

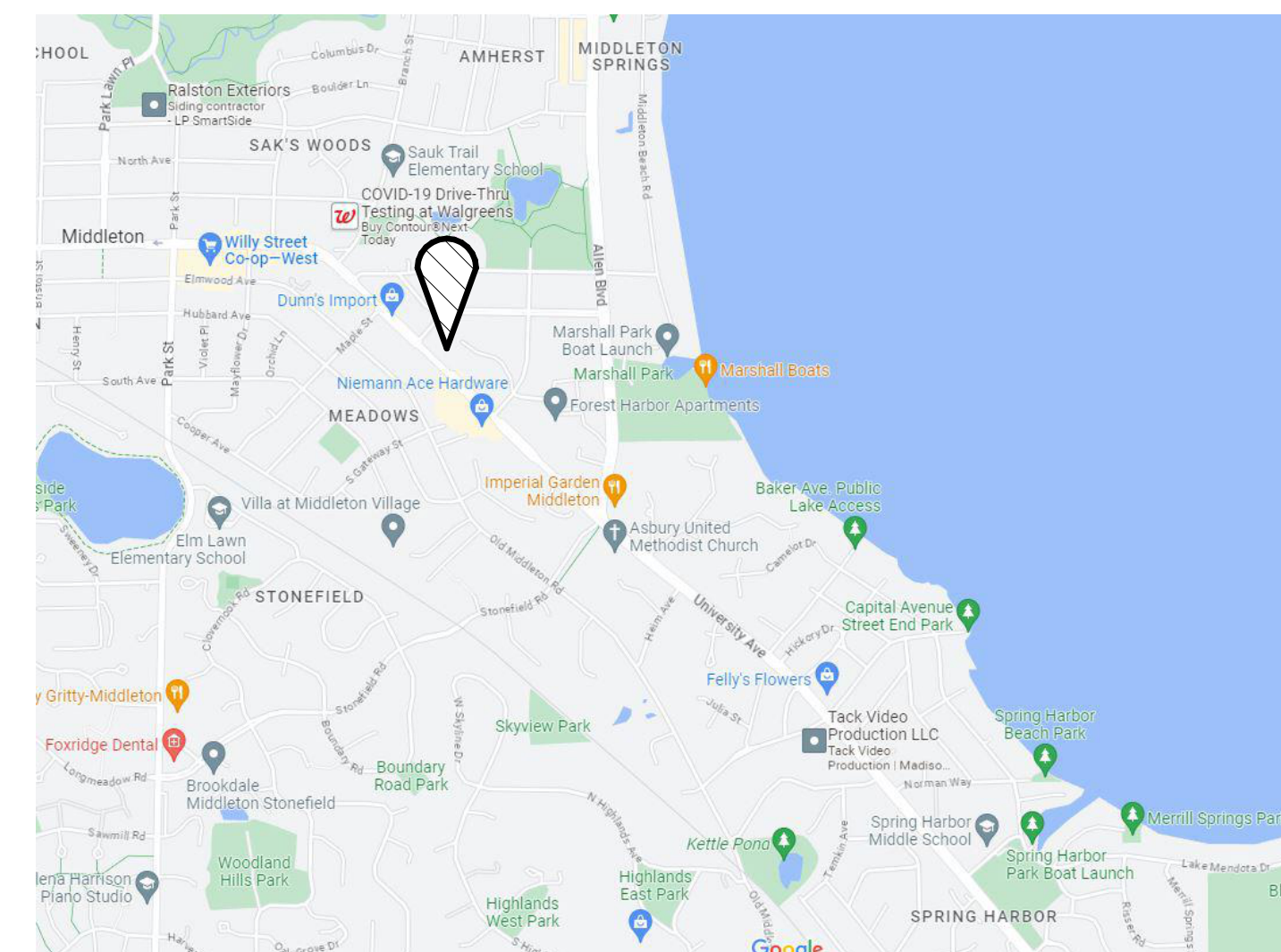


# UNIVERSITY AVENUE APARTMENTS

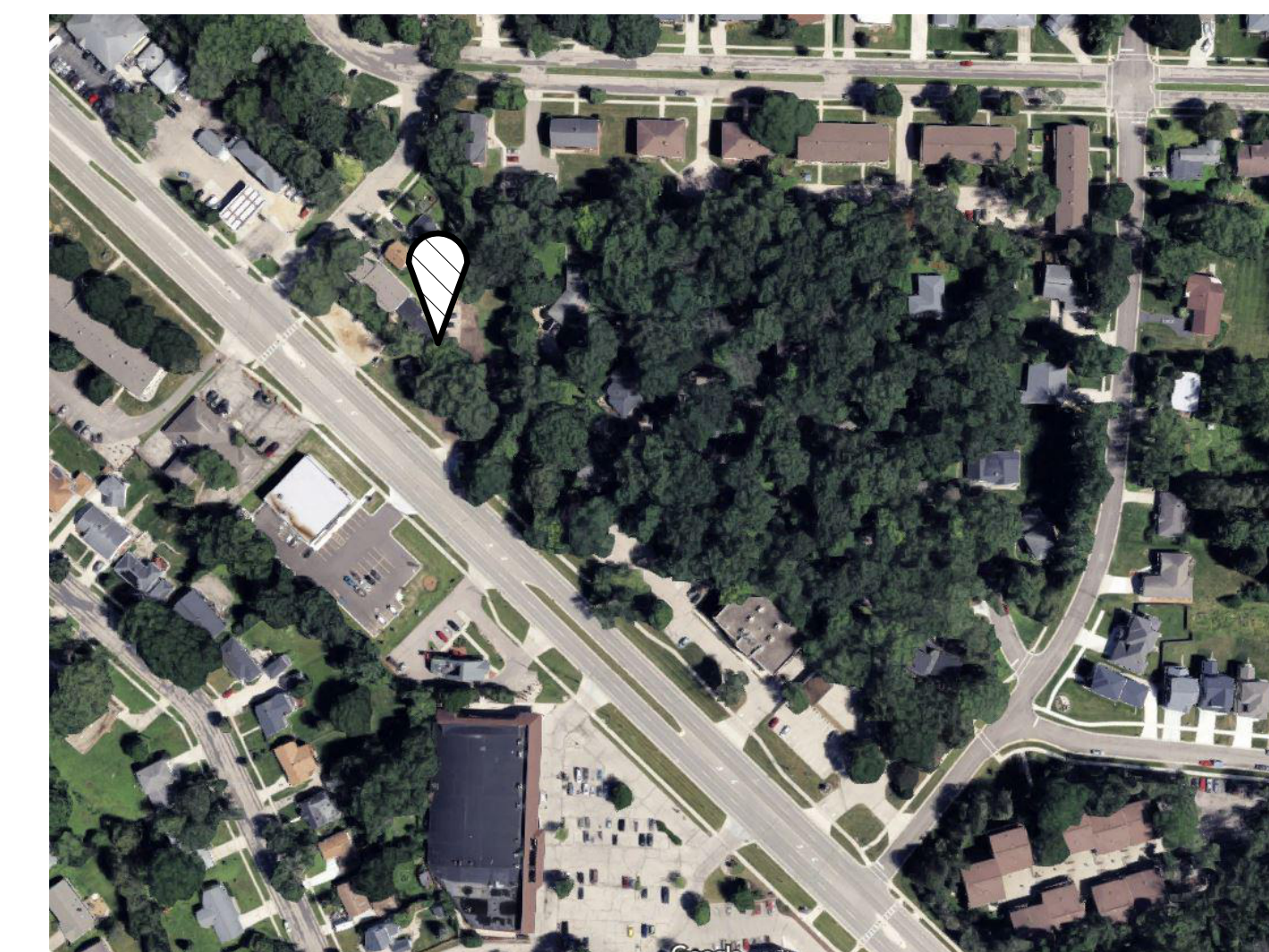
6418 UNIVERSITY AVENUE  
MIDDLETON, WI 53562

GENERAL IMPLEMENTATION PLAN DRAWINGS

VICINITY LOCATION MAP:



PROJECT LOCATION MAP:



GBA PROJECT NO. 202303

OWNER:  
 **RIPPLE MANAGEMENT**  
3801 REGENT STREET  
MADISON, WI 53705  
PHONE: (608) 238-2044  
CONTACT: JULIO MARTINEZ  
EMAIL: julio@ripplements.com

ARCHITECT/INTERIOR DESIGNER:  
 **GARY BRINK AND ASSOCIATES, INC**  
2248 DEMING WAY, SUITE 120  
MIDDLETON, WI 53762  
PHONE: (608) 829-1750  
CONTACT: JEFFREY T. BRENKUS  
EMAIL: jeff.brenkus@garybrink.com

CIVIL/LANDSCAPE:  
 **WYSER ENGINEERING**  
300 EAST FRONT STREET  
MOUNT HOREB, WI 53572  
PHONE: (608) 437.1980  
CONTACT: WADE WYSE  
EMAIL: wade.wyse@wyserengineering.com

COVER	PROJECT COVER SHEET
A-00	AERIAL VIEWS
A-01	ARCHITECTURAL SITE PLAN
A-02	LOWER LEVEL PLAN
A-03	FIRST FLOOR PLAN
A-04	SECOND FLOOR PLAN
A-05	THIRD FLOOR PLAN
A-06	FOURTH FLOOR PLAN
A-07	FIFTH FLOOR PLAN
A-08	EXTERIOR ELEVATIONS
A-09	SHADE & SHADOW STUDIES
C100	SITE PLAN
C200	GRADING PLAN
C201	DETAIL GRADING PLAN
C300	UTILITY PLAN
C400	DETAILS
Pg 1-11	SITE LIGHTING LAYOUT & PHOTOMETRIC PLAN

Include landscaping plan

PROJECT:  
 **UNIVERSITY AVENUE APARTMENTS**  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN  
CLIENT:  
 **RIPPLE MANAGEMENT**  
3801 REGENT STREET  
MADISON, WISCONSIN

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PROJECT: 202303  
DRAWN BY: Author  
DATE: 06/20/23  
SCALE: AS NOTED

GIP DRAWING SET 06/20/2023

PROJECT COVER SHEET

**COVER**



AERIAL VIEW OF SITE



AERIAL VIEW OF SITE



AERIAL VIEW OF SITE



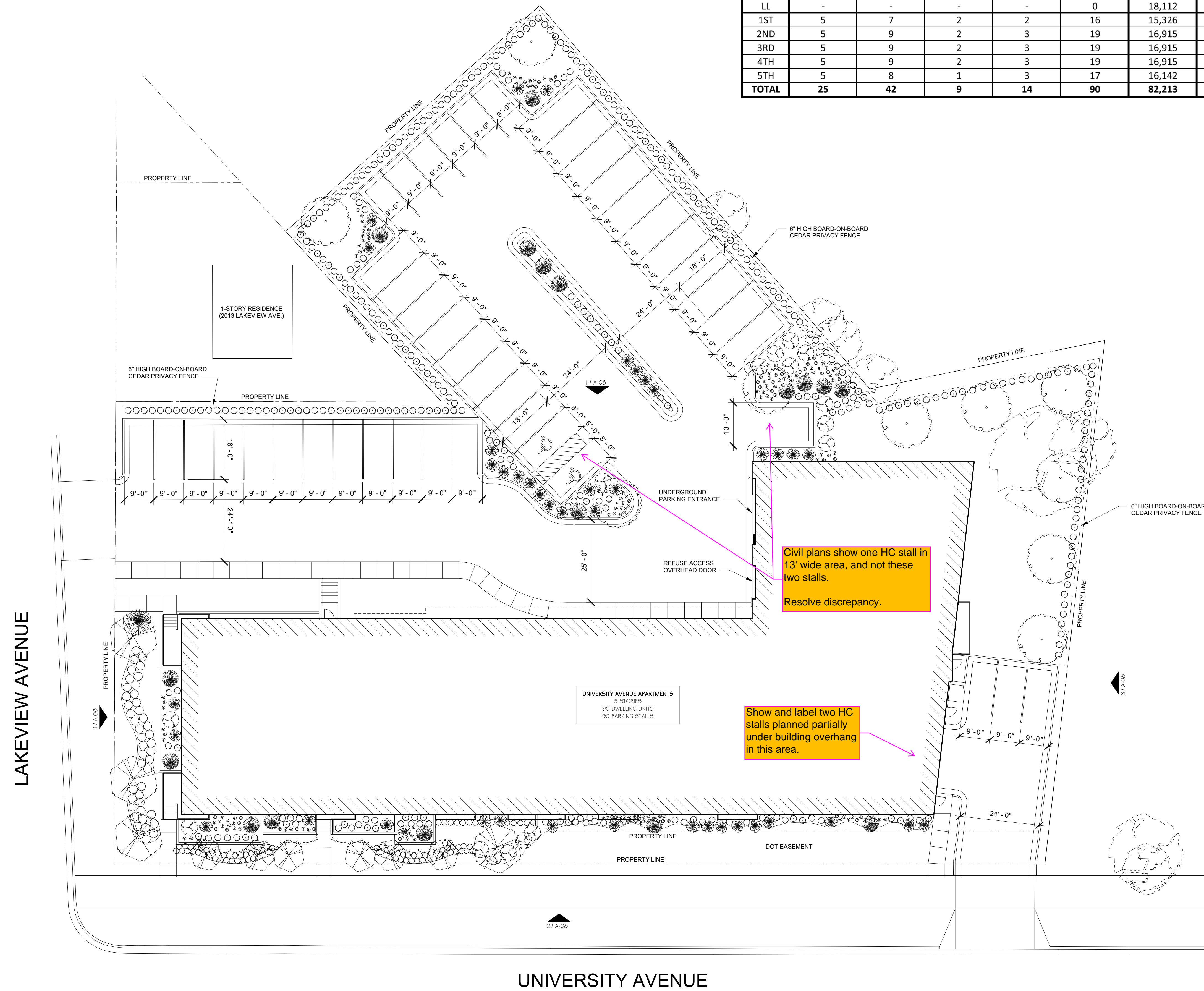
AERIAL VIEW OF SITE

PROJECT: **UNIVERSITY AVENUE APARTMENTS**  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN  
CLIENT: **RIPPLE MANAGEMENT**  
3801 REGENT STREET  
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CASTLE ROCK APARTMENTS									
FLOOR	STUDIO	1-BR	1-BR w/DEN	2-BR	TOTAL	AREA	UG PARKING	SURF. PARKING	TOTAL PARKING
LL	-	-	-	-	0	18,112	45	40	85
1ST	5	7	2	2	16	15,326	-	5	5
2ND	5	9	2	3	19	16,915	-	-	0
3RD	5	9	2	3	19	16,915	-	-	0
4TH	5	9	2	3	19	16,915	-	-	0
5TH	5	8	1	3	17	16,142	-	-	0
<b>TOTAL</b>	<b>25</b>	<b>42</b>	<b>9</b>	<b>14</b>	<b>90</b>	<b>82,213</b>	<b>45</b>	<b>45</b>	<b>90</b>



Civil plans show one HC stall in 13' wide area, and not these two stalls.  
Resolve discrepancy.

Show and label two HC stalls planned partially under building overhang in this area.

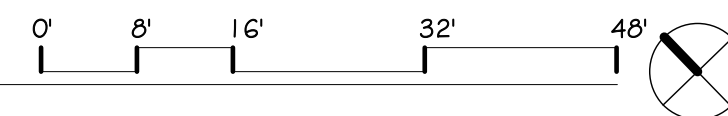
UNIVERSITY AVENUE APARTMENTS  
5 STORIES  
90 DWELLING UNITS  
90 PARKING STALLS

1-STORY RESIDENCE  
(2019 LAKEVIEW AVE.)

LAKEVIEW AVENUE

UNIVERSITY AVENUE

1 ARCHITECTURAL SITE PLAN  
1/16" = 1'-0"



PROJECT: UNIVERSITY AVENUE APARTMENTS

6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN

CLIENT: RIPPLE MANAGEMENT

3801 REGEN STREET  
MADISON, WISCONSIN

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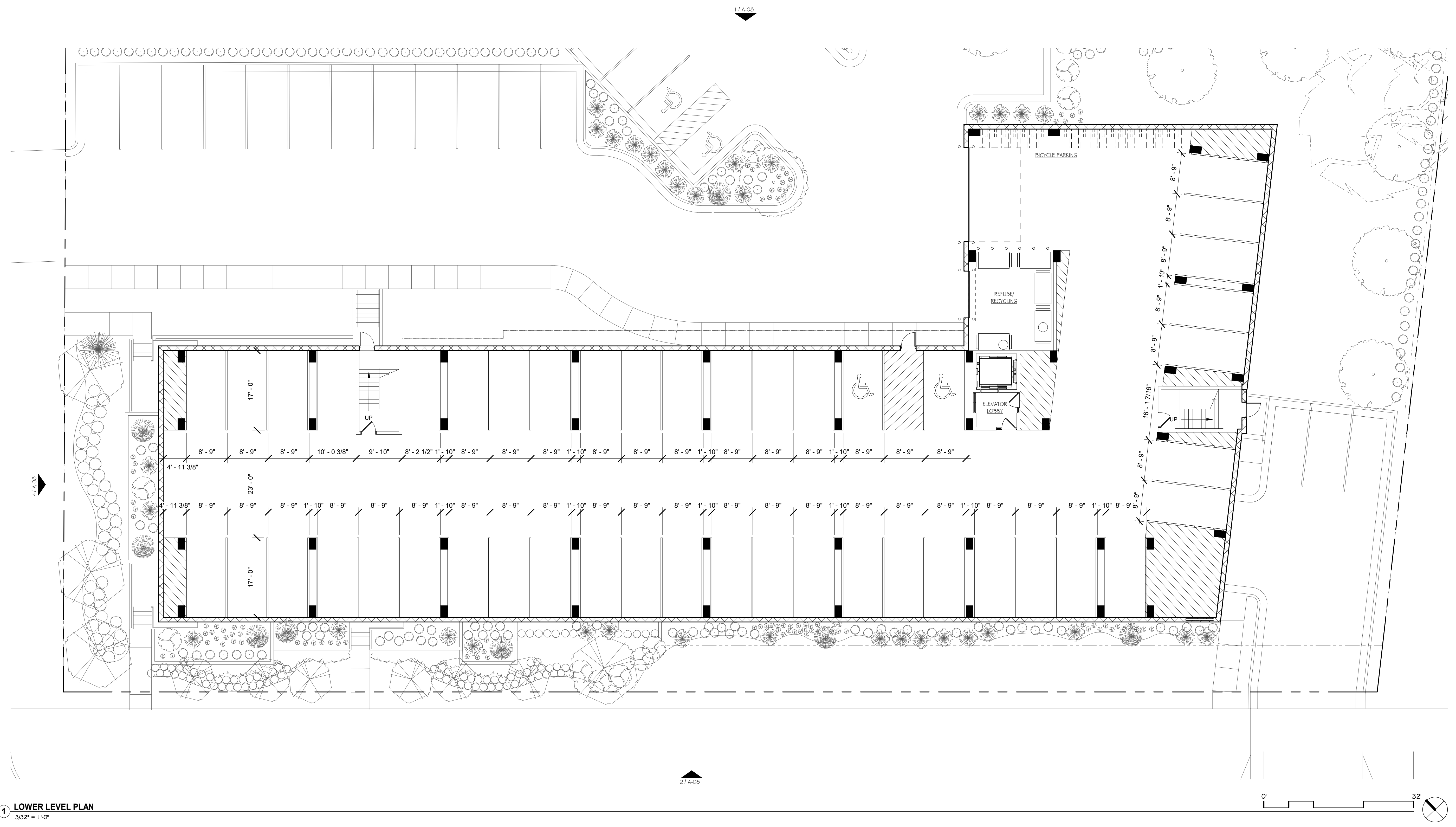
PROJECT: 202303  
DRAWN BY: Author  
DATE: 06/20/23  
SCALE: AS NOTED

ARCHITECTURAL  
SITE PLAN

A-01

ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq

LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf



1 LOWER LEVEL PLAN  
3/32" = 1'-0"

PROJECT: UNIVERSITY AVENUE APARTMENTS  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN  
CLIENT: RIPPLE MANAGEMENT  
3801 REGENCY STREET  
MADISON, WISCONSIN

PROJECT: 202303  
DRAWN BY: Author  
DATE: 06/20/23  
SCALE: AS NOTED

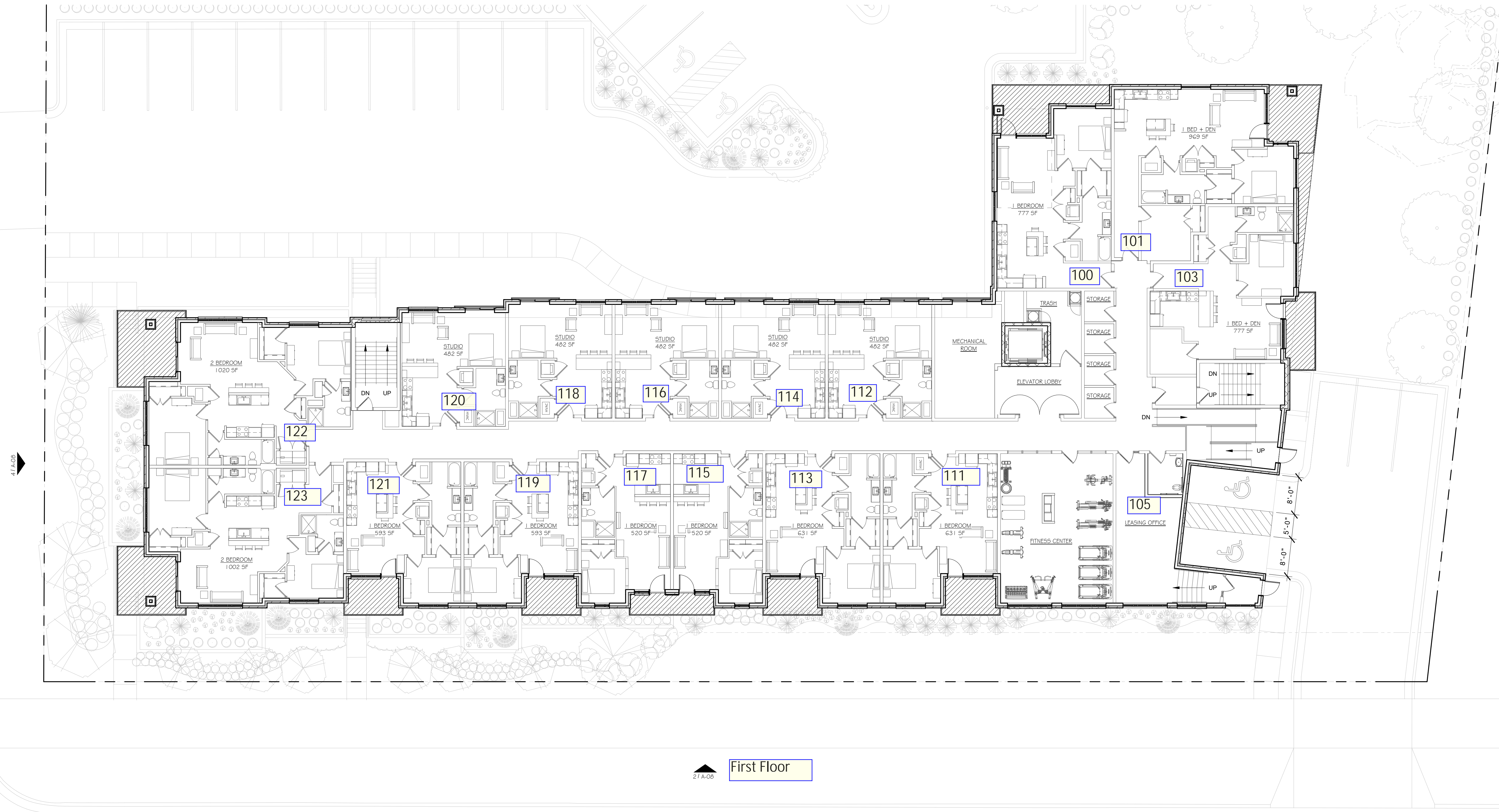
GIP DRAWING SET 06/20/2023

LOWER LEVEL PLAN

ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq
LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf

1/A-03

LAKEVIEW AVENUE



21 A-03 First Floor

UNIVERSITY AVENUE

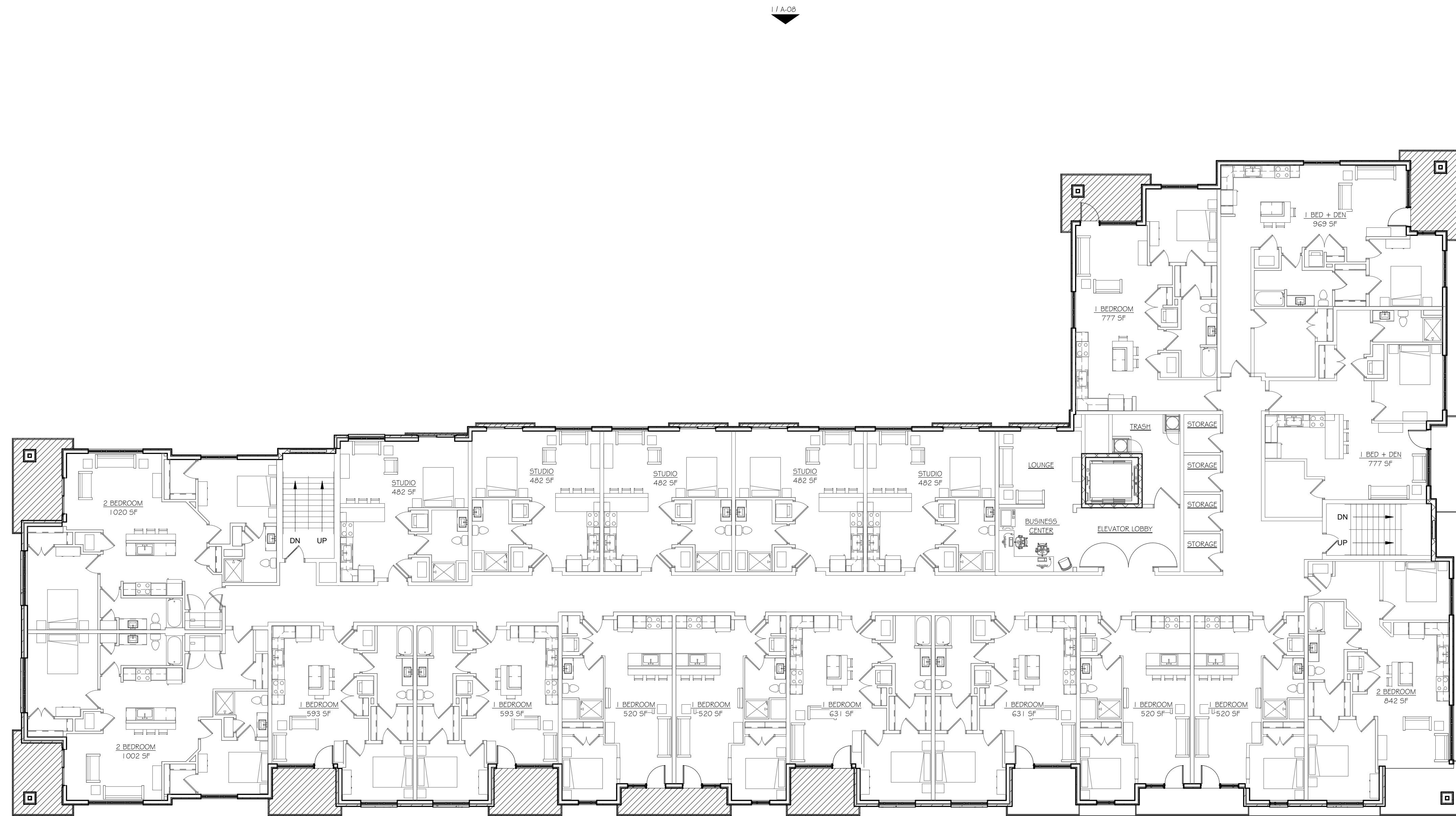
PROJECT: UNIVERSITY AVENUE APARTMENTS  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN

CLIENT: RIPPLE MANAGEMENT  
3801 REGENT STREET  
MADISON, WISCONSIN

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DATE: 06/20/23  
SCALE: AS NOTED

GIP DRAWING SET 06/20/2023

ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq
LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf



PROJECT: UNIVERSITY AVENUE APARTMENTS  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN

CLIENT: RIPPLE MANAGEMENT  
3801 REGENT STREET  
MADISON, WISCONSIN

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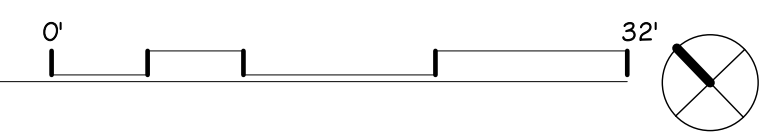
PROJECT: 202303  
DRAWN BY: Author  
DATE: 06/20/23  
SCALE: AS NOTED

GIP DRAWING SET 06/20/2023

SECOND FLOOR PLAN

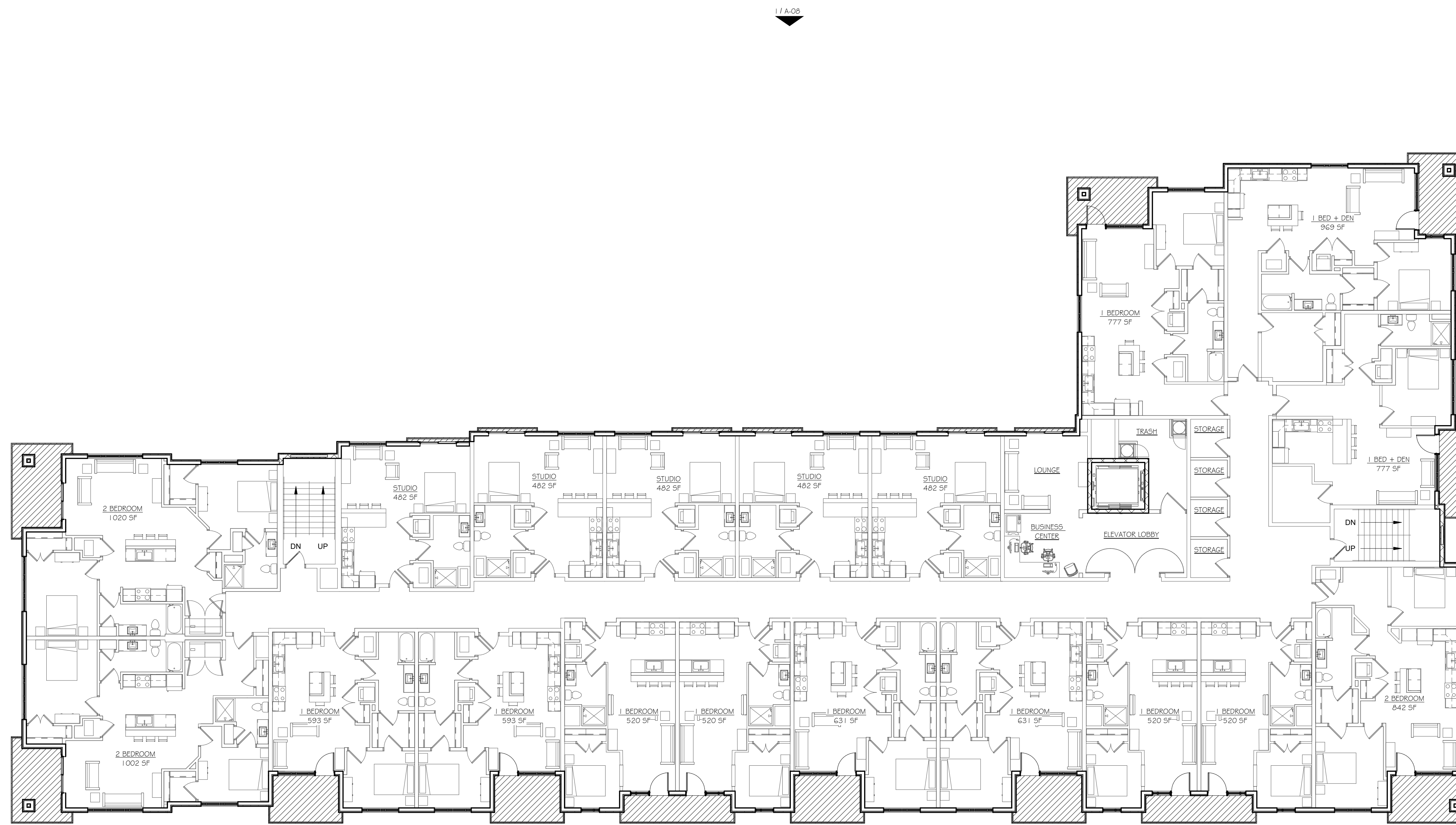
A-04

1 SECOND FLOOR PLAN  
3/32" = 1'-0"



ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq

LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf



1 THIRD FLOOR PLAN  
3/8" = 1'-0"

21A-08



PROJECT: UNIVERSITY AVENUE APARTMENTS  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN

CLIENT: RIPPLE MANAGEMENT  
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MADISON, WISCONSIN

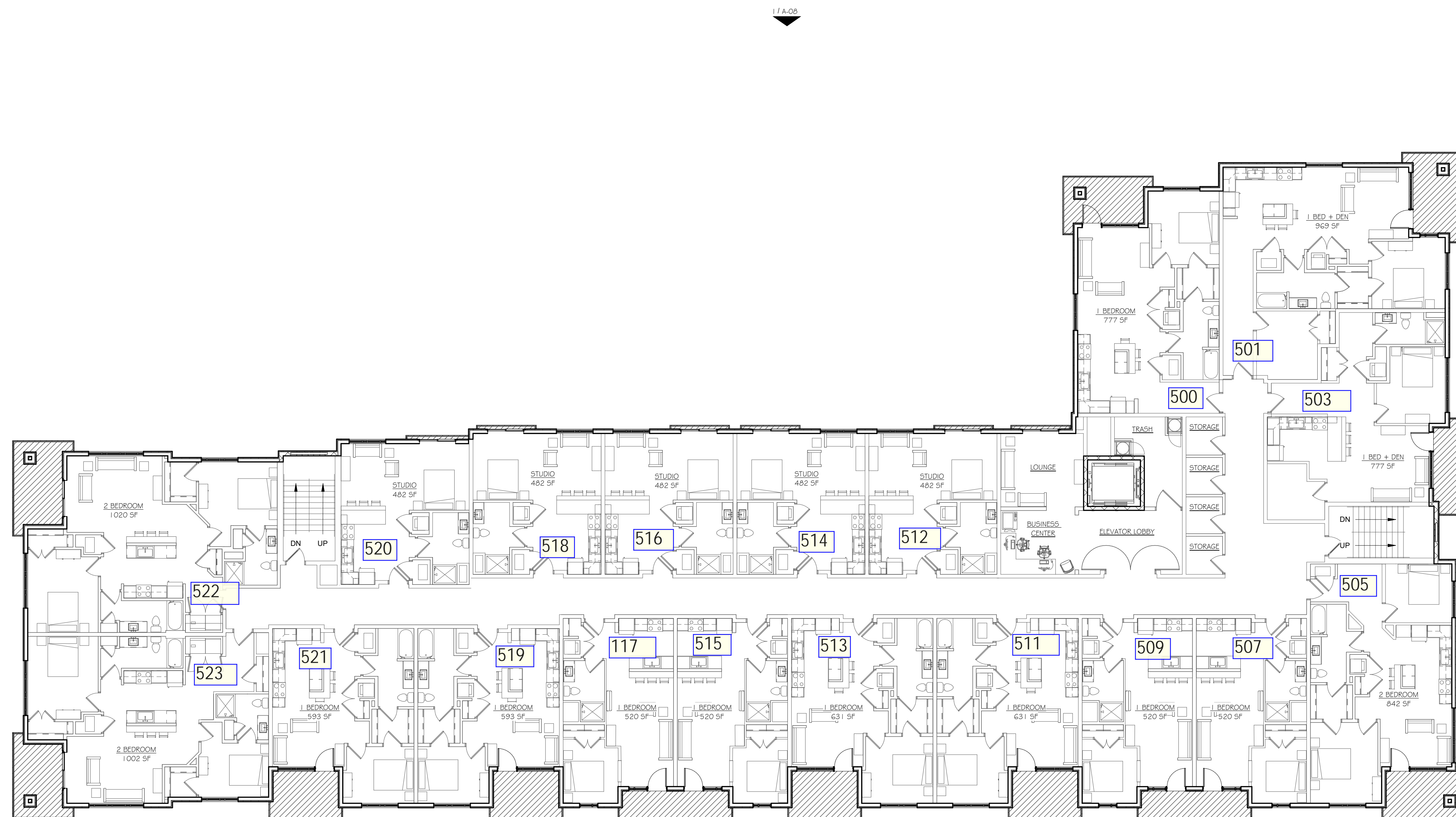
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GIP DRAWING SET 06/20/2023

THIRD FLOOR PLAN

ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq

LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf



PROJECT: UNIVERSITY AVENUE APARTMENTS  
6418 UNIVERSITY AVENUE  
MIDDLETON, WISCONSIN

CLIENT: RIPPLE MANAGEMENT  
3801 REGENT STREET  
MADISON, WISCONSIN

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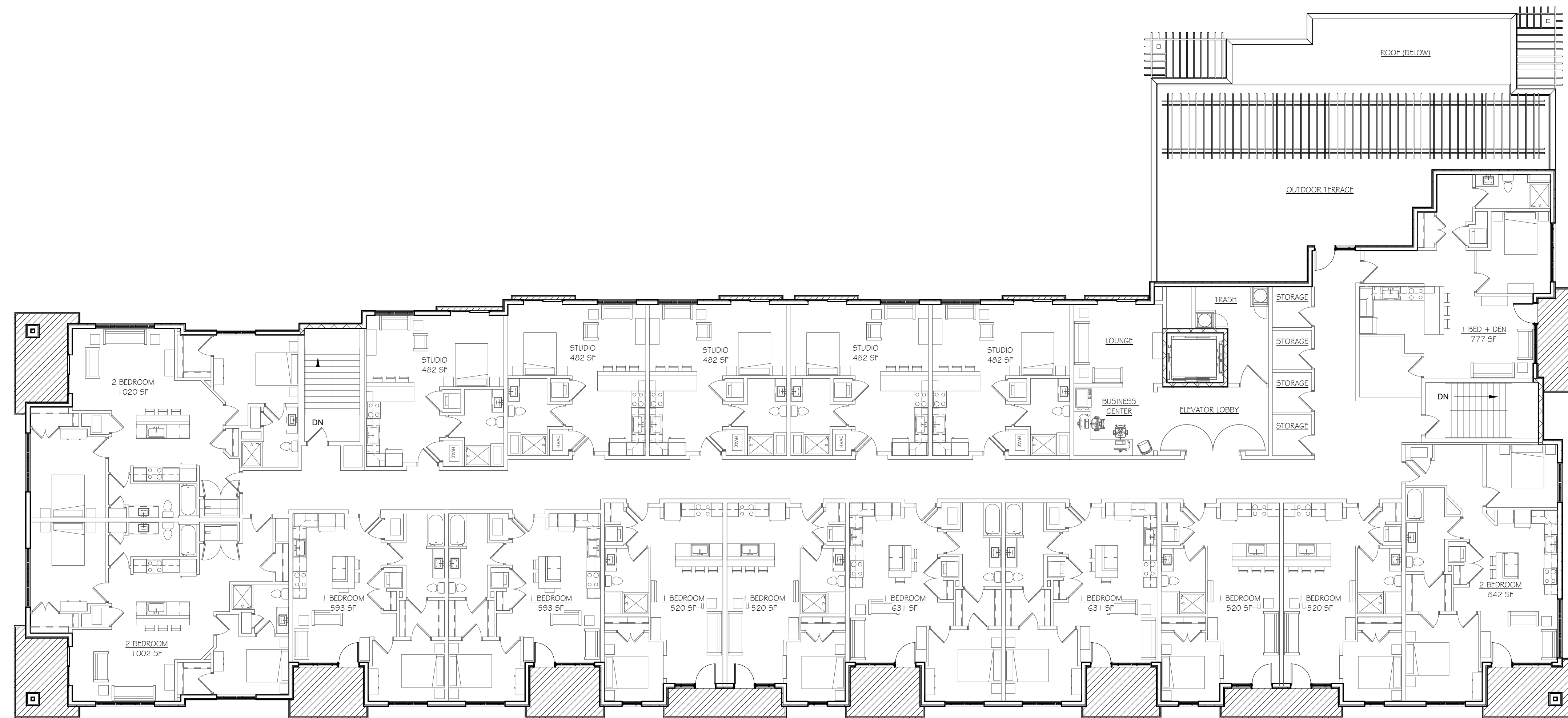
GIP DRAWING SET 06/20/2023

1 FOURTH FLOOR PLAN  
3/8" = 1'-0"

FOURTH FLOOR PLAN



ROOM TYPE	AREA
STUDIO (25)	482 sq
1-BR-A (18)	520 sq
1-BR-B (10)	593 SF
1-BR-C (10)	631 sq
1-BR-D (4)	777 sq
1-BR W/ DEN (4)	970 sq
1-BR W/ DEN (5)	777 sq
2-BR + 2BA-A (5)	1002 sq
2-BR + 2BA-B (5)	1005 sq
2-BR + 1-BA (4)	842 sq
LOUNGE	163 sf
BIZ CENTER	127 sf
RESIDENT STORAGE	154 sf
ELEVATOR LOBBY	178 sf
REFUSE/RECYCLING	53 sf



Provide Elevations per County and City Datum

ACTUAL	GRAPHIC	FINISH TAG	DESCRIPTION
		BR-1	BRICK MANUFACTURER: GLEN-GERY COLOR: JAMESTOWN FINISH: SAND
		EIFS-1	EIFS MANUFACTURER: DRYVIT COLOR: INTERACTIVE CREAM (SW 6113) FINISH: WEATHERLASTIC SMOOTH
		STN-1	STONE VENEER MANUFACTURER: BUECHEL STONE COLOR: SILVERDALE LIMESONE FINISH: WEATHERLASTIC SMOOTH VARYING SIZES
		MTL-1	METAL PANEL SIDING MANUFACTURER: PAC-CLAD COLOR: BURNISHED SLATE FINISH: SMOOTH, FLUSH AND REVEAL VARYING PANEL WIDTHS (7"-12")
		TRM-1	METAL TRIM MANUFACTURER: PAC-CLAD COLOR: BURNISHED SLATE FINISH: SMOOTH
		TRM-2	COMPOSITE TRIM MANUFACTURER: LP SMARTSIDE COLOR: TO MATCH BURNISHED SLATE FINISH: CEDAR TEXTURE
		WD-1	WOOD-LOOK COMPOSITE SIDING MANUFACTURER: LP SMARTSIDE, 38 SERIES COLOR: TO MATCH BURNISHED SLATE FINISH: CEDAR TEXTURE
		WD-2	WOOD-LOOK SOFFIT & UNDERSIDE OF PATIOS MANUFACTURER: CERTAINTED, 150F SERIES COLOR: FONTHILL CHERRY (8422) FINISH: CEDAR TEXTURE
		WN-1	METAL WINDOWS MANUFACTURER: INTUS, SUPERA SERIES COLOR: DARK BRONZE FINISH: MATTE
		WN-2	METAL PATIO DOORS MANUFACTURER: INTUS, SUPERA SERIES COLOR: DARK BRONZE FINISH: MATTE
		SF-1	METAL STOREFRONT SYSTEM MANUFACTURER: KAWNEER COLOR: DARK BRONZE FINISH: MATTE

1 NORTH ELEVATION  
3/32" = 1'-0"

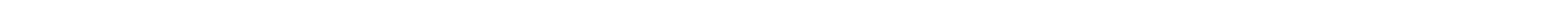


Include reference to NAVD88 elevation (typ).

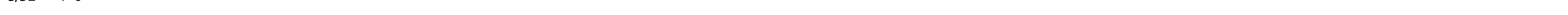
2 SOUTH ELEVATION  
3/32" = 1'-0"



3 EAST ELEVATION  
3/32" = 1'-0"



4 WEST ELEVATION  
3/32" = 1'-0"



PROJECT: UNIVERSITY AVENUE APARTMENTS  
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MIDDLETON, WISCONSIN  
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3801 REGENT STREET  
MADISON, WISCONSIN

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EXTERIOR ELEVATIONS



WINTER SOLSTICE - 10:00 AM



WINTER SOLSTICE - 12:00 PM



WINTER SOLSTICE - 5:00 PM



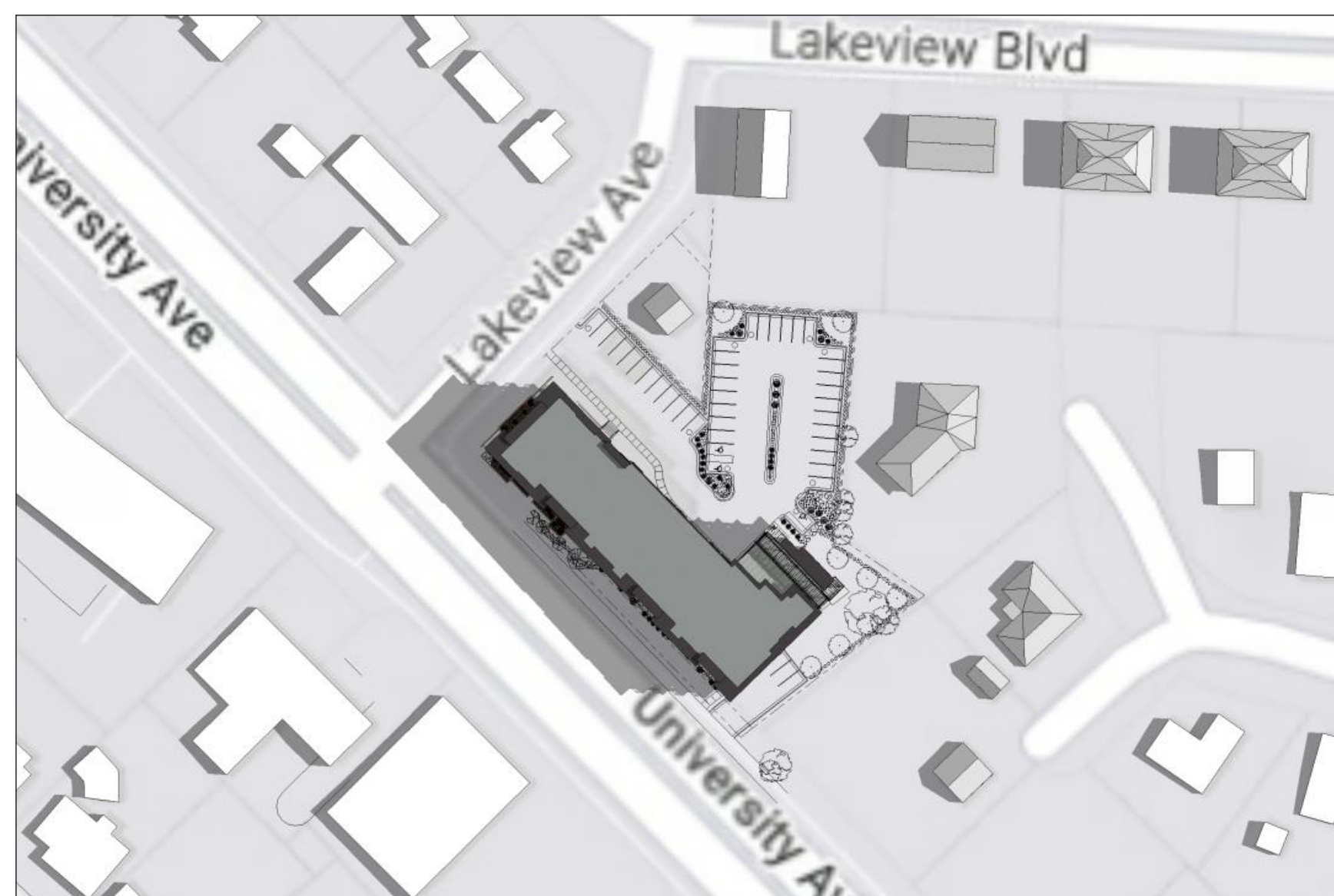
EQUINOX - 9:00 AM



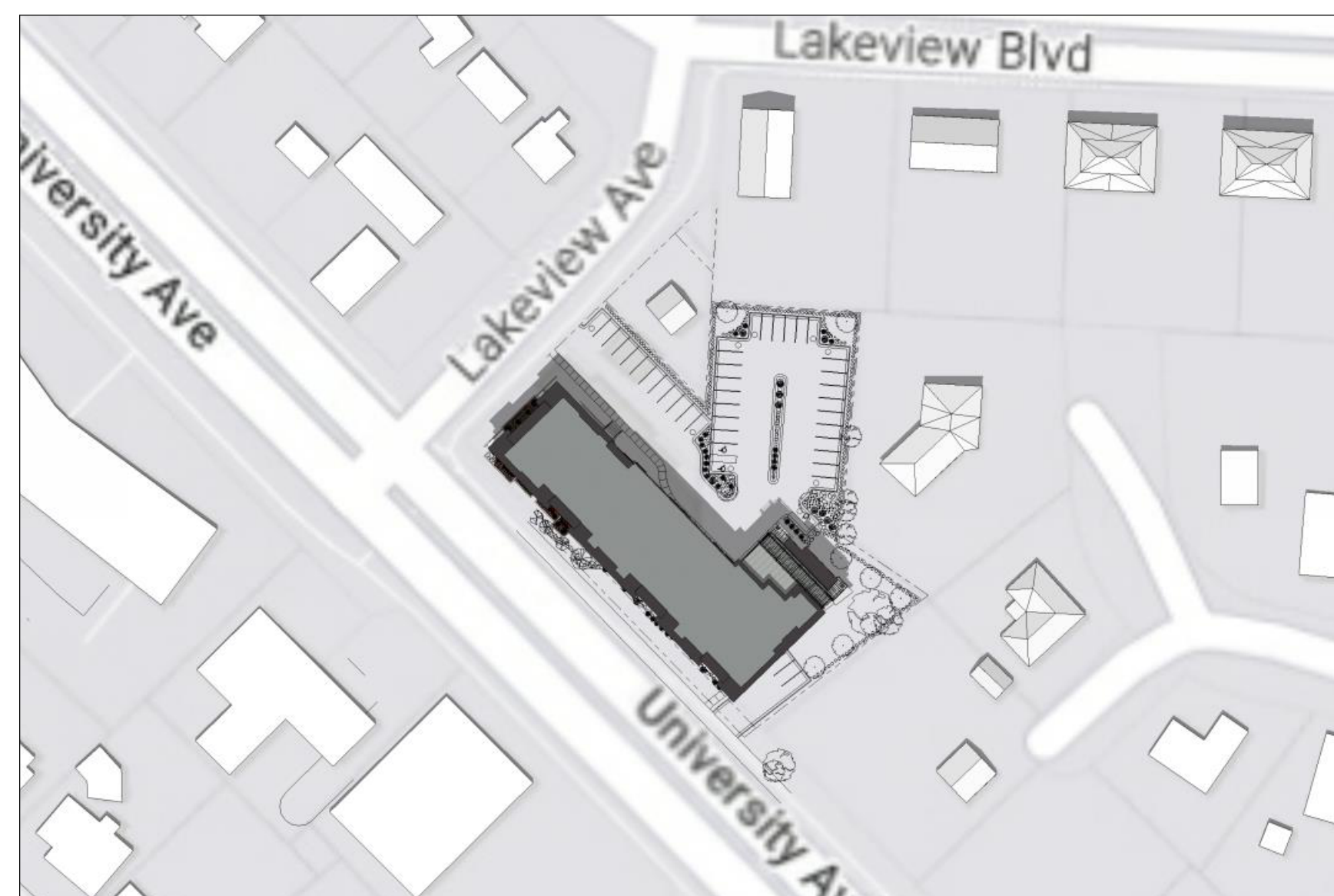
EQUINOX - 12:00 PM



EQUINOX - 4:00 PM



SUMMER SOLSTICE - 8:00 AM



SUMMER SOLSTICE - 12:00 PM



SUMMER SOLSTICE - 5:00 PM

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GIP DRAWING SET 06/20/2023

**CASTLE ROCK REDEVELOPMENT**  
CITY OF MIDDLETON, DANE COUNTY, WI

Sheet Title:  
SITE PLAN

Revisions:

No.	Date:	Description:

Graphic Scale	
Wysers Number	23-1026
Set Type	GDP
Date Issued	06/19/2023
Sheet Number	C100

**LEGEND (PROPOSED)**

	PROPOSED PROPERTY BOUNDARY
	EASEMENT
	BUILDING FOOTPRINT
	18" CURB AND GUTTER
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	STORMWATER TREATMENT FACILITY



**GENERAL NOTES**

- UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON THE WEEKS OF APRIL 6 AND MAY 31, 2023. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
- THE BENCHMARK LOCATIONS ARE SHOWN FOR REFERENCE ONLY ON THIS PLAN. THE ELEVATIONS FOR THE SURVEY ARE BASED ON PUBLISHED ELEVATIONS FOR CITY OF MIDDLETON HYDRANT H12090. PRIOR TO SETTING SITE ELEVATIONS, THE CONTRACTOR SHALL CHECK INTO THE BENCHMARKS SHOWN. CONTRACTOR ASSUMES RISK ASSOCIATED WITH BENCHMARK TRANSFER ONTO THE SITE.
- CONTRACTOR TO OBTAIN APPROPRIATE PERMITS FOR STREET OPENINGS & TO WORK WITHIN THE CITY'S LAND IF REQUIRED.
- WYSER ENGINEERING SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER OR CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY REGULATORY AGENCIES.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF MIDDLETON STANDARD SPECIFICATIONS.

**SITE INFORMATION BLOCK:**  
 SITE ADDRESS: 6418 UNIVERSITY AVE.  
 SITE ACREAGE: 51,654 SQ. FT. (1.19 AC)  
 USE OF PROPERTY: MULTI-FAMILY RESIDENTIAL  
 ZONING:  
 CURRENT: RESIDENTIAL (R-3)  
 PROPOSED: PDD

**SETBACKS:**  
**BUILDING:**  
 FRONT YARD: 15- FEET (UNIVERSITY AVE WHERE SHOWN)  
 5- FEET (UNIVERSITY AVE WHERE SHOWN)  
 20- FEET (LAKEVIEW AVE)  
 REAR YARD: 20- FEET (NORTHEAST)  
 SIDE YARD: 30- FEET (SOUTHWEST)  
 PATIO: 15- FEET INTO FRONT YARD SETBACK (UNIVERSITY AVE)  
 6.5- FEET INTO FRONT YARD SETBACK (LAKEVIEW AVE)  
 4.0- FEET INTO SIDE YARD (SOUTHWEST)  
 RETAINING WALL ALLOWED WITHIN 1- FOOT OF PROPERTY LINE

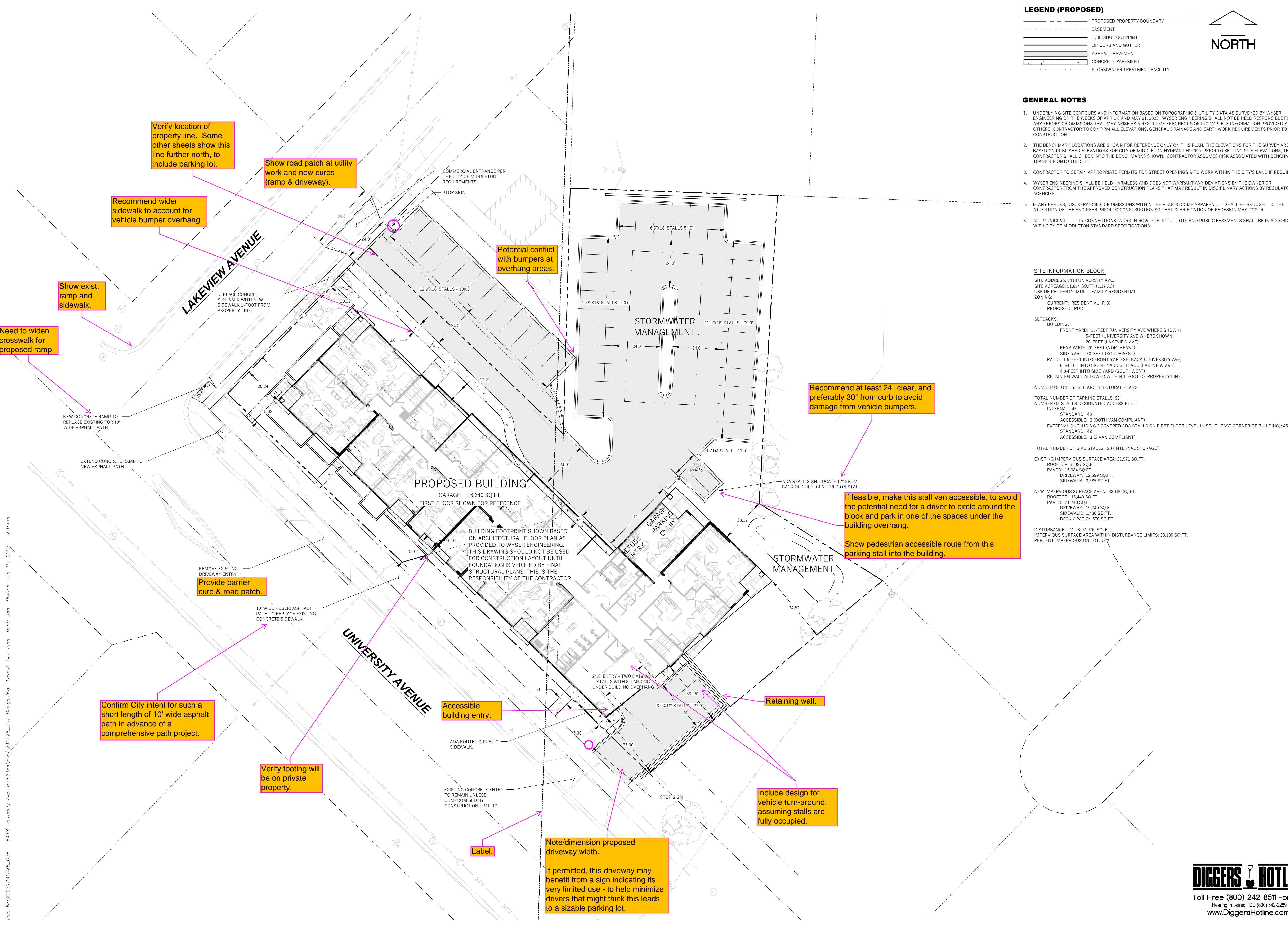
NUMBER OF UNITS: SEE ARCHITECTURAL PLANS  
 TOTAL NUMBER OF PARKING STALLS: 90  
 NUMBER OF STALLS DESIGNATED ACCESSIBLE: 5  
 INTERNAL: 45  
 STANDARD: 43  
 ACCESSIBLE: 2 (BOTH VAN COMPLIANT)  
 EXTERNAL (INCLUDING 2 COVERED ADA STALLS ON FIRST FLOOR LEVEL IN SOUTHEAST CORNER OF BUILDING): 45  
 STANDARD: 42  
 ACCESSIBLE: 3 (2 VAN COMPLIANT)

TOTAL NUMBER OF BIKE STALLS: 20 (INTERNAL STORAGE)

EXISTING IMPERVIOUS SURFACE AREA: 21,971 SQ. FT.  
 ROOFTOP: 5,987 SQ. FT.  
 PAVED: 15,984 SQ. FT.  
 DRIVEWAY: 12,399 SQ. FT.  
 SIDEWALK: 3,585 SQ. FT.

NEW IMPERVIOUS SURFACE AREA: 38,180 SQ. FT.  
 ROOFTOP: 16,440 SQ. FT.  
 PAVED: 21,740 SQ. FT.  
 DRIVEWAY: 19,740 SQ. FT.  
 SIDEWALK: 1,430 SQ. FT.  
 DECK / PATIO: 570 SQ. FT.

DISTURBANCE LIMITS: 51,500 SQ. FT.  
 IMPERVIOUS SURFACE AREA WITHIN DISTURBANCE LIMITS: 38,180 SQ. FT.  
 PERCENT IMPERVIOUS ON LOT: 74%



Verify location of property line. Some other sheets show this line further north, to include parking lot.

Show road patch at utility work and new curbs (ramp & driveway).

Recommend wider sidewalk to account for vehicle bumper overhang.

Show exist. ramp and sidewalk.

Need to widen crosswalk for proposed ramp.

Potential conflict with bumpers at overhang areas.

Recommend at least 24" clear, and preferably 30" from curb to avoid damage from vehicle bumpers.

If feasible, make this stall van accessible, to avoid the potential need for a driver to circle around the block and park in one of the spaces under the building overhang.

Show pedestrian accessible route from this parking stall into the building.

Provide barrier curb & road patch.

Confirm City intent for such a short length of 10' wide asphalt path in advance of a comprehensive path project.

Verify footing will be on private property.

Accessible building entry.

Retaining wall.

Include design for vehicle turn-around, assuming stalls are fully occupied.

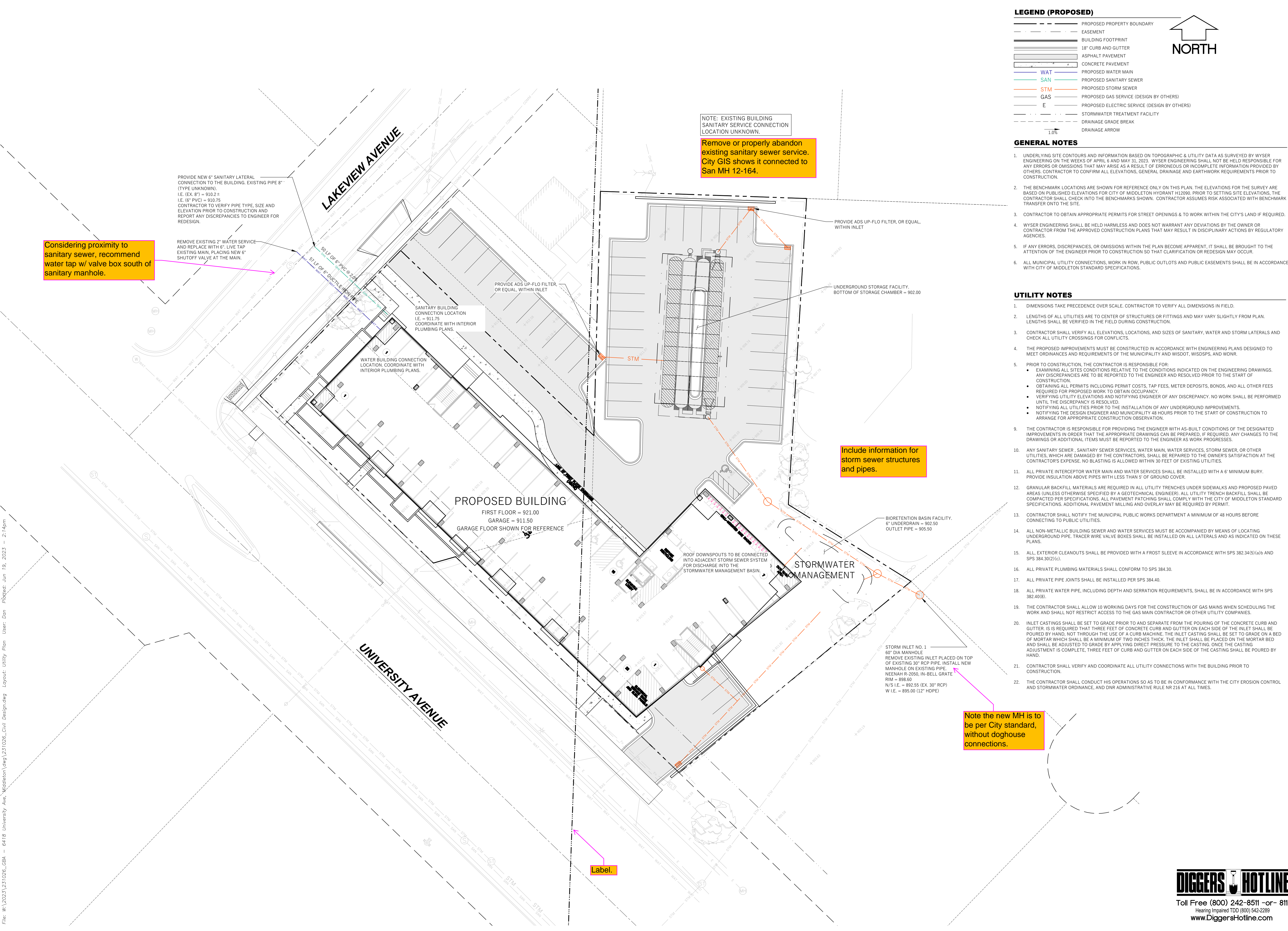
Note/dimension proposed driveway width.  
 If permitted, this driveway may benefit from a sign indicating its very limited use - to help minimize drivers that might think this leads to a sizable parking lot.

File: W:\2023\231026\_GBA - 6418 University Ave, Middleton\dwg\231026\_Civil\_Design.dwg Layout: Site Plan User: Dan Plotter: Jun 19, 2023 - 2:15pm





File: W:\2023\231026\_CBA - 6418 University Ave, Middleton\dwg\231026\_Civil Design.dwg Layout: Utility Plan User: Dan Plotter: Jun 19, 2023 - 2:14pm



Considering proximity to sanitary sewer, recommend water tap w/ valve box south of sanitary manhole.

NOTE: EXISTING BUILDING SANITARY SERVICE CONNECTION LOCATION UNKNOWN.  
Remove or properly abandon existing sanitary sewer service. City GIS shows it connected to San MH 12-164.

Include information for storm sewer structures and pipes.

Note the new MH is to be per City standard, without doghouse connections.

Label.

**LEGEND (PROPOSED)**

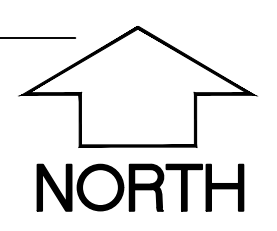
- PROPOSED PROPERTY BOUNDARY
- - - EASEMENT
- ▭ BUILDING FOOTPRINT
- ▭ 18" CURB AND GUTTER
- ▭ ASPHALT PAVEMENT
- ▭ CONCRETE PAVEMENT
- WAT — PROPOSED WATER MAIN
- SAN — PROPOSED SANITARY SEWER
- STM — PROPOSED STORM SEWER
- GAS — PROPOSED GAS SERVICE (DESIGN BY OTHERS)
- E — PROPOSED ELECTRIC SERVICE (DESIGN BY OTHERS)
- ▭ STORMWATER TREATMENT FACILITY
- ▭ DRAINAGE GRADE BREAK
- ▭ DRAINAGE ARROW

**GENERAL NOTES**

- UNDERLYING SITE CONTOURS AND INFORMATION BASED ON TOPOGRAPHIC & UTILITY DATA AS SURVEYED BY WYSER ENGINEERING ON THE WEEKS OF APRIL 6 AND MAY 31, 2023. WYSER ENGINEERING SHALL NOT BE HELD RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY ARISE AS A RESULT OF ERRONEOUS OR INCOMPLETE INFORMATION PROVIDED BY OTHERS. CONTRACTOR TO CONFIRM ALL ELEVATIONS, GENERAL DRAINAGE AND EARTHWORK REQUIREMENTS PRIOR TO CONSTRUCTION.
- THE BENCHMARK LOCATIONS ARE SHOWN FOR REFERENCE ONLY ON THIS PLAN. THE ELEVATIONS FOR THE SURVEY ARE BASED ON PUBLISHED ELEVATIONS FOR CITY OF MIDDLETON HYDRANT H12090. PRIOR TO SETTING SITE ELEVATIONS, THE CONTRACTOR SHALL CHECK INTO THE BENCHMARKS SHOWN. CONTRACTOR ASSUMES RISK ASSOCIATED WITH BENCHMARK TRANSFER ONTO THE SITE.
- CONTRACTOR TO OBTAIN APPROPRIATE PERMITS FOR STREET OPENINGS & TO WORK WITHIN THE CITY'S LAND IF REQUIRED.
- WYSER ENGINEERING SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER OR CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY REGULATORY AGENCIES.
- IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS WITHIN THE PLAN BECOME APPARENT, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- ALL MUNICIPAL UTILITY CONNECTIONS, WORK IN ROW, PUBLIC OUTLOTS AND PUBLIC EASEMENTS SHALL BE IN ACCORDANCE WITH CITY OF MIDDLETON STANDARD SPECIFICATIONS.

**UTILITY NOTES**

- DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
- LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF SANITARY, WATER AND STORM LATERALS AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH ENGINEERING PLANS DESIGNED TO MEET ORDINANCES AND REQUIREMENTS OF THE MUNICIPALITY AND WISDOT, WISDPS, AND WDRN.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
  - EXAMINING ALL SITES CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
  - OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS, BONDS, AND ALL OTHER FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY.
  - VERIFYING UTILITY ELEVATIONS AND NOTIFYING ENGINEER OF ANY DISCREPANCY. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS RESOLVED.
  - NOTIFYING ALL UTILITIES PRIOR TO THE INSTALLATION OF ANY UNDERGROUND IMPROVEMENTS.
  - NOTIFYING THE DESIGN ENGINEER AND MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION OBSERVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE ENGINEER WITH AS-BUILT CONDITIONS OF THE DESIGNATED IMPROVEMENTS IN ORDER THAT THE APPROPRIATE DRAWINGS CAN BE PREPARED. IF REQUIRED, ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE ENGINEER AS WORK PROGRESSES.
- ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE. NO BLASTING IS ALLOWED WITHIN 30 FEET OF EXISTING UTILITIES.
- ALL PRIVATE INTERCEPTOR WATER MAIN AND WATER SERVICES SHALL BE INSTALLED WITH A 6" MINIMUM BURY. PROVIDE INSULATION ABOVE PIPES WITH LESS THAN 5' OF GROUND COVER.
- GRANULAR BACKFILL MATERIALS ARE REQUIRED IN ALL UTILITY TRENCHES UNDER SIDEWALKS AND PROPOSED PAVED AREAS (UNLESS OTHERWISE SPECIFIED BY A GEOTECHNICAL ENGINEER). ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED PER SPECIFICATIONS. ALL PAVEMENT PATCHING SHALL COMPLY WITH THE CITY OF MIDDLETON STANDARD SPECIFICATIONS. ADDITIONAL PAVEMENT MILLING AND OVERLAY MAY BE REQUIRED BY PERMIT.
- CONTRACTOR SHALL NOTIFY THE MUNICIPAL PUBLIC WORKS DEPARTMENT A MINIMUM OF 48 HOURS BEFORE CONNECTING TO PUBLIC UTILITIES.
- ALL NON-METALLIC BUILDING SEWER AND WATER SERVICES MUST BE ACCOMPANIED BY MEANS OF LOCATING UNDERGROUND PIPE. TRACER WIRE VALVE BOXES SHALL BE INSTALLED ON ALL LATERALS AND AS INDICATED ON THESE PLANS.
- ALL EXTERIOR CLEANOUTS SHALL BE PROVIDED WITH A FROST SLEEVE IN ACCORDANCE WITH SPS 382.34(5)(a)(b) AND SPS 384.30(2)(c).
- ALL PRIVATE PLUMBING MATERIALS SHALL CONFORM TO SPS 384.30.
- ALL PRIVATE PIPE JOINTS SHALL BE INSTALLED PER SPS 384.40.
- ALL PRIVATE WATER PIPE, INCLUDING DEPTH AND SERRATION REQUIREMENTS, SHALL BE IN ACCORDANCE WITH SPS 382.40(8).
- THE CONTRACTOR SHALL ALLOW 10 WORKING DAYS FOR THE CONSTRUCTION OF GAS MAINS WHEN SCHEDULING THE WORK AND SHALL NOT RESTRICT ACCESS TO THE GAS MAIN CONTRACTOR OR OTHER UTILITY COMPANIES.
- INLET CASTINGS SHALL BE SET TO GRADE PRIOR TO AND SEPARATE FROM THE POURING OF THE CONCRETE CURB AND GUTTER. IS IS REQUIRED THAT THREE FEET OF CONCRETE CURB AND GUTTER ON EACH SIDE OF THE INLET SHALL BE POURED BY HAND, NOT THROUGH THE USE OF A CURB MACHINE. THE INLET CASTING SHALL BE SET TO GRADE ON A BED OF MORTAR WHICH SHALL BE A MINIMUM OF TWO INCHES THICK. THE INLET SHALL BE PLACED ON THE MORTAR BED AND SHALL BE ADJUSTED TO GRADE BY APPLYING DIRECT PRESSURE TO THE CASTING. ONCE THE CASTING ADJUSTMENT IS COMPLETE, THREE FEET OF CURB AND GUTTER ON EACH SIDE OF THE CASTING SHALL BE POURED BY HAND.
- CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTIONS WITH THE BUILDING PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO BE IN CONFORMANCE WITH THE CITY EROSION CONTROL AND STORMWATER ORDINANCE, AND DNR ADMINISTRATIVE RULE NR 126 AT ALL TIMES.

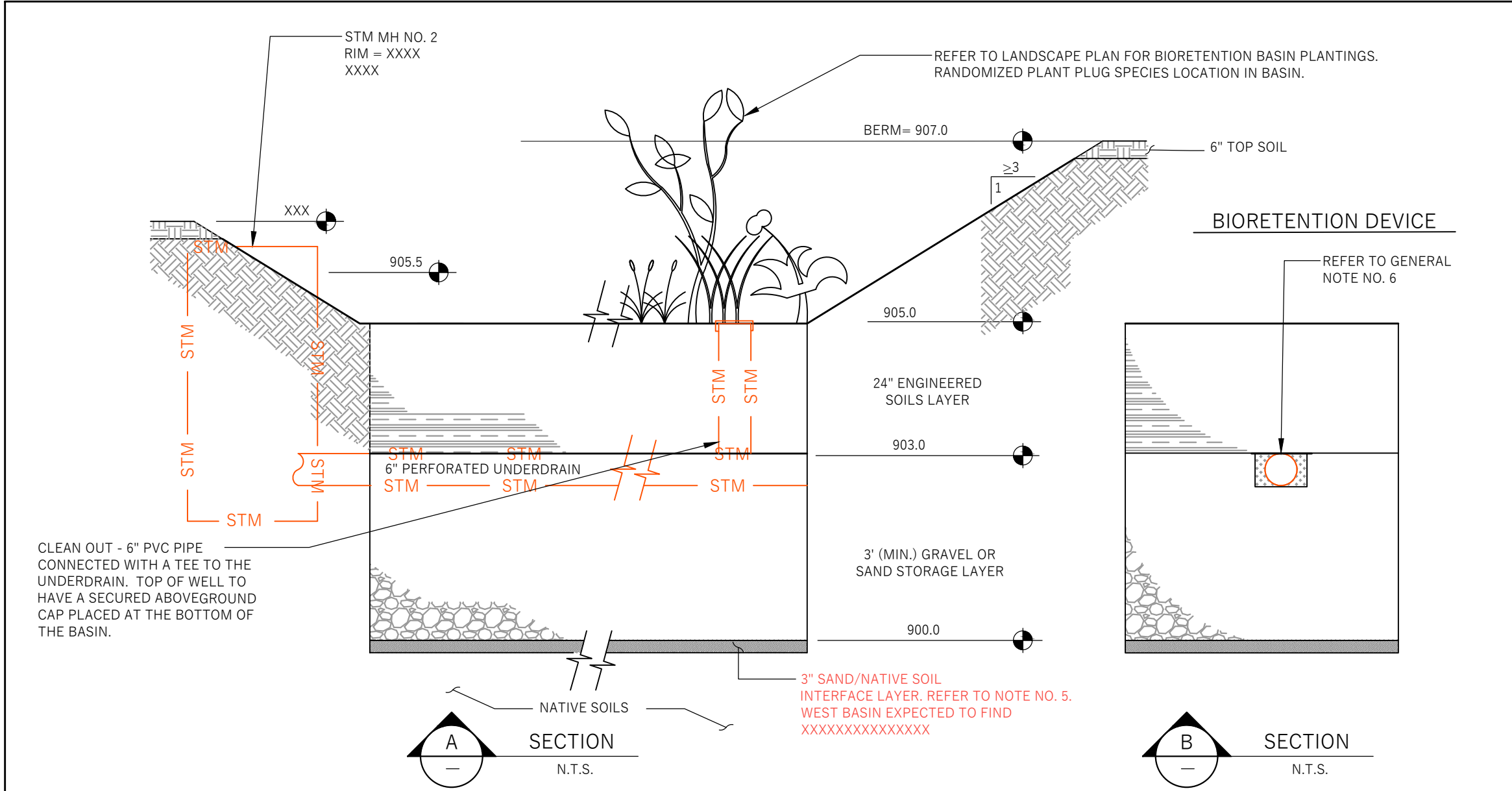


Revisions:

No.	Date:	Description:

Graphic Scale	
Wysers Number	23-1026
Set Type	GDP
Date Issued	06/19/2023
Sheet Number	C300

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**GENERAL NOTES:**

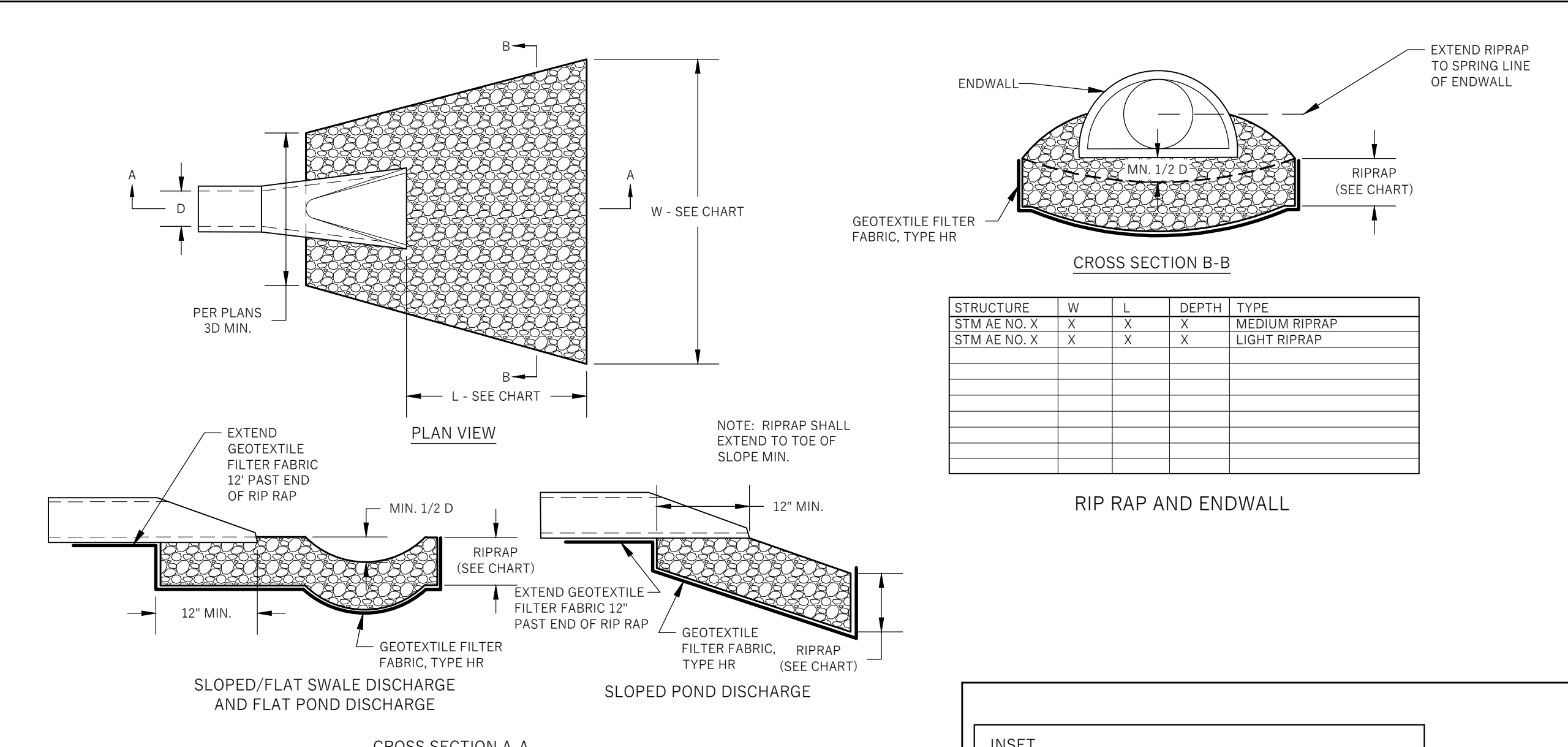
- ALL CONSTRUCTION PRACTICES SHALL MEET THE SPECIFICATIONS OF THE WDNR TECHNICAL STANDARD 1004 - BIORETENTION FOR INFILTRATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THIS STANDARD AND CONSTRUCT THE BIORETENTION DEVICE IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED THEREIN.
- CONTRACTOR SHALL INSTALL NATIVE PLANT PLUGS IN THE BASIN AND INSTALL A CLASS II EROSION CONTROL MAT (OVERLAPPED AND ANCHORED WITH MIN. 6\"/>

OF: 70% ASTM C33 SAND AND 30% CERTIFIED COMPOST (SEE GENERAL NOTE 4).

- CERTIFIED COMPOST SHALL CONSIST OF: ~40% ORGANIC MATTER, ~60% ASH CONTENT, PH OF 6-8, AND MOISTURE CONTENT OF 35-50% BY WEIGHT.
- SAND/NATIVE SOIL INTERFACE LAYER SHALL BE FORMED BY A LAYER OF SAND 3 INCHES DEEP, WHICH IS VERTICALLY MIXED WITH THE NATIVE SOIL TO A DEPTH OF 2-4 INCHES. A CONSTRUCTION REPRESENTATIVE MUST BE ON SITE DURING OVER EXCAVATION TO APPROVE OF THE DEPTH AND SOIL TYPES.
- FILTER FABRIC SHALL BE PLACED ABOVE THE PERFORATED PIPE, A WIDTH OF 4 FEET CENTERED OVER THE FLOW LINE OF THE PIPE.
- ANNUAL RYE GRASS SHALL BE SEED AT 40 LB/ACRE WITH THE SEED MIX IN THE AREAS SURROUNDING THE BASIN, ON SIDE SLOPES, AND OVER ANY LAND THAT DISCHARGES INTO THE BASIN FOR EROSION CONTROL WHEN BASIN IS BROUGHT ON-LINE. ROOTSTOCK AND PLUGS ARE REQUIRED TO ESTABLISH VEGETATION AT THE INVERT OF THE BASIN.
- RUNOFF MUST INFILTRATE WITHIN 24-HOURS. BASINS UNABLE TO MAINTAIN THESE RATES MUST BE DEEP FILLED, REGRADED, AND IF NECESSARY REPLANTED TO RESTORE ORIGINAL INFILTRATION RATES.
- ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH APPLICABLE LOCAL, REGIONAL, AND STATE STORMWATER STANDARDS FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER.
- REFER TO LANDSCAPE PLAN FOR PLANTING REQUIREMENTS.

INFILTRATION DEVICES ARE DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR), COUNTY, MUNICIPALITY, AND ENGINEERING STANDARD OF CARE. ALL DESIGNATED INFILTRATION AREAS (e.g., RAIN GARDENS, INFILTRATION BASINS, BIORETENTION DEVICES) SHALL BE FENCED PRIOR TO CONSTRUCTION AND REMAIN UNDISTURBED AND PROTECTED DURING THE CONSTRUCTION OF PROPOSED SITE IMPROVEMENTS. PROPOSED BIORETENTION DEVICES SHALL NOT BE CONSTRUCTED UNTIL THE DEVICE'S CONTRIBUTING WATERSHED AREA MEETS ESTABLISHED VEGETATION REQUIREMENTS SET FORTH WITHIN THE RESPECTIVE WDNR TECHNICAL STANDARDS. IF THE LOCATION OF THE INFILTRATION AREA CONFLICTS WITH CONSTRUCTION STAGING AND/OR CONSTRUCTION TRAFFIC AND IS DISTURBED, COMPACTION MITIGATION WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR IS REQUIRED TO PROVIDE QUALIFIED STAFF FOR INSPECTION AND OBSERVATION OF THE CONSTRUCTION ACTIVITIES RELATING TO ALL JOB SITE REGULATORY COMPLIANCE INCLUDING THE PROTECTION AND CONSTRUCTION OF ALL STORMWATER MANAGEMENT FEATURES. ANY OBSERVATION OF PLAN OR SITE DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.



**TABLE 1**

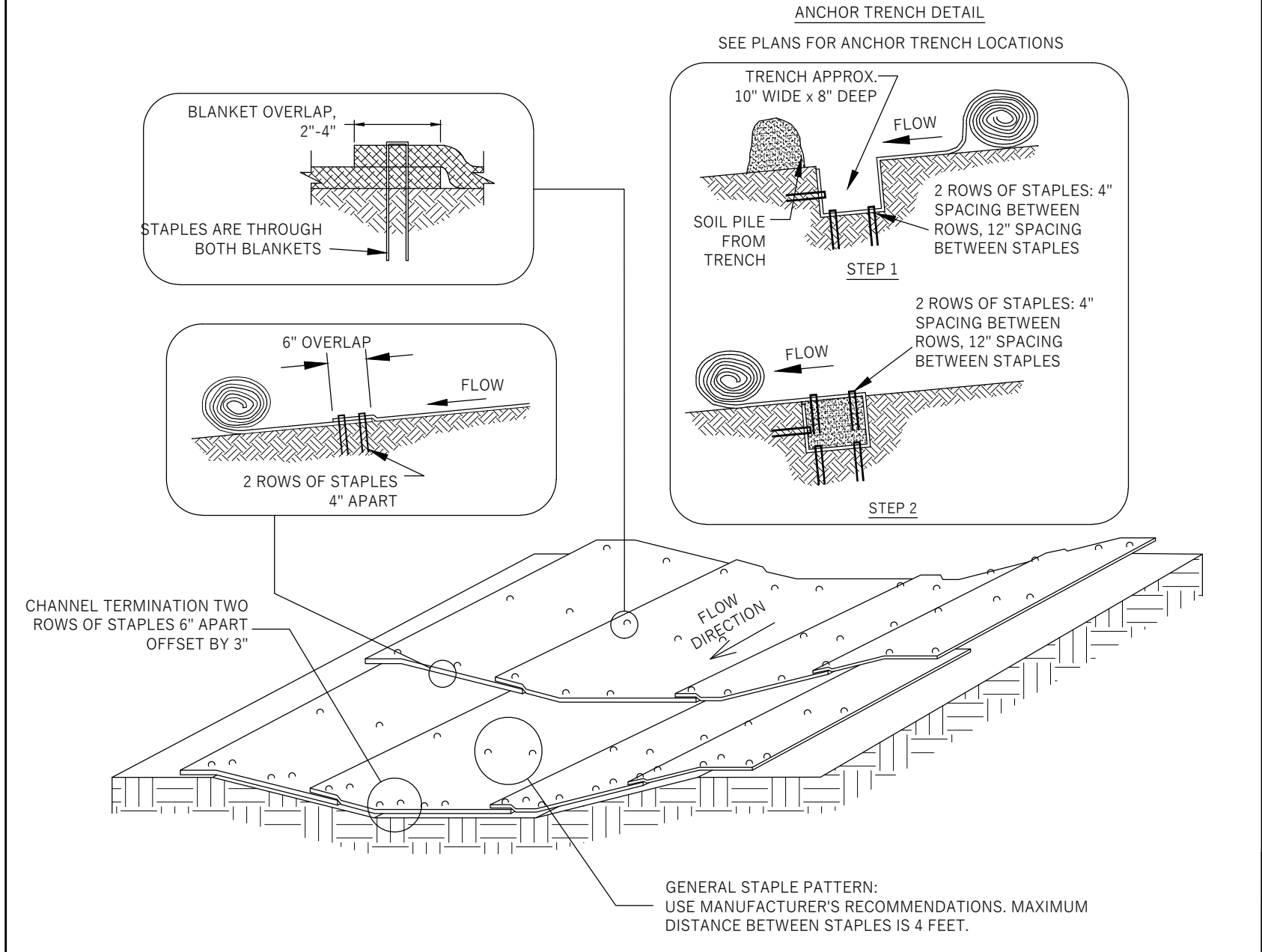
SIEVE SIZE	PERCENT BY WEIGHT PASSING
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

**MATERIAL NOTES**

- USE HARD, DURABLE, ANGULAR STONE OR RECYCLED CONCRETE MEETING THE GRADATION IN TABLE 1. WHERE THIS GRADATION IS NOT AVAILABLE, MEET THE GRADATION IN WISCONSIN DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATION, SECTION 312 SELECT CRUSHED MATERIAL. USE MATERIAL SUBSTANTIALLY FREE FROM DIRT, DEBRIS, STEEL, VEGETABLE MATTER, AND OTHER DELETERIOUS MATERIAL. PLACE THE AGGREGATE IN A LAYER AT LEAST 12 INCHES THICK.
- THE TRACKING PAD SHALL BE UNDERLAIN WITH A WDOT TYPE R GEOTEXTILE FABRIC WHERE WARRANTED BASED ON SOIL TYPE OR HIGH GROUNDWATER.
- INSTALLATION SHALL CONFORM WITH THE REQUIREMENTS OF WDNR CONSERVATION PRACTICE STANDARD 1057.
- INSTALL THE TRACKING PAD ACROSS THE FULL WIDTH OF THE ACCESS POINT, OR RESTRICT EXITING TRAFFIC TO A DEDICATED EGRESS LANE WITH A DRIVING SURFACE AT LEAST 12 FEET WIDE.
- DIMENSIONS OF THE TRACKING PAD SHALL BE MINIMUM AS NOTED ON THE FIGURE ABOVE.
- DIVERT SURFACE FLOWS AWAY FROM TRACKING PADS OR CONVEY FLOW UNDER AND/OR AROUND USING CULVERTS AND SWALES. DIRECT RUNOFF FROM TRACKING PADS TO SEDIMENT CONTROL PRACTICES.
- DO NOT COMPACT AGGREGATE PRIOR TO USE. COMPACTION, GROUTING, OR OTHER MEANS OF CREATING A SMOOTH SURFACE COMPROMISE THE EFFECTIVENESS OF THE TRACKING PAD.
- TRACKING PAD SHALL BE REMOVED OR INCORPORATED INTO GRAVEL DRIVEWAY ONLY AFTER CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.

**INSPECTION & MAINTENANCE NOTES**

- STONE TRACKING PADS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD.
- MONITOR AND MAINTAIN DEVICES TO MINIMIZE SHIFTING, RUTTING OF ADJACENT SURFACES, AND STRUCTURAL FAILURE. MAINTAIN A LOOSE, ROUGH SURFACE BY SCRAPING, LOOSENING, OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
- ADDITIONAL AGGREGATE SHALL BE PLACED IF THE TRACKING PAD BECOMES BURIED OR IF SEDIMENT IS NOT BEING REMOVED EFFECTIVELY FROM THE VEHICLE TIRES.
- A MINIMUM 30-FOOT WIDE BY 50-FOOT LONG BY 12-INCH THICK PAD SHALL BE MAINTAINED AT ALL TIMES. ADD STONE AS NEEDED TO MAINTAIN THE MINIMUM PAD THICKNESS.
- THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
- ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING AT THE END OF EACH WORKING DAY.
- REMOVE STONES LODGED BETWEEN THE TIRES OF DUAL WHEEL VEHICLES PRIOR TO LEAVING THE CONSTRUCTION SITE.
- MAINTENANCE SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION FOR SITE CONDITIONS.
- REPLACE DAMAGED OR CRUSHED CULVERTS UNDER TRACKING PAD.



**MATERIAL NOTES**

- ONLY PRODUCTS LISTED IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) ARE ACCEPTABLE FOR USE.
- STAPLES USED FOR CLASS I TYPES A & B MATS SHALL BE 1-2 INCH WIDE, U-SHAPED, MADE OF NO.11 (3.65mm) OR LARGER DIAMETER STEEL WIRE, AND NOT LESS THAN 6 INCHES LONG FOR FIRM SOILS AND 12 INCHES LONG FOR LOOSE SOILS.

**INSTALLATION NOTES**

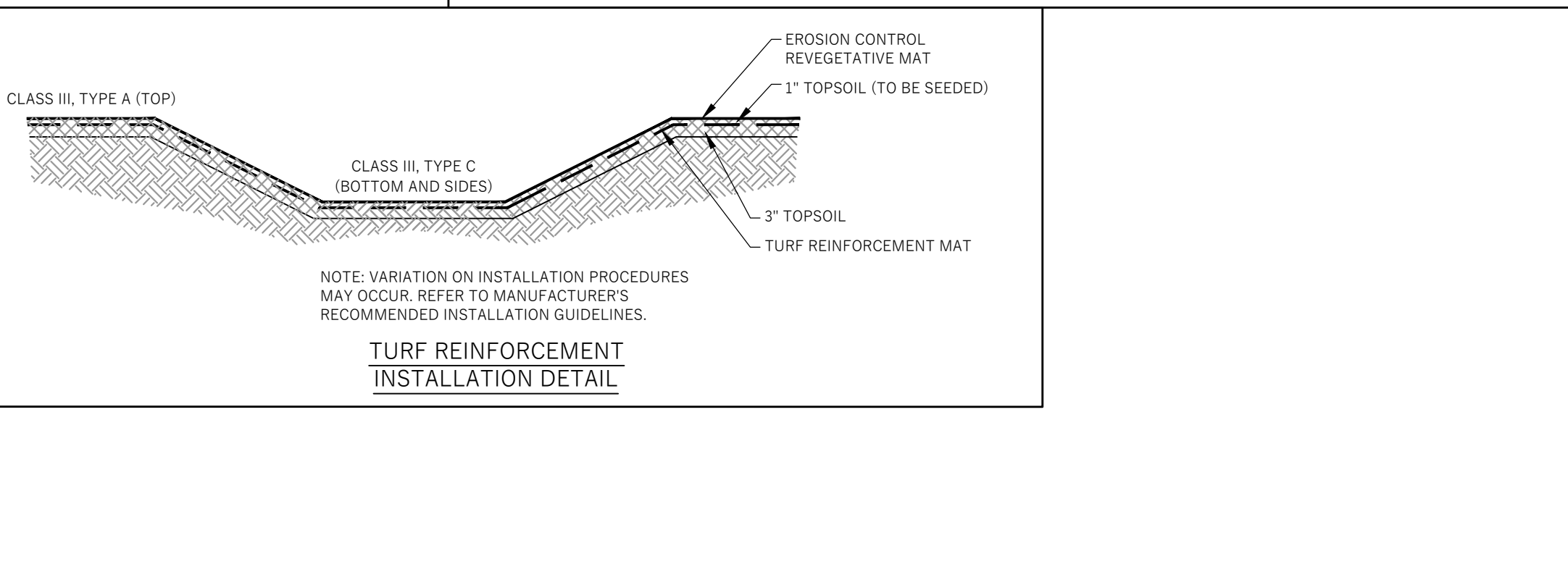
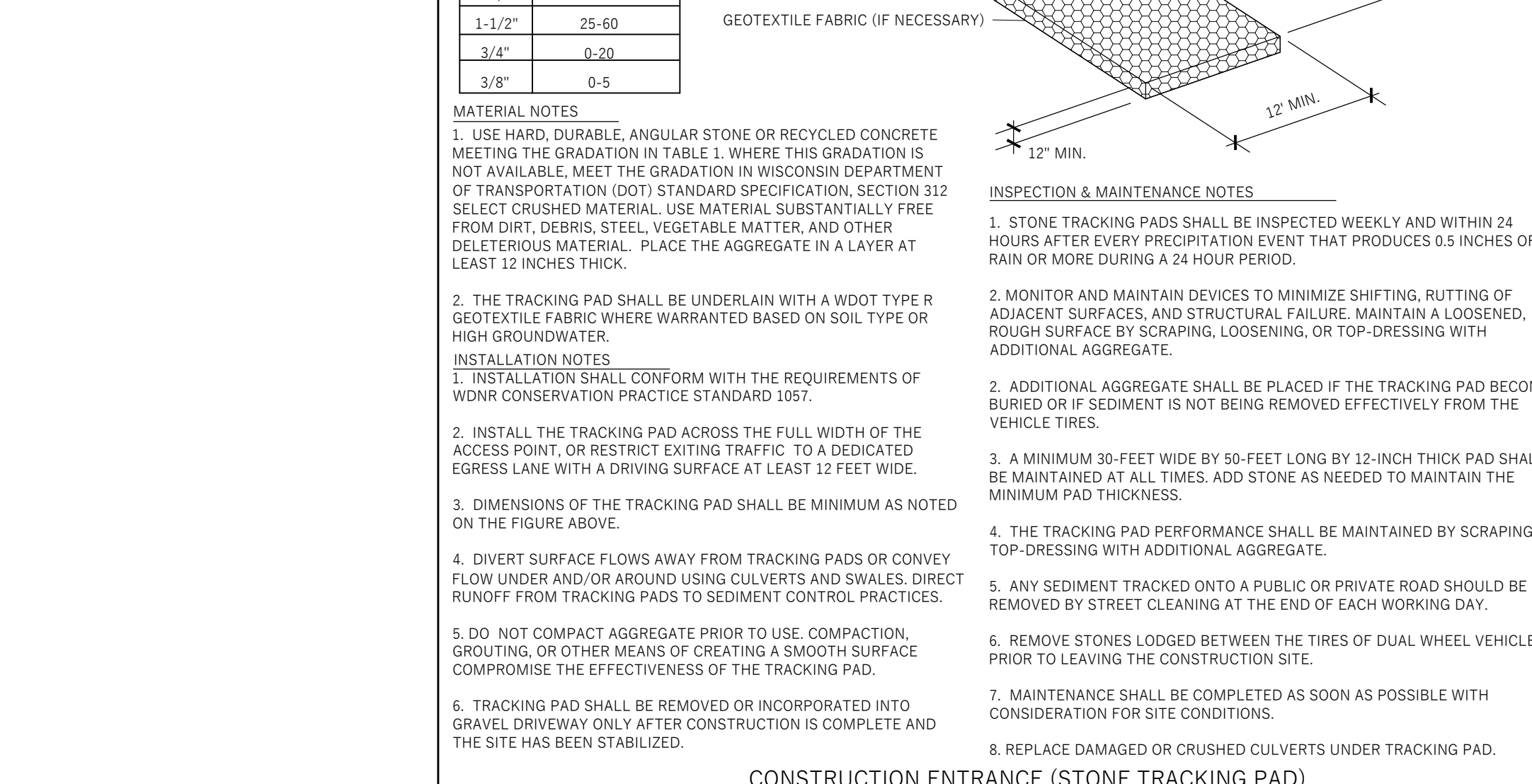
- EROSION CONTROL REVEGETATIVE MATS (ECRM) SHALL BE INSTALLED AFTER TOPSOIL AND SEED HAVE BEEN PLACED.
- INSTALLATION OF ECRM SHOULD BE COORDINATED WITH PERMANENT RESTORATION PRACTICES.
- INSTALLATION SHALL CONFORM WITH WDNR CONSERVATION PRACTICE STANDARD 1053.
- ALL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S

**RECOMMENDATIONS. THIS STANDARD DETAIL IS AN EXAMPLE OF TYPICAL INSTALLATION GUIDANCE.**

- MATS SHALL BE IN FIRM AND CONTINUOUS CONTACT WITH THE SOIL.
- IF SECTIONS OF ECRM NEED TO BE OVERLAPPED, ENSURE THAT THE OVERLAP IS FACING DOWNSTREAM TO PREVENT WATER FROM FLOWING BENEATH THE ECRM.

**INSPECTION & MAINTENANCE NOTES**

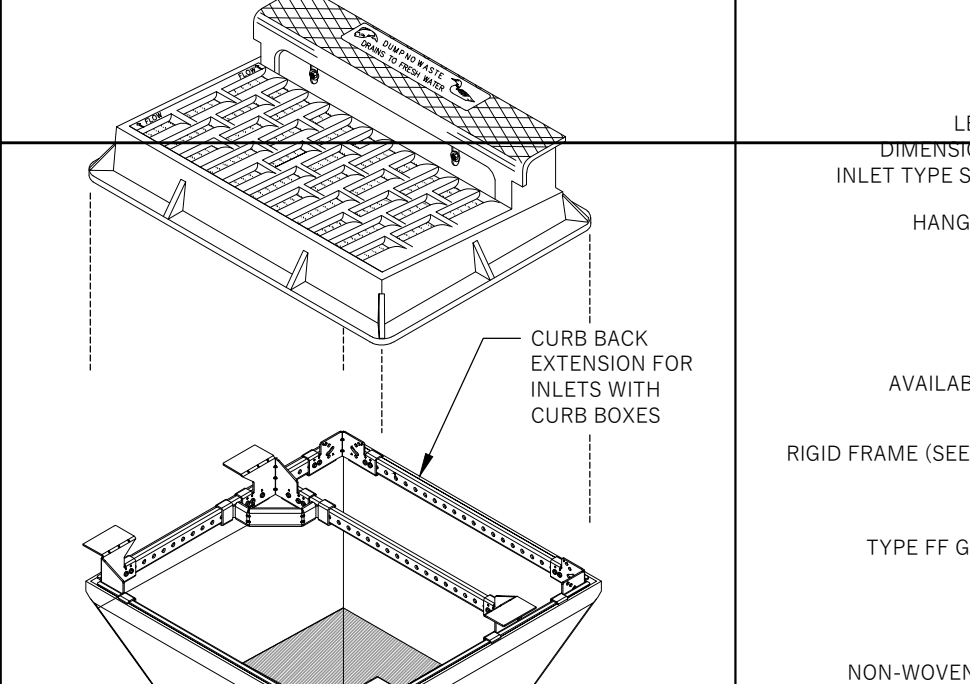
- INSTALL ADDITIONAL ANCHORING IN AREAS OF OBSERVED RILLING AND CONCENTRATED FLOW BENEATH THE EROSION MAT. IF RILLING IS SEVERE ENOUGH TO PREVENT VEGETATION ESTABLISHMENT, REMOVE EROSION MAT, REGRADE, COMPACT, RE-SEED, AND REPLACE THE SECTION OF MAT.
- IF PRODUCTS WITH PLASTIC NETTING ARE USED, REMOVE NETTING OR REPLACE MAT IF SEPARATION OF THE NETTING FROM THE MAT IS OBSERVED.
- ALL MAINTENANCE ACTIVITIES SHOULD OCCUR AS SOON AS POSSIBLE WITH CONSIDERATION OF SITE CONDITIONS.



**CONSTRUCTION ENTRANCE (STONE TRACKING PAD)**

**TURF REINFORCEMENT INSTALLATION DETAIL**

NOTE: VARIATION ON INSTALLATION PROCEDURES MAY OCCUR. REFER TO MANUFACTURER'S RECOMMENDED INSTALLATION GUIDELINES.

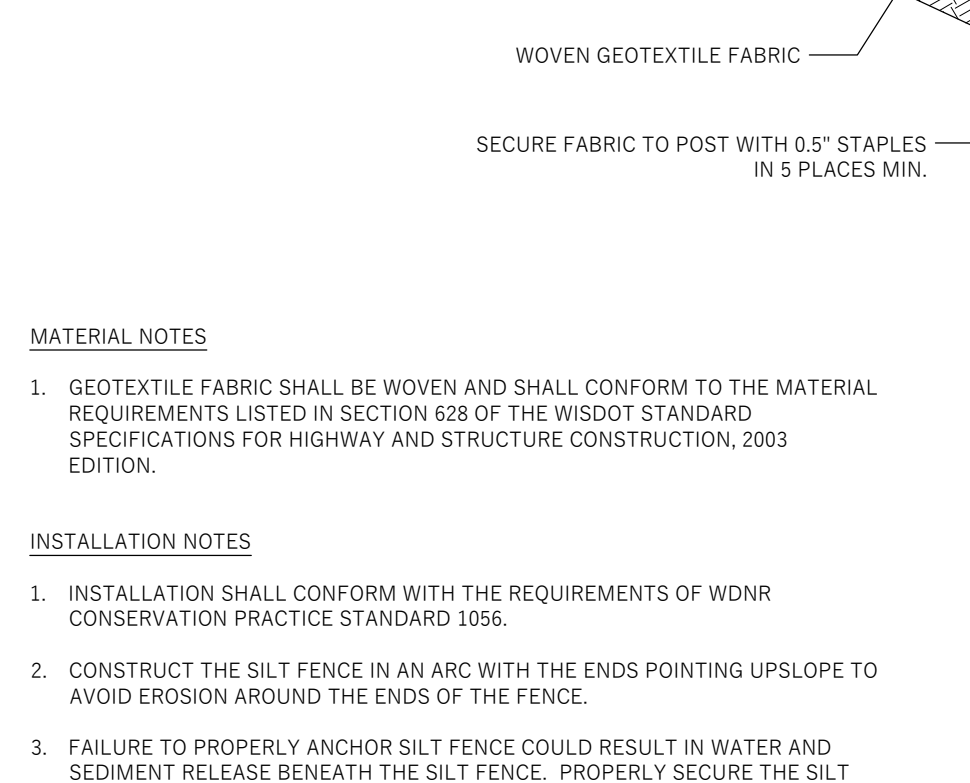


**NOTES:**

- DETAIL BASED ON WDNR TECHNICAL STANDARD 1060. ANY VARIATIONS FROM THAT STANDARD IS UNINTENDED AND SHOULD NOT BE USED.
- TAPER BOTTOM OF BAG TO MAINTAIN 8" OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.
- THE RIGID FRAME SHALL BE CONSTRUCTED OF GALVANIZED STEEL AND HAVE ADEQUATE STRENGTH TO SUPPORT THE WEIGHT OF THE SEDIMENT BAG WHEN COMPLETELY FULL.
- THE RIGID FRAME SHALL NOT INTERFERE WITH OR ELEVATE THE GRATE MORE THAN 1/8".
- DROP THE INLET FILTER THROUGH THE CLEAR OPENING SUCH THAT THE HANGERS REST FIRMLY ON THE LIP OF THE STRUCTURE.

**MAINTENANCE NOTES:**

- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARS SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE STRUCTURE SHALL BE IMMEDIATELY REMOVED.



**TYPE D-RF INLET PROTECTION**

**CONSTRUCTION ENTRANCE (STONE TRACKING PAD)**

**SILT FENCE**

**MATERIAL NOTES**

- GEOTEXTILE FABRIC SHALL BE WOVEN AND SHALL CONFORM TO THE MATERIAL REQUIREMENTS LISTED IN SECTION 628 OF THE WISDOT STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2003 EDITION.

**INSTALLATION NOTES**

- INSTALLATION SHALL CONFORM WITH THE REQUIREMENTS OF WDNR CONSERVATION PRACTICE STANDARD 1056.
- CONSTRUCT THE SILT FENCE IN AN ARC WITH THE ENDS POINTING UPSLOPE TO AVOID EROSION AROUND THE ENDS OF THE FENCE.
- FAILURE TO PROPERLY ANCHOR SILT FENCE COULD RESULT IN WATER AND SEDIMENT RELEASE BENEATH THE SILT FENCE. PROPERLY SECURE THE SILT FENCE INTO THE ANCHOR TRENCH.
- CONSTRUCT THE FENCE FROM A CONTINUOUS ROLL OF GEOTEXTILE TO AVOID JOINTS. WHERE JOINTS ARE NECESSARY, OVERLAP TO THE NEXT POST OR WRAP ADJOINING FABRICS TOGETHER AROUND THE JOINT POST AND TIGHTLY FASTEN.
- SILT FENCE SHALL NOT BE USED IN AREAS OF CONCENTRATED FLOW.

**INSPECTION & MAINTENANCE NOTES**

- AT A MINIMUM, PERFORM INSPECTIONS WEEKLY AND WITHIN 24 HOURS OF PRECIPITATION EVENTS PRODUCING 0.5 INCHES OR MORE OF RAINFALL.
- INSPECT FENCES FOR DAMAGE TO STAKES AND FABRIC, UNDERCUTTING, EXCESSIVE SEDIMENT ACCUMULATION (GREATER THAN 1/2 OF THE FENCE HEIGHT), AND INDICATIONS OF SCOUR AROUND THE EDGES.
- REPAIR OR REPLACE SILT FENCE WITHIN 24 HOURS OF IDENTIFYING AND DEFICIENCIES.

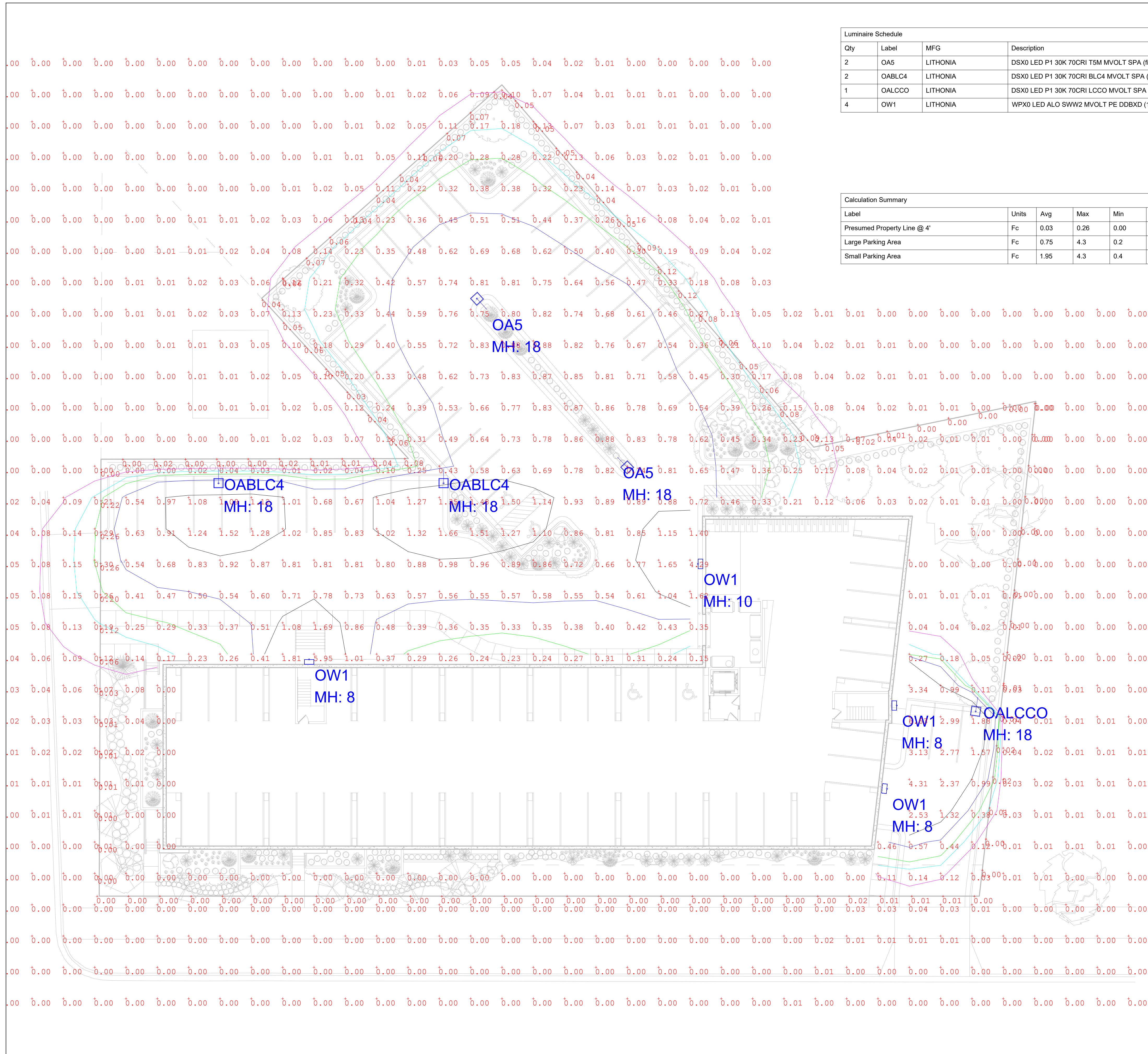
Revisions:

No.	Date:	Description:

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Wysér Number	23-1026
Set Type	GDP
Date Issued	06/19/2023

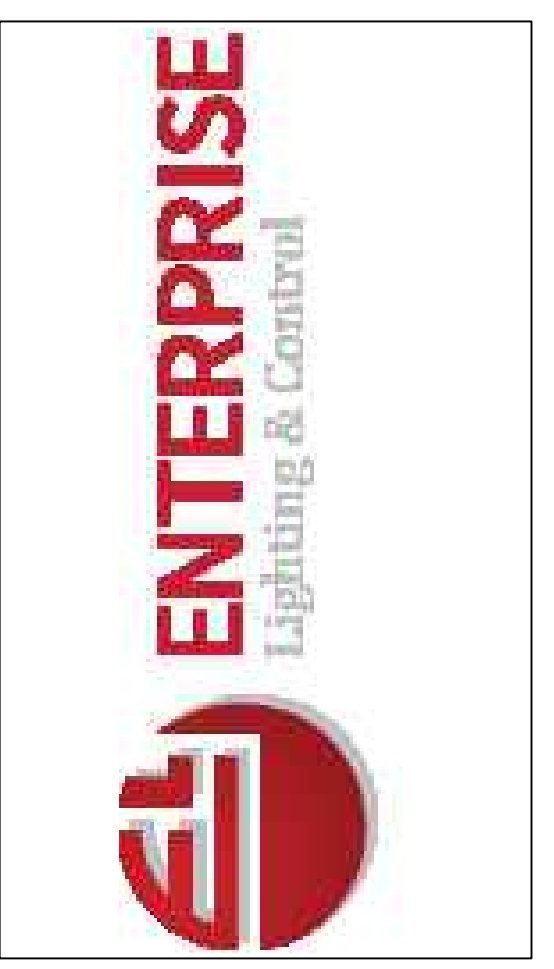
Sheet Number **C400**





Luminaire Schedule						
Qty	Label	MFG	Description	LLF	Lum. Watts	Total Watts
2	OA5	LITHONIA	DSX0 LED P1 30K 70CRI TSM MVOLT SPA (finish) + 16' POLE + 2' BASE	0.950	34	68
2	OABLC4	LITHONIA	DSX0 LED P1 30K 70CRI BLC4 MVOLT SPA (finish) + 16' POLE + 2' BASE	0.950	34	68
1	OALCCO	LITHONIA	DSX0 LED P1 30K 70CRI LCCO MVOLT SPA (finish) + 16' POLE + 2' BASE	0.950	34	34
4	OW1	LITHONIA	WPX0 LED ALO S1W2 MVOLT PE DDBXD (1200LM)	0.950	9.2	36.8

Calculation Summary						
Label	Units	Avg	Max	Min	Max/Min	Avg/Min
Presumed Property Line @ 4'	Fc	0.03	0.26	0.00	N.A.	N.A.
Large Parking Area	Fc	0.75	4.3	0.2	21.50	3.75
Small Parking Area	Fc	1.95	4.3	0.4	10.75	4.88



COMMENTS	
DATE	
#	
REVISIONS	

DRAWN BY : JT	DATE : 6-19-2023	SCALE : 1/16" = 1'
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UNIVERSITY AVENUE APARTMENTS	MADISON, WI	SITE LIGHTING LAYOUT
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# D-Series Size 0 LED Area Luminaire



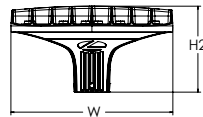
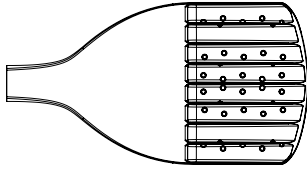
Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

d<sup>#</sup>series

## Specifications

EPA:	0.44 ft <sup>2</sup> (0.04 m <sup>2</sup> )
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)



## Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

## Ordering Information

**EXAMPLE:** DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature <sup>2</sup>	Color Rendering Index <sup>2</sup>	Distribution	Voltage	Mounting	
DSX0 LED	<b>Forward optics</b> P1 P5 P2 P6 P3 P7 P4	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare <sup>3</sup> T4M Type IV medium T4LG Type IV low glare <sup>3</sup> TFTM Forward throw medium	T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control <sup>3</sup> BLC4 Type IV backlight control <sup>3</sup> LCCO Left corner cutoff <sup>3</sup> RCCO Right corner cutoff <sup>3</sup>	MVOLT (120V-277V) <sup>4</sup> HVOLT (347V-480V) <sup>5,6</sup> XVOLT (277V-480V) <sup>7,8</sup>	<b>Shipped included</b> SPA Square pole mounting (#8 drilling, 3.5" min. SQ pole) RPA Round pole mounting (#8 drilling, 3" min. RND pole) SPA5 Square pole mounting (#5 drilling, 3" min. SQ pole) <sup>9</sup> RPA5 Round pole mounting (#5 drilling, 3" min. RND pole) <sup>9</sup> SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole) WBA Wall bracket <sup>10</sup>
	<b>Rotated optics</b> P10 <sup>1</sup> P12 <sup>1</sup> P11 <sup>1</sup> P13 <sup>1</sup>	(this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	80CRI 80CRI 80CRI 80CRI 80CRI				

Control options	Other options	Finish (required)
<p><b>Shipped installed</b></p> <p>NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.<sup>11,12,18,19</sup></p> <p>PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.<sup>13,18,19</sup></p> <p>PER NEMA twist-lock receptacle only (controls ordered separate)<sup>14</sup></p> <p>PER5 Five-pin receptacle only (controls ordered separate)<sup>14,19</sup></p> <p>PER7 Seven-pin receptacle only (controls ordered separate)<sup>14,19</sup></p> <p>FAO Field adjustable output<sup>15,19</sup></p> <p>BL30 Bi-level switched dimming, 30%<sup>16,19</sup></p> <p>BL50 Bi-level switched dimming, 50%<sup>16,19</sup></p> <p>DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)<sup>17</sup></p>	<p><b>Shipped installed</b></p> <p>HS Houseside shield (black finish standard)<sup>20</sup></p> <p>L90 Left rotated optics<sup>1</sup></p> <p>R90 Right rotated optics<sup>1</sup></p> <p>CCE Coastal Construction<sup>21</sup></p> <p><b>Shipped separately</b></p> <p>EGS External Glare Shield (reversible, field install required, matches housing finish)</p> <p>BS Bird Spikes (field install required)</p>	<p>DDBXD Dark Bronze</p> <p>DBLXD Black</p> <p>DNAXD Natural Aluminum</p> <p>DWHXD White</p> <p>DDBTXD Textured dark bronze</p> <p>DBLTXD Textured black</p> <p>DNATXD Textured natural aluminum</p> <p>DWHGXD Textured white</p>



## Ordering Information

### Accessories

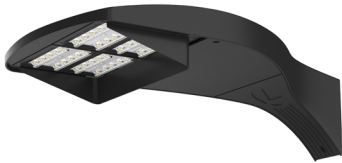
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>22</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>22</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>22</sup>
DSHORT SBK	Shorting cap <sup>22</sup>
DSX0HS 20C	House-side shield for P1, P2, P3 and P4 <sup>20</sup>
DSX0HS 30C	House-side shield for P10, P11, P12 and P13 <sup>20</sup>
DSX0HS 40C	House-side shield for P5, P6 and P7 <sup>20</sup>
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGS (FINISH)	External glare shield

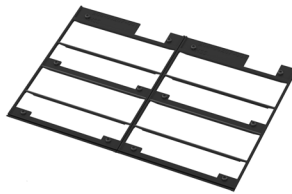
### NOTES

- 1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
- 2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
- 3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
- 4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- 6 HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
- 7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
- 8 XVOLT not available in packages P1, P2 or P10.
- 9 SPAS and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
- 10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
- 11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
- 12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
- 13 PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT.
- 14 PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- 15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
- 16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG.
- 17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
- 18 Reference Motion Sensor Default Settings table on page 4 to see functionality.
- 19 Reference Controls Options table on page 4.
- 20 Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- 21 CCE option not available with option BS and EGS. Contact Technical Support for availability.
- 22 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

## Shield Accessories



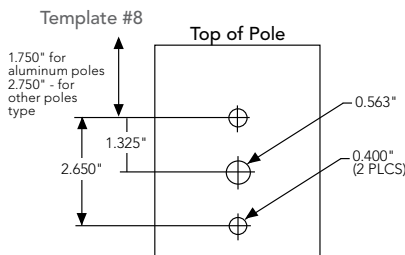
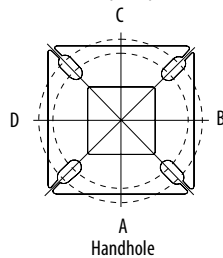
External Glare Shield (EGS)



House Side Shield (HS)

## Drilling

### HANDHOLE ORIENTATION (from top of pole)



### Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"	3"	3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPAS	#5	3"	3"	3"	3"	3"	3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"	3"	3"

### DSX0 Area Luminaire - EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 with SPA	0.44	0.88	0.96	1.18	---	1.16
DSX0 with SPAS, SPA8N	0.51	1.02	1.06	1.26	---	1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93

Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier	
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
<b>25°C</b>	<b>77°C</b>	<b>1.00</b>
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

### FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

\*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

### Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	Current (A)					
					120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

### LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

### Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

### Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclipse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V



# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K					40K					50K								
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
20	530	P1	33W	T1S	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157				
				T2M	4,545	1	0	2	137	4,736	1	0	2	143	4,829	1	0	2	145				
				T3M	4,597	1	0	2	138	4,791	1	0	2	144	4,885	1	0	2	147				
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131				
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149				
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136				
				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150				
				T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154				
				T5W	4,878	3	0	1	147	5,084	3	0	2	153	5,183	3	0	2	156				
				T5LG	4,814	2	0	1	145	5,018	2	0	1	151	5,115	2	0	1	154				
				BLC3	3,344	0	0	1	101	3,485	0	0	1	105	3,553	0	0	1	107				
				BLC4	3,454	0	0	2	104	3,599	0	0	2	108	3,670	0	0	2	111				
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108				
				LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108				
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157				
				20	700	P2	45W	T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
								T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138
T3M	5,930	1	0					3	131	6,180	1	0	3	137	6,301	1	0	3	140				
T3LG	5,297	1	0					1	117	5,521	1	0	1	122	5,628	1	0	1	125				
T4M	6,018	1	0					3	133	6,272	1	0	3	139	6,395	1	0	3	142				
T4LG	5,474	1	0					1	121	5,705	1	0	1	126	5,816	1	0	1	129				
TFTM	6,060	1	0					3	134	6,316	1	0	3	140	6,439	1	0	3	143				
T5M	6,192	3	0					1	137	6,453	3	0	2	143	6,579	3	0	2	146				
T5W	6,293	3	0					2	139	6,558	3	0	2	145	6,686	3	0	2	148				
T5LG	6,210	2	0					1	138	6,472	3	0	1	143	6,598	3	0	1	146				
BLC3	4,313	0	0					2	96	4,495	0	0	2	100	4,583	0	0	2	102				
BLC4	4,455	0	0					2	99	4,643	0	0	2	103	4,733	0	0	2	105				
RCCO	4,352	0	0					2	96	4,536	0	0	2	100	4,624	0	0	2	102				
LCCO	4,352	0	0					2	96	4,536	0	0	2	100	4,624	0	0	2	102				
AFR	6,328	1	0					1	140	6,595	1	0	1	146	6,724	1	0	1	149				
20	1050	P3	69W					T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
								T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130				
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116				
				T4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132				
				T4LG	7,790	1	0	2	113	8,119	1	0	2	118	8,277	1	0	2	120				
				TFTM	8,624	1	0	3	125	8,988	1	0	3	130	9,163	2	0	3	133				
				T5M	8,812	3	0	2	128	9,184	4	0	2	133	9,363	4	0	2	136				
				T5W	8,955	4	0	2	130	9,333	4	0	2	135	9,515	4	0	2	138				
				T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136				
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95				
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98				
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95				
				LCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95				
				AFR	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139				
				20	1400	P4	93W	T1S	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130
								T2M	10,557	2	0	3	113	11,003	2	0	3	118	11,217	2	0	3	121
T3M	10,680	2	0					3	115	11,130	2	0	3	120	11,347	2	0	3	122				
T3LG	9,540	1	0					2	103	9,942	1	0	2	107	10,136	1	0	2	109				
T4M	10,839	2	0					3	117	11,296	2	0	3	121	11,516	2	0	4	124				
T4LG	9,858	1	0					2	106	10,274	1	0	2	110	10,474	1	0	2	113				
TFTM	10,914	2	0					3	117	11,374	2	0	3	122	11,596	2	0	3	125				
T5M	11,152	4	0					2	120	11,622	4	0	2	125	11,849	4	0	2	127				
T5W	11,332	4	0					3	122	11,811	4	0	3	127	12,041	4	0	3	129				
T5LG	11,184	3	0					1	120	11,656	3	0	2	125	11,883	3	0	2	128				
BLC3	7,768	0	0					2	83	8,096	0	0	2	87	8,254	0	0	2	89				
BLC4	8,023	0	0					3	86	8,362	0	0	3	90	8,524	0	0	3	92				
RCCO	7,838	1	0					2	84	8,169	1	0	2	88	8,328	1	0	2	90				
LCCO	7,838	1	0					2	84	8,169	1	0	2	88	8,328	1	0	2	90				
AFR	11,396	1	0					2	122	11,877	1	0	2	128	12,109	2	0	2	130				

# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics																							
LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K					40K					50K								
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)								
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
40	700	P5	90W	T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146				
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135				
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137				
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122				
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139				
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126				
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140				
				T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143				
				T5W	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145				
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143				
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99				
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103				
				RCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100				
				LCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100				
				AFR	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146				
				40	1050	P6	137W	T1S	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
								T2M	16,253	3	0	4	119	16,939	3	0	4	124	17,269	3	0	4	126
T3M	16,442	2	0					4	120	17,135	3	0	4	125	17,469	3	0	4	128				
T3LG	14,687	2	0					2	107	15,306	2	0	2	112	15,605	2	0	2	114				
T4M	16,687	2	0					4	122	17,391	3	0	5	127	17,730	3	0	5	129				
T4LG	15,177	2	0					2	111	15,817	2	0	2	115	16,125	2	0	2	118				
TFTM	16,802	2	0					4	123	17,511	2	0	4	128	17,852	2	0	5	130				
T5M	17,168	4	0					2	125	17,893	5	0	3	131	18,241	5	0	3	133				
T5W	17,447	5	0					3	127	18,183	5	0	3	133	18,537	5	0	3	135				
T5LG	17,218	4	0					2	126	17,944	4	0	2	131	18,294	4	0	2	134				
BLC3	11,959	0	0					3	87	12,464	0	0	3	91	12,707	0	0	3	93				
BLC4	12,352	0	0					4	90	12,873	0	0	4	94	13,124	0	0	4	96				
RCCO	12,067	1	0					3	88	12,576	1	0	3	92	12,821	1	0	3	94				
LCCO	12,067	1	0					3	88	12,576	1	0	3	92	12,821	1	0	3	94				
AFR	17,545	2	0					3	128	18,285	2	0	3	133	18,642	2	0	3	136				
40	1300	P7	171W					T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
								T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121				
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108				
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123				
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112				
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124				
				T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127				
				T5W	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129				
				T5LG	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127				
				BLC3	14,182	0	0	3	83	14,780	0	0	3	87	15,068	0	0	3	88				
				BLC4	14,647	0	0	4	86	15,265	0	0	4	89	15,562	0	0	4	91				
				RCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89				
				LCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89				
				AFR	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129				

# Performance Data

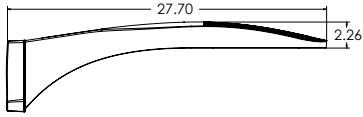
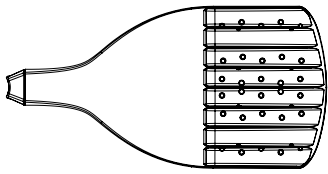
## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

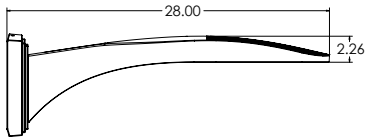
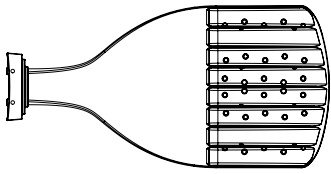
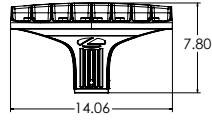
Rotated Optics																			
LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K					40K					50K				
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	P10	51W	T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
				T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143
				T3M	6,933	3	0	3	136	7,225	3	0	3	142	7,366	3	0	3	145
				T3LG	6,194	2	0	2	122	6,455	2	0	2	127	6,581	2	0	2	129
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134
				TFTM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148
				T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151
				T5W	7,357	3	0	2	145	7,667	3	0	2	151	7,816	4	0	2	154
				T5LG	7,260	3	0	1	143	7,567	3	0	1	149	7,714	3	0	1	152
				BLC3	5,043	3	0	3	99	5,256	3	0	3	103	5,358	3	0	3	105
				BLC4	5,208	3	0	3	102	5,428	3	0	3	107	5,534	3	0	3	109
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
				30	700	P11	68W	T1S	9,358	3	0	3	138	9,753	3	0	3	143	9,943
T2M	8,669	3	0					3	127	9,034	3	0	3	133	9,211	3	0	3	135
T3M	8,768	3	0					3	129	9,138	3	0	3	134	9,316	3	0	3	137
T3LG	7,833	3	0					3	115	8,164	3	0	3	120	8,323	3	0	3	122
T4M	8,899	3	0					3	131	9,274	3	0	3	136	9,455	3	0	3	139
T4LG	8,093	3	0					3	119	8,435	3	0	3	124	8,599	3	0	3	126
TFTM	8,962	3	0					3	132	9,340	3	0	3	137	9,522	3	0	3	140
T5M	9,156	4	0					2	135	9,542	4	0	2	140	9,728	4	0	2	143
T5W	9,304	4	0					2	137	9,696	4	0	2	143	9,885	4	0	2	145
T5LG	9,182	3	0					1	135	9,569	3	0	1	141	9,756	3	0	1	143
BLC3	6,378	3	0					3	94	6,647	3	0	3	98	6,777	3	0	3	100
BLC4	6,587	3	0					3	97	6,865	3	0	3	101	6,999	3	0	3	103
RCCO	6,436	0	0					2	95	6,707	0	0	2	99	6,838	0	0	2	101
LCCO	6,436	0	0					2	95	6,707	0	0	2	99	6,838	0	0	2	101
AFR	9,358	3	0					3	138	9,753	3	0	3	143	9,943	3	0	3	146
30	1050	P12	103W					T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075
				T2M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126
				T3M	12,412	4	0	4	120	12,935	4	0	4	125	13,187	4	0	4	128
				T3LG	11,089	3	0	3	107	11,556	3	0	3	112	11,782	3	0	3	114
				T4M	12,597	4	0	4	122	13,128	4	0	4	127	13,384	4	0	4	129
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118
				TFTM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130
				T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133
				T5W	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135
				T5LG	12,998	3	0	2	126	13,546	3	0	2	131	13,810	3	0	2	134
				BLC3	9,029	3	0	3	87	9,409	3	0	3	91	9,593	3	0	3	93
				BLC4	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
				30	1300	P13	129W	T1S	15,704	3	0	3	122	16,366	3	0	3	127	16,685
T2M	14,547	4	0					4	113	15,161	4	0	4	118	15,457	4	0	4	120
T3M	14,714	4	0					4	114	15,335	4	0	4	119	15,634	4	0	4	121
T3LG	13,145	3	0					3	102	13,700	3	0	3	106	13,967	3	0	3	108
T4M	14,933	4	0					4	116	15,563	4	0	4	121	15,867	4	0	4	123
T4LG	13,582	3	0					3	105	14,155	3	0	3	110	14,431	3	0	3	112
TFTM	15,039	4	0					4	117	15,673	4	0	4	122	15,979	4	0	4	124
T5M	15,364	4	0					2	119	16,013	4	0	2	124	16,325	4	0	2	127
T5W	15,613	5	0					3	121	16,272	5	0	3	126	16,589	5	0	3	129
T5LG	15,409	3	0					2	120	16,059	3	0	2	125	16,372	4	0	2	127
BLC3	10,703	4	0					4	83	11,155	4	0	4	87	11,372	4	0	4	88
BLC4	11,054	4	0					4	86	11,520	4	0	4	89	11,745	4	0	4	91
RCCO	10,800	1	0					2	84	11,256	1	0	2	87	11,475	1	0	3	89
LCCO	10,800	1	0					2	84	11,255	1	0	2	87	11,475	1	0	3	89
AFR	15,704	3	0					3	122	16,366	3	0	3	127	16,685	4	0	4	130



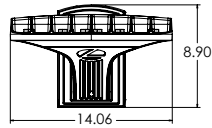
# Dimensions



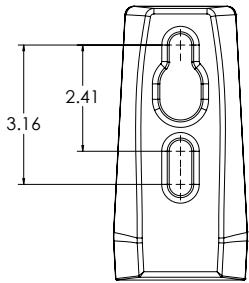
DSX0 with RPA, RPA5, SPA5, SPA8N



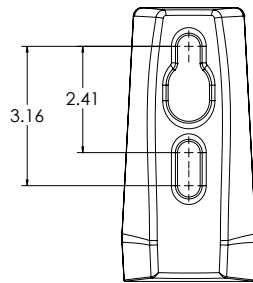
DSX0 with WBA



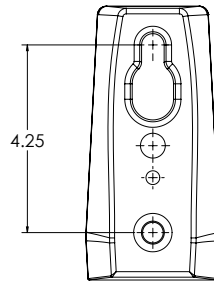
SPA8N



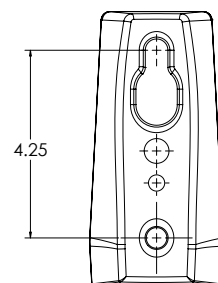
RPA



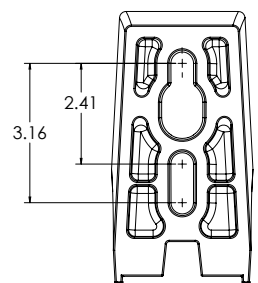
SPA5



RPA5

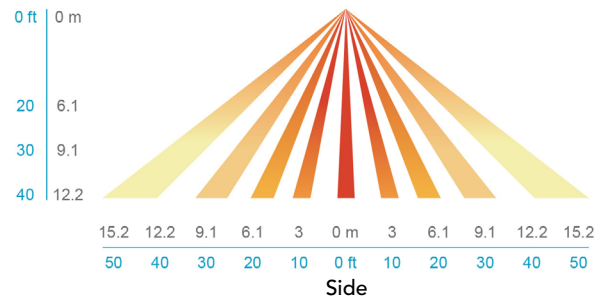
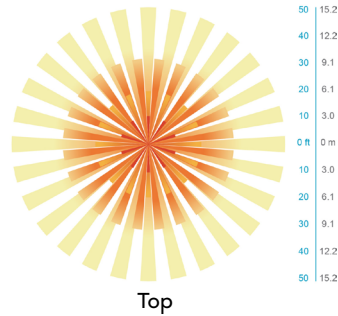
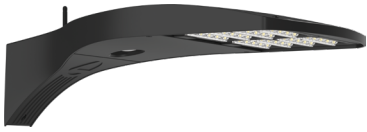


BASE FIXTURE



## nLight Sensor Coverage Pattern

### NLTAIR2 PIRHN



## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 1.5G. Low EPA (0.44 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

### OPTICS

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L80/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### STANDARD CONTROLS

The DSX0 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. PIR integrated motion sensor with on-board photocell feature field-adjustable programming and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

### nLIGHT AIR CONTROLS

The DSX0 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

### INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

### LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



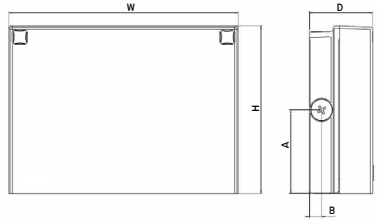
# WPX LED Wall Packs



Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

## Specifications



Front View

Side View

Luminaire	Height (H)	Width (W)	Depth (D)	Side Conduit Location		Weight
				A	B	
WPX1	8.1" (20.6 cm)	11.1" (28.3 cm)	3.2" (8.1 cm)	4.0" (10.3 cm)	0.6" (1.6 cm)	6.1 lbs (2.8kg)
WPX2	9.1" (23.1 cm)	12.3" (31.1 cm)	4.1" (10.5 cm)	4.5" (11.5 cm)	0.7" (1.7 cm)	8.2 lbs (3.7kg)
WPX3	9.5" (24.1 cm)	13.0" (33.0 cm)	5.5" (13.7 cm)	4.7" (12.0 cm)	0.7" (1.7 cm)	11.0 lbs (5.0kg)

## Introduction

The WPX LED wall packs are energy-efficient, cost-effective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,550 to 9,200 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Photocell and emergency egress battery options make WPX ideal for every wall mounted lighting application.

## Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DDBXD

Series	Color Temperature	Voltage	Options	Finish
WPX1 LED P1	30K 3000K	MVOLT 120V - 277V	(blank) None	DDBXD Dark bronze
WPX1 LED P2	40K 4000K	347 347V <sup>3</sup>	E4WH Emergency battery backup, CEC compliant (4W, 0°C min) <sup>2</sup>	DWHXD White
WPX2 LED	50K 5000K		E14WC Emergency battery backup, CEC compliant (14W, -20°C min) <sup>2</sup>	DBLXD Black
WPX3 LED			PE Photocell <sup>3</sup>	Note : For other options, consult factory.

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

### NOTES

- All WPX wall packs come with 6kV surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPD6KV option to get WPX1 LED P1 with 6kV surge protection. Sample nomenclature: WPX1 LED P1 40K MVOLT SPD6KV DDBXD
- Battery pack options only available on WPX1 and WPX2.
- Battery pack options not available with 347V and PE options.

## FEATURES & SPECIFICATIONS

### INTENDED USE

The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal for replacing up to 150W, 250W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution. WPX is rated for -40°C to 40°C.

### CONSTRUCTION

WPX feature a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

### ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs and LED lumen maintenance of L90/100,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection (Note: WPX1 LED P1 package comes with a standard surge protection rating of 2.5kV. It can be ordered with an optional 6kV surge protection). All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable drive current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output (to dim the luminaire).

### INSTALLATION

WPX can be mounted directly over a standard electrical junction box. Three 1/2 inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows poke-through conduit wiring on surfaces that don't have an electrical junction box. Wiring can be made in the integral wiring compartment in all cases. WPX is only recommended for installations with LEDs facing downwards.

### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified. International Dark Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx).

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.



## Performance Data

### Electrical Load

Luminaire	Input Power (W)	120V	208V	240V	277V	347V
WPX1 LED P1	11W	0.09	0.05	0.05	0.04	0.03
WPX1 LED P2	24W	0.20	0.12	0.10	0.09	0.07
WPX2	47W	0.39	0.23	0.20	0.17	0.14
WPX3	69W	0.58	0.33	0.29	0.25	0.20

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.94	>0.92	>0.90

### Lumen Output

Luminaire	Color Temperature	Lumen Output
WPX1 LED P1	3000K	1,537
	4000K	1,568
	5000K	1,602
WPX1 LED P2	3000K	2,748
	4000K	2,912
	5000K	2,954
WPX2	3000K	5,719
	4000K	5,896
	5000K	6,201
WPX3	3000K	8,984
	4000K	9,269
	5000K	9,393

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### HID Replacement Guide

Luminaire	Equivalent HID Lamp	WPX Input Power
WPX1 LED P1	100W	11W
WPX1 LED P2	150W	24W
WPX2	250W	47W
WPX3	400W	69W

### Emergency Egress Battery Packs

The emergency battery backup is integral to the luminaire — no external housing or back box is required. The emergency battery will power the luminaire for a minimum duration of 90 minutes and deliver minimum initial output of 550 lumens. Both battery pack options are CEC compliant.

Battery Type	Minimum Temperature Rating	Power (Watts)	Controls Option	Ordering Example
Standard	0°C	4W	E4WH	WPX2 LED 40K MVOLT <b>E4WH</b> DDBXD
Cold Weather	-20°C	14W	E14WC	WPX2 LED 40K MVOLT <b>E14WC</b> DDBXD

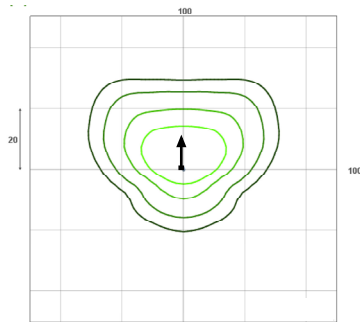
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting [WPX LED](#) homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

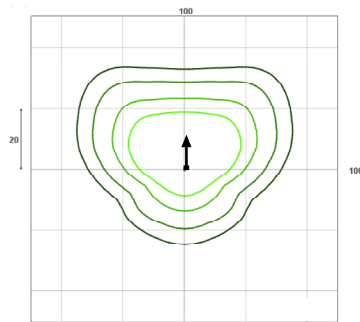
#### LEGEND

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<span style="display:inline-block; width:10px; height:10px; background-color:#008000;"></span>	0.2 fc
<span style="display:inline-block; width:10px; height:10px; background-color:#90ee90;"></span>	0.5 fc
<span style="display:inline-block; width:10px; height:10px; background-color:#ffff00;"></span>	1.0 fc

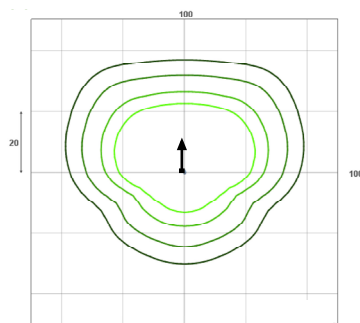
WPX1 LED P1



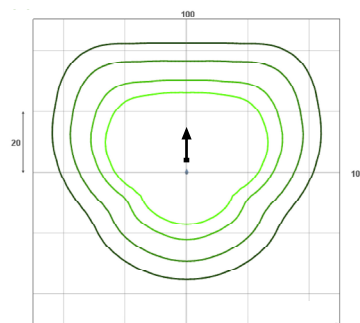
WPX1 LED P2



WPX2 LED



WPX3 LED



Mounting Height = 12 Feet.