



BC HOUSING & OKANAGAN METIS & ABORIGINAL HOUSING SOCIETY (OMAHS) KNELLER ROAD RENTAL APARTMENT PROJECT

**DEVELOPMENT PERMIT APPLICATION
Design Rationale**

December 04 , 2023

INTRODUCTION

The Okanagan Métis & Aboriginal Housing Society (OMAHS) is a non-profit society incorporated in August of 1986. The Society's mandate is to develop and maintain affordable and comfortable rental housing units, integrated within the urban communities of the Okanagan. The major objective is to make affordable rental housing available for all households (native and non-native people) of low and moderate income. OMAHS wishes to construct a new 48-unit affordable housing project and the Society expects the same profile of tenants on this new proposed project and have noted that a high percentage of these tenants do not own vehicles.

SITE

As part of the realignment of Kneller Road, completed during the construction of the OMAHS owned Nissen Crossing project, the remaining lots on the east side of the road (235, 239, and 175 Kneller Road) were cleared and ear-marked in 2019 for two BC Housing projects. The OMAHS Development Team led by Dan Scuka from Scuka Construction, working in conjunction with BC Housing and the Kelowna Women's Shelter (KWS), submitted a Subdivision Application in early 2022 addressing the overall lot consolidation and subdivision into 2 properties: the northern lot for the KWS project, the southern lot for the OMAHS project. A Rezoning Application was submitted at the same time proposing a change from RU-1 zoning to CA1r for the KWS project and MF3r for the OMAHS project.

BUILDING DESIGN

The goal of The Society and design team was to have the new apartment building look like it 'belonged' on the street by looking very similar to Nissen Crossing. As such the material palette for the new project directly references Nissen Crossing with a mix of blue cement panel and light lap siding cladding while window sizes and layouts were matched. The minor 'frames' (inverted U-shaped projections) both articulate the façade and also help to create similarities between the projects. However, the new project differs from its neighbour with larger, more expressive corner 'wrap-around' decks and major frames which articulate the building corners and also provide a cornice at the level 5 floor edge. The fifth storey setback provides a relief to the scale of the building wall on Kneller Road and provides an opportunity for a long linear roofline on the top floor. The south stair goes up to the roof per the Society's request, for improved maintenance access and provides a vertical element on the building's east elevation.

LANDSCAPE & SHARED OUTDOOR AMENITIES

The project site design was predicated on a goal to be a 'good neighbour' by both physically improving and socially benefiting the adjacent OMAHS owned townhouse complex at 115 Kneller Road. The proposed 'off-site project' design works does this by revising the existing entry & garbage area into a beautiful parking area with landscaping while also replacing a tired play area and sport court with a new shared amenity. The proposed shared garbage enclosure allows for the existing townhouse garbage and play area to be redesigned into a shared outdoor amenity consisting of a turf area and dog-run. The northeast corner of the apartment site is also proposed to be shared amenity play area which would serve both the townhouse and the apartment building. The apartment building parkade ramp has been located on the townhouse property to both allow for more landscape area on the apartment project site while also reducing the amount of let-downs and vehicle entry points off Kneller Road.

Please note that the design team has calculated the townhouse complex under the 2022 zoning bylaw and determined that the total amenity space required to be provided to be accessible to all residents is approx. 112.0sm and excluding the existing sport court and play area the total provided is 1,540sm. The area of the proposed dog run will add another approx. 64sm to that total.

PARKING VARIANCE

This OMAHS project is providing the same type of housing as the adjacent Nissen Crossing project completed in 2019. Based on the parking utilization on this adjacent property, we are seeking a parking variance to reduce the number of parking stalls from 62 to 43 stalls for the 48 units, providing only 72% of the required stalls. While this reduction may seem high, the Nissen Crossing Housing property only utilizes 28% of onsite parking. At its peak utilization, only 36% of the total stalls were being used.

The Project plans to have ground level surface parking and 1 level of semi-underground parkade to accommodate 48 units as the maximum of the building footprint. Per the table below the proposed parking bylaw requires the provision of 62 parking stalls whereas OMAHS is proposing to provide 43 stalls (combined total of on and off-site stalls) leaving a deficit of 17 stalls.

Table 1: Project Vehicle Parking Summary (from Zoning Summary table on drawing DP-A1.01)

NEW OMAHS APARTMENT BLDG. - VEHICLE PARKING SUMMARY				
	STUDIO UNITS	1 BEDROOM UNITS	2 BEDROOM UNITS	3 BEDROOM UNITS
REQUIRED SPACE SUMMARY	1 unit total	29 units total	15 units total	3 units total
SPACES REQUIRED PER UNIT	1.0 per unit min.	1.20 per unit min.	1.4 per unit min.	1.6 per unit min.
SPACES REQUIRED FOR UNITS	1.0	35.0	21.0	5.0
TOTAL SPACES REQUIRED FOR UNITS				62
VISITOR STALLS (MIN .014 PER DWELLING UNIT)				7
TOTAL SPACES REQUIRED PRE-REDUCTION				69
MF3r RENTAL SUBZONE REDUCTION (10% REDUCTION OUTSIDE OF URBAN CENTRE)				7
TOTAL SPACES REQUIRED				62
ACCESSIBLE SPACES REQUIRED				3
ACCESSIBLE VAN SPACES REQ'D	PROVIDED AS PART OF THE TOTAL SPACES REQUIRED			1
PROVIDED SPACES SUMMARY				
LEVEL P1 PARKADE	5	19	2	26
NISSEN CROSSING DEDICATED STALLS	16	0	0	16
TOWNHOUSE COMPLEX DEDICATED STALLS	0	0	1	1
TOTAL PROVIDED (BY SPACE TYPE)	21	19	3	
% OF SMALL CAR STALLS PROVIDED ON SITE	44% (MAX. PERMITTED 50%)			
TOTAL SPACES PROVIDED				43

ADJACENT OMAHS PROPERTIES

NISSEN CROSSING

OMAHS also owns Nissen Crossing, a 78-unit complex located directly to the west of the subject property. In 2020, OMAHS completed a survey over a few months by doing a vehicle count on random days and times and discovered that on average, 73% of the parking stalls remained unused. The breakdown was 66% unused in the parkade and 82% of the surface parking remained unused. Please see tables below and photos provided at the end of this rationale for more info.

Table 2: Nissen Crossing Parkade Parking Utilization Study 2020

Date	Time	# of Stalls Used	% of Stalls Used	# of Stalls Not Used	% of Stalls Not Used
25-Feb	6:00 PM	23	35%	42	65%
19-Apr	6:30 PM	20	31%	45	69%
25-May	6:00 PM	22	34%	43	66%
01-Jun	7:30PM	21	32%	44	68%
02-Jun	8:30 PM	22	34%	43	66%
03-Jun	12:00 AM	23	35%	42	65%
05-Jun	2:00 PM	20	31%	45	69%
06-Jun	12:00 AM	23	35%	42	65%
07-Jun	9:30 PM	22	34%	43	66%
TOTAL AVERAGE		22	34%	43	66%

Table 3: Nissen Crossing Surface Parking Lot Utilization Study 2020

Date	Time	# of Stalls Used	% of Stalls Used	# of Stalls Not Used	% of Stalls Not Used
25-Feb	1:00 AM	7	15%	41	85%
08-Apr	8:00 PM	7	15%	41	85%
15-Apr	8:00 PM	6	13%	42	88%
22-Apr	9:00 PM	8	17%	40	83%
29-Apr	8:30 PM	9	19%	39	81%
24-May	7:30 PM	11	23%	37	77%
05-Jun	6:00 PM	13	27%	35	73%
08-Jun	7:30AM	7	15%	41	85%
TOTAL AVERAGE		9	18%	40	82%

Table 4: Nissen Crossing Parking Utilization Study Totals 2020

TOTAL NUMBER OF STALLS PROVIDED*	113
TOTAL AVERAGE NUMBER OF STALLS USED	30
TOTAL AVERAGE % OF USED STALLS	27%
TOTAL AVERAGE NUMBER OF STALLS NOT USED	83
TOTAL AVERAGE % OF STALLS NOT USED	73%

A follow-up parking count was conducted daily for two weeks in November 2023, to confirm the previous study's findings. The tables below provide the updated data.

Table 5: Nissen Crossing Parkade Parking Utilization Study 2023

Date	Time	# of Stalls Used	% of Stalls Used	# of Stalls Not Used	% of Stalls Not Used
31-Oct	3:00 PM	16	25%	49	75%
02-Nov	11:30 AM	22	34%	43	66%
02-Nov	5:00 PM	22	34%	43	66%
03-Nov	7:00 AM	32	49%	33	51%
03-Nov	1:00 PM	24	34%	43	66%
06-Nov	6:30 AM	32	49%	33	51%
06-Nov	4:00 PM	21	32%	44	68%
07-Nov	5:45 AM	33	51%	32	49%
07-Nov	4:45 PM	22	34%	43	66%
09-Nov	6:45 AM	33	51%	32	49%
12-Nov	8:30 AM	30	45%	35	55%
TOTAL AVERAGE		26	40%	39	60%

Table 6: Nissen Crossing Surface Parking Lot Utilization Study 2023

Date	Time	# of Stalls Used	% of Stalls Used	# of Stalls Not Used	% of Stalls Not Used
31-Oct	3:00 PM	8	17%	40	83%
02-Nov	11:30 AM	7	15%	41	85%
02-Nov	5:00 PM	7	15%	41	85%
03-Nov	7:00 AM	5	10%	43	90%
03-Nov	1:00 PM	5	10%	39	90%
06-Nov	6:30 AM	6	13%	42	87%
06-Nov	4:00 PM	8	17%	40	83%
07-Nov	5:45 AM	4	8%	44	92%
07-Nov	4:45 PM	4	8%	44	92%
09-Nov	6:45 AM	5	10%	43	90%
12-Nov	8:30 AM	2	4%	46	96%
TOTAL AVERAGE		6	12%	42	88%

Table 7: Nissen Crossing Parking Utilization Study Totals 2023

TOTAL NUMBER OF STALLS PROVIDED*	113
TOTAL AVERAGE NUMBER OF STALLS USED	32
TOTAL AVERAGE % OF USED STALLS	28%
TOTAL AVERAGE NUMBER OF STALLS NOT USED	81
TOTAL AVERAGE % OF STALLS NOT USED	72%

Note: Currently 3 surface stalls are being used as public amenity areas and furnished with picnic tables, chairs, and removable gazebo.

The updated study shows that very little has changed over the years and that parking demand remains very low at Nissen Crossing. Due to the low demand over the past several years, the Society has repurposed some of its surface parking to accommodate outdoor gathering spots by providing picnic tables, chairs and a portable gazebo in three of its unused stalls. OMAHS invested significant amounts of funds to provide infrastructure for vehicles, its residents typically can't afford when it could be put to better use in terms of more units and/or resident amenities. At its observed peak usage, 74 parking stalls were still not being used. At \$25,000 per stall, that is \$1,850,000 of unused infrastructure.

As part of the revised parking rationale development the design team calculated the parking requirements (see Table 8 below) for Nissen Crossing using the proposed Parking Bylaw and concluded that the project has a surplus of 16 parking stalls. These 16 stalls are noted on the parking summary as dedicated to the new OMAHS project which could be dedicated through a covenant or other owner agreement.

Table 8: Nissen Crossing Parking Summary Using 2022 Parking ByLaw

NISSEN CROSSING - 2022 BYLAW VEHICLE PARKING SUMMARY				
	1 BEDROOM UNITS	2 BEDROOM UNITS	STUDIO UNITS	
REQUIRED SPACES SUMMARY	52 units total	18 units total	8 units total	78 units total
VEHICLE SPACES REQUIRED	1.20 per unit min.	1.4 per unit min.	1.0 per unit min.	<u>TOTAL</u>
APARTMENTS (UNITS)	63	25	8	96
APARTMENT (VISITORS)	MIN. 0.14 SPACE PER DWELLING UNIT			13
OMAHS OFFICE	2.5 PER 100 sm GFA			2
TOTAL SPACES REQUIRED PRE-RENTAL REDUCTION				111
MF2 RENTAL SUBZONE REDUCTION	10% REDUCTION OUTSIDE OF URBAN CENTRE			11
TOTAL SPACES REQUIRED				100
PROVIDED SPACES SUMMARY				
	REGULAR SPACE	SMALL CAR SPACE	ACCESSIBLE SPACES	
LEVEL 1 PARKADE	35	11	4	50
SURFACE PARKING	27	39		66
TOTAL EXISTING SPACES PROVIDED	62	50	4	
% OF SMALL CAR STALLS PROVIDED	43% (MAX. 50%)			
TOTAL EXISTING SPACES PROVIDED				116
TOTAL SURPLUS REGULAR VEHICLE SPACES PROPOSED TO BE DEDICATED TO NEW OMAHS APARTMENT BLDG.				16

NOTE: If variance supported OMAHS to work with City to define location of dedicated stalls.

ADJACENT OMAHS PROPERTIES

115 KNELLER ROAD TOWNHOUSE COMPLEX

OMHAS owns the townhouse project at 115 Kneller Road which is located directly east of the subject property. The proposal shown in the Rezoning Drawings would be to redesign the current townhouse visitor parking lot which currently consists of six parking stalls into a new parking lot with nine parking stalls, three of which could be dedicated through a covenant or other owner agreement to the new OMAHS Housing project.

Table 9: Townhouse Complex Parking Summary Using 2022 Parking ByLaw

TOWNHOUSE COMPLEX - 2022 BYLAW VEHICLE PARKING SUMMARY			
	2 BEDROOM UNITS	3 & 4 BEDROOM UNITS	
	0 units total	28 units total	<u>28 units total</u>
REQUIRED SPACES SUMMARY	1.20 per unit min.	1.6 per unit min.	TOTAL
APARTMENTS (UNITS)	0	45	45
APARTMENT (VISITORS)	MIN. 0.14 SPACE PER DWELLING UNIT		4
TOTAL SPACES REQUIRED PRE-RENTAL REDUCTION			49
MF2 RENTAL SUBZONE REDUCTION	10% REDUCTION OUTSIDE OF URBAN CENTRE		5
TOTAL SPACES REQUIRED			44
PROVIDED SPACES SUMMARY	REGULAR SPACE	SMALL CAR SPACE	ACCESSIBLE SPACES
SURFACE PARKING	45	0	0
TOTAL EXISTING SPACES PROVIDED	45	0	0
% OF SMALL CAR STALLS PROVIDED	0% (MAX. 50%)		
TOTAL EXISTING SPACES PROVIDED			45
TOTAL SURPLUS REGULAR VEHICLE SPACES PROPOSED TO BE DEDICATED TO NEW OMAHS APARTMENT BLDG.			1

NOTE: One surplus stall is proposed as the accessible van stall adjacent to garbage enclosure.

The OMAHS Townhouse Complex parking lot was originally constructed with 56 stalls but has been so underutilized that the Society transformed nine parking stalls into a playground for its residents in 2006 with no effect to the parking demand. It still has underutilized parking stalls to this day.

SUPPORTIVE HOUSING PARKING PRECEDENT (PROVIDED BY BC HOUSING)

Based on existing BC Housing projects of similar scale and location, it is anticipated that the demand for parking by the future tenants of the Project will be significantly lower than for a market rental project. Several completed studies echo this statement, including reports completed by the City of Kamloops, City of Vancouver, City of Victoria. The City of Kamloops Affordable Housing Developer Package states that based on parking demand trends, social housing parking requirements are 0.25 spots per unit.

The City of Kamloops uses a reduced parking requirement for multi-family affordable housing and multi-family Social Housing or assisted living. The Social Housing minimum parking requirement for Kamloops is 0.25 vehicular spaces per dwelling unit plus an additional 10% for designated visitor parking and 0.5 bicycle parking stalls. Using Kamloops requirement would require this project to provide 13 parking stalls and 24 bicycle parking stalls. These rates are comparable to what is being observed on the Nissen Crossing property.

PROXIMITY TO AMENITIES

The new OMAHS Housing project is conveniently located with many stores, restaurants and services available at the nearby Willow Park Shopping Centre. As noted in the table below, many amenities are located within close proximity to the subject OMAHS site.

Community Amenity/ Facility	Distance from Site (meters)	Public Transportation Time
Pharmacy	600m	10 mins
Religious Services	150m	0 mins
Food/Restaurants	300m	0 mins
Daycare	2km	9 mins
Shopping	150m	8 mins
Ben Lee Park	600m	0 mins
Houghton Multi-Use Corridor	250m	0 mins

The Project's proposed properties are currently vacant land and will add reasonable density around existing transit corridors, therefore, encouraging increased ridership and improving the overall reliability and frequency of the current bus services. The Project is well located with a nearby bus stop for both Bus Route 8 and Route 10. Route 8 is University/ OK College line. It connects the OMAHS project to the east of the City of Kelowna from the Kelowna-Rock Creek Highway. It brings the tenants north to University of British Columbia Okanagan and south to Okanagan College, encouraging the potential for some of OMAHS' residents to access education opportunities. Route 10 is North Rutland line. It connects the OMAHS project to downtown Kelowna and the Queensway Exchange as well as to Rutland. Both buses pass through the Orchard Park bus loop offering the many services and shops available in the mall as well as many more transit route options.

EXISTING KELOWNA POLICY

The Healthy Housing Strategy (HHS) was adopted by the Mayor and Council in June 2018 and includes information linking health and housing, and policy priorities to encourage the development of healthy housing. While the proposed project positively relates to all four healthy housing links identified in the report, one of expressed importance is Community and Location; by providing housing that is well situated in a walkable neighbourhood with strong transit (including active transit) connections, this project is the type identified in this strategy as providing healthy housing.

The strategy also identifies key directions and actions that benefit the provision of healthy housing. One direction given is to improve housing affordability and reduce barriers for affordable housing. Parking costs are one of the greatest barriers to the provision of affordable housing. The report indicates that "by setting minimum parking requirements, the City is driving up housing costs and disincentivizing sustainable modes of transportation." A key policy direction provided in the HHS is to reduce parking requirements for infill and affordable housing and Appendix E-VI provides specific direction to identify opportunities for off-street parking reductions and/or parking elimination.

HOUSING AGREEMENT AND COVENANT ON TITLE

OMAHS is committed to the long-term provision of affordable housing with the Project. Therefore, both parties are prepared to secure an extended housing tenure through a housing agreement with a covenant registered on title to ensure the ongoing affordability of the proposed units. This will guarantee that the Project is operated and maintained as affordable housing in a manner that is consistent with the objective of protecting long-term affordability.

CLIMATE ACTION

As the City of Kelowna's own Climate Action webpage in 2021 stated "Kelowna has experienced the havoc that climate change can cause to a community, with back-to-back years of record spring precipitation causing historic flooding followed by hot dry summers that contributed to droughts and wildfires (2017 and 2018)".

The Climate Projection for the Okanagan Region report (February 2020) shows that as greenhouse gas (GHG) emissions continue to grow, changes like these will become more common in the next three decades with hotter, drier summers; warmer winters; increased precipitation in all seasons except summer; and a shifting of the seasons. Reduced single occupant vehicle use and greater uptake of transit, walking, cycling and other environmentally sustainable options must clearly be embraced by developers of housing projects such as the one OMAHS is proposing.

CONCLUSION

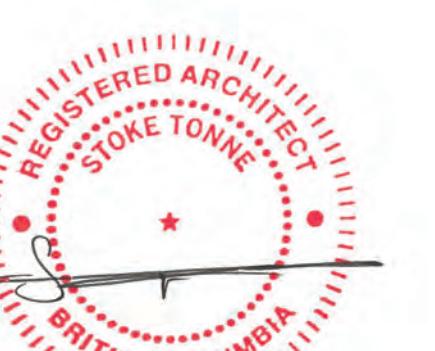
The vision for the new OMAHS project is to provide affordable housing for indigenous and non-indigenous occupants, and it is anticipated that this project will have the same profile of tenants as Nissen Crossing where a high percentage of these tenants do not own vehicles. Parking costs are one of the greatest barriers to providing affordable housing and it is our opinion that to reduce the number of units to match available parking would mean fewer affordable housing units in exchange for parking that will remain vacant, as observed in its two previous developments.

This project also presents a unique opportunity in that it is situated in between two existing OMAHS-owned affordable housing complexes and directly south of the proposed Kelowna Women's Shelter project complex where parking requirements and local traffic are significantly reduced. A higher percentage of the occupants are/will be utilizing alternate forms of transportation such as walking or public transportation which is what is being encouraged city wide for a wide variety of reasons.

Based on this, and all the factors noted above, we are requesting that the City of Kelowna support the reduction of required parking on the site with a parking variance allowing for the proposed 43 parking stalls provided both on site and by way of transferring some parking spaces from the adjacent OMAHS owned Nissen Crossing project.



METKLEJOHN ARCHITECTS INC.



2023-12-04

BC HOUSING & OKANAGAN METIS & ABORIGINAL HOUSING SOCIETY (OMAHS) KNELLER ROAD RENTAL APARTMENT PROJECT



175 KNELLER ROAD, KELOWNA, BC, V1X 4C2

ISSUED FOR DEVELOPMENT PERMIT

2023-12-04

ARCHITECTURAL

DP-A0.00	COVER SHEET & DRAWING LIST
DP-A1.00 SERIES	ZONING AND SUMMARY, SHADOW STUDY
DP-A1.01	ZONING SUMMARY, MAPS & PHOTOS
DP-A1.02	ZONING PLANS
DP-A1.03	SHADOW STUDY
DP-A2.00 SERIES	CONTEXT, SURVEY & SITE
DP-A2.01	CONTEXT PLAN
DP-A2.02	SURVEY PLAN
DP-A2.03	SITE PLAN
DP-A3.00 SERIES	FLOOR PLANS
DP-A3.01	LEVEL P1 FLOOR PLAN
DP-A3.02	LEVEL 1 FLOOR PLAN
DP-A3.03	LEVEL 2 FLOOR PLAN
DP-A3.04	LEVEL 3 FLOOR PLAN
DP-A3.05	LEVEL 4 FLOOR PLAN
DP-A3.06	LEVEL 5 FLOOR PLAN
DP-A3.07	ROOF PLAN
DP-A4.00 SERIES	BUILDING ELEVATIONS
DP-A4.01	NORTH-EAST & SOUTH-WEST BLDG. ELEVATIONS
DP-A4.02	SOUTH-WEST & SOUTH-EAST BLDG. ELEVATIONS
DP-A4.10 SERIES	3D VIEWS
DP-A4.11	3D VIEWS
DP-A5.00 SERIES	BUILDING SECTIONS
DP-A5.01	BUILDING SECTIONS
DP-A8.00 SERIES	UNIT PLANS
DP-A8.01	UNIT PLANS

Issued		
No.	Date	Revision
1	2023-12-04	ISSUED FOR DEVELOPMENT PERMIT

Project Title
**BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT**

175 KNELLER ROAD, KELOWNA, BC, V1X 4C2
PARCEL A (PLAN #1566) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOO DIVISION YALE DISTRICT PLAN 426

Drawing Number
DP-A0.00

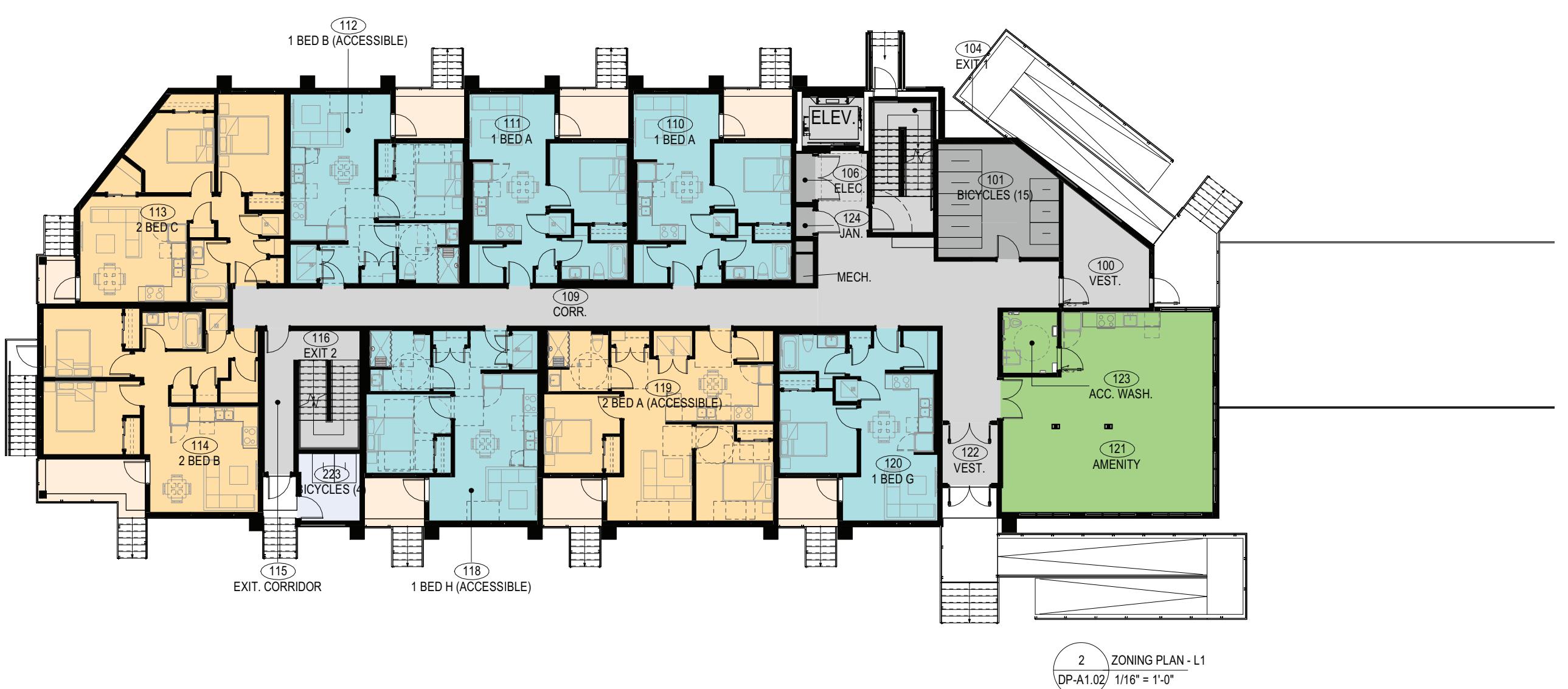
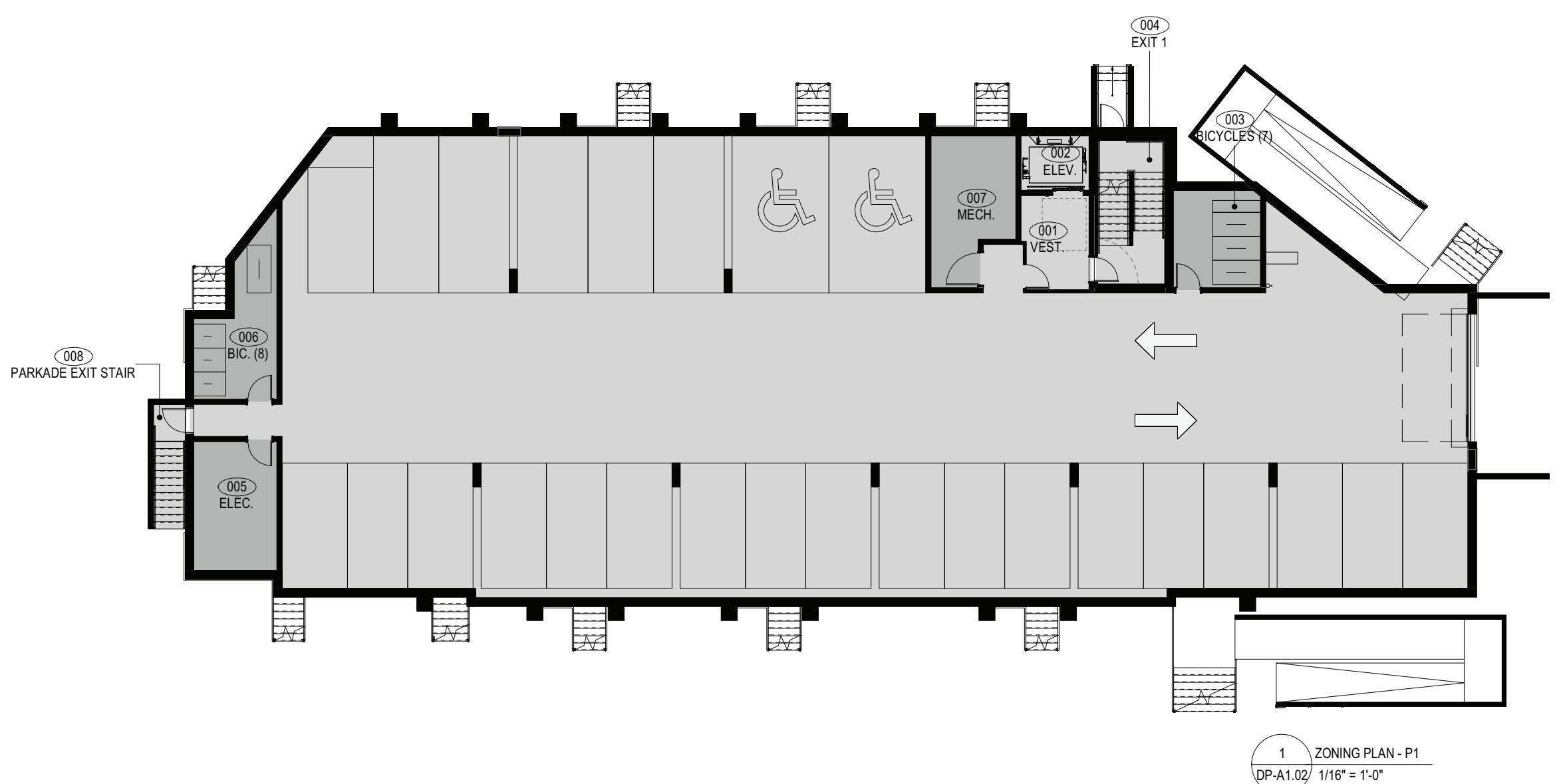
Revision

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**COVER SHEET &
DRAWING LIST**

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METKLEJOHN ARCHITECTS INC.



ZONING PLANS LEGEND:	
NET INCLUDED IN F.A.R. CALCULATIONS	
■ 3-BEDROOM UNITS	
■ 2-BEDROOM UNITS	
■ 1-BEDROOM UNITS	
■ STUDIO UNITS	
GROSS NOT INCLUDED IN F.A.R. CALCULATIONS	
■ PRIVATE AMENITY : BALCONIES & PATIOS	
■ COMMON AMENITY : AMENITY ROOMS	
■ CIRCULATION	
■ PARKING, BUILDING SERVICES, STORAGE	

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELLOGG, BC, V0Y 4C2
PARCEL A (PLAN D156) OF LOT 2 SECTION 27 TOWNSHIP 26
OSOYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number Revision

DP-A1.02

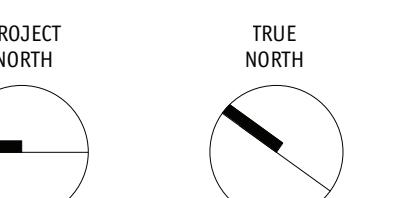
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ZONING PLANS

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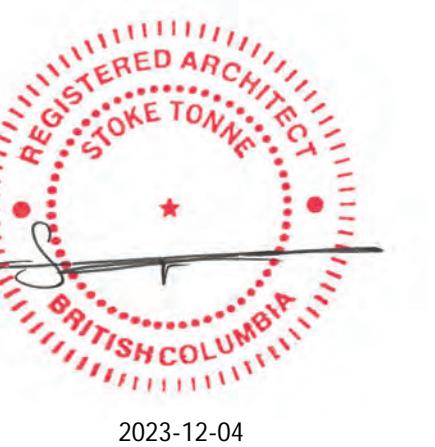
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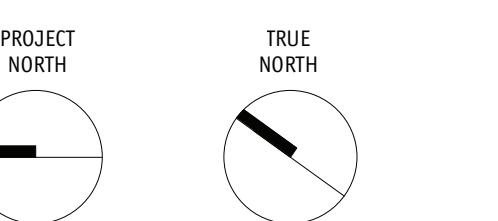
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Revision		
No.	Date	Revision

Project Title



2023-12-04



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Revision

No. Date Revision

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELowna, BC, V1X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOO DIVISION YALE DISTRICT PLAN 426

Drawing Number

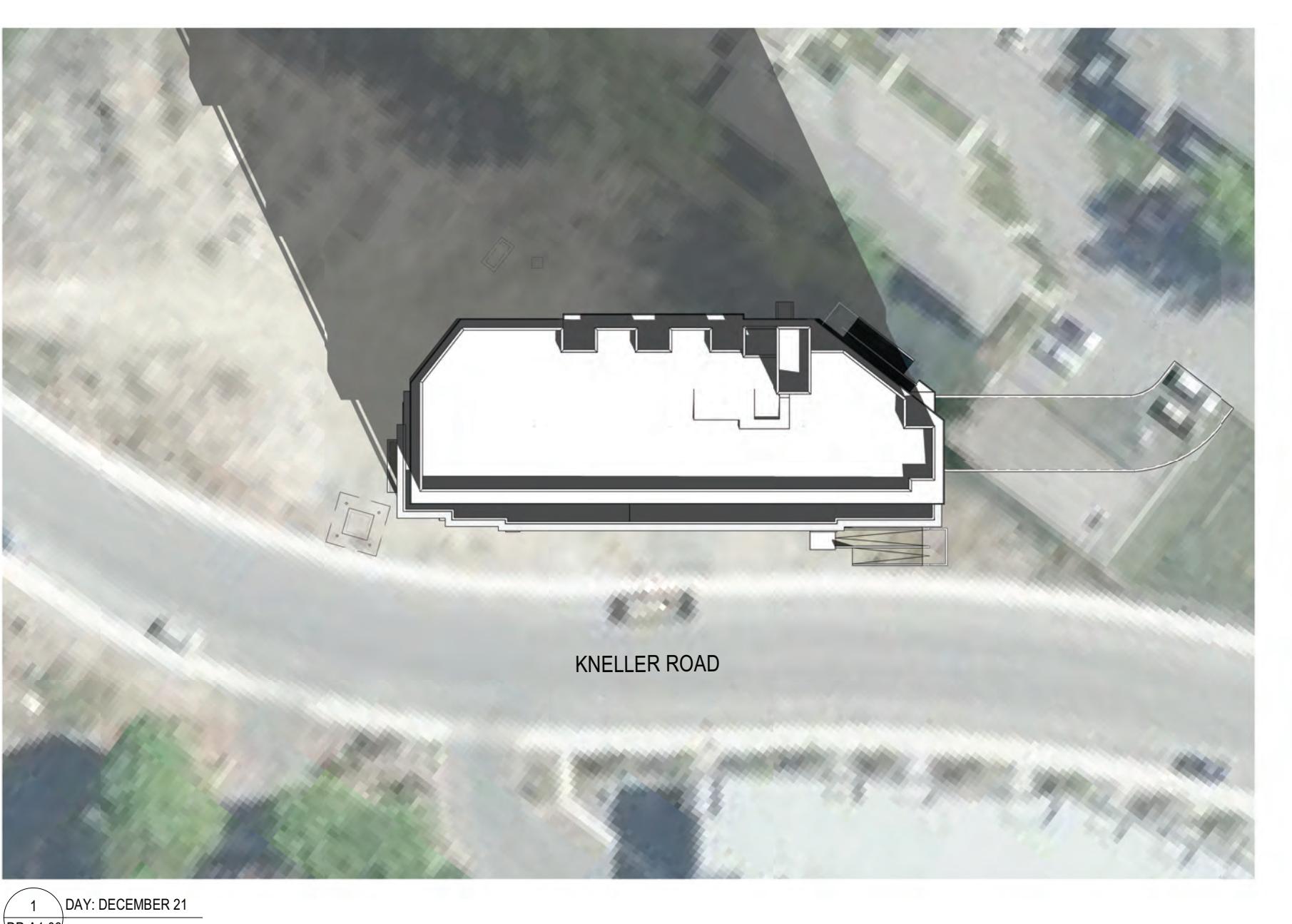
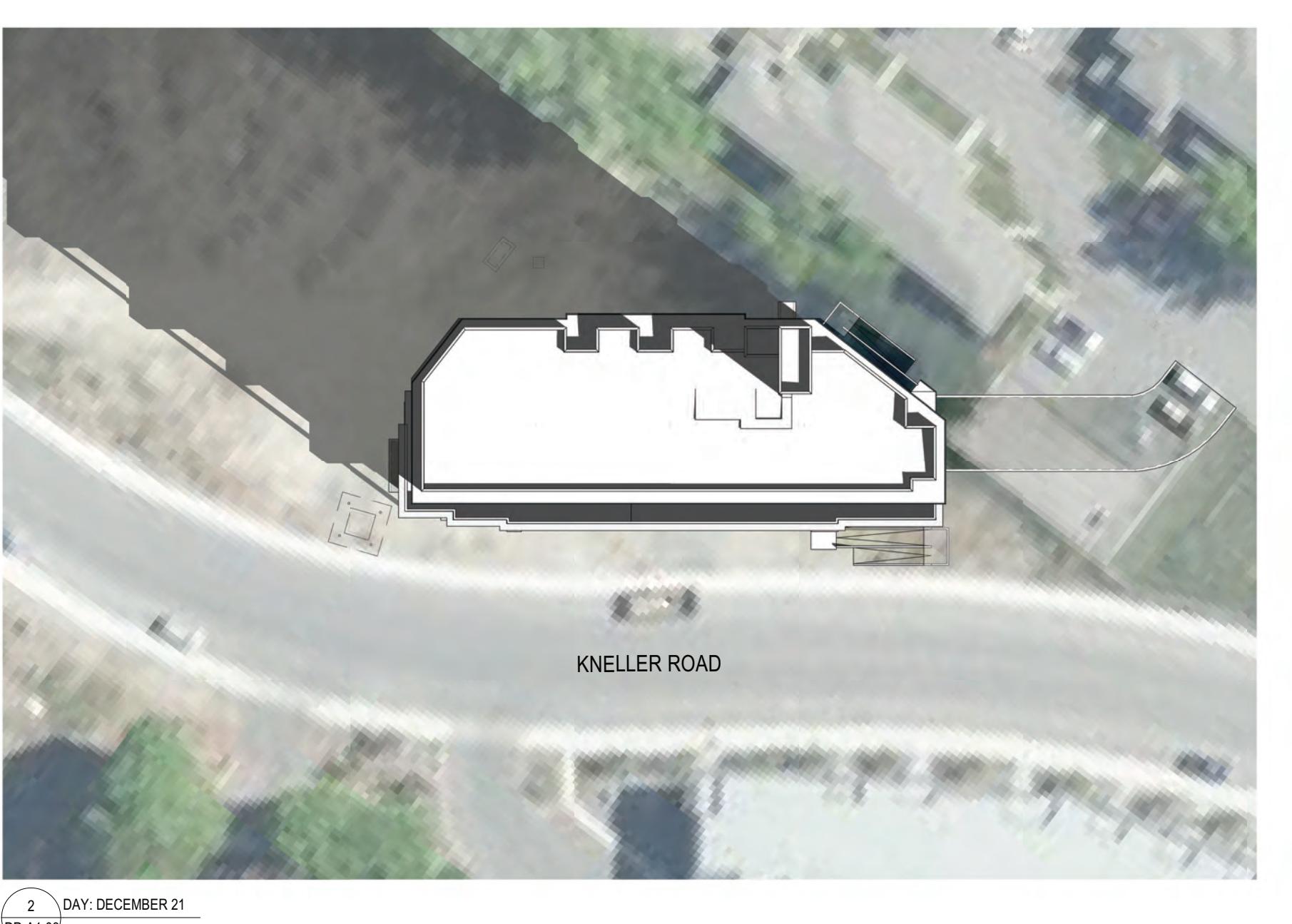
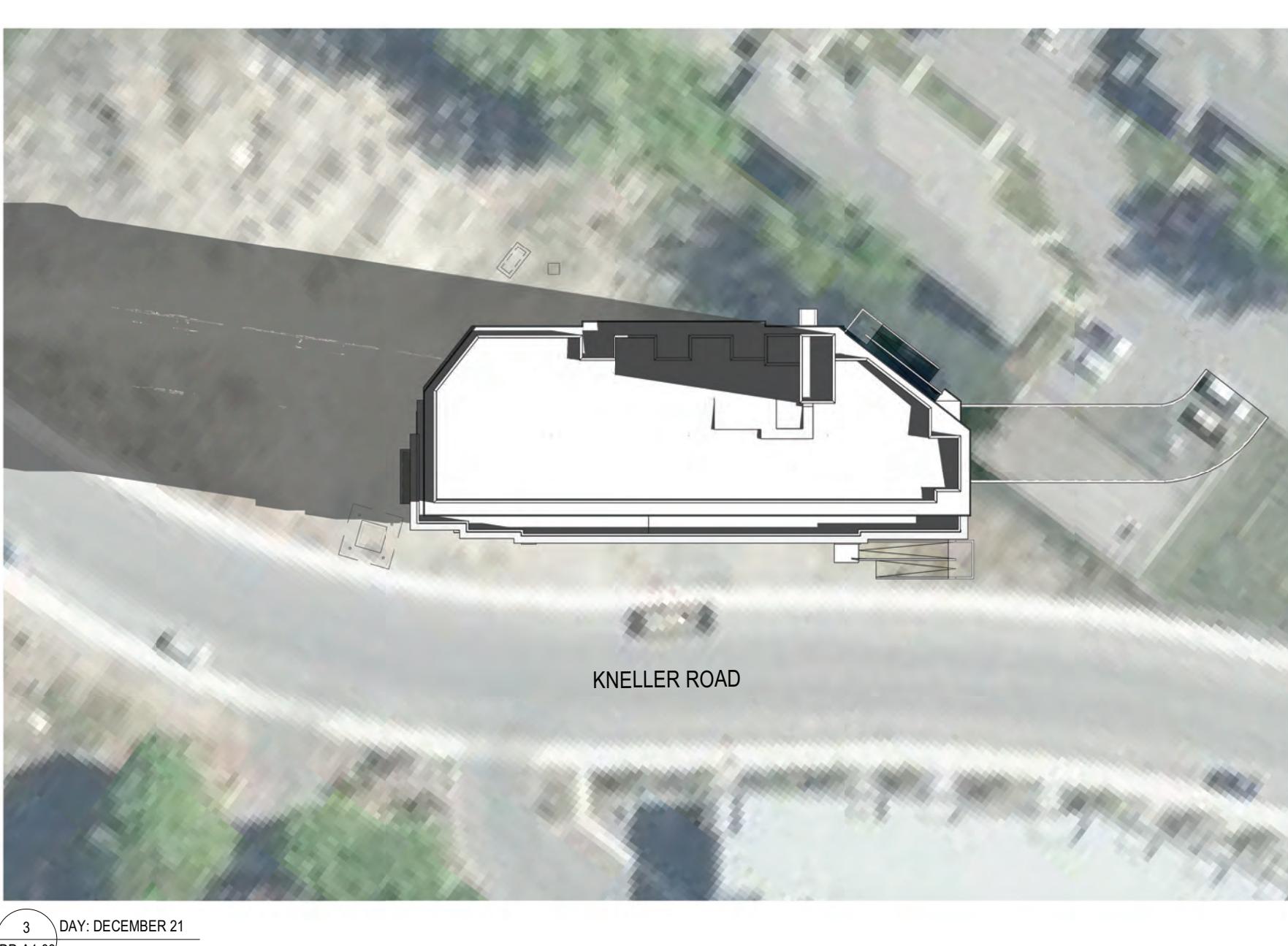
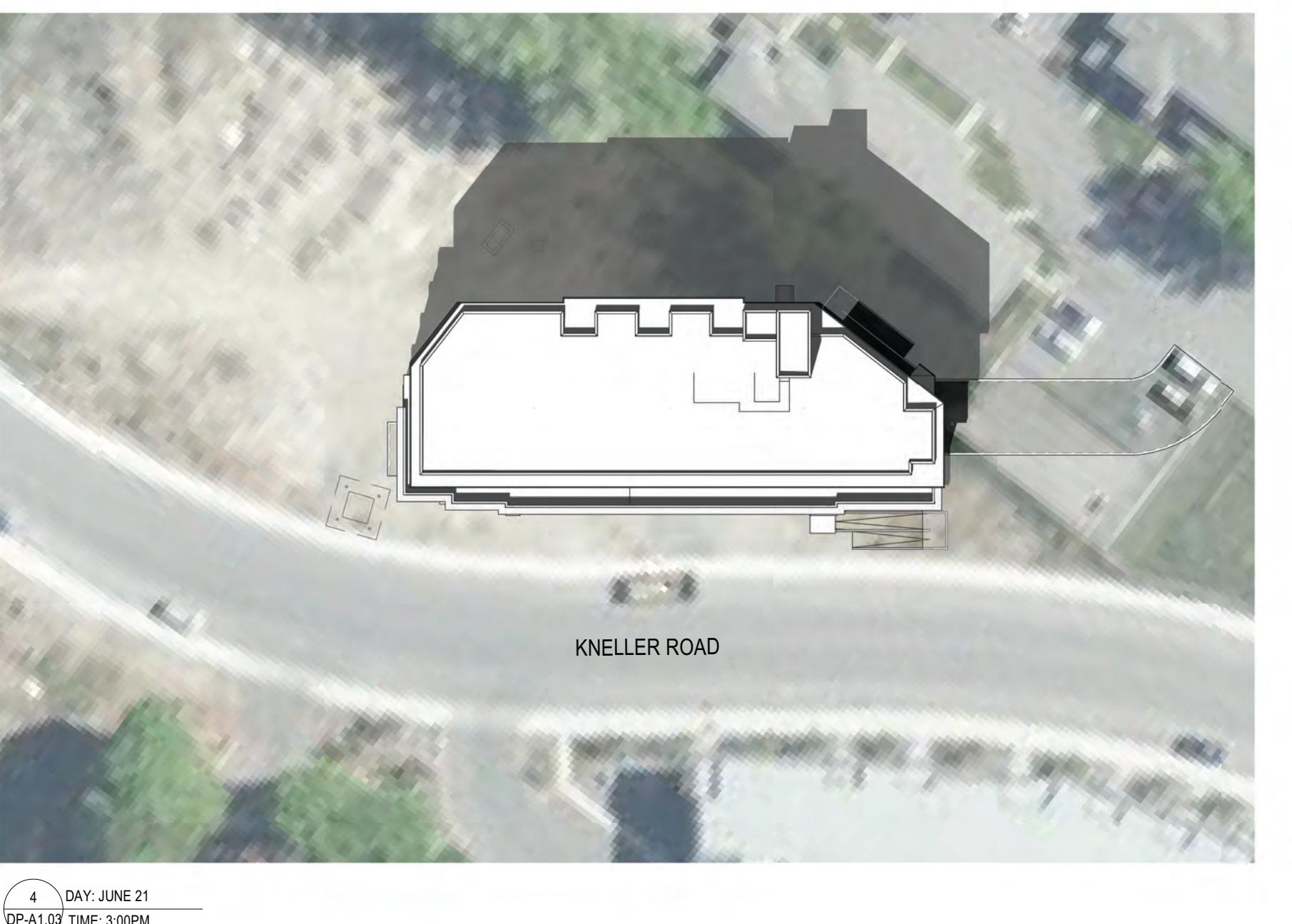
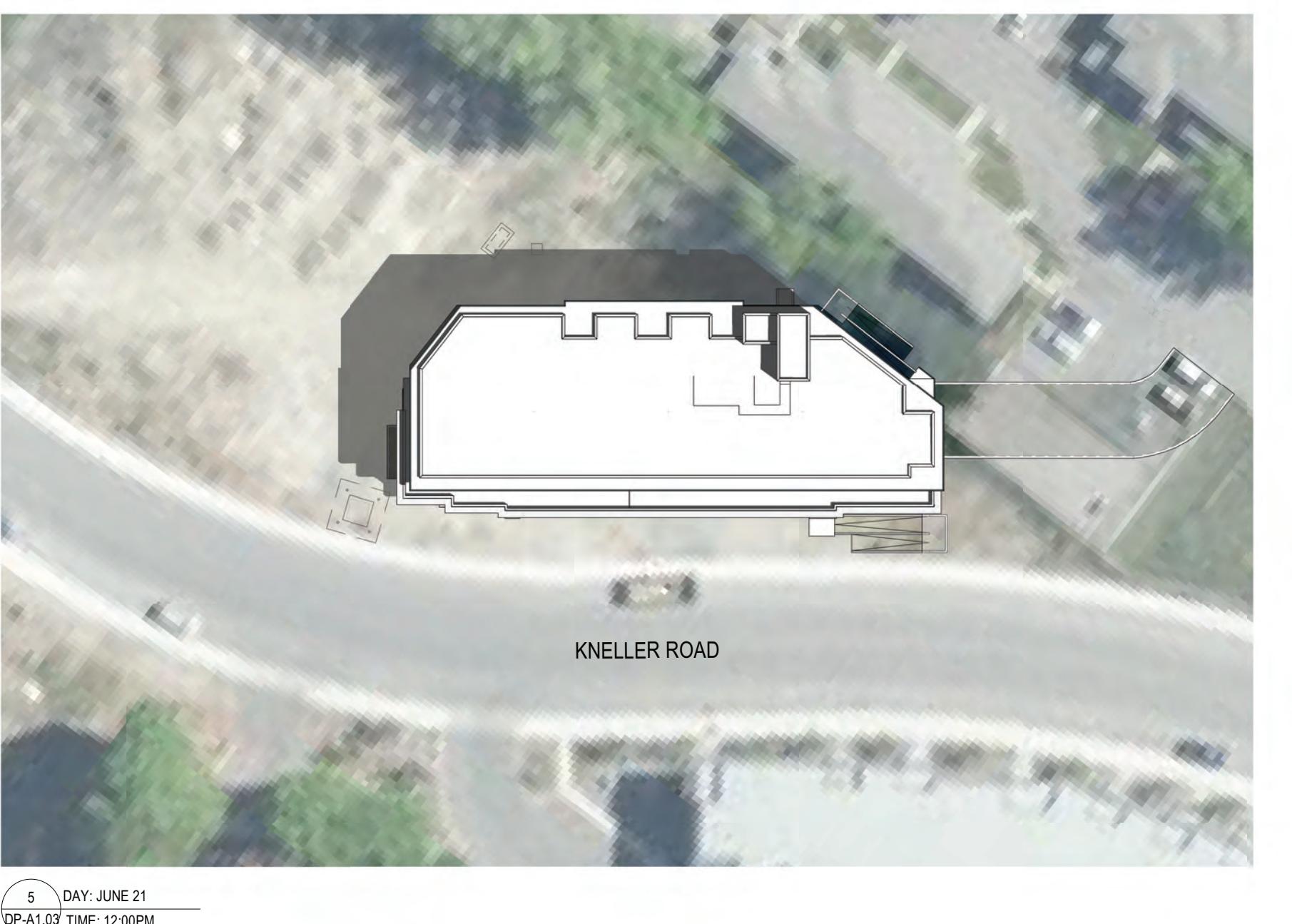
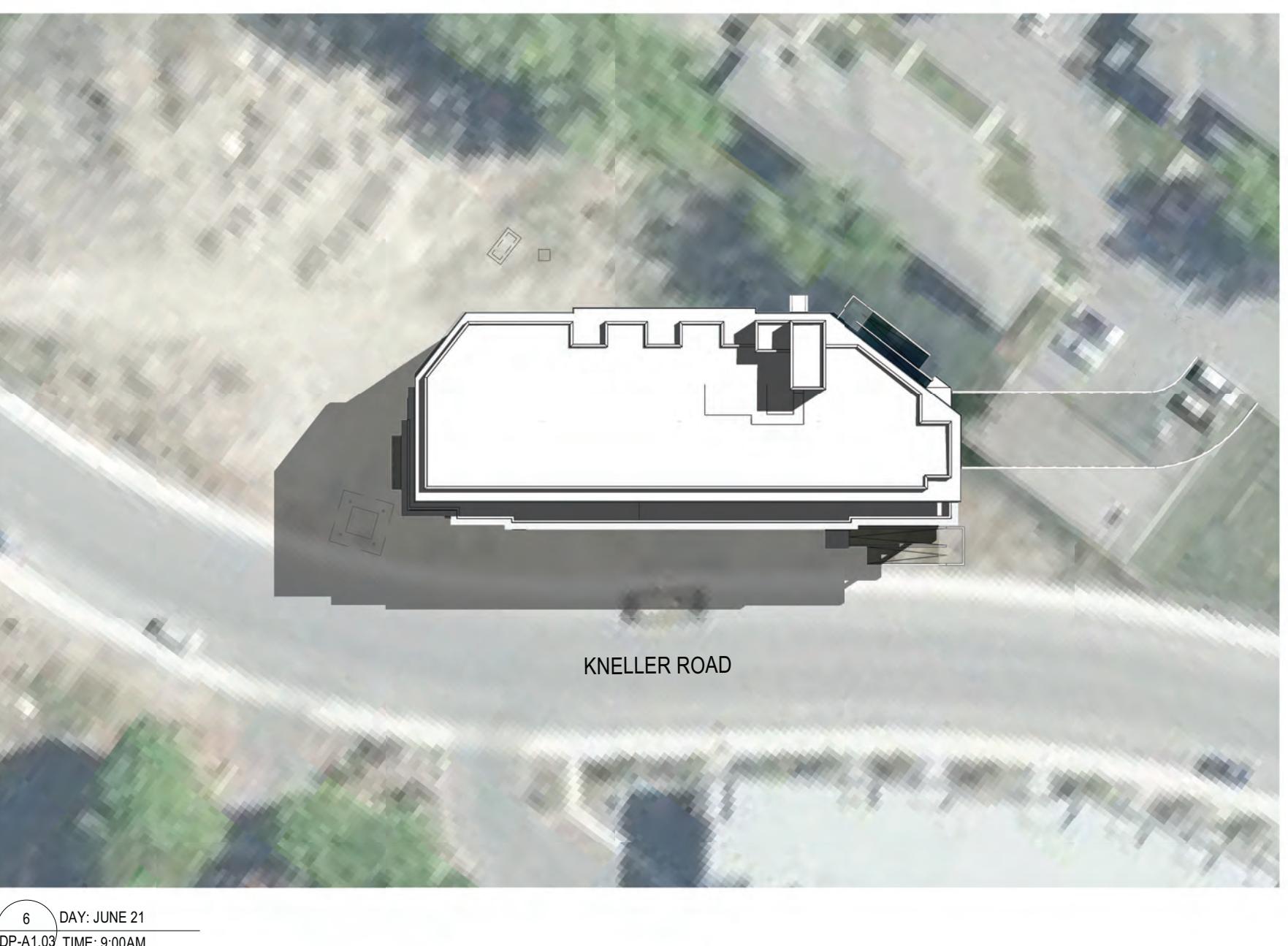
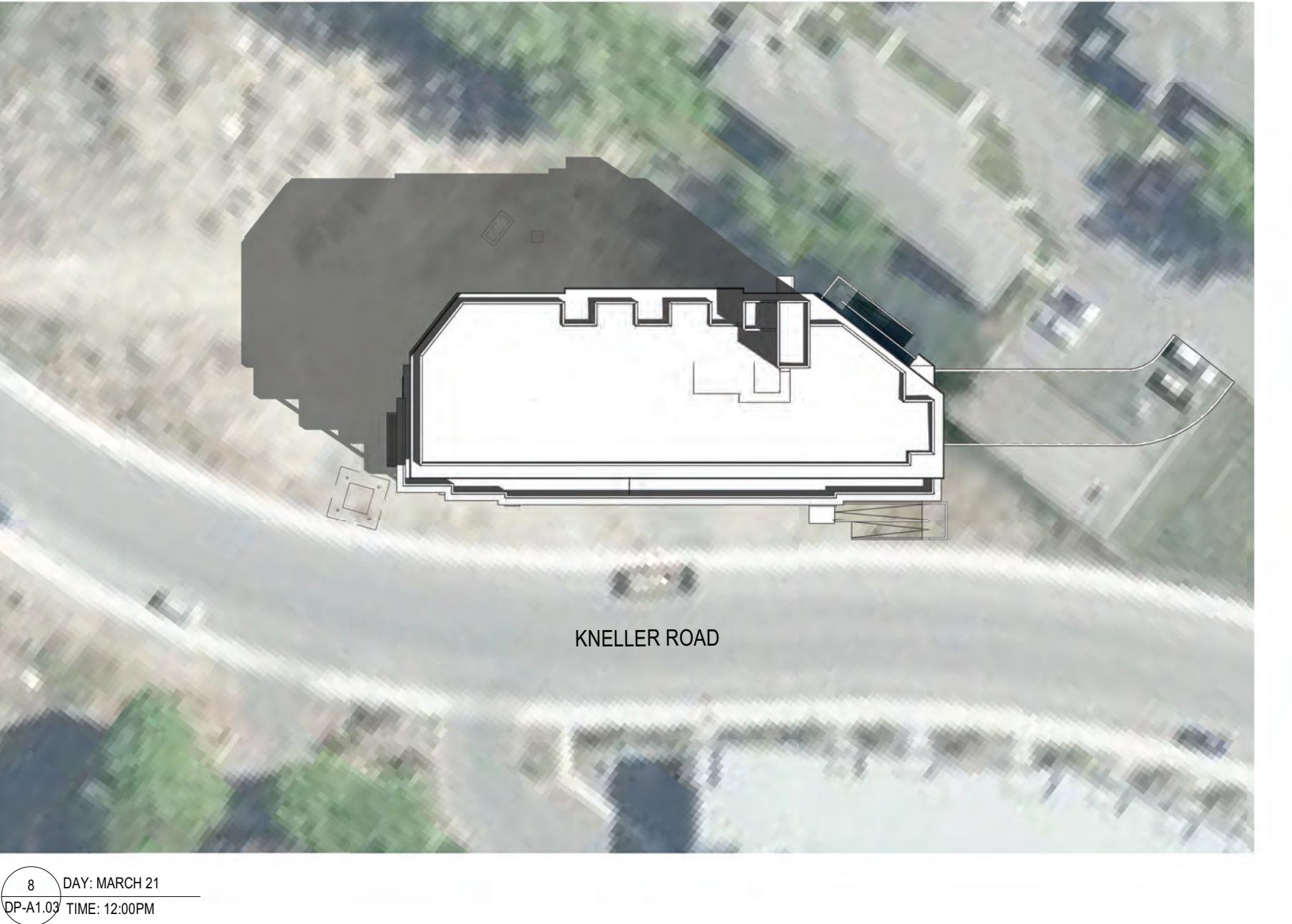
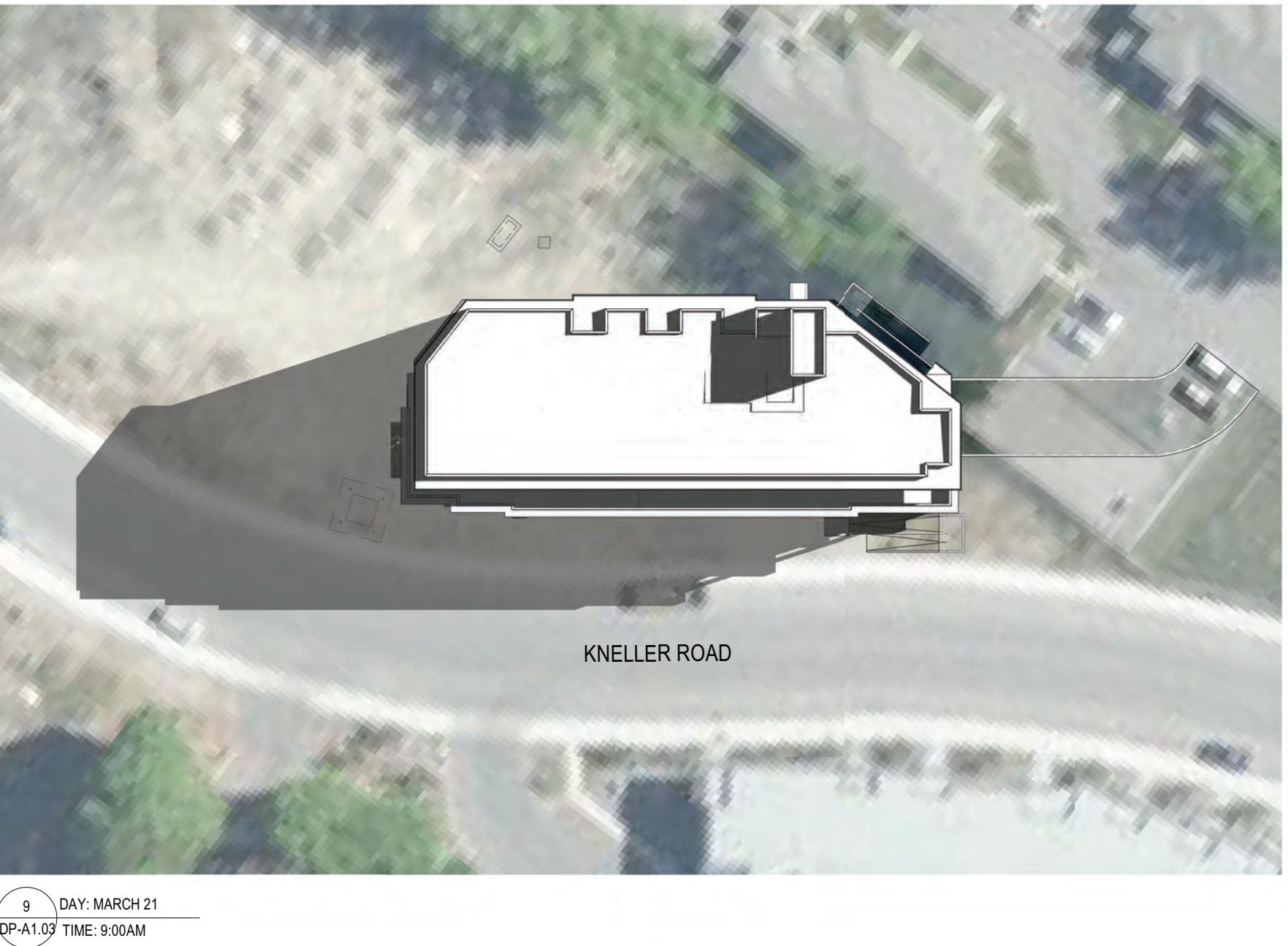
Revision

DP-A1.03

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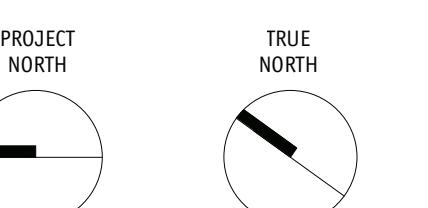
SHADOW STUDY

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2023-12-04



Issued

1 2023-12-04 ISSUED FOR DEVELOPMENT PERMIT

Revision

No. Date Revision

Project Title

BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT

175 KNELLER ROAD, KELowna, BC, V1X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOKS DIVISION YALE DISTRICT PLAN 426

Drawing Number

DP-A2.01

Revision

Drawing Title

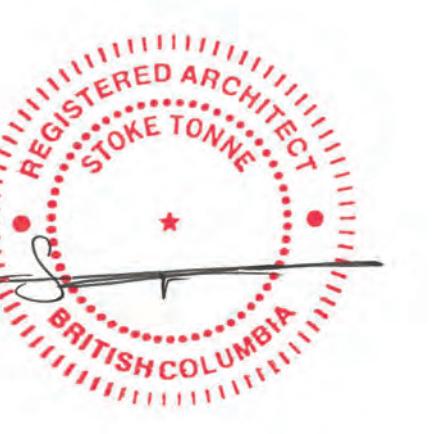
CONTEXT PLAN

Job No.	m+m 23-1973
Scale	1" = 20'-0"
Drawn	A.M.
Checked	S.T.

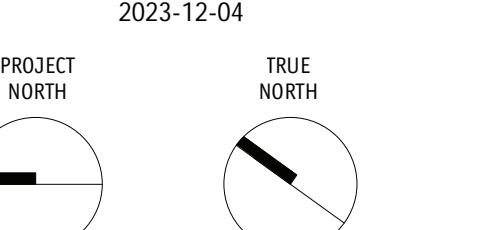




METKLEJOHN ARCHITECTS INC.



2023-12-04



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Revision

No. Date Revision

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELLOGG, BC, V0X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A2.02

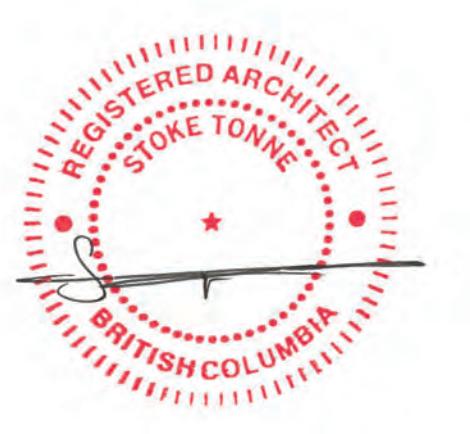
Drawing Title

SURVEY PLAN

SURVEY PLAN NOTES:	
1. SURVEY INFORMATION SHOWN PREPARED BY RUNNALS DENBY BRITISH COLUMBIA LAND SURVEYORS - SURVEY FILE DATED: JULY 25, 2019	

Job No.	m+m 23-1973
Scale	3/32" = 1'-0"
Drawn	A.M.
Checked	S.T.





Issued	1	2023-12-04	ISSUED FOR DEVELOPMENT PERMIT
Revision	No.	Date	Revision

Project Title
BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELOWNA, BC, V1X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOK DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A2.03

Drawing Title

SITE PLAN

SITE PLAN NOTES:

- ALL LANDSCAPE INFORMATION SHOWN PREPARED BY ECORA - REFER TO LANDSCAPE DEVELOPMENT PERMIT DRAWINGS FOR MORE INFORMATION.
- ALL SERVICING AND CIVIL INFORMATION SHOWN PREPARED BY PILLING & ASSOC. CONSULTING ENGINEERING - REFER TO CIVIL D.P. DRAWINGS FOR MORE INFORMATION.
- LOT LINE BETWEEN OMAHS OWNED TOWNHOUSE COMPLEX AND NEW OMAHS APARTMENT BUILDING SHOWN AS ADJUSTED ON ARCHITECTURAL DRAWINGS TO ALLOW FOR SOUTHEAST CORNER OF PARKADE WALL TO BE WITHIN 3m SIDE YARD SETBACK. LOT LINE ADJUSTMENT TO BE LEGALLY SURVEYED AND FORMALIZED AS PART OF PENDING SUBDIVISION APPLICATION. PLEASE NOTE THAT LANDSCAPE AND CIVIL DP DRAWINGS SHOWN DO NOT SHOW PROPERTY LINE ADJUSTED.

Job No.	m+m 23-1973
Scale	1/16" = 1'-0"
Drawn	A.M.
Checked	S.T.



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METKLEJOHN ARCHITECTS INC.



PROJECT NORTH

TRUE NORTH

Issued	Date	Revision
1	2023-12-04	ISSUED FOR DEVELOPMENT PERMIT

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELOWNA, BC, V1X 4C2
PARCEL A (PLAN 15156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A3.01

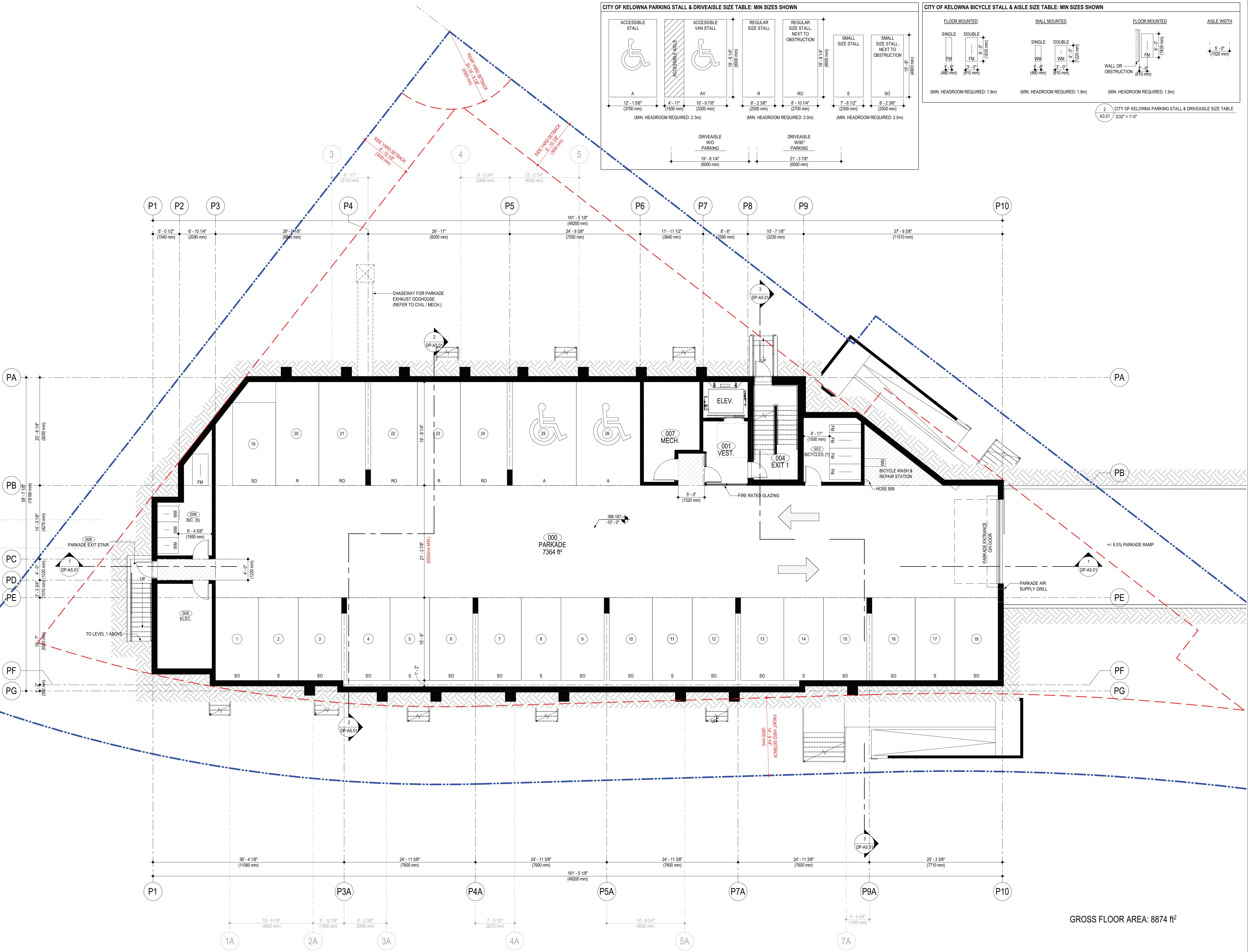
Drawing Title

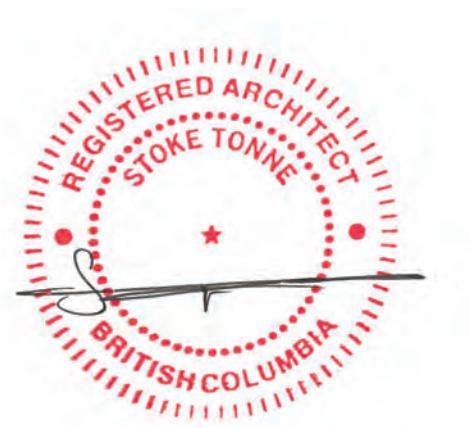
LEVEL P1 FLOOR PLAN

GROSS FLOOR AREA: 8874 ft²

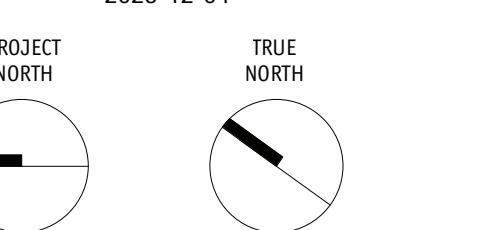
CITY OF KELOWNA PARKING STALL & DRIVEABLE SIZE TABLE: MIN SIZES SHOWN						
ACCESSIBLE STALL	ACCESSIBLE AISLE	REGULAR SIZE STALL	REGULAR SIZE STALL NEXT TO OBSTRUCTION	SMALL SIZE STALL	SMALL SIZE STALL NEXT TO OBSTRUCTION	AISLE WIDTH
A	AV	R	RO	S	SO	
12' - 0 1/8" (3700 mm)	4' - 11" (1500 mm)	10' - 9 7/8" (3300 mm)	8' - 2 3/8" (2500 mm)	7' - 6 1/2" (2300 mm)	8' - 2 3/8" (2500 mm)	15' - 9" (4800 mm)
(MIN. HEADROOM REQUIRED: 2.3m)			(MIN. HEADROOM REQUIRED: 2.0m)			
DRIVEABLE W/O PARKING	DRIVEABLE W/90° PARKING					
19' - 8 1/4" (6000 mm)	21' - 3 7/8" (6500 mm)					

CITY OF KELOWNA BICYCLE STALL & AISLE SIZE TABLE: MIN SIZES SHOWN						
FLOOR MOUNTED	WALL MOUNTED	FLOOR MOUNTED				AISLE WIDTH
SINGLE	DOUBLE	SINGLE				
FM	FM	WM				
4' - 6" (1400 mm)	3' - 0" (910 mm)	4' - 6" (1400 mm)				
(MIN. HEADROOM REQUIRED: 1.9m)	(MIN. HEADROOM REQUIRED: 1.9m)	(MIN. HEADROOM REQUIRED: 1.9m)				
WALL OR OBSTRUCTION						
Z - 0" (60 mm)						





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BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELLOGG, BC, V0X 4C2
PARCEL A (PLAN 0156) OF LOT 1 SECTION 27 TOWNSHIP 26
OSYOOS DIVISION YALE DISTRICT PLAN 426

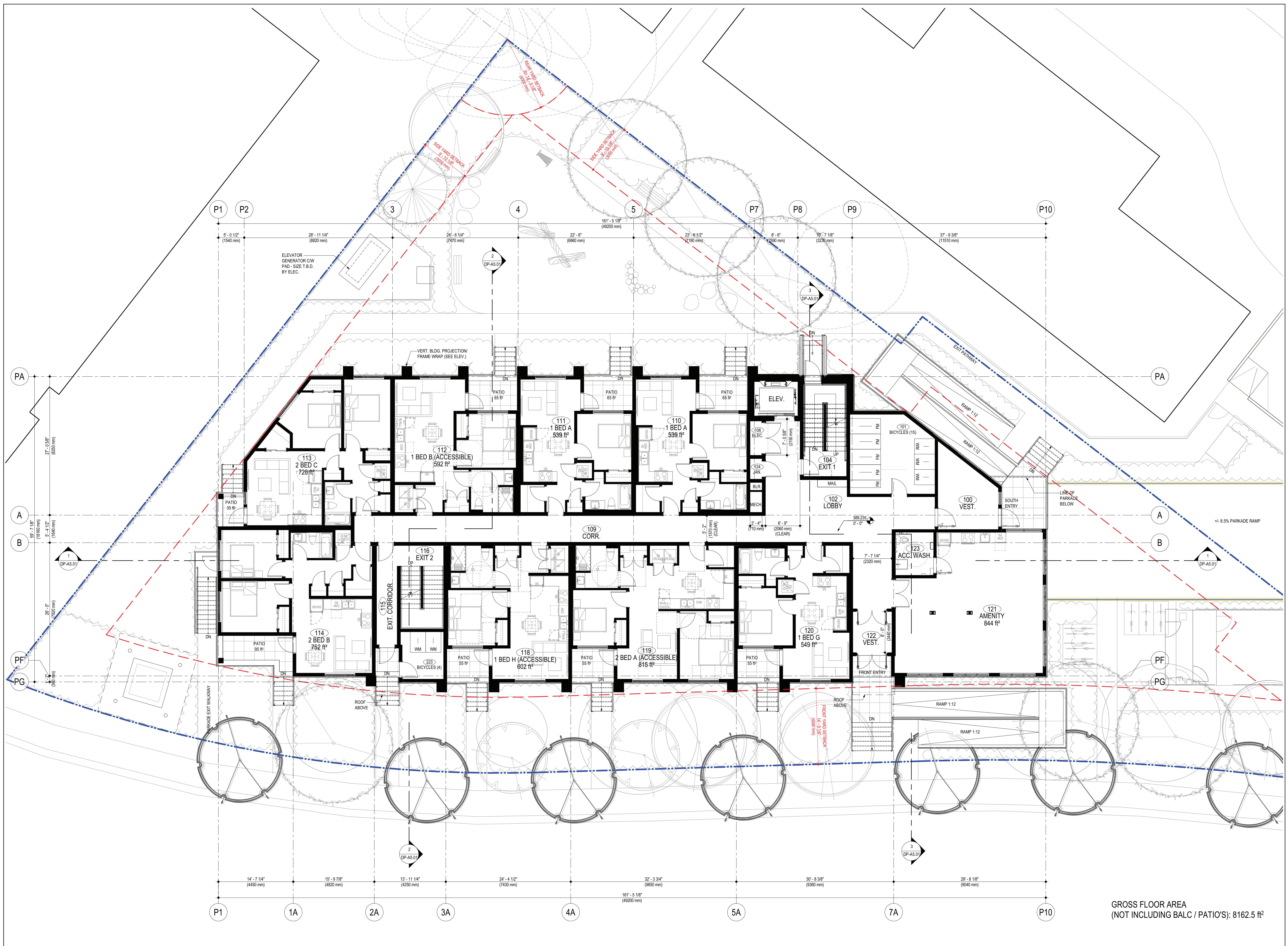
Drawing Number

Revision

DP-A3.02

Drawing Title

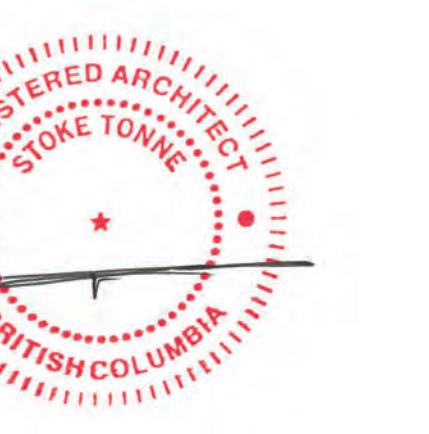
LEVEL 1 FLOOR PLAN



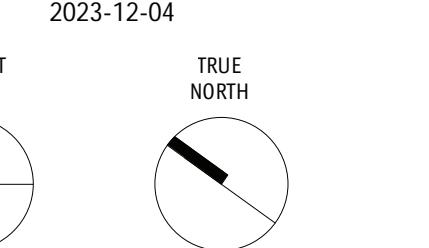


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2023-12-04



Issued

1 2023-12-04 ISSUED FOR DEVELOPMENT PERMIT

Revision

No. Date Revision

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELLOGG, BC, V0X 4C2
PARCEL A (PLAN 0156) OF LOT 2 SECTION 27 TOWNSHIP 26
OSOYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

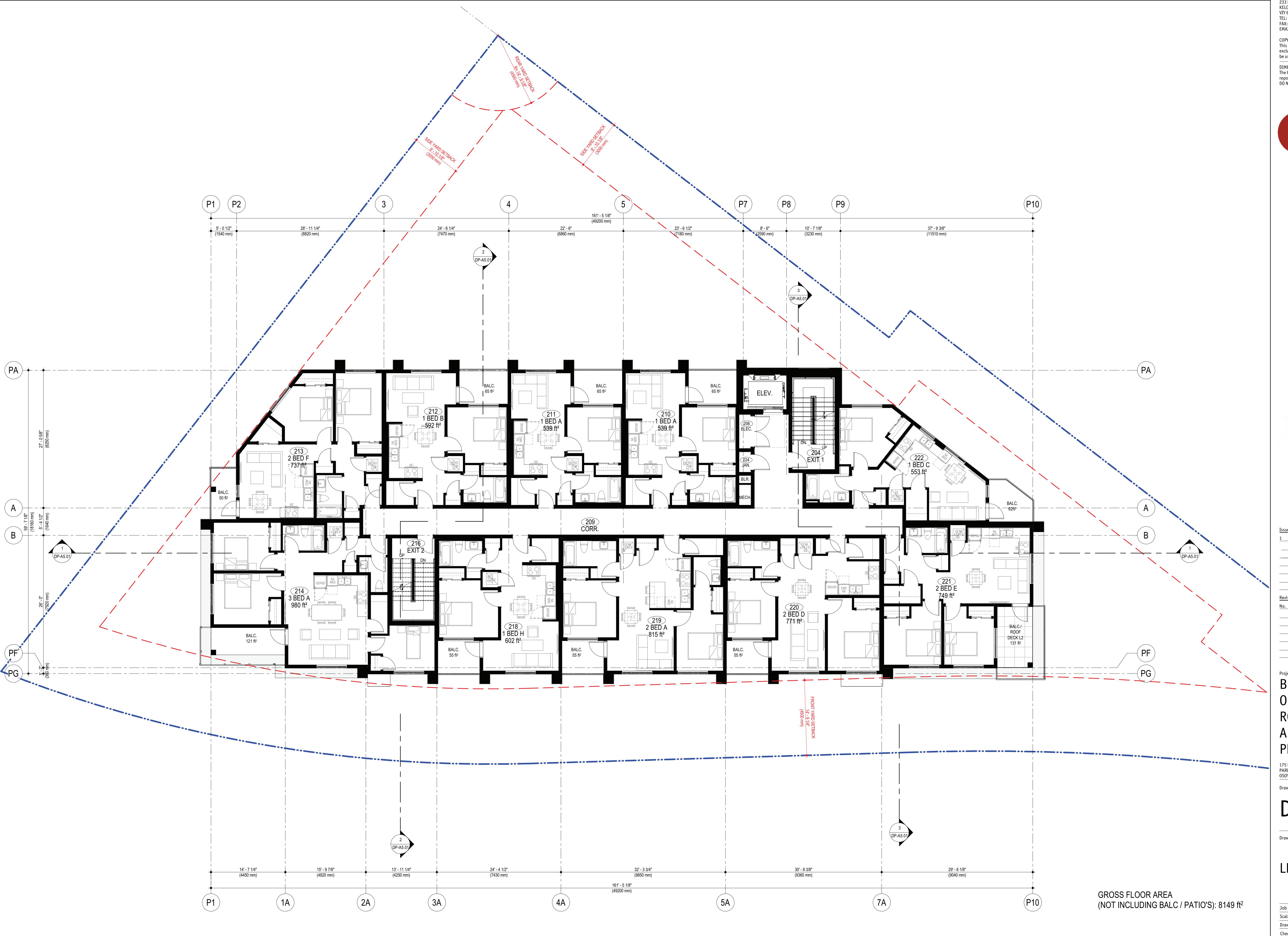
Revision

DP-A3.03

Drawing Title

LEVEL 2 FLOOR PLAN

Job No.	m+m 23-1973
Scale	1/8" = 1'-0"
Drawn	A.M.
Checked	S.T.



GROSS FLOOR AREA
(NOT INCLUDING BALC / PATIO'S): 8149 ft²

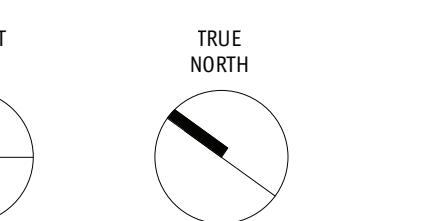


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2023-12-04



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1 2023-12-04 ISSUED FOR DEVELOPMENT PERMIT

Revision

No. Date Revision

Project Title

BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT

175 KNELLER ROAD, KELowna, BC, V1X 4C2
PARCEL A (PLAN 0156) OF LOT 2 SECTION 27 TOWNSHIP 26
OSYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A3.04

Drawing Title

LEVEL 3 FLOOR PLAN

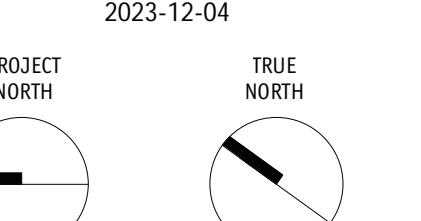
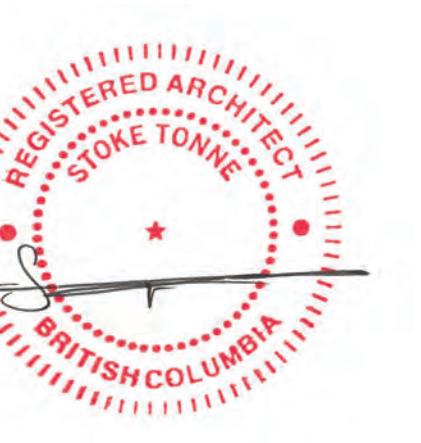
GROSS FLOOR AREA
(NOT INCLUDING BALC / PATIO'S): 8149 ft²





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No. Date Revision

Project Title BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELowna, BC, V1X 4C2
PARCEL A (PLAN 0156) OF LOT 2 SECTION 27 TOWNSHIP 26
OSYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A3.05

Drawing Title

LEVEL 4 FLOOR PLAN

GROSS FLOOR AREA
(NOT INCLUDING BALC / PATIO'S): 8149 ft²





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Project Title
**BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT**

175 KNELLER ROAD, KELLOGG, BC, V0X 4C2
PARCEL A (PLAN 01566) OF LOT 1 SECTION 27 TOWNSHIP 26
OSYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A3.06

Drawing Title

LEVEL 5 FLOOR PLAN

GROSS FLOOR AREA
(NOT INCLUDING BALC / PATIO'S): 6870 ft²





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METKLEJOHN ARCHITECTS INC.



PROJECT NORTH
TRUE NORTH

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1 2023-12-04 ISSUED FOR DEVELOPMENT PERMIT

Revision
No. Date Revision

Project Title
**BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT**

175 KNELLER ROAD, KELLOGG, BC, V0Y 4C2
PARCEL A (PLAN 0156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

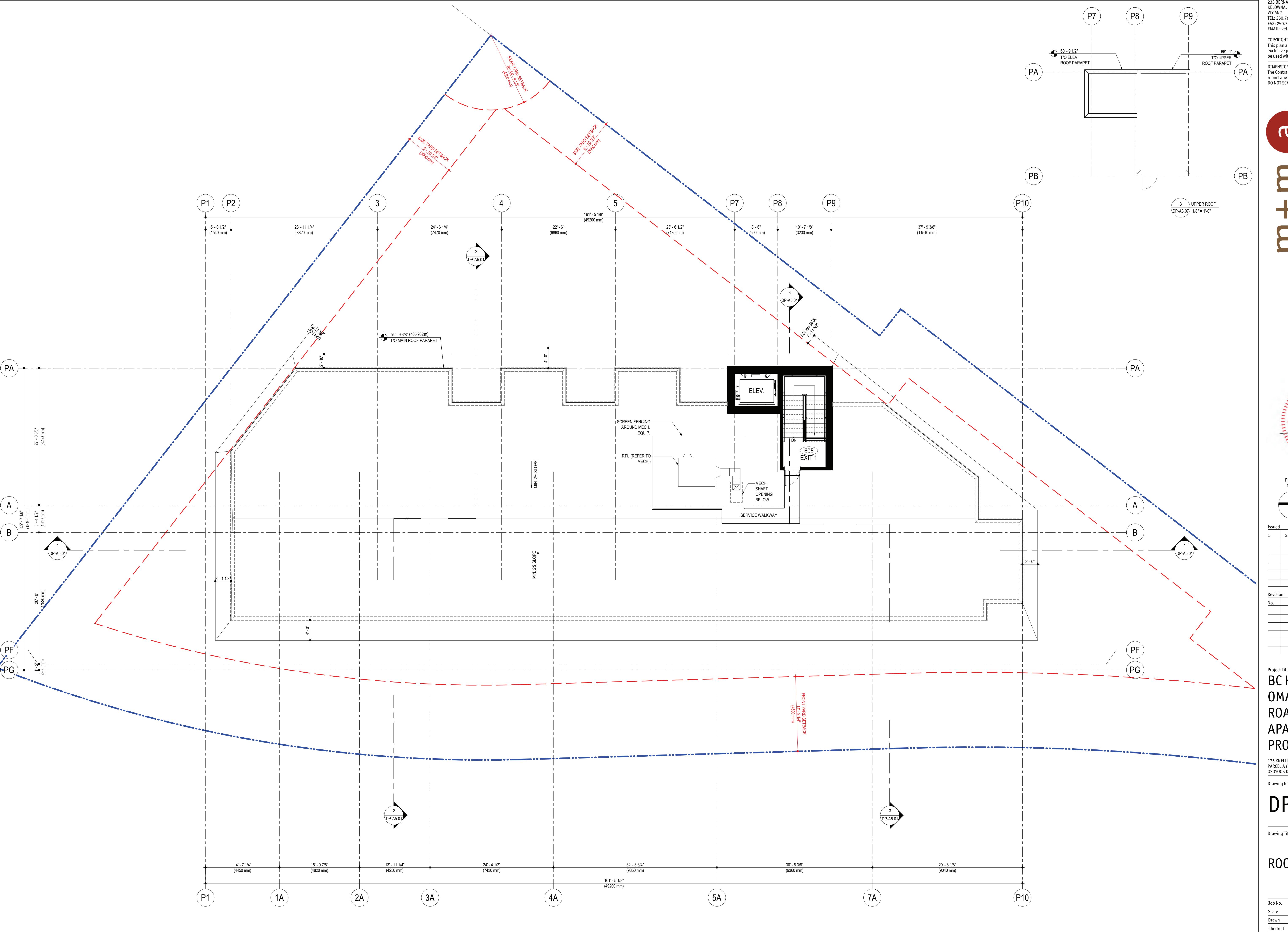
Revision

DP-A3.07

Drawing Title

ROOF PLAN

Job No.	m+m 23-1973
Scale	1/8" = 1'-0"
Drawn	A.M.
Checked	S.T.





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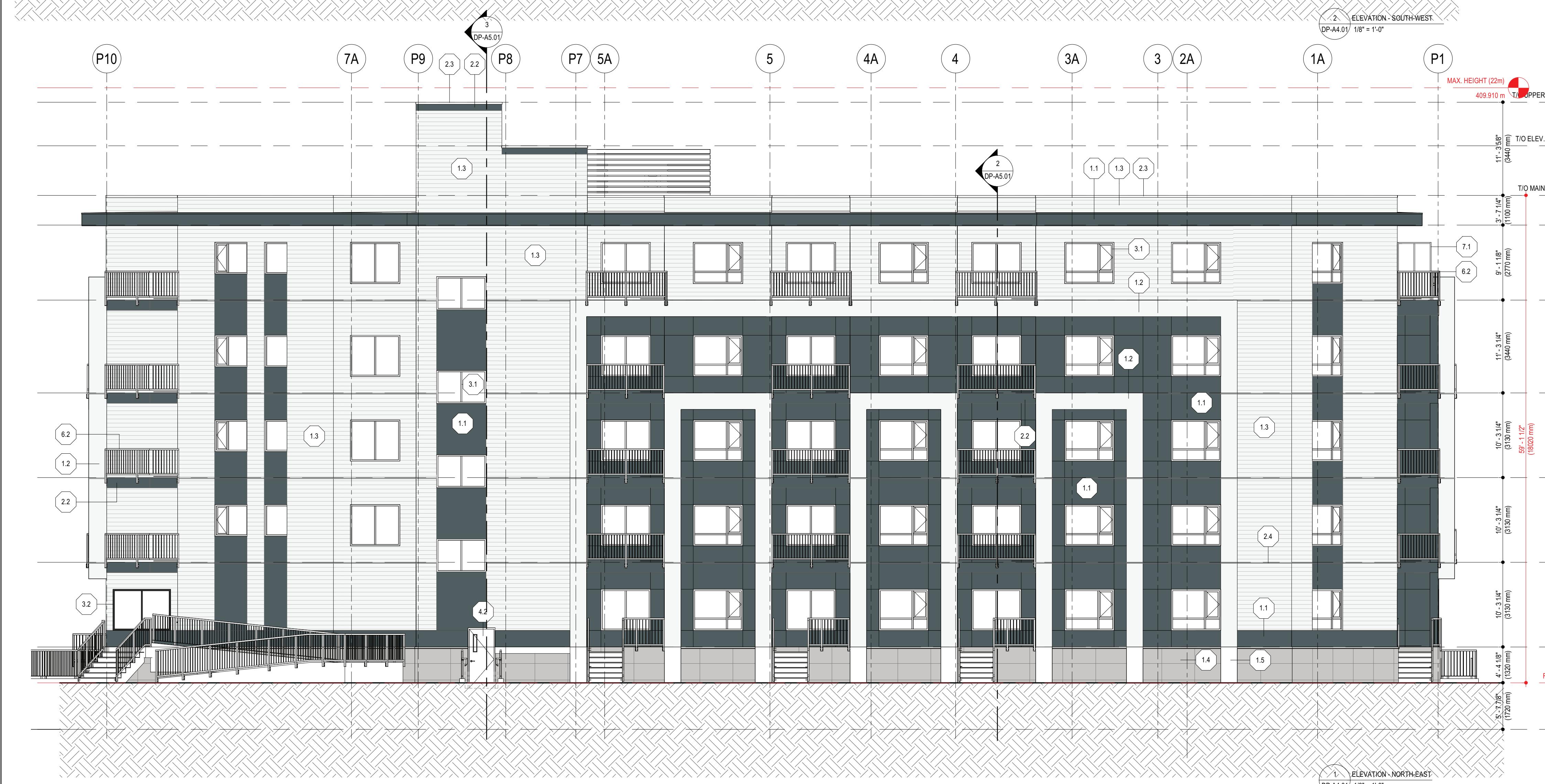
METKLEJOHN ARCHITECTS INC.



2023-12-04



BUILDING ELEVATION KEYNOTE SCHEDULE		
	MATERIAL	COLOUR
1.0 CLADDING		
1.1	FIBRE CEMENT PANEL	MEDIUM BLUE
1.2	FIBRE CEMENT PANEL	WHITE
1.3	FIBRE CEMENT HORIZONTAL LAP SIDING	WHITE
1.4	CONCRETE FACED INSULATION	GREY
1.5	CONCRETE	GREY
2.0 SOFFIT/FASCIA/TRIMS		
2.1	ALUMINUM SOFFIT PLANKS	LIGHT GRAY
2.2	FIBRE CEMENT TRIM BOARD	MEDIUM BLUE
2.3	PAPET CAP FLASHINGS	MEDIUM GRAY
2.4	WALL FLASHING	MATCHING ADJACENT SIDING
3.0 WINDOWS		
3.1	VINYL WINDOWS	WHITE
	VISION GLAZING	CLEAR / NO TINT
3.2	VINYL WINDOWS	BLACK
	VISION GLAZING	CLEAR / NO TINT
4.0 DOORS		
4.1	ALUMINUM & GLASS DOOR	BLACK ANODIZED
4.2	METAL DOOR & STEEL FRAME	MATCHING ADJACENT WALL
4.3	VINYL SWING DOORS	WHITE
4.4	INSULATED OVERHEAD DOOR	MEDIUM GRAY
5.0 ROOFS		
5.1	BUILT-UP ROOF MEMBRANE	GRAY / PATTERNED
5.2	BALCONY / DECK MEMBRANE	GRAY / PATTERNED
5.3	ROOF DECK PAVER	MEDIUM GRAY
6.0 METALS		
6.1	ROOF DECK GUARDRAIL	LIGHT GRAY
6.2	BALCONY METAL GUARDRAIL	LIGHT GRAY
6.3	HANDRAIL	LIGHT GRAY
7.0 FENCES / SCREENS		
7.1	GLAZED PRIVACY SCREEN	DARK GRAY FRAME
	GLAZING	FROSTED
7.2	ALUMINUM LOUVRE	CLEAR ANODIZED



BUILDING ELEVATION MATERIAL SCHEDULE		
FIBRE CEMENT PANEL - MEDIUM BLUE	FIBRE CEMENT PANEL - WHITE	FIBRE CEMENT LAP SIDING - WHITE
1.1, 2.2, 2.4, 4.2	1.2, 2.4, 4.2	1.3, 2.4, 4.2
CONCRETE FACED INSULATION	ROOF MEMBRANE - MEDIUM GRAY	METALS - LIGHT GRAY
1.4	5.1	2.1, 6.1, 6.2, 6.3
METALS - MEDIUM GRAY	METALS - DARK GRAY	VINYL - WHITE
2.3, 4.4, 5.3	7.1	3.1, 4.3
ALUMINUM - BLACK ANODIZED	ALUMINUM - CLEAR ANODIZED	CONCRETE - NATURAL
3.2, 4.1	7.2	1.5

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Revision		
No.	Date	Revision
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Project Title BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KELLER ROAD, KELLOGG, BC, V0X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSWOODS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A4.01

Drawing Title
**NORTH-EAST &
SOUTH-WEST BLDG.
ELEVATIONS**

Job No.	m+m 23-1973
Scale	AS SHOWN
Drawn	A.M.
Checked	S.T.



METKLEJOHN ARCHITECTS INC.



2023-12-04

BUILDING ELEVATION KEYNOTE SCHEDULE		
	MATERIAL	COLOUR
1.0 CLADDING		
1.1	FIBRE CEMENT PANEL	MEDIUM BLUE
1.2	FIBRE CEMENT PANEL	WHITE
1.3	FIBRE CEMENT HORIZONTAL LAP SIDING	WHITE
1.4	CONCRETE FACED INSULATION	GREY
1.5	CONCRETE	GREY
2.0 SOFFIT/FASCIA/TRIMS		
2.1	ALUMINUM SOFFIT PLANKS	LIGHT GRAY
2.2	FIBRE CEMENT TRIM BOARD	MEDIUM BLUE
2.3	PAPET CAP FLASHINGS	MEDIUM GRAY
2.4	WALL FLASHING	MATCHING ADJACENT SIDING
3.0 WINDOWS		
3.1	VINYL WINDOWS	WHITE
	VISION GLAZING	CLEAR / NO TINT
3.2	VINYL WINDOWS	BLACK
	VISION GLAZING	CLEAR / NO TINT
4.0 DOORS		
4.1	ALUMINUM & GLASS DOOR	BLACK ANODIZED
4.2	METAL DOOR & STEEL FRAME	MATCHING ADJACENT WALL
4.3	VINYL SWING DOORS	WHITE
4.4	INSULATED OVERHEAD DOOR	MEDIUM GRAY
5.0 ROOFS		
5.1	BUILT-UP ROOF MEMBRANE	GRAY / PATTERNED
5.2	BALCONY / DECK MEMBRANE	GRAY / PATTERNED
5.3	ROOF DECK PAVER	MEDIUM GRAY
6.0 METALS		
6.1	ROOF DECK GUARDRAIL	LIGHT GRAY
6.2	BALCONY METAL GUARDRAIL	LIGHT GRAY
6.3	HANDRAIL	LIGHT GRAY
7.0 FENCES / SCREENS		
7.1	GLAZED PRIVACY SCREEN	DARK GRAY FRAME
	GLAZING	FROSTED
7.2	ALUMINUM LOUVRE	CLEAR ANODIZED

BUILDING ELEVATION MATERIAL SCHEDULE		
FIBRE CEMENT PANEL - MEDIUM BLUE	FIBRE CEMENT PANEL - WHITE	FIBRE CEMENT LAP SIDING - WHITE
1.1, 2.2, 2.4, 4.2	1.2, 2.4, 4.2	1.3, 2.4, 4.2
CONCRETE FACED INSULATION	ROOF MEMBRANE - MEDIUM GRAY	METALS - LIGHT GRAY
1.4	5.1	2.1, 6.1, 6.2, 6.3
METALS - MEDIUM GRAY	METALS - DARK GRAY	VINYL - WHITE
2.3, 4.4, 5.3	7.1	3.1, 4.3
ALUMINUM - BLACK ANODIZED	ALUMINUM - CLEAR ANODIZED	CONCRETE - NATURAL
3.2, 4.1	7.2	1.5



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No.	Date	Revision
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Project Title BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KELLER ROAD, KELLOGG, BC, V1X 4C2
PARCEL A (PLAN 15166) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOODOOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A4.02

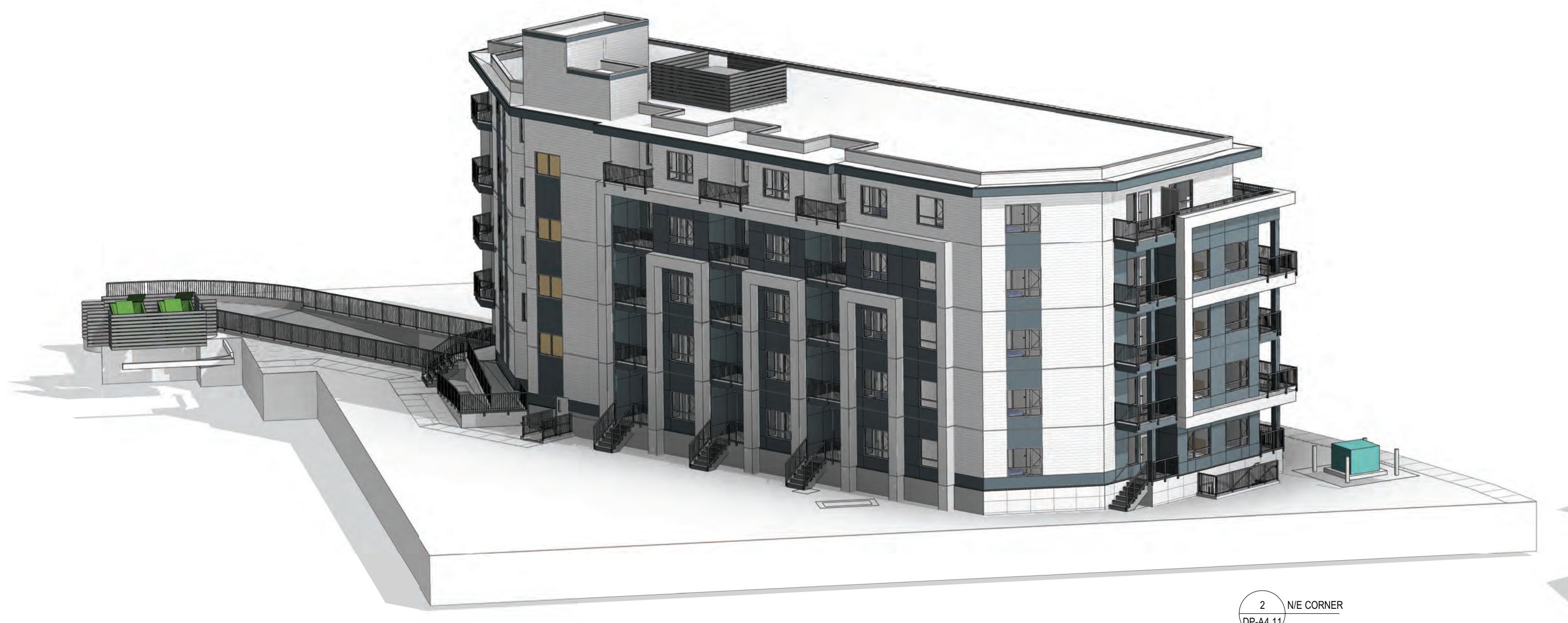
Drawing Title
**SOUTH-WEST &
SOUTH-EAST BLDG.
ELEVATIONS**

Job No.	m+m 23-1973
Scale	AS SHOWN
Drawn	A.M.
Checked	S.T.



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m+m
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2023-12-04

Issued		
1	2023-12-04	ISSUED FOR DEVELOPMENT PERMIT
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No.	Date	Revision

Project Title

BC HOUSING &
OMAHS, KNELLER
ROAD RENTAL
APARTMENT
PROJECT

175 KNELLER ROAD, KELLOGG, BC, V1X 4C2
PARCEL A (PLAN D1566) OF LOT 4 SECTION 27 TOWNSHIP 26
OSOYOO DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A4.11

Drawing Title

3D VIEWS

Job No.	m+m 23-1973
Scale	
Drawn	A.M.
Checked	S.T.



2023-12-04

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Revision	No. Date	Revision

BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELOWNA, BC, V1X 4C2
PARCEL A (PLAN D156) OF LOT 4 SECTION 27 TOWNSHIP 26
OSYODS DIVISION YALE DISTRICT PLAN 426

Drawing Number

Revision

DP-A5.01

Drawing Title

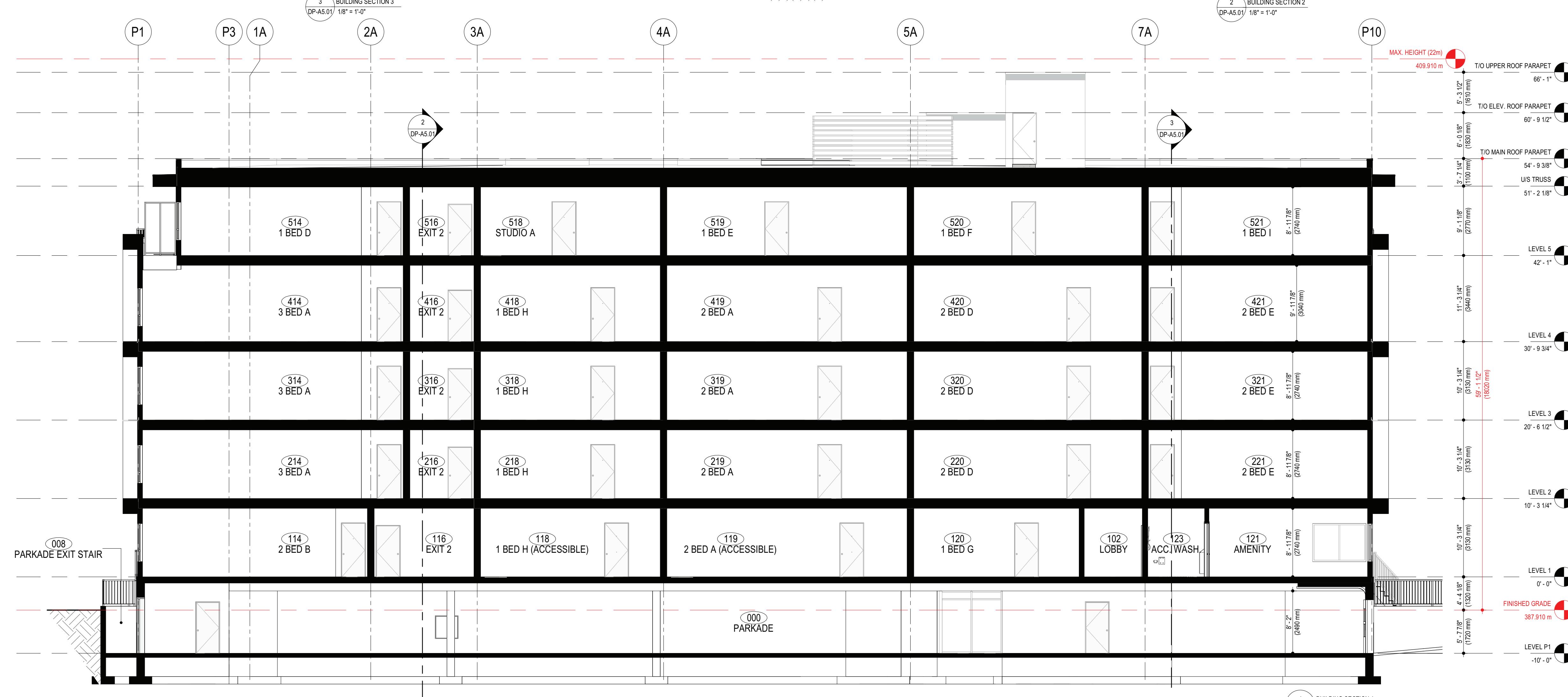
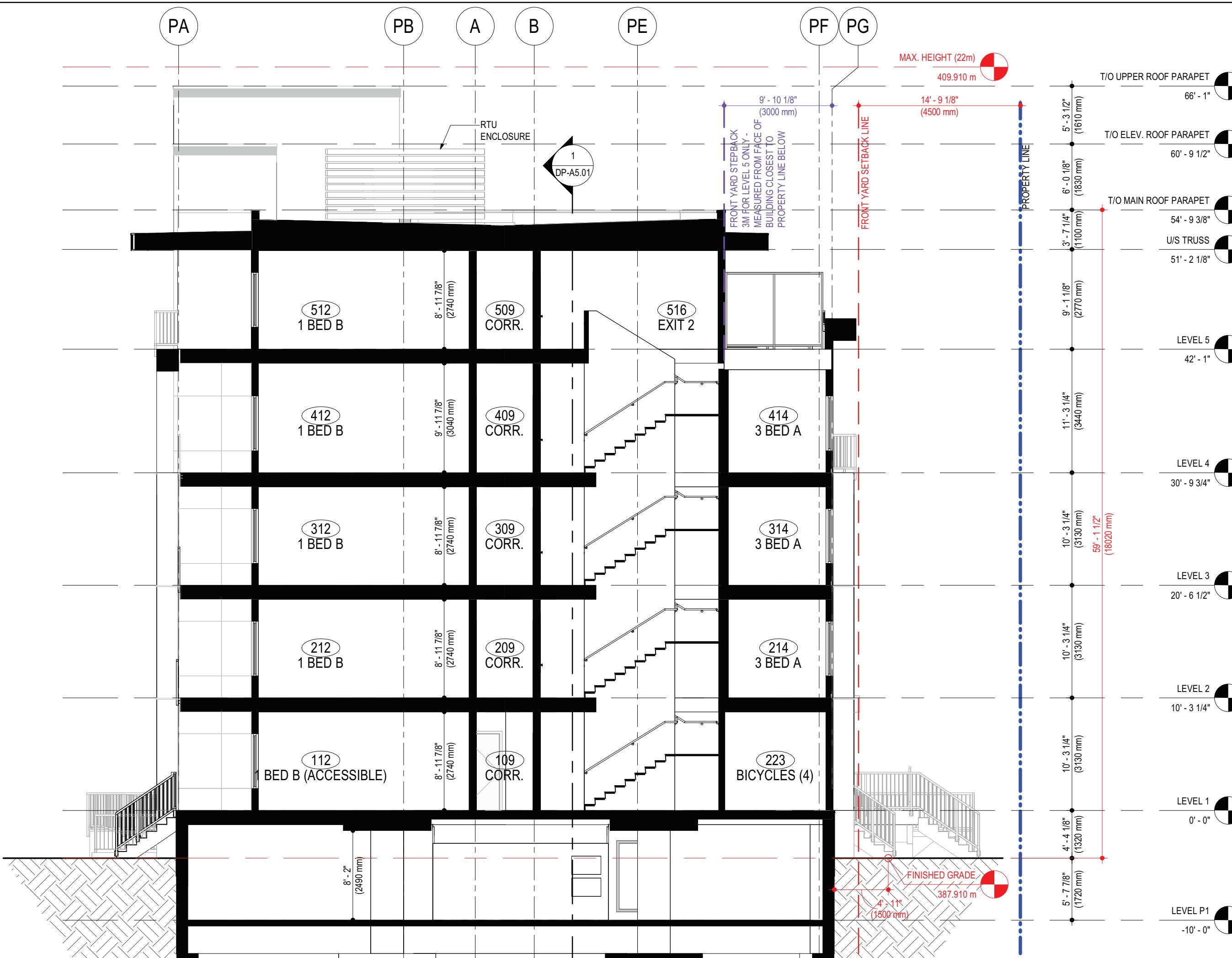
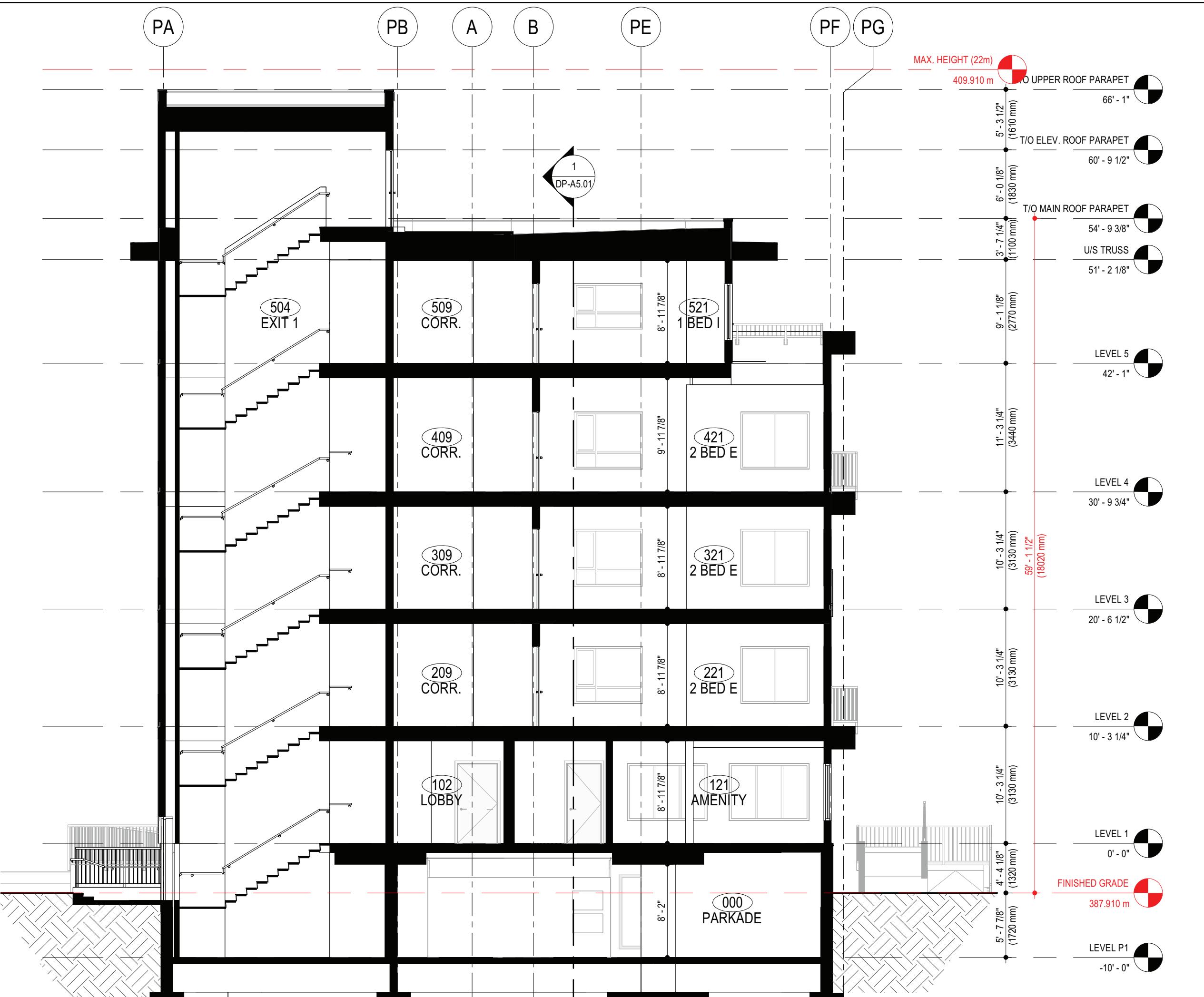
BUILDING SECTIONS

Job No. m+m 23-1973

Scale AS SHOWN

Drawn A.M.

Checked S.T.



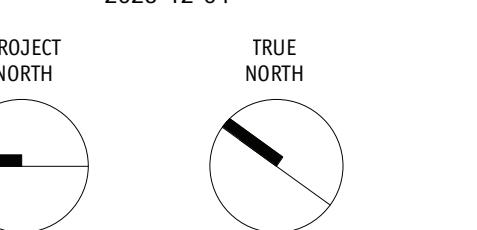


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2023-12-04



Issued	1	2023-12-04	ISSUED FOR DEVELOPMENT PERMIT
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BC HOUSING & OMAHS, KNELLER ROAD RENTAL APARTMENT PROJECT

175 KNELLER ROAD, KELOWNA, BC, V1X 4C2
PARCEL A (PLAN DP156) OF LOT 1 SECTION 27 TOWNSHIP 26
OSYODOS DIVISION YALE DISTRICT PLAN 426

Drawing Number

DP-A8.01

Revision

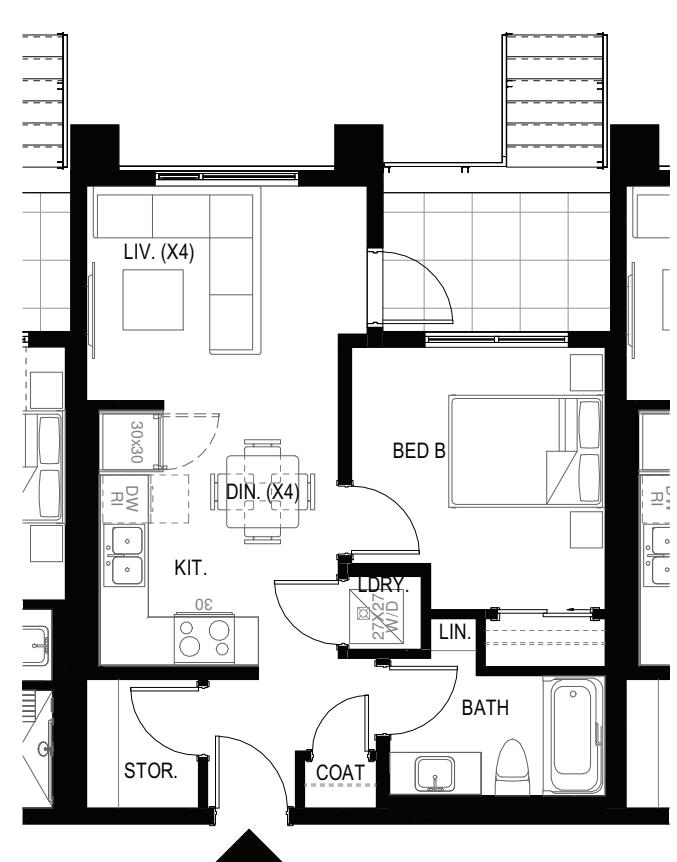
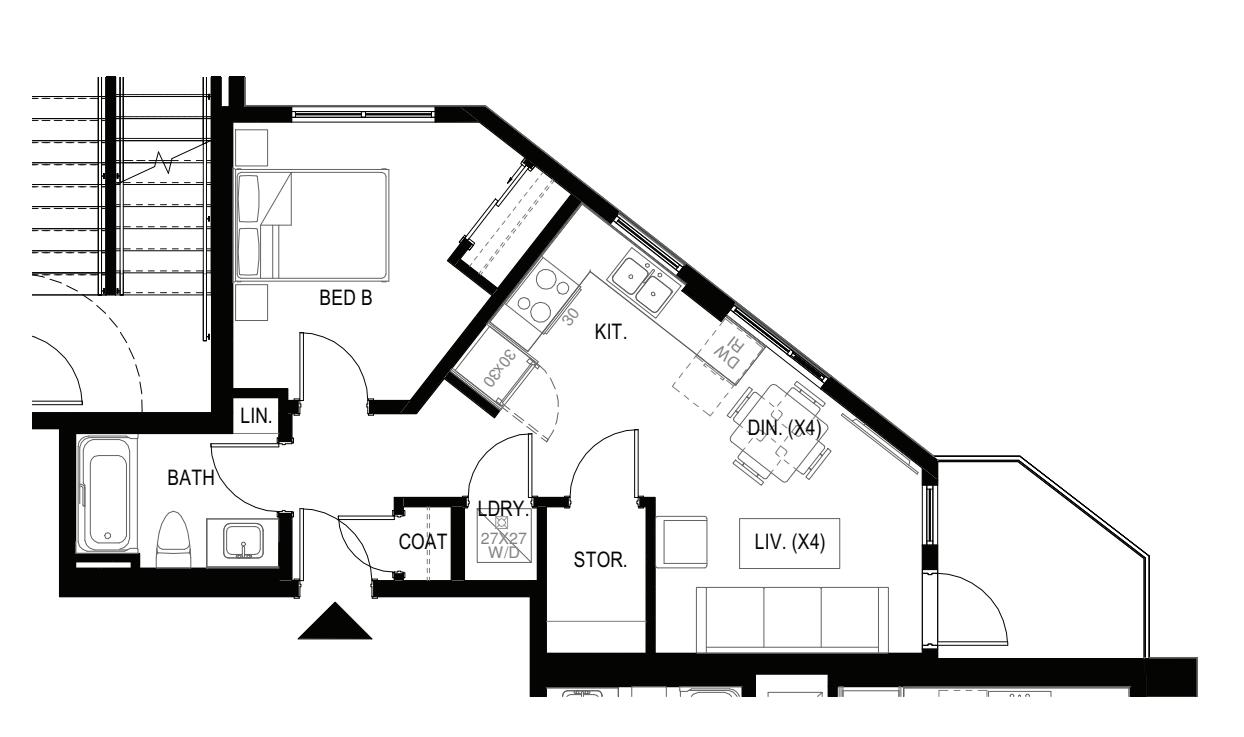
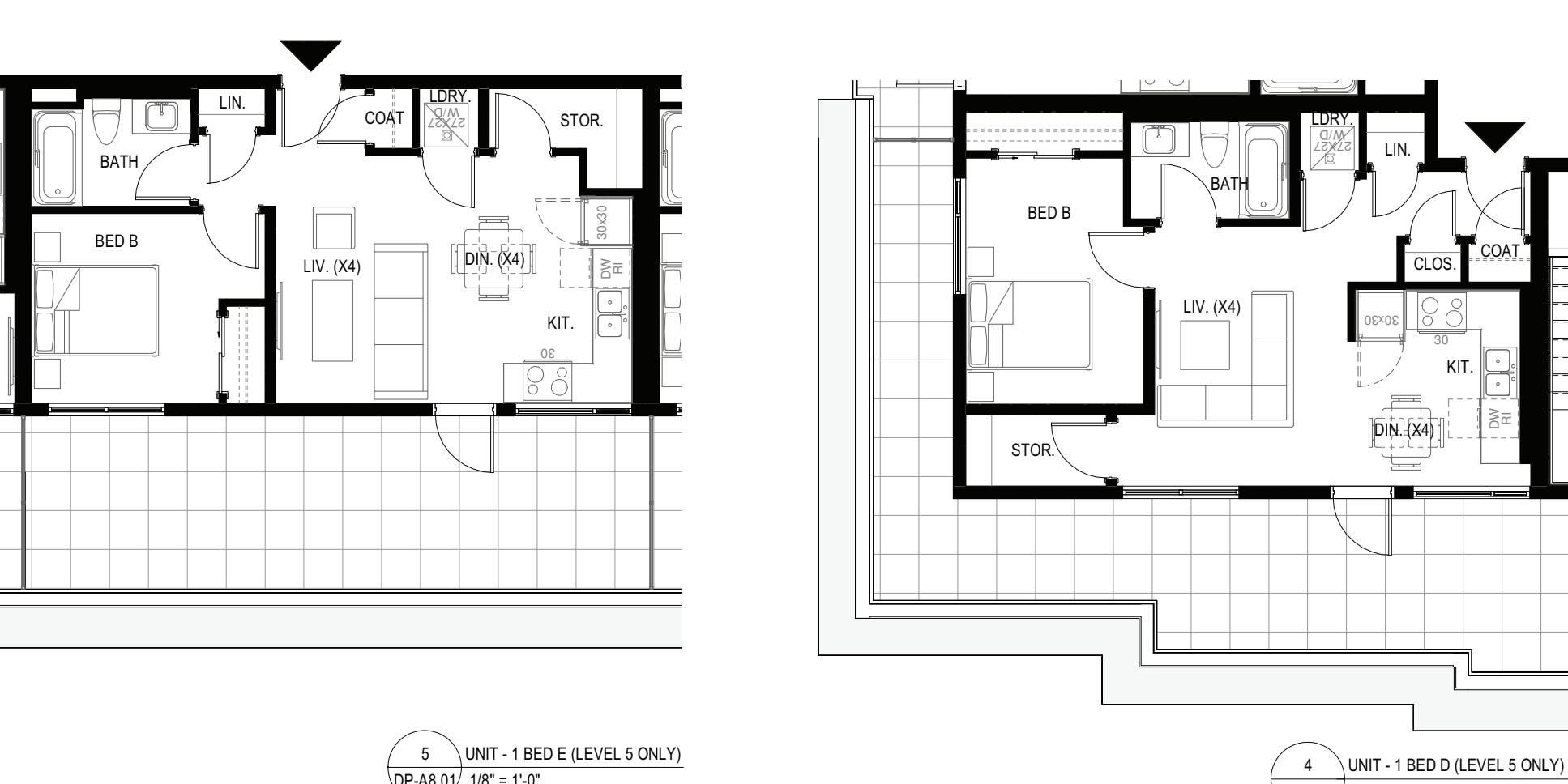
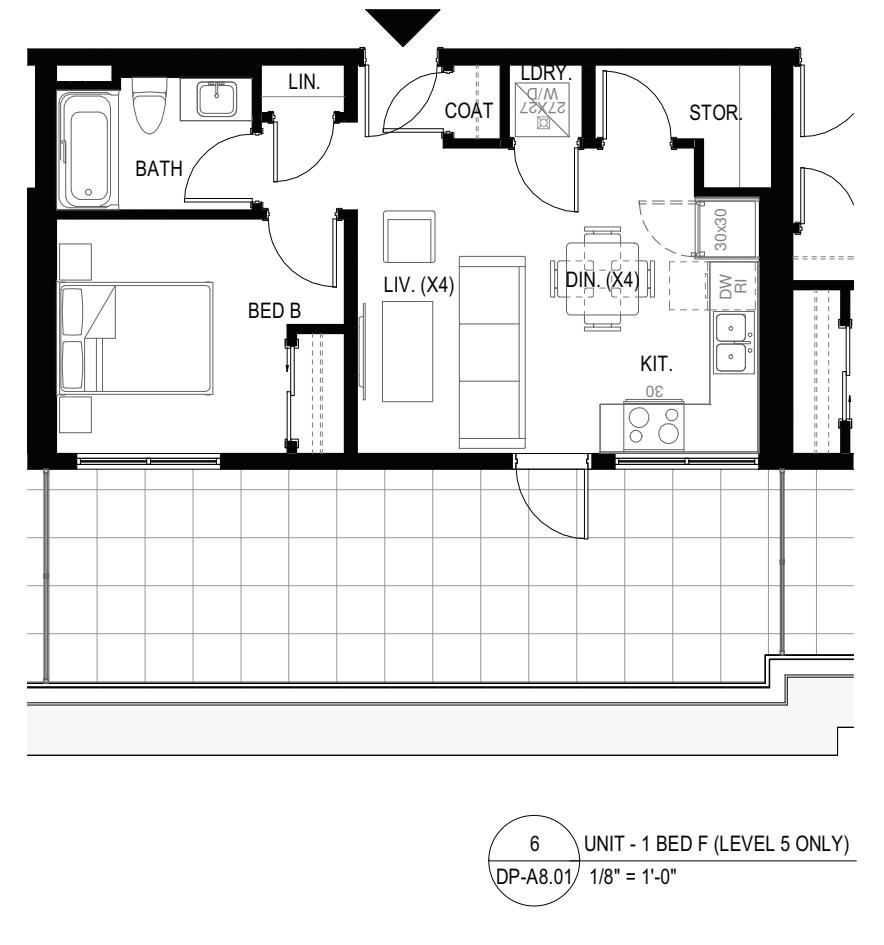
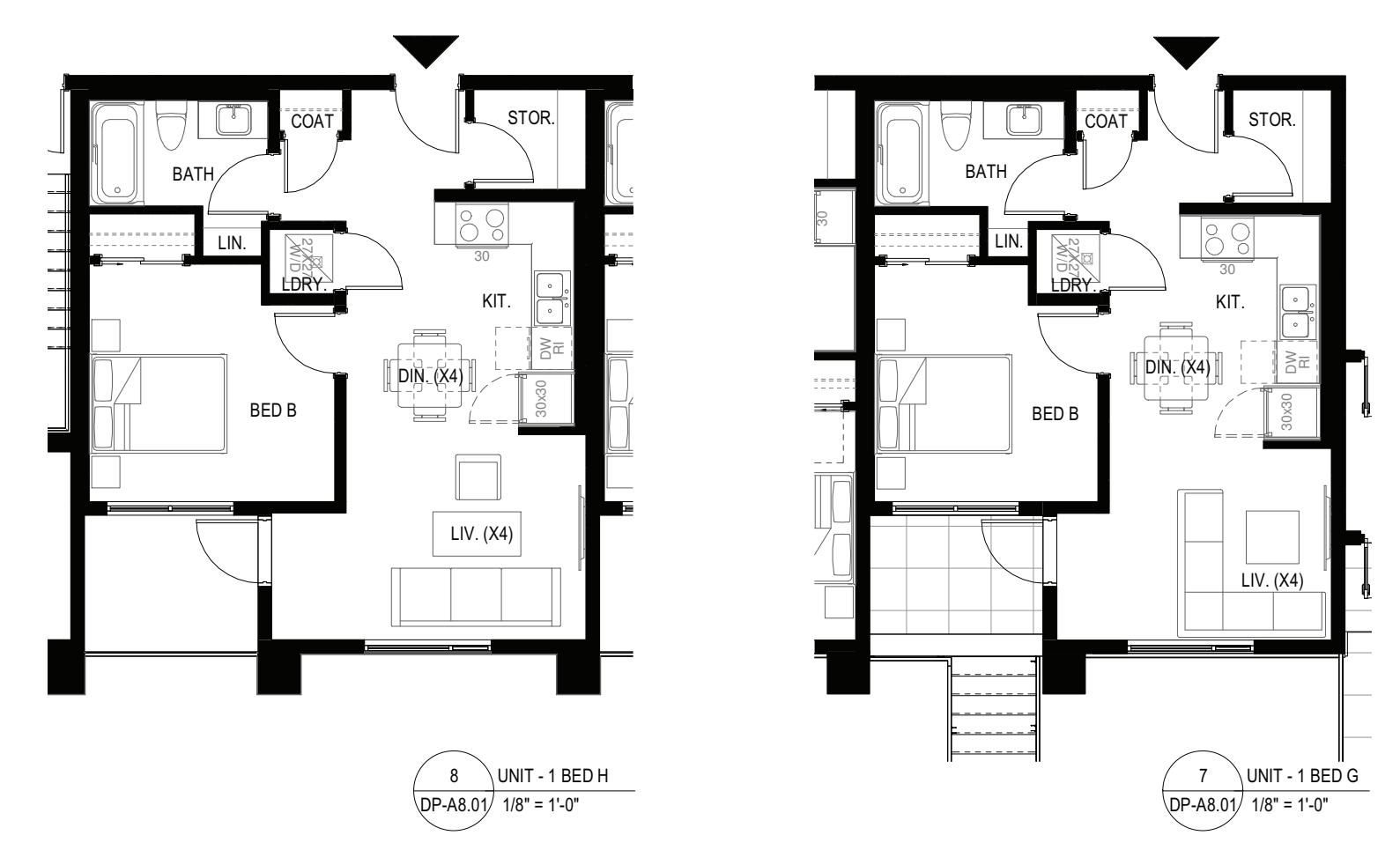
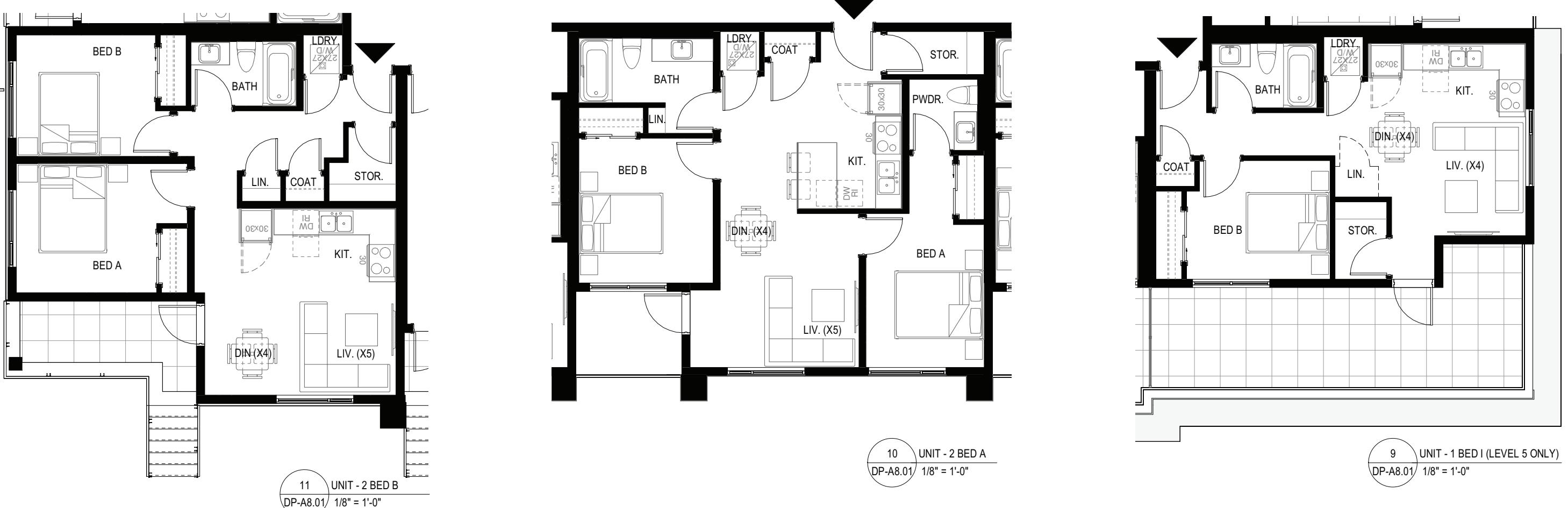
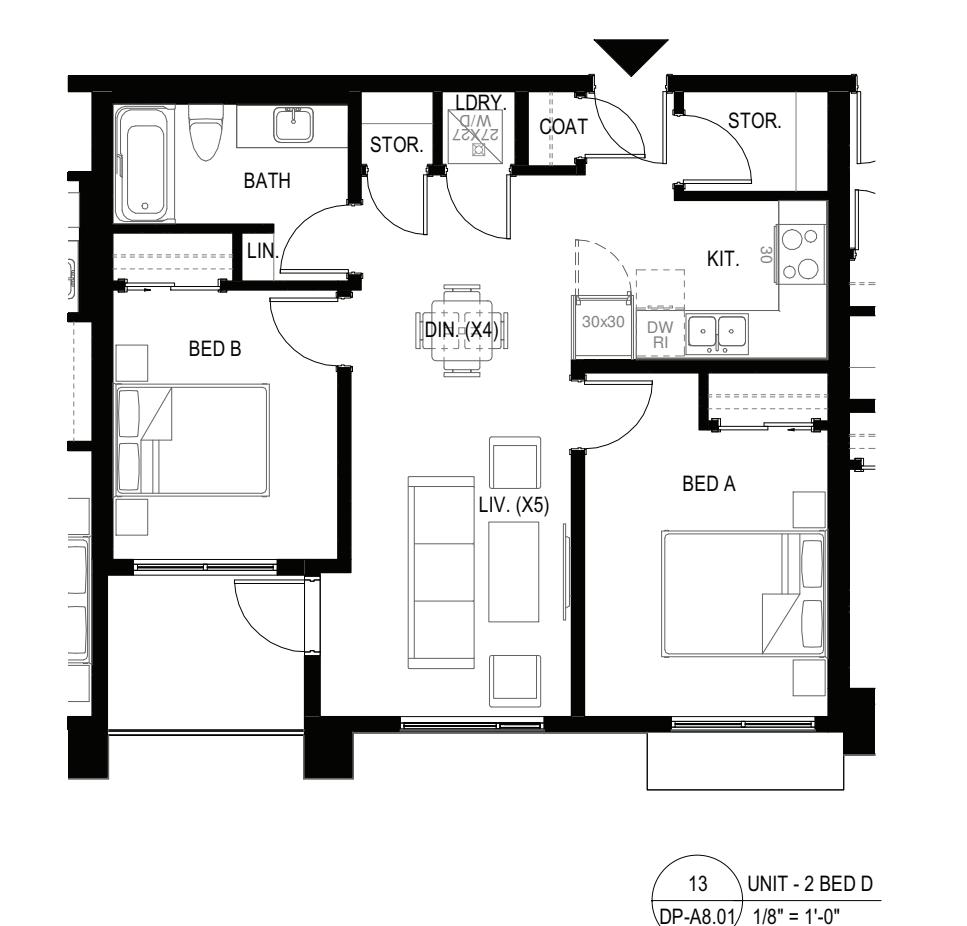
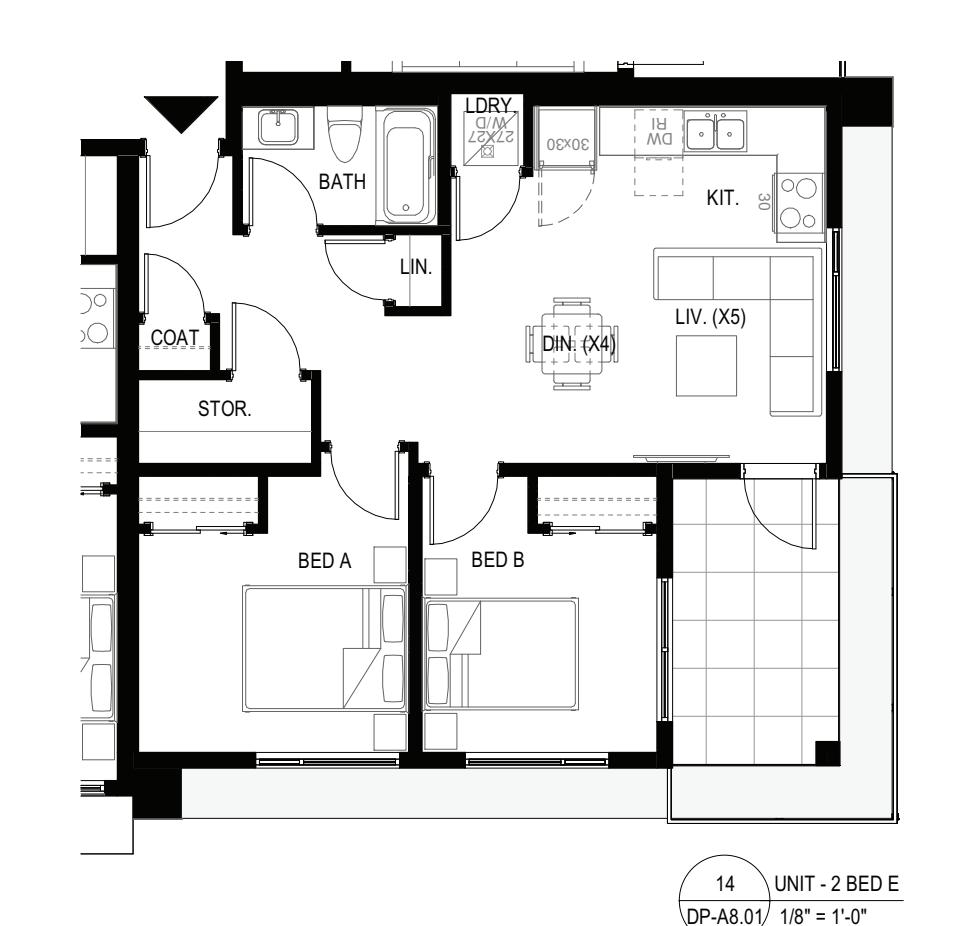
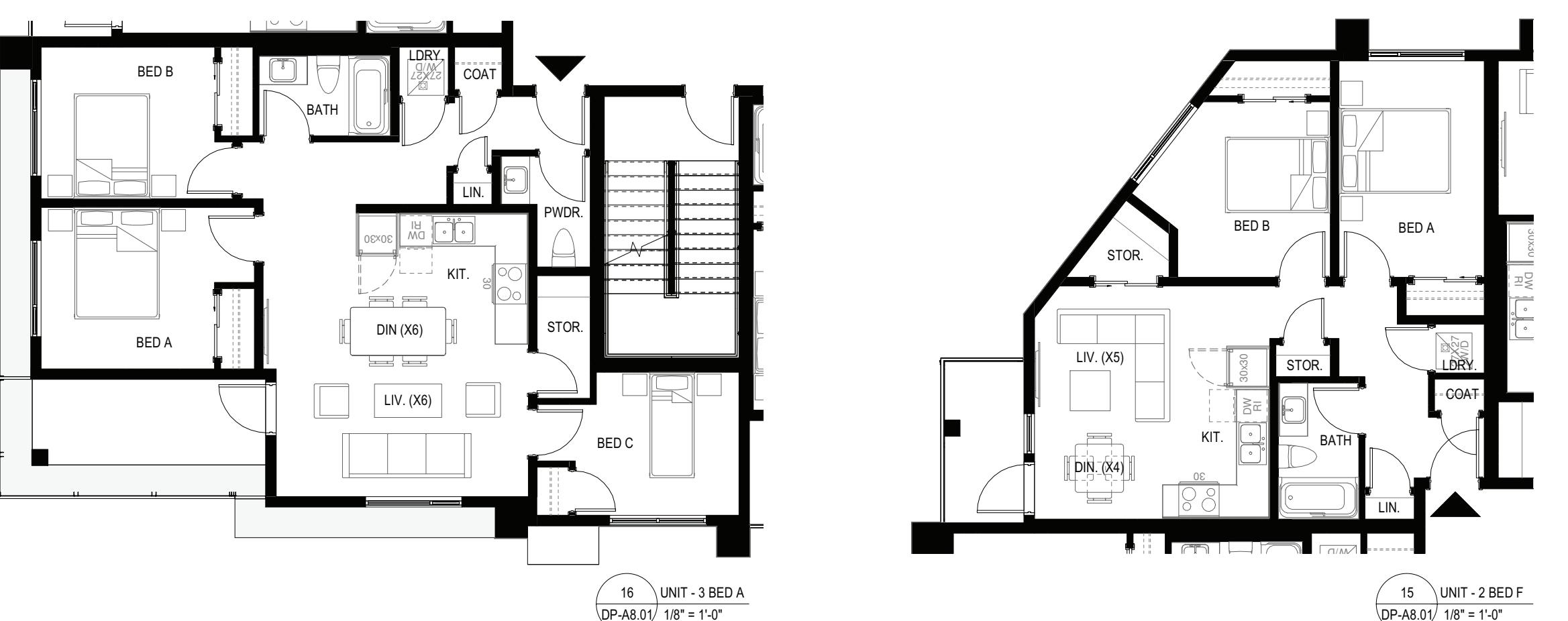
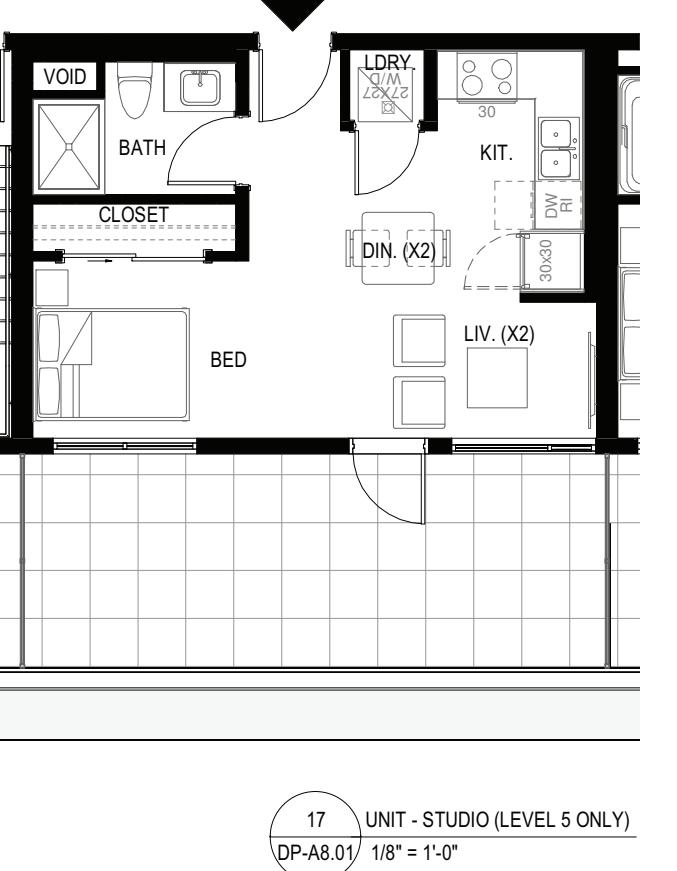
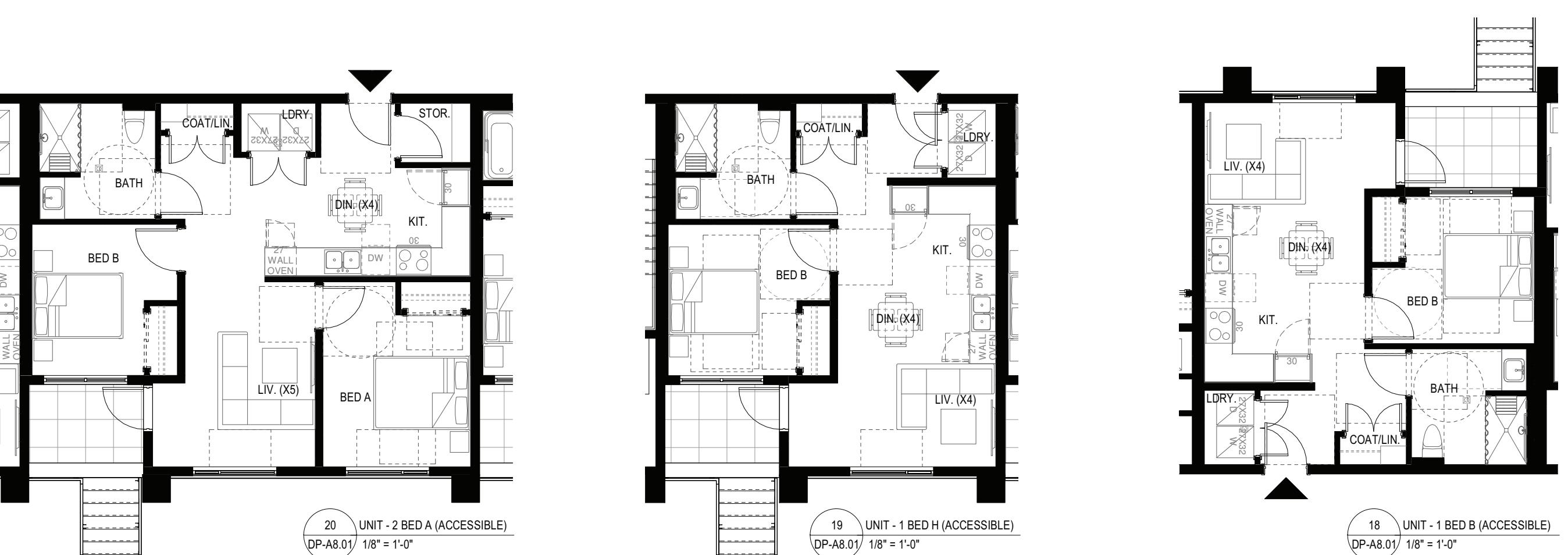
Drawing Title

UNIT PLANS

Job No.	m+m 23-1973
Scale	AS SHOWN
Drawn	A.M.
Checked	S.T.

UNIT PLAN SYMBOL LEGEND:

SYMBOL	DESCRIPTION
▼	UNIT ENTRY VIA CORRIDOR



0 5 10 15 20 25 M



PLANT LIST

PLANT QUANTITIES ESTIMATED ONLY. NOT FOR PRICING				
BOTANICAL NAME	COMMON NAME	QTY*	SIZE/SPACING	REMARKS
TREES				
ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	1	5cm CAL.	
ACER PLATANOIDES 'PRINCETON GOLD'	PRINCETON GOLD NORWAY MAPLE	5	4cm CAL.	
FRAXINUS PENNSYLVANICA	GREEN ASH	8	5cm CAL.	
MAGNOLIA 'SUSAN'	MAGNOLIA 'SUSAN'	2	3cm CAL.	
PINUS FLEXILIS 'VANDERWOLF'S PYRAMID'	LIMBER PINE	1	2.5m HT.	
SHRUBS				
ARCTOSTAPHYLOS UVA-URSI	KINNIKINICK	5	#02 CONT. / 1.8M O.C. SPACING	
ARTEMISIA LUDoviciana	WHITE SAGE	20	#02 CONT. / 0.9M O.C. SPACING	
BERBERIS AQUIFOLIUM	HOLLY-LEAVED BARBERRY	10	#02 CONT. / 1.2M O.C. SPACING	
BUXUS 'GREEN VELVET'	GREEN VELVET BOXWOOD	15	#02 CONT. / 3.0M O.C. SPACING	
EUONYMUS ALATUS 'COMPACTUS'	FIRE BALL BURNING BUSH	3	#02 CONT. / 2.4M O.C. SPACING	
RHUS AROMATICA 'GRO-Low'	GRO-Low SUMAC	4	#02 CONT. / 2.4M O.C. SPACING	
RIBES AUREUM	GOLDEN CURRENT	4	#02 CONT. / 1.2M O.C. SPACING	
ROSA 'RADCON'	RAINBOW KNOCKOUT ROSE	15	#02 CONT. / 1.2M O.C. SPACING	
ROSA RUGOSA 'HANSA'	HANSA RUGOSA ROSE	15	#02 CONT. / 1.8M O.C. SPACING	
ROSA Woodsii	WOODSII ROSE	5	#02 CONT. / 0.9M O.C. SPACING	
SAMBUCUS NIGRA SUBSP. CAerulea	BLUE ELDERBERRY	3	#02 CONT. / 9.0M O.C. SPACING	
SPIRAEA X VANYHOOTII	BRIDAL WREATH SPIREA	3	#02 CONT. / 3.0M O.C. SPACING	
SYRINGA MEYERI 'PABIN'	DWARF KOREAN LILAC	7	#02 CONT. / 2.1M O.C. SPACING	
SYRINGA PUBESCENS SUBSP. PATULA 'MISS KIM'	MISS KIM LILAC	3	#02 CONT. / 2.4M O.C. SPACING	
TAXUS X MEDIA 'TAUNTON'	TAUNTON YEW	10	#02 CONT. / 1.5M O.C. SPACING	
VIBURNUM TRILOBUM 'COMPACTUM'	COMPACT CRANBERRY BUSH	5	#02 CONT. / 1.8M O.C. SPACING	
PERENNIALS & GRASSES				
ACHILLEA Millefolium 'TERRACOTTA'	TERRACOTTA YARROW	60	#01 CONT. / 0.6M O.C. SPACING	
ATHYRIUM FILIX-FEMINA VAR. ANCUSTUM 'LADY IN RED'	LADY IN RED FERN	60	#01 CONT. / 0.6M O.C. SPACING	
CALAMAGROSTIS X ACUTIFLORA 'KARI FOERSTER'	KARI FOESTER FEATHER REED GRASS	40	#01 CONT. / 0.75M O.C. SPACING	
ECHINACEA PURPUREA 'SOLAR FLARE'	SOLAR FLARE CONEFLOWER	60	#01 CONT. / 0.6M O.C. SPACING	
RUDBECKIA FULGIDA VAR. SULLIVANTII 'GOLDSTORM'	BLACK-EYED SUSAN	60	#01 CONT. / 0.6M O.C. SPACING	
SEDUM 'HERBSTSTREUDE'	AUTUMN JOY STONECROP	60	#01 CONT. / 0.6M O.C. SPACING	
SPOROBOLUS HETEROLEPIS	PRairie DROPSHEd	30	#01 CONT. / 0.9M O.C. SPACING	
TIarella cordifolia	FOAM FLOWER	60	#01 CONT. / 0.6M O.C. SPACING	

PROJECT TITLE
OMAHS, 175 KNELLER ROAD

Kelowna, BC
DRAWING TITLE

CONCEPTUAL LANDSCAPE PLAN

ISSUED FOR / REVISION
1 23.12.04 Issued for Development Permit
2
3
4
5

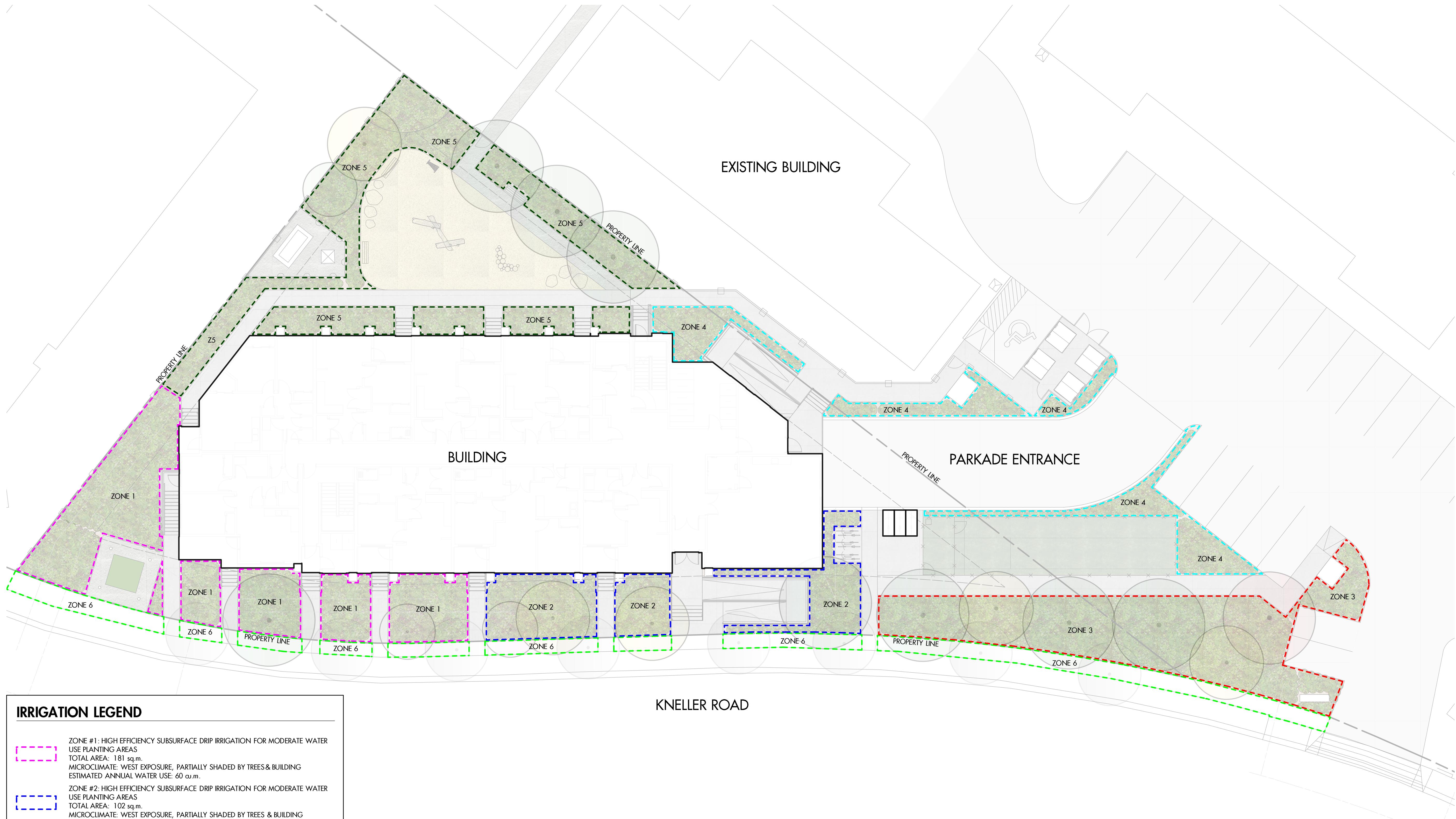
PROJECT NO. 23-0786
DESIGN BY GS
DRAWN BY MC
CHECKED BY FB
DATE DEC. 4, 2023
SCALE 1:150
PAGE SIZE 24" x 36"

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IRRIGATION LEGEND

 	ZONE #1: HIGH EFFICIENCY SUBSURFACE Drip IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 181 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 60 cu.m.
 	ZONE #2: HIGH EFFICIENCY SUBSURFACE Drip IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 102 sq.m. MICROCLIMATE: WEST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 34 cu.m.
 	ZONE #3: HIGH EFFICIENCY SUBSURFACE Drip IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 190 sq.m. MICROCLIMATE: SOUTH EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 63 cu.m.
 	ZONE #4: HIGH EFFICIENCY SUBSURFACE Drip IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 99 sq.m. MICROCLIMATE: SOUTHEAST EXPOSURE, PARTIALLY SHADED BY TREES & BUILDING ESTIMATED ANNUAL WATER USE: 33 cu.m.
 	ZONE #5: HIGH EFFICIENCY SUBSURFACE Drip IRRIGATION FOR MODERATE WATER USE PLANTING AREAS TOTAL AREA: 186 sq.m. MICROCLIMATE: NORTHEAST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 62 cu.m.
 	ZONE #6: LOW VOLUME POP-UP SPRAYHEADS FOR TURF AREAS TOTAL AREA: 105 sq.m. MICROCLIMATE: SOUTHWEST EXPOSURE, PARTIALLY SHADED BY TREES ESTIMATED ANNUAL WATER USE: 90 cu.m.

IRRIGATION NOTES

- IRRIGATION PRODUCTS AND INSTALLATION METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE WATER USE REGULATION BYLAW NO. 10480 AND THE SUPPLEMENTARY SPECIFICATIONS IN THE CITY OF KELOWNA BYLAW 7900 (PART 6, SCHEDULE 5).
- THE IRRIGATION SYSTEM SHALL MEET THE REQUIREMENTS, REGULATIONS, AND BYLAWS OF THE WATER PURVEYOR.
- THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTION DEVICE, WATER METER, AND SHUT OFF VALVE LOCATED OUTSIDE THE BUILDING ACCESSIBLE TO THE CITY.
- AN APPROVED SMART CONTROLLER SHALL BE INSTALLED. THE IRRIGATION SCHEDULING TIMES SHALL UTILIZE A MAXIMUM ET VALUE OF 7" / MONTH (KELOWNA JULY ET), TAKING INTO CONSIDERATION SOIL TYPE, SLOPE, AND MICROCLIMATE.
- Drip line and emitters shall incorporate technology to limit root intrusion.
- Irrigation sleeves shall be installed to route irrigation lines under hard surfaces and features.
- Irrigation pipe shall be sized to allow for a maximum flow of 1.5m /SEC.
- A flow sensor and master valve shall be connected to the controller and programmed to stop flow to the system in case of an irrigation water leak.

WATER CONSERVATION CALCULATIONS

LANDSCAPE MAXIMUM WATER BUDGET (WB) = 518 cu.m. / year
ESTIMATED LANDSCAPE WATER USE (WU) = 343 cu.m. / year
WATER BALANCE = 175 cu.m. / year
*REFER ATTACHED IRRIGATION APPLICATION FOR DETAILED CALCULATIONS

PROJECT TITLE
OMAHS, 175 KNELLER ROAD
KELLOGG, BC
DRAWING TITLE

ISSUED FOR / REVISION	
1	23.12.04 Issued for Development Permit
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PROJECT NO	23-0786
DESIGN BY	G5
DRAWN BY	MC
CHECKED BY	FB
DATE	DEC. 4, 2023
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PAGE SIZE	24" x 36"
SEAL	



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