING.
7. STUB 1-1/4"C. OUT OF POLE BASE AND CAP FOR FUTURE CIRCUITING.
8. WIRE CIRCUITS (1,3) VIA A 20A-2P BREAKER AND 20A-4POLE (2X SPARE) MECH HELD LIGHTING CONTACTOR W/SUB ENCLOSURE AND A NEMA3R ADJ. PHOTOCELL SUCH THAT THE PHOTOCELL SHALL CONTROL CONTACTOR. MOUNT CONTACTOR IN THE ENCLOSURE AND MOUNT THE PHOTOCELL ON THE NORTH SIDE OF THE ENCLOSURE EXTERIOR. ADJ. PHOTOCELL FOR DESIRED ON-OFF OPERATION WITH DEVELOPER.
9. #8 COPPER SERVICE ENTRANCE GROUND IN ¾"C. DOWN TO TO GROUND ROD AND N-G BOND PER LOCAL AND GOVERNING CODES.

ELECTRICAL RISER DIAGRAM

SDGI
Systems Design Group, Int.
Design Firm# 184.008218-0002
6765 Revere Court
Gurnee, IL 60031
847.525.7850
gryzik@comcast.net

STATE OF ILLINOIS – REGISTERED PROFESSIONAL ENGINEER – RONALD R. GRYZIK – 060506

PROJECT:
THE RESIDENCES OF CRYSTAL POINT
CRYSTAL LAKE, IL.

NO.	DATE	DESCRIPTION
	4.26.24	ISSUE FOR PERMIT

ELECTRICAL
SITE LIGHTING PLAN
& DETAILS

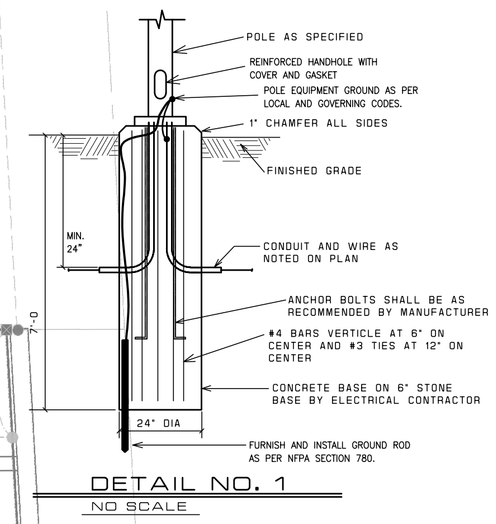
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Drawn By: RRG	
Project Number: 2024-5	

ELECTRICAL SPECIFICATIONS

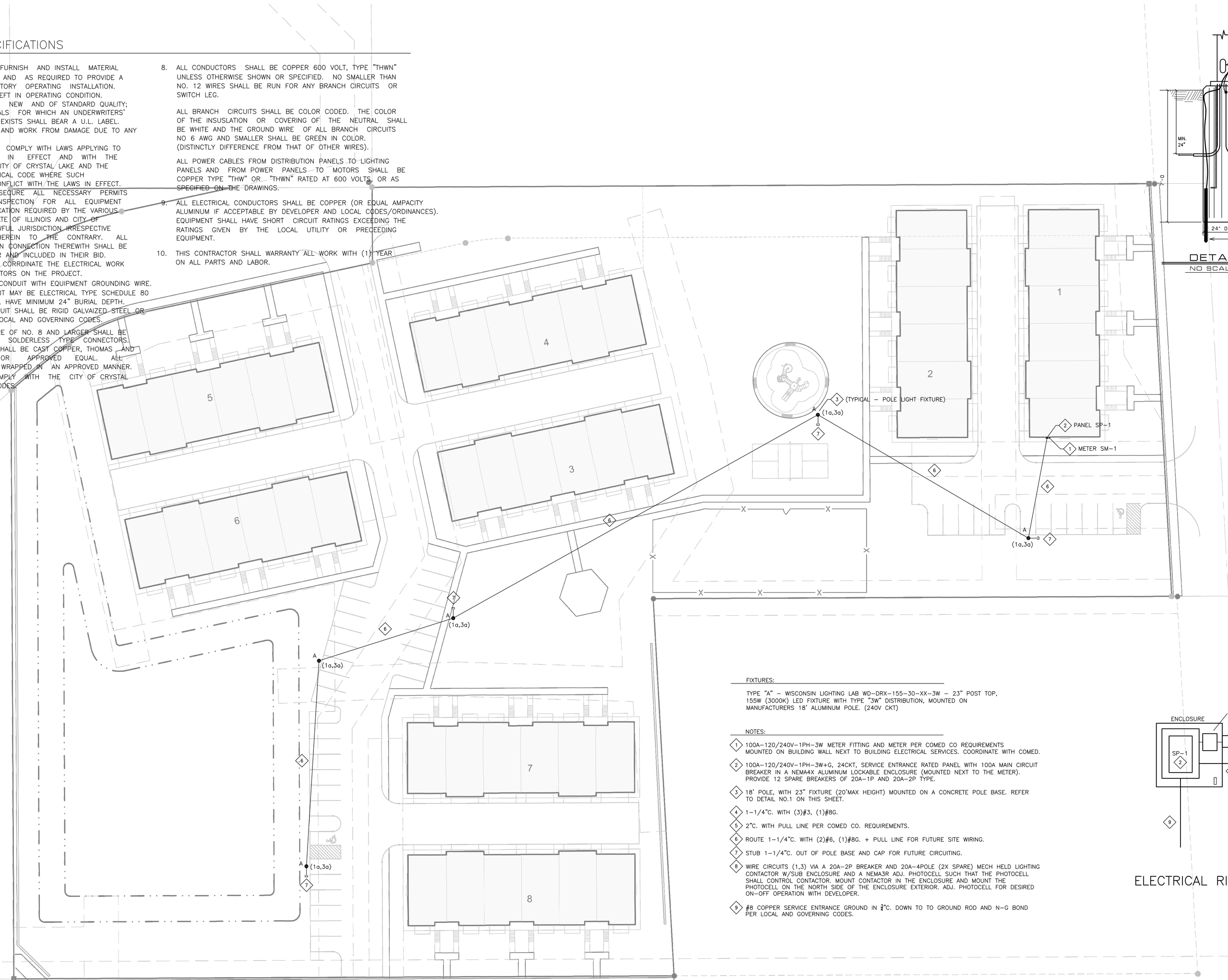
1. THIS CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL INDICATED ON DRAWINGS AND AS REQUIRED TO PROVIDE A COMPLETE AND SATISFACTORY OPERATING INSTALLATION. INSTALLATION SHALL BE LEFT IN OPERATING CONDITION.
2. ALL MATERIALS SHALL BE NEW AND OF STANDARD QUALITY; NO REJECTS. ALL MATERIALS FOR WHICH AN UNDERWRITERS' LABORATORIES STANDARD EXISTS SHALL BEAR A U.L. LABEL. PROTECT ALL EQUIPMENT AND WORK FROM DAMAGE DUE TO ANY CAUSE.
3. THE INSTALLATION SHALL COMPLY WITH LAWS APPLYING TO ELECTRICAL INSTALLATION IN EFFECT AND WITH THE REGULATIONS OF THE CITY OF CRYSTAL LAKE AND THE STATE OF ILLINOIS ELECTRICAL CODE WHERE SUCH REGULATIONS DO NOT CONFLICT WITH THE LAWS IN EFFECT. THIS CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND CERTIFICATES OF INSPECTION FOR ALL EQUIPMENT INCLUDED IN THE SPECIFICATION REQUIRED BY THE VARIOUS DEPARTMENTS OF THE STATE OF ILLINOIS AND CITY OF CRYSTAL LAKE HAVING LAWFUL JURISDICTION IRRESPECTIVE OF ANY STATEMENTS HEREIN TO THE CONTRARY. ALL FEES AND ASSESSMENTS IN CONNECTION THEREWITH SHALL BE PAID BY THIS CONTRACTOR AND INCLUDED IN THEIR BID.
4. THIS CONTRACTOR SHALL COORDINATE THE ELECTRICAL WORK WITH THE OTHER CONTRACTORS ON THE PROJECT.
5. ALL WIRING SHALL BE IN CONDUIT WITH EQUIPMENT GROUNDING WIRE. ALL BELOW GRADE CONDUIT MAY BE ELECTRICAL TYPE SCHEDULE 80 PVC. ALL CONDUITS SHALL HAVE MINIMUM 24" BURIAL DEPTH. ALL ABOVE GROUND CONDUIT SHALL BE RIGID GALVAIZED STEEL OR IMC AS ACCEPTABLE BY LOCAL AND GOVERNING CODES.
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7. ALL EQUIPMENT SHALL COMPLY WITH THE CITY OF CRYSTAL LAKE ORDINANCES AND CODES.
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DETAIL NO. 1
NO SCALE



FIXTURES:

TYPE "A" – WISCONSIN LIGHTING LAB WD-DRX-155-30-XX-3W – 23" POST TOP, 155W (3000K) LED FIXTURE WITH TYPE "3W" DISTRIBUTION, MOUNTED ON MANUFACTURERS 18' ALUMINUM POLE. (240V CKT)

NOTES:

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2. 100A-120/240V-1PH-3W+G, 24CKT, SERVICE ENTRANCE RATED PANEL WITH 100A MAIN CIRCUIT BREAKER IN A NEMA4X ALUMINUM LOCKABLE ENCLOSURE (MOUNTED NEXT TO THE METER). PROVIDE 12 SPARE BREAKERS OF 20A-1P AND 20A-2P TYPE.
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5. 2"C. WITH PULL LINE PER COMED CO. REQUIREMENTS.
6. ROUTE 1-1/4"C. WITH (2)#6, (1)#8G. + PULL LINE FOR FUTURE SITE WIRING.
7. STUB 1-1/4"C. OUT OF POLE BASE AND CAP FOR FUTURE CIRCUITING.
8. WIRE CIRCUITS (1,3) VIA A 20A-2P BREAKER AND 20A-4POLE (2X SPARE) MECH HELD LIGHTING CONTACTOR W/SUB ENCLOSURE AND A NEMA3R ADJ. PHOTOCELL SUCH THAT THE PHOTOCELL SHALL CONTROL CONTACTOR. MOUNT CONTACTOR IN THE ENCLOSURE AND MOUNT THE PHOTOCELL ON THE NORTH SIDE OF THE ENCLOSURE EXTERIOR. ADJ. PHOTOCELL FOR DESIRED ON-OFF OPERATION WITH DEVELOPER.
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ELECTRICAL RISER DIAGRAM

SDGI
Systems Design Group, Int.
Design Firm# 184.008218-0002
6765 Revere Court
Gurnee, IL 60031
847.525.7850
gryzik@comcast.net

STATE OF ILLINOIS – REGISTERED PROFESSIONAL ENGINEER – RONALD R. GRYZIK – 060506

PROJECT:
THE RESIDENCES OF CRYSTAL POINT
CRYSTAL LAKE, IL.

NO.	DATE	DESCRIPTION
	4.26.24	ISSUE FOR PERMIT

ELECTRICAL
SITE LIGHTING PLAN
& DETAILS

Scale: 1"=30'	Sheet Number: E1.0
Drawn By: RRG	
Project Number: 2024-5	

COMcheck Software Version COMcheckWeb

Exterior Lighting Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	Residences of Crystal Point
Project Type:	New Construction
Exterior Lighting Zone	2 (Residentially zoned area (LZ2))

Construction Site:

Owner/Agent:

Designer/Contractor:
Ron Gryzik
SDGI
6765 Revere Court
Gurnee, Illinois 60031
8475257850
gryzik@comcast.net

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Parking areas (Parking area)	16818 ft2	0.04	Yes	673
Play and Court areas (Special feature area)	1800 ft2	0.1	Yes	180
			Total Tradable Watts (a) =	853
			Total Allowed Watts =	853
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Parking areas (Parking area, 16818 ft2): Tradable Wattage				
LED: A: 20' Pole Light: Other:	1	4	155	620
Play and Court areas (Special feature area, 1800 ft2): Tradable Wattage				
LED: A: 20' Pole Light: Other:	1	1	155	155
			Total Tradable Proposed Watts =	775

Exterior Lighting PASSES: Design 38% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

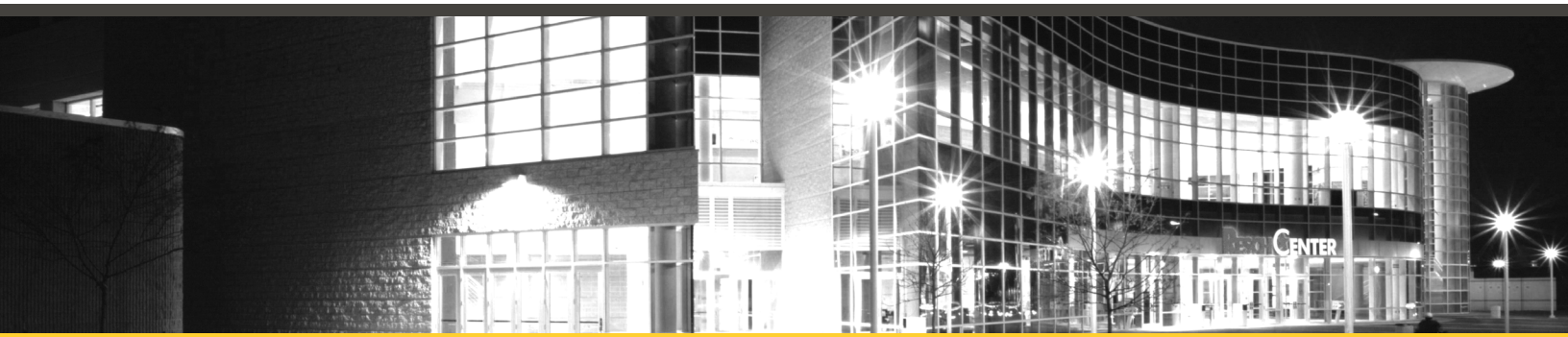
Name - Title _____ Signature _____ Date _____

NAFCO® RSAA ROUND STRAIGHT ALUMINUM ANCHOR BASE LIGHT POLES

Catalog #

Project

Comments



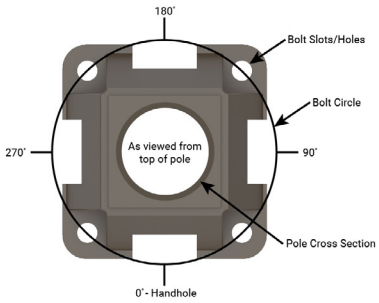
Proudly engineered and manufactured in the American Midwest – our NAFCO® family of professional-grade light pole products combines 50+ years of manufacturing expertise and top-notch Midwestern workmanship. Like all WiLL products, NAFCO® poles come supported by our unmatched design, engineering, and project support capabilities.

Specifications

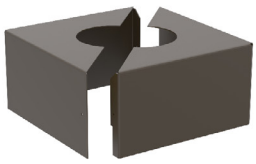
- **Pole Shaft** - The pole shaft is extruded from seamless 6063-T6 aluminum.
- **Pole Top** - A removable top cap is provided for poles receiving drilling patterns for side-mount luminaire arm assemblies. Other pole top options include Tenon Top, Top Cap Only or Open Top which is typical when the pole top diameter matches the necessary slip-fit dimensions.
- **Hand Hole** - 2" x 4" oval hand hole and grounding provision are provided (dimensions are nominal). Cover and cover attachment hardware also included.
- **Anchor Base & Cover** - The anchor base is cast from 356 alloy aluminum and supplied with an aluminum two-piece base cover. The completed pole assembly is heat-treated to a T6 temper. Optional decorative base covers available as special order.
- **Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.
- **Hardware** - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.
- **Finish** - Finishes include anodized or painted. Please consult factory for special finishing colors and fixture matching options. When storing light poles outside, remove all protective wrapping immediately upon delivery to prevent finish damage.
- **Design Criteria** - Standard EPA (Effective Projected Area) and weight values are based on AASHTO Criteria (with 3 second gust factor) for side and top mounted fixtures only. Satisfactory performance of light poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.



Anchor Base Detail



Base Cover





Top Cap



Tenon Top



Vibration Dampener



Handhole Cover



Festoon



NPT Pipe Coupling

308 N. Brooke St. | Fond du Lac, WI 54935
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EPA Loading Guide (Commercial Design Criteria)

Base Model	80mph w/ 1.3 Gust		90mph w/ 1.3 Gust		100mph w/ 1.3 Gust		110mph w/ 1.3 Gust		120mph w/ 1.3 Gust	
	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)
NP-RSAA-08-4040-C	12.7	100	9.7	100	7.5	100	6.6	100	5.3	100
NP-RSAA-10-4040-C	9.3	100	7.1	100	5.3	100	4.6	100	3.6	100
NP-RSAA-12-4040-C	7.2	100	5.2	100	3.8	100	3.2	100	2.3	100
NP-RSAA-14-4040-C	5.5	100	3.8	100	2.6	100	2	100	1.3	100
NP-RSAA-15-4040-C	4.8	100	3.2	100	2	100	1.6	100	0.9	100
NP-RSAA-15-4040-D	8.4	100	6.1	100	4.4	100	3.7	100	2.6	100
NP-RSAA-15-5050-D	14.9	125	11	125	8.3	125	7.1	125	5.4	125
NP-RSAA-16-4040-C	4.1	100	2.6	100	1.6	100	1.1	100	0.4	100
NP-RSAA-16-4040-D	7.5	100	5.3	100	3.8	100	3.1	100	2.1	100
NP-RSAA-16-5050-D	13.5	125	9.9	125	7.3	125	6.2	125	4.6	125
NP-RSAA-18-4040-D	5.8	100	3.9	100	2.5	100	1.9	100	1.1	100
NP-RSAA-18-4040-E	8.5	100	6	100	4.3	100	3.5	100	2.4	100
NP-RSAA-18-5050-D	10.9	125	7.7	125	5.4	125	4.5	125	3.1	125
NP-RSAA-20-4040-D	4.4	100	2.7	100	1.5	100	0.9	100	N/A	N/A
NP-RSAA-20-4040-E	6.7	100	4.5	100	3	100	2.3	100	1.3	100
NP-RSAA-20-5050-D	8.6	125	5.8	125	3.8	125	3	125	1.8	125
NP-RSAA-20-5050-E	12.6	125	9	125	6.4	125	5.3	125	3.7	125
NP-RSAA-20-6060-D	14.1	150	10	150	7	150	5.8	150	3.9	150
NP-RSAA-20-6060-E	20.1	150	14.7	150	10.9	150	9.2	150	6.9	150
NP-RSAA-22-5050-E	10.3	125	7	125	4.7	125	3.7	125	2.3	125
NP-RSAA-22-6060-D	11.4	150	7.7	150	5.1	150	4	150	2.4	150
NP-RSAA-22-6060-E	16.8	150	12	150	8.5	150	7.1	150	5	150
NP-RSAA-24-5050-E +	8.3	125	5.4	125	3.3	125	2.4	125	1.1	125
NP-RSAA-24-6060-D	9.1	150	5.8	150	3.4	150	2.4	150	1	150
NP-RSAA-24-6060-E	13.9	150	9.6	150	6.5	150	5.2	150	3.3	150
NP-RSAA-25-5050-E +	7.4	125	4.6	125	2.6	125	1.8	125	0.6	125
NP-RSAA-25-6060-D	8.1	150	4.9	150	2.7	150	1.7	150	N/A	N/A
NP-RSAA-25-6060-E	12.7	150	8.6	150	5.6	150	4.3	150	2.5	150
NP-RSAA-26-6060-D +	7.1	150	4.1	150	2	150	1	150	N/A	N/A
NP-RSAA-26-6060-E +	11.5	150	7.6	150	4.8	150	3.6	150	1.8	150
NP-RSAA-28-6060-D +	5.3	150	2.6	150	0.6	150	N/A	N/A	N/A	N/A
NP-RSAA-28-6060-E +	9.3	150	5.8	150	3.2	150	2.1	150	0.5	150
NP-RSAA-30-6060-D +	4.1	150	1.5	150	N/A	N/A	N/A	N/A	N/A	N/A
NP-RSAA-30-6060-E +	7.9	150	4.5	150	2.1	150	1.1	150	N/A	N/A

1. The total combined EPA and weight of all fixtures, brackets, and other attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole.
2. Standard EPA (Effective Projected Area) and weight values are based around standard commercial criteria (with 1.3 second gust factor) and AASHTO standards. **Specific light pole design standards are available from factory.**
3. Custom products, configurations, options, and accessories available from factory.
4. Satisfactory performance of light poles is dependent upon the structure being properly attached to a supporting foundation of adequate design.

"+" indicates a vibration dampener is standard.

308 N. Brooke St. | Fond du Lac, WI 54935
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EPA Loading Guide (2017 Florida Building Code)

Base Model	140mph		150mph		160mph		170mph		180mph	
	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)	Max EPA (sq ft)	Max Weight (lb)
NP-RSAA-08-4040-C	5.8	100	4.9	100	4.1	100	3.5	100	2.9	100
NP-RSAA-10-4040-C	4	100	3.2	100	2.6	100	2.1	100	1.7	100
NP-RSAA-12-4040-C	2.7	100	2	100	1.5	100	1.1	100	0.7	100
NP-RSAA-14-4040-C	1.6	100	1	100	0.6	100	N/A	100	N/A	100
NP-RSAA-15-4040-C	1.1	100	0.6	100	N/A	100	N/A	100	N/A	100
NP-RSAA-15-4040-D	3	100	2.3	100	1.7	100	1.2	100	0.7	100
NP-RSAA-15-5050-D	6.2	125	4.9	125	3.9	125	3.1	125	2.3	125
NP-RSAA-16-4040-C	0.7	100	N/A	100	N/A	100	N/A	100	N/A	100
NP-RSAA-16-4040-D	2.5	100	1.8	100	1.2	100	0.7	100	N/A	100
NP-RSAA-16-5050-D	5.3	125	4.2	125	3.2	125	2.4	125	1.7	125
NP-RSAA-18-4040-D	1.3	100	0.8	100	N/A	100	N/A	100	N/A	100
NP-RSAA-18-4040-E	2.8	100	2	100	1.4	100	0.8	100	N/A	100
NP-RSAA-18-5050-D	3.7	125	2.7	125	1.9	125	1.1	125	0.5	125
NP-RSAA-20-4040-D	0.5	100	N/A	100	N/A	100	N/A	100	N/A	100
NP-RSAA-20-4040-E	1.7	100	1	100	N/A	100	N/A	100	N/A	100
NP-RSAA-20-5050-D	2.3	125	1.4	125	0.6	125	N/A	125	N/A	125
NP-RSAA-20-5050-E	4.4	125	3.2	125	2.2	125	1.4	125	0.8	125
NP-RSAA-20-6060-D	5.1	150	4	150	2.7	150	1.8	150	1.1	150
NP-RSAA-20-6060-E	8.2	150	6.7	150	5.1	150	4	150	3	150
NP-RSAA-22-5050-E	3	125	1.9	125	1	125	N/A	125	N/A	125
NP-RSAA-22-6060-D	3.5	150	2.5	150	1.4	150	0.6	150	N/A	150
NP-RSAA-22-6060-E	6.3	150	4.9	150	3.5	150	2.4	150	1.7	150
NP-RSAA-24-5050-E +	1.6	125	0.8	125	N/A	125	N/A	125	N/A	125
NP-RSAA-24-6060-D	2	150	1.2	150	N/A	150	N/A	150	N/A	150
NP-RSAA-24-6060-E	4.6	150	3.4	150	2.1	150	1.2	150	N/A	150
NP-RSAA-25-5050-E +	1	125	N/A	125	N/A	125	N/A	125	N/A	125
NP-RSAA-25-6060-D	1.4	150	0.6	150	N/A	150	N/A	150	N/A	150
NP-RSAA-25-6060-E	3.8	150	2.6	150	1.4	150	0.6	150	N/A	150
NP-RSAA-26-6060-D +	0.8	150	N/A	150	N/A	150	N/A	150	N/A	150
NP-RSAA-26-6060-E +	3.1	150	2	150	0.8	150	N/A	150	N/A	150
NP-RSAA-28-6060-D +	N/A	150	N/A	150	N/A	150	N/A	150	N/A	150
NP-RSAA-28-6060-E +	1.8	150	0.7	150	N/A	150	N/A	150	N/A	150
NP-RSAA-30-6060-D +	N/A	150	N/A	150	N/A	150	N/A	150	N/A	150
NP-RSAA-30-6060-E +	0.9	150	N/A	150	N/A	150	N/A	150	N/A	150

1. The total combined EPA and weight of all fixtures, brackets, and other attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole.
2. Standard EPA (Effective Projected Area) and weight values are based around Ultimate Wind Speed, Risk Category II, Exposure Category C. Specific light pole design standards are available from factory. Above data is based around the load centroid being at 2.5' above the pole top and with 2.0' eccentricity. Weight of horizontally eccentric load is capped at 100lb, all remaining weight mounted 2.5' above top of the pole.
3. Custom products, configurations, options, and accessories available from factory.
4. Satisfactory performance of light poles is dependent upon the structure being properly attached to a supporting foundation of adequate design.

"+" indicates a vibration dampener is standard.

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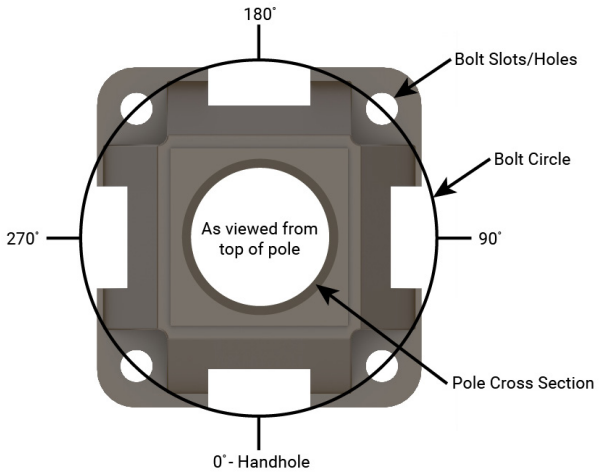
Designation & Dimensional Information

Base Model	Pole Dimensions					Base Plate		Anchor Bolts	
	Nominal Mounting Height	Top OD (in)	Base OD (in)	Wall Thick (in)	Structural Weight (lb)	Bolt Circle Diameter (in)	Sq (in) x Thick (in)	Dia x Length x Hook (in)	Projection (in)
NP-RSAA-08-4040-C	8'-0"	4	4	0.125	36	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-10-4040-C	10'-0"	4	4	0.125	39	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-12-4040-C	12'-0"	4	4	0.125	43	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-14-4040-C	14'-0"	4	4	0.125	47	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-15-4040-C	15'-0"	4	4	0.125	49	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-15-4040-D	15'-0"	4	4	0.188	63	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-15-5050-D	15'-0"	5	5	0.188	72	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-16-4040-C	16'-0"	4	4	0.125	50	9.25	8.625 x 8.625 x 0.75	0.625 x 16.00 x 2.00	2.75
NP-RSAA-16-4040-D	16'-0"	4	4	0.188	65	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-16-5050-D	16'-0"	5	5	0.188	75	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-18-4040-D	18'-0"	4	4	0.188	71	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-18-4040-E	18'-0"	4	4	0.25	87	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-18-5050-D	18'-0"	5	5	0.188	82	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-20-4040-D	20'-0"	4	4	0.188	76	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-20-4040-E	20'-0"	4	4	0.25	94	9.25	8.625 x 8.625 x 0.75	0.75 x 17.00 x 3.00	2.75
NP-RSAA-20-5050-D	20'-0"	5	5	0.188	89	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-20-5050-E	20'-0"	5	5	0.25	111	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-20-6060-D	20'-0"	6	6	0.188	104	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-20-6060-E	20'-0"	6	6	0.25	131	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-22-5050-E	22'-0"	5	5	0.25	120	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-22-6060-D	22'-0"	6	6	0.188	112	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-22-6060-E	22'-0"	6	6	0.25	142	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-24-5050-E +	24'-0"	5	5	0.25	129	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-24-6060-D	24'-0"	6	6	0.188	120	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-24-6060-E	24'-0"	6	6	0.25	153	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-25-5050-E +	25'-0"	5	5	0.25	133	8.375 - 10.375	10.25 x 10.25 x 0.875	0.75 x 17.00 x 3.00	3.5
NP-RSAA-25-6060-D	25'-0"	6	6	0.188	124	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-25-6060-E	25'-0"	6	6	0.25	158	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-26-6060-D +	26'-0"	6	6	0.188	129	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-26-6060-E +	26'-0"	6	6	0.25	163	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-28-6060-D +	28'-0"	6	6	0.188	137	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-28-6060-E +	28'-0"	6	6	0.25	174	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-30-6060-D +	30'-0"	6	6	0.188	143	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5
NP-RSAA-30-6060-E +	30'-0"	6	6	0.25	182	9.625 - 11.375	11 x 11 x 1	1.00 x 36.00 x 4.00	3.5

1. The total combined EPA and weight of all fixtures, brackets, and other attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole.
2. Custom products, configurations, options, and accessories available from factory.
3. Satisfactory performance of light poles is dependent upon the structure being properly attached to a supporting foundation of adequate design.

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Anchor Base Detail



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Ordering Information

Ex: NP-RSAA-10-4040-C-AB-SB-FP-MB-D2-FSTR

Product Family	Design	Length	Base OD	Top OD	Thickness	Anchor Bolts	Base Type	Finish Type	Painted Color	Fixture Mounting
NP = NAFCO®	RSAA = Round Straight Aluminum Anchor Base	8-30 = 8-30'	40 = 4"	40 = 4"	C = 0.125"	AB = Includes Anchor Bolts	SB = Standard Base	FP = Finish Painted	DB = Dark Bronze	PC = Cap Only, No Side Drilling
		C = Custom	50 = 5"	50 = 5"	D = 0.188"	LAB = Less Anchor Bolts	CB = Custom Base	AN = Anodized	MB = Medium Bronze	PL = Open Top, No Cap or Side Drilling
			60 = 6"	60 = 6"	E = 0.250"	C = Custom		C = Custom	BK = Black	D1 = Drill Single
			C = Custom	C = Custom					WH = White	D2 = Drill 2@180
									LG = Light Gray	D3 = Drill 3@120
									SG = Slate Gray	D4 = Drill 4@90
									DG = Dark Green	D5 = Drill 2@90
									NA = Natural Aluminum Paint	D6 = Drill 3@90
									SA = Satin Silver Anodized	P1 = 4" OD x 5" Long Tenon
									BA = Bronze Anodized	P2 = 2.38" OD x 4" Long Tenon
									BKA = Black Anodized	P3 = 3.50" OD x 6" Long Tenon
									RAL = Custom RAL Match	P4 = 4" OD x 6" Long Tenon
									C = Custom	P5 = 2.88" OD x 4" Long Tenon
										P6 = 2.88" OD x 5" Long Tenon
										P7 = 2.38" OD x 5" Long Tenon
										PQ = 2.38" OD x 12" Long Tenon
										PD = 3" OD x 3" Long Tenon
										P9 = Custom Size Tenon

Options & Accessories (Add as Suffix)		
Option	**Option**	**Accessories**
SPL = Special Cut Length (Please Specify)	HHU = Additional Unreinforced Hand Hole Opening w/ Cover Assembly	STAMP = Engineering Services, Signed & Sealed Calcs
BCSPCL = Special Base Plate to Match Existing Bolt Circle (May Add to Production Lead Time, May Require Special Base Cover)	HHR = Additional Reinforced Hand Hole Opening w/ Cover Assembly	STAMPCA = Engineering Services, CA Signed & Sealed Calcs
VDA = Internal Vibration Dampener, Factory Installed	FSTR = Festoon Provision, Electrical by Others (Specify Pole Height & Orientation)	PRE063 = Pre-Ship Anchor Bolts - 0.625" x 16" x 2"
VDF = Internal Vibration Dampener, Field Installable	CPL = NPT Pipe Coupling (Specify Pole Height, Orientation, & NPT Size)	PRE075 = Pre-Ship Anchor Bolts - 0.75" x 17" x 3"
PXDX = Side Drill + Tenon w/ Additional Hand Hole (Specify Tenon OD & Length)	EVC = Electric Vehicle Charger Provision, Includes Single Drilling & Hand Hole at 180°, Height & Orientation TBA	PRE100 = Pre-Ship Anchor Bolts - 1.0" x 36" x 4"
	CMR = Camera Provision, Includes Single Drilling & Hand Hole at 180° (If Not Located at Pole Top)	

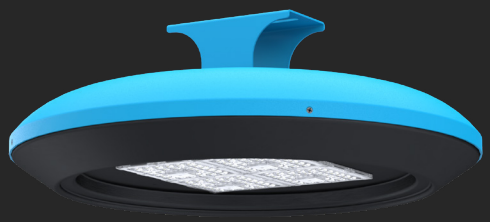
1. See previous pages for base model configurations. Consult factory or your sales rep for deviations from base models.
2. Please consult factory or your sales representative to verify options and accessories will work with your light pole part number.
3. Custom products, configurations, options, and accessories available from factory.

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WiLLstudio™ DRX

Decorative • Architectural LED Lighting









Shown with custom WiLLstudio™ DRX light fixture and CR1 bracket arm



Shown with custom WiLLstudio™ DRX light fixture and SH1 Single Shepherds Hook



Shown with CL2 decorative clamshell base cover

MANUFACTURED in WISCONSIN

Proudly engineered and manufactured in Wisconsin, USA – our WiLLstudio™ family of LED lighting products combines 50 years of manufacturing expertise with premium components and top-notch Midwestern workmanship. With state-ofthe-art rendering capabilities, an eye for design, and nimble production flow, the experts at WiLL create cutting-edge lighting with an enhanced aesthetic.

WiLL | WISCONSIN LIGHTING LAB®

WiLLstudio™ DRX ARCHITECTURAL AREA & POST TOP LIGHTING

Catalog #

Project

Comments



Highlights

- Designed, engineered, and manufactured in Wisconsin, USA from premium domestic and imported components
- Performance coatings and custom color matching of RAL codes and architectural colors
- IES files, photometric reports, and lighting simulations available from factory design team
- Proprietary heat sink design with low drive current resulting in reported L90 LED life over 100,000 hours
- Easy driver and LED module access for technology upgrades and maintenance
- Flexible mounting options with custom adapters available
- Output options over 20,000 lumens

Applications

- Area and site lighting
- Roadways and streets
- Park lighting and walkways
- Schools and hospitals
- Retail stores and commercial buildings
- Amber and turtle applications

Construction & Finish

- High-grade aluminum enclosure for superior corrosion resistance, strength, and thermal management
- Architectural grade powder coat enclosure and black anodized heat sink
- High-grade stainless steel hardware for superior strength and corrosion resistance
- Driver components are fully encased in potting material for moisture and vibration resistance

Light Poles & Arms

- WiLL offers one of the most comprehensive light pole, bracket, and arm catalogs in the industry
- Aluminum, steel, fiberglass, and concrete materials
- Straight, tapered, and decorative designs
- Custom fabrication, finishing, and accessories available
- Dedicated light pole application support team

Standards & Warranty

- ETL Certification for UL STD 1598 & CSA STD C22.2 # 250.0 for wet locations
- Meets Buy American Act requirements
- Standard 5-year limited warranty with extended factory warranties available
- Turtle and wildlife compliance options (consult factory)

Light Engine & Electrical

- Premium tier 1 LED chips for extreme efficiency and high-quality color rendering for a broad range of applications
- Optical assembly constructed of UV stabilized polycarbonate with silicone seal
- -40°C to +40°C ambient operating temperature
- Standard AC input voltage of 120-277V 50/60 Hz; up to 480V available
- Isolated 1-10V PWM/3-timer-modes dimmable (standard) and dim-to-off with standby power ≤ 0.5W (optional)
- Power factor of 0.90 min
- Total harmonic distortion of 20% max
- Drivers include integral input Surge Protection of Differential Mode 6kV, Common Mode 10kV per EN 61000-4-5
- Thermally protected secondary 10kA surge suppression available (optional)
- Always-on auxiliary power: 12VDC, 200mA (optional)
- Local specifying engineer recommended for product selection and local compliance
- Licensed electrician required for installation

Control Options

- Integral passive infrared Bluetooth® sensor for motion, photo, dimming, and daylight harvesting control
- Wireless mesh network for large-scale control of zones, dimming, schedules, and sensors
- DMX control options available from factory

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EPA Chart

Base Model	0° Tilt	45° Tilt	90° Tilt
WD-DRX (Area)	0.65	1.65	2.65
WD-DRX (Post Top)	1.25	N/A	N/A

Specifications & Typical Lumen Output (WHITE LED)

Base Model	Weight (lb)	System Watts (W)	Engine Qty	Drive Current (A)	Typical HID Replacement	Distribution	3000K, 70 CRI					4000K, 70 CRI					5000K, 70 CRI				
							Lumens	B	U	G	lm/W	Lumens	B	U	G	lm/W	Lumens	B	U	G	lm/W
WD-DRX-40	15	38	4	0.11	100-150W	1S = Type I Short	6,132	2	0	2	161	6,493	2	0	2	171	6,493	2	0	2	171
						2M = Type II Medium	6,132	2	0	2	161	6,493	2	0	2	171	6,493	2	0	2	171
						3M = Type III Medium	6,059	1	0	1	159	6,415	1	0	1	169	6,415	1	0	1	169
						3W = Type III Wide	5,913	2	0	2	156	6,261	2	0	2	165	6,261	2	0	2	165
						4M = Type IV Medium	6,278	2	0	2	165	6,647	2	0	2	175	6,647	2	0	2	175
						5W = 150° Type V Square	6,497	3	0	1	171	6,879	3	0	1	181	6,879	3	0	1	181
						5M = 90° Type V Medium	6,570	3	0	1	173	6,956	3	0	1	183	6,956	3	0	1	183
						5N = 70° Type V Narrow	6,424	3	0	1	169	6,802	3	0	1	179	6,802	3	0	1	179
						5VN = 30° Type V Very Narrow	5,183	3	0	1	136	5,488	3	0	1	144	5,488	3	0	1	144
WD-DRX-80	15	76	4	0.22	150-250W	1S = Type I Short	10,962	3	0	3	144	11,607	3	0	3	153	11,607	3	0	3	153
						2M = Type II Medium	10,962	3	0	3	144	11,607	3	0	3	153	11,607	3	0	3	153
						3M = Type III Medium	10,832	2	0	2	143	11,468	2	0	2	151	11,468	2	0	2	151
						3W = Type III Wide	10,571	3	0	3	139	11,192	3	0	3	147	11,192	3	0	3	147
						4M = Type IV Medium	11,223	2	0	3	148	11,883	2	0	3	156	11,883	2	0	3	156
						5W = 150° Type V Square	11,615	4	0	2	153	12,297	4	0	2	162	12,297	4	0	2	162
						5M = 90° Type V Medium	11,745	3	0	1	155	12,436	3	0	1	164	12,436	3	0	1	164
						5N = 70° Type V Narrow	11,484	4	0	1	151	12,159	4	0	1	160	12,159	4	0	1	160
						5VN = 30° Type V Very Narrow	9,266	4	0	1	122	9,810	4	0	1	129	9,810	4	0	1	129
WD-DRX-115	15	115	4	0.33	250-320W	1S = Type I Short	15,489	3	0	3	135	16,400	3	0	3	143	16,400	3	0	3	143
						2M = Type II Medium	15,489	3	0	3	135	16,400	3	0	3	143	16,400	3	0	3	143
						3M = Type III Medium	15,305	3	0	3	133	16,205	3	0	3	141	16,205	3	0	3	141
						3W = Type III Wide	14,936	3	0	4	130	15,814	3	0	4	138	15,814	3	0	4	138
						4M = Type IV Medium	15,858	3	0	4	138	16,790	3	0	4	146	16,790	3	0	4	146
						5W = 150° Type V Square	16,411	4	0	3	143	17,376	4	0	3	151	17,376	4	0	3	151
						5M = 90° Type V Medium	16,595	4	0	1	144	17,571	4	0	1	153	17,571	4	0	1	153
						5N = 70° Type V Narrow	16,227	4	0	1	141	17,181	4	0	1	149	17,181	4	0	1	149
						5VN = 30° Type V Very Narrow	13,092	5	0	1	114	13,862	5	0	1	121	13,862	5	0	1	121
WD-DRX-155	15	155	4	0.44	320-400W	1S = Type I Short	19,865	4	0	4	128	21,033	4	0	4	136	21,033	4	0	4	136
						2M = Type II Medium	19,865	3	0	3	128	21,033	3	0	3	136	21,033	3	0	3	136
						3M = Type III Medium	19,629	3	0	3	127	20,783	3	0	3	134	20,783	3	0	3	134
						3W = Type III Wide	19,156	3	0	4	124	20,282	3	0	4	131	20,282	3	0	4	131
						4M = Type IV Medium	20,338	3	0	5	131	21,534	3	0	5	139	21,534	3	0	5	139
						5W = 150° Type V Square	21,047	5	0	3	136	22,285	5	0	3	144	22,285	5	0	3	144
						5M = 90° Type V Medium	21,284	4	0	1	137	22,535	4	0	1	145	22,535	4	0	1	145
						5N = 70° Type V Narrow	20,811	5	0	1	134	22,035	5	0	1	142	22,035	5	0	1	142
						5VN = 30° Type V Very Narrow	16,791	5	0	2	108	17,778	5	0	2	115	17,778	5	0	2	115

Note: Typical lumen values are based on photometric tests performed in accordance with ANSI/IES LM-79-19. Field performance may differ resulting from optical configuration, color temp and owner environment, and application.
Note: Data based on 25°C ambient operating temperature.
Note: BUG ratings are calculated with fixture tilt set to 0°

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Specifications & Typical Lumen Output (AMBER LED)

Base Model	Weight (lb)	System Watts (W)	Engine Qty	Drive Current (A)	LED Source	Lumens
WD-DRX-CW-TA	15	104.0	4	0.40	True Amber (593 nm)	3,572
WD-DRX-CW-PCA	15	158.0	4	0.45	Phosphor Converted Amber (590 nm)	12,376

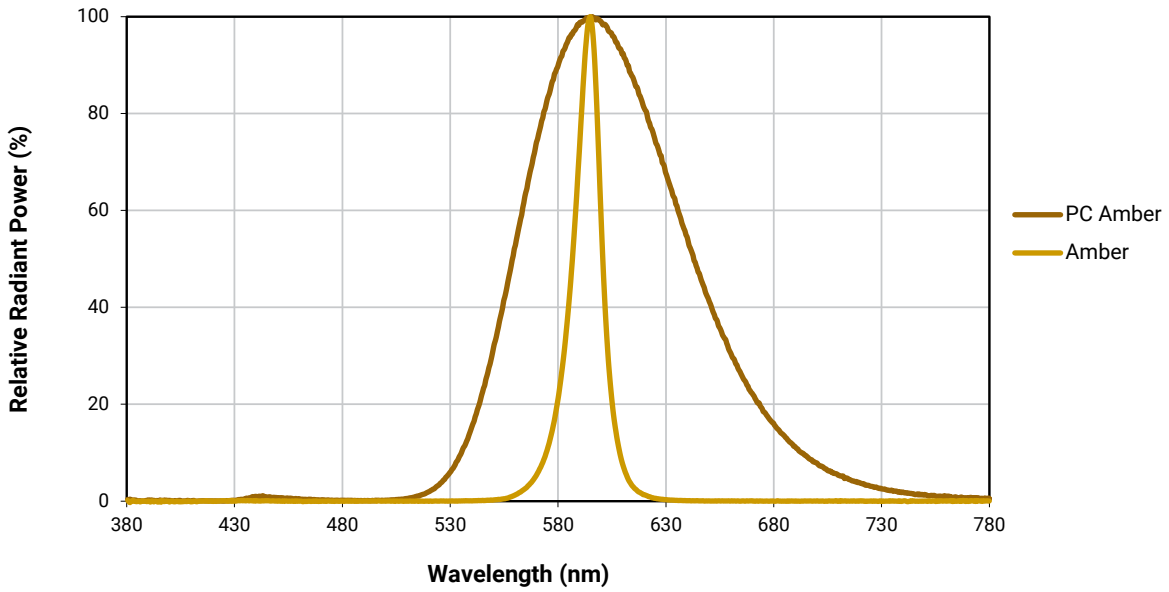
Lumen Multiplier & Maintenance (WHITE LED)

Ambient Temperature	Lumen Multiplier	TM-21 Lumen Maintenance (50,000 hr)	Reported L90 (hr)	Reported L70 (hr)
0°C / 32°F	1.039	98.01	>102,000	>102,000
10°C / 50°F	1.023	98.1	>102,000	>102,000
25° C / 77°F	1.000	98.2	>102,000	>102,000
30°C / 86°F	0.992	97.95	>102,000	>102,000
35°C / 95°F	0.984	97.86	>102,000	>102,000
40° C / 104°F	0.977	97.75	>102,000	>102,000

	Current (A)			
Voltage (V)	40W	80W	115W	155W
Input Current @ 120V (A)	0.32	0.63	0.96	1.29
Input Current @ 208V (A)	0.18	0.37	0.55	0.75
Input Current @ 240V (A)	0.16	0.32	0.48	0.65
Input Current @ 277V (A)	0.14	0.27	0.42	0.56
Input Current @ 347V (A)	0.11	0.22	0.33	0.45
Input Current @ 480V (A)	0.08	0.16	0.24	0.32

Note: Values calculated according to IESNA TM-21-11 methodology.

LED Chip Wavelengths

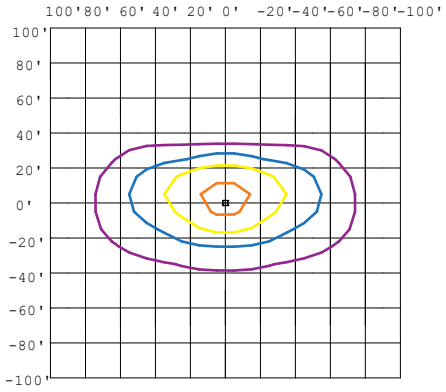


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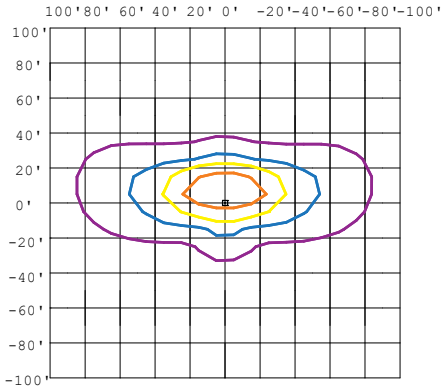
Photometric Diagrams

LEGEND
0.5 fc 2.0 fc 5.0 fc 10 fc 25 fc

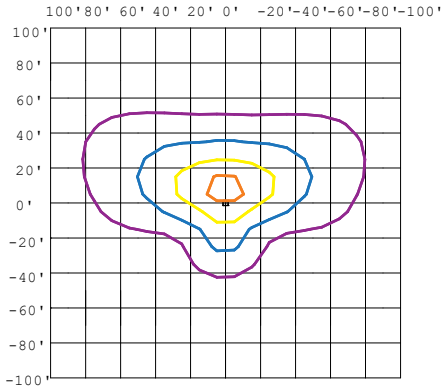
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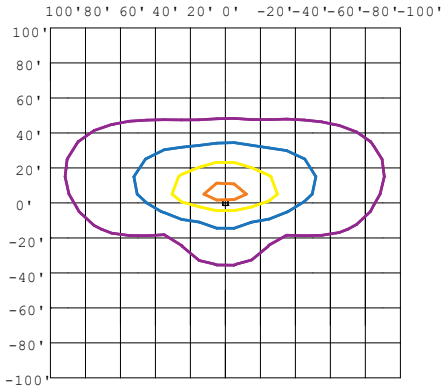
90W DRX
(1S) Type I Short
15' Height @ 0°



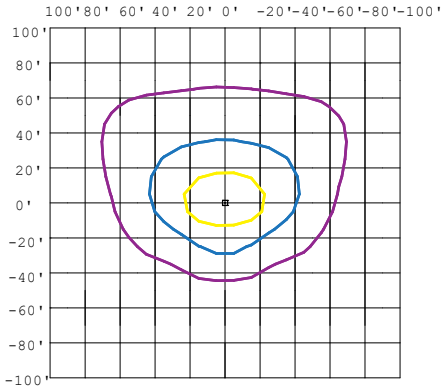
90W DRX
(2M) Type II Medium
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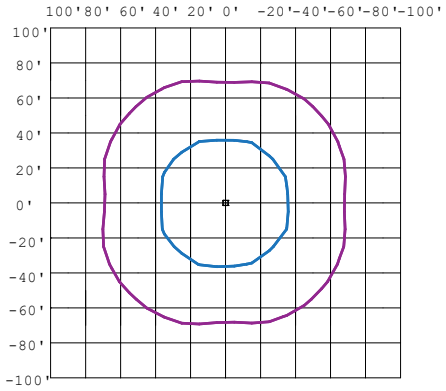
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(3M) Type III Medium
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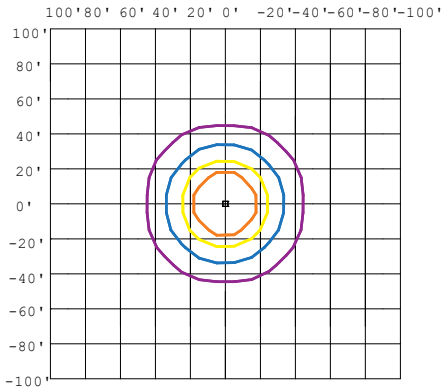
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(3W) Type III Wide
15' Height @ 0°



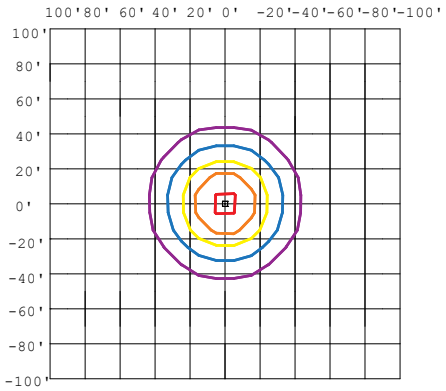
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(4M) Type IV Medium
15' Height @ 0°



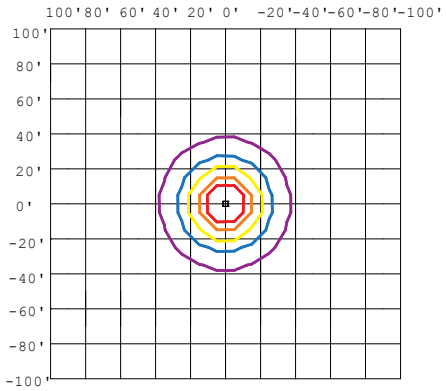
90W DRX
(5W) 150° Type V Square
15' Height @ 0°



90W DRX
(5M) 90° Type V Medium
15' Height @ 0°



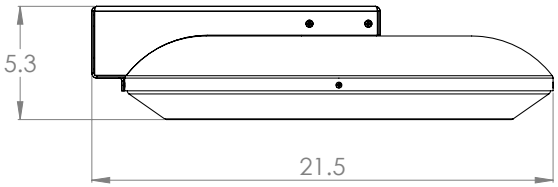
90W DRX
(5N) 70° Type V Narrow
15' Height @ 0°

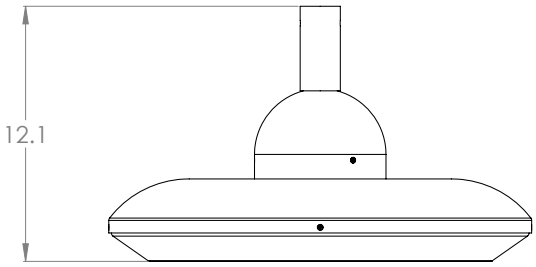


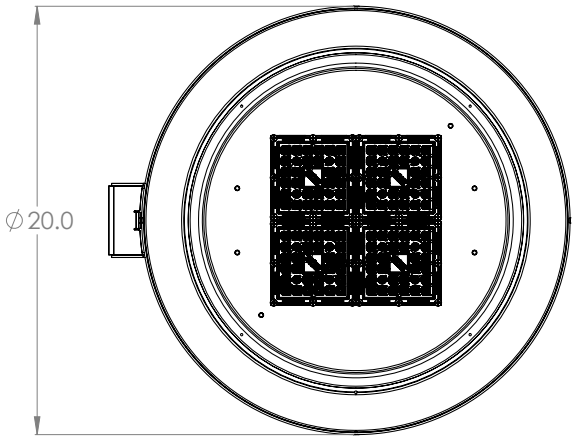
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(5VN) 30° Type V Very Narrow
15' Height @ 0°

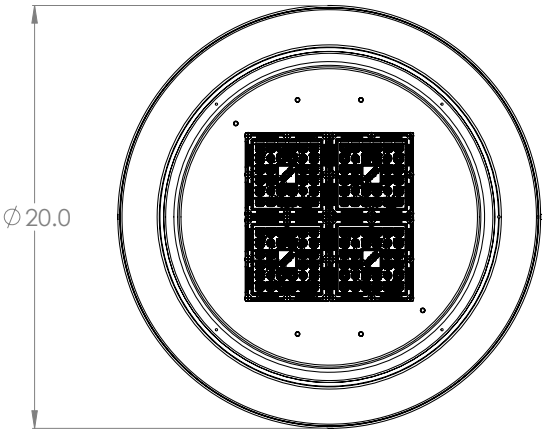
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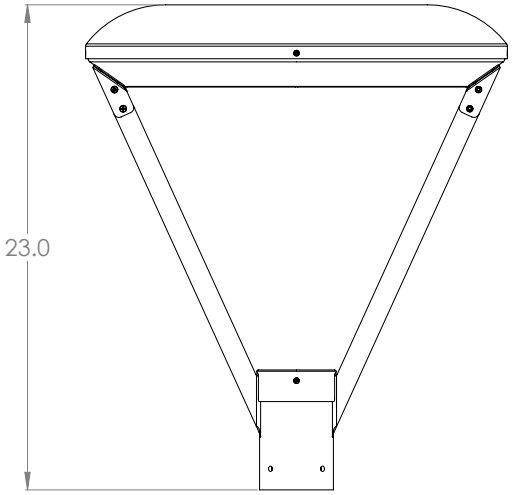
Dimensional Diagrams

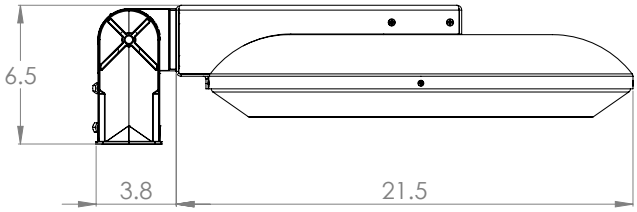


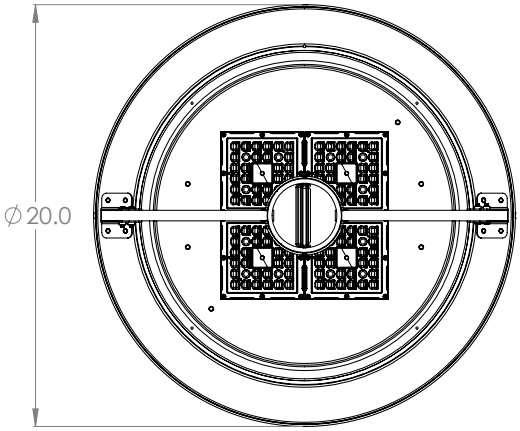


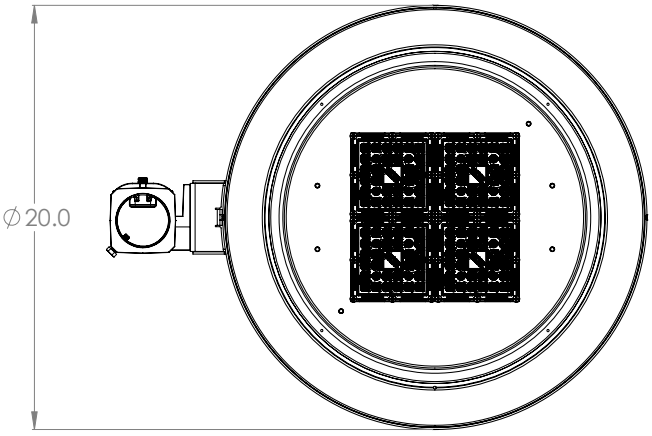












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Ordering Information

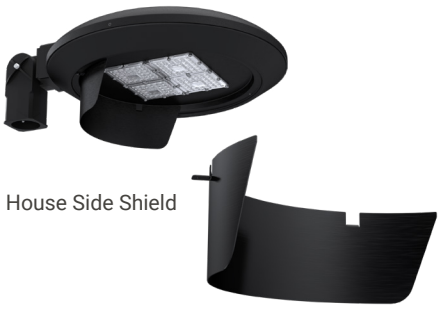
Ex: WD-DRX-80-30-MV-5W-BK-3T

Product Family	Design	Lumen Output (Model = Nominal Lumens)	Color Temp	Voltage	Distribution	Finish Color
WD = WiLLstudio™	DRX = Medium Housing	40 = 6,000	30 = 3000K, 70 CRI	MV = 120-277V	1S = Type I Short	BK = Black
	CH = Custom	80 = 12,000	40 = 4000K, 70 CRI	HV = 277-480V	2M = Type II Medium	DB = Dark Bronze
		115 = 18,000	50 = 5000K, 70 CRI	CV = Custom	3M = Type III Medium	WH = White
		155 = 22,000	PCA = PC Amber (590 nm)		3W = Type III Wide	NA = Nat Alum Silver
		CW = Custom & Amber	TA = True Amber (593 nm)		4M = Type IV Medium	LG = Light Gray
			CT = Custom		5W = 150° Type V Square	SG = Slate Gray
					5M = 90° Type V Medium	DG = Dark Green
					5N = 70° Type V Narrow	DP = Dark Platinum
					CD = Custom	GM = Graphite Metallic
						RAL = Custom RAL Match

Options & Accessories (Add as Suffix)		
Mounting	**Options**	**Accessories**
3T = 3.0" OD Tenon/Pole Fit	WHP3NP = 2' Cord w/o Plug, Stripped Pigtail	TLPC1 = Twist-Lock Photocell, 120-277V (Not Installed) (Requires N5P Receptacle)
PM = Pendant Mount	WHP7NP = 6' Cord w/o Plug, Stripped Pigtail	TLPC4 = Twist-Lock Photocell, 347/480V (Not Installed) (Requires N5P Receptacle)
SMS = Side Mount (Square Pole or Wall)	WHP11NP = 10' Cord w/o Plug, Stripped Pigtail	HSS-DRX = House Side Shield
SMR = Side Mount (Round Pole)	SRG27710 = 10kA Surge Suppressor (Field Replaceable), 120-277V	AFW = Area/Flood Light Wall Bracket (Black Finish) (Not Installed)
SF = 2.38" OD Slipfitter (Not Used With Frosted Lens Option)	SRG48010 = 10kA Surge Suppressor (Field Replaceable), 347-480V	GFX = Wireless DMX Lighting Control System (Consult Factory)
CS = Cable Suspension	BPC1 = Button Photocontrol, 120-277V	GFM = Wireless Mesh Lighting Control System (Consult Factory)
CM = Custom	BPC3 = Button Photocontrol, 347V	
	BPC4 = Button Photocontrol, 480V	
	N5P = NEMA 5pin Twist-Lock Receptacle	
	MPS = Programmable Motion Sensor w/ ON/OFF + Dimming + Photocontrol, Bluetooth Settings Adjustable, maximum coverage of 100' diameter from 40' mounting height (Remote Mount Only)	

Note: Custom products, configurations, options, and accessories available from factory.
Note: Products are designed and built to accepted industry safety standards, and standard products are certified by Intertek to UL safety standards. Custom configurations may not have formal ETL marks.


Slipfitter Mount


House Side Shield


Wall Bracket


Side Mount


Pendant Mount

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April 29, 2024

Elizabeth A. Maxwell, AICP
City Planner
City of Crystal Lake
100 W. Woodstock Street
Crystal Lake, IL 60014

RE: Derbyshire Townhomes – Proposed Development

Dear Elizabeth,

The purpose of this letter is to express my views prior to a scheduled meeting on the above referenced subject before the City Planning and Zoning Commission.

To begin, I will appear before the Commission as President of Wedgewood Association, Inc., and a Crystal Lake homeowner since 1979.

In my opinion there are at least four areas of major concern for the Commission to consider before any action to approve may be taken. These are briefly outlined below as follows:

Density

"Gross density has been provided at nine (9) units to the acre. Net density excluding roads and detention is required to be provided and comply with the nine dwelling units per acre."

- **Preliminary PUD and Preliminary Plat of Subdivision**

The acreage (gross density) is described as being approximately 5 acres (Development Application) to 5.5 acres (for sale sign presently on property). A document from Equity Trust Co. lists the acreage at 5.27, and a final plat indicates acreage as 5.312.

As a small parcel of non-contiguous land on the west side of Crabapple Dr. was likely included in the final plat, I recommend for the proposed development an acreage of 5.2 be used as a calculation of gross density.

We must also calculate net density.

The developer in the Final Site Plan lists acreage for plantings in a natural/lower detention area as .77 acres. To this acreage the acreage of the proposed 24 ft. wide street from Huntly Rd. from the east to Crabapple Dr. to the west must be added, as must the acreage of the street exiting Bard Rd. on the north side. There may be several other areas to consider.

Therefore, the net density for determining compliance with the Crystal Lake Code for the proposed development appears to be approximately 4 acres.

The developer of the proposed development is proposing an increase of 33-1/3% over the allowable density of 9 units per acre as set forth in the Crystal Lake Code.

In my opinion, allowing 48 units on this 4 acre parcel of land far exceeds 9 units per acre as set forth in the Code. This becomes even more evident when space set aside for a tot lot, pickle ball/basketball court, gazebo and dog park is also considered, (the tot lot appears to be too close to the pickle ball court).

Drainage

"The offsite area from the west currently drains to the middle of west property line. The offsite area will be routed through the detention basin. We will address the offsite drainage during final design."

- **Advantage Consulting Engineers**

There is a drainage pipe emanating from Crystal Lake Water Tower property to the west. The pipe protrudes approximately 120 ft. to the north from where Crabapple Dr. ends.

The pipe drains thru an easterly channel for also 120 ft. before culminating with an accumulation of water in a pond like setting. (see enclosed photos, and red line marking on the Final Site Plan)

From information available, units of the proposed development will not include basements. It would appear drainage would therefore by necessity flow under two of the proposed buildings. This should not be acceptable to the Committee.

The report of the consultants (also enclosed) concluded "In our opinion, the storm water management meets the minimum requirements of the McHenry County Storm Water Management Ordinance.

I have a copy of the Ordinance. The document is extensive. What specific section(s) of the ordinance does the consultant reference as meeting minimum requirements?

If not properly managed, water damage to units will likely occur. There are sections of the consultant's report that appear confusing. (see Runoff Volume Reduction Hierarchy). In my opinion, the developer and his consultant failed to coordinate the drainage / storm water management effort with either McHenry Count Water Resources or City Public Works. Regardless, the developer must submit a final design for review.

Lakeshore Recycling Systems (LRS) / District 47 / 155 School Busses

"Per the petitioner, garbage will be picked up from roll cans loaded at the street and the garbage truck will not enter the site."

- **Preliminary PUD Site Plan**

We need to consider a number of factors. Let's first look at the 24 proposed units near the exit to Crabapple Dr. Each homeowner will need to put identification marks on their trash receptacles, and, under ideal conditions, roll them next to the curb. (an extension of a public walkway on Crabapple Dr. about 8 ft. from the curb is planned). In the winter, snow and ice will force homeowners to place these receptacles in the street. Vehicles (2 per unit) exiting or entering the area could create a hazard especially if snowplows, garbage trucks or school busses are also present. Add to this emergency

vehicles and you have the elements necessary for a perfect storm (disaster). The same holds true for exits on Bard and Huntly Rds.

It must be mentioned that the speed limit is 30 mph on Bard Rd. and 35 mph on Huntley Rd.

In addition to giving serious consideration to density and drainage issues, the Commission must also give serious consideration to this issue.

Natural Environment / Trees

"The petitioner will be removing trees. The total inches removed is 59.6 inches. This would (sic) require 24 replacement trees."

- **Preliminary PUD Landscape Plan**

The removal of trees appears to be consistent with any new or proposed development in Crystal Lake; i.e., Waters Edge, Pathway Ct. The proposed Derbyshire Townhomes development is no exception.

The removal of a large number of trees from an area described by the developer as the "norther pod" can only be described as harmful to the environment. The only trees left in the proposed development will be those on adjacent property not under the developers control or ownership.

Of importance, the area designated for tree removal serves as a natural habitat for wildlife to include numerous deer. This was confirmed by an arborist who accompanied me during a recent visit to the site.

The developer indicates tree removal of 59.6 inches. This calculation appears low especially when a number of Walnut and Cedar trees are included in the count, as well as one 125 year old Burr Oak.

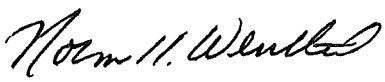
In addition to the above, there are other factors the Commission may want to consider to include:

1. There are no walking paths or trails in the proposed development. There is a planned sidewalk where homeowners can walk south to a park on the corner of Huntley and Ackman Rds.

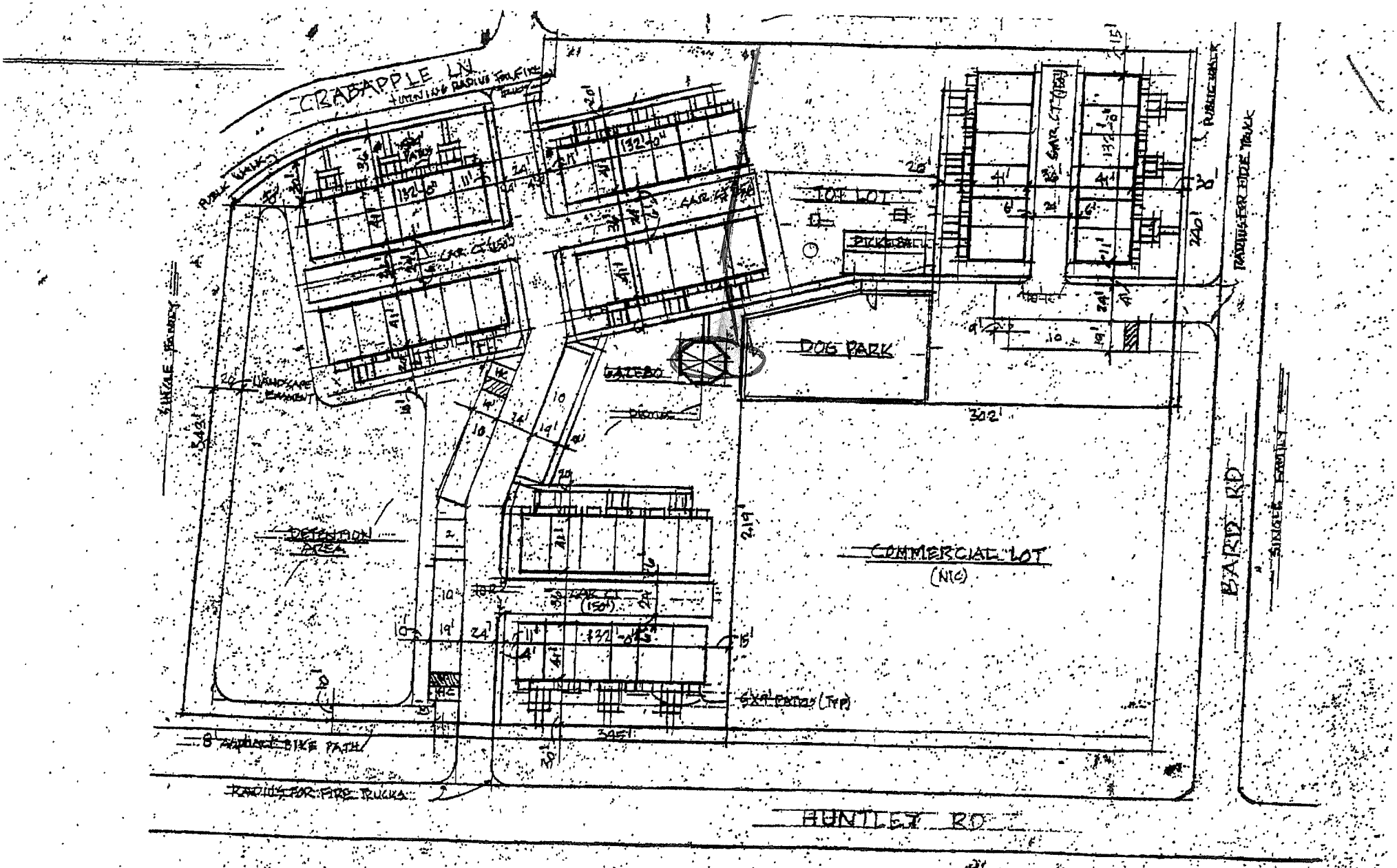
However, access to the beaches of Crystal Lake will require either walking on or crossing Huntley Rd.

2. The Walnut Glen Community will not allow access thru their development.
3. The property on the corner of Bard and Huntley Rds. contiguous to be proposed development is zoned commercial.
4. At some point, the developer will turn over responsibility of the development to a homeowner association. The association will be responsible for external unit maintenance, and the grounds to include a tot lot with playground equipment, pickle ball court, and dog park. Association dues to include insurance may be high as liability issues may be present.
5. The developer has indicated an extension of sidewalks on Crabapple and Huntley Rds., and a new sidewalk on Bard Rd. Also, presumably the utility poles and transmission lines will be removed, and the lines placed underground. Any cost to the public (Crystal Lake taxpayers) should be made known.

Thank you for giving attention to this letter. Please feel free to share this with any other person who may be interested.



Norman H. Wentland
President
Wedgewood Association, Inc.
1070Plantain Ct.
Crystal Lake, IL 60014
Nwentland06@gmail.com
(815)345-1794



DERBYSHIRE TOWNHOMES

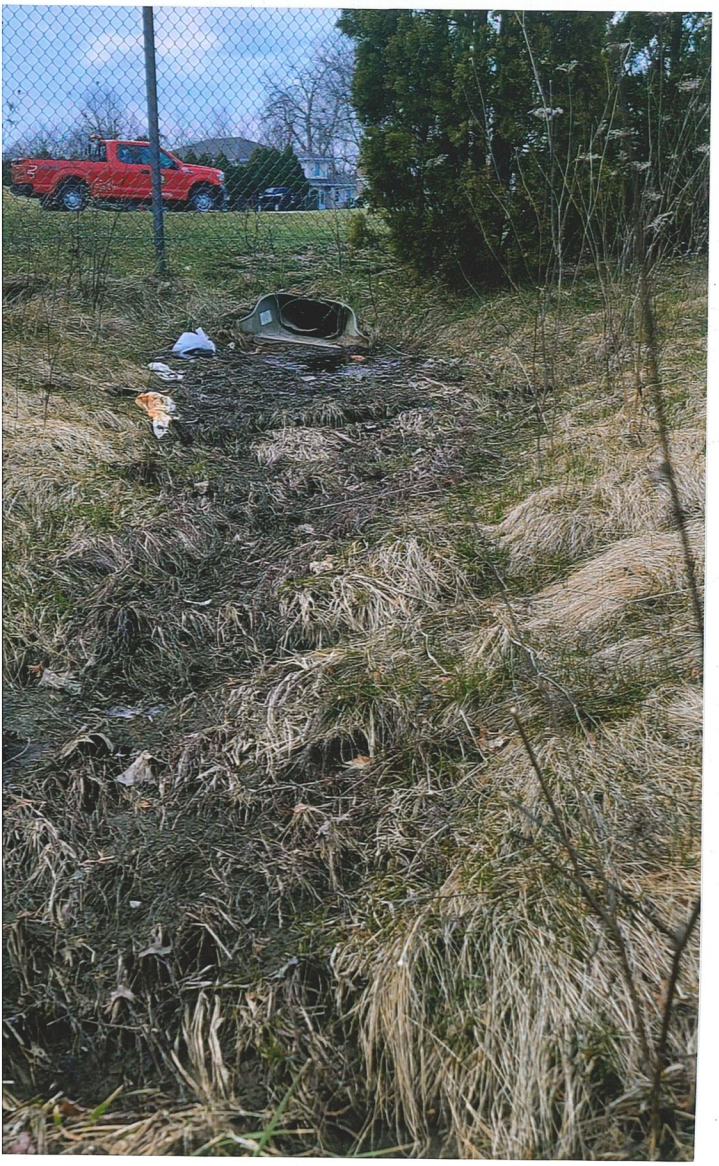
FINAL SITE PLAN 12/20/23











Dated : 6/10/2024

Good Morning Madam

Response to public comment

[1] GROSS AREA

Together with the main area and the SW of Crabapple Dr, we are 5.312 (attached is the survey as well).

PARCEL 1 AREA: (NE OF CRABAPPLE DR.)	**215,275+/- SQ.FT.**	**4.942 ACRES**
PARCEL 1 AREA: (SW OF CRABAPPLE DR.)	**2,035+/- SQ.FT.**	**0.047 ACRES**
PARCEL 2 AREA:	**14,066+/- SQ.FT.**	**0.323 ACRES**
TOTAL SITE AREA:	**231,396+/- SQ.FT.**	**5.312 ACRES**

[2] STORMWATER

c. On the Inlet Area Exhibit (Sheet DR3), existing contour lines should be extended on the east side of the parcel over the Huntly Road. This will allow verification of drainage areas delineation for storm structures I29, CB28 and CB27.
d. The proposed 906 contours in the north of the detention basin, near building #7, and around Storm Structure I24 do not correctly tie into the existing contours and should be revised accordingly on the Grading Plan (Sheet G1).

2. Comment #4d from the previous CBBEL memorandum dated March 8, 2024, remains outstanding. The segment of proposed storm sewer from storm structure I29 to the existing manhole should be modeled to demonstrate that it is adequately sized. The proposed storm sewers must be modeled to demonstrate adequate conveyance of the 10-year critical duration storm.

The storm water management is per article VI B of the code. It appears that the City City consultant (CBBEL) has reviewed the report and has pretty much approved it.
A special structure and storm sewer system will be used to convey the offsite flow to the detention basin. Our engineer will address this as soon as the surveyor provides more details.

[3] DENSITY

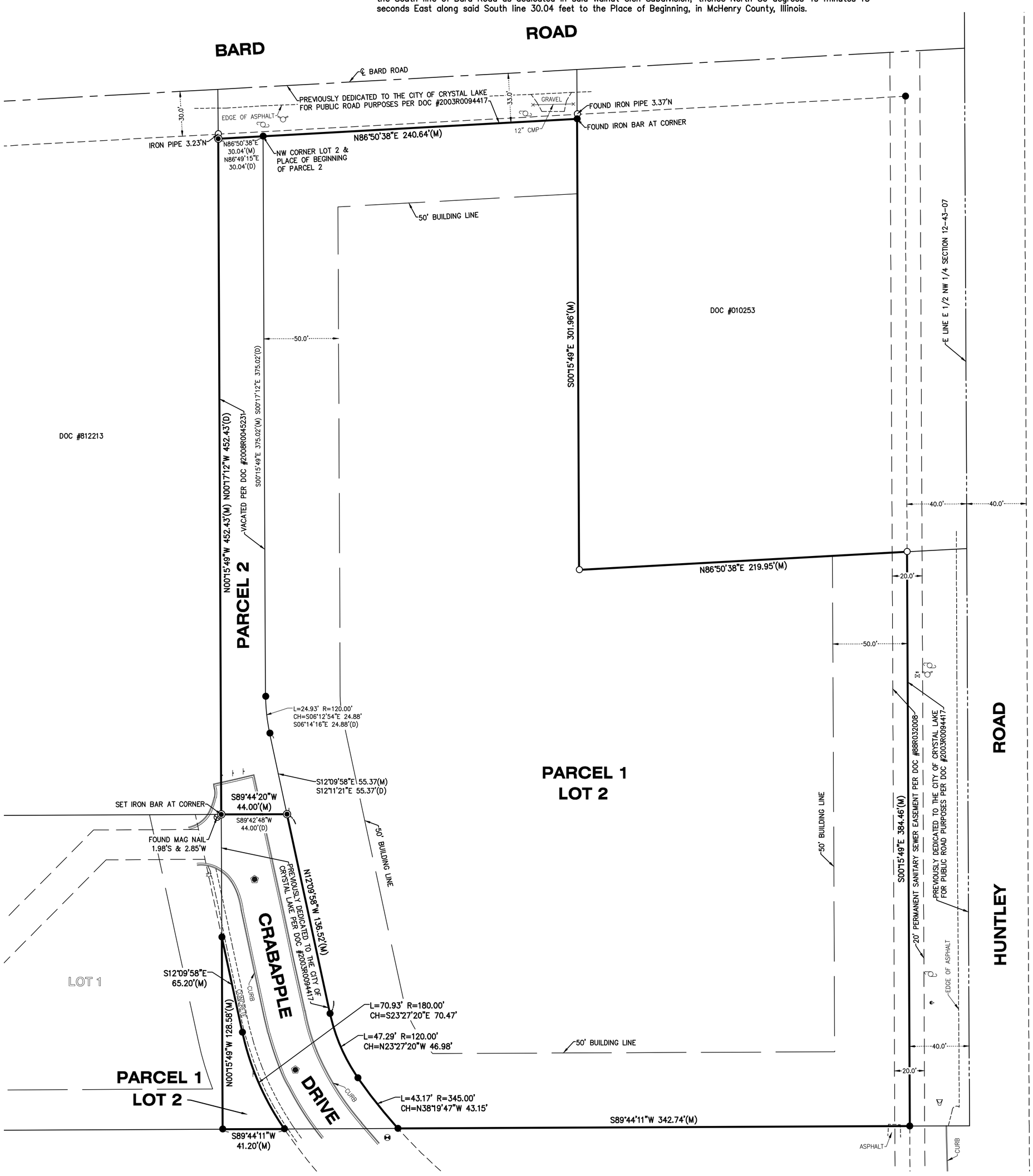
There has been discussion and recommendation by the PZC on this issue

Vanderstappen
Land Surveying, Inc.
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1316 N. Madison St.
Woodstock, Illinois 60098
ph. 815-337-8310 fax 815-337-8314
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ALTA/NSPS LAND TITLE SURVEY

PARCEL 1:
Lot 2 in Walnut Glen Subdivision of part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7, East of the Third Principal Meridian, according to the Plat thereof recorded July 17, 2003 as Document No. 2003R0094417, in McHenry County, Illinois.

PARCEL 2:
Part of Crabapple Drive (Vacated per Ordinance Document No. 2008R045231)as originally dedicated per Document No. 2003R056448 and depicted in the Final Plat of Walnut Glen Subdivision, being a Subdivision of part of the East Half of the Northwest Quarter of Section 12, Township 43 North, Range 7 East of the Third Principal Meridian, according to the Plat thereof recorded July 17, 2003R0094417, described as follows: Beginning at the Northwest corner of Lot 2 in said Walnut Glen Subdivision; thence South 00 degrees 17 minutes 12 seconds East along the East line of said Crabapple Drive, 375.02 feet; thence Southeasterly 24.93 feet along said East line, being a curve to the left having a radius of 120.00 feet, the chord of bears South 06 degrees 14 minutes 16 seconds East, 24.88 feet; thence South 12 degrees 11 minutes 21 seconds East along said East line, 55.37 feet to the South line of property described in Document No. 812213, extended East; thence South 89 degrees 42 minutes 48 seconds West along said South line extended, 44.00 feet to the Southeast corner of said property lands; thence North 00 degrees 17 minutes 12 seconds West along the East line thereof and the West line of said Crabapple Drive 452.43 feet to the South line of Bard Road as dedicated in said Walnut Glen Subdivision; thence North 86 degrees 49 minutes 15 seconds East along said South line 30.04 feet to the Place of Beginning, in McHenry County, Illinois.



SURVEYOR'S NOTES

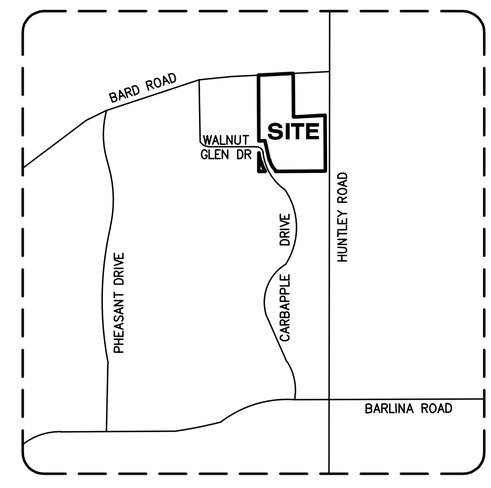
1. The utility easements shown hereon have been provided by Chicago Title Insurance Company, Commitment policy #22ST01960CL dated July 29, 2022. The title information shown hereon is exclusively that provided to the Surveyor by the Title Insurer or the client. The Surveyor does not warrant the exact location of the Utility Easements shown hereon, but does state that they are located as accurately as possible from the information provided.
2. Based on Flood Insurance Rate Map, Panel No. 17111C0326J, dated November 16, 2006, the subject property lies within Zone "X", areas determined to be outside the annual 0.2% chance floodplain.
3. Distances are marked in feet and decimal places thereof, no dimension shall be assumed by scale measurement hereon. Distances and/or bearings shown with a "D" in parenthesis (D) are record or deed values, not field measured.
4. Compare this plat, legal description and all survey monuments before building, and immediately report any discrepancies to the surveyor.
5. The location of the property lines shown on the face of this plat are based on the legal description contained in the title commitment and shown hereon. This information has been furnished by the client and compared to record deeds to check for gaps and /or overlaps. However, this survey may not reflect historical matters of title and ownership that have not been disclosed by the title commitment.
6. Only the improvements which were visible from above ground at time of survey and through a normal search and walk through of the site are shown on the face of this plat. Lawn sprinkler systems, if any, are not shown on this survey.
7. Manholes, inlets and other utility rims or grates shown hereon are from field location of such, and only represent such utility improvements which are visible from above ground survey at the time of survey, through a normal search and walk through of the site. The labeling of these manholes (sanitary, water, etc) are based solely on the "stamped" markings on the rim. No underground observations have been made to verify the actual use or existence of underground utilities.
8. Surface indications of utilities on the surveyed parcel have been shown. Underground and offsite observations have not been made to determine the extent of utilities serving or existing on the property, public and/or private records have not been searched to provide additional information. Overhead wires and poles (if any) have been shown, however their function and dimensions have not been shown.
9. This survey may not reflect all utilities or improvements, if such items are hidden by landscaping, or are covered by such items as dumpsters or trailers or when the site was covered with snow. At the time of survey, the site was not covered by snow.
10. This survey makes no statement regarding the actual presence or absence of any service or utility line. Controlled underground exploratory effort together with "JULIE" markings is recommended to determine the full extent of underground service and utility lines. Contact J.U.L.I.E. at 1-800-892-0123.
11. Restrictions that may be found in local buildings and/or zoning codes have not been shown. Height and bulk restrictions (if any) have not been shown. Only those setback restrictions shown on the recorded subdivision plat or in the title commitment have been shown.
12. The surveyed property is located at Huntley Road in Crystal Lake IL. (Pertains to Table A, item 2).
13. The surveyed property is Zoned Multifamily (PUD) – (R-3B PUD) based on the Official Zoning Map of the City of Crystal Lake, dated February 1st, 2022. Plottable restrictions from said Zoning District have not been shown. (Pertains to Table A, item 6).

SCHEDULE B EXCEPTIONS

14. Exceptions 1, 4, 5, 6, 7, 8, 9, 10, 11 and 12 are not survey related.
15. Exceptions 2, 3, 13, 14 and 16 are blanket in nature.
16. Exceptions 15, 17 and 18 are plotted hereon.

LEGEND	
	DOWN GUY
	FIRE HYDRANT
	FLARED END SECTION
●	FOUND IRON BAR
○	FOUND IRON PIPE
⊗	FOUND MAG NAIL
	LIGHT
	SANITARY MANHOLE
◉	SET IRON BAR
	SIGN
	UTILITY POLE
	VALVE VAULT
	WATER VALVE
(M)	MEASURE
(R)	RECORD

40' 0' 40' 80'
SCALE: 1" = 40'



VICINITY MAP N.T.S.

PARCEL 1 AREA: 215,275+/- SQ.FT. 4.942 ACRES
(NE OF CRABAPPLE DR.)

PARCEL 1 AREA: 2,035+/- SQ.FT. 0.047 ACRES
(SW OF CRABAPPLE DR.)

PARCEL 2 AREA: 14,066+/- SQ.FT. 0.323 ACRES

TOTAL SITE AREA: 231,396+/- SQ.FT. 5.312 ACRES

CLIENT: WAGGONER LAW FIRM P.C.
DRAWN BY: CKV CHECKED BY: APG
SCALE: 1"=40' SEC. 12 T. 43 R. 07 E.
BASIS OF BEARING: IL EAST ZONE NAD83 (2011)
P.I.N.: 18-12-179-005
JOB NO.: 220770 I.D. ALT
FIELDWORK COMP.: 07/21/22 BK. ___ PG. ___
ALL DISTANCES SHOWN IN FEET AND DECIMAL PARTS THEREOF CORRECTED TO 68° F. REF: 001120

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

11/16/22 – APG – TOTAL SITE AREA ADDED
10/10/22 – CKV – REVISED PER UPDATED TITLE COMMITMENT

Certified to: 1) Chicago Title Insurance Company
2) Equity Trust Co.

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 1, 2, 3, 4, 6a, 11a, & 19 of Table A thereof. The field work was completed on July 21th, 2022.

Dated this 26th day of July, A.D., 2022.

VANDERSTAPPEN LAND SURVEYING INC.
Design Firm No. 184-002792

_____ (seal)
ARTHUR P. GRITMACKER, 035-003857
PROFESSIONAL LAND SURVEYOR

ARTHUR P. GRITMACKER
035-003857
PROFESSIONAL LAND SURVEYOR
STATE OF ILLINOIS
EXP. 11/30/2022
WOODSTOCK, ILLINOIS

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