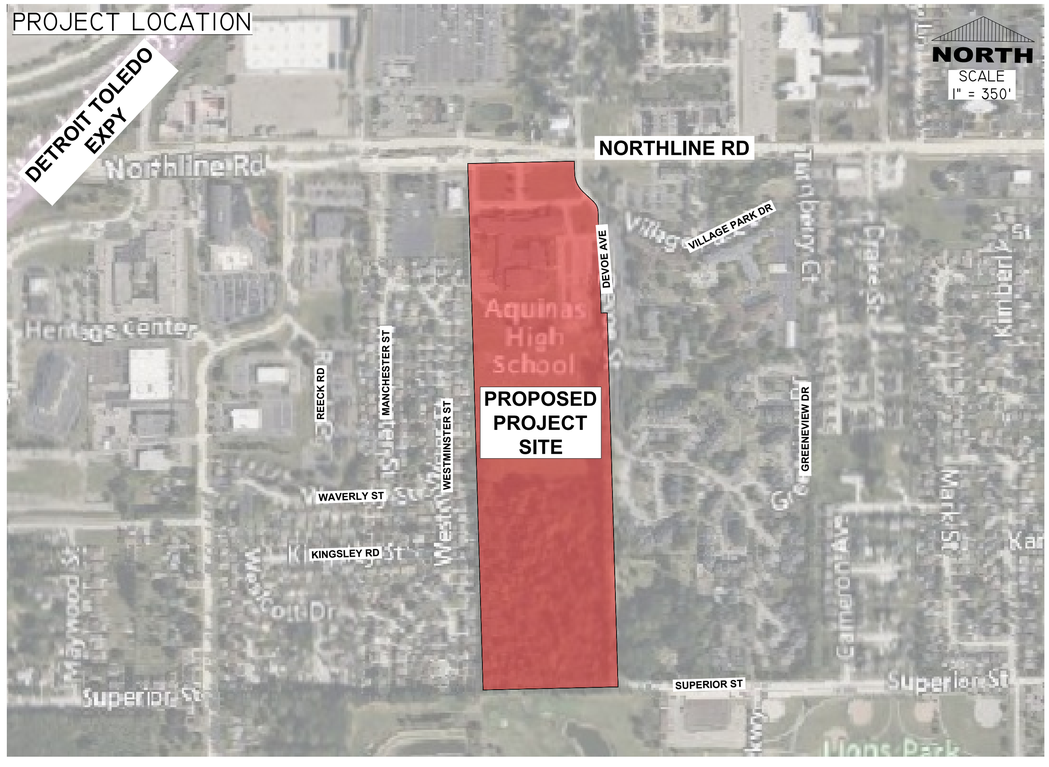
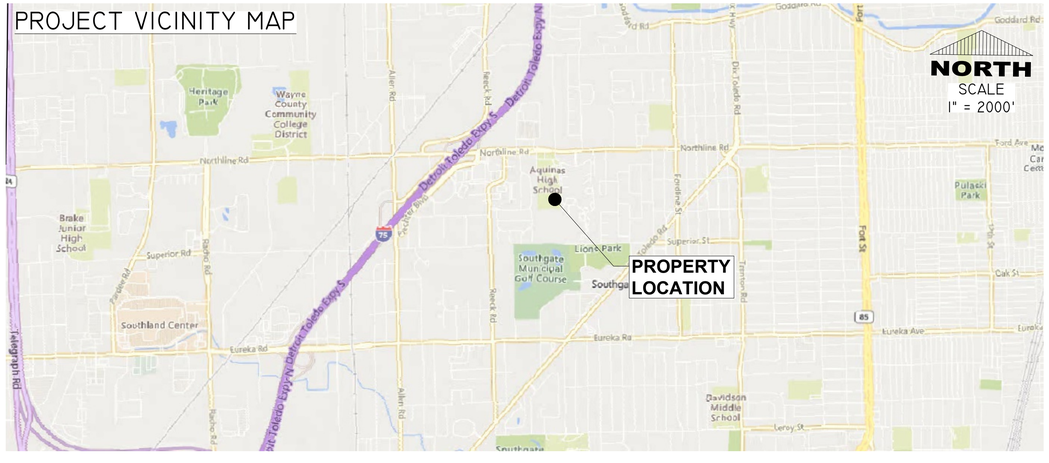
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

SITE PLAN APPROVAL

PREPARED FOR

NORTHLINE PROPERTY GROUP





SHEET INDEX	
Sheet Number	**Sheet Title**
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AI-A10	ARCHITECTURAL PLANS (10 SHEETS)
C2.0	DEMOLITION PLAN
C1.0	TOPOGRAPHIC AND BOUNDARY SURVEY PLAN
C3.0	OVERALL SITE PLAN
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C3.2	SITE PLAN - SELF STORAGE
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C3.4	VEHICLE TURNING MOVEMENT PLAN
C4.0	GRADING PLAN - MULTI FAMILY
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C5.0	UTILITY PLAN - MULTI FAMILY
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LS-1	OVERALL LANDSCAPE PLAN VIE
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LS-5	AMENITY FEATURE REFERENCE PLAN
LS-6	ENTRANCE & SIGN ELEVATION PLAN
PH	PHOTOMETRIC PLANS (6 SHEETS)

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2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
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CLIENT:
NORTHLINE PROPERTY GROUP, LLC
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FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
TITLESHEET

SHEET NUMBER:
C0.0

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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LEGEND

	EXISTIING	PROPOSED	DEMO/REMOVAL
SUBJECT PROPERTY LINE			
ADJACENT PROPERTY LINE			
BOUNDARY LOT LINE			
BUILDING SETBACK LINE			
ROAD CENTERLINE			
EASEMENT LINE			
RIGHT OF WAY LINE			
FLOWLINE			
CURB & GUTTER			
WOOD FENCE LINE			
CHAINLINK FENCE LINE	X X	X X	
DECORATIVE FENCE LINE			
WETLAND LINE			
NATURAL FEATURE SETBACK LINE			
MAJOR CONTOUR LINE	XXX	XXX	
MINOR CONTOUR LINE	XXX	XXX	
STORM PIPE	ST ST	ST ST	
SANITARY SEWER	SAN SAN	SAN SAN	
WATER LINE	W W	W W	
GAS LINE	GAS GAS	GAS GAS	
OVERHEAD LINE	OH OH	OH OH	
UG ELECTRIC LINE	E E	E E	
COMBINED SEWER	COMB COMB	COMB COMB	
UG TELE LINE	UGT UGT	UGT UGT	
UG FIBER OPTIC LINE	FO FO	FO FO	
DRAINAGE AREA BOUNDARY			
SILT FENCE			
WATER EDGE LINE			
BUILDING OVERHANG LINE			
RET./MASONRY SCREEN WALL			
BUILDING			
ASPHALT PAVEMENT			
CONCRETE PAVEMENT			
CONCRETE SIDEWALK			
DECORATIVE SIDEWALK			
PARKING STRIPING			
GRAVEL			
RIPRAP			
WETLAND			
LANDSCAPE			

PR FINISH GRADE ELEVATION	FG XXX.XX	MATCH EXISTING ELEVATION	XXX.X ME
PR TOP OF CURB ELEVATION	T/C XXX.XX	EXISTING ELEVATION	EX XXX.X
PR GUTTER ELEVATION	G XXX.XX	TOP OF BERM ELEVATION	TOB XXX.X
PR FLOW LINE ELEVATION	FL XXX.XX	TOP OF POND ELEVATION	TOP XXX.X
PR RIM ELEVATION	RIM XXX.XX	BOTTOM OF POND ELEVATION	BOP XXX.X
PR TOP OF SIDEWALK ELEVATION	T/W XXX.XX		
PR TOP OF WALL ELEVATION	TOW XXX.XX		
PR BOTTOM OF WALL ELEVATION	BOW XXX.XX		

LEGEND

	EXISTIING	PROPOSED	DEMO/REMOVAL
BOLLARD			
WHEEL STOP			
CATCH BASIN			
YARD DRAIN			
STORM MANHOLE			
SUMP			
FLARED END SECTION			
DOWNSPOUT			
SANITARY MANHOLE			
SANITARY CLEANOUT			
GAS MARKER			
GAS METER			
GATE VALVE IN WELL			
GATE VALVE IN BOX			
FIRE HYDRANT			
UTILITY POLE			
ELECTRIC METER			
TRANSFORMER			
TRAFFIC LIGHTS			
TELE RISER			
TELE MANHOLE			
GENERATOR			
CABLE TV RISER			
SATELLITE DISH			
ELECTRIC MANHOLE			
AIR CONDITIONER			
POLE MOUNTED AREA LIGHT			
WALL MOUNTED AREA LIGHT			
WALL PACK			
CANOPY LIGHT			
WALL MOUNT DECORATIVE SCONCE			
DECIDUOUS TREE			
EVERGREEN TREE			
ORNAMENTAL TREE			
SHRUB			
PERENNIAL			

ABBREVIATIONS

@	AT	LT	LEFT
ABAN	ABANDONED	MH	MANHOLE
APPROX	APPROXIMATE	MTR	METER
B/C, BC	BACK OF CURB	NTS	NOT TO SCALE
BM	BENCHMARK	OH	OVERHEAD POWER LINE
BR	BACK OF RAMP	℄ , PL	PROPERTY LINE
CTV,	CABLE TELEVISION	PR, PROP	PROPOSED
℄, CL	CENTERLINE	R	RADIUS
CONC	CONCRETE	RCCO	RIGHT CORNER CUT-OFF
DA	DRAINAGE AREA	RCP	REINFORCED CONCRETE PIPE
DB	DETENTION BASIN	RT	RIGHT
DIA.	DIAMETER	RET.	RETAINING
D.I.	DUCTILE IRON PIPE	R/W, R.O.W.	RIGHT OF WAY
DW, DWY	DRIVEWAY	STRM	STORM DRAIN
DWG	DRAWING	SF	SQUARE FOOT
EA	EACH	SAN	SANITARY SEWER
EASE.	EASEMENT	STA	STATION
ELEC	ELECTRIC	STD	STANDARD
ELEV	ELEVATION	S/W	SIDEWALK
EX	EXISTING	SY	SQUARE YARD
FC	FACE OF CURB	TELE	TELEPHONE
FD	FOUND	TC	TOP OF CURB
FES	FLARED END SECTION	TCE	TEMP. CONSTRUCTION EASEMENT
FG	FINISHED GRADE	TEMP.	TEMPORARY
FH, HYD	FIRE HYDRANT	TYP	TYPICAL
FT	FOOT, FEET	WATR	WATER LINE
GM	GAS METER	WC	WHEEL CHAIR
GV	GAS VALVE	WM	WATER METER
GW	GUY WIRE	WV	WATER VALVE
HDPE	HIGH DENSITY POLYETHYLENE	W/	WITH
INT	INTERSECTION		
INV	INVERT		
L	LENGTH		
LCCO	LEFT CORNER CUT-OFF		
LF	LINEAL FOOT, LINEAR FEET		

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CLIENT:

NORTHLINE PROPERTY GROUP, LLC

30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT
PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

GENERAL NOTES AND LEGEND

SHEET NUMBER:

C0.1

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

ROSEWOOD APARTMENT HOMES

SOUTHGATE, MI



LOCATION MAP

NOT TO SCALE

ARCHITECTURAL SHEET INDEX (SPA)

Sheet Number	Sheet Name	Current Revision Date
A1	COVER	
	MULTIFAMILY APARTMENT HOMES	
A2	FOUNDATION & FIRST FLOOR PLANS	
A3	SECOND & THIRD FLOOR PLANS	
A4	ROOF PLAN	
A5	UNIT FLOOR PLANS	
A6	EXT ELEVATIONS	
A7	RENDERINGS	
	MULTIFAMILY - LEASING BUILDING	
A8	SPA SHEET - ELEVATIONS/PLANS	
	STORAGE - LEASING BUILDING	
A9	SPA SHEET - ELEVATIONS/PLANS	
A10	MATERIAL LEGEND	

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DEVELOPMENT

ARCHITECT:

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SHEET TITLE: COVER

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REVISED 10/10/2025

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CHECKED BY: Checker
JOB NUMBER: 2902
DATE: 04/29/2025
SHEET NUMBER: A1

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STRUCTURAL NOTES:

(2) 2x8 HEADERS TO BEAR ON (1) ONE JACK STUD UNLESS NOTED OTHERWISE.

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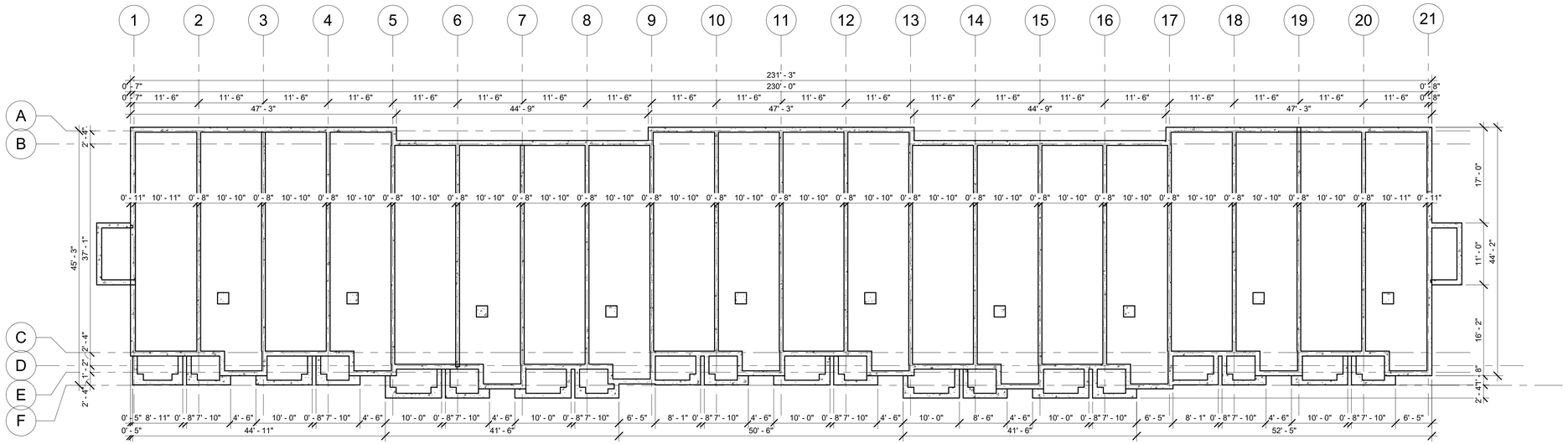
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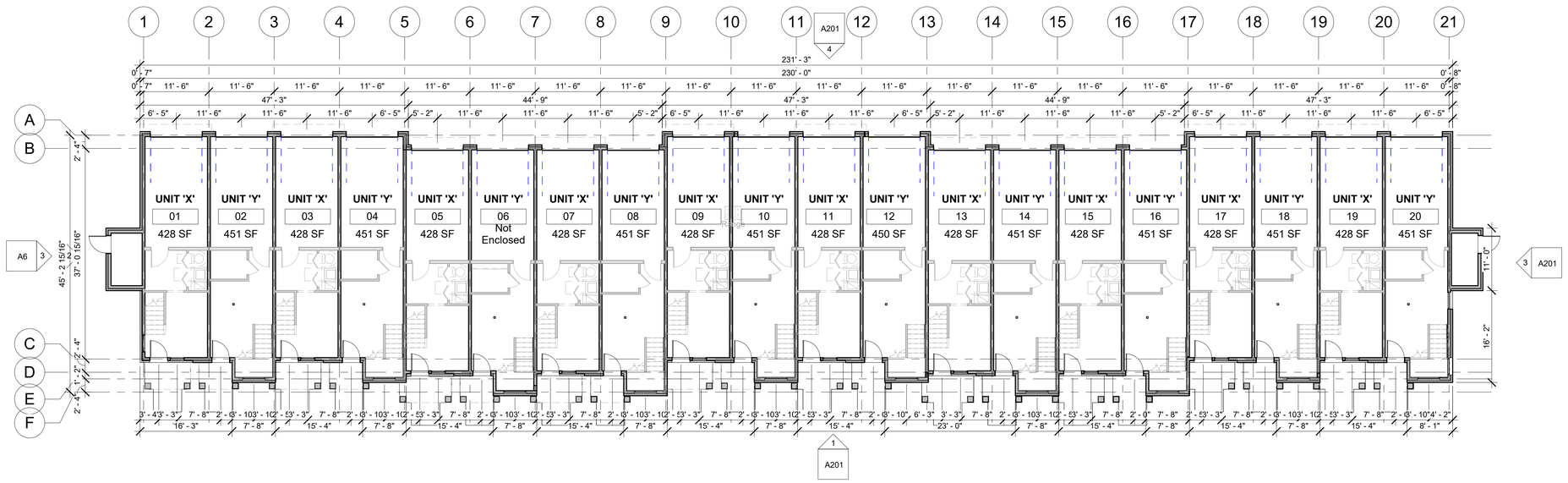
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LVL DESIGN VALUES FOR MODULUS OF ELASTICITY (E) SHALL BE 2,000,000 PSI (2.0 E)



1 00-FOUNDATION PLAN
3/32" = 1'-0"



3 01-FIRST FLOOR PLAN
3/32" = 1'-0"

ALL INTERIOR PARTITION DIMENSIONS ARE 3 1/2" UNLESS NOTED OTHERWISE.

BEFORE CONSTRUCTION OBTAIN WINDOW & DOOR ROUGH OPENING SIZES FROM WINDOW/DOOR SUPPLIER.

TRUSS DESIGNER/FABRICATOR SEE SHEET #2 FOR ADDITIONAL NOTES & INFORMATION

SEE SHEET #3 & 4 FOR ADDITIONAL DETAILS REGARDING DRAWINGS & CONSTRUCTION

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SHEET TITLE
FOUNDATION & FIRST FLOOR PLANS

CLIENT / PROJECT
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SOUTHGATE, MI

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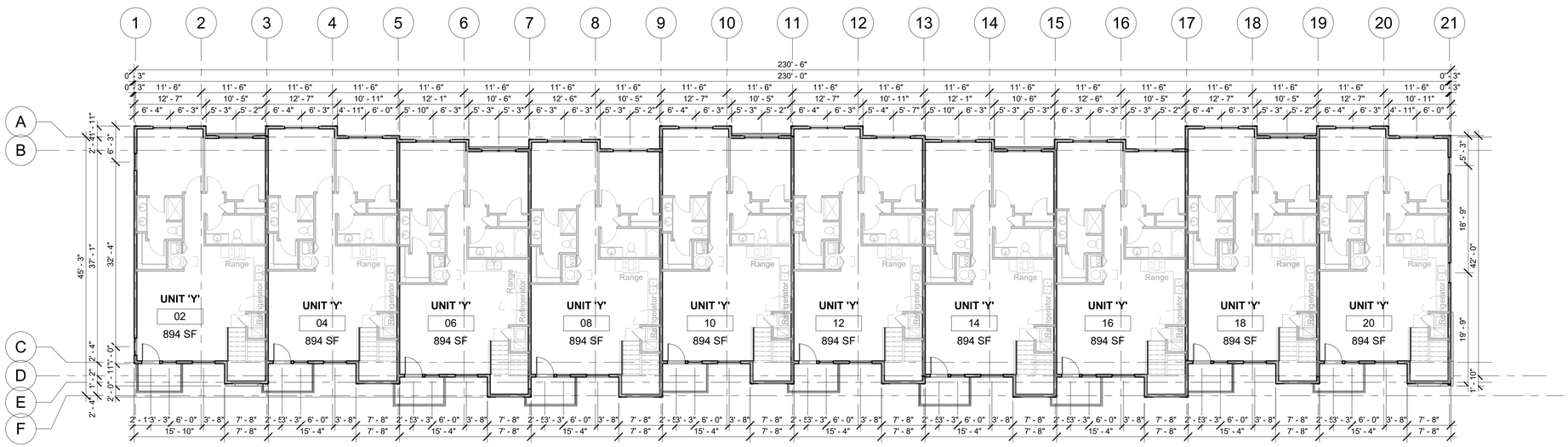
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1 02-SECOND FLOOR PLAN
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3 03-THIRD FLOOR PLAN
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SHEET TITLE
SECOND & THIRD FLOOR PLANS

CLIENT / PROJECT
BACALL DEVELOPMENT
NORTHLINE APARTMENTS
SOUTHGATE, MI

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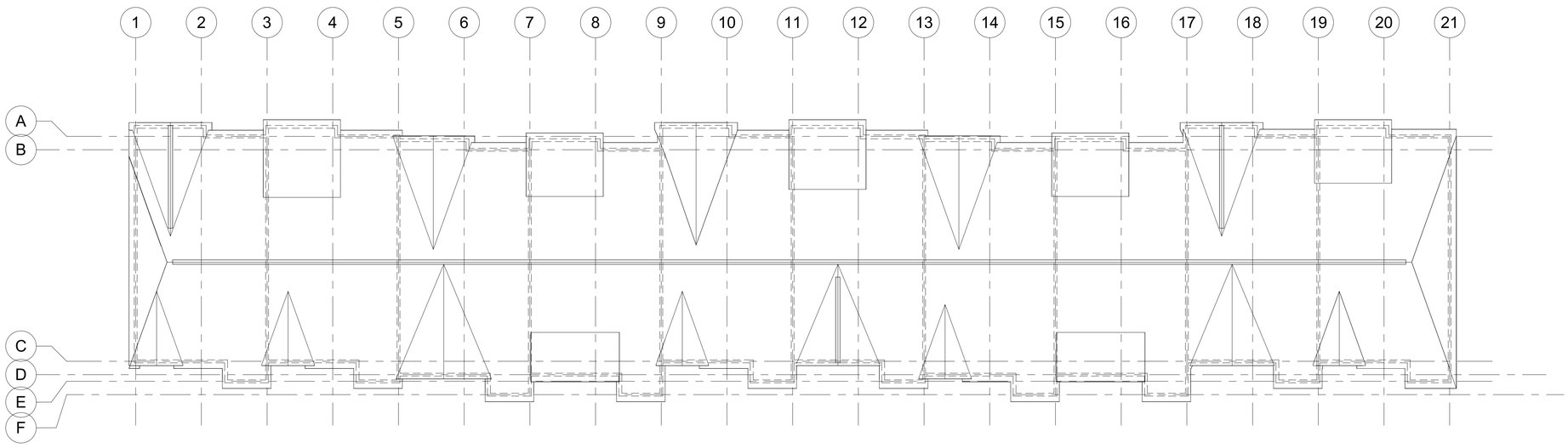
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SHEET TITLE
ROOF PLAN

CLIENT/ PROJECT
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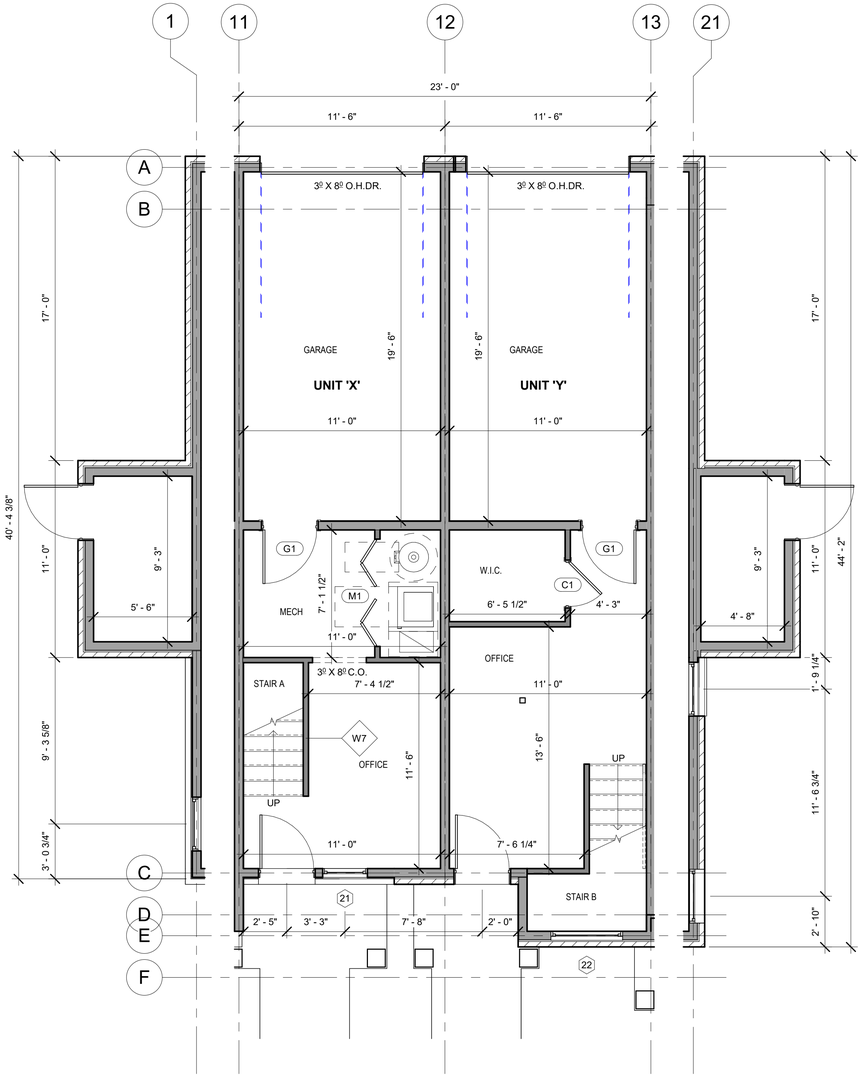
ALL PRE-ENGINEERED LUMBER HEADERS SHALL BE BUILT-UP FROM THE NUMBER OF HEADERS INDICATED ON DRAWINGS. ALL MEMBERS SHALL BE SECURED WITH NAILS OR BOLTS AS SPECIFIED BY THE MANUFACTURER FOR SIZES INDICATED.

ALL GIRDER TRUSSES TO BEAR ON (2) TWO STUDS MINIMUM OR AS REQUIRED TO MATCH NUMBER OF TRUSS PLYS, WHICH EVER IS GREATER U.N.O. ON THE PLAN.

TRUSS FABRICATOR/CONTRACTOR TO PROVIDE ALL HANGERS W/ MODEL No. CLEARLY STAMPED & LAYOUT DRAWINGS CLEARLY INDICATING LOCATION OF VARIOUS HANGERS REQUIRED.

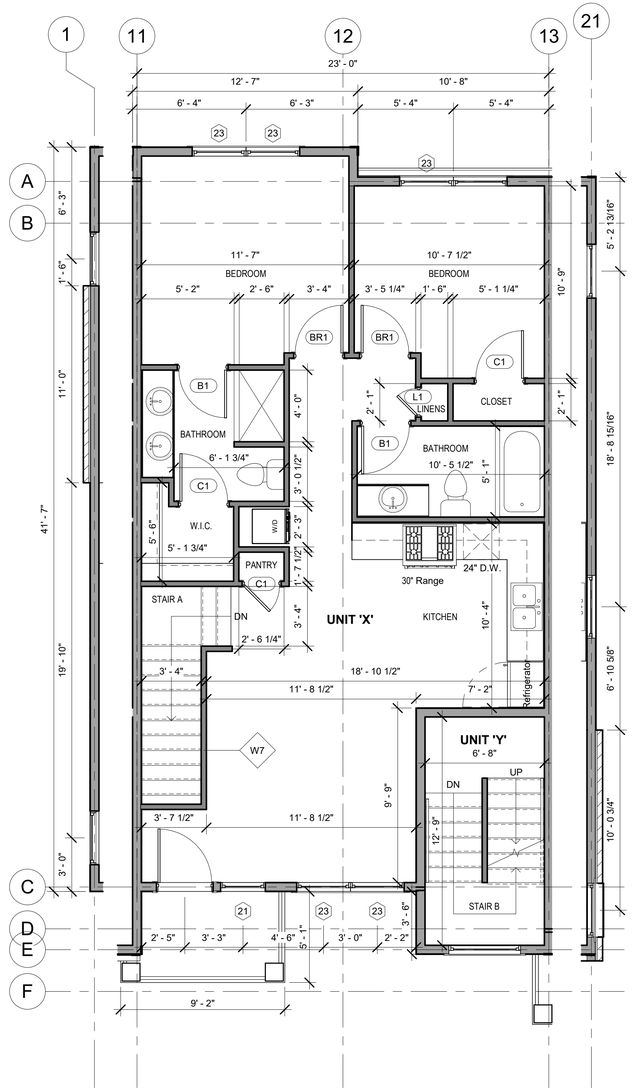
CARPENTER CONTRACTOR TO INSTALL NAIL SIZES & NUMBER REQ'D. AS SPECIFIED FOR EACH TYPE OF HANGER.

LVL DESIGN VALUES FOR MODULUS OF ELASTICITY (E) SHALL BE 2,000,000 PSI (2.0 E)



01-FIRST FLOOR PLAN
UNIT X & Y

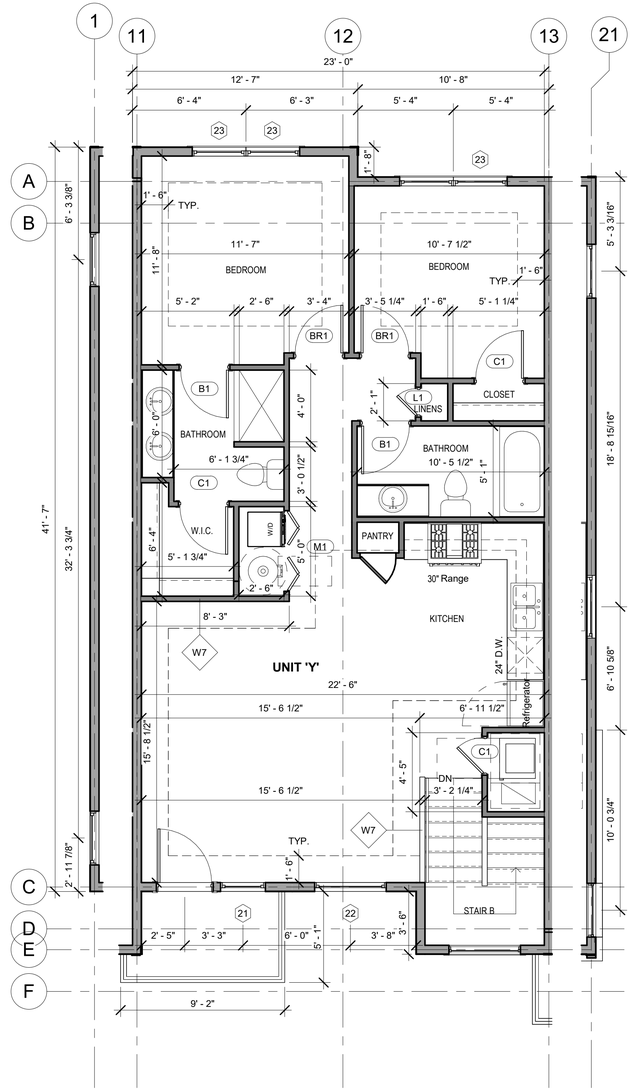
1 / A6 SCALE: 1/4" = 1'-0"



02-SECOND FLOOR PLAN
UNIT X

4 / A6 SCALE: 1/4" = 1'-0"

GENERAL CONTRACTOR TO V.I.F. THE KITCHEN LAYOUT



03-THIRD FLOOR PLAN
UNIT Y

7 / A6 SCALE: 1/4" = 1'-0"

GENERAL CONTRACTOR TO V.I.F. THE KITCHEN LA

UNIT 'X' AREA	
Key Name	AREA
FIRST FLOOR	234 SF
SECOND FLOOR	867 SF
TOTAL	1,101 SF

UNIT 'Y' AREA	
LEVEL	AREA
FIRST FLOOR	259 SF
SECOND FLOOR	99 SF
THIRD FLOOR	965 SF
TOTAL	1,323 SF

ALL INTERIOR PARTITION DIMENSIONS ARE 3 1/2" UNLESS NOTED OTHERWISE.

BEFORE CONSTRUCTION OBTAIN WINDOW & DOOR ROUGH OPENING SIZES FROM WINDOW/DOOR SUPPLIER.

TRUSS DESIGNER/FABRICATOR SEE SHEET #2 FOR ADDITIONAL NOTES & INFORMATION

SEE SHEET #3 & 4 FOR ADDITIONAL DETAILS REGARDING DRAWINGS & CONSTRUCTION

SEE SHEET #1 FOR ADDITIONAL NOTES REGARDING DRAWINGS & CONSTRUCTION.

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SHEET TITLE: UNIT FLOOR PLANS

CLIENT/ PROJECT: BACALL DEVELOPMENT
NORTHLINE APARTMENTS
SOUTHGATE, MI

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1 REAR ELEVATION
1/8" = 1'-0"



2 FRONT ELEVATION
1/8" = 1'-0"



3 LEFT SIDE ELEVATION
1/8" = 1'-0"



4 RIGHT SIDE ELEVATION
1/8" = 1'-0"

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SHEET TITLE
EXT ELEVATIONS

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Author

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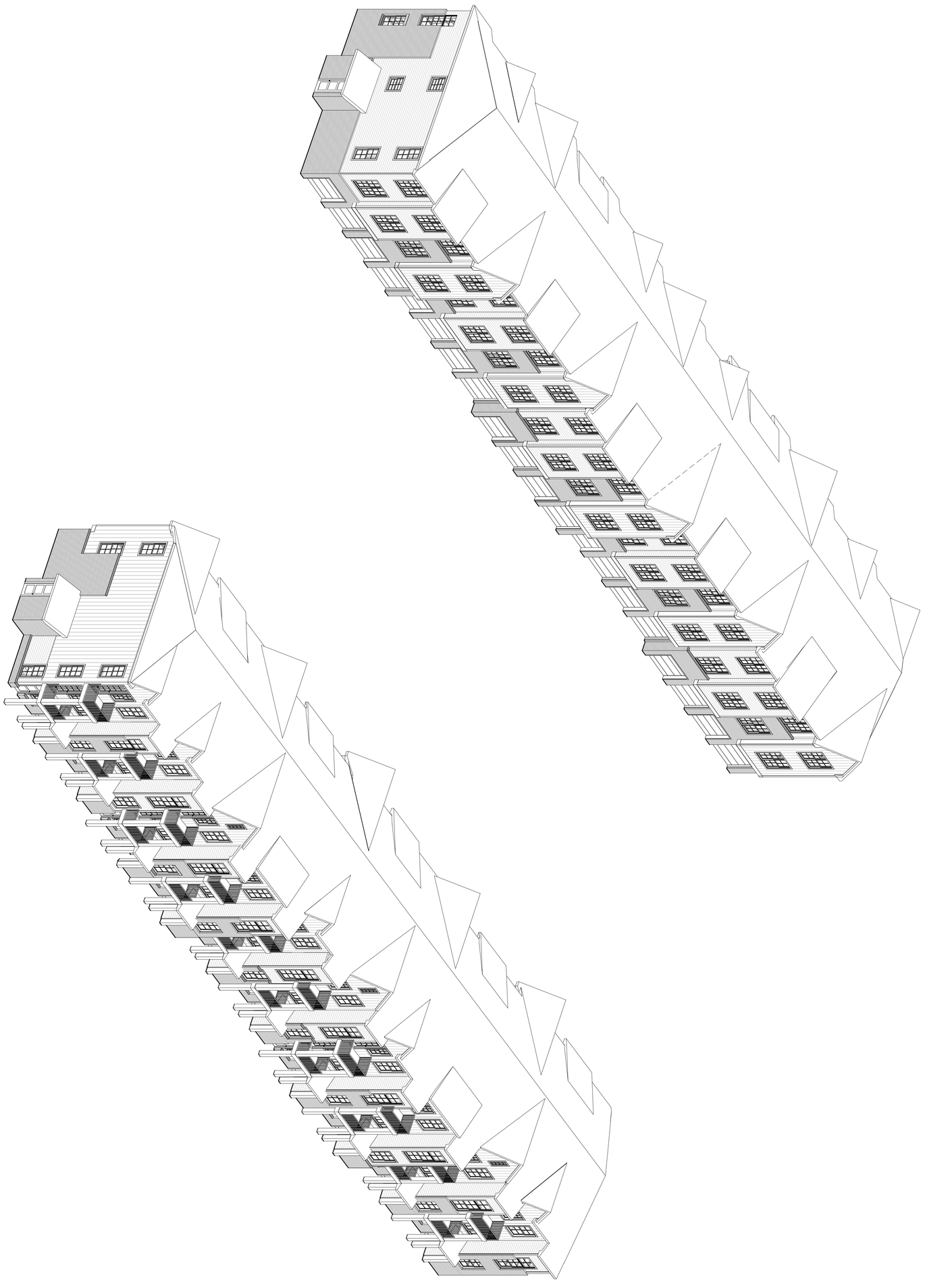
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JOB NUMBER: 2002

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CLIENT/ PROJECT
BACALL DEVELOPMENT
NORTHLINE APARTMENTS

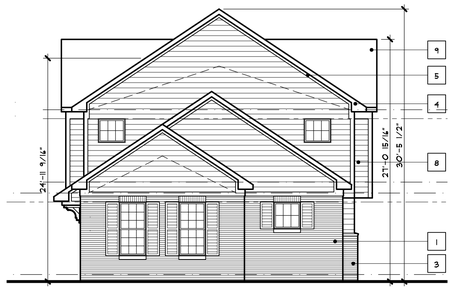
SOUTHGATE, MI

SHEET TITLE
RENDERINGS



FRONT (NORTH) ELEVATION

SCALE: 1/8" = 1'-0"



LEFT SIDE (WEST) ELEVATION

SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND (BACALL)			
KEY NAME	MATERIAL	MANUFACTURER	NAME/DESCRIPTION/COLOR
1	Brick 1	Glen Gery	St. Cloud
2	Brick 2	Glen Gery	Anchor Bay
3	Brick 3	Glen Gery	Shelby
4	Trim (Fascia & Soffit)	Certainteed or equal	White
5	Trim (Frieze bd, Corner & Window trim)	Certainteed or equal	White
6	Horizontal Vinyl Siding: Color A:	Certainteed	Flagstone Blue
7	Horizontal Vinyl Siding: Color B	Certainteed	Colonial White
8	Horizontal Vinyl Siding: Color C	Certainteed	Savannah Wicker
9	Roofing: Asphalt	Certainteed	Georgetown Grey
10	Vertical Board & Batten: Color A	Certainteed	Flagstone Blue
11	Vertical Board & Batten: Color B	Certainteed	Colonial White
12	Vertical Board & Batten: Color C	Certainteed	Savannah Wicker
13	Garage Door 1	CHI Doors	Black
14	Garage Door 2	CHI Doors	White
15	Single Hung Window	Vinyl	White
16	Unit Entry door 1	Sherwin Williams	Tricorn Black SW 6258
17	Unit Entry door 2	Sherwin Williams	Crabby Apple SW 7592
18	Unit Entry door 3	Sherwin Williams	Indigo Batik SW 7602
19	Gutters and Downspouts	Quality Aluminum Products	White
20	Balcony Railing	Aluminum	Black
21	Balcony & Porch Columns	Aluminum	
22	Balcony Decking	Trex or equal	Rocky Harbor
23	Soffits	Certainteed	

BUILDING DATA	
	SQUARE FOOTAGE
LEASING - 1ST FLR	915
APARTMENT	
1ST FLR – FOYER	292
2ND FLR	1115
CONDITIONED AREA TOTAL	1407
1ST FLR – GARAGE + STOR.	399



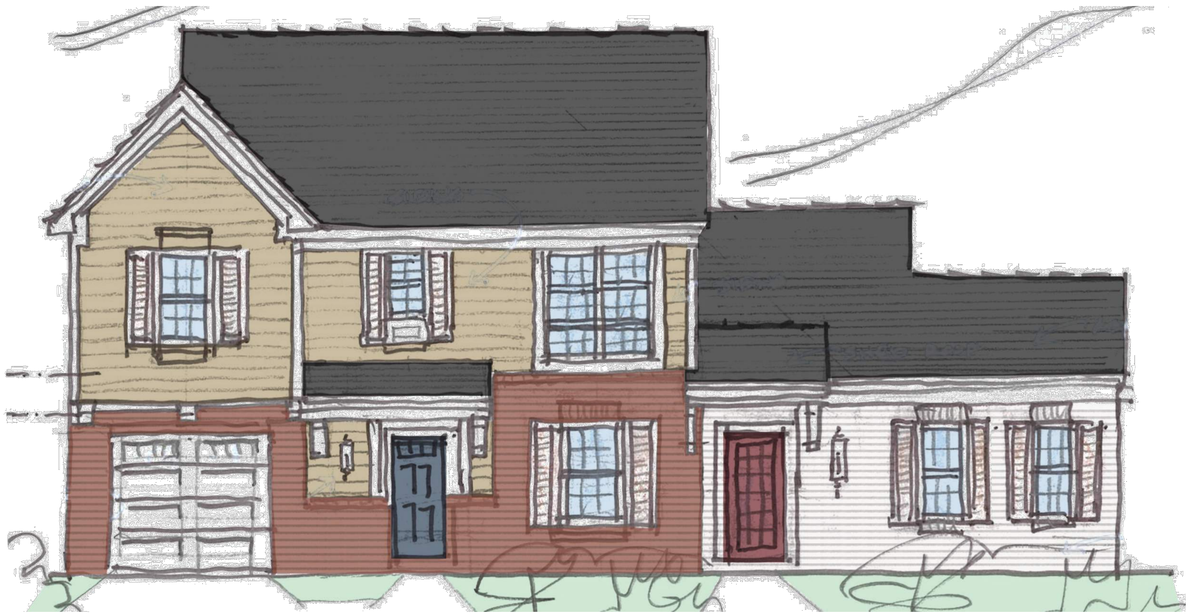
RIGHT SIDE (EAST) ELEVATION

SCALE: 1/8" = 1'-0"



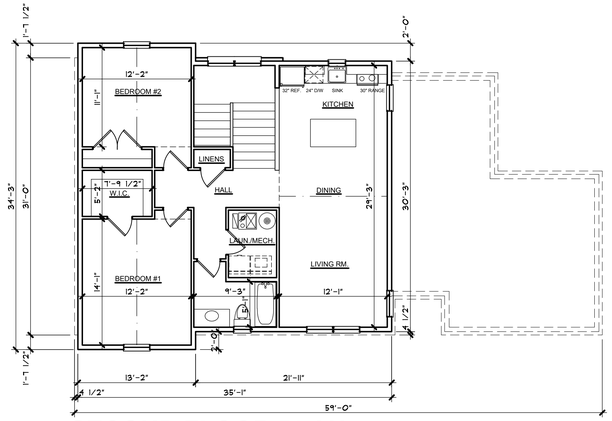
REAR (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"



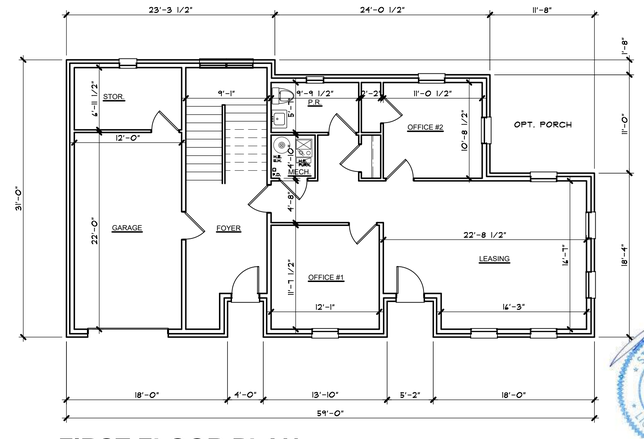
FRONT ELEVATION RENDERING - MULTIFAMILY LEASING

SCALE: 1/4" = 1'-0"



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

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SHEET TITLE
MULTIFAMILY LEASING
PLANS AND ELEVATIONS

CLIENT/PROJECT
BACALL
LEASING BUILDING
SOUTHGATE, MICHIGAN

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FRONT (NORTH) ELEVATION

SCALE: 1/8" = 1'-0"

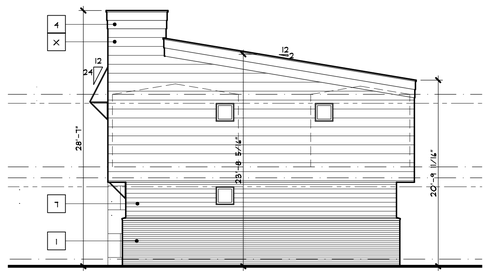


LEFT SIDE (WEST) ELEVATION

SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND (BACALL)			
KEY NAME	MATERIAL	MANUFACTURER	NAME/DESCRIPTION/COLOR
1	Brick 1	Glen Gery	St. Cloud
2	Brick 2	Glen Gery	Anchor Bay
3	Brick 3	Glen Gery	Shelby
4	Trim (Fascia & Soffit)	Certainteed or equal	White
5	Trim (Frieze bd, Corner & Window trim)	Certainteed or equal	White
6	Horizontal Vinyl Siding: Color A:	Certainteed	Flagstone Blue
7	Horizontal Vinyl Siding: Color B	Certainteed	Colonial White
8	Horizontal Vinyl Siding: Color C	Certainteed	Savannah Wicker
9	Roofing: Asphalt	Certainteed	Georgetown Grey
10	Vertical Board & Batten: Color A	Certainteed	Flagstone Blue
11	Vertical Board & Batten: Color B	Certainteed	Colonial White
12	Vertical Board & Batten: Color C	Certainteed	Savannah Wicker
13	Garage Door 1	CHI Doors	Black
14	Garage Door 2	CHI Doors	White
15	Single Hung Window	Vinyl	White
16	Unit Entry door 1	Sherwin Williams	Tricorn Black SW 6258
17	Unit Entry door 2	Sherwin Williams	Crabby Apple SW 7592
18	Unit Entry door 3	Sherwin Williams	Indigo Batik SW 7602
19	Gutters and Downspouts	Quality Aluminum Products	White
20	Balcony Railing	Aluminum	Black
21	Balcony & Porch Columns	Aluminum	
22	Balcony Decking	Trex or equal	Rocky Harbor
23	Soffits	Certainteed	

BUILDING DATA	
	SQUARE FOOTAGE
LEASING - 1ST FLR	915
APARTMENT	
1ST FLR – FOYER	292
2ND FLR	1115
CONDITIONED AREA TOTAL	1407
1ST FLR – GARAGE + STOR.	399



RIGHT SIDE (EAST) ELEVATION

SCALE: 1/8" = 1'-0"



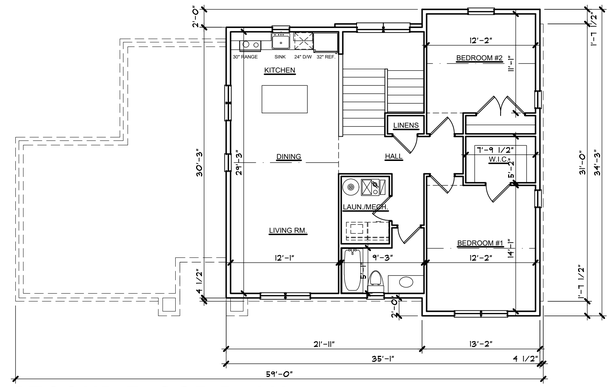
REAR (SOUTH) ELEVATION

SCALE: 1/8" = 1'-0"



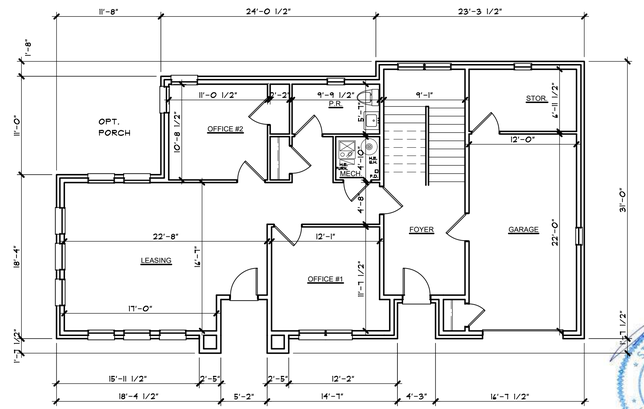
FRONT ELEVATION RENDERING - SELF-STORAGE LEASING

SCALE: 1/8" = 1'-0"



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

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SHEET TITLE
LEASING BUILDINGS
PLANS AND ELEVATIONS

CLIENT/PROJECT
BACALL
LEASING BUILDING
SOUTHGATE, MICHIGAN

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EXTERIOR MATERIAL LEGEND (BACALL)							
KEY NAME	MATERIAL	MANUFACTURER	MANUFACTURER CODE	NAME/DESCRIPTION/COLOR	SIZE	REP CONTACT	NOTES
1	Brick 1	Glen Gery		St. Cloud	Queen	Brickworks: (248) 666-2411 Mike Vyletel	Natural Mortar
2	Brick 2	Glen Gery		Anchor Bay	Queen	Brickworks: (248) 666-2411 Mike Vyletel	Natural Mortar
3	Brick 3	Glen Gery		Shelby	Queen	Brickworks: (248) 666-2411 Mike Vyletel	Natural Mortar
4	Trim (Fascia & Soffit)	Certainteed or equal	Restoration Millwork	White		Certainteed: Chris Eckerman (810) 852-9013	
5	Trim (Frieze bd, Corner & Window trim)	Certainteed or equal	Restoration Millwork	White		Certainteed: Chris Eckerman (810) 852-9013	
6	Horizontal Vinyl Siding: Color A:	Certainteed	Mainstreet	Flagstone Blue	Double 5" Clapboard	Certainteed: Chris Eckerman (810) 852-9013	
7	Horizontal Vinyl Siding: Color B	Certainteed	Mainstreet	Colonial White	Double 5" Clapboard	Certainteed: Chris Eckerman (810) 852-9013	
8	Horizontal Vinyl Siding: Color C	Certainteed	Mainstreet	Savannah Wicker	Double 5" Clapboard	Certainteed: Chris Eckerman (810) 852-9013	
9	Roofing: Asphalt	Certainteed	Landmark	Georgetown Grey	Modular	Certainteed: Brandonw Gilleland (248) 678-8543	
10	Vertical Board & Batten: Color A	Certainteed	Single Board & Batten 7"/ #34136	Flagstone Blue	7" Board & Batten	Certainteed: Chris Eckerman (810) 852-9013	
11	Vertical Board & Batten: Color B	Certainteed	Single Board & Batten 7"/ #34136	Colonial White	7" Board & Batten	Certainteed: Chris Eckerman (810) 852-9013	
12	Vertical Board & Batten: Color C	Certainteed	Single Board & Batten 7"/ #34136	Savannah Wicker	7" Board & Batten	Certainteed: Chris Eckerman (810) 852-9013	
13	Garage Door 1	CHI Doors		Black			
14	Garage Door 2	CHI Doors		White			
15	Single Hung Window	Vinyl		White			
16	Unit Entry door 1	Sherwin Williams		Tricorn Black SW 6258			
17	Unit Entry door 2	Sherwin Williams		Crabby Apple SW 7592			
18	Unit Entry door 3	Sherwin Williams		Indigo Batik SW 7602			
19	Gutters and Downspouts	Quality Aluminum Products		White		Quality Aluminum Products 800.368.2141	
20	Balcony Railing	Aluminum	Powder Coated Finish	Black			
21	Balcony & Porch Columns	Aluminum	White				
22	Balcony Decking	Trex or equal	Enhance	Rocky Harbor			
23	Soffits	Certainteed					
24							

NOTE: Materials, fixtures and suppliers used for this project may vary based on pricing and availability. All construction materials and fixtures shall be of comparable style, appearance, color and quality to the materials listed and shown on the accompanying material board, and shall be indicated on the constructions plans that will be submitted to the City for construction.

Note: All window Trim surround to be integral

BACALL Northline Rd Southgate:
Exterior Materials Finishes

SCHEME A



Brick Style 1: Glen Gary - St. Cloud



Vinyl Siding 1: Certainteed Mainstreet Flagstone Blue Horizontal Siding



Vertical Board & Batten 1: Certainteed Flagstone Blue



CHI Doors: Black Garage Door

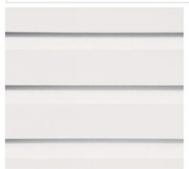


Unit Entry Door 1: Sherwin Williams Tricorn Black

SCHEME B



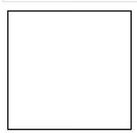
Brick Style 2: Glen Gary - Anchor Bay



Vinyl Siding 2: Certainteed Mainstreet Colonial White Horizontal Siding



Vertical Board & Batten 2: Certainteed Colonial White



CHI Doors: White Garage Door



Unit Entry Door 2: Sherwin Williams Wild Current SW 7563

SCHEME C



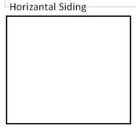
Brick Style 3: Glen Gary - Shelby



Vinyl Siding 3: Certainteed Mainstreet Savannah Wicker Horizantal Siding



Vertical Board & Batten 3: Certainteed Savannah Wicker



CHI Doors: White Garage Door



Unit Entry Door 2: Sherwin Williams Endless Sea SW 7563

Common Materials For All Buildings



Certainteed White Trim for Fascia, Frieze, Soffit, Corner & Window Trim



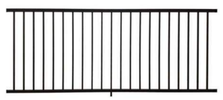
White Aluminum Products Gutters & Downspouts



Georgetown Grey Asphalt Roofing



Window: Single Hung Vinyl White



Black Powder Coated Finish Balcony Railing

Refer to Architect's drawings for material locations.
Images shown are digital representations of specific materials.

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SHEET TITLE: MATERIAL LEGEND

CLIENT/ PROJECT: BACALL DEVELOPMENT NORTHLINE APARTMENTS SOUTHGATE, MI

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JOB NUMBER: 2902
DATE: 04/29/2025
SHEET NUMBER: A8

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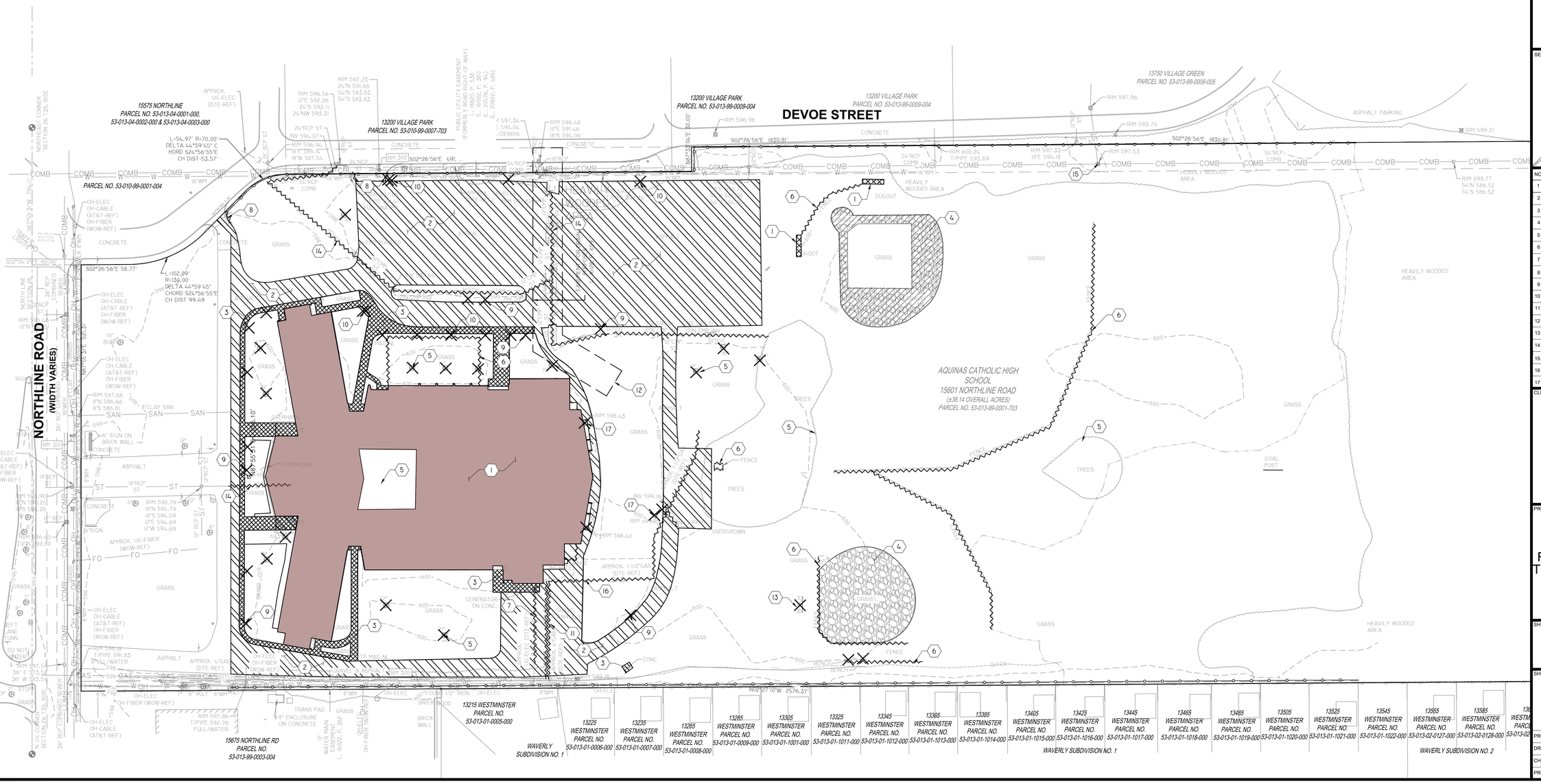
KEY NOTES

1. DEMOLISH BUILDING
2. REMOVE ASPHALT PAVEMENT
3. REMOVE CONCRETE PAVEMENT
4. REMOVE GRAVEL SURFACE
5. REMOVE TREES
6. REMOVE FENCE
7. REMOVE UNDERGROUND ELECTRIC LINE
8. REMOVE CURB AND GUTTER
9. REMOVE SIGN
10. REMOVE LIGHT POLE
11. REMOVE WATER PIPE
12. EXISTING DRAINAGE EASEMENT TO BE VACATED
13. REMOVE BENCH
14. REMOVE STORM PIPE
15.
16. REMOVE GAS PIPE AND METER
17. REMOVE FIRE HYDRANT

NORTH

60 30 0 60 120

DRAWING SCALE: 1"=60'


NORTHLINE ROAD
(WIDTH VARIES)
DEVOE STREET
15575 NORTHLINE
PARCEL NO. 53-013-04-0001-000,
53-013-04-0002-000 & 53-013-04-0003-000
PARCEL NO. 53-010-99-0001-004
13200 VILLAGE PARK
PARCEL NO. 53-010-89-0007-703
13200 VILLAGE PARK
PARCEL NO. 53-013-99-0009-004
13750 VILLAGE GREEN
PARCEL NO. 53-013-99-0009-005
AQUINAS CATHOLIC HIGH
SCHOOL
15601 NORTHLINE ROAD
(±38.14 OVERALL ACRES)
PARCEL NO. 53-013-99-0001-703
15675 NORTHLINE RD
PARCEL NO.
53-013-99-0003-004
13215 WESTMINSTER
PARCEL NO.
53-013-01-0005-000
WAVERLY
SUBDIVISION NO. 1
WAVERLY SUBDIVISION NO. 1
WAVERLY SUBDIVISION NO. 2
HEAVILY WOODED AREA
ASPHALT PARKING
GRASS
TREES
CONCRETE
ASPHALT
FENCE
DUGOUT
GOAL POST
OVERGROWN
GENERATOR ON CONC.
TRANS PAD
8' ENCLOSURE ON CONCRETE
BRICK WALL
LANDSCAPE
DITCH
BENCH
12" WATER MAIN EASEMENT L. 00022, P. 582
PUBLIC UTILITY EASEMENT (FORMERLY ROAD RIGHT-OF-WAY) L. 18823, P. 536 L. 18823, P. 540 L. 20576, P. 940 L. 20822, P. 485)
S02°26'56"E 1830.81'
S02°26'56"E 58.77'
N02°27'10"W 2576.37'
L=54.97' R=70.00' DELTA 44°59'45" C HORD S24°56'55"E CH DIST-53.57'
L=102.89' R=139.00' DELTA 44°59'45" CHORD S24°56'55"E CH DIST 99.49
BM 302
BM 303
SAN
STORM
COMB
OH-ELEC
OH-CABLE (AT&T-REF)
OH-FIBER (WOW-REF)
GAS
FO
W
WM
8"CLAY SAN
6" SIGN ON BRICK WALL
10' SIGN
LEFT LANE TURN
DO NOT ENTER
STOP
APPROX. UG-ELEC (DTE-REF)
APPROX. UG-FIBER (WOW-REF)
APPROX. 4"GAS (DTE-REF)
APPROX. I-I/2"GAS (DTE-REF)
RIM 597.23 24"N 591.68 54"N 583.83 54"S 583.85
RIM 596.56 12"E 592.26 24"S 592.11 24"NW 593.31
RIM 596.94 18"E 588.64 18"W 587.54
RIM 597.33 12"E 594.18
RIM 597.96
RIM 597.55
RIM 596.98
RIM 600.24 T/PIPE 595.69
RIM 593.70
RIM 599.21
RIM 698.77 54"N 586.52 54"S 586.52
RIM 596.46 12"E 591.66 18"S 594.06
RIM 597.34 594.04 /DEBRIS
RIM 598.43
RIM 599.16
RIM 598.40
RIM 597.66 8"N 586.66 8"S 586.81
RIM 594.90 12"N 590.20 18"S 594.20
RIM 596.00 12"N 592.80
RIM 598.79 18"N 594.79 18"S 594.59 12"E 594.69 12"W 594.69
RIM 598.18 T/PIPE 591.83 FULL/WATER 598
RIM 597.54 36"E 575.54 36"W 585.94
RIM 597.86 T/PIPE 592.76 FULL/WATER
INV 596.07
INV 599.04
INV 594.06
INV 599.16
INV 598.79
INV 598.79
INV 598.69
INV 598.69
INV 598.69

BENCHMARKS:
(GPS DERIVED - NAVD88)

BM #300
BENCH TIE IN THE EAST FACE OF THE 6TH POWER POLE SOUTH OF NORTHLINE ROAD, WEST OF THE SCHOOL.
ELEV. - 600.68

BM #301
BENCH TIE IN THE EAST FACE OF THE 3RD POWER POLE WEST OF DEVOE STREET, ON THE SOUTH SIDE OF NORTHLINE ROAD.
ELEV. - 599.06

BM #302
DIMPLE IN THE EAST SIDE OF A SEWER MANHOLE LID LOCATED ON THE WEST SIDE OF DEVOE STREET, APPROX. 180' SOUTHEAST FROM THE EAST BUILDING CORNER OF THE SCHOOL.
ELEV. - 597.27

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26163C0404E, DATED 02/02/2012.

PARCEL DESCRIPTION

PER CHICAGO TITLE INSURANCE COMPANY COMMITMENT NUMBER: 23020035-C, REVISION 4, DATED JUNE 27, 2023

LAND SITUATED IN THE CITY OF SOUTHGATE, COUNTY OF WAYNE IN THE STATE OF MICHIGAN AND DESCRIBED AS FOLLOWS:

THE WEST 1/2 OF THE EAST 1/2 OF THE NORTHEAST 1/4 OF SECTION 26, TOWN 3 SOUTH, RANGE 10 EAST, CITY OF SOUTHGATE, WAYNE COUNTY, EXCEPT THE NORTH 60 FEET THEREOF, ALSO EXCEPT THAT PART DESCRIBED AS BEGINNING NORTH 89 DEGREES 34 MINUTES 30 SECONDS WEST 655.18 FEET AND SOUTH 00 DEGREES 03 MINUTES 03 SECONDS WEST 60 FEET FROM THE NORTHEAST CORNER OF SECTION 26; THENCE NORTH 89 DEGREES 34 MINUTES 30 SECONDS WEST 139.32 FEET; THENCE SOUTH 00 DEGREES 03 MINUTES 03 SECONDS WEST 58.58 FEET; THENCE ON A CURVE TO THE NORTHEAST, RADIUS 100 FEET, ARC 103.45 FEET, CHORD SOUTH 22 DEGREES 26 MINUTES 57 SECONDS EAST 99.49 FEET; THENCE SOUTH 44 DEGREES 56 MINUTES 57 SECONDS EAST 71.76 FEET; THENCE ON A CURVE TO THE SOUTHWEST, RADIUS 100 FEET, ARC 55.71 FEET, CHORD SOUTH 22 DEGREES 26 MINUTES 57 SECONDS EAST 53.57 FEET; THENCE NORTH 89 DEGREES 57 MINUTES 51 SECONDS EAST 30 FEET; THENCE NORTH 00 DEGREES 03 MINUTES 03 SECONDS EAST 250 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THAT PORTION OF THE ABOVE DESCRIBED PROPERTY DESCRIBED IN LIBER 20822, PAGE 485, WAYNE COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS: A PERMANENT 60 FEET RIGHT-OF-WAY FOR ROAD PURPOSES THE CENTERLINE OF WHICH IS DESCRIBED AS:

BEGINNING AT A POINT DISTANT NORTH 89 DEGREES 34 MINUTES 30 SECONDS WEST 655.18 FEET (RECORDED AS 655.11 FEET) ALONG THE NORTH LINE OF SECTION 26, TOWN 3 SOUTH, RANGE 10 EAST (ALSO THE CENTERLINE OF NORTHLINE ROAD) AND SOUTH 00 DEGREES 03 MINUTES 03 SECONDS WEST (RECORDED AS SOUTH 00 DEGREES 04 MINUTES WEST) 60 FEET FROM THE NORTHEAST CORNER OF SECTION 26, TOWN 3 SOUTH, RANGE 10 EAST AND PROCEEDING THENCE SOUTH 00 DEGREES 03 MINUTES 03 SECONDS WEST (RECORDED AS SOUTH 00 DEGREES 04 MINUTES WEST) 745.83 FEET TO A POINT OF ENDING. SAID CENTERLINE BEING THE WEST LINE OF VACATED TROWBRIDGE PARK SUBDIVISION, CITY OF SOUTHGATE, WAYNE COUNTY, MICHIGAN, AS RECORDED IN LIBER 62, PAGE 8 OF PLATS, WAYNE COUNTY RECORDS.

1. REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS

ALSO DESCRIBED AS:

PART OF THE NORTHEAST 1/4 OF SECTION 26, TOWN 3 SOUTH, RANGE 10 EAST, CITY OF SOUTHGATE, WAYNE COUNTY, MICHIGAN, DESCRIBED AS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 26; THENCE SOUTH 87 DEGREES 55 MINUTES 31 SECONDS WEST 794.11 FEET ALONG THE NORTH LINE OF SAID SECTION 26 AND THE CENTERLINE OF NORTHLINE ROAD (120 FEET WIDE); THENCE SOUTH 02 DEGREES 04 MINUTES 29 SECONDS EAST 60.00 FEET TO THE INTERSECTION OF THE SOUTHERLY RIGHT-OF-WAY LINE OF NORTHLINE ROAD AND THE WESTERLY RIGHT-OF-WAY LINE OF DEVOE STREET TO THE POINT OF BEGINNING; THENCE ALONG THE WESTERLY AND SOUTHERLY RIGHT-OF-WAY LINE OF DEVOE STREET THE FOLLOWING FOUR COURSES: SOUTH 02 DEGREES 26 MINUTES 56 MINUTES EAST 58.77 FEET (RECORDED AS SOUTH 00 DEGREES 03 MINUTES 03 SECONDS WEST 58.58 FEET); 102.09 FEET (RECORDED AS 103.45 FEET) ALONG THE ARC OF A 130.00 FOOT RADIUS CURVE TO THE LEFT HAVING A CHORD BEARING SOUTH 24 DEGREES 56 MINUTES 55 SECONDS EAST (RECORDED AS SOUTH 22 DEGREES 26 MINUTES 57 SECONDS EAST) 99.49 FEET; SOUTH 47 DEGREES 26 MINUTES 56 SECONDS EAST (RECORDED AS SOUTH 44 DEGREES 56 MINUTES 57 SECONDS EAST) 71.76 FEET, AND 54.97 FEET (RECORDED AS 55.71 FEET) ALONG THE ARC OF A 70.00 FOOT RADIUS CURVE TO THE RIGHT HAVING A CHORD BEARING SOUTH 24 DEGREES 56 MINUTES 55 SECONDS EAST (RECORDED AS SOUTH 22 DEGREES 26 MINUTES 57 SECONDS EAST) 53.57 FEET; THENCE SOUTH 02 DEGREES 26 MINUTES 56 SECONDS EAST 495.81 FEET; THENCE NORTH 87 DEGREES 33 MINUTES 04 SECONDS EAST 30.00 FEET; THENCE SOUTH 02 DEGREES 26 MINUTES 56 SECONDS EAST 1830.81 FEET;
THENCE SOUTH 87 DEGREES 56 MINUTES 55 SECONDS WEST 660.45 FEET; THENCE NORTH 02 DEGREES 27 MINUTES 10 SECONDS WEST 2576.37 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF NORTHLINE ROAD; THENCE NORTH 87 DEGREES 55 MINUTES 31 SECONDS EAST 521.31 FEET ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF NORTHLINE ROAD TO THE POINT OF BEGINNING, CONTAINING 38.14 ACRES OF LAND, MORE OR LESS, SUBJECT TO ANY EASEMENTS AND/OR EXCEPTIONS, RECORDED OR OTHERWISE.

NOTE:

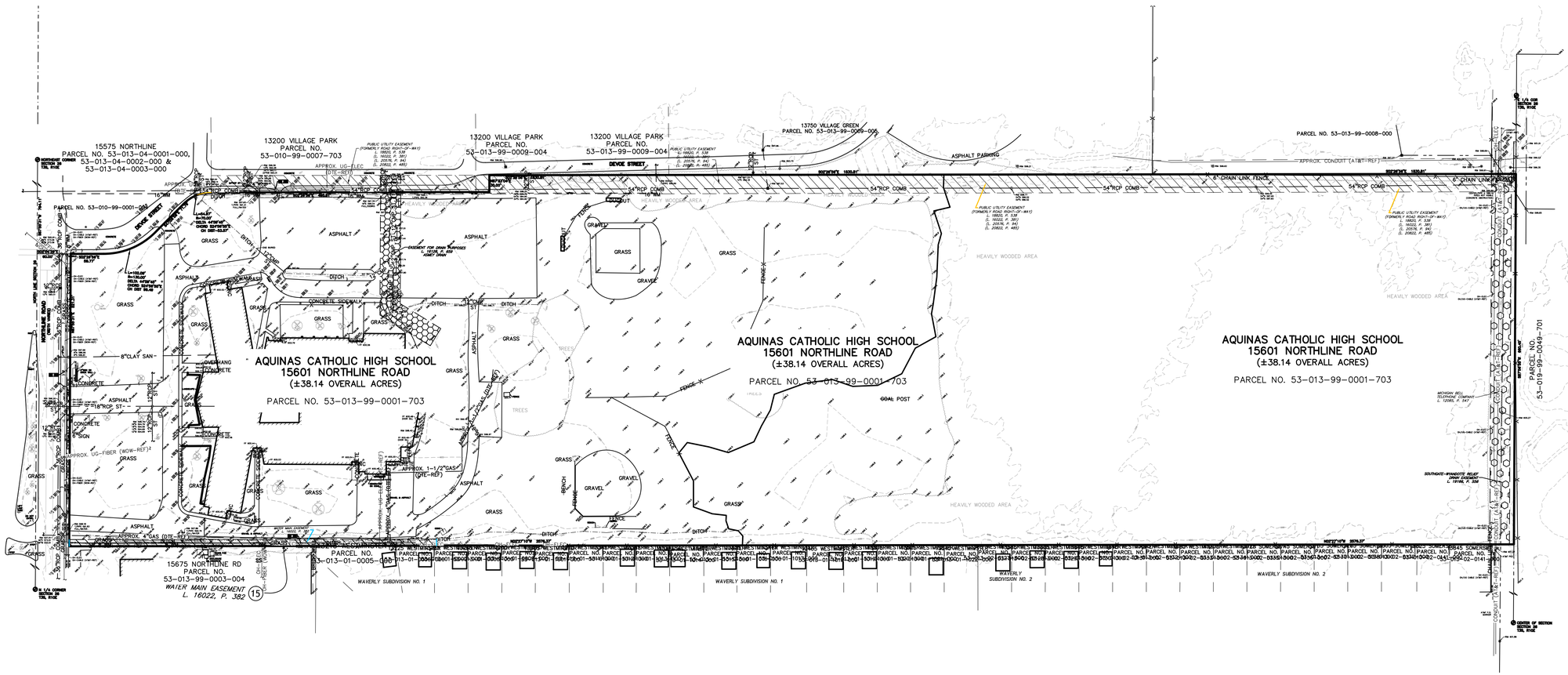
THE LEGAL DESCRIPTION AS DESCRIBED IN THE TITLE COMMITMENT NUMBER: 23020035-C IS THE SAME AS THE AS SURVEYED (ALSO DESCRIBED AS) THE METES AND BOUNDS LEGAL DESCRIPTION.

REFERENCE DRAWINGS:
ALTA/ACSM LAND TITLE SURVEY, HENNESSEY ENGINEERS, PROJECT NO. 52241, DATED 11/25/15, UPDATED 8/3/2023

GAS	DTE GAS COMPANY MAP DATED 09/27/2023
CABLE	AT&T MAPS A1 & B1, DATED 09/26/2023
FIBER OPTIC	WOW CABLE MAP
ELECTRIC	DTE FACILITY MAP
WATER MAIN	HAVE NOT RECEIVED MAPS AS OF 10/03/2023
SANITARY SEWER	HAVE NOT RECEIVED MAPS AS OF 10/03/2023
STORM SEWER	HAVE NOT RECEIVED MAPS AS OF 10/03/2023

LEGEND:

-OH-ELEC-	EX. OH. ELEC, POLE & GUY WIRE
-UG-CATV-	EX. U.G. CABLE TV & PEDESTAL
-UG-COMM-	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
-UG-ELEC-	EX. U.G. ELEC,MANHOLE & METER
	EX. GAS LINE
	EX. GAS VALVE & GAS LINE MARKER
	EX. TRANSFORMER & IRRIGATION VALVE
	EX. WATER MAIN
	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
	EX. WATER VALVE BOX & SHUTOFF
	EX. SANITARY SEWER
	EX. SANITARY CLEANOUT & MANHOLE
	EX. COMBINED SEWER MANHOLE
	EX. STORM SEWER
	EX. CLEANOUT, MANHOLE & CULVERT
	EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
	EX. YARD DRAIN, ROOF DRAIN & DOWNSPOUT
	EX. UNIDENTIFIED STRUCTURE
	EX. MAILBOX, SIGN & GUARD POST
	EX. LIGHT POLE & YARD LIGHT
	EX. FENCE
	EX. GUARD RAIL
	EX. DEC. TREE, CONIFEROUS TREE & SHRUB
	EX. TREE TAG, & TREE LINE
	EX. SPOT ELEVATION
	EX. CONTOUR
	EX. WETLAND
	IRON FOUND / SET
	NAIL FOUND / NAIL & CAP SET
	BRASS PLUG SET
	MONUMENT FOUND / SET
	SECTION CORNER FOUND
(R) (M) (C)	RECORDED / MEASURED / CALCULATED



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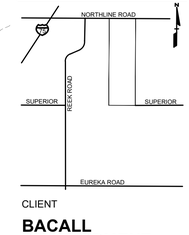
STATE OF MICHIGAN
JAMES P. BUTLER
License No. 53039605
PROFESSIONAL ENGINEER

NORTH

0 50 100 200
SCALE: 1" = 100'

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

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE AND NOT NECESSARILY COMPLETE. NO GUARANTEE OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT

BACALL DEVELOPMENT
30407 WEST THIRTEEN MILE ROAD
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE

SELF STORAGE PROJECT
15601 NORTHLINE ROAD
CITY OF SOUTHGATE, WAYNE COUNTY, MICHIGAN

REVISIONS	
OWNER REVIEW COMMENTS	9/27/2024
OWNER REVIEW COMMENTS	10/7/2024
PERMIT SUBMITTAL	10/30/2024

ORIGINAL ISSUE DATE:
JULY 19 , 2024

DRAWING TITLE

OVERALL TOPOGRAPHIC SURVEY

PEA JOB NO.	2023-0738
P.M.	JPB
DN.	LP
DES.	GWC

DRAWING NUMBER:

C-1.0

S:\PROJECTS\2023\23-0738 BACALL - SOUTHGATE_DWG'S_CONSTRUCTION\C-1.0TOPO 23-0738.dwg PLOT DATE: 10/30/2024 01:46:1 pgryr

GENERAL SITE DATA

TOTAL LAND AREA:	38.14 ACRES (1,661,473 SF)
OUTLOT A:	1.08 ACRES (47,116.27 SF)
OUTLOT B:	1.36 ACRES (59,285.9 SF)
SELF-STORAGE:	6.52 ACRES (283,969.98 SF)
MULTI-FAMILY:	29.18 ACRES (1,271,100.69 SF)
CURRENT ZONING:	PUD
PROPOSED ZONING:	PUD

NORTH

60 30 0 60 120

DRAWING SCALE: 1"=60'

RETAIL STRIP W/ DRIVE THRU END CAP (OUTLOT A) - PHASE 3

LAND AREA:	1.08 ACRES (47,116.27 SF)
BUILDING AREA:	0.23 ACRES (10,048 SF)
DRIVE THRU:	1,548 SF
RETAIL STRIP:	8,500
BUILDING LOT COVERAGE:	21.32%
OPEN SPACE:	17.24 %

BUILDING SETBACKS:	PROVIDED
FRONT BLDG STBK	22'-5"
REAR BLDG STBK	62'-9"
NORTH SIDE BLDG STBK	83'-7"
SOUTH SIDE BLDG STBK	41'-2"

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
RETAIL STRIPS	27	30
DRIVE THRU	16	19
TOTAL	43	49

C-STORE W/ DRIVE THRU (OUTLOT B) - PHASE 3

LAND AREA:	1.36 ACRES (59,285.90 SF)
BUILDING AREA:	6,891 SF
C-STORE:	6,092 SF
DRIVE THRU	750 SF
BUILDING LOT COVERAGE:	11.6%
OPEN SPACE:	19.17%

BUILDING SETBACKS:	PROVIDED
FRONT BLDG STBK	55'-2"
REAR BLDG STBK	80'-5"
NORTH SIDE BLDG STBK	124'
SOUTH SIDE BLDG STBK	35'

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
C-STORE	8	9
DRIVE THRU	19	19
TOTAL	27	28

MULTI FAMILY - PHASE 1

LAND AREA:	29.18 ACRES (1,271,100.69 SF)
DEVELOPED AREA (PHASE - 1)	7.405 ACRES (322,561.8 SF)
DEVELOPED AREA (PHASE - 2)	3.12 ACRES (135,801 SF)
UNDEVELOPED AREA	18.66 ACRES (812,737.2 SF)
NUMBER OF UNIT BUILDINGS:	5
TOTAL UNIT BUILDING AREA:	1.12 ACRES (49,020 SF)
TOTAL OFFICE BUILDING AREA:	0.04 ACRES (1,725 SF)
BUILDING LOT COVERAGE:	3.99 %
OPEN SPACE:	82.47%
BUILDING AREA:	9,804 SF (49,020 SF)
NUMBER OF BUILDINGS :	5
NUMBER OF UNITS PER BUILDING:	20
TOTAL NUMBER OF UNITS:	100
BUILDING HEIGHT:	32'-6"

BUILDING SETBACKS:	PROVIDED
FRONT BLDG STBK	57'-11"
REAR BLDG STBK	57'-7"
NORTH SIDE BLDG STBK	65'-2"
SOUTH SIDE BLDG STBK	2063'-10"

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
MULTI FAMILY RESIDENTIAL	200	260
ACCESSIBLE PARKING (VAN)	5	5

SELF STORAGE (PREV. APPROVED)-PH1

LAND AREA	6.52 ACRES (283,969.98 SF)
NUMBER OF STORAGE BUILDINGS	11
TOTAL STORAGE BUILDING AREA	79,200 SF
NUMBER OF OFFICE BUILDINGS	1
TOTAL OFFICE BUILDING AREA	1,725 SF
BUILDING LOT COVERAGE:	28.49%
OPEN SPACE:	14.0%

BLDG OFFICE STBK:	PROVIDED
FRONT BLDG STBK	74'-6"
REAR BLDG STBK	176'-6"
NORTH SIDE BLDG STBK	74'-6"
SOUTH SIDE BLDG STBK	775'-2"

STORAGE SETBACKS:	PROVIDED
FRONT BLDG STBK	48'-6"
REAR BLDG STBK	71'-6"
NORTH SIDE BLDG STBK	68'-6"
SOUTH SIDE BLDG STBK	70'-6"

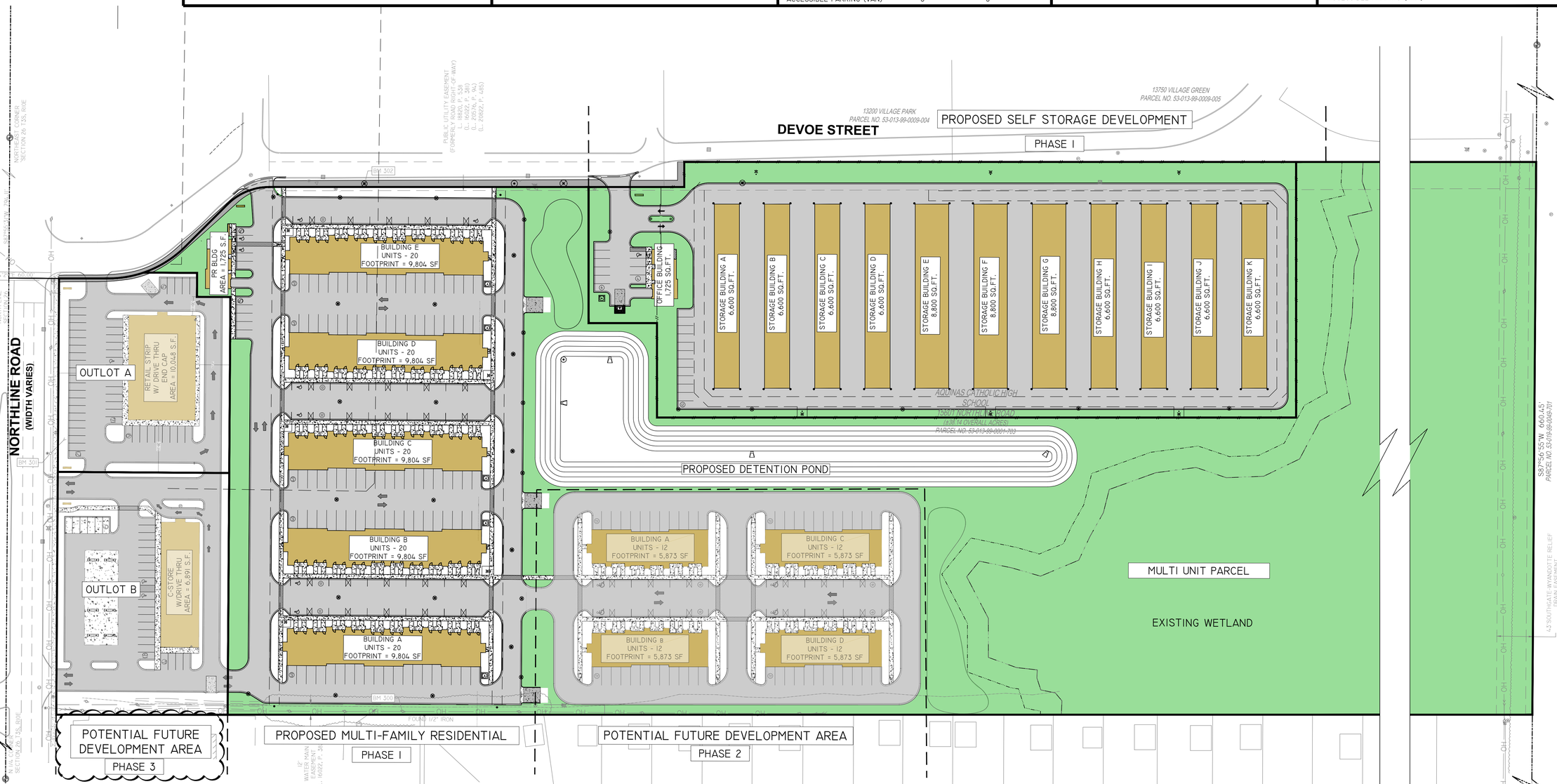
PARKING REQUIREMENTS:	PROVIDED
STORAGE 5 SPACES PLUS 1 PER EMPLOYEE	120

MULTI FAMILY - PHASE 2

LAND AREA:	29.18 ACRES (1,271,100.69 SF)
DEVELOPED AREA (PHASE - 1)	7.405 ACRES (322,561.8 SF)
DEVELOPED AREA (PHASE - 2)	3.12 ACRES (135,801 SF)
UNDEVELOPED AREA	18.66 ACRES (812,737.2 SF)
NUMBER OF UNIT BUILDINGS:	4
TOTAL UNIT BUILDING AREA:	0.54 ACRES (23,492 SF)
BUILDING LOT COVERAGE:	1.85%
OPEN SPACE:	77.7%
BUILDING AREA:	5,873 SF (23,492 SF)
NUMBER OF BUILDINGS :	4
NUMBER OF UNITS PER BUILDING:	12
TOTAL NUMBER OF UNITS:	48
BUILDING HEIGHT:	34'-4"
NUMBER OF STORIES:	3

BUILDING SETBACKS:	PROVIDED
FRONT BLDG STBK	409'-5"
REAR BLDG STBK	57'-2"
NORTH SIDE BLDG STBK	421'-10"
SOUTH SIDE BLDG STBK	1597'-6"

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
MULTI FAMILY RESEDENTAL	48	72
ACCESSIBLE PARKING (VAN)	4	4



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KALABAT ENGINEERING
CIVIL ENGINEERING & SITE DEVELOPMENT
31333 Southfield Road Suite 250
Beverly Hills, MI 48025
Ph 248.600.8707
F 248.594.5919
iden@kalabat.com

CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT ENGINEER No. 6201062804
REGISTERED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	PUD SPA	05-06-26
2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
4		
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CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

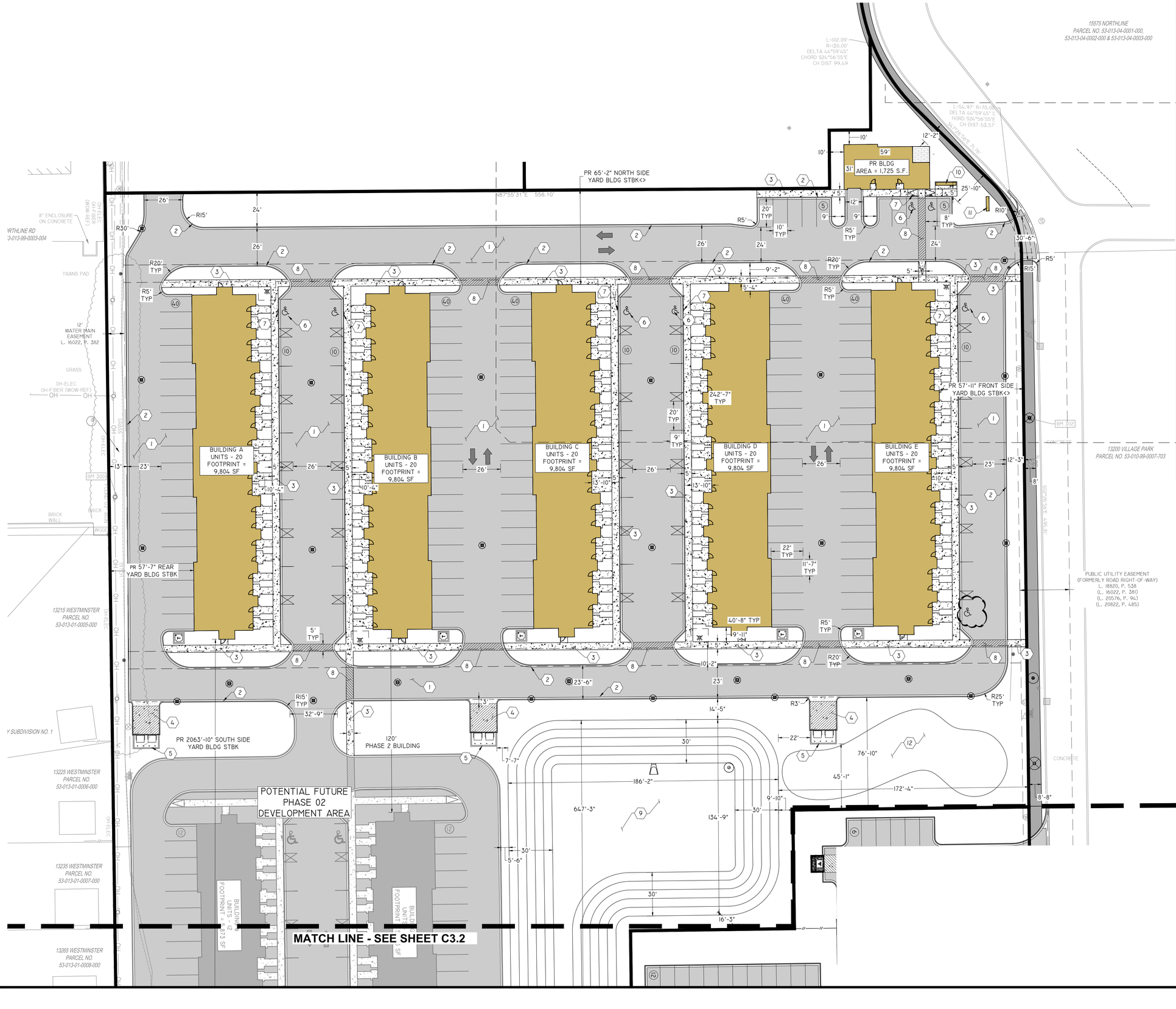
PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C3.0

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'

SITE DATA

LAND AREA:	29.18 ACRES (1,271,100.69 SF)
BUILDING AREA:	9,804 SF (49,020 SF)
NUMBER OF BUILDINGS :	5
NUMBER OF UNITS PER BUILDING:	20
TOTAL NUMBER OF UNITS:	100
BUILDING HEIGHT:	32'-6"

BUILDING SETBACKS:	PROVIDED
FRONT BLDG STBK	57'-11"
REAR BLDG STBK	57'-7"
NORTH SIDE BLDG STBK	65'-2"
SOUTH SIDE BLDG STBK	2063'-10"

PARKING REQUIREMENTS:	REQUIRED	PROVIDED
MULTI FAMILY RESIDENTIAL	200	260
ACCESSIBLE PARKING (VAN)	5	5

KEY NOTES

1. CONSTRUCT STANDARD DUTY ASPHALT PAVEMENT PER DETAIL 'C' OF SHEET C3.3
2. CONSTRUCT CURB AND GUTTER PER DETAIL 'D' OF SHEET C3.3
3. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 'G' OF SHEET C3.3, WIDTH PER PLAN
4. CONSTRUCT 8" CONCRETE PAVEMENT PER DETAIL 'E' OF SHEET C3.3
5. CONSTRUCT DUMPSTER ENCLOSURE PER DETAIL 'H' OF SHEET C3.3
6. INSTALL ADA ACCESSIBLE PARKING PAVEMENT MARKINGS AND STRIPING PER DETAIL 'A' OF SHEET C3.3
7. INSTALL ADA ACCESSIBLE PARKING SIGN PER DETAIL 'B' OF SHEET C3.3
8. PAVEMENT MARKING FOR PEDESTRIAN SAFETY PATH
9. PROPOSED DETENTION POND SEE SHEET C5.5 FOR DETAILS
10. INSTALL CLUSTER MAILBOX
11. PROPOSED MONUMENT SIGN
12. PROPOSED POCKET PARK SEE LANDSCAPING PLAN

KALABAT ENGINEERING
CIVIL ENGINEERING & SITE DEVELOPMENT
31333 Southfield Road Suite 250
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Ph 248.600.8707
F 248.594.5919
iden@kalabat.com

CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	PUD SPA	05-06-26
2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
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CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
SITE PLAN - MULTI FAMILY

SHEET NUMBER:
C3.1

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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KEY NOTES

1. CONSTRUCT STANDARD DUTY ASPHALT PAVEMENT PER DETAIL 'C' OF SHEET C3.3
2. CONSTRUCT CURB AND GUTTER PER DETAIL 'D' OF SHEET C3.3
3. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 'G' OF SHEET C3.3, WIDTH PER PLAN
4. CONSTRUCT 8" CONCRETE PAVEMENT PER DETAIL 'E' OF SHEET C3.3
5. CONSTRUCT DUMPSTER ENCLOSURE PER DETAIL 'J' OF SHEET C3.3
6. INSTALL ADA ACCESSIBLE PARKING PAVEMENT MARKINGS AND STRIPING PER DETAIL 'A' OF SHEET C3.3
7. INSTALL ADA ACCESSIBLE PARKING SIGN PER DETAIL 'B' OF SHEET C3.3
8. PROPOSED MONUMENT SIGN
9. INSTALL 6' HIGH PRIVACY FENCE PER DETAIL 'L' SHEET C3.3
10. PROPOSED DETENTION POND SEE SHEET C5.5 FOR DETAILS
11. PROPOSED GATE

NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'

SELF STORAGE (PREV. APPROVED)

LAND AREA	6.52 ACRES (283,969.98 SF)
NUMBER OF STORAGE BUILDINGS	11
TOTAL STORAGE BUILDING AREA	79,200 SF
NUMBER OF OFFICE BUILDINGS	1
TOTAL OFFICE BUILDING AREA	1,725 SF
BUILDING LOT COVERAGE:	28.49%
OPEN SPACE:	10.1%

BLDG OFFICE STBK:	PROVIDED
FRONT BLDG STBK	74'-6"
REAR BLDG STBK	142'
NORTH SIDE BLDG STBK	74'-6"
SOUTH SIDE BLDG STBK	739'-8"

STORAGE SETBACKS:	PROVIDED
FRONT BLDG STBK	50'-6"
REAR BLDG STBK	35'
NORTH SIDE BLDG STBK	68'-6"
SOUTH SIDE BLDG STBK	35'

PARKING REQUIREMENTS:	PROVIDED
STORAGE 5 SPACES PLUS 1 PER EMPLOYEE	120

13200 VILLAGE PARK
PARCEL NO. 53-013-99-0009-004

13200 VILLAGE PARK
PARCEL NO. 53-013-99-0009-004

DEVOE STREET

CONCRETE

ROW OF PINES

S02°26'56"E 1830.81'

S02°26'56"E 1830.81'

N87°33'04"E 330.00'

PR 74'-6" FRONT YARD BLDG STBK

PR 50'-6" FRONT YARD STORAGE STBK

R25' R15' R30' TYP R30'

25' 22' 12' 19' 6' 21'

OFFICE BUILDING 1,725 SQ.FT.

59' 31' 18'-8" 11'-6" 29'-6" 20' 12' 7' 24' 19' 76'-8" 9'-10"

STORAGE BUILDING A 6,600 SQ.FT.
STORAGE BUILDING B 6,600 SQ.FT.
STORAGE BUILDING C 6,600 SQ.FT.
STORAGE BUILDING D 6,600 SQ.FT.
STORAGE BUILDING E 8,800 SQ.FT.
STORAGE BUILDING F 8,800 SQ.FT.
STORAGE BUILDING G 8,800 SQ.FT.
STORAGE BUILDING H 6,600 SQ.FT.
STORAGE BUILDING I 6,600 SQ.FT.
STORAGE BUILDING J 6,600 SQ.FT.
STORAGE BUILDING K 6,600 SQ.FT.

40' TYP 30' TYP 220' TYP 30' TYP

HEAVILY WOODED AREA

PR 35' SOUTH SIDE STORAGE STBK

PR 738'-8" SOUTH YARD BLDG STBK

PR 74'-6" NORTH SIDE BLDG STBK

PR 142' REAR YARD BLDG STBK

PR 68'-6" NORTH STORAGE STBK

10' TYP 19' TYP

PR 35' REAR YARD STORAGE STBK

MATCH LINE - SEE SHEET ####

AQUINAS CATHOLIC HIGH SCHOOL
15601 NORTHLINE ROAD
(±38.14 OVERALL ACRES)
PARCEL NO: 53-013-99-0001-703

168'-11" PHASE 2 BUILDINGS

647'-4"

12'-11" 72'-10" 5'-6"

POTENTIAL FUTURE PHASE 02 DEVELOPMENT AREA

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CIVIL ENGINEERING & SITE DEVELOPMENT

31333 Southfield Road Suite 250
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CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
REGISTERED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	PUD SPA	05-06-26
2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
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CLIENT:

NORTHLINE PROPERTY GROUP, LLC

30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

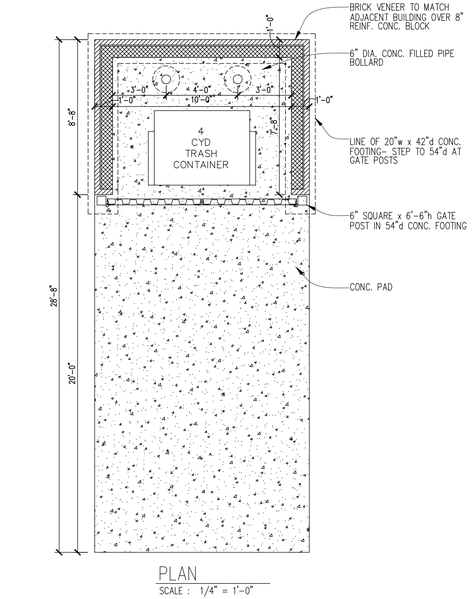
SITE PLAN - SELF STORAGE

SHEET NUMBER:

C3.2

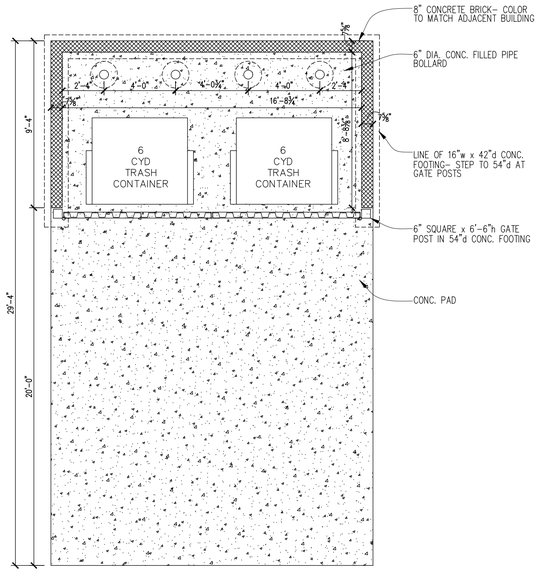
PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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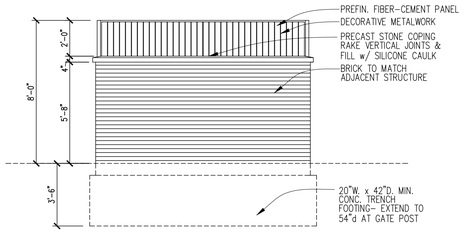
PLAN

SCALE : 1/4" = 1'–0"



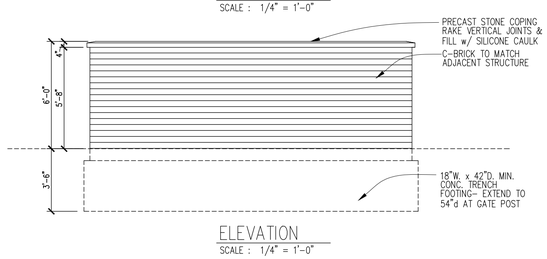
PLAN

SCALE : 1/4" = 1'–0"



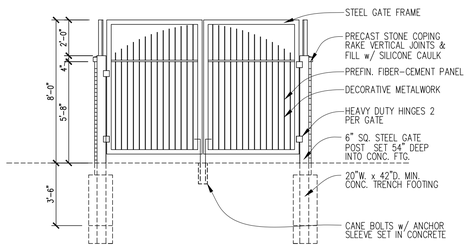
ELEVATION

SCALE : 1/4" = 1'–0"



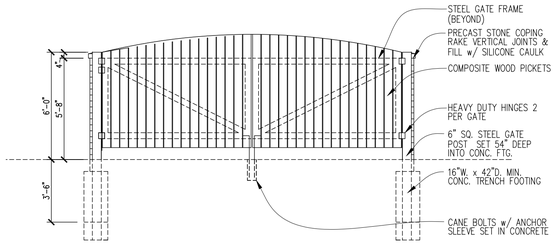
ELEVATION

SCALE : 1/4" = 1'–0"



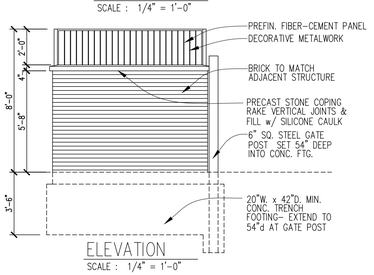
ELEVATION

SCALE : 1/4" = 1'–0"



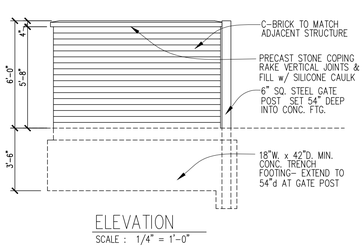
ELEVATION

SCALE : 1/4" = 1'–0"



ELEVATION

SCALE : 1/4" = 1'–0"



ELEVATION

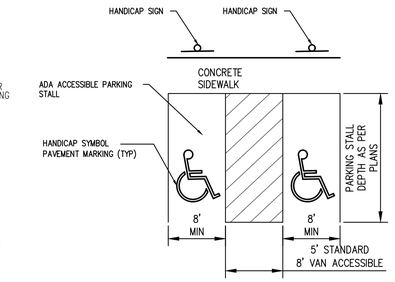
SCALE : 1/4" = 1'–0"

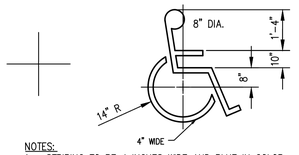
J C3.3 REFUSE ENCLOSURE

SCALE: N.T.S

H C3.3 REFUSE ENCLOSURE

SCALE: N.T.S



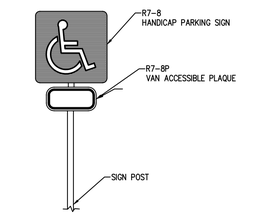


NOTES:

1. STRIPING TO BE 4 INCHES WIDE AND BLUE IN COLOR.
2. HANDICAP SIGNS TO BE PLACED IN THE NEAREST GRASS AREA ACROSS CONCRETE WALKS FOR SPACES THAT ABUT WALKS. HANDICAP SIGNS TO BE BOLLARD MOUNTED AND PLACED AT HEAD OF SPACE FOR SPACES THAT DO NOT ABUT WALKS.
3. STALL AND AISLE WIDTHS ARE TYPICAL UNLESS OTHERWISE STATED ON PLAN.

A C3.3 ADA ACCESSIBLE PARKING STRIPING DETAIL

SCALE: N.T.S.



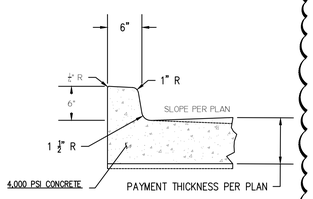
NOTE: HANDICAP PARKING SIGN SHALL CONFORM WITH THE CURRENT STATE AND LOCAL CODES AND REGULATIONS

B C3.3 HANDICAP PARKING AND VAN ACCESSIBLE SIGN

SCALE: N.T.S.

I C3.3 ASPHALT PATH TYPICAL SECTION

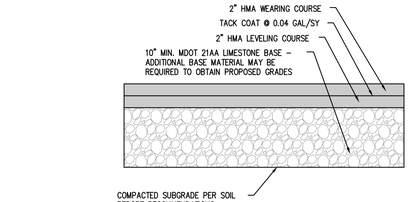
SCALE: N.T.S.



NOTE: EXPANSION JOINTS REQUIRED AT 100' MAXIMUM SPACING OR AT ALL BUT JOINTS TO EXISTING CONCRETE, CURB RETURNS OR AS DIRECTED BY THE ENGINEER

K C3.3 INTEGRAL CONCRETE CURB AND PAVEMENT

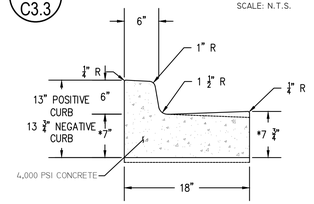
SCALE: N.T.S.



NOTES:
PAVING CONTRACTOR TO SUBMIT HMA PAVEMENT MIX SELECTION TO DESIGN ENGINEER OR MUNICIPAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

C C3.3 STANDARD DUTY ASPHALT PAVEMENT SECTION

SCALE: N.T.S.

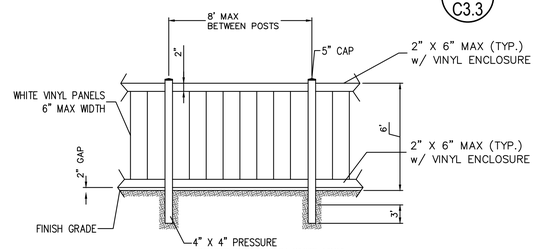


* DIMENSIONS REVERSED FOR NEGATIVE SLOPED CURB

NOTE: EXPANSION JOINTS REQUIRED AT 100' MAXIMUM SPACING OR AT ALL BUT JOINTS TO EXISTING CONCRETE, CURB RETURNS OR AS DIRECTED BY THE ENGINEER

D C3.3 CONCRETE CURB AND GUTTER

SCALE: N.T.S.



EXACT DIMENSIONS AND INSTALLATION PER MANUFACTURER SPECIFICATIONS CONTRACTOR TO PROVIDE SHOP DRAWINGS TO OWNER

L C3.3 WHITE VINYL PRIVACY FENCE DETAIL

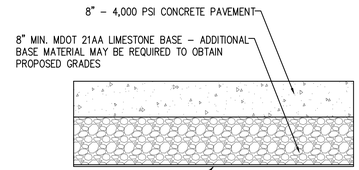
SCALE: N.T.S.



AGGREGATE BASE SHALL BE COMPACTED TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D–1557. CONTROL JOINTING SHALL BE IN ACCORDANCE WITH PLANS. EXPANSION JOINTS SHALL BE ½" THICK EXPANSION PAPER EXCEPT WHEN SPECIFIED AS 1" THICK AND SHALL BE SPACED NO GREATER THAN 50'.

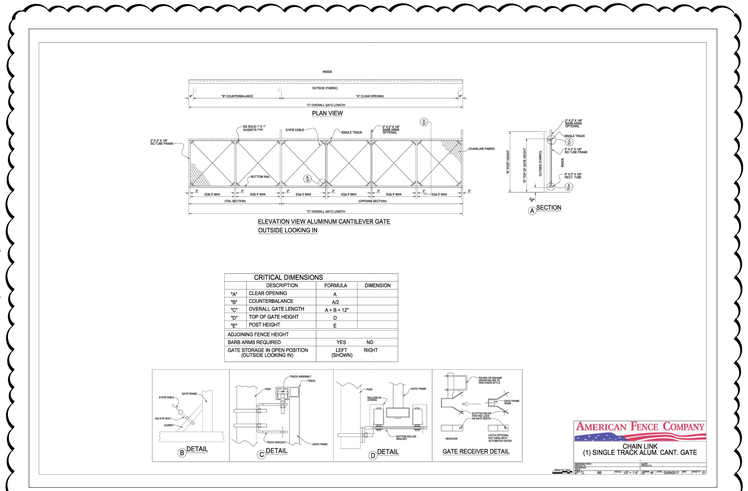
G C3.3 TYPICAL SIDEWALK SECTION

SCALE: N.T.S



E C3.3 8" CONCRETE PAVEMENT

SCALE: N.T.S.



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SEAL:

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IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

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CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

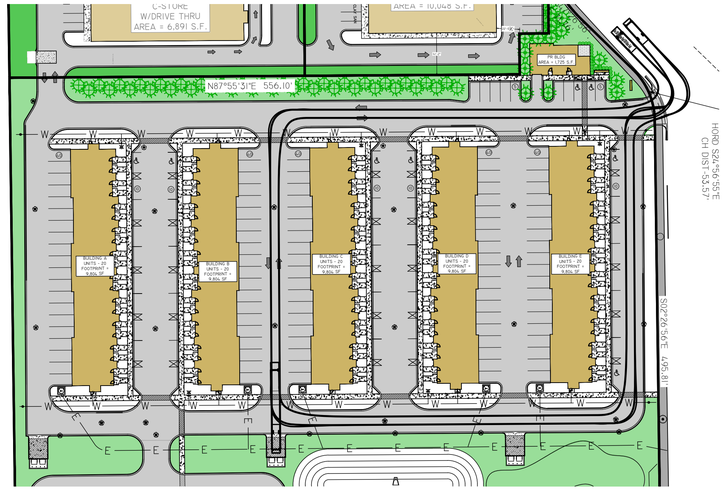
SHEET TITLE:
SITE DETAILS

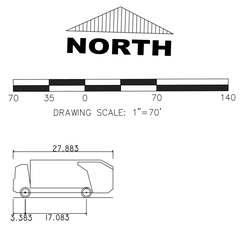
SHEET NUMBER:
C3.3

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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DUMPSTER TRUCK TURNING MOVEMENT PLAN - MULTY FAMILY

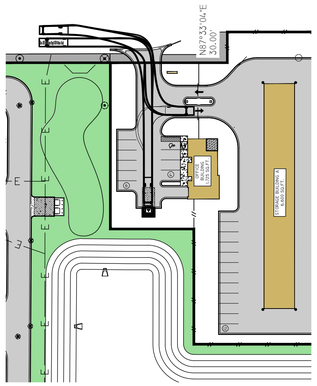


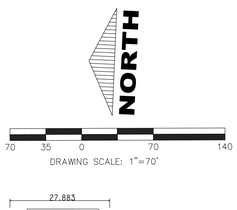


HINO 338 M + WAYNE ROYAL GTI4 REFUSE TRUCK

OVERALL LENGTH	27.883FT
OVERALL WIDTH	8.042FT
OVERALL BODY HEIGHT	10.488FT
MIN BODY GROUND CLEARANCE	1.318FT
TRACK WIDTH	8.042FT
LOCK-TO-LOCK TIME	6.00S
CURB TO CURB TURNING RADIUS	27.400FT

DUMPSTER TRUCK TURNING MOVEMENT PLAN - SELF STORAGE





HINO 338 M + WAYNE ROYAL GTI4 REFUSE TRUCK

OVERALL LENGTH	27.883FT
OVERALL WIDTH	8.042FT
OVERALL BODY HEIGHT	10.488FT
MIN BODY GROUND CLEARANCE	1.318FT
TRACK WIDTH	8.042FT
LOCK-TO-LOCK TIME	6.00S
CURB TO CURB TURNING RADIUS	27.400FT

FIRE TRUCK TURNING MOVEMENT PLAN - MULTY FAMILY

E-ONE COMBINATION UNIT

OVERALL LENGTH	38.250FT
OVERALL WIDTH	8.333FT
OVERALL BODY HEIGHT	11.250FT
MIN BODY GROUND CLEARANCE	1.359FT
TRACK WIDTH	8.333FT
LOCK-TO-LOCK TIME	6.00S
MAX WHEEL ANGLE	45.00°

FIRE TRUCK TURNING MOVEMENT PLAN - SELF STORAGE

E-ONE COMBINATION UNIT

OVERALL LENGTH	38.250FT
OVERALL WIDTH	8.333FT
OVERALL BODY HEIGHT	11.250FT
MIN BODY GROUND CLEARANCE	1.359FT
TRACK WIDTH	8.333FT
LOCK-TO-LOCK TIME	6.00S
MAX WHEEL ANGLE	45.00°

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CONSULTANTS:

SEAL:

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IDEN KALABAT ENGINEER No. 6201062804
LICENSED PROFESSIONAL ENGINEER

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CLIENT:

NORTHLINE PROPERTY GROUP, LLC

30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT
PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

C3.0

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'

N87°55'31"E 556.10'

PR BLDG AREA = 1,725 S.F.

SEE SHEET C4.2 - GRADING DETAIL A

BUILDING A UNITS - 20 FOOTPRINT = 9,804 SF

BUILDING B UNITS - 20 FOOTPRINT = 9,804 SF

BUILDING C UNITS - 20 FOOTPRINT = 9,804 SF

BUILDING D UNITS - 20 FOOTPRINT = 9,804 SF

BUILDING E UNITS - 20 FOOTPRINT 9,804 SF

MATCH LINE - SEE SHEET C4.1

PARCEL NO. 53-013-04-0001-000, 53-013-04-0002-000 & 53-013-04-0003-000

13200 VILLAGE PARK PARCEL NO. 53-010-99-0007-703

13215 WESTMINSTER PARCEL NO. 53-013-01-0005-000

13225 WESTMINSTER PARCEL NO. 53-013-01-0006-000

13235 WESTMINSTER PARCEL NO. 53-013-01-0007-000

13265 WESTMINSTER PARCEL NO. 53-013-01-0008-000

PUBLIC UTILITY EASEMENT (FORMERLY ROAD RIGHT-OF-WAY) L. 18820, P. 538 (L. 16022, P. 391) (L. 20576, P. 94) (L. 20822, P. 485)

12" WATER MAIN EASEMENT L. 16022, P. 382

KALABAT ENGINEERING
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15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

GRADING PLAN - MULTI FAMILY

SHEET NUMBER:

C4.0

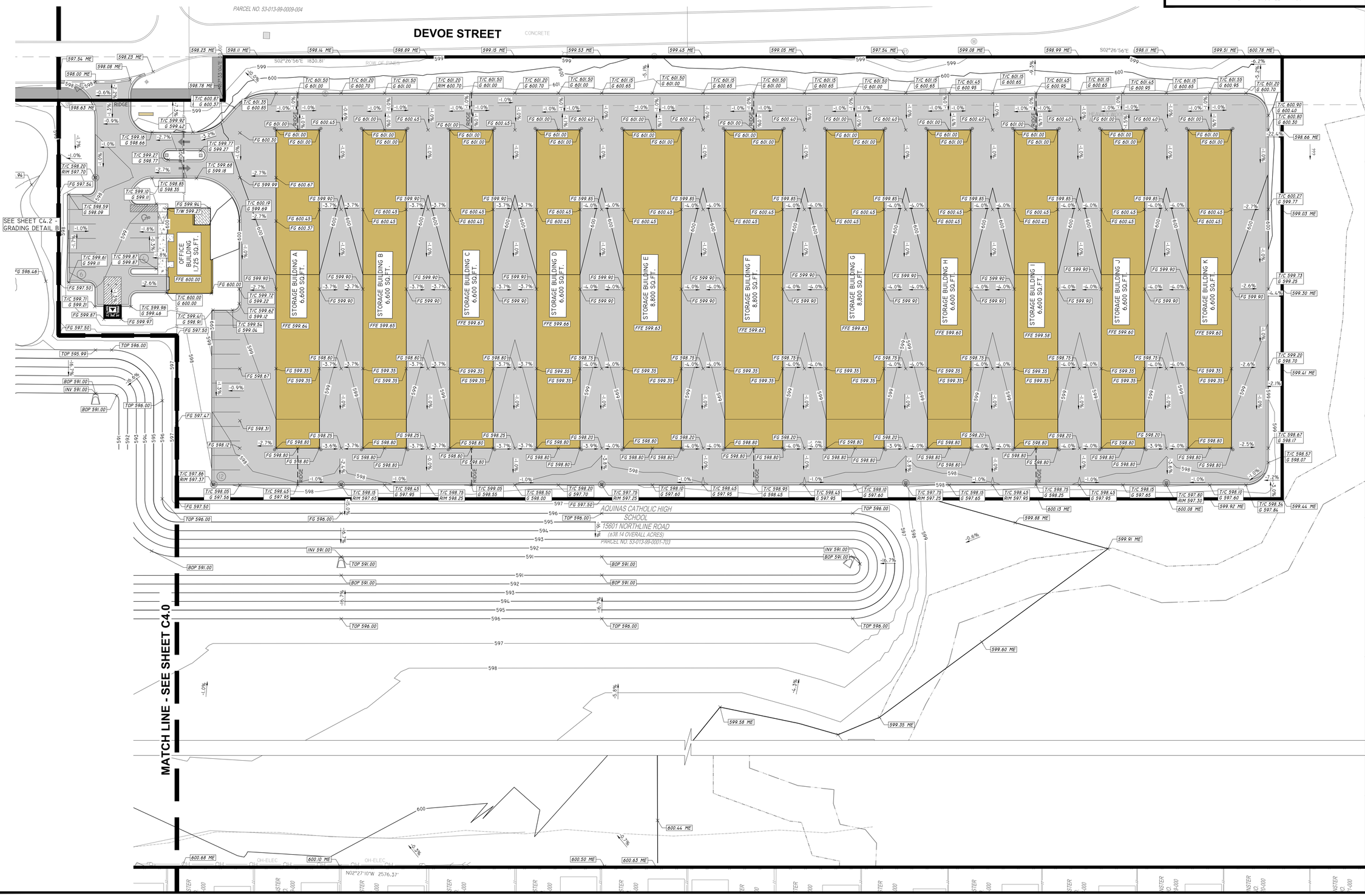
PROJECT NUMBER: CD25-105

DRAWN BY: S.SALMAN

CHECKED BY: I.KALABAT

PREPARATION DATE:

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15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
GRADING PLAN - SELF STORAGE

SHEET NUMBER:
C4.1

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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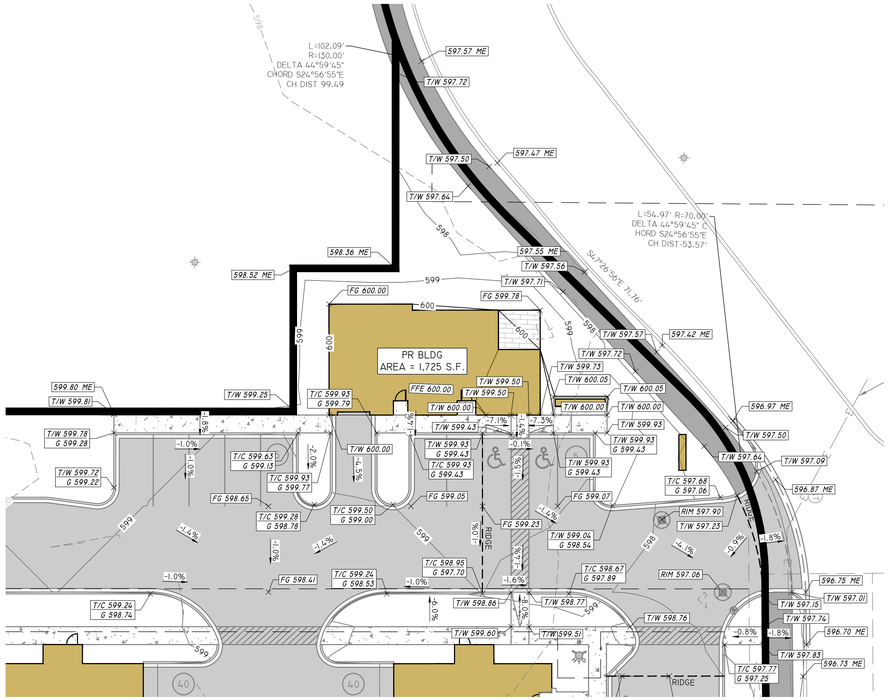
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NORTH

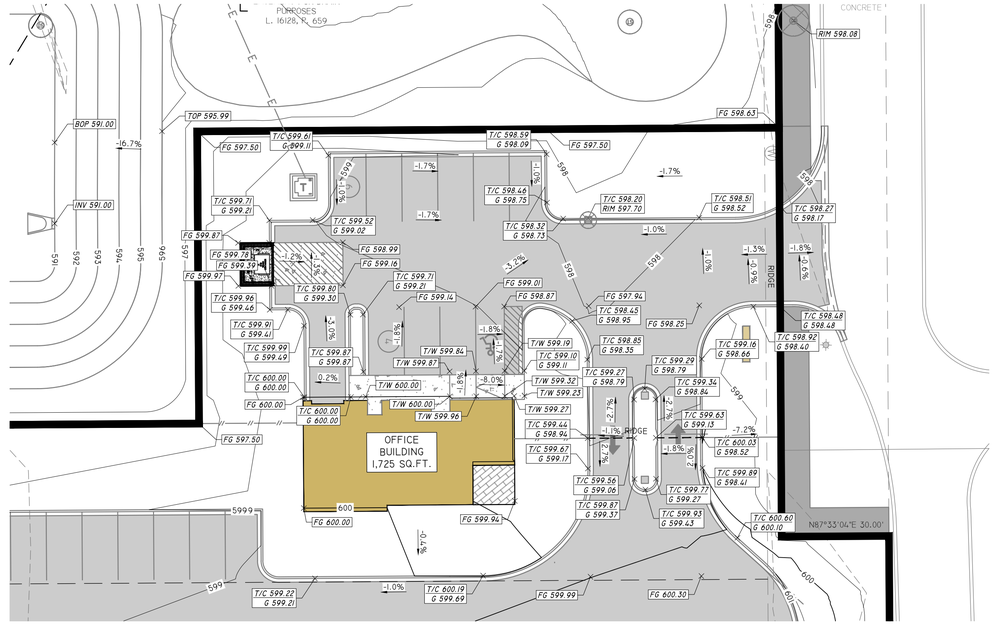
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DRAWING SCALE: 1"=20'

GRADING DETAIL A



GRADING DETAIL B



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CONSULTANTS:

SEAL:

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ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
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CLIENT:

NORTHLINE PROPERTY GROUP, LLC

30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

GRADING DETAILS

SHEET NUMBER:

C4.2

PROJECT NUMBER: CD25-105

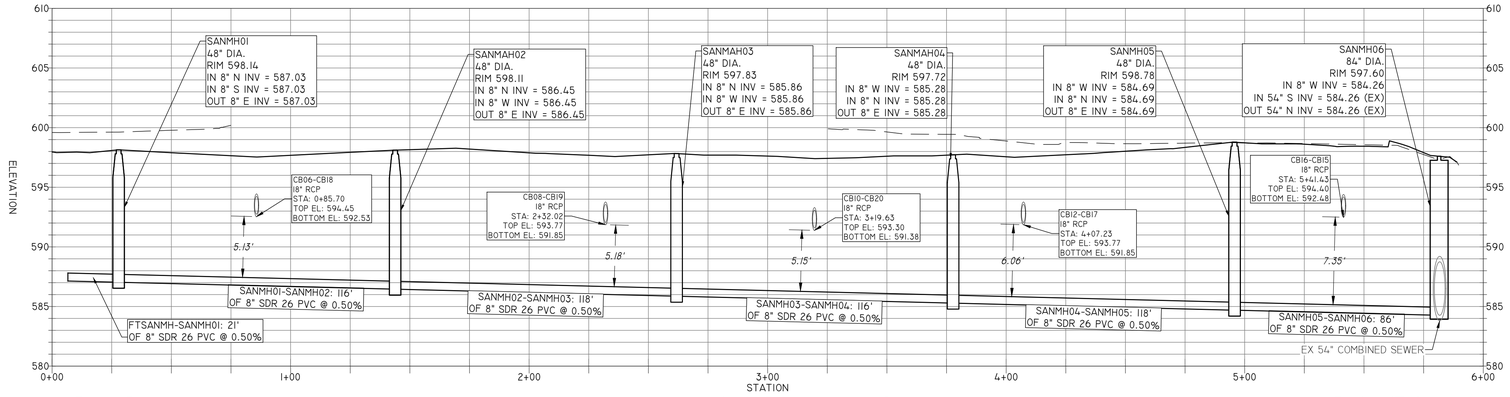
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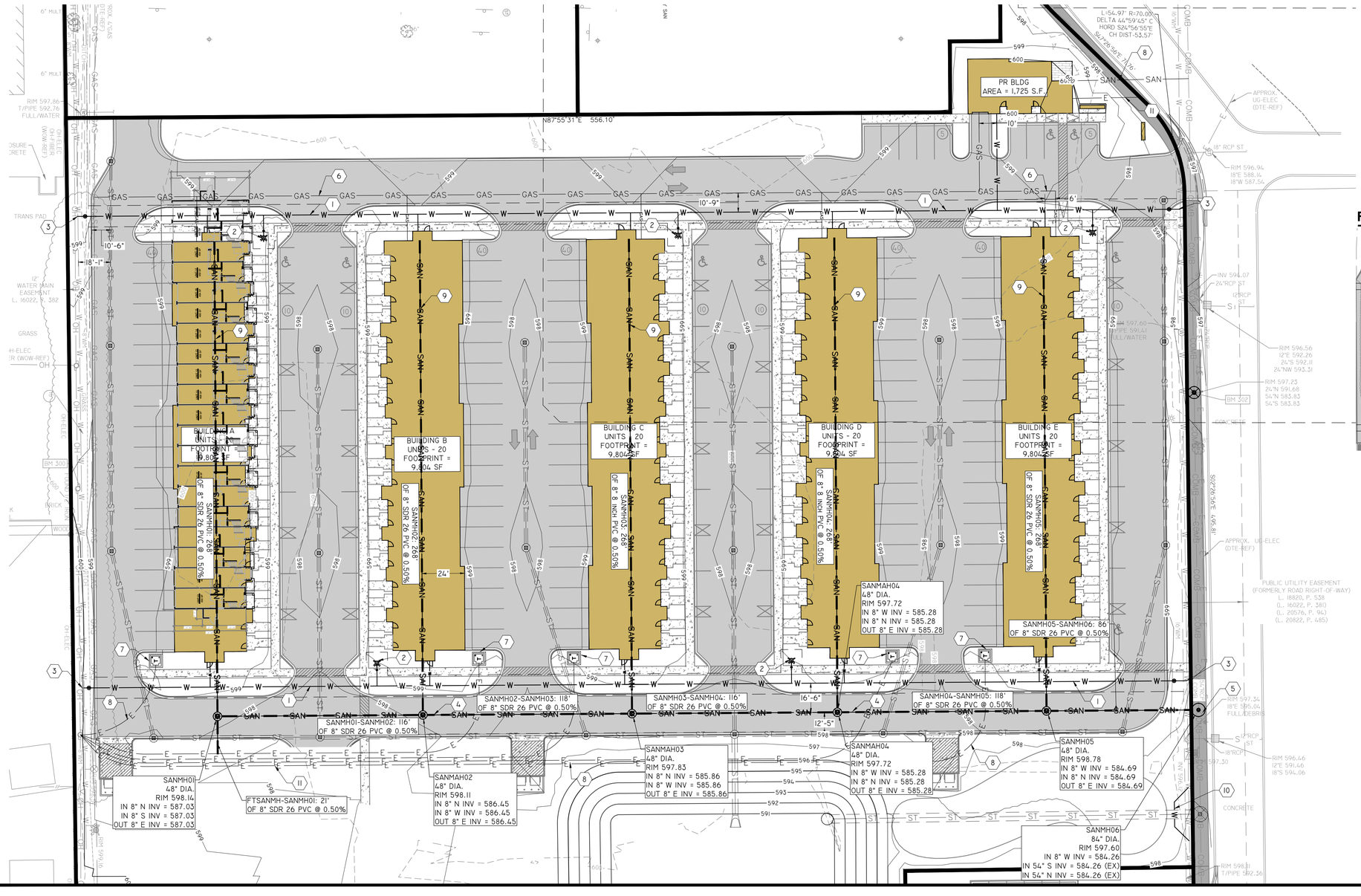
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PREPARATION DATE:

SANITARY PROFILES

SANMH01-SANMH05





FIRE HYDRANT COVERAGE (250' HOSE LENGTH)

NORTH

HORIZONTAL SCALE
30 15 0 30 60
DRAWING SCALE: 1"=30'

VERTICAL SCALE
6 3 0 6 12
DRAWING SCALE: 1"=6'

KEY NOTES

1. INSTALL 8" DUCTILE IRON PIPE WATER LINE PER CITY OF SOUTHGATE ENGINEERING STANDARDS
2. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF SOUTHGATE ENGINEERING STANDARDS
3. INSTALL TAPPING SLEEVE, GATE VALVE IN WELL AND CONNECT TO EXISTING WATER MAIN PER CITY OF SOUTHGATE ENGINEERING STANDARDS
4. INSTALL 6" SDR 26 PVC SANITARY SEWER PER CITY OF SOUTHGATE ENGINEERING STANDARDS
5. INSTALL SANITARY SEWER MANHOLE OVER EXISTING SANITARY SEWER MAIN PER CITY OF SOUTHGATE ENGINEERING STANDARDS
6. PROPOSED 2" GAS SERVICE LEAD (BY OTHERS)
7. PROPOSED TRANSFORMER LOCATION
8. PROPOSED UNDERGROUND ELECTRIC SERVICE LINE (BY OTHERS)
9. INSTALL 4" SDR 26 PVC SANITARY SEWER LEAD
10. RELOCATE EX I6" WATER MAIN FOR STORM SEWER OUTLET CONNECTION TO COMBINED SEWER PER CITY OF SOUTHGATE ENGINEERING STANDARDS

NOTES

1. PROVIDE MINIMUM OF 24" CLEARANCE AT ALL UTILITY CROSSINGS.
2. ALL PROPOSED UTILITY CONSTRUCTION TO BE CARRIED OUT PER CITY OF SOUTHGATE ENGINEERING STANDARDS.

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PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

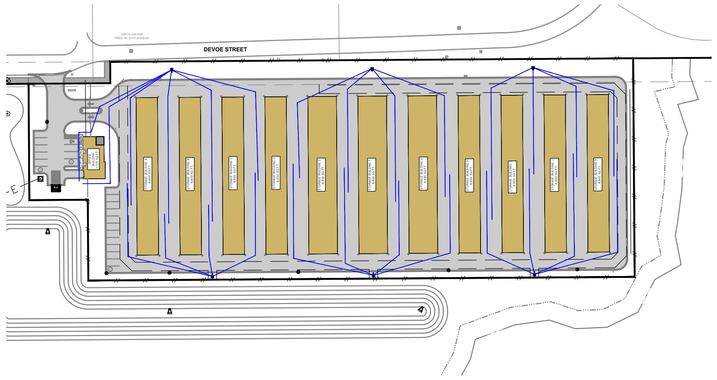
SHEET TITLE:
UTILITY PLAN - MULTI FAMILY

SHEET NUMBER:
C5.0

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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FIRE HYDRANT COVERAGE (250' HOSE LENGTH)



NOTES

1. PROVIDE MINIMUM OF 24" CLEARANCE AT ALL UTILITY CROSSINGS.
2. ALL PROPOSED UTILITY CONSTRUCTION TO BE CARRIED OUT PER CITY OF SOUTHGATE ENGINEERING STANDARDS.

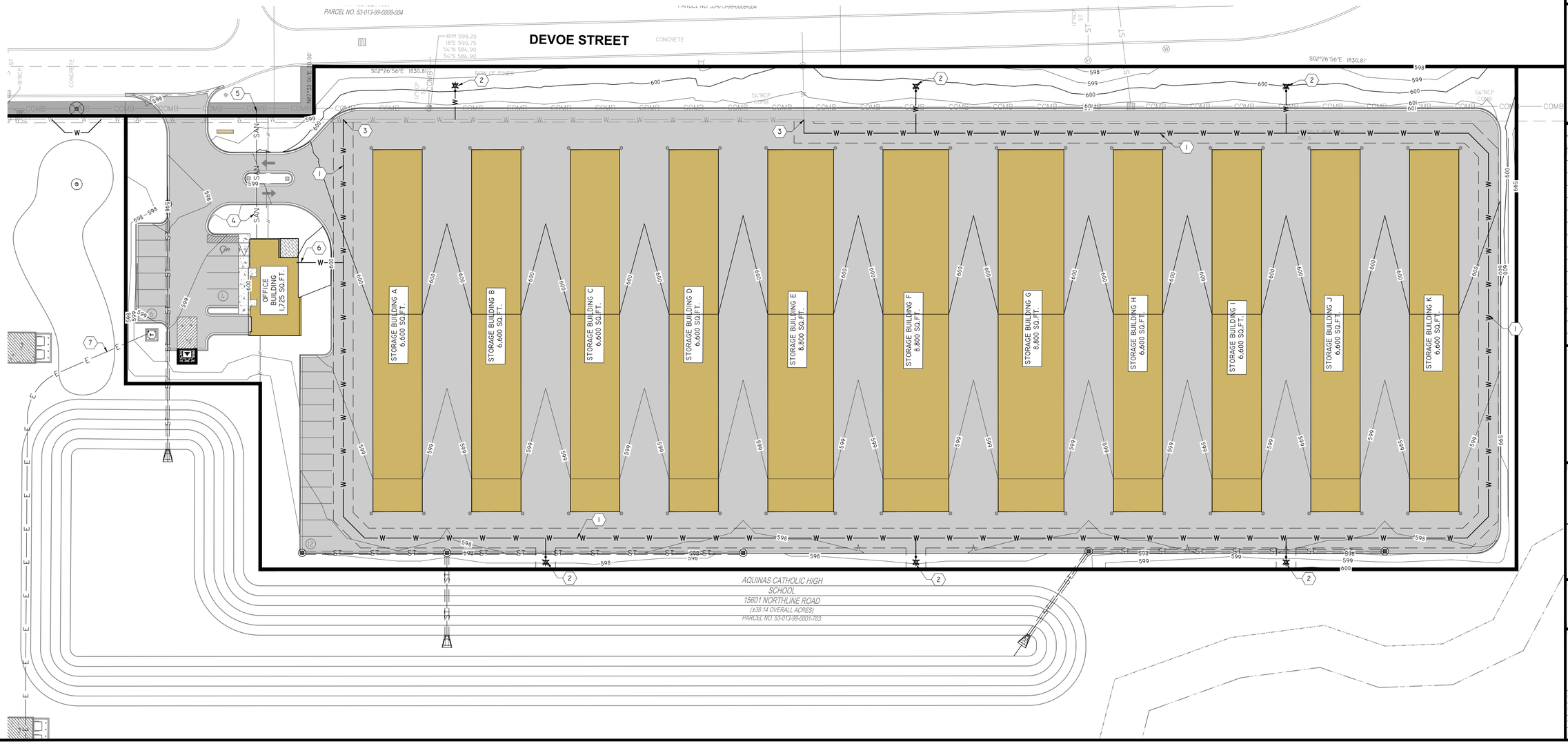
NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'

KEY NOTES

1. INSTALL 8" DUCTILE IRON PIPE WATER LINE PER CITY OF SOUTHGATE ENGINEERING STANDARDS
2. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF SOUTHGATE ENGINEERING STANDARDS
3. INSTALL TAPPING SLEEVE, CONNECT TO EXISTING WATER MAIN AND GATE VALVE IN WELL PER CITY OF SOUTHGATE ENGINEERING STANDARDS
4. INSTALL 6" SDR 26 PVC SANITARY SEWER LEAD PER CITY OF SOUTHGATE ENGINEERING STANDARDS
5. CONNECT TO EXISTING COMBINED SEWER PER CITY OF SOUTHGATE ENGINEERING STANDARDS
6. INSTALL 1" TYPE K COPPER WATER LEAD PER CITY OF SOUTHGATE ENGINEERING STANDARDS
7. PROPOSED UNDERGROUND ELECTRIC SERVICE LINE (BY OTHERS)



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CLIENT:

NORTHLINE PROPERTY GROUP, LLC

30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

UTILITY PLAN - SELF STORAGE

SHEET NUMBER:

C5.2

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

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NORTH

30 15 0 30 60

DRAWING SCALE: 1"=30'



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CLIENT:

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30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:

ROSEWOOD DEVELOPMENT
PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE

15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:

STORMWATER MANAGEMENT PLAN - MULTI FAMILY

SHEET NUMBER:

C5.4

PROJECT NUMBER: CD25-105

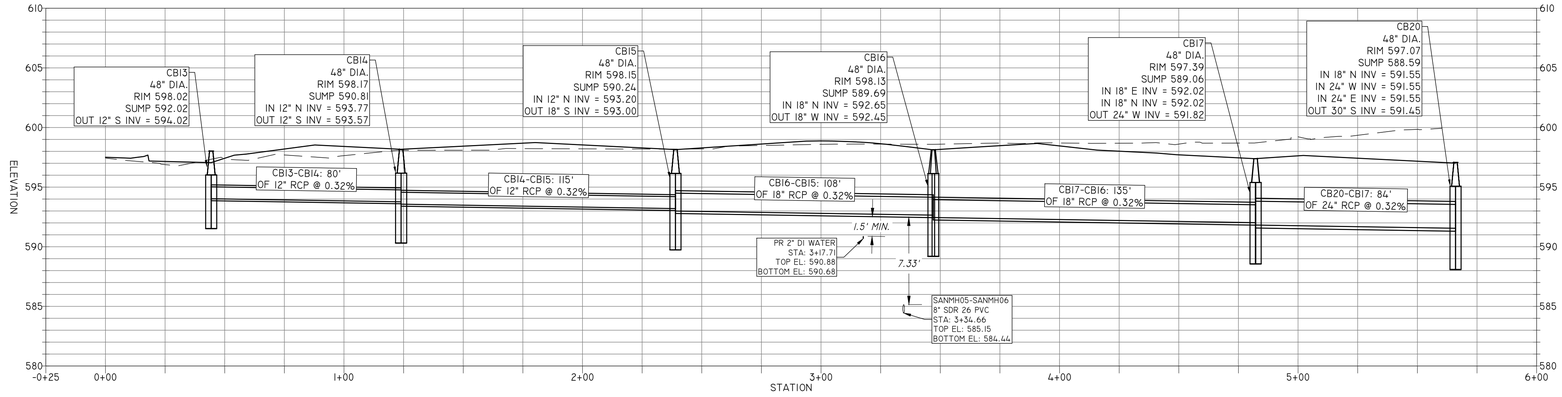
DRAWN BY: S.SALMAN

CHECKED BY: I.KALABAT

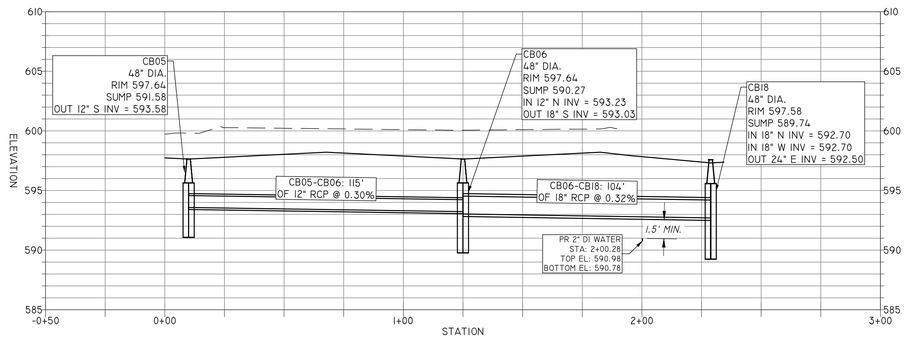
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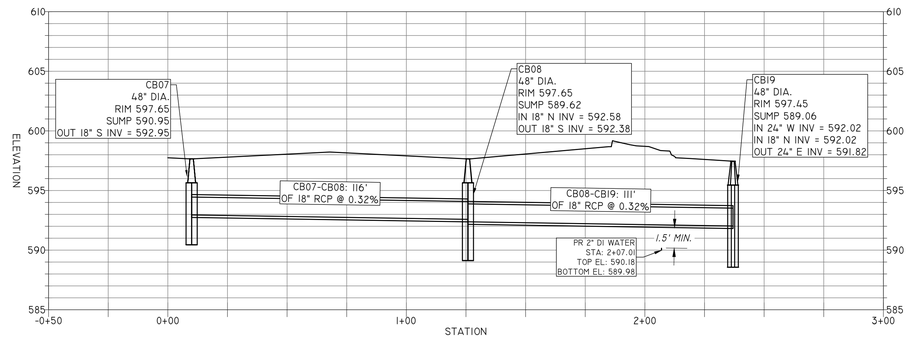
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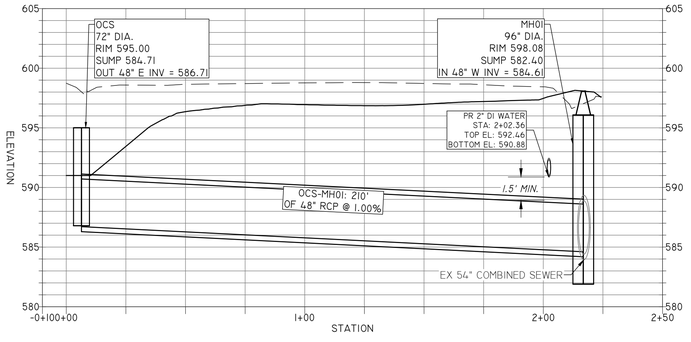
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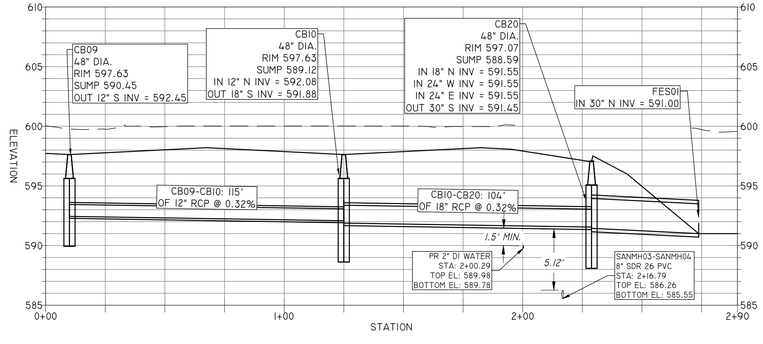
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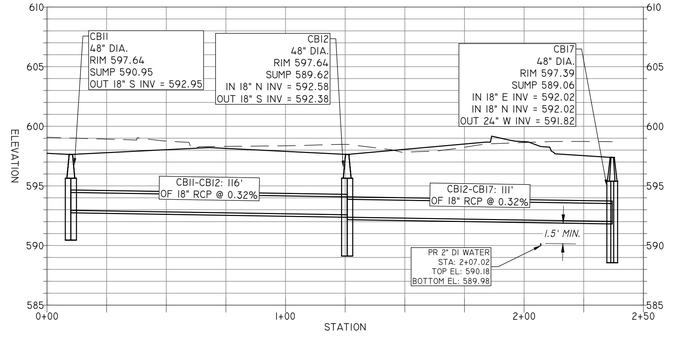
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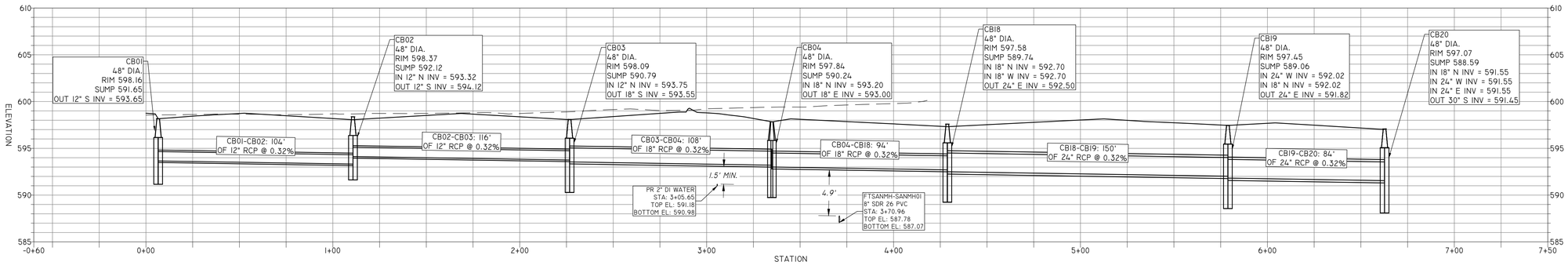
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CB11-CB17



CB01-CB20



HORIZONTAL SCALE
30 15 0 30 60
DRAWING SCALE: 1"=30'

VERTICAL SCALE
6 3 0 6 12
DRAWING SCALE: 1"=6'

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CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
STORMWATER PROFILES - MULTI FAMILY

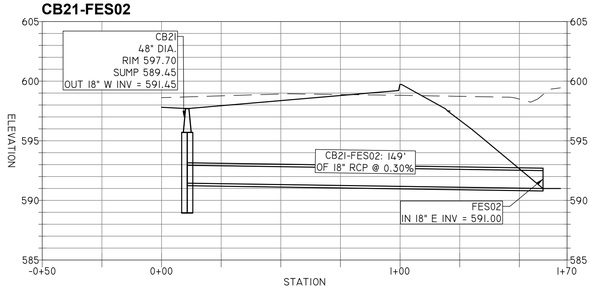
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DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

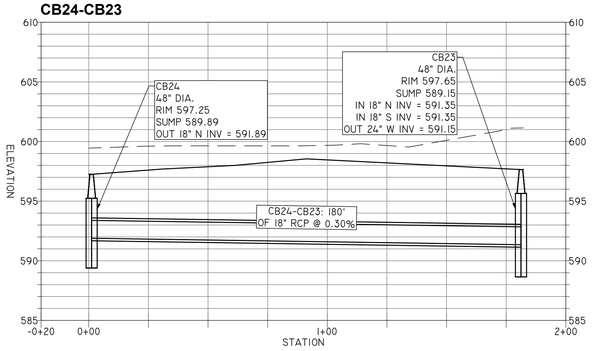
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STORMWATER PROFILES

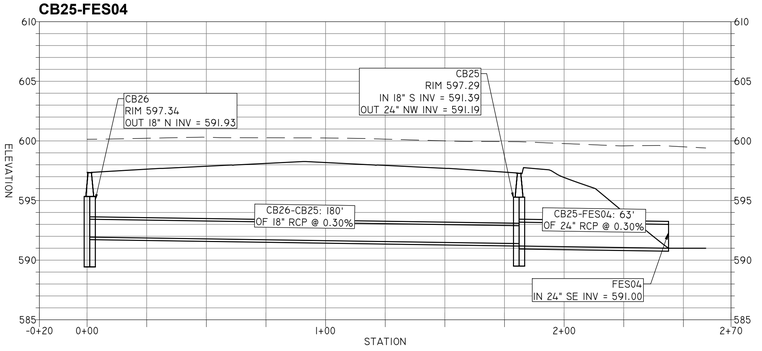
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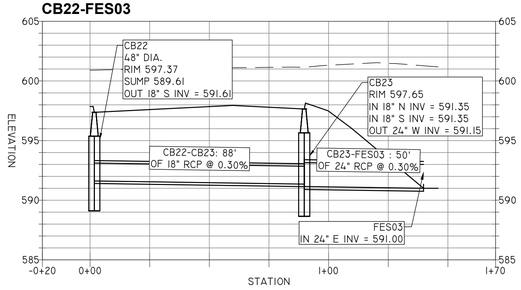
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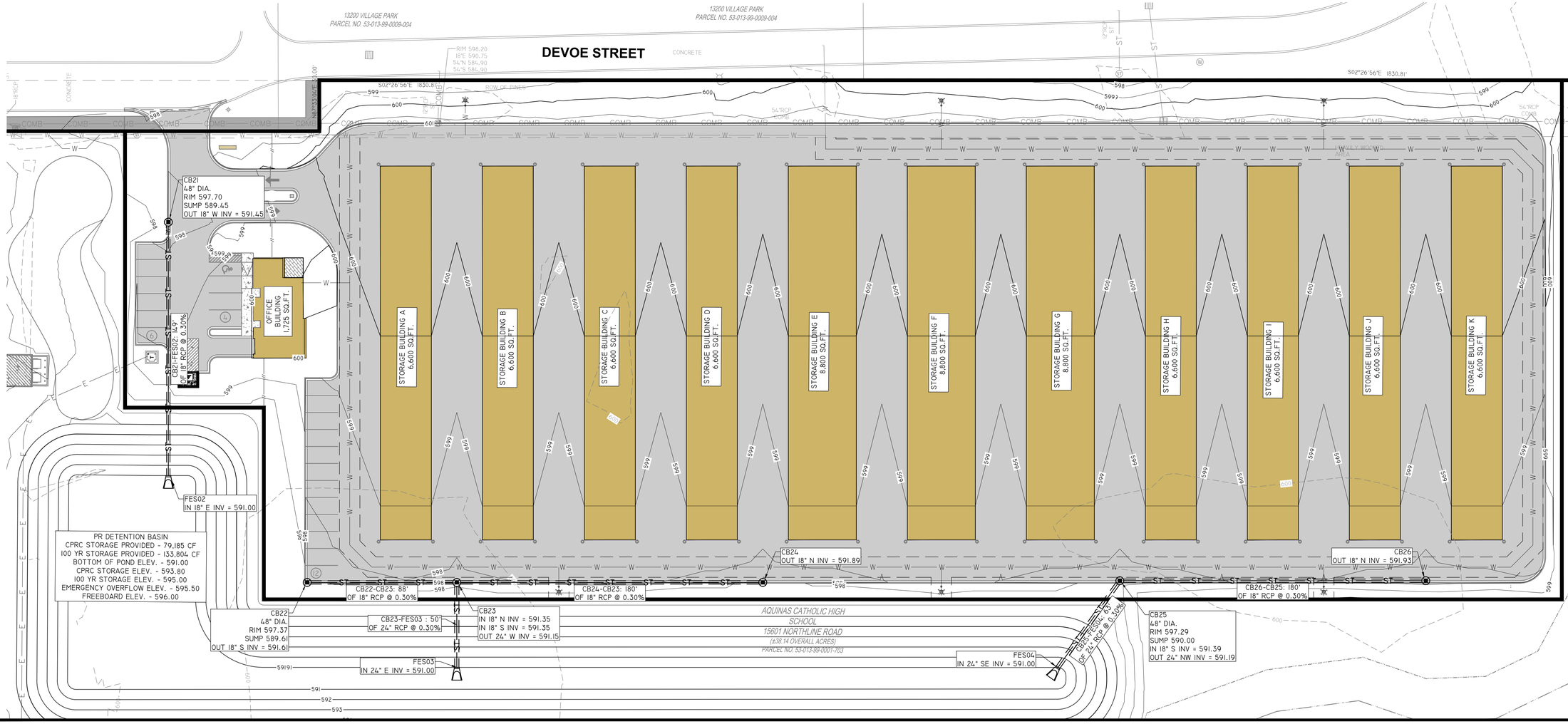


CB25-FES04



CB22-FES03





NORTH

HORIZONTAL SCALE
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DRAWING SCALE: 1"=30'

VERTICAL SCALE
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DRAWING SCALE: 1"=6'

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SHEET TITLE:
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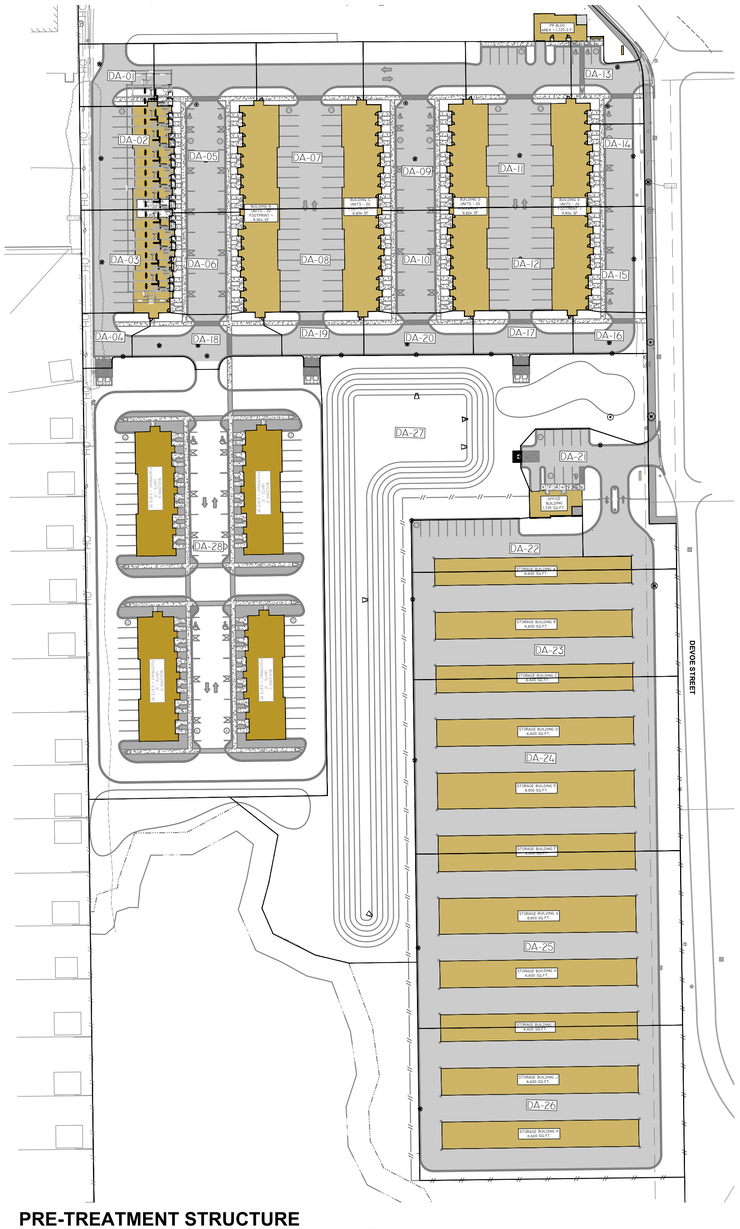
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DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
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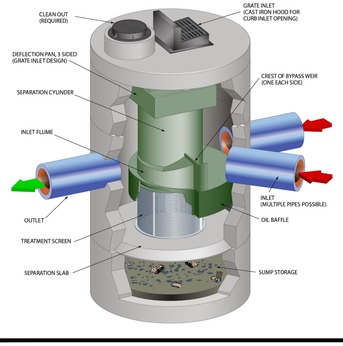
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DRAINAGE AREAS



PRE-TREATMENT STRUCTURE



WEIGHTED RUNOFF CO-EFFICIENT

DRAINAGE AREA - 01

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	3376.00	3207.20	
Concrete	0.95	223.00	211.85	
Roof	0.95		0.00	
Green Space	0.10	2206.00	220.60	
		∑ (C x Area)	3639.65	
		∑ (Area)	5805.00	ft²
		∑ (Area)	0.133	acres
Weighted run-off co-efficient (C)			0.63	

DRAINAGE AREA - 02

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	5431.00	5159.45	
Concrete	0.95		0.00	
Roof	0.95	4893.00	4648.35	
Green Space	0.10	1500.00	150.00	
		∑ (C x Area)	9957.80	
		∑ (Area)	11824.00	ft²
		∑ (Area)	0.271	acres
Weighted run-off co-efficient (C)			0.84	

DRAINAGE AREA - 03

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	5406.00	5135.70	
Concrete	0.95		0.00	
Roof	0.95	4904.00	4658.80	
Green Space	0.10	1404.00	140.40	
		∑ (C x Area)	9934.90	
		∑ (Area)	11714.00	ft²
		∑ (Area)	0.269	acres
Weighted run-off co-efficient (C)			0.85	

DRAINAGE AREA - 04

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	1381.00	1311.95	
Concrete	0.95	783.00	743.85	
Roof	0.95		0.00	
Green Space	0.10	1368.00	136.80	
		∑ (C x Area)	2192.60	
		∑ (Area)	3532.00	ft²
		∑ (Area)	0.081	acres
Weighted run-off co-efficient (C)			0.62	

DRAINAGE AREA - 05

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	9274.00	8810.30	
Concrete	0.95	3463.00	3289.85	
Roof	0.95		0.00	
Green Space	0.10	4482.00	448.20	
		∑ (C x Area)	12548.35	
		∑ (Area)	17219.00	ft²
		∑ (Area)	0.395	acres
Weighted run-off co-efficient (C)			0.73	

DRAINAGE AREA - 06

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	4799.00	4559.05	
Concrete	0.95	2936.00	2789.20	
Roof	0.95		0.00	
Green Space	0.10	1115.00	111.50	
		∑ (C x Area)	7459.75	
		∑ (Area)	8850.00	ft²
		∑ (Area)	0.203	acres
Weighted run-off co-efficient (C)			0.84	

DRAINAGE AREA - 07

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	12840.00	12198.00	
Concrete	0.95	447.00	424.65	
Roof	0.95	9797.00	9307.15	
Green Space	0.10	3343.00	334.30	
		∑ (C x Area)	22264.10	
		∑ (Area)	26427.00	ft²
		∑ (Area)	0.607	acres
Weighted run-off co-efficient (C)			0.84	

DRAINAGE AREA - 08

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	8329.00	7912.55	
Concrete	0.95		0.00	
Roof	0.95	9757.00	9269.15	
Green Space	0.10		0.00	
		∑ (C x Area)	17181.70	
		∑ (Area)	18086.00	ft²
		∑ (Area)	0.415	acres
Weighted run-off co-efficient (C)			0.95	

DRAINAGE AREA - 09

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	9298.00	8833.10	
Concrete	0.95	3466.00	3292.70	
Roof	0.95		0.00	
Green Space	0.10	4512.00	451.20	
		∑ (C x Area)	12577.00	
		∑ (Area)	17276.00	ft²
		∑ (Area)	0.397	acres
Weighted run-off co-efficient (C)			0.73	

DRAINAGE AREA - 10

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	4799.00	4559.05	
Concrete	0.95	2940.00	2793.00	
Roof	0.95		0.00	
Green Space	0.10	1125.00	112.50	
		∑ (C x Area)	7464.55	
		∑ (Area)	8864.00	ft²
		∑ (Area)	0.203	acres
Weighted run-off co-efficient (C)			0.84	

DRAINAGE AREA - 11

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	12878.00	12234.10	
Concrete	0.95	447.00	424.65	
Roof	0.95	9797.00	9307.15	
Green Space	0.10	3356.00	335.60	
		∑ (C x Area)	22301.50	
		∑ (Area)	26478.00	ft²
		∑ (Area)	0.608	acres
Weighted run-off co-efficient (C)			0.84	

DRAINAGE AREA - 12

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	8329.00	7912.55	
Concrete	0.95		0.00	
Roof	0.95	9758.00	9270.10	
Green Space	0.10		0.00	
		∑ (C x Area)	17182.65	
		∑ (Area)	18087.00	ft²
		∑ (Area)	0.415	acres
Weighted run-off co-efficient (C)			0.95	

DRAINAGE AREA - 13

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	2823.00	2681.85	
Concrete	0.95	240.00	228.00	
Roof	0.95		0.00	
Green Space	0.10	1908.00	190.80	
		∑ (C x Area)	3100.65	
		∑ (Area)	4971.00	ft²
		∑ (Area)	0.114	acres
Weighted run-off co-efficient (C)			0.62	

DRAINAGE AREA - 14

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	3656.00	3473.20	
Concrete	0.95	1474.00	1400.30	
Roof	0.95		0.00	
Green Space	0.10	1957.00	195.70	
		∑ (C x Area)	5069.20	
		∑ (Area)	7087.00	ft²
		∑ (Area)	0.163	acres
Weighted run-off co-efficient (C)			0.72	

DRAINAGE AREA - 15

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	3717.00	3531.15	
Concrete	0.95	1490.00	1415.50	
Roof	0.95		0.00	
Green Space	0.10	2083.00	208.30	
		∑ (C x Area)	5154.95	
		∑ (Area)	7290.00	ft²
		∑ (Area)	0.167	acres
Weighted run-off co-efficient (C)			0.71	

DRAINAGE AREA - 16

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	2146.00	2038.70	
Concrete	0.95	254.00	241.30	
Roof	0.95		0.00	
Green Space	0.10	1427.00	142.70	
		∑ (C x Area)	2422.70	
		∑ (Area)	3827.00	ft²
		∑ (Area)	0.088	acres
Weighted run-off co-efficient (C)			0.63	

DRAINAGE AREA - 17

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	3256.00	3093.20	
Concrete	0.95	980.00	931.00	
Roof	0.95		0.00	
Green Space	0.10	1522.00	152.20	
		∑ (C x Area)	4176.40	
		∑ (Area)	5758.00	ft²
		∑ (Area)	0.132	acres
Weighted run-off co-efficient (C)			0.73	

DRAINAGE AREA - 18

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	5352.00	5084.40	
Concrete	0.95	654.00	621.30	
Roof	0.95		0.00	
Green Space	0.10	1659.00	165.90	
		∑ (C x Area)	5871.60	
		∑ (Area)	7665.00	ft²
		∑ (Area)	0.176	acres
Weighted run-off co-efficient (C)			0.77	

DRAINAGE AREA - 19

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	2799.00	2659.05	
Concrete	0.95	976.00	927.20	
Roof	0.95		0.00	
Green Space	0.10	1391.00	139.10	
		∑ (C x Area)	3725.35	
		∑ (Area)	5166.00	ft²
		∑ (Area)	0.119	acres
Weighted run-off co-efficient (C)			0.72	

DRAINAGE AREA - 20

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	3771.00	3582.45	
Concrete	0.95	554.00	526.30	
Roof	0.95		0.00	
Green Space	0.10	1411.00	141.10	
		∑ (C x Area)	4249.85	
		∑ (Area)	5736.00	ft²
		∑ (Area)	0.132	acres
Weighted run-off co-efficient (C)			0.74	

DRAINAGE AREA - 21

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	10650.00	10117.50	
Concrete	0.95	695.00	660.25	
Roof	0.95	1770.00	1681.50	
Green Space	0.30	4946.00	1483.80	
		∑ (C x Area)	13943.05	
		∑ (Area)	18061.00	ft²
		∑ (Area)	0.415	acres
Weighted run-off co-efficient (C)			0.77	

DRAINAGE AREA - 22

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	7450.00	7077.50	
Concrete	0.95		0.00	
Roof	0.95	3300.00	3135.00	
Green Space	0.30	1400.00	420.00	
		∑ (C x Area)	10632.50	
		∑ (Area)	12150.00	ft²
		∑ (Area)	0.279	acres
Weighted run-off co-efficient (C)			0.88	

DRAINAGE AREA - 23

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	19320.00	18354.00	
Concrete	0.95		0.00	
Roof	0.95	13200.00	12540.00	
Green Space	0.30	3000.00	900.00	
		∑ (C x Area)	31794.00	
		∑ (Area)	35520.00	ft²
		∑ (Area)	0.815	acres
Weighted run-off co-efficient (C)			0.90	

DRAINAGE AREA - 24

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	29750.00	28262.50	
Concrete	0.95		0.00	
Roof	0.95	23100.00	21945.00	
Green Space	0.30	4860.00	1458.00	
		∑ (C x Area)	51665.50	
		∑ (Area)	57710.00	ft²
		∑ (Area)	1.325	acres
Weighted run-off co-efficient (C)			0.90	

DRAINAGE AREA - 25

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	29736.00	28249.20	
Concrete	0.95	0.00	0.00	
Roof	0.95	23100.00	21945.00	
Green Space	0.30	4860.00	1458.00	
		∑ (C x Area)	51652.20	
		∑ (Area)	57696.00	ft²
		∑ (Area)	1.325	acres
Weighted run-off co-efficient (C)			0.90	

DRAINAGE AREA - 26

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	26890.00	25545.50	
Concrete	0.95	0.00	0.00	
Roof	0.95	16500.00	15675.00	
Green Space	0.30	6935.00	2080.50	
		∑ (C x Area)	43301.00	
		∑ (Area)	50325.00	ft²
		∑ (Area)	1.155	acres
Weighted run-off co-efficient (C)			0.86	

DRAINAGE AREA - 27

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	64900.00	61655.00	
Concrete	0.95	10635.00	10103.25	
Roof	0.95	23492.00	22317.40	
Green Space	0.30	31514.00	9454.20	
		∑ (C x Area)	103529.85	
		∑ (Area)	130541.00	ft²
		∑ (Area)	2.997	acres
Weighted run-off co-efficient (C)			0.79	

DRAINAGE AREA - TOTAL

Land cover	C	Area	C x Area	Unit
Asphalt	0.95	303,319	288153.05	
Concrete	0.95	32,031	30429.45	
Roof	0.95	155,137	147380.15	
Green Space	0.30	94,291	28287.30	
∑ (C x Area)			494249.95	
∑ (Area)			584778.00	ft²
∑ (Area)			13.42	acres
Weighted run-off co-efficient (C)			0.845	

FLOOD CONTROL, CPVC, CPRC & OUTLET CONTROL CALCULATIONS

Time of Concentration

Description	Value	Unit
Sheet flow		
Slope (%)	1.00	
Coefficient	0.48	
Velocity	0.48	ft/s
Flow length	300.00	ft
Time	10.42	min
Shallow Drainage Course		
Slope (%)	1.00	
Coefficient	1.20	
Velocity	1.20	ft/s
Flow length	24.00	ft
Time	0.33	min
Pipe Flow		
Slope (%)	0.32	
Velocity	4.00	ft/s
Flow length	245.00	ft
Time	1.02	min
Total travel time	**12**	**min**

ALLOWABLE RELEASE RATE

Description	Value	Unit
Contributing area (A)	13.425	acres
Maximum Allowable	1.00	ft^3/acre
Calculated allowable release rate	0.570	ft^3/acre
Allowable release rate	0.570	ft^3/acre

REQUIRED DETENTION BASIN VOLUME

Description	Value	Unit
Contributing area (A)	13.425	acres
Post-development runoff coefficient (C)	0.845	
Time of concentration for the development (T_C)	11.77	min
100-year peak rainfall intensity (I_{100})	6.973	in/hour
Allowable release rate (Q_{VRR})	0.570	ft^3/acre
Allowable 100-year post development peak flow rate (Q_{100P})	7.659	ft^3/s
Post-development 100-year runoff volume (V_{100R})	215,412	ft^3
100-year post-development peak inflow rate (Q_{100IN})	79.118	ft^3/s
Storage curve factor (R)	0.556	
V_{100R} X R	119,826	ft^3
Required Channel Protection Volume Control (V_{CPVC-R})	41,187	ft^3
Provided Channel Protection Volume Control (V_{CPVC-P})	0	ft^3
V_{100R} X R - V_{CP-P}	119,826	
Required Channel Protection Rate Control Volume (V_{CPRC-R})	78,256	ft^3
Provided Channel Protection Rate Control Volume (V_{CPRC-P})	79,185	ft^3
Channel Protection Rate Control Volume Elevation	593.80	
Required 100-yr detention volume (V_{100D})	119,826	ft^3
Provided 100-yr detention volume (V_{100P})	133,804	ft^3
100-yr Detention Elevation	595.00	

100 YR STORAGE VOLUME PROVIDED (ELEV.-591-595)

Elevation	Area (ft^2)	Δh (ft)	Vprov (ft^3)	Sum Vprov (ft^3)
591.00	16334	0	0.00	0.00
592.00	24834	1	20,436	20,436
593.00	33561	1	29,088	49,524
593.80	**40705**	**0.8**	**29,660**	**79,185**
594.00	42514	0.2	7,590	86,775
595.00	**51693**	**1**	**47,029**	**133,804**

ORIFICE CALCULATION (CPRC)

Description	Value	Unit
CPRC Volume required	78,256	
Discharge over 48-hrs	172,800	s
Average Discharge Rate	0.45	cfs
Maximum Head	2.80	ft
Average Head	1.40	ft
Extended Detention Orifice Area	0.077	ft^2
Required Extended Detention Orifice Diameter	3.76	in
Provided Extended Detention Orifice Diameter	3.76	in
Orifice invert elevation	591.00	

ORIFICE CALCULATION (100-YR STORAGE)

Description	Value	Unit
Head on Extended Detention Orifice	4	ft
100-Yr Flow through Extended Detention Orifice	0.77	cfs
Remaining flow for 100-Yr Orifice	6.89	cfs
Residual head on 100-Yr Orifice	1.20	ft
Requried 100-Yr Orifice Area	1.26	ft^2
Requried 100-Yr Orifice Diameter	15.23	in
Provided 100-Yr Orifice Diameter	15.23	in

OVERFLOW STRUCTURE SIZE CALCULATION

Description	Value	Unit
Size of Manhole	8	ft
Length of Weir (perimeter)	25.12	ft
Acreage tributary to overflow	13.42	acres
Composite runoff coefficent	0.85	
Time of concentration (from pipe flow calcs)	11.77	min
Storage elevation	595.00	ft
Freeboard elevation	596	ft
Intensity of the Storm (I-100)	6.89	in/hr
Qexp	78.19	ft^3/s
Head over weir	0.96	ft
Elevation of water during overflow conditions	595.96	ft

SUMMARY

- BOTTOM OF POND ELEVATION - 591.00
- CPRC STORAGE ELEVATION - 593.80
- I00 YR STORAGE ELEVATION - 595.00
- DEPTH OF DETENTION STORAGE - 4 FT
- EMERGENCY SPILLWAY ELEVATION - 595.50
- FREEBOARD ELEVATION - 596.00
- CPRC ORIFICE DIA. - 3.76 INCHES @ 591.00
- FLOOD CONTROL ORIFICE DIA. - 15.23 INCHES @ 593.80

NOTE

1. DETENTION BASIN HAS BEEN DESIGNED TO ACCOMMODATE PHASE 2 OF MULTIFAMILY DEVELOPMENT AS WELL. TWO OUTLOTS WILL HAVE ITS OWN DETENTION.
2. NO CPVC STORAGE HAS BEEN PROVIDED

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CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	PUD SPA	05-06-26
2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
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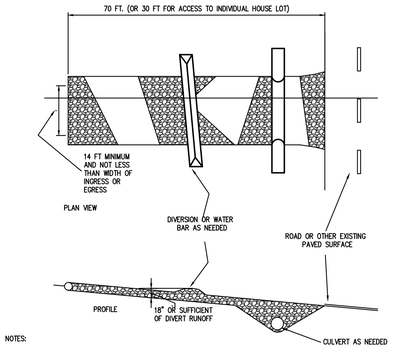
CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT
PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
STORMWATER DETAILS

SHEET NUMBER:
C5.8

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:



NOTES:

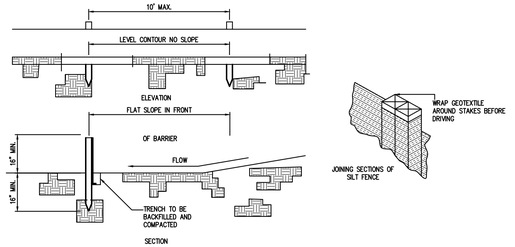
1. STONE SIZE--MDOT 21AA CRUSHED STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS --THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH --THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE --A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 lBS.
MINIMUM PUNCTURE STRENGTH	80 PSI.
MINIMUM TEAR STRENGTH	50 LBS.
MINIMUM BURST STRENGTH	320 PSI.
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS<0.6MM.
PERMITTIVITY CM/SEC.	1X10--3

6. TIMING--THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT --A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER GAP --A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE --TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF--SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION--SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL--THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

CONSTRUCTION ENTRANCE

SCALE: N.T.S



1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6--INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6--IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND, (SEE DETAILS).
10. MAINTENANCE---SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE--HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

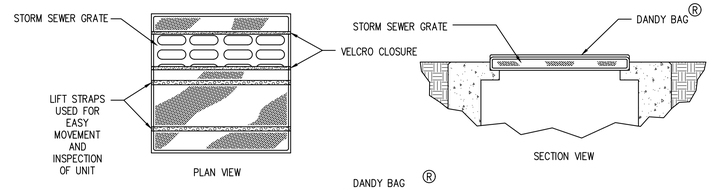
1. FENCE POST -- THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2--BY--2--IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC -- SEE CHART BELOW.

TABLE 6.3.2 MINIMUM CRITERIA FOR SILT FENCE FABRIC (ODOT, 2002)

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 lBS. (535 N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 lBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS (220 N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS (1 80N)	ASTM D 4533
APPARENT OPENING SIZE	≤0.84 MM	ASTM D 4751
MINIMUM PERMITTIVITY	1X10--2 SEC.--1	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355

SILT FENCE

SCALE: N.T.S.



DANDY BAG ® SPECIFICATIONS

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

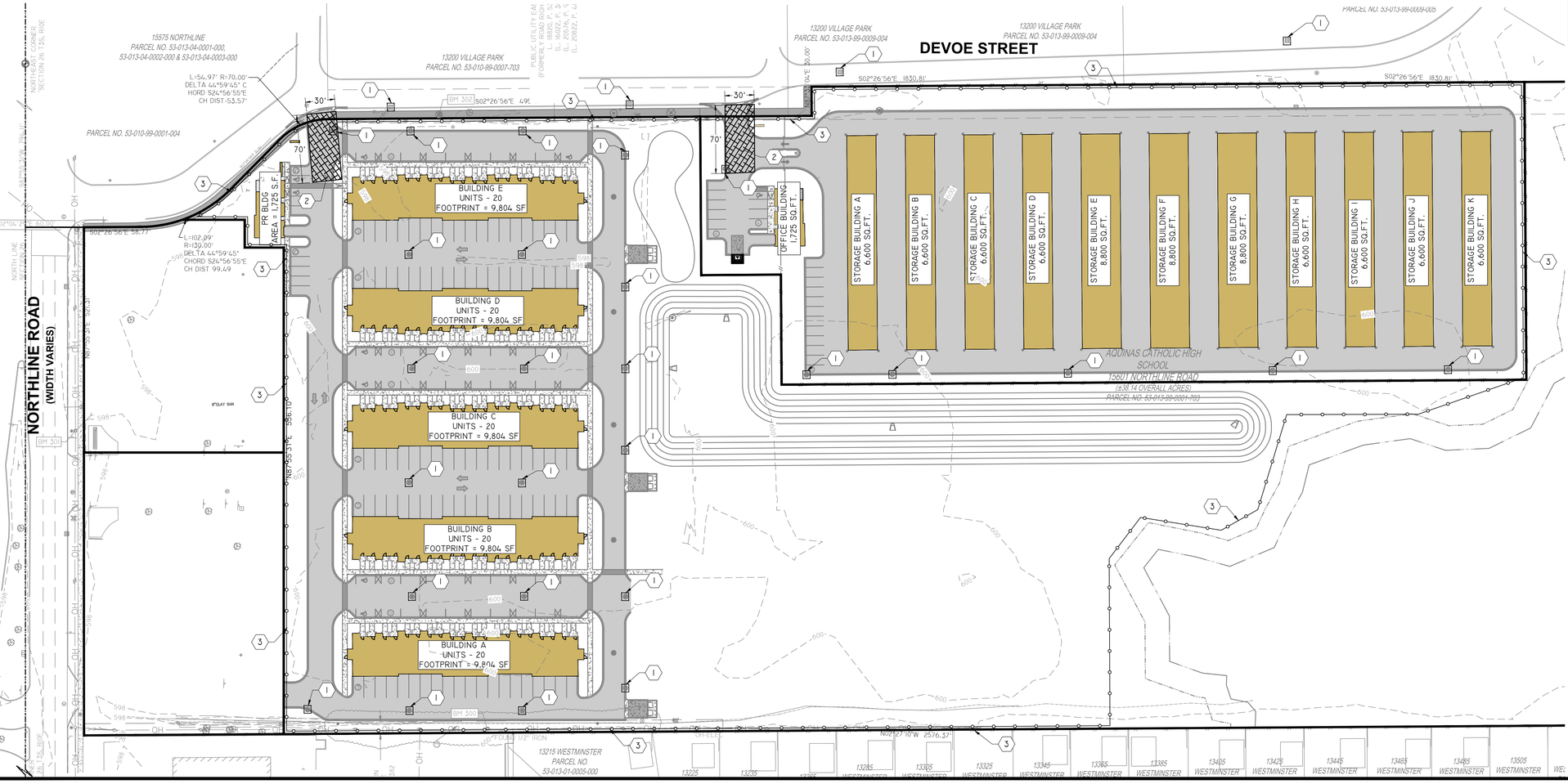
HI--FLOW DANDY BAG ® (SAFETY ORANGE)

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	KN (LBS)	1.62 (365) X 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 X 10
PUNCTURE STRENGTH	ASTM D 4833	KN (LBS)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	KPA (PSI)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	KN (LBS)	0.51 (115) X 0.33 (75)
UV RESISTENCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	MM (US STD SIEVE)	0.425 (40)
FLOW RATE	ASTM D 4491	1/MIN/M (GAL/MIN/FT)	5907 (145)
PERMITTIVITY	ASTM D 4491	SEC--1	2.1

*NOTE: ALL DANDY BAGS ® CAN BE ORDERED WITH OUR OPTIONAL OIL ABSORBENT PILLOWS

DANDY BAG INLET PROTECTION

SCALE: N.T.S.



KEY NOTES

1. INSTALL INLET PROTECTION PER DETAIL - ON THIS SHEET
2. CONSTRUCT CONSTRUCTION ENTRANCE PER DETAIL - ON THIS SHEET
3. INSTALL SILT FENCE PER DETAIL- ON THIS SHEET

NOTES

1. AREA OF DISTURBANCE = 700,352 SF (16.077 ACRES)
2. THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM BY GENERAL CONTRACTOR
3. ALL LAWN AREAS TO RECEIVE PERMANENT STABILIZATION IN THE FORM OF SEED OR SOD

CONSTRUCTION SEQUENCE

1. INSTALL ALL SOIL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION. ALL SOIL EROSION MEASURES AREA TO BE INSTALLED PRIOR TO ANY GROUNDBREAKING OR EARTH MOVEMENT.
2. BEGIN CONSTRUCTION
3. FINISH CONSTRUCTION AND ESTABLISH FINISH GRADE
4. RIGHT--OF--WAY MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION
5. 10' AROUND STORM SEWER STRUCTURES MUST BE STABILIZED PRIOR TO FINAL GRADE INSPECTION
6. AFTER PERMANENT EARTH STABILIZATION IS COMPLETED, REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES. NO PERMANENT SOIL EROSION CONTROL MEASURES (ASIDE FROM FINAL VEGETATIVE STABILIZATION) APPLIES TO THIS PARCEL

NORTH

60 30 0 60 120

DRAWING SCALE: 1"=60'

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CONSULTANTS:

SEAL:

STATE OF MICHIGAN
IDEN KALABAT
ENGINEER
No. 6201062804
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	DATE
1	PUD SPA	05-06-26
2	PUD SPA REV 1	05-27-26
3	PUD SPA REV 2	08-03-26
4		
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17		

CLIENT:
NORTHLINE PROPERTY GROUP, LLC
30407 WEST THIRTEEN MILE ROAD,
FARMINGTON HILLS,
MI 48334

PROJECT:
ROSEWOOD DEVELOPMENT PUD: MULTI FAMILY STACKED TOWN HOMES AND SELF STORAGE
15601 NORTHLINE ROAD
SOUTHGATE, MI 48195

SHEET TITLE:
SOIL EROSION AND SEDIMENTATION CONTROL PLAN

SHEET NUMBER:
C6.0

PROJECT NUMBER: CD25-105
DRAWN BY: S.SALMAN
CHECKED BY: I.KALABAT
PREPARATION DATE:

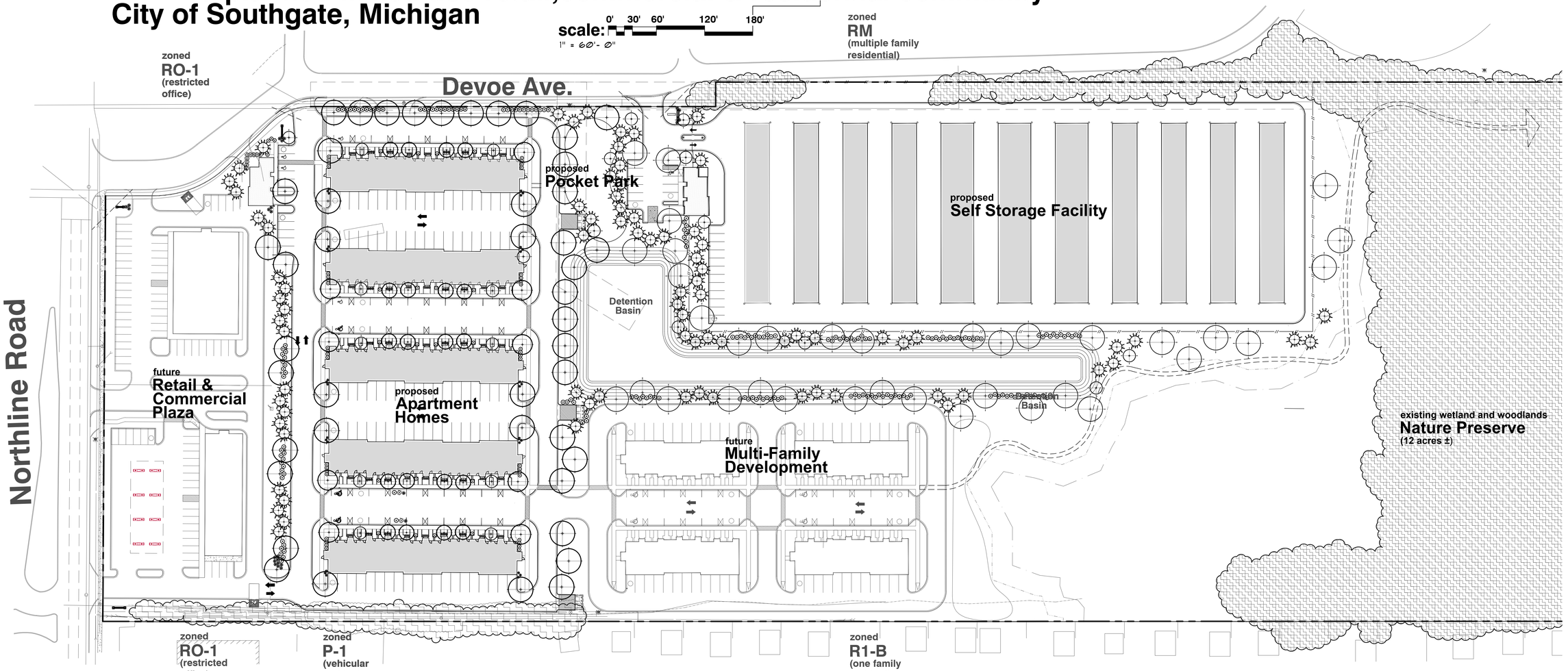
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overall landscape plan for:

Rosewood Development

- a planned mixed use retail,commercial & residential community

City of Southgate, Michigan



general landscape notes:

1. LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISITNG CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK. CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.
2. PRIOR TO BEGINING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES. GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING
3. NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.
4. ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON SITE IF NECESSARY
5. ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY CITY OF SOUTHGATE AND LANDSCAPE ARCHITECT
6. ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAIL SHOWN ON PLAN.
7. PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARDBARK MULCH.
8. DIG SHRUB PITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
9. NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.
10. REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4' DIA. CIRCLE WITH 3" PULLED AWAY FROM TRUNK . 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.
11. PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE STANDARDS.
12. PROVIDE PEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.
13. ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
14. PLANT TREES AND SHRUBS GENERALLY NO CLOSER THEN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:
    a.). SHADE TREES _____ 5 FT.
    b.). ORNAMENTAL AND EVERGREEN TREES (CRAB, PINE, SPRUCE, ETC.) _____ 10 FT.
    c.). SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY _____ 2 FT.
15. NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.
16. ALL LAWN AREAS AND LANDSCAPE BEDS TO BE FULLY IRRIGATED WITH A AUTOMATIC UNDERGROUND SYSTEMS. IRRIGATION SYSTEM TO HAVE SEPARTE ZONES FOR LAWN AREAS, PARKING ISLANDS, AND SHRUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED
17. UNLESS NOTED OTHERWISE, LANDSCAPE BEDS ADJACENT TO LAWN TO RECIEVE EDGING. EDGING SHALL BE 4" X 1/8" METAL (FINISH BLACK OR GREEN) OR APPROVED EQUAL AND TO BE INSTALLED WITH HORIZONTAL METAL STAKES AT 32" O.C. OR PER MANUFACTERER'S SPECIFICATION.
18. ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS A MIN. OF 16"-18" DEPTH. BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS. ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.
19. WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
20. ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPERATES DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.
21. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEAR BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLTION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.

sheet index:

LS-1 OVERALL LANDSCAPE PLAN VIEW
LS-2 MULTI-FAMILY LANDSCAPE PLAN DETAIL
LS-3 SELF-STORAGE LANDSCAPE PLAN DETAIL
LS-4 SOD & SEEDING REFERENCE PLAN
LS-5 AMENITY FEATURE REFERENCE PLAN
LS-6 ENTRANCE & SIGN ELEVATION PLAN

FPA
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seal:

STATE OF MICHIGAN — FELINO A. PASCUAL — LANDSCAPE ARCHITECT — No. 1533 — REGISTERED

client:

BACALL DEVELOPMENT
30407 West 13-Mile Road
Farmington Hills, Michigan
48334
ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

OVERALL LANDSCAPE PLAN VIEW

job no./issue/revision date:

LS25.097.09	INITIAL	9/23/2025
LS25.097.10	REVIEW	10/20/2025
LS25.097.10	SPA	10/28/2025
LS26.078.05	SPA	5/26/2026
LS26.078.08	SPA	8/5/2026

drawn by: JP

checked by: FP

date: 5-15-2025

notice:

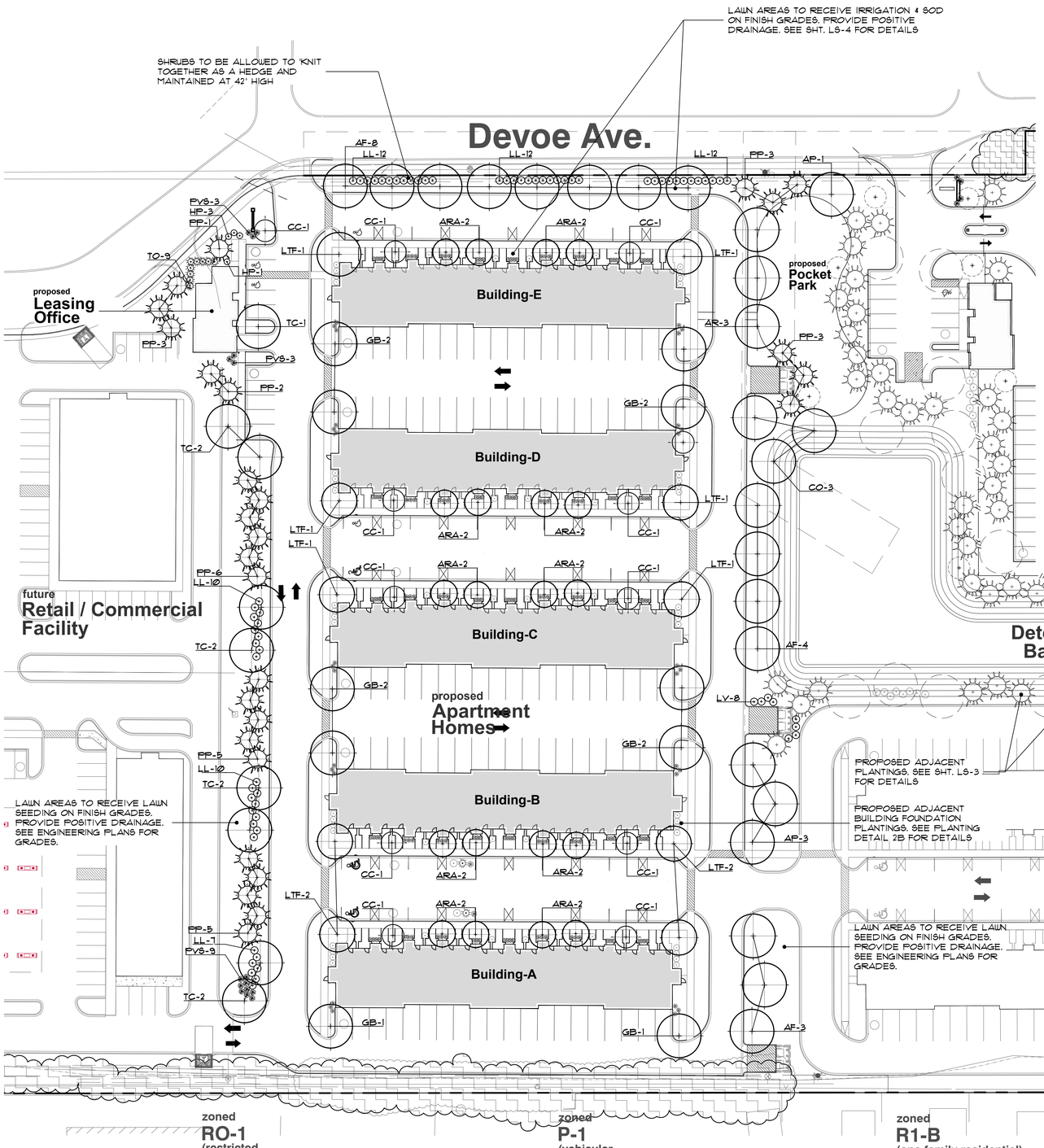
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The location and elevations of existing underground utilities as shown on this drawing are only approximate. no guarantee is either expressed or implied as to the completeness of accuracy. contractor shall be exclusively responsible for determining the exact location and elevation prior to the start of construction

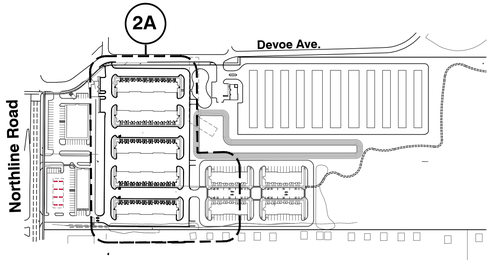
project no: LS26.078.05

sheet no: LS-1 of 6



2A landscape planting detail

SCALE: 1" =40' - 0"

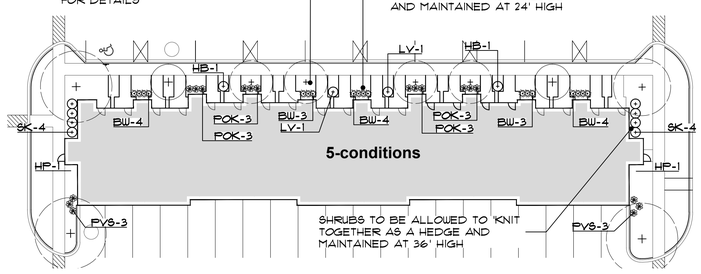


key reference location map

NO SCALE

plant material list

key	quant. 2A	quant. 2B	botanical name	common name	size	comments
			LARGE CANOPY AND EVERGREEN TREES			
AF	15	-	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE RED MAPLE	3" BB	
TC	9	-	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	3" BB	
AR	3	-	ACER R. 'FRANKSRED'	RED SUNSET RED MAPLE	3" BB	
CO	3	-	CELTIS OCCIDENTALIS	HACKBERRY	3" BB	
GB	10	-	GINKGO BILOBA	GINKGO TREE	3" BB	
AP	4	-	ACER PLATANOIDES 'CRIMSON KING'	CRIMSON KING MAPLE	3" BB	
LTF	10	-	LIRIODENDRON TULIPIFERA 'FASTIGIATUM'	COLUMNAR TULIPTREE	3" BB	
ARA	20	-	ACER R. 'ARMSTRONG'	ARMSTRONG RED MAPLE	3" BB	
CC	11	-	CERCIS CANADENSIS	EASTERN REDBUD (MULTI-STEM)	2" BB	
PP	28	-	PICEA PUNGENS	COLORADO SPRUCE	6' BB	
			SHRUBS AND ORNAMENTAL GRASSES			
LL	65	-	LIGUSTRUM VULGARE 'LODENSE'	LODENSE PRIVET	3' BB	60" O.C. SPACING
SK	-	40	SYRINGA PATULA 'MISS KIM'	MISS KIM DWARF LILAC	3' B.B.	48" O.C. SPACING
HB	4	10	HYDRANGEA PANICULATA 'ILVOBO'	BOBO HYDRANGEA	#3 CONT	36" O.C. SPACING
TO	9	-	THUJA OCCIDENTALIS 'NIGRA'	DARK GREEN ARBORVITAE	7' BB	50" O.C. SPACING
HP	-	10	HYDRANGEA PANICULATA 'BULK'	QUICK FIRE HYDRANGEA	3' BB	48" O.C. SPACING
BW	-	90	ILEX CRENATA 'SOFT TOUCH'	SOFT TOUCH HOLLY	18" BB	24" O.C. SPACING
LV	8	10	LIGUSTRUM X. 'VICARY'	VICARY PRIVET	36" CONT.	60" O.C. SPACING
PVS	15	30	PANICUM VIRGATUM 'SHENNANDOAH'	SHENANDOAH 'SWITCH GRASS'	#3 CONT.	48" O.C. SPACING
POK	12	60	PENNISETUM ALOPECUROIDES 'KARLEY ROSE'	KARLEY ROSE FOUNTAIN GRASS	#3 CONT.	32" O.C. SPACING



2B building foundtion planting detail

SCALE: 1" =30' - 0"

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seal:

STATE OF MICHIGAN — FELINO A. PASCUAL — LANDSCAPE ARCHITECT — No. 4333 — REGISTERED

client:

BACALL DEVELOPMENT
30407 West 13-Mile Road
Farmington Hills, Michigan
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ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

MULTI-FAMILY LANDSCAPE PLAN DETAIL

job no./issue/revision date:

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LS26.078.05	SPA	5/26/2026
LS26.078.08	SPA	8/5/2026

JP

checked by:
FP

date:
5-15-2025

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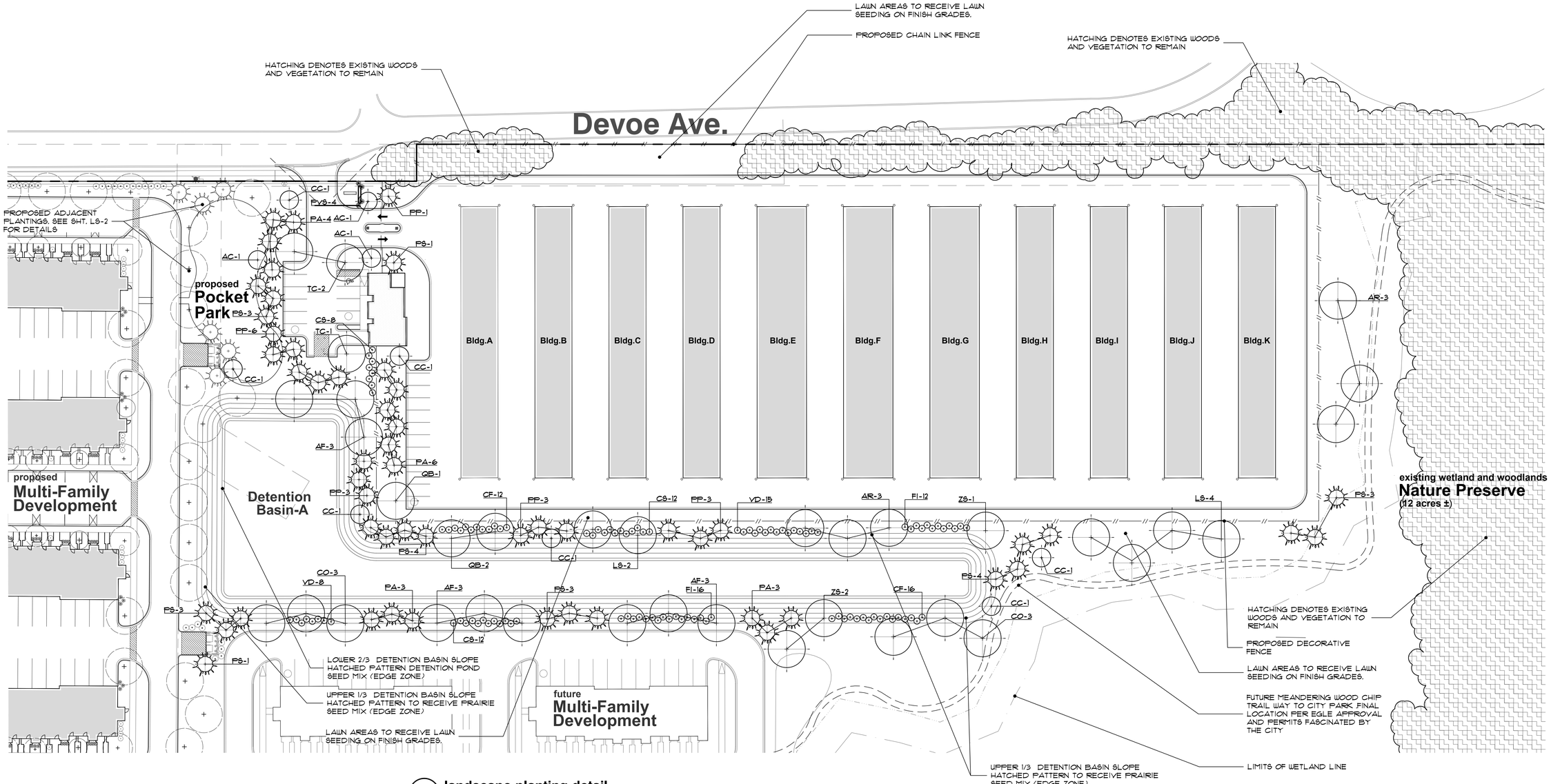
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project no:
LS26.078.05

sheet no:
LS-2 of 6



3A landscape planting detail

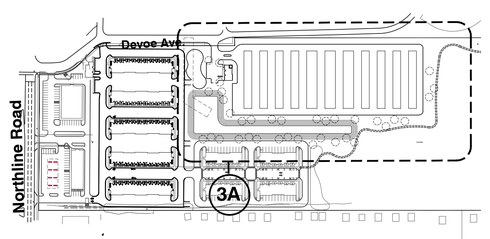
SCALE: 1" =40' - 0"

plant material list

key	quant. 3A	botanical name	common name	size	comments
		LARGE CANOPY TREES			
AF	9	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE RED MAPLE	2 1/2" BB	
AR	6	ACER R. 'FRANKSRED'	RED SUNSET RED MAPLE	2 1/2" BB	
ZS	3	ZELKOVA SERRATE 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	2 1/2" BB	
CO	6	CELTIS OCCIDENTALIS	NORTHERN HACKBERRY	2 1/2" BB	
QB	3	QUERCUS 'BICOLOR'	SWAMP WHITE OAK	2 1/2" BB	
LS	6	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	2 1/2" BB	
TC	3	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2" BB	
		ORNAMENTAL TREES			
CC	7	CERCIS CANADENSIS	EASTERN REDBUD	10' BB	(MULTI-STEM)
AC	3	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	10' BB	(MULTI-STEM)

plant material list

key	quant. 4A	botanical name	common name	size	comments
		EVERGREEN TREES			
PS	21	PINUS STROBUS	EASTERN WHITE PINE	8' BB	
PP	16	PICEA PUNGENS	COLORADO SPRUCE	8' BB	
PA	16	PICEA ABIES	NORWAY SPRUCE	8' BB	
		SHRUBS			
VD	23	VIBURNUM DENSATA 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	36" CONT.	60" O.C. SPACING
FI	28	FORSYTHIA X INTERMEDIA	BORDER FORSYTHIA	3' BB	60" O.C. SPACING
CS	32	CORNUS STOLONIFERA	REDTWIG DOGWOOD	3' BB	60" O.C. SPACING
CF	28	CORNUS FLAVIRAMEA	YELLOWTWIG DOGWOOD	3' BB	60" O.C. SPACING
		SHRUBS			
PVS	4	PANICUM VIRGATUM 'SHENNANDOAH'	SHENANDOAH 'SWITCH GRASS'	#3 CONT.	48" O.C. SPACING



key reference location map

NO SCALE

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seal:

STATE OF MICHIGAN FELINO A. PASCUAL LANDSCAPE ARCHITECT No. 1533 REGISTERED LANDSCAPE ARCHITECT

client:

BACALL DEVELOPMENT
30407 West 13-Mile Road
Farmington Hills, Michigan 48334
ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

SELF-STORAGE LANDSCAPE PLAN DETAIL

job no./issue/revision date:

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LS26.078.08	SPA	8/5/2026

drawn by: JP

checked by: FP

date: 5-15-2025

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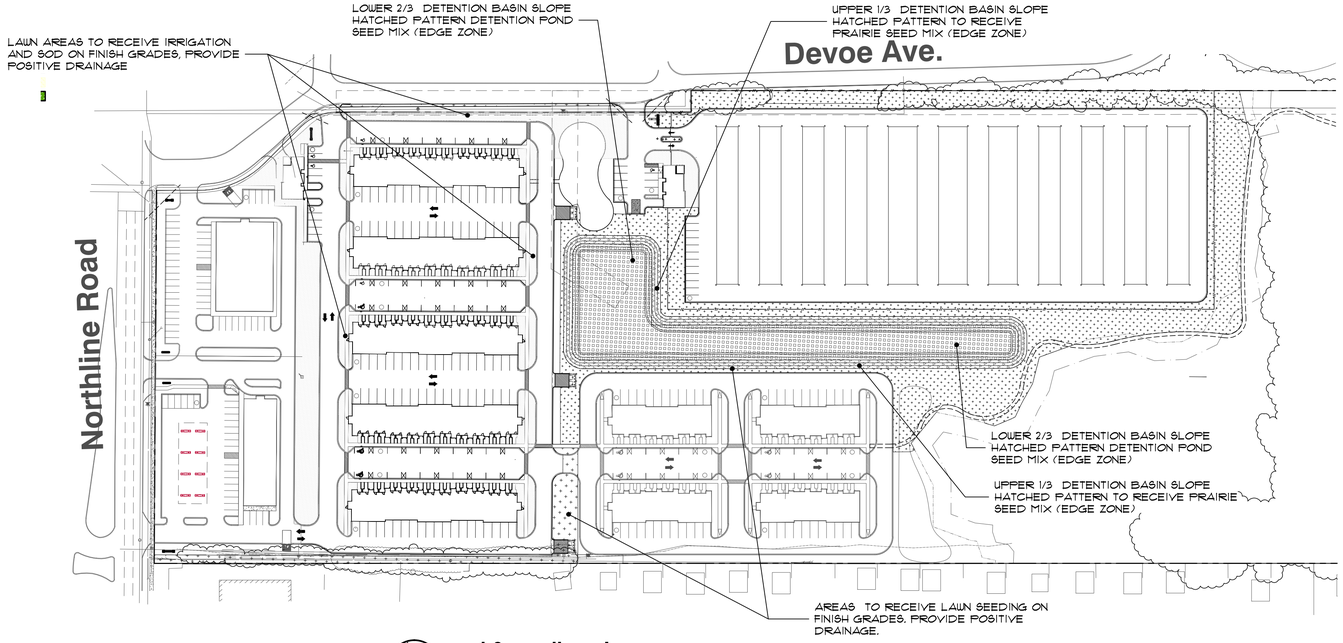
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project no: LS26.078.05

sheet no: **LS-3** of 6



north

sod & seeding plan

SCALE: 1" =100' - 0"

economy prairie seed mix

THIS PRAIRIE SEED MIX OFFERS AN ECONOMICAL WAY TO ESTABLISH A PRAIRIE. IN ADDITION TO NATIVE PRAIRIE GRASSES, FLOWERING SPECIES PROVIDE COLOR THROUGHOUT THE GROWING SEASON AND FOOD SOURCES FOR BIRDS AND BUTTERFLIES. ADDING SEED OR PLANT PLUGS AT A LATER DATE IS A WONDERFUL WAY TO INCREASE A PRAIRIE'S RICHNESS AND DIVERSITY. THIS SEED MIX INCLUDES AT LEAST 6 OF 7 NATIVE PERMANENT GRASS AND SEDGE SPECIES AND 10 OF 13 NATIVE FORB SPECIES. APPLY AT 40.95 PLS POUNDS PER ACRE.

BOTANICAL NAME	COMMON NAME	PLS OZ/ACRE
PERMANENT GRASSES/SEDGES		
ANDROPOGON GERARDII	BIG BLUESTEM	12.00
BOUTELOUA CURTIPENDULA	SIDE-OATS GRAMA	16.00
CAREX SPP.	PRAIRIE SEDGE SPECIES	3.00
ELYMUS CANADENSIS	CANADA WILD RYE	24.00
PANICUM VIRGATUM	SWITCH GRASS	2.50
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	32.00
SORGHASTRUM NUTANS	INDIAN GRASS	12.00
	TOTAL	101.50
TEMPORARY COVER		
AVENA SATIVA	COMMON OAT 512.00	
	TOTAL	512.00
FORBS		
ASCLEPIAS SYRIACA	COMMON MILKWEED	1.00
ASCLEPIAS TUBEROSA	BUTTERFLY WEED	1.00
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	10.00
COREOPSIS LANCEOLATA	SAND COREOPSIS	6.00
ECHINACEA PURPUREA	BROAD-LEAVED PURPLE CONEFLOWER	8.00
HELIOPSIS HELIANTHOIDES	FALSE SUNFLOWER	0.25
MONARDA FISTULOSA	WILD BERGAMOT	0.50
PENSTEMON DIGITALIS	FOXGLOVE BEARD TONGUE	1.00
RATIBIDA PINNATA	YELLOW CONEFLOWER	4.00
RUDBECKIA HIRTA	BLACK-EYED SUSAN	8.00
SOLIDAGO SPECIOSA	SHOWY GOLDENROD	0.50
SYMPHYOTRICHUM LAEVE	SMOOTH BLUE ASTER	1.00
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
	TOTAL	41.75

detention basin seed mix

A WETLAND SEED MIX FOR SATURATED SOILS IN A DETENTION POND OR FOR SEEDING A SATURATED BASIN, THIS MIX WILL TOLERATE HIGHLY FLUCTUATING WATER LEVELS AND POOR WATER QUALITY ASSOCIATED WITH URBAN STORMWATER WETLANDS AND PONDS. FOR DETENTION BASINS THAT EXPERIENCE LONG, DRY PERIODS, USE THE ECONOMY PRAIRIE SEED MIX IN THE UPPER THIRD TO HALF OF THE BASIN AREA IN COMBINATION WITH THIS MIX. THIS SEED MIX INCLUDES AT LEAST 10 OF 12 NATIVE PERMANENT GRASS AND SEDGE SPECIES AND 13 OF 17 NATIVE FORB SPECIES. APPLY AT 36.22 PLS POUNDS PER ACRE.

BOTANICAL NAME	COMMON NAME	PLS OZ/ACRE
PERMANENT GRASSES/SEDGES		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX CRISTATELLA	CRESTED OVAL SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	3.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	24.00
GLYCERIA STRIATA	FOWL MANNA GRASS	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	1.00
PANICUM VIRGATUM	SWITCH GRASS	2.00
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	3.00
SCIRPUS ATROVIRENS	DARK GREEN RUSH	2.00
SCIRPUS CYPERINUS	WOOL GRASS	1.00
	TOTAL	41.50
TEMPORARY COVER		
AVENA SATIVA	COMMON OAT	512.00
	TOTAL	512.00
FORBS		
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.50
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2.00
BIDENS SPP. BIDENS	SPECIES	2.00
EUPATORIUM PERFOLIATUM	COMMON BONESET	1.00
HELENIUM AUTUMNALE	SNEEZEWEED	2.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	4.00
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	0.50
MIMULUS RINGENS	MONKEY FLOWER	1.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN	1.00
RUDBECKIA TRILOBA	BROWN-EYED SUSAN	1.50
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	1.00
SENNA HEBECARPA	WILD SENNA	2.00
SYMPHYOTRICHUM LANCEOLATUM	PANICLED ASTER	0.50
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
THALICTRUM DASYCARPUM	PURPLE MEADOW RUE	2.00
	TOTAL	26.00

planting landscape notes:

GENERAL NOTES:

1. PLANT MATERIALS TO BE INSTALLED ACCORDING TO THE CITY OF SOUTHGATE AND CURRENT AMERICAN ASSOCIATION OF NURSERYMENS STANDARDS.
2. PLANT MATERIALS TO BE GUARANTEED FOR 2 YEARS. REPLACE FALLING MATERIAL WITHIN 1 YEAR, OR THE NEXT APPROPRIATE PLANTING PERIOD.
3. PLANT MATERIALS TO BE OF PREMIUM QUALITY, NO. 1 GRADE NORTHERN NURSURY GROWN, IN HEALTHY CONDITION, FREE OF PESTS AND DISEASES.
4. MULCH IS TO BE NATURAL COLORED, FINELY SHREDDED HARDWOOD BARK OF 4" THICK BARK MULCH FOR TREES IN 4' DIA. CIRCLE W/3" PULLED AWAY FROM TRUNK, 3" THICK BARK MULCH FOR SHRUBS AND 2" THICK BARK MULCH FOR PERRENIALS.
5. CALL MISS DIG AT 1-800-482-7171 PRIOR TO ANY CONSTRUCTION.

DECIDUOUS & EVERGREEN TREE:

1. TREE SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
2. DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
3. REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSLIGHTLY AND COULD CAUSE GIRDLING.
4. REMOVE TREE STAKES, GUY WIRES AND TREE WRAP AFTER ONE WINTER SEASON.

SHRUB:

1. SHRUB SHALL BE INSTALLED SAME RELATIONSHIP TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.
2. DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.
3. REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSLIGHTLY AND COULD CAUSE GIRDLING.

landscape maintenance notes:

LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN, ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED FUNCTIONS OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.

1. LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
2. PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
3. ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 15 AND NOVEMBER 15 OR UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

lawn area:

SOD LAWN AREAS SHALL BE KENTUCKY BLUE GRASS BLEND GRASS IN A SOD NURSERY ON LOAM SOIL. SOD TO BE INSTALLED ON MINIMUM 4" TOPSOIL.

SEEDED LAWN AREAS SHALL CONSIST OF THE FOLLOWING TYPES AND PROPORTIONS:

5% PERENNIAL RYE GRASS
10% RED FESCUE
25% CHEWING FESCUE
60% KENTUCKY BLUE GRASS

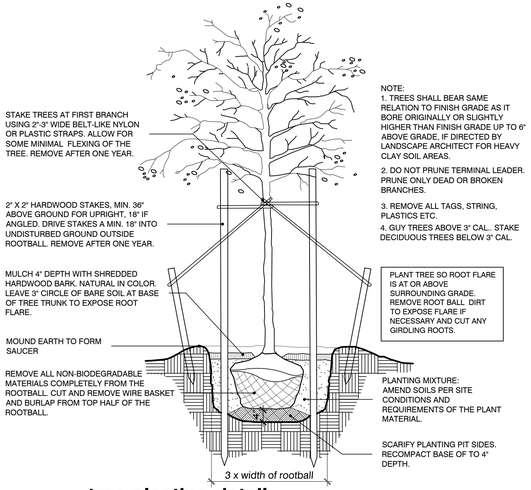
SEED MIX SHALL BE APPLIED AT A RATE OF 200 POUNDS PER ACRE AND WEED CONTENT SHALL NOT EXCEED 1%. SEED. PROVIDE A MINIMUM 4" TOP SOIL ON ALL SEEDED LAWN AREA

basin construction notes

1. PROPER CONSTRUCTION TECHNIQUES, PARTICULARLY INSTALLATION OF VEGETATION, ARE IMPORTANT TO THE SUCCESSFUL FUNCTIONING OF OPEN DETENTION BASINS, ESPECIALLY FOR CONSTRUCTED WETLAND TYPE OPEN DETENTION BASINS IN ORDER TO ESTABLISH A DENSE AND DIVERSE EMERGENT WETLAND PLANT COMMUNITY. GENERAL GUIDELINES FOR VEGETATION INSTALLATION INCLUDE:
2. IF EMERGENT PLANT STOCK IS PROPOSED IN THE POND ZONE, THE SUPPLIED PLUG MATERIAL MUST HAVE SUFFICIENT VEGETATIVE GROUTH EXTENDING OUT OF THE WATER ONCE PLANTED.
3. SEED MUST BE PLANTED ABOVE THE PERMANENT WATER ELEVATION.
4. ALL SEEDED AREAS TO BE PROPERLY STABILIZED WITH A MUCH BLANKET FEGGED IN PLACE.
5. ADDITIONAL GUIDANCE ON SEED AND SOD SPECIFICATIONS AND INSTALLATION IS PROVIDED IN SECTION 8.5.1 OF THIS MANUAL.
6. DEPENDING ON THE TYPE OF VEGETATION, BARRIERS MAY BE REQUIRED FOR ONE YEAR TO PROTECT THE PLANTINGS (E.G., SNOW FENCE OR NETTING TO DETER WILDLIFE, PREVENT MOWING).
7. IF DETENTION BASIN ARE COMPACTED, THE SLOPES MUST BE ROTOTILLED, 4" (FOUR) OF COMPOST OR TOPSOIL MUST BE ADDED
8. "NO MOW ZONE" SIGNS MUST BE PLACED AROUND THE BASIN
9. DETENTION BASIN NATIVE SEEDING TO BE PERFORMED IN EARLY SPRING OR LATE FALL. AQUATIC PLANTS SHOULD BE INSTALLED IN THE SUMMER AFTER THE COVER CROP HAS ESTABLISHED

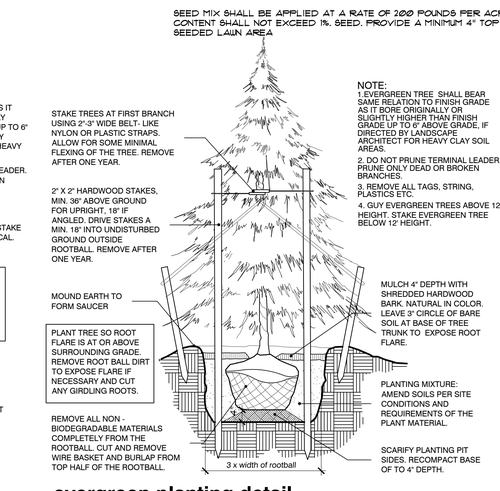
hatch pattern legend

- AREAS TO RECEIVE LAWN SEEDING
- AREAS TO RECEIVE DETENTION POND SEED MIX
- AREAS TO RECEIVE PRAIRIE SEED MIX. (NO MOWED AREA)
- AREAS TO RECEIVE IRRIGATION AND SOD, MAINTAINED AND MOWED WEEKLY



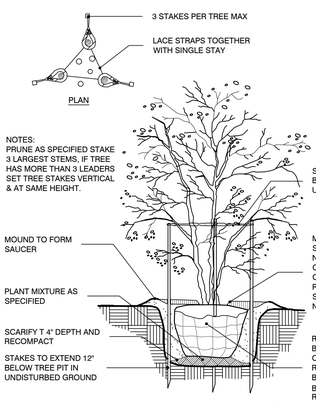
tree planting detail

no scale



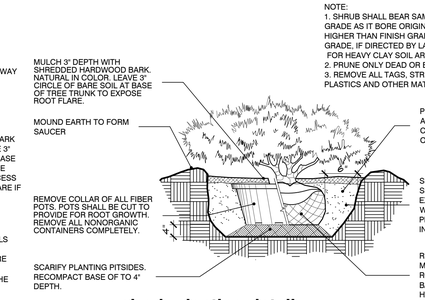
evergreen planting detail

no scale



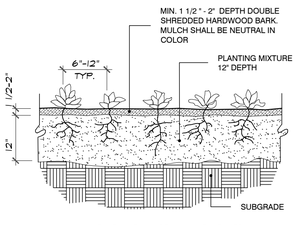
multi-stem tree planting detail

no scale



shrub planting detail

no scale



perennial planting detail

no scale

FELINO A. PASCUAL and ASSOCIATES
Community Land Planner and registered Landscape Architect
24333 Orchard Lake Rd, Suite G
Farmington Hills, MI 48336
ph. (248) 557-5588
fax. (248) 557-5416

seal:

STATE OF MICHIGAN — FELINO A. PASCUAL — LANDSCAPE ARCHITECT — No. 1533

client:

BACALL DEVELOPMENT

30407 West 13-Mile Road
Farmington Hills, Michigan
48334
ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

SOD & SEEDING REFENCE PLAN

job no./issue/revision date:

LS25.097.09	INITIAL	9/23/2025
LS25.097.10	REVIEW	10/20/2025
LS25.097.10	SPA	10/28/2025
LS26.078.05	SPA	5/26/2026
LS26.078.08	SPA	8/5/2026

drawn by: **JP**

checked by: **FP**

date: **5-15-2025**

notice:

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3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 For free location of public utility lines

The location and elevations of existing underground utilities as shown on this drawing are only approximate. no guarantee is either expressed or implied as to the completeness of accuracy. contractor shall be exclusively responsible for determining the exact location and elevation prior to the start of construction

project no:

LS26.078.05

sheet no:

LS-4 of 6



A bollard light

BY LITHONIA LIGHTING OR EQUAL
MODEL: DSXB LED (D-SERIES LED BOLLARD 8'DIA.X42" HGT.) OR



B bike rack

(TOTAL OF 1-CONDITIONS)
2 7/8" O.D. STEEL TUBE BIKE RACK
MANUFACTURED BY DUMOR SITE FURNISHING • P.O. BOX 142 MIFFINTOWN, PA 17059 • TOLL FREE 800-598-4018 • WWW.DUMOR.COM

MODEL 125-30 • BLACK • 5 FOOT LONG OR EQUAL



C 6' wide park bench seat

6' WIDE DOUGLAS FIR BENCH SEAT BY DUMOR, INC. MODEL NO. 34-60D (5-1) BLACK- POLYESTER POWER-COATED FINISH FRAME OR EQUAL



D pond fountain



J pedestrian trail way signage



I meandering pedestrian trail way

5' WIDE MEANDERING WALK



H decorative pole and light



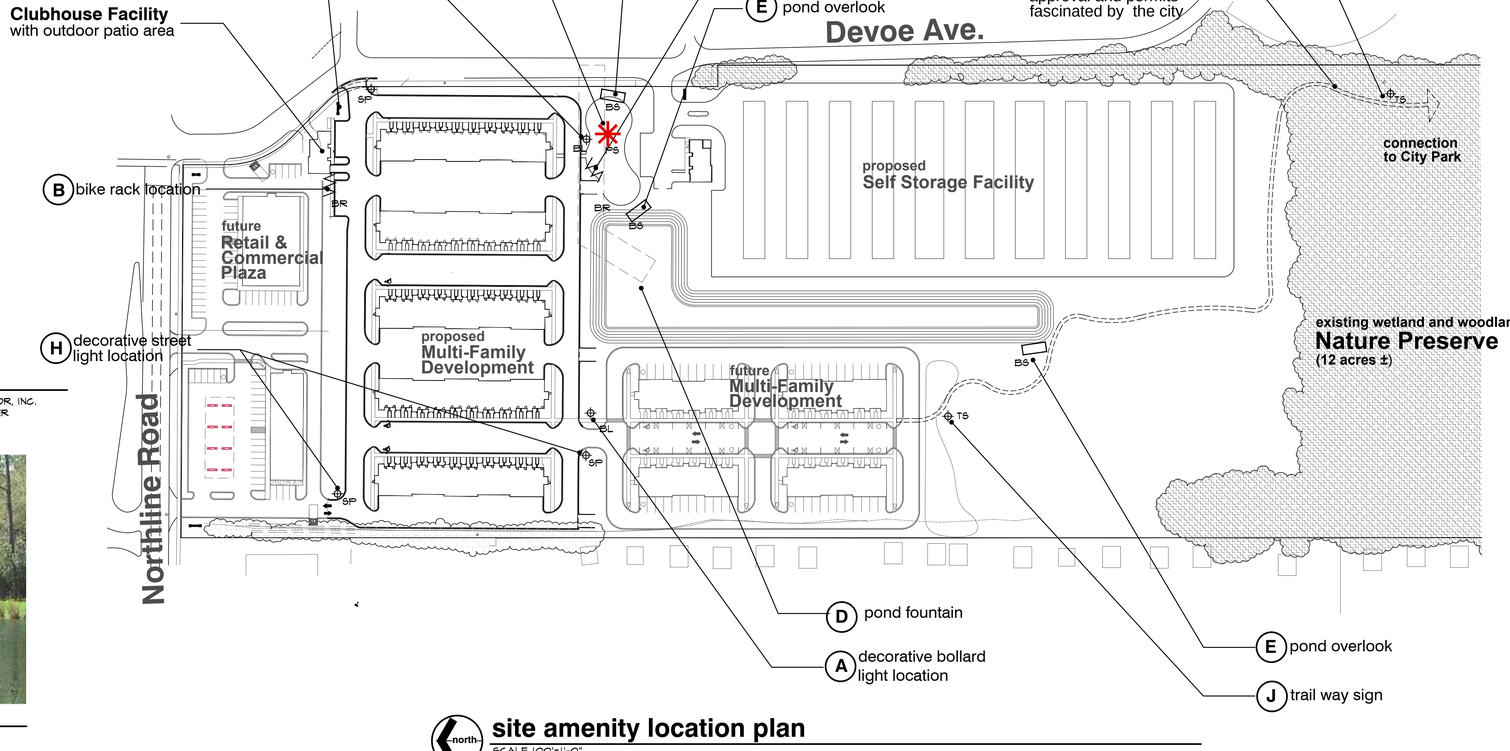
G swing



F playscape



E pond overlook



site amenity location plan

SCALE 100'=1'-0"

- SP DECORATIVE POLE & LIGHT FIXTURE
- GF PLAYSCAPE AND SWING
- BR BIKE RACK
- BS BENCH SEAT
- BL BOLLARD LIGHT FIXTURE
- PS PET WASTE STATION
- TS TRAIL WAY SIGN

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fax. (248) 557-5416

seal:

STATE OF MICHIGAN — FELINO A. PASCUAL — LANDSCAPE ARCHITECT — NO. 1533

client:

BACALL DEVELOPMENT
30407 West 13-Mile Road
Farmington Hills, Michigan 48334
ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

AMENITY FEATURE REFERENCE PLAN

job no./issue/revision date:

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LS25.097.10	REVIEW	10/20/2025
LS25.097.10	SPA	10/28/2025
LS26.078.05	SPA	5/26/2026
LS26.078.08	SPA	8/5/2026

drawn by: JP
checked by: FP
date: 5-15-2025

notice:

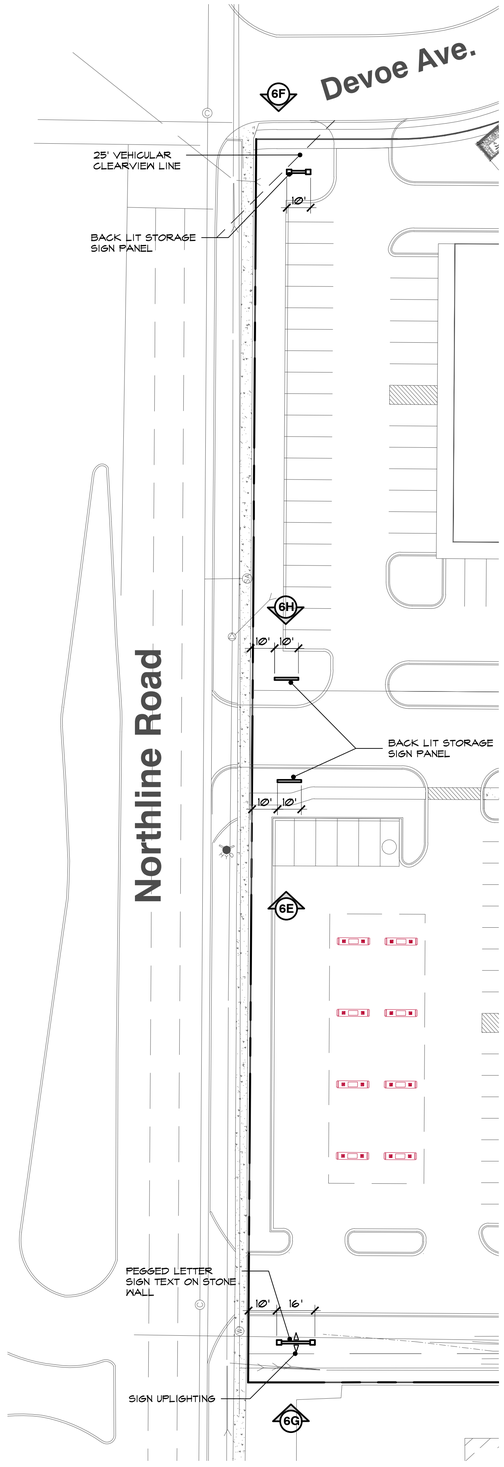
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3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 For free location of public utility lines

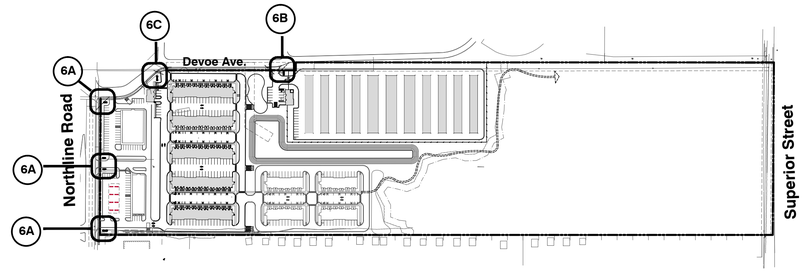
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project no: LS26.078.05

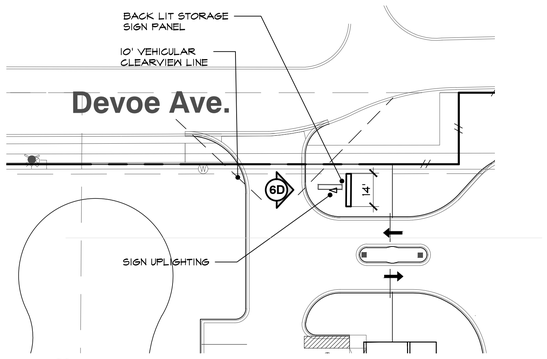
sheet no: LS-5 of 6



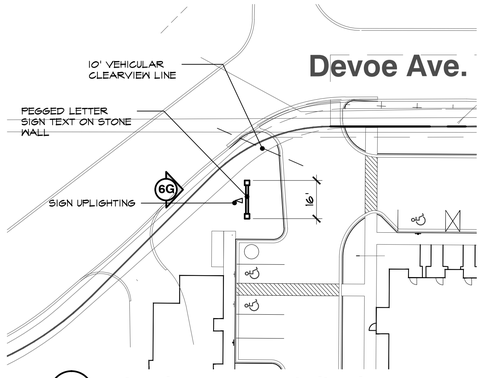
6A **entry sign monument site plan**
SCALE: 30'=1' - 0"



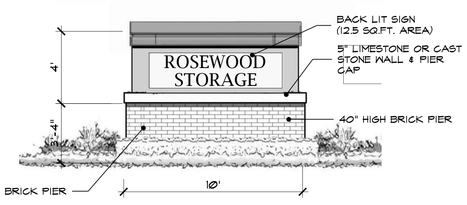
key reference location map
NO SCALE



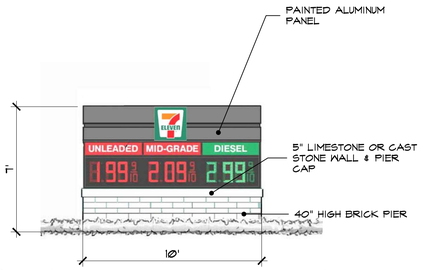
6B **entry sign monument site plan**
SCALE: 30'=1' - 0"



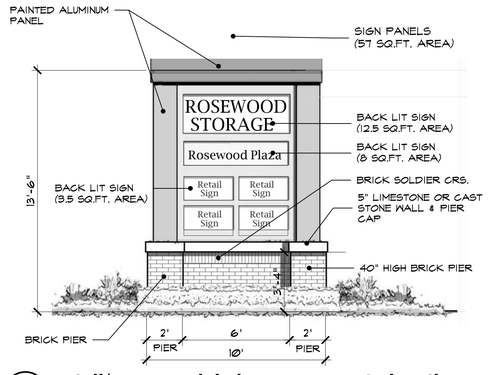
6C **entry sign monument site plan**
SCALE: 30'=1' - 0"



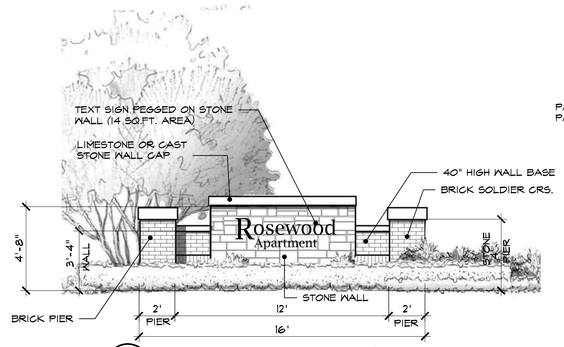
6D **storage sign monument elevation**
SCALE: 1/4" =1' - 0" (2-LOCATIONS)



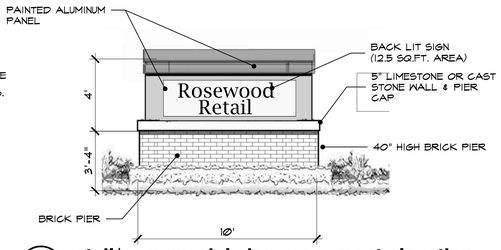
6E **fueling station sign monument elevation**
SCALE: 1/4" =1' - 0"



6F **retail/commercial sign monument elevation**
SCALE: 1/4" =1' - 0"



6G **entry sign monument elevation**
SCALE: 1/4" =1' - 0" (2-LOCATIONS)



6H **retail/commercial sign monument elevation**
SCALE: 1/4" =1' - 0"

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seal:

STATE OF MICHIGAN
FELINO A. PASCUAL
LANDSCAPE ARCHITECT
No. 33
REGISTERED LANDSCAPE ARCHITECT

client:

BACALL DEVELOPMENT
30407 West 13-Mile Road
Farmington Hills, Michigan 48334
ph. 248-538-7500

project:

ROSEWOOD DEVELOPMENT

project location:

City of Southgate, Michigan

Northline Road

sheet title:

ENTRANCE & SIGN ELEVATION PLAN

job no./issue/revision date:

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LS26.078.05	SPA	5/26/2026
LS26.078.08	SPA	8/5/2026

drawn by: JP

checked by: FP

date: 5-15-2025

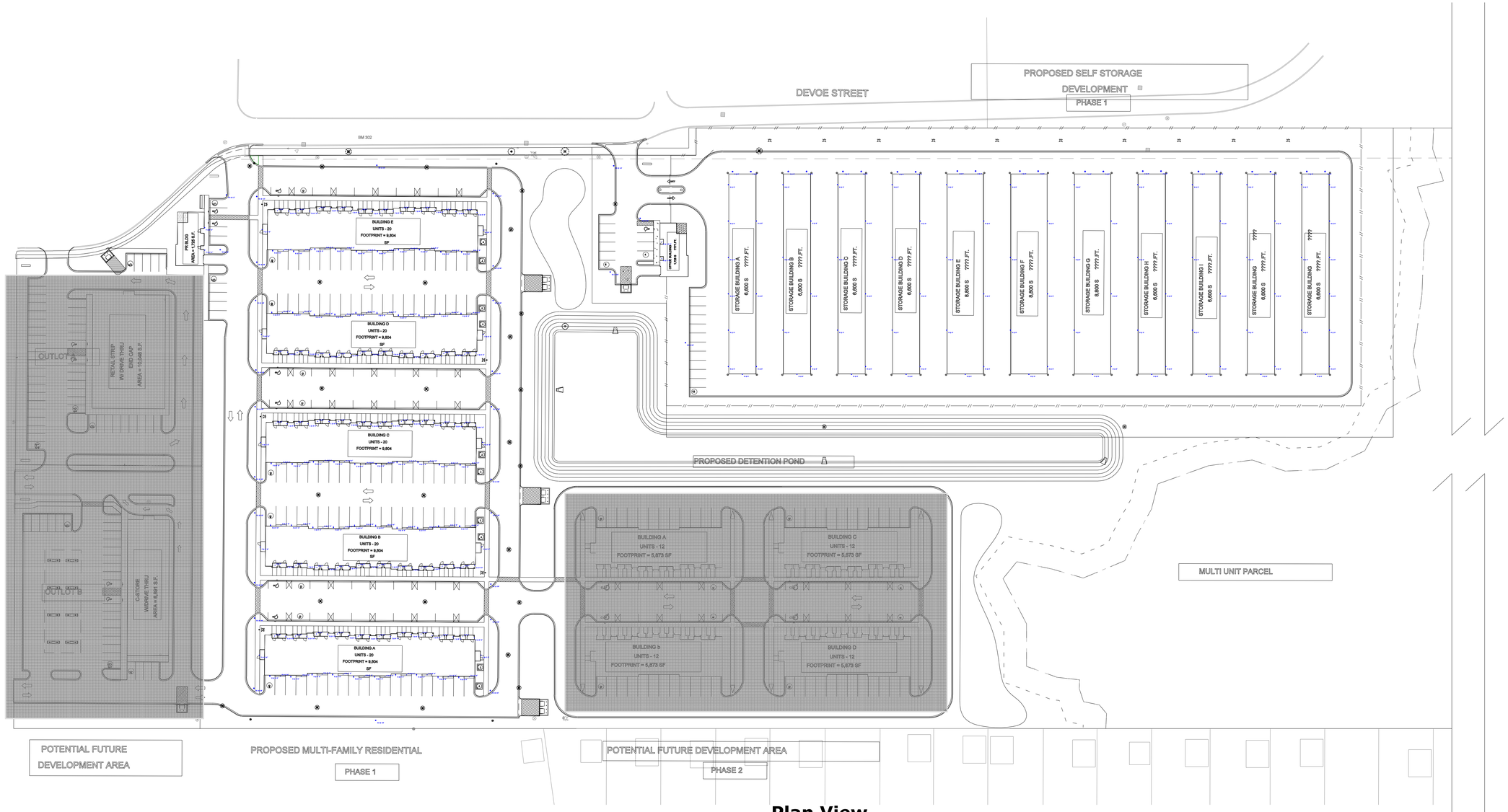
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project no: LS26.078.05

sheet no: **LS-6 of 6**



Plan View

Scale - 1" = 60ft

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp	LLF	Wattage
	S1	23	Holophane	PUCL3 P70 30K FC5 FRGL	Taft LED Post-Top Full Cutoff Lantern 100W 3000 series CCT Type 5 distribution zero uplight 10% Frosted tempered glass lens No HSS	7113	0.9	97.04
	S2	2	Holophane	PUCL3 P20 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 50W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	4344	0.9	48.15 69
	S3	3	Holophane	PUCL3 P05 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 30W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	2731	0.9	29.91 97
	C	50	WAC Lighting	WS-W68913-GH	Farmhouse Outdoor Wall Sconce, 3000K	198	0.9	12.23 45
	D	102	Juno Lighting	WF4 SWW5 90CRI _ 3000K	5CCT 4in Flat Wafer _ 3000K	677	0.9	8.9
	E	50	VISUAL LIGHTING	GLO1171	Portola 26" Lantern	879	0.9	9.5
	F	12	VISUAL LIGHTING	GLO1141	Portola Small Lantern, 10.5"	879	0.9	9.5
	G	100	WAC LIGHTING	WL-LED100-C-WT	Endurance Step Light, 3000K	271	0.9	3.9
	H	83	Lithonia Lighting	ARC2 LED P2 30K	ARC2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K	2250	0.9	16.12 28
	J	22	Spectrum Lighting	WD1611GV-15L-35K-EX-TF2-MWI	Nom. 16" Diam x 12" H, Warehouse Dome	1091	0.9	10

General Note

1. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2019. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note

THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note

FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Drawing Note

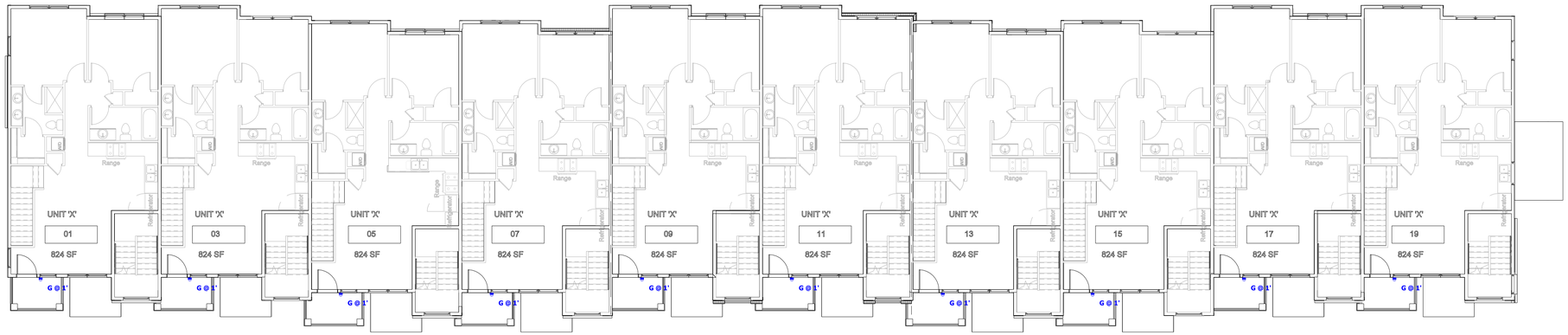
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

BACALL SOUTHGATE PROJECT
PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

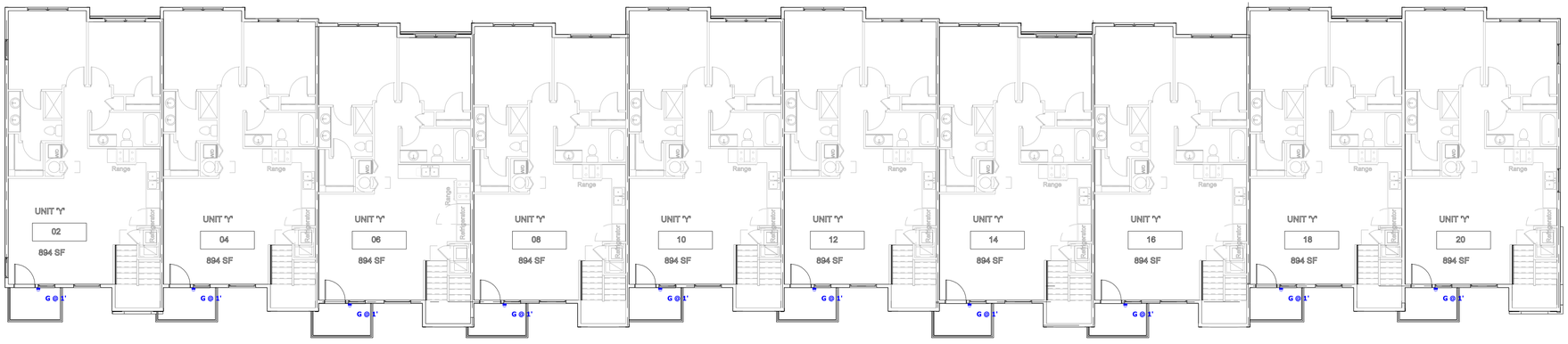
Designer
KS
Date
08/05/2026
Scale
Not to Scale
Drawing No.
#26-58946_V4



SECOND FLOOR

Plan View

Scale - 1" = 10ft



THIRD FLOOR

Plan View

Scale - 1" = 10ft

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp	LLF	Wattage
	S1	23	Holophane	PUCL3 P70 30K FC5 FRGL	Taft LED Post-Top Full Cutoff Lantern 100W 3000 series CCT Type 5 distribution zero uplight 10% Frosted tempered glass lens No HSS	7113	0.9	97.04
	S2	2	Holophane	PUCL3 P20 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 50W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	4344	0.9	48.15 69
	S3	3	Holophane	PUCL3 P05 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 30W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	2731	0.9	29.91 97
	C	50	WAC Lighting	WS-W68913-GH	Farmhouse Outdoor Wall Sconce, 3000K	198	0.9	12.23 45
	D	102	Juno Lighting	WF4 SWW5 90CRI _ 3000K	5CCT 4in Flat Wafer _ 3000K	677	0.9	8.9
	E	50	VISUAL LIGHTING	GLO1171	Portola 26" Lantern	879	0.9	9.5
	F	12	VISUAL LIGHTING	GLO1141	Portola Small Lantern, 10.5"	879	0.9	9.5
	G	100	WAC LIGHTING	WL-LED100-C-WT	Endurance Step Light, 3000K	271	0.9	3.9
	H	83	Lithonia Lighting	ARC2 LED P2 30K	ARC2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K	2250	0.9	16.12 28
	J	22	Spectrum Lighting	WD1611GV-15L-35K-EX-TF2-MWI	Nom. 16" Diam x 12" H, Warehouse Dome	1091	0.9	10

General Note

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Alternates Note

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Ordering Note

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Drawing Note

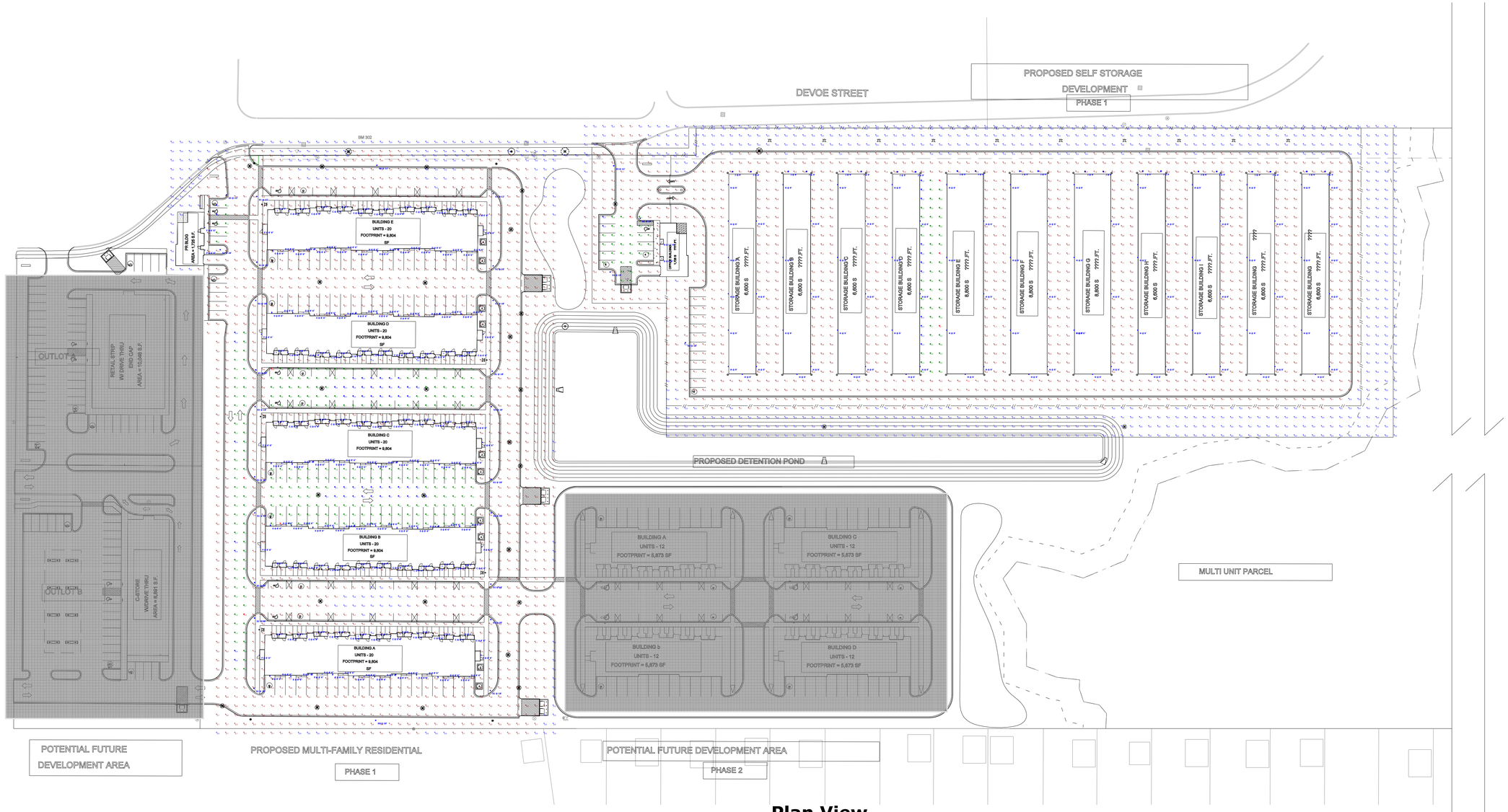
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BACALL SOUTHGATE PROJECT
PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
KS
Date
08/05/2026
Scale
Not to Scale
Drawing No.
#26-58946_V4



Plan View

Scale - 1" = 60ft

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp	LLF	Wattage
	S1	23	Holophane	PUCL3 P70 30K FC5 FRGL	Taft LED Post-Top Full Cutoff Lantern 100W 3000 series CCT Type 5 distribution zero uplight 10% Frosted tempered glass lens No HSS	7113	0.9	97.04
	S2	2	Holophane	PUCL3 P20 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 50W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	4344	0.9	48.15 69
	S3	3	Holophane	PUCL3 P05 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 30W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	2731	0.9	29.91 97
	C	50	WAC Lighting	WS-W68913-GH	Farmhouse Outdoor Wall Sconce, 3000K	198	0.9	12.23 45
	D	102	Juno Lighting	WF4 SWW5 90CRI _ 3000K	5CCT 4in Flat Wafer _ 3000K	677	0.9	8.9
	E	50	VISUAL LIGHTING	GLO1171	Portola 26" Lantern	879	0.9	9.5
	F	12	VISUAL LIGHTING	GLO1141	Portola Small Lantern, 10.5"	879	0.9	9.5
	G	100	WAC LIGHTING	WL-LED100-C-WT	Endurance Step Light, 3000K	271	0.9	3.9
	H	83	Lithonia Lighting	ARC2 LED P2 30K	ARC2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K	2250	0.9	16.12 28
	J	22	Spectrum Lighting	WD1611GV-15L-35K-EX-TF2-MWI	Nom. 16" Diam x 12" H, Warehouse Dome	1091	0.9	10

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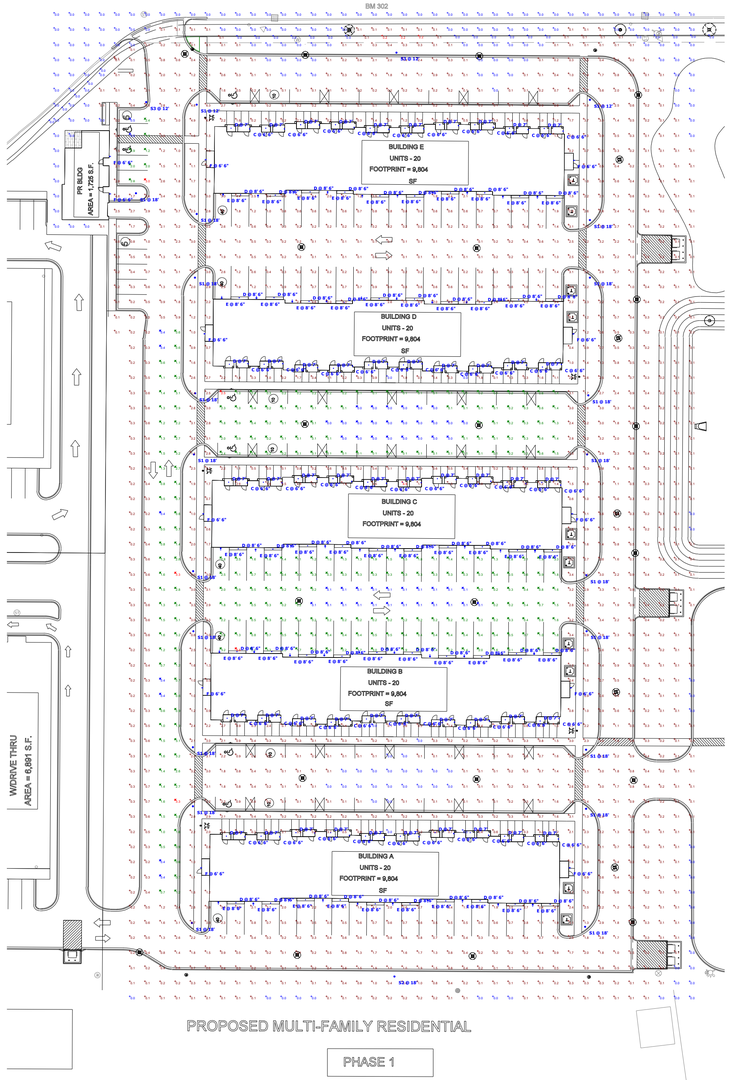
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Designer
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Plan View

Scale - 1" = 50ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Devoe Street Property Line	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
Multi-Family Drive Lane Typ.	✳	1.5 fc	3.3 fc	0.4 fc	8.3:1	3.8:1
Multi-Family Front Entry Parking Typ.	✳	0.3 fc	2.5 fc	0.0 fc	N/A	N/A
Multi-Family Garage Parking Typ.	✳	0.9 fc	4.8 fc	0.1 fc	48.0:1	9.0:1
Multi-Family Leasing Office Parking	✳	1.7 fc	3.0 fc	0.5 fc	6.0:1	3.4:1
Overall Multi-Family Residential	+	0.9 fc	6.5 fc	0.0 fc	N/A	N/A
Overall Self Storage	+	0.8 fc	7.5 fc	0.0 fc	N/A	N/A
Self Storage Aisle Typ.	✳	1.5 fc	5.1 fc	0.2 fc	25.5:1	7.5:1
Self Storage Office Parking	✳	1.4 fc	3.1 fc	0.3 fc	10.3:1	4.7:1

Schedule

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◎	S1	23	Holophane	PUCL3 P70 30K FC5 FRGL	Taft LED Post-Top Full Cutoff Lantern 100W 3000 series CCT Type 5 distribution zero uplight 10% Frosted tempered glass lens No HSS	7113	0.9	97.04
◎	S2	2	Holophane	PUCL3 P20 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 50W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	4344	0.9	48.15 69
◎	S3	3	Holophane	PUCL3 P05 30K FC3 CLGL HSS	Taft LED Post-Top Full Cutoff Lantern 30W 3000 series CCT Type 3 distribution zero uplight Clear tempered glass lens House side shield	2731	0.9	29.91 97
⌂	C	50	WAC Lighting	WS-W68913-GH	Farmhouse Outdoor Wall Sconce, 3000K	198	0.9	12.23 45
◯	D	102	Juno Lighting	WF4 SWW5 90CRI _ 3000K	5CCT 4in Flat Wafer _ 3000K	677	0.9	8.9
⌂	E	50	VISUAL LIGHTING	GLO1171	Portola 26" Lantern	879	0.9	9.5
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⌂	G	100	WAC LIGHTING	WL-LED100-C-WT	Endurance Step Light, 3000K	271	0.9	3.9
⌂	H	83	Lithonia Lighting	ARC2 LED P2 30K	ARC2 LED WITH P2 - PERFORMANCE PACKAGE, 3000K	2250	0.9	16.12 28
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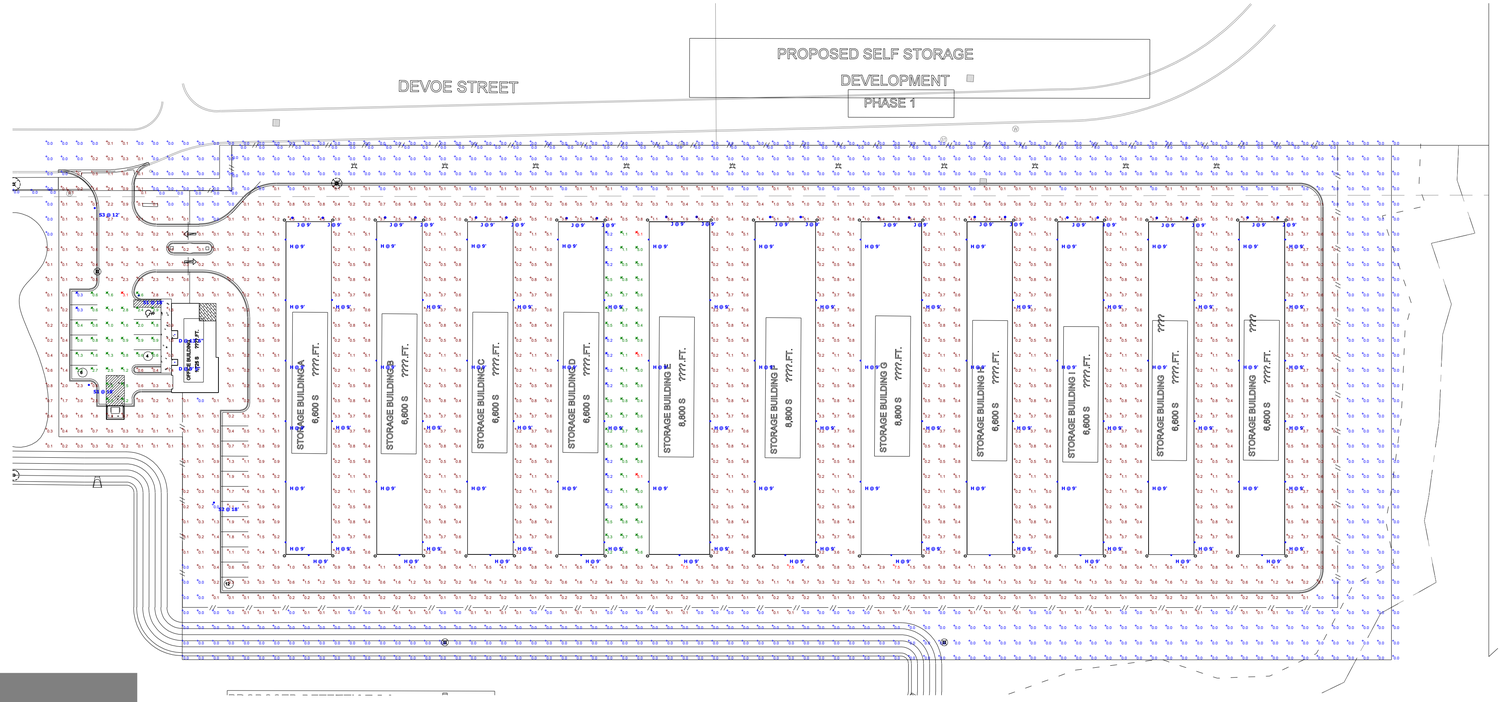
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Plan View - A

Scale - 1" = 50ft

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BACALL SOUTHGATE PROJECT
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HOLOPHANE
LEADERS IN LIGHTING SOLUTIONS

Catalog Number	Type
Notes	

PUCL3
Utility Taft Series Luminaire Full Cutoff LED3



Mechanical
- Heavy grade A360 cast aluminum (<1% copper)
- Tool-less access with a spring-loaded latch
- Hidden hinge door allowing the door to swing open and remain open
- Optional internal or external NEMA twist lock photocontrol receptacle. Housing contains a tempered glass window to allow light to reach the cell for internal versions.
- Mount to slip-fitter that will accept 3" high by 2-7/8" to 3-1/8" O.D. pole tenon
- Die-cast aluminum cover contains stainless steel hinge which secures entry the LED optical chamber
- Polyester power-coat paint to ensure maximum durability
- Rigorous multi-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 per ASTM D1654 after over 5,000 hours exposure to salt fog chamber (operated per ASTM B117) on standard anti RAL finish options.
- RAL (RALcoat)/DICKI paint colors are Super Durable Corrosion Resistant, 80% gloss.

Electrical
- Surge protection meets ANSI/IEEE C62.41.2 10kV/10kA.
- Standard UV resistance per ANSI C136.2-2015.
- Quick disconnect connectors for ease of installation and maintenance.
- Three-pole terminal block is standard, with optional prewired leads for ease of installation
- LED electronic 0-10v dimmable driver meets maximum total harmonic distortion (THD) of 20%, >0.90 Power Factor and is ROHS-compliant.
- Minimum operating temperature is -40°C.
- Electronic driver has an estimated minimum life of 100,000 hours @ 25°C.

Optical
- IP65-rated optical compartment
- LED circuit board located in the top cover
- Asymmetric or Symmetric zero uplight distributions
- 2700K, 3000K and 4000K CCT
- 70CRI Standard

Control Options
- Field Adjustable Output (AO) module - Onboard device that adjusts the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8
- eLight by OSRAM outdoor fixture-mounted motion and photo sensor, features a dual radio to communicate wirelessly to other eLight Air enabled devices and the eLight Gateway, on/off control in response to daylight and by motion – FLDCSA
- Long life photocontrol, 20 years – PCCL, PC4 and P40 with DTL

- 7 pin photocontrol receptacle internally (PR7) or externally (PER7) mounted in place of the finial
- DTL DIN dedicated bracket with external mounted antenna - DMBRA

Manufacturing
- Manufactured in Crawfordsville, Indiana, ARRA compliant
- 100% electrical testing on all luminaires before shipment
- ISO 9001:2015 registered. Minimum experience in manufacturing LED-based products.

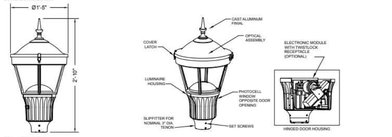
Certification and Standards
- Luminaire shall be UL 1598 - Wet Location Safety Listing
- Suitable for operation in an ambient temperature -40°C (40°F) to 40°C (104°F) per UL certification for performance packages P05 thru P10 Type 2, 2 & 5 no glass, P05 thru P40 Type 2, 3, 4 & 5 clear glass and P05 thru P40 Type 1 & 5 frosted glass
- Suitable for operation in an ambient temperature -40°C (40°F) to 25°C (95°F) per UL certification for performance packages P10R Type 45 no glass, P10R Type 2, 3, 4 & 5 clear glass and P10R Type 1 & 5 frosted glass
- LM79 compliant
- 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 to confirm which versions are qualified.

Government Procurement
BAA - Buy American Act: This product is available in a version that qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS.
BABA - Build America Buy America: This product is available in a version that qualifies as a domestic end product under the terms of the definitions of the Build America, Buy America Act. Products manufactured by C.I.R. Part 184 and other agency implementing regulations, including Department of Transportation regulations.
Please refer to www.acuitybrands.com/resources/buy-american for additional information.

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

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.

DIMENSIONAL DATA



© 2023-2026 Acuity Brands Lighting, Inc. All rights reserved. Rev. 05/06/26 Specifications subject to change without notice.

WAC LIGHTING

Fixture Type:	
Catalog Number:	
Project:	
Location:	

Farmhouse
Outdoor Wall Sconce 3000K

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
WS-W68913 13"	3000K	BK-Black GM-Graphite	12W	900	198

Example: **WS-W68913-GH**
For custom requests please contact customs@waclighting.com

DESCRIPTION
A romantic, rain-against-the-window appearance that sparkles when illuminated.

FEATURES
- Driver concealed within the fixture
- 5 year warranty

SPECIFICATIONS

Color Temp:	3000K
Input:	120-277V,50/60Hz
CRI	90
Dimming:	ELV: 100-10% , 0-10V: 100-5% , TRIAC: 100-10%
Rated Life:	64,000 Hours
Standards:	ETL, cETL, ADA, Wet Location Listed
Construction	Aluminum body with seeded hammered glass

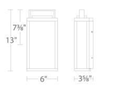
REPLACEMENT PARTS
RPL-CLA-GB913 - Glass for WS-W68913



FINISHES:



LINE DRAWING



WS-W68913

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. May 2026

JUNO

Juno Wafer™ LED Downlight Series
4", 6" & 8" LED Ultra-Thin Wafer Switchable Downlight
5CCT Switchable White Downlight

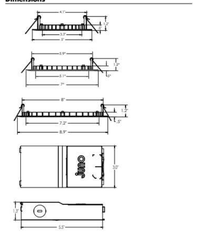
WF4/WF6/WF8 SWW5 Series



Brushed Nickel
Oil Rubbed Bronze
Matte Black

Project:	
Fixture Type:	
Location:	
Contact/Phone:	

Dimensions



Product Features
The 4",6"& 8" round smooth with 3CCT Switchable White technology provide high-quality light output and efficiency featuring a switch for easy color temperature adjustment to choose between 2700K, 3000K, 3500K, 4000K, or 5000K - while eliminating the need for recessed housings.
- Round smooth lens trim designed to distribute precise even illumination for general purpose areas
- Cordless - no can required, expands easy to install and less labor
- 5 selectable color temperatures to choose with a switch ranging from warm (2700K) to daylight (5000K) allowing customization for endless applications

Applications
- Residential and light commercial applications including multi-family, hospitality, assisted living, dormitories and other multi-level construction
- Shallow slim profile allows for easy remodel or new construction insulated and drop ceiling installations
- What rated and airtight: perfect for showers, bathrooms, and outdoor soffits

Performance

Delivered Lumens	700L (WF4), 950L (WF6) and 1640L (WF8) Nominal at 3000K
LED Color Temperature	Switchable White (27K, 30K, 35K, 40K, 50K) Default set at 3000K
CRI	90+
Voltage	Dedicated 120V
Dimming	Dimmable to 10% with triac (120v) or 0-10v (MVOLT) dimmers

For a list of compatible dimmers see NACOUWFBSDWU

Specifications

	WF4	WF6	WF8
Aperture:	3.3"	5.1"	7.2"
Hole Cutout Size:	4.25"	6.25"	8.25"
Overlap Trim:	.5"	.7"	8.9"
Height:	1.2"	1.2"	1.2"

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Light Commercial & Residential

VISUAL COMFORT & CO.

GLO1171ANBZ: Large Arm Lantern



Collection: Portola

UPC #: 785952140512

Finish: Antique Bronze (ANBZ)

Dimensions:

Width:	10.62"	**Extends:**	13"
Height:	26.0"	**Wire:**	8" (color Black/White)
		Mounting Proc.:	Screw(s)
		Connection:	Mounted To Box

Bulbs:
1 - Medium A19 60.0w Max. 120V Not included

Features:
- Easily converts to LED with optional replacement lamps
- Meets Title 24 energy efficiency standards
- Title 24 compliant if used with Joint Appendix (JA8) approved light bulbs listed in the California Energy Commission Appliance database.

Material List:
1 Body - Aluminum - Antique Bronze

Safety Listing:
Safety Listed for Wet Locations

Instruction Sheets:
Trilingual (English, Spanish, and French) (GLO1171 GLO1191)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Etched / White Inside	4		9.38	12.25						

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	7.0	5.0	0.75		14.12	11.88

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	GLO1171ANBZ	1	785952140512	15.75	13.19	20.87	2.51	9.0	0	No
Master Pack	GLO1171ANBZ	0	10785952142719							No

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VISUAL COMFORT & CO.

GLO1141TXB: Small Lantern



Collection: Portola

UPC #: 785952140503

Finish: Textured Black (TXB)

Dimensions:

Width:	6.62"	**Extends:**	7.375"
Height:	10.5"	**Wire:**	8" (color Black/White)
		Mounting Proc.:	Screw(s)
		Connection:	Mounted To Box

Bulbs:
1 - Medium A19 60.0w Max. 120V Not Included

Features:
- Easily converts to LED with optional replacement lamps
- Meets Title 24 energy efficiency standards
- Title 24 compliant if used with Joint Appendix (JA8) approved light bulbs listed in the California Energy Commission Appliance database.

Material List:
1 Body - Aluminum - Textured Black

Safety Listing:
Safety Listed for Wet Locations

Instruction Sheets:
Trilingual (English, Spanish, and French) (GLO1141 GLO1151 GLO1161 GLO1181)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Etched / White Inside	4		5.5	6.75						

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	5.0	5.0	0.75		4.12	6.38

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	GLO1141TXB	1	785952140503	16.12	17.33	26.97	4.9	16.2	0	Yes
Master Pack	GLO1141TXB	0	10785952140800							No

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RLM CLASSICS

WAREHOUSE DOME
DAMP / WET LOCATION
CLASSIC SHAPES

PROJECT:
QUANTITY: TYPE:







SERIES	LUMENS*	CCT	DRIVER / DIMMING*	ACCESSORIES*	MOUNTING*	INTERIOR*	FINISH*	WET KIT
WD18GV WD18GV3 WD27GV3	10L 1000 LM 27L 2700 LM 50L 5000 LM	3K CRI 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	EE Electronic Driver, 120V/277V 10VDIM Yes, 0-10V, 120V/277V (no triac, 100%)	TFD 14" Frosted Dome TGD 14" Frame Only Guard WG2 14" Frosted Wire WG3 14" Frosted Wire Guard FLD 14" Frosted Flat FGD 14" Flat Wire Guard	WALL MOUNT WM Wall Mount Direct CPA Straight Arm PA Mounting Arm Style CEILING MOUNT HA Hang Straight HC Hang Straight 3 Thread PM Rigid Pendant Mount CM Canopy Direct Mount CA Cord Adapter EMCS 10ft Large Drive Canopy EM EMCM 10ft Canopy EM EMEN 7ft Remote with Enclosure	MWH Matte White TBD Custom Color PBD Platinum Color (Interior)	MBK Matte Black MBZ Platinum Bronze PT Platinum Silver CC Custom Color	WLKA Wet Location Kit

EXAMPLE: WD18GV10L30KEXT72/WMSWMWCH

NOTES:
1 External Access Lumens at 30K. 2 Contact Factory for Additional Options. B Enclosure, Wire Guard Required. - Chooses One Option. ★ Standard Enclosure
★ Reference Mounting Page for Available Arm Options ★ Standard Finishes. ★ See Mounting Page for Available Arm Options ★ Quantity Length in Inches. See Mounting Page for Available Lengths.
★ Reference Color Sheet Located on Product Webpage for Full List of Available Colors ★ Standard Finishes.

ILLUMINATING WHAT'S POSSIBLE.

Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products. as soon as

ARC2 LED
Architectural Wall Luminaire

VOLT 20

Catalog Number	
Notes	
Type	

Note: Actual performance may differ as a result of end-user environment and application.

Introduction
The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.
ARC2 delivers up to 6,500 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. It offers integrated emergency battery backup options, including an 8W cold temperature option, making it suitable for pedestrian scale applications in any environment.

Specifications
Depth (D1): 9.25"
Depth (D2): 7.5"
Height: 5"
Width: 14"
Weight: (without options) 11 lbs



ARC LED Family Overview

Luminaire	Standard ER, 0°C	Cold ER, -20°C	Approximate Lumens (4000K)				
			P1	P2	P3	P4	P5
ARC1 LED	4W	--	1,500	2,000	3,000	--	--
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

Ordering Information **EXAMPLE:** ARC2 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options	Finish
ARC2 LED	P1 1,500 Lumens P2 2,000 Lumens P3 3,000 Lumens P4 4,000 Lumens P5 6,500 Lumens	30K 3000K 40K 4000K 50K 5000K	MVOLT 347	E4WH Emergency battery backup, CEC compliant (4W, 0°C min) E8WC Emergency battery backup, CEC compliant (8W, -20°C min) PE Button type photocell for dusk-to-dawn operation DMG 0-10V dimming wires pulled outside fixture (for use with an external control, sold separately) SPDMOV 40V surge protection FAO Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100%* LDS18 18" Fixture leads	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories
Ordered and shipped separately.
WSBW 308BD U Surface - mounted back box (specify finish)

NOTES
1 SDCN not available with E4WH, E8WC and SPDMOV.
2 FAO not available with DMG.

LITHONIA LIGHTING COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

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ARC2 LED
Rev. 08/27/24

ENDURANCE STEP LIGHT
WL-LED100

WAC

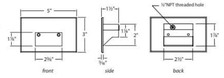
Fixture Type:	
Catalog Number:	
Project:	
Location:	



PRODUCT DESCRIPTION
With a sleek profile and no visible hardware, Endurance Step and Wall Lights are designed to seamlessly blend into any architectural environment. These luminaries deliver enhanced energy efficiency and optimized light output to effectively illuminate stairs, walls, and walkways with little to no glare.

Suitable for both indoor and outdoor applications, the factory-sealed IP67 light engine allows the fixture to withstand harsh outdoor environments.

FEATURES
- Direct wiring, no driver needed
- Low profile, flush to wall aesthetics with no visible hardware
- IP67 rated fully potted/sealed light engine
- 54,000 hour rated life
- Balanced lighting, free of shadows with minimum glare



SPECIFICATIONS
Construction: Die-cast aluminum, brass, or 316 marine-grade cast stainless steel
Power: Direct wiring, no remote driver needed. Input voltage: 120V 50/60Hz
Light Source: Integrated LED Module, CRI 90+ Optional color lenses. Total power consumption of 3.5W
Mounting: Fits into 2" x 4" J-Box with minimum inside dimensions of 1.5" x 2.5" x 1.75" Includes bracket for J-Box mount.
Dimming: 100-10% ELV
Operating Temperature: 40°F to +122°F (-40°C to +50°C)
Standards: IP67, ETL & cETL Listed for wet locations Title 24 JA8-2016 Compliant.

ORDER NUMBER

120V	Color Temperature		Lumens	Finish	
WL-LED100 120V	27	Warm 2700K	65	BK	Black on Aluminum
	30	White 3000K		BNY	Brushed Nickel on Aluminum
	AM	Amber 610nm		BZ	Bronze on Aluminum
	RD	Red 640nm		GH	Graphite on Aluminum
	BL	Blue 450nm		SS	Stainless Steel
WL-LED100 120V	27	Warm 2700K	65	WT	White on Aluminum
	30	White 3000K		BBR	Bronze on brass
	AM	Amber 610nm			

*Brushed Nickel Finish is for interior use only

Example: **WL-LED100-30-SS**

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

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44 Harbor Park Drive
Port Washington, NY 11050

South East Manufacturing Facility
1600 Distribution Ct
Lithia Springs, GA 30122

Central Manufacturing Facility
1700 South J Elmer Freeway, Ste 100
Cedar Hill,TX 75104

West Manufacturing Facility
1750 S Archibald Ave
Ontario, CA 91761

WAC Lighting retains the right to modify the design of our products at any time as part of the company's continuous improvement program. OCT 2025

General Note
1. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2019. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Mounting Height Note
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

BACALL SOUTHGATE PROJECT
PHOTOMETRIC PLAN
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
KS
Date
08/05/2026
Scale
Not to Scale
Drawing No.
#26-58946_V4