



STAFF REPORT

To: Council

File No.: 3360-20-2105/ RZ000058

From: Director of Development Services

Date: June 14, 2023

Subject: Zoning Amendment Bylaw No. 3037 – 1590 Piercy Ave

PURPOSE:

The purpose of this report is for Council to consider a Zoning Bylaw amendment application to establish a new Comprehensive Development 39 (CD-39) zone, and rezone the property from R-2 to CD-39 to allow a multi-unit housing development consisting of nine town house units.

LEGAL DESCRIPTION:

That Part of Lot 3, Section 41, Comox District, Plan 4764, Shown Outlined in Red on Plan 1402 R.

EXECUTIVE SUMMARY:

This report details a zoning amendment application to permit a multi-unit housing development containing nine town houses in three buildings on a 2,032 m² sized property. The subject property is located in a Secondary Growth Centre (McPhee Neighbourhood Centre) surrounded by a mix of multi-unit housing developments and single-residential homes. The proposed development is consistent with OCP land use policies. Development Services Department staff support this zoning amendment application.

BACKGROUND:

This application was originally received in May 2021. For various reasons including adoption of the new OCP, the application has not been presented for bylaw readings until now. This application is therefore reviewed in part with reference to both the old OCP and new OCP.

The subject property is approximately 0.203 ha in size and is located on Piercy Avenue between 17th Street and Cumberland Avenue. The site contains an existing single-residential building and is covered by a mix of shrubs, trees, and grasses. The site slopes west to east with an average slope of 2%. Vehicular access is from Piercy Avenue. **Figure 1** shows the subject property location.

Figure 1 – Subject Property



The subject property is within the Residential Two (R-2) zone. Surrounding properties are a mix of single-residential dwellings and multi-unit residential buildings. See Table 1 below.

Table 1 – Surrounding Zoning and Use

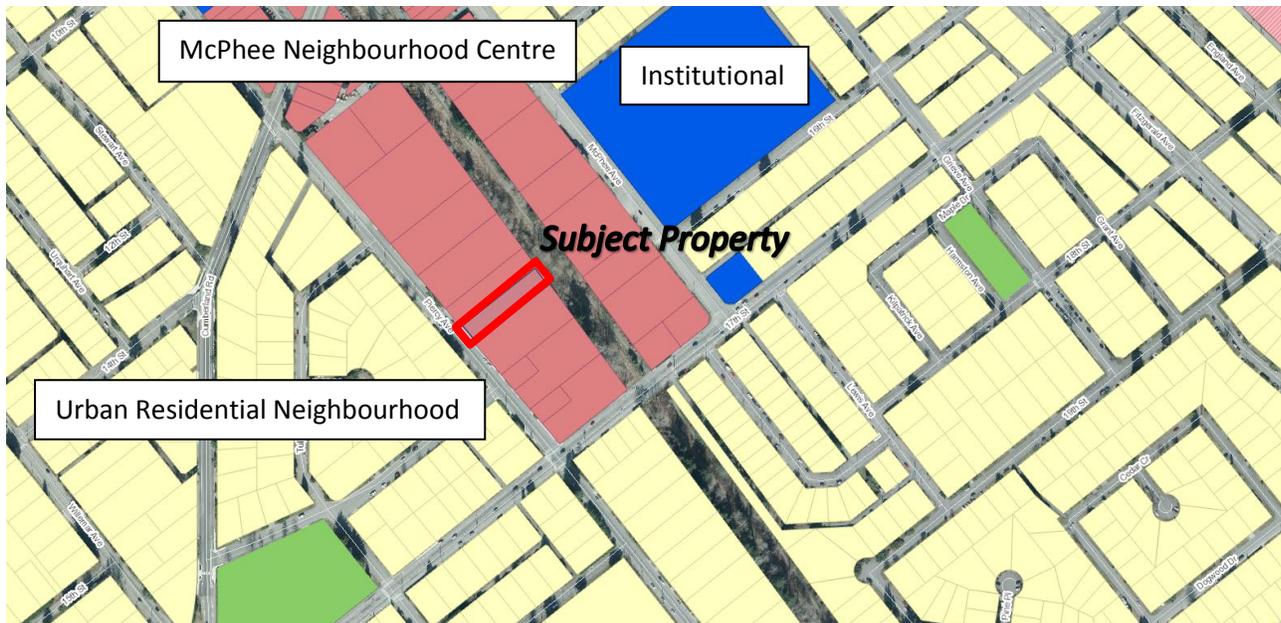
Direction	Zoning	Use
West	R-2 (Residential Two)	Multi-residential – 6 townhomes
South east	R-3 (Residential Three)	Multi-residential – 10 townhomes
South west (across Piercy Ave)	R-2 (Residential Two)	Single residential dwellings
North east (rear)	I-3 (Industrial Three)	Island Corridor Foundation right of way

By means of comparison, the subject property is slightly larger than the property at 1580 Piercy Ave, neighbour to the west that contains six units in the form of 3 duplex units. That property is approx. 1947 m² in area with a 20.5 m frontage. The subject property is 2,030 m² (0.5 ac) with a 21.6 m frontage.

The Official Community Plan (OCP) designates the subject property and properties on the east side of Piercy Avenue between as 17th Street and west of Cumberland Rd and properties across the Island Corridor as “Neighbourhood Centre”. A diversity of multi-residential housing choices and neighbourhood scale commercial uses are supported within this designation. Across Piercy Avenue the OCP Land Use designation for these properties is “Urban Residential” (**Figure 2**).

The OCP designates this subject property to be in the form and character Development Permit Area for Commercial, Industrial, Mixed-Use Developments, and Multi-Residential Dwellings with Three or More Units (DPA-1) and staff have reviewed for general compliance. There is no development permit application at this time and one will be required prior to building permit issuance.

Figure 2 – OCP Land Use Designations



The applicant proposes to amend the zoning bylaw to facilitate the construction of nine residential units in three buildings: a duplex that fronts Piercy Avenue; a fourplex located in the centre of the lot; and a triplex at the rear. See **Figure 3** for a site plan of the proposed development and **Figure 4** for a conceptual rendering of the development (without landscaping). The applicant’s proposal is summarized in **Attachment 1**.

Figure 3 – Conceptual Development Layout



Architectural and landscape drawings are shown in **Attachment 2 and 3**. These may be subject to refinement as part of subsequent development permit application process should the zoning bylaw amendment be approved.

Figure 4– Site Plan



DISCUSSION:

Zoning Review

The subject property is zoned R-2 which does not permit multi-residential development. The proposed development requires a zoning bylaw amendment to accommodate the infill development. Because an existing comparable zone (the R-3 zone) regulations would not permit this particular proposal, a comprehensive development zone (CD-39) based upon the R-3 zone has been drafted for Council’s consideration. The proposed CD-39 zone is attached as **Attachment 5**.

Table 2 below compares the proposed CD-39 zone to the R-3 zone to identify the differences. If the R-3 was applied to this property, these differences would require variances to be obtained by Council separately.

The proposed on-site parking reduction included in the table is supported pursuant to the parking studies (**Attachment 4**) submitted by the applicant.

Zoning Review - Table 2

	R-3 Zone	Proposed (CD-39 Zone)	Deviations that would require a variance
Lot size	1,250 m ²	2,030 m ²	Larger lot size
FAR	0.40	0.40	
Lot Coverage	none	22.3 %	
Lot Frontage	30.0 m	21.6 m	8.4 m less lot frontage width
Setbacks			
- Front	7.5 m	7.5 m	
- Rear	7.5 m	7.3 m	Rear yard setback is 7.3 m, 0.2 m less at the NE corner due to lot shape.
- Side	4.5 m total with a min of 1.5 m 6.0 m when the back of the building is adjacent to or faces a side lot line	2.8 m (NW) 1.5 (SE)	Side yard setbacks total 4.3 m, 0.2 m less due to lot width. Building 2 (triplex) rear elevation faces side lot line (east) with a 5.0 m setback due to lot width.
Building Height			
- Principle	10.0 m	6.5 m	Lower due to building form

	R-3 Zone	Proposed (CD-39 Zone)	Deviations that would require a variance
Usable Open Space	30.0 m ² for each DU with 1 bdrm 50.0 m ² for each DU with 2+ bdrms Total – 450 m ²	Total - 1,065 m ²	More useable open space to allow for private open space for each unit as well as community open suitable for family housing and will contain some furniture.
Accessory Building - Height - Size - Siting	4.5 m 50.0 m ² or 10% of rear yard In side or rear yard only. 1.5 m from side or rear lot line	Covered garbage enclosure 2.8 m 13.0 m ² Is at zero lot line, side yard (west)	Garbage enclosure is zero lot line so it's accessible to contractors.
Parking (Section 7) - Vehicular - Bicycle - EV Bicycle	1.2 per DU + 10% visitor Total – 11 + 2 = 12 Class II (Occupant) – 18 Class I (Visitor) – 2 9	1 per DU + 1 visitor Total – 9 + 1 = 10 Class II (Occupant)– 18 Class I (Visitor)– 8 9	Two fewer on-site parking stalls are proposed based upon parking analyses prepared by Watt Consulting and supported by the OCP.

Outdoor Amenity Space, Landscaping and Trees

The total outdoor amenity space is 1065 m² which includes front yards and private rear porches for each unit and a larger amenity area located between the four townhouses and three townhouses. This area will contain some outdoor furniture.

The garbage/recycling enclosure located west of the parking area is to be located at zero lot line. This enclosure is small at 13.0 m² and 2.8 m height. It will be constructed of materials that complement the building materials. The location of the enclosure at the zero lot line is necessary given site constrictions and waste receptacle access requirements. The enclosure of the garbage/recycling facility was proposed to address comments from the neighbour.

Landscape buffers will be planted around the perimeter of the property ranging from 1.2 m in width to 3.4 m in width for the north side yard (left), between 1.5 to 1.8 m in the south side yard (left) and 4.5 m buffers will be planted in the rear and in front yards except for driveway. In addition to the landscape buffer around the perimeter a 1.8 m wood fence will be installed as well as privacy fences between patios. Site furniture is also proposed including benches and a picnic table. Refer to **Attachment 3** of this report for the landscape plan.

The landscape plan shows protection of two mature maple trees and tree replacement for those that are being removed (32 new trees). The arborist report notes that trees located in the perimeter are cottonwood or red-alder and are not suitable for the landscape plan. These species are also not eligible for tree bylaw retention candidates (outside of Environmentally Sensitive Areas). Other trees have structural characteristics which preclude them from maturing into healthy, defect-free trees.

Access, Parking and Bikes

Parking for this project is detailed in the two traffic/parking studies prepared by WATT Consulting Group, dated March 30, 2020 and July 4, 2022 (***Attachment 4***). The studies determined the total expected parking demand for the proposed development is 10 parking spaces total: one per dwelling unit and one visitor parking space for a total of ten, or 1.11 spaces per unit.

The parking area and 2.0 m wide strip of the driveway will be permeable surfaces of core grass/core gravel and meets OCP policy NE 16 to limit the extent of impervious surfaces on private and public land.

On-street parking use was observed for both studies, in the evening hours, the peak demand time for residential use. The 2020 study observed a 9% occupancy rate, out of 157 total spaces. And the 2022 study observed a 23% occupancy rate based on 143 parking spaces. These findings reflect that the surrounding residential land uses do not rely heavily on on-street parking during peak demand time for residential use.

The subject property will be served by a 6 m wide driveway access. The parking area will be permeable surfaces of core grass/core gravel.

Infrastructure

The applicant proposes to discharge via point source flows directly into the adjacent private Island Corridor Foundation (ICF) property. The applicant has provided confirmation from ICF confirming they will permit this action and will enter into an easement with the proponent. This easement will be required to be registered on the title of the property prior to Council's consideration of final approval.

POLICY ANALYSIS:

This proposal meets the following objectives detailed in Official Community Plan Bylaw 3070, 2022.

Land Use:

- ***Objective 1:*** Community growth is located away from hazardous lands, agricultural lands and environmentally sensitive areas.
 - The subject property contains no environmentally sensitive areas.
- ***Objective 2:*** The majority of community growth is strategically guided into growth centres to create more 10-minute neighbourhoods
 - The subject property is located in the McPhee Neighbourhood Centre 1.1 km from commercial/retail amenities and personal and professional services. There are two bus stops within a 6-minute walk and another stop within 11-minute walk. Sidewalks are located on both side of Piercy Avenue. There is an existing bike route 600 m from the subject property and 900 m from a future proposed bike route. The Island Corridor multi-use pathway, runs along the rear property line.
- ***Objective 3:*** Moderate infill development occurs across the entire city outside growth centres
 - The development proposes a floor area ratio of .40 and is consistent with the R-3 zone, the most similar low-density multi-residential zone.
 - The nine units are located in three buildings and are similar to surrounding multi-unit developments.

Streets and Transportation:

- ***Objective 6:*** The amount of land dedicated to parking is minimized
 - The parking proposed is located on impervious surfaces. Two fewer parking spaces are proposed based upon two professional parking studies.

- *Objective 7:* Parking standards reflect electric vehicle and cycling needs
 - The proposal includes required bike parking and EV charging facilities.

Buildings and Landscape:

- *Objective 2:* New buildings are highly energy and water efficient, perform at net-zero emissions standard and produce renewable energy
 - These Part 9 buildings will be constructed to the BCBC Step 3 high energy performance standards.
- *Objective 4:* The designs of new buildings complement neighbourhood character
 - The proposed design and layout is consistent with the surrounding townhouse developments.

Affordable Housing:

- *Objective 1:* A variety of housing options are permitted and positively integrated in all neighbourhoods
 - *Policy AH 1:* Support higher housing densities, including amending the Zoning Bylaw to permit two dwelling units per single residential lot, in all residential land use designations, as described in the Managing Growth Policy section of this Plan, and in accordance with protection of Environmentally Sensitive Areas policies.
 - The proposed development increases the number of units from two to nine.
 - *Policy AH 6:* Encourage the provision of 3+ bedroom units as part of a mix of unit types in new multi-residential buildings to create more housing choices for families.
 - The proposal includes two-three bedroom units. Also, the large useable open space in the middle of the development will allow for outside play space for young children.

Natural Environment:

- *Objective 3:* Courtenay's air, water, and soil are clean
 - *Policy NE 16:* Limit the extent of impervious surfaces on private and public land.
 - The percent of impervious surfaces for paved areas and buildings is 48% in total. The pervious areas include the driveway, parking area, landscape buffers, and open space.

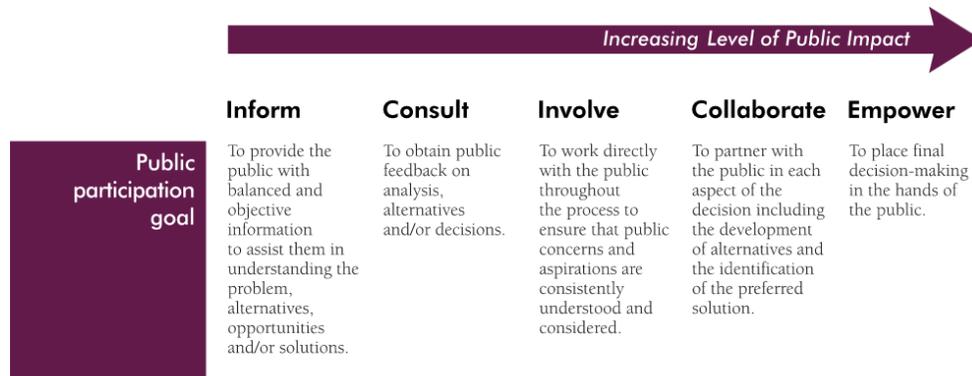
Community Amenity Contribution

The applicant has confirmed amenity contributions of \$40,000. See **Attachment 6** for a copy of the applicant's letter.

Prior to final adoption of Bylaw No. 3037, a section 219 covenant to secure the community amenity contributions of \$40,000 must be completed and registered on the title of the subject property. The amenity contribution will be provided prior to issuance of the building permit.

CITIZEN/PUBLIC ENGAGEMENT:

Staff will “Consult” the public based on the IAP2 Spectrum of Public Participation:



The applicant mailed out a public information package on May 28, 2021 to 80 property owners and resident occupiers within 100 m of the subject property. The Public Information meeting (PIM) mail out can be found in **Attachment 7**. The comments received by the City and applicant can be found in **Attachment 8** together with staff responses. The following summarizes some of the substantive comments received and staff responses:

1. The garbage area is located too close to the neighbouring units.
This comment resulted in the garbage area being redesigned so it is enclosed. The proposed location is necessary to accommodate the garbage trucks turning radius.
2. Proximity of one of the buildings to the neighbouring units is too close and privacy will be lost. The landscape buffer should be of larger trees.
The proposed duplex dwelling units will be located between 1.5 m (4.95 ft) and the rear triplex 2.2 m (7.3 ft) from the property lines. This siting is permissible in most residential zones. A large maple is being retained in the rear of the triplex building and a landscape buffer is proposed to be planted around the perimeter of the property.
3. The (first) parking study methodology has flaws regarding when it was completed, the comparable developments that were used and assessment of on street parking
This comment resulted in the applicant providing an updated parking study. Both studies are attached. The consultants concluded that the proposed number of on-site parking stalls is suitable for the proposed residential use and that there is adequate on street parking for the residential use.
4. Traffic light should be installed at 17th St and Piercy Ave.
The City's Transportation Plan (2019) does not identify this intersection as a high collision intersection. However, Piercy Ave itself is a recognized cycling route in the City's Cycling Network Plan and cycling improvements at the intersection of Piercy and 17th are budgeted in the 2023 work plan.

Should Zoning Amendment Bylaw No. 3037 receive First and Second Readings, a statutory public hearing will be held to obtain public feedback in accordance with the *Local Government Act*.

As required by Section 52(3) of the **Transportation Act** where the subject property is located within 800 m of a controlled access highway, the Ministry of Transportation must grant its approval prior to Council's consideration of approval. The subject property is located within 800 m of Cliffe Avenue, a designated highway.

REGIONAL GROWTH STRATEGY REFERENCE:

The Comox Valley Regional Growth Strategy (RGS) is a framework for future land use, and sets basic direction for planning, policies, and action for all member municipalities, including Courtenay. The RGS is guided by a number of growth management principles that are incorporated by this proposed application:

- Promote the efficient use of land, provide greater transportation choices, reduce public servicing costs, and achieve environmental benefits through compact growth.
- Promote intensification, compact growth and supportive public transit services throughout designated Municipal Areas as the primary means of accommodating population and employment growth.

FINANCIAL IMPLICATIONS:

There are no direct financial implications related to the processing of this Zoning Bylaw amendment application as the fees are designed to offset the administrative costs.

The application, if approved, will be required to apply for and be issued a form and character development permit. The development will also be subject to City and Regional District development cost charges which are determined at time of building permit based on the final building design. Because this is an infill development no new civil infrastructure is being developed beyond replacing existing.

ADMINISTRATIVE IMPLICATIONS:

Processing this application is part of the core duties of the Department of Development Services. Should Council not move forward with the zoning bylaw amendment a rezoning application could not be considered for a year unless Council considers a request to reconsider with 2/3 vote in favour.

ASSET MANAGEMENT IMPLICATIONS:

The applicant submitted engineered civil plans for water, sewer, and stormwater to service the development. The submissions are adequate to confirm the site can be serviced. Final engineering plans will be required as part of the building permit application.

The off-site transportation related improvements include removing and relocating the driveway let down and replacing the existing sidewalk on the Piercy Avenue frontage.

STRATEGIC PRIORITIES REFERENCE:

This initiative addresses some of the goals that guide Council's strategic priorities:

- The proposal provides nine two- and three-bedroom units of infill housing with common amenity space located in walking distance to the downtown and services. This location is along public transportation and cycling routes and cycling infrastructure is included in the development allowing for reduced vehicle dependence. Infill housing also makes efficient use of existing municipal infrastructure

OPTIONS:

1. THAT Council give First and Second Reading to "Zoning Amendment Bylaw No. 3037" (1590 Piercy Avenue) to amend Zoning Bylaw NO. 2500, 2007 create a new CD-39 Zone and rezone the subject property to CD-39 with the following conditions met prior to final adoption:
 - a. A section 219 covenant registered on title to secure the community amenity contributions of \$40,000 to be provided prior to issuance of the building permit.

b. An easement to permit drainage from the subject property on to the Island Corridor Foundation lands; and

THAT Council direct staff to advertise a statutory Public Hearing for “Zoning Amendment Bylaw No. 3037”.

2. THAT Council give First Reading of Zoning Bylaw No. 3037 (1590 Piercy Ave) and refer to staff for further information prior to second reading.
3. That Council deny Zoning Amendment Bylaw No. 3037 (1590 Piercy Ave) . (please see Administrative Implications).

Staff recommends Option 1

Prepared by: Brigid Reynolds, RPP, MCP, MCIP, Contract Planner

Reviewed by: Nancy Gothard, RPP, MCIP Manager of Community and Sustainability Planning
Marianne Wade, Director of Development Services, RPP, MCIP

Concurrence: Geoff Garbutt, RPP, M.Pl., MCIP, City Manager (CAO)

Attachments to the staff report

Attachment 1 - Applicant proposal

Attachment 2 - Architectural plans

Attachment 3 - Landscape plans

Attachment 4 - Parking studies

Attachment 5 - Bylaw 3037 and CD-39 Zone

Attachment 6 - Letter of confirmation for amenity contribution

Attachment 7 - PIM mail out notice

Attachment 8 - Comments received and staff responses

Nine Peaks – 1590 Piercy Avenue

Development Proposal

Perspective Design Build LTD is applying to change the Zoning of 1590 Piercy avenue from R-2 to R-3 for the purpose of constructing nine townhouse units. Seven of these townhouses will be two-bedroom units and two will be three-bedroom units. They will be separated into three buildings: a two unit building facing Piercy Avenue, a four unit building in the heart of the property and a three unit building along the rear.

The lot will be developed to have a driveway, onsite parking, a garbage enclosure, bicycle parking facilities, green space, an amenity area, pathways, and a variety of native and ornamental plants and trees. Two large maple trees on the property will be retained. The driving infrastructure and the parking infrastructure will be permeable and consist of core gravel and core grass.

The proposed development conforms with the R-3 Zoning as follows:

Section 8.3.1 Permitted Uses: The project is a multi-family residential dwelling which conforms to the usage.

Section 8.3.2 Lot Size: The lot is 2030 meters squared which is above the minimum of 1250 meters squared.

Section 8.3.4 Floor area ratio: The proposed floor area ratio is 38.27%, below the 40% maximum.

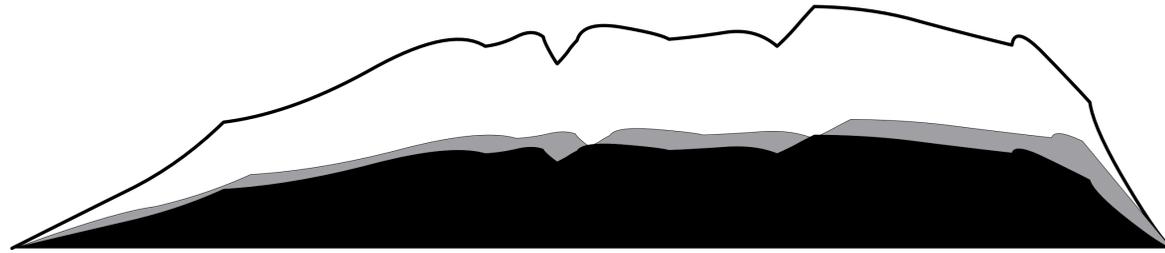
Section 8.3.5 Setbacks: All of the setbacks are observed.

Section 8.3.6 Height of Buildings: At 6.5 meters in height the proposed development is below the 10 meter maximum.

Section 8.3.7 Usable open Space: The development is required to have 450 meters squared of open usable space and the project is designed to have 1065 meters squared.

Section 8.3.9 Off-Street Parking: The on-site parking supply is 10 spaces and 30 bicycle parking spaces. A minimum of 10% of these spaces will have e-bike charging capacity and a minimum of 10% of these spaces are sized to accommodate cargo bicycles. These designs are in accordance with the parking study supplied by Watt Consulting for the project.

Section 8.3.3 Lot frontage: The required minimum lot frontage is 30 meters and this lot only has a frontage of 21.644 meters. The added setback challenges and lot coverage challenges have been addressed and the lot will function well as an R-3 lot. The neighboring lot Strata Plan EPS3363 Has a similar frontage and is a successful multifamily development.



NINE PEAKS

1590 PIERCY AVENUE, COURTENAY



**DRAWING INDEX
ARCHITECTURAL**

- P1 SITE PLAN
- P2 FOUNDATION PLAN
- P3 FLOOR PLANS
- P4 ROOF PLAN
- P5 SECTIONS
- P6 ELEVATIONS



**PERSPECTIVE DESIGN
BUILD LTD.**
1160 4TH ST., COURTENAY
BRITISH COLUMBIA V9N 1H8

**DUPLEX
DETAILED DESIGN**

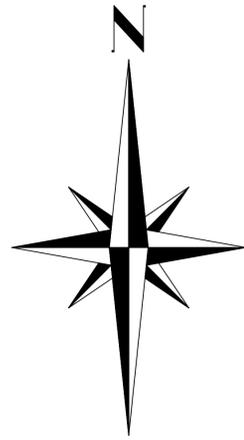
**TO SCALE ON 36X24
PRINT FORMAT ONLY**

COVER SHEET 0.0
REVISION 1

VERSION FOR RE-ZONING PURPOSES

COURTENAY DISTRICT, PLAN 4764 TOPOGRAPHIC SURVEY PLAN

1590 PIERCY AVENUE, COURTENAY
SCALE 1 : 150 (METRIC)



PROJECT DATA

ZONING R2 (TO BE RE-ZONED R3)
LOT AREA 0.5 ACRES (2030.5 SQ M)

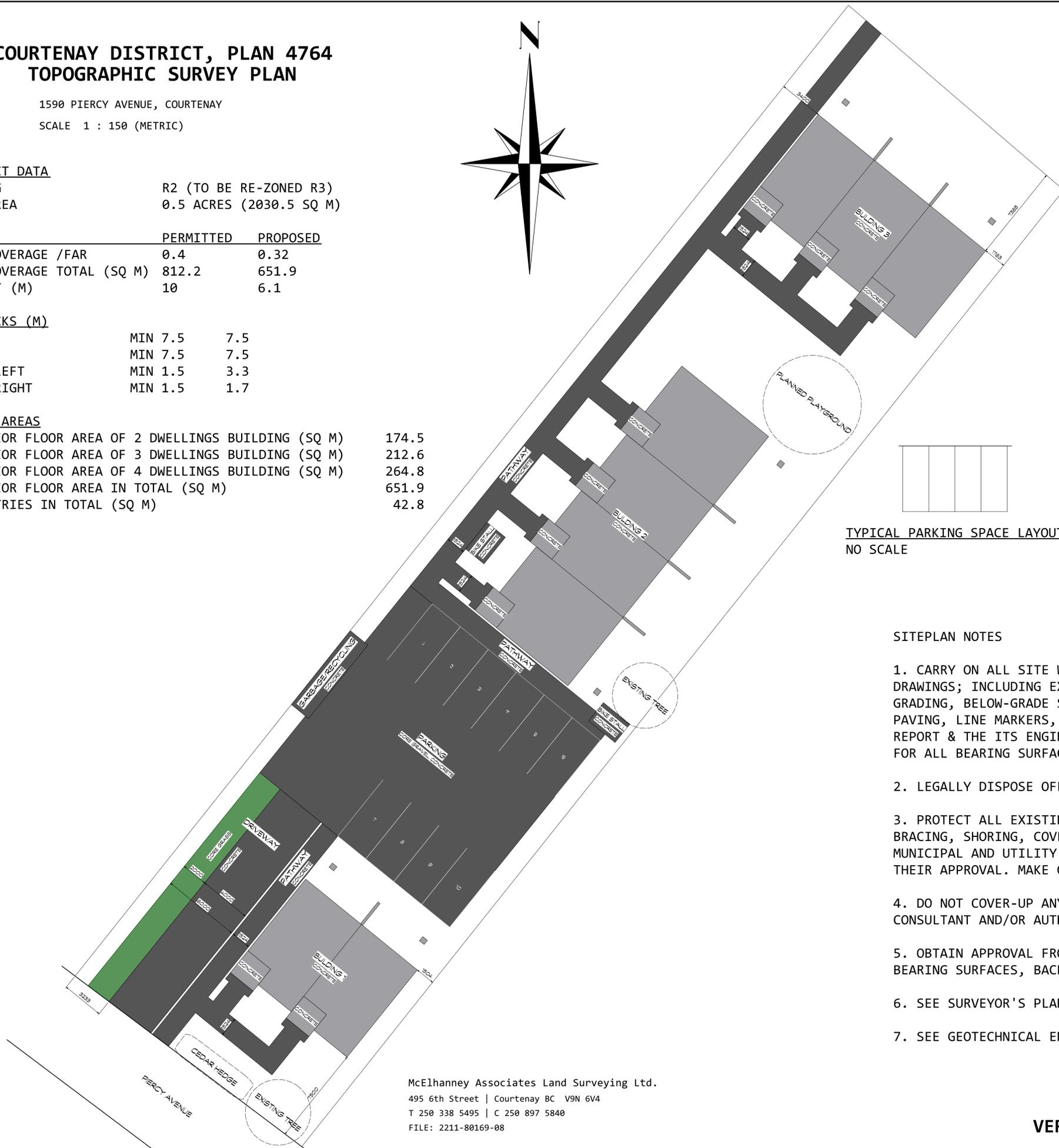
ITEMS	PERMITTED	PROPOSED
LOT COVERAGE /FAR	0.4	0.32
LOT COVERAGE TOTAL (SQ M)	812.2	651.9
HEIGHT (M)	10	6.1

SETBACKS (M)

FRONT	MIN 7.5	7.5
REAR	MIN 7.5	7.5
SIDE LEFT	MIN 1.5	3.3
SIDE RIGHT	MIN 1.5	1.7

FLOOR AREAS

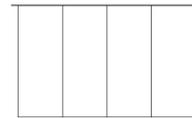
EXTERIOR FLOOR AREA OF 2 DWELLINGS BUILDING (SQ M)	174.5
EXTERIOR FLOOR AREA OF 3 DWELLINGS BUILDING (SQ M)	212.6
EXTERIOR FLOOR AREA OF 4 DWELLINGS BUILDING (SQ M)	264.8
EXTERIOR FLOOR AREA IN TOTAL (SQ M)	651.9
(9)ENTRIES IN TOTAL (SQ M)	42.8



OFF-STREET PARKING SPACES (PER DWELLING INCL.10% VISITOR PARKING)	REQUIRED	PROPOSED
	14 (1.5)	10 (1.1)

BICYCLE PARKING ADDITION

LONG TERM PARKING SPACES	-	30
SHORT TERM PARKING SPACES	-	8



TYPICAL PARKING SPACE LAYOUT
NO SCALE

OTHER PARKING LOT SPECIFICATIONS SHALL FOLLOW
DIVISION 7, BYLAW 2500 (2007) REQUIRMENTS

SEE PARKING STUDY ISSUED AND SIGNED BY WATT CONSULTING GROUP,
FILE NUMBER 2785.B01; MARCH 30, 2020

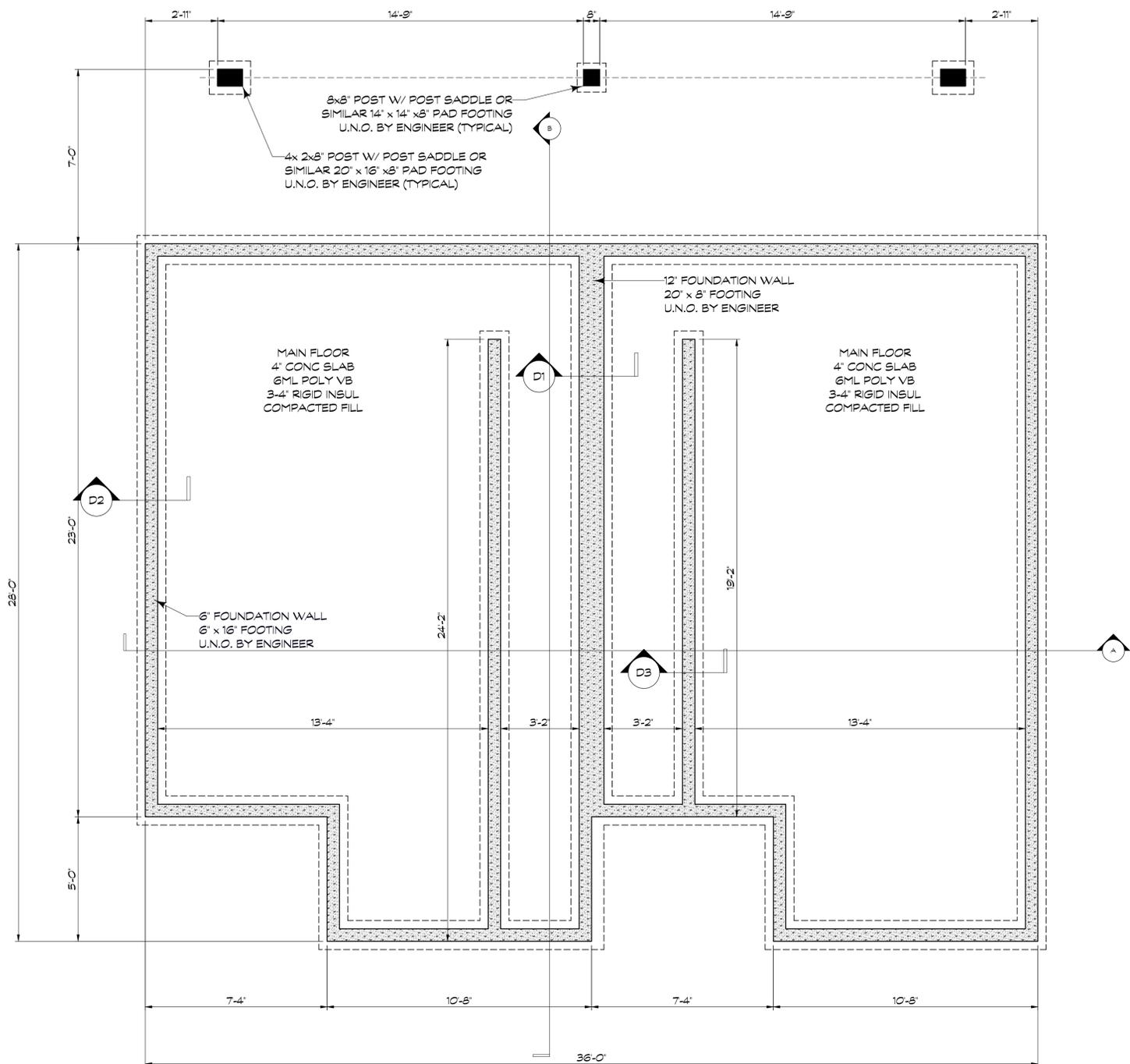
SITEPLAN NOTES

1. CARRY ON ALL SITE WORK SHOWN ON OR READILY INFERRABLE FROM THE PERMIT DRAWINGS; INCLUDING EXCAVATION, DEWATERING, BACKFILLING, ROUGH & FINISHED GRADING, BELOW-GRADE SERVICES, PLANTING, SODDING, FENCING, CURBING, PAVING, LINE MARKERS, SIGNAGE, ETC. CO-ORDINATE ALL WORK WITH THE SOIL REPORT & THE ITS ENGINEER. PROVIDE INSPECTIONS, TEST AND REPORTS, FOR ALL BEARING SURFACES, BACKFILL MATERIALS, AND COMPACTION.
2. LEGALLY DISPOSE OFF-SITE ALL EXCAVATED MATERIAL, & ITEMS REQUIRING REMOVAL.
3. PROTECT ALL EXISTING PUBLIC PROPERTY AND UTILITIES. PROVIDE HOARDINGS, BRACING, SHORING, COVERS, ETC. AS REQUIRED. CONTACT ALL REQUISITE MUNICIPAL AND UTILITY AUTHORITIES FOR LOCATES, AND CARRY OUT WORK TO THEIR APPROVAL. MAKE GOOD ANY DAMAGE.
4. DO NOT COVER-UP ANY WORK UNTIL PROPERLY INSPECTED BY THE PERTINENT CONSULTANT AND/OR AUTHORITY.
5. OBTAIN APPROVAL FROM GEOTECHNICAL / STRUCTURAL ENGINEER FOR ALL BEARING SURFACES, BACKFILL MATERIALS, AND COMPACTION.
6. SEE SURVEYOR'S PLAN FOR PROPERTY LINE DIMENSIONS AND DIRECTION.
7. SEE GEOTECHNICAL ENGINEER'S REPORT FOR SOIL / BEARING CONDITIONS.

McElhanney Associates Land Surveying Ltd.
495 6th Street | Courtenay BC V9N 6V4
T 250 338 5495 | C 250 897 5840
FILE: 2211-80169-08

VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 1
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SITE PLAN	



FOUNDATION PLAN
SCALE: 3/8" = 1'-0"

~68 LINEAR FT PER DWELLING

NOTE:
ALL POINT LOADS MUST BE ASSESSED BY AN ENGINEER AND FOOTING SIZES INCREASE AS REQUIRED TO SUPPORT LOADS

NOTES:

GENERAL NOTES

- ALL WORK SHALL CONFORM TO CURRENT BUILDING CODES AND LOCAL BYLAWS
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS

CONCRETE

- ALL CONCRETE TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 20MPA AT 28 DAYS
- FOOTINGS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR SOIL BEARING CAPACITY OF 2500 PSF. LOCAL CONDITIONS AND / OR LOCAL PRACTICE MAY NECESSITATE A MORE STRINGENT FOOTING DESIGN WHICH, MAY REQUIRE CONFIRMATION BY A CERTIFIED STRUCTURAL ENGINEER. THIS WILL BE THE RESPONSIBILITY OF THE OWNER / CONTRACTOR TO PROVIDE.
- CONCRETE FOOTINGS MUST BE PLACED ON UNDISTURBED OR COMPACTED SOIL TO AN ELEVATION BELOW FROST PENETRATION OR ALTERNATIVE METHOD SHALL BE USED TO ENSURE INSULATION OF FOUNDATION AS PER LOCAL BUILDING CODE
- ALL CONCRETE AND MASONRY FOUNDATION WALLS EXCEEDING LIMITS STATED IN BUILDING CODES REQUIRE DESIGN BY A REGISTERED STRUCTURAL ENGINEER
- ALL FOOTINGS TO HAVE 2 ROWS OF MIN. NO. 4 REBAR 3' CLEAR FROM SIDE AND BOTTOM
- ALL WOOD CONTACTING CONCRETE TO BE SEPARATED WITH APPROVED MATERIAL

STRUCTURAL

- ALL WOOD FRAMING TO BE #2 OR BETTER DOUGLAS FIR OR SPRUCE
- ALL LINTELS TO BE 2-2X10 #2 DOUGLAS FIR OR BETTER UNLESS OTHERWISE NOTED
- LAMINATE STUDDING UNDER ALL LOAD BEARING POINTS
- JOISTS ARE TO BE DOUBLED UNDER PARTITIONS
- ALL ENGINEERED COMPONENTS TO BE INSTALLED TO MANUFACTURERS SPECS.

PLUMBING

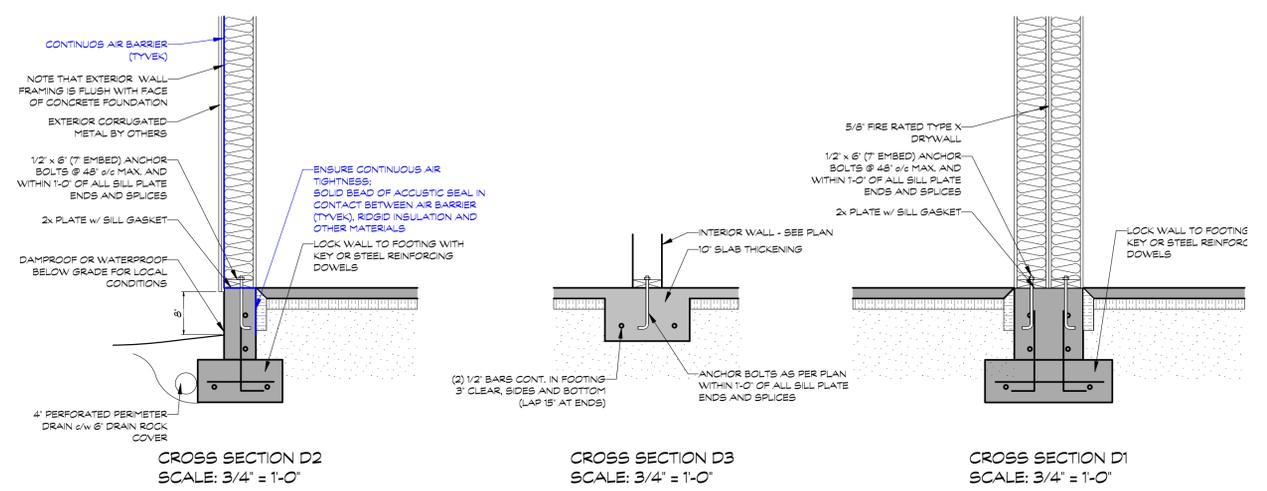
- PLUMBING FIXTURES AND FITTINGS SHALL MEET THE STANDARDS NOTED BELOW
- A) WATER CLOSET = 1.6 GAL PER FLUSH
- B) SHOWER HEAD = 2.5 GPM MAX
- C) LAVATORY FAUCETS = 2.2 GPM MAX
- D) SINK FAUCETS = 2.2 GPM MAX TITLE 24, VCBC, UPC

EGRESS WINDOWS (BEDROOMS)

- FINISHED SILL 59" ABOVE FLOOR MAX.
- NET OPENING TO BE 3.77 SQUARE FEET MINIMUM, WITH NO DIMENSION LESS THAN 15"

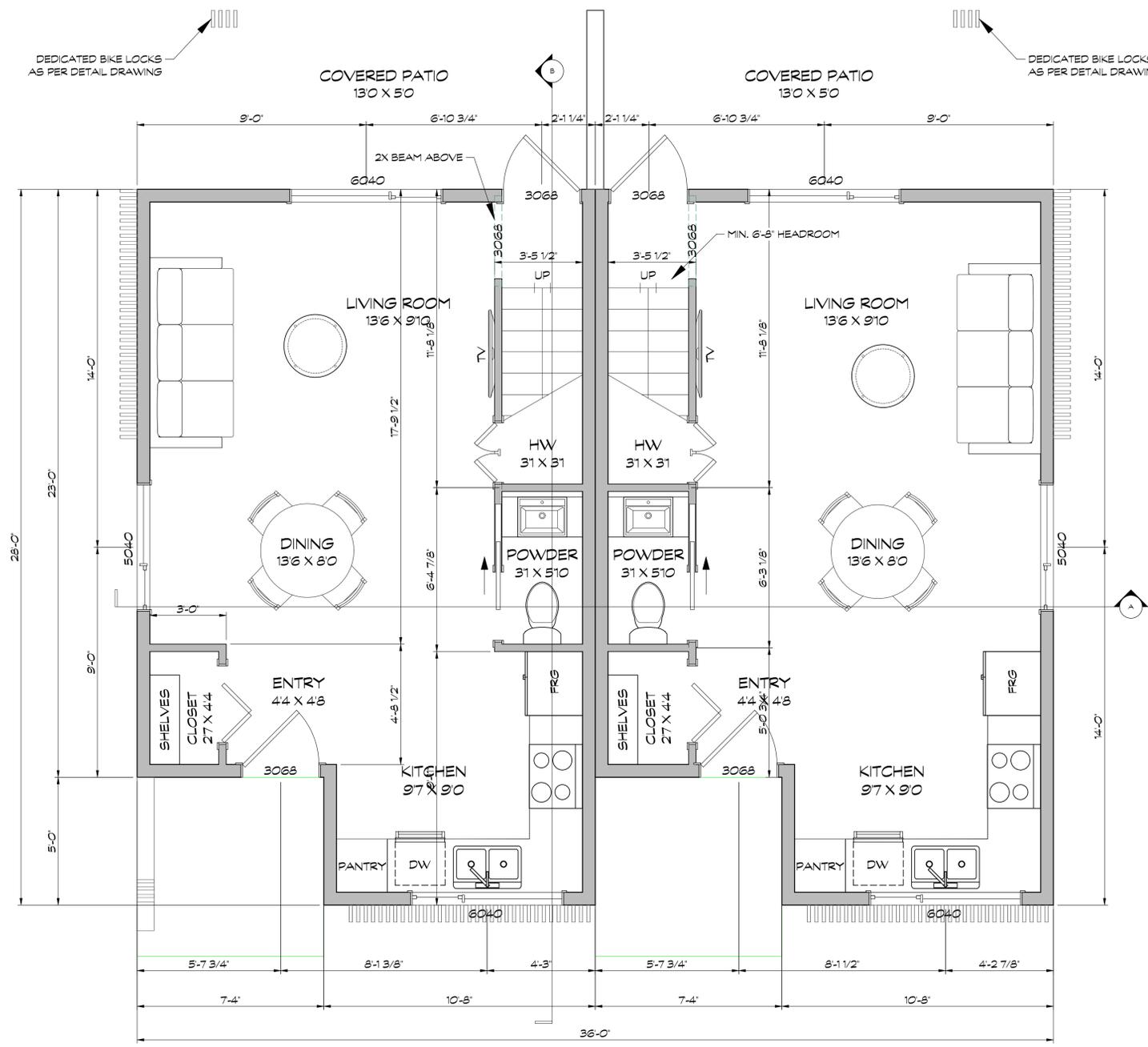
MECHANICAL AND VENTILATION

- BUILDING MUST BE PROVIDED WITH MECHANICAL VENTILATION DESIGN BY OTHERS
- ATTIC TO BE VENTED MINIMUM 1:300 OF AREA
- ONE HALF OF ROOF VENTS TO BE LOCATED IN UPPER PORTION OF ATTIC SPACE, AT LEAST 3'-0" HIGHER THAN EAVE OR CORNICE VENTS
- 22' x 30' MIN. ATTIC ACCESS. INSULATE AND WEATHER STRIP DOOR, 30' MIN. HEAD CLEARANCE

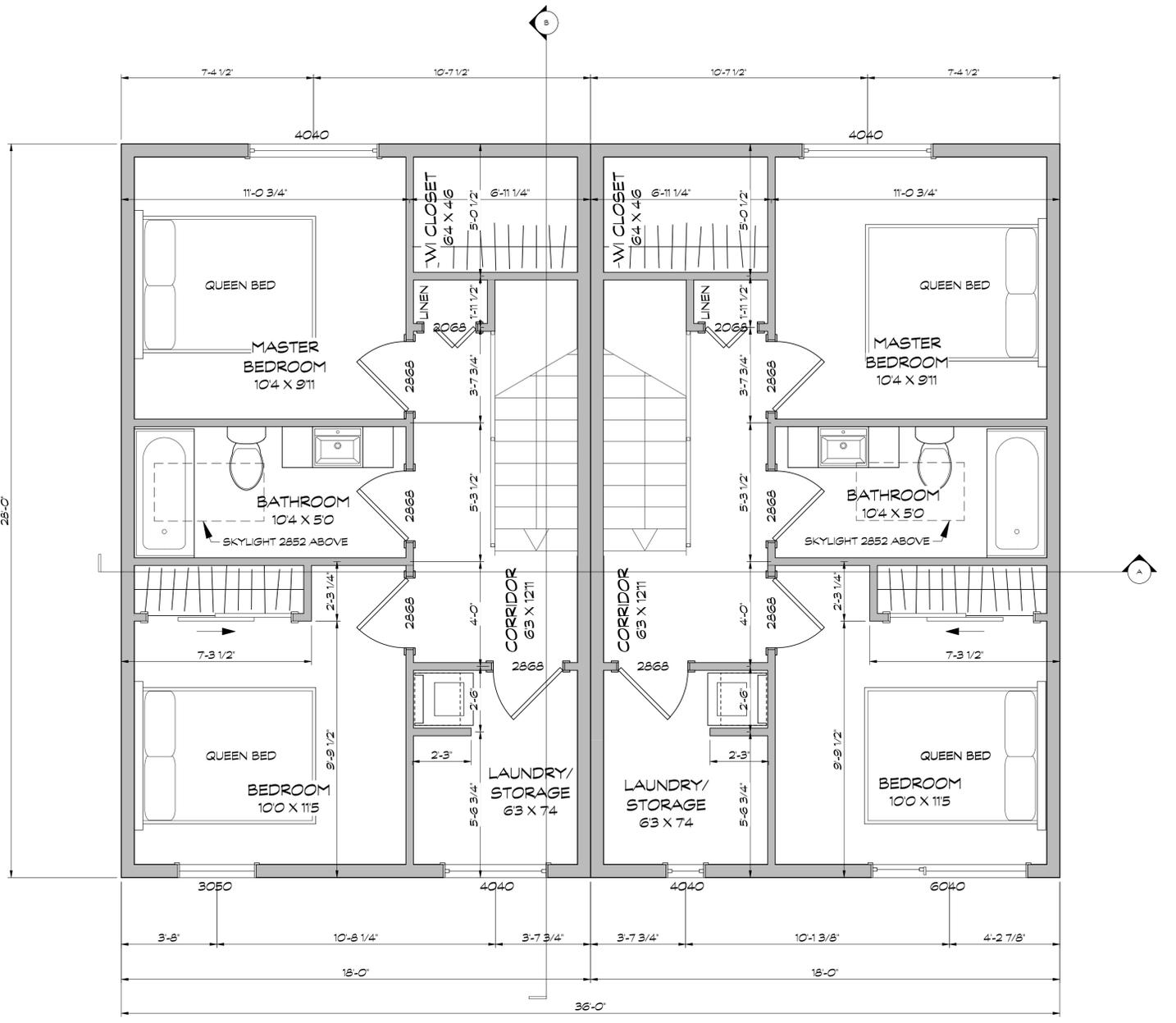


VERSION FOR RE-ZONING PURPOSES

1.FEB01/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 2
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title FOUNDATION PLAN	



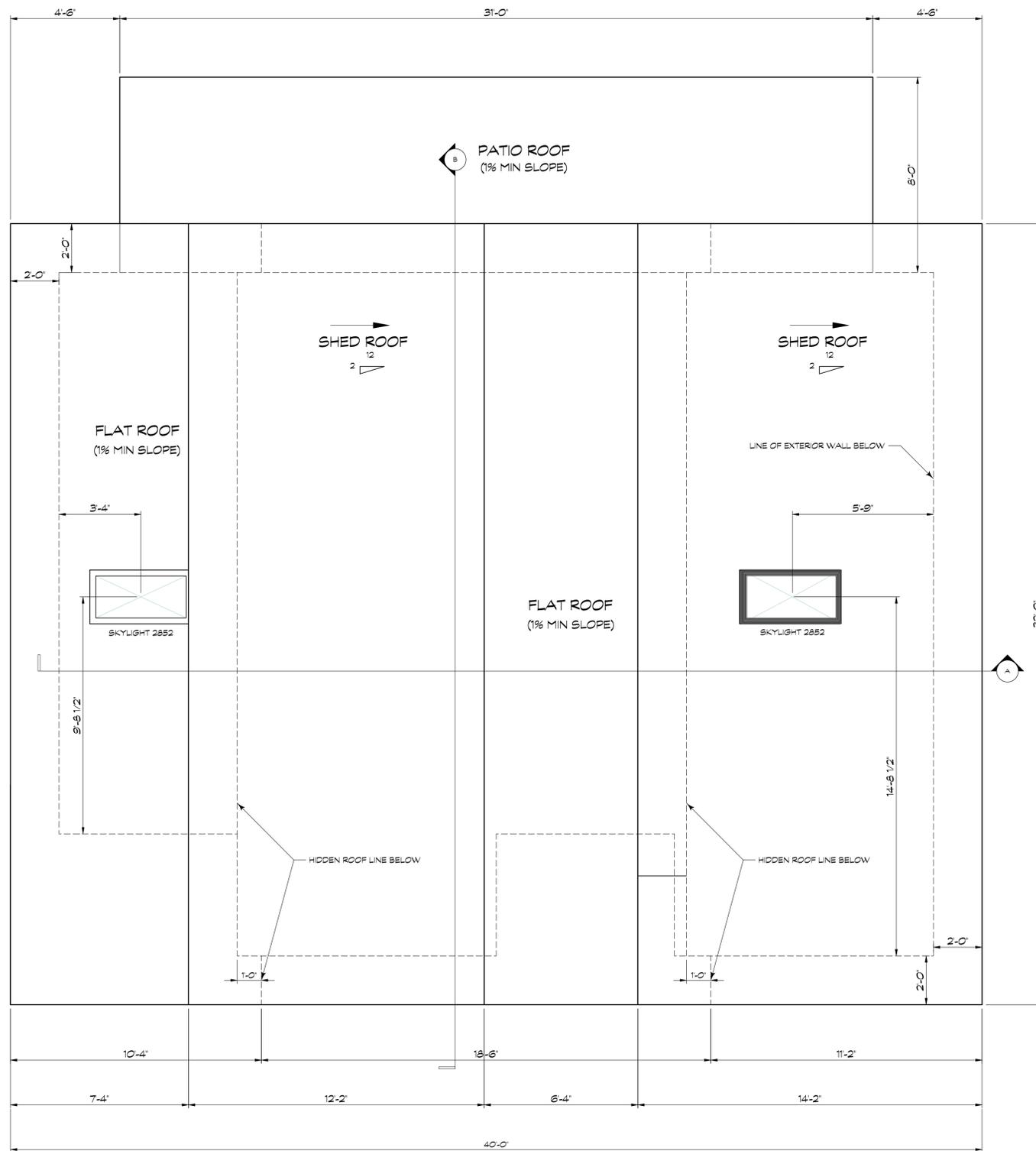
MAIN FLOOR PLAN
 SCALE: 3/8" = 1'-0"
 467 SQ FT (EXTERIOR FLOOR AREA PER DWELLING)
 51 SQ FT (ENTRY SLAB PER DWELLING)
 935 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)
 102 SQ FT (ENTRY SLABS IN TOTAL PER BUILDING)



UPPER FLOOR PLAN
 SCALE: 3/8" = 1'-0"
 472 SQ FT (EXTERIOR FLOOR AREA IN PER DWELLING)
 945 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)

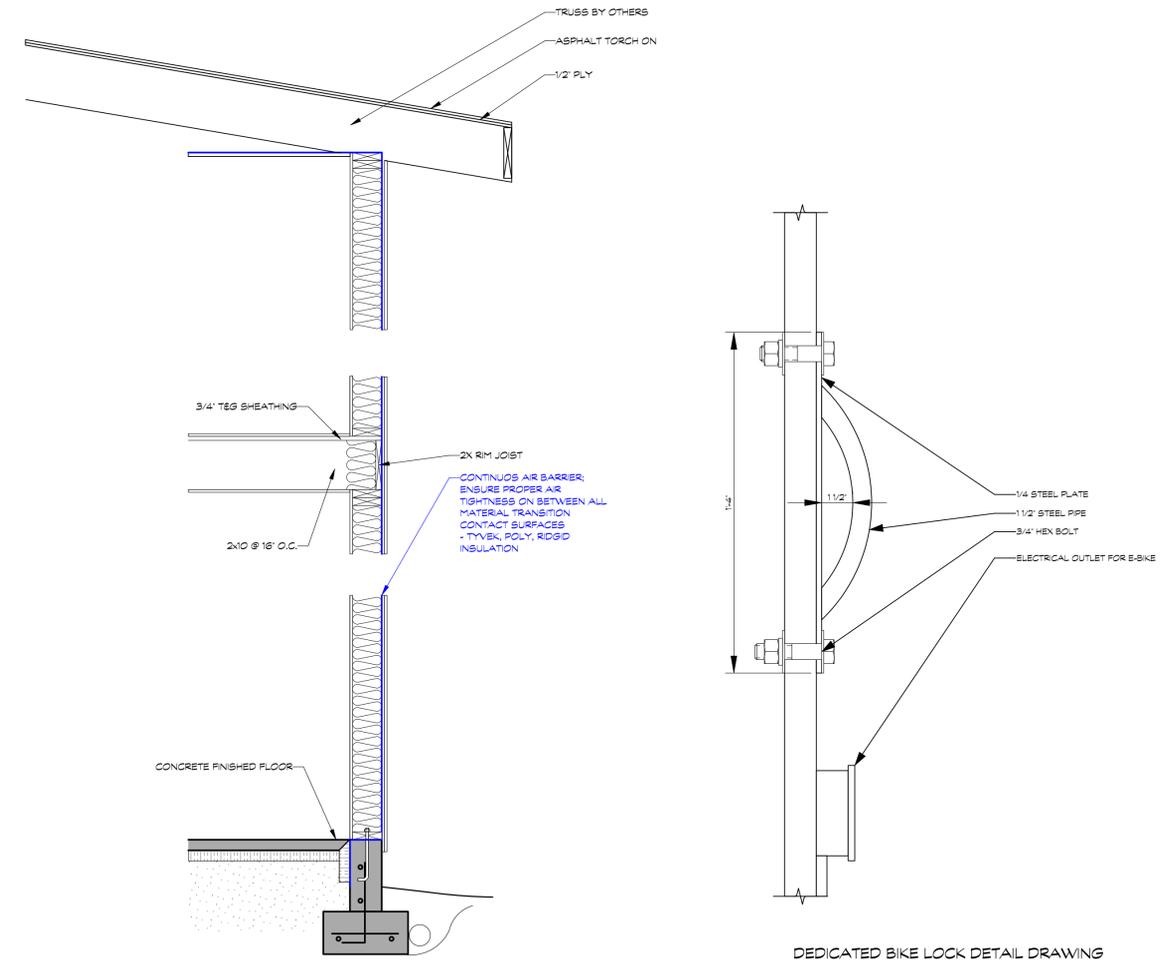
VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 3
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title FLOOR PLANS	



ROOF PLAN
SCALE: 3/8" = 1'-0"

(1%) COVERED PATIO FLAT ROOF AREA = ~248 SQ FT
 (1%) FLAT ROOF AREA = ~541 SQ FT
 (9.5%) SHED ROOF AREA = ~880 SQ FT



TYPICAL WALL SECTION
SCALE 3/4" = 1'-0"

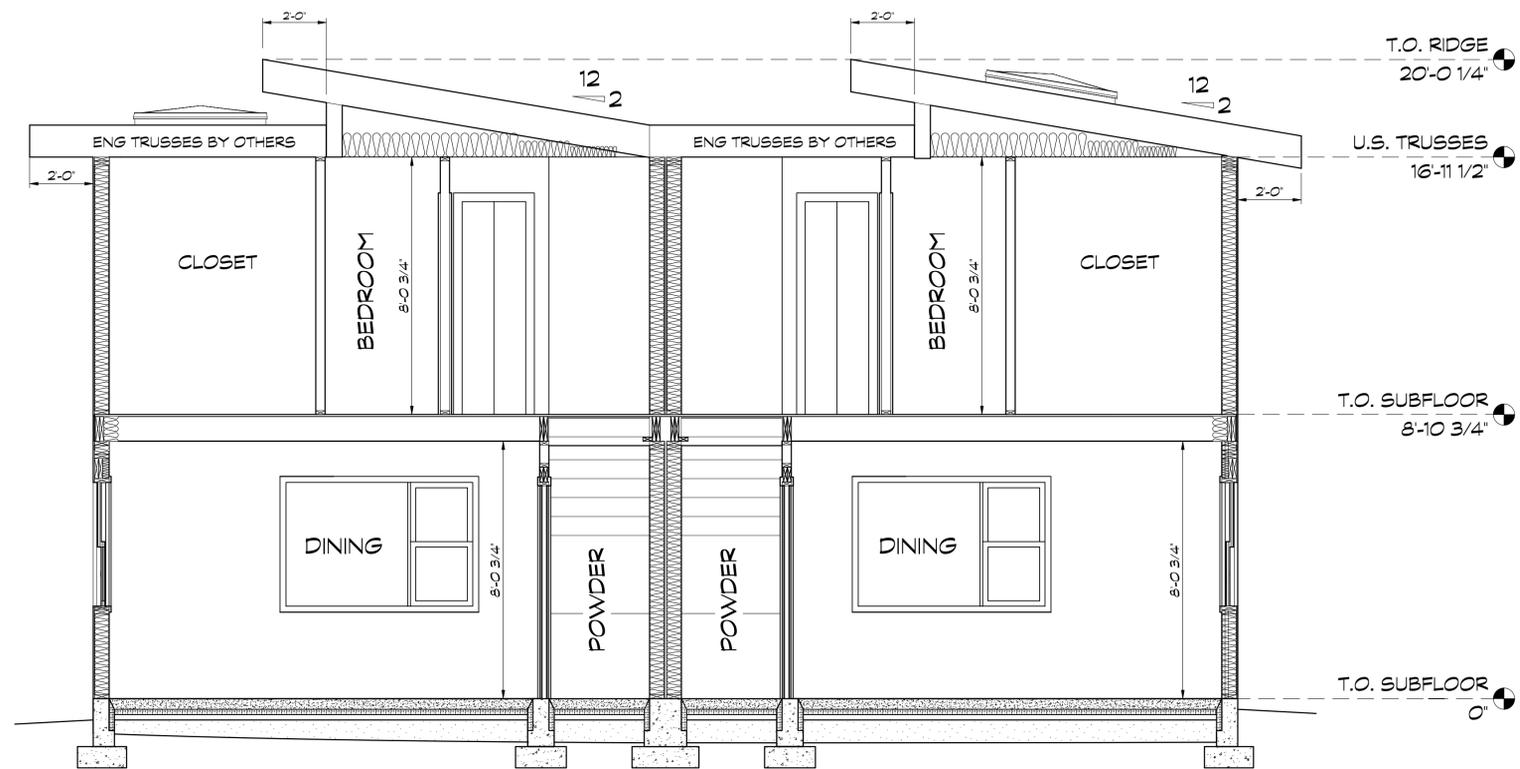
DEDICATED BIKE LOCK DETAIL DRAWING
SCALE: 3/4" = 1'-0"

VERSION FOR RE-ZONING PURPOSES

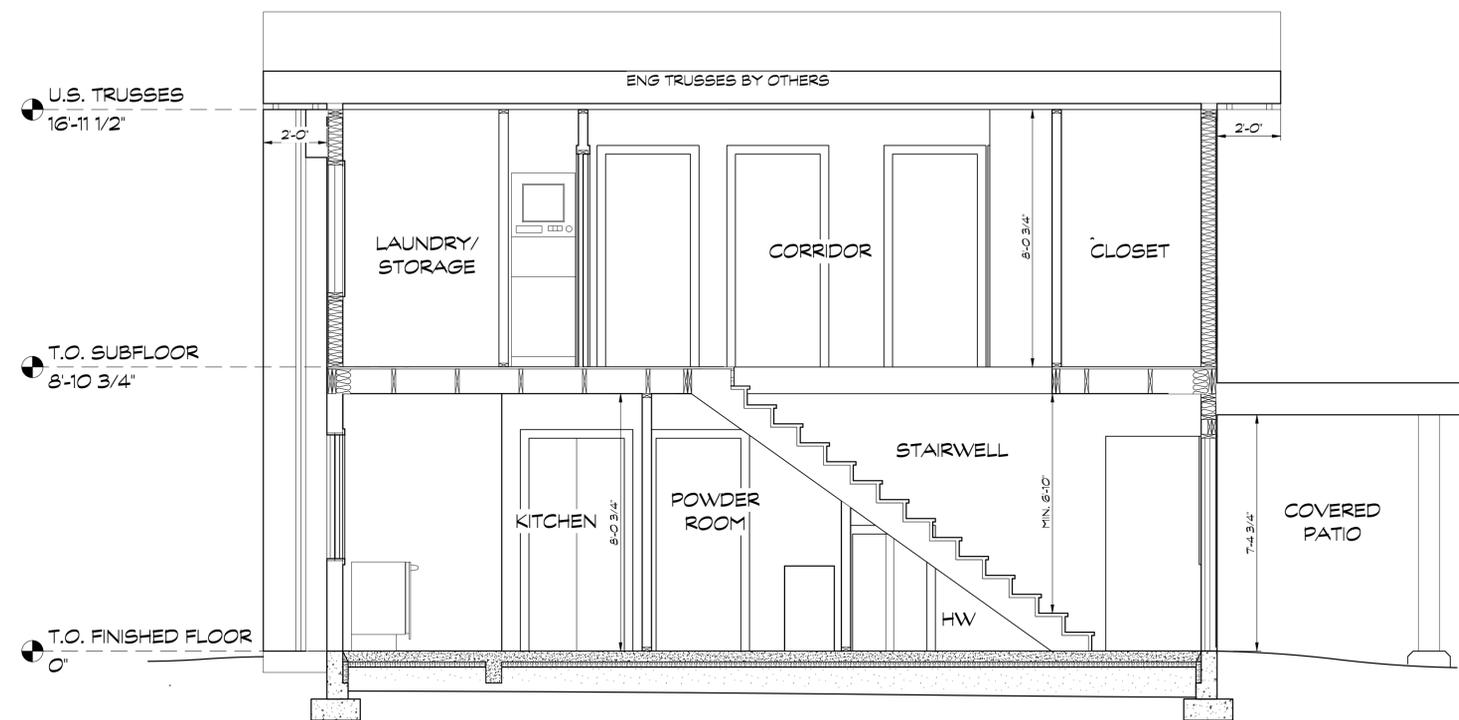
1.FEB01/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 4
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title ROOF PLAN	

SEALED POLYETHYLENE AIR BARRIER - CODE REFERENCES
 9.36.2.9. AIR TIGHTNESS
 9.36.2.10. CONSTRUCTION OF AIR BARRIER DETAILS

- ENSURE AIR BARRIER IS CONTINUOUS AND AIR TIGHT AT:
- PARTITION WALLS AT EXTERIOR WALLS AND CEILING
 - RECESSED LIGHTS
 - DRYER AND RANGE HOOD EXHAUSTS
 - EXTERIOR DOOR AND WINDOW PENETRATIONS
 - BATHROOM CEILING FANS
 - PLUMBING PENETRATIONS
 - MECHANICAL PENETRATIONS
 - INTERIOR AND EXTERIOR ELECTRICAL PENETRATIONS
 - RM JOISTS
 - FOUNDATION WALL TRANSITION



SECTION A
 SCALE: 3/8" = 1'-0"



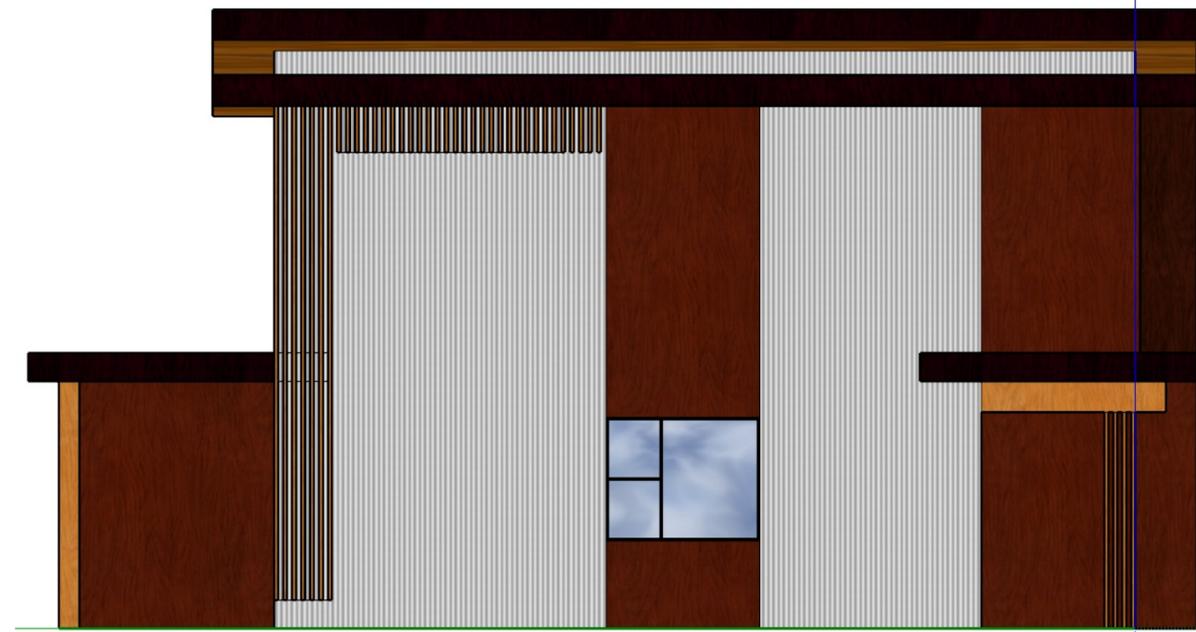
SECTION B
 SCALE: 3/8" = 1'-0"

VERSION FOR RE-ZONING PURPOSES

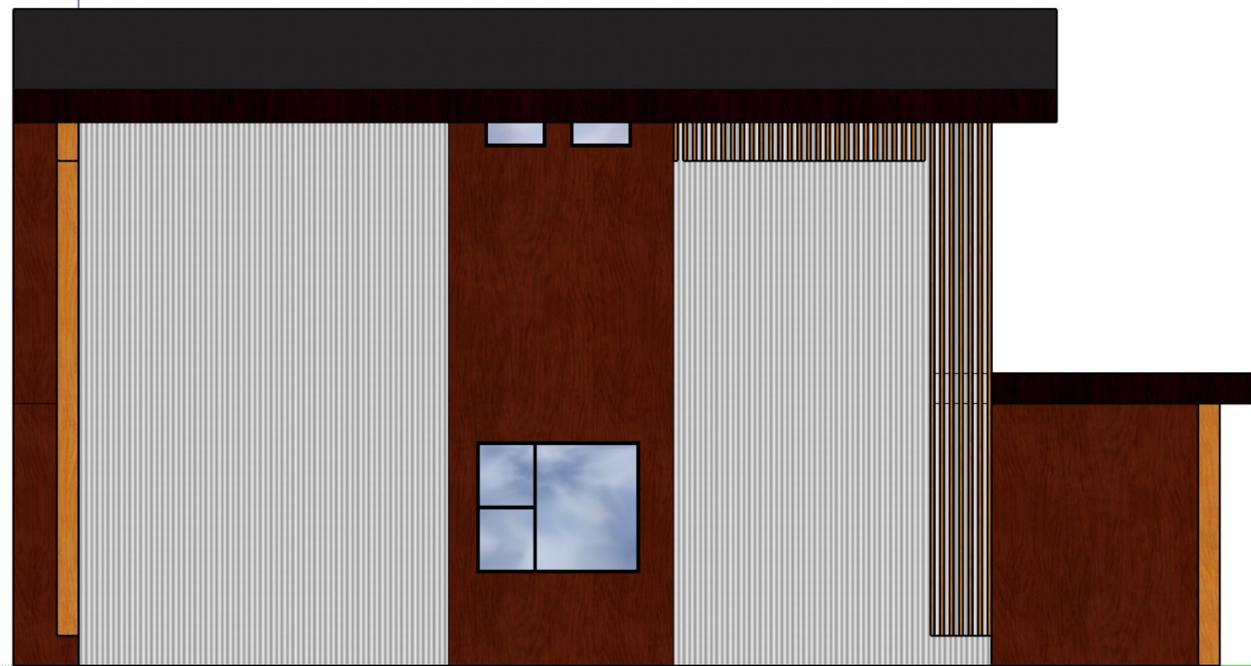
1.FEB01/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 5
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SECTIONS	



Front Elevation - Not to scale



Left Elevation - Not to scale



Right Elevation - Not to scale



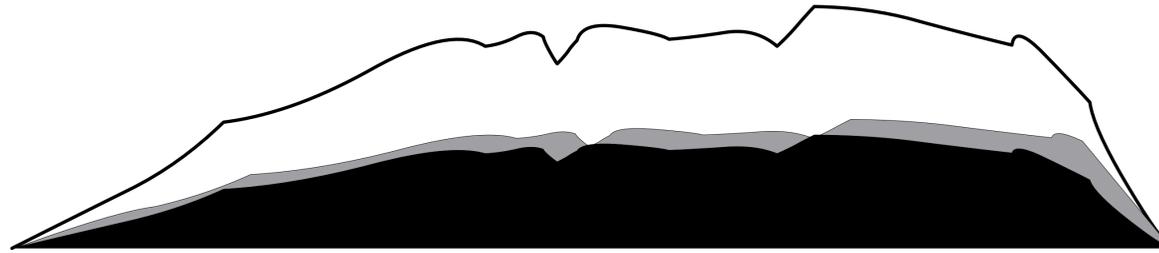
Rear Elevation - Not to scale

Materials Legend

Wood Tone Fibre Cement Panel	Fir Timber Framing and Ornamental Wooden Slats
Cedar Siding	Glazing
Metal Siding	Accent Paint
Paint Grade Fibre Cement Panel	Torch on Roofing Membrane

VERSION FOR RE-ZONING PURPOSES

1.FE001/21 Concept Design for Review
 ISSUE NOTES
 PERSPECTIVE Sheet No. 6
 Project Location 1590 Piercy Rd., Courtenay, BC
 Project Title NINE PEAKS
 Sheet Title ELEVATIONS



NINE PEAKS

1590 PIERCY AVENUE, COURTENAY



**DRAWING INDEX
ARCHITECTURAL**

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- P2 FOUNDATION PLAN
- P3 FLOOR PLANS
- P4 2ND FLOOR PLANS
- P5 ROOF PLAN
- P6 SECTIONS
- P7 ELEVATIONS



**PERSPECTIVE DESIGN
BUILD LTD.**
1160 4TH ST., COURTENAY
BRITISH COLUMBIA V9N 1H8

**FOURPLEX
DETAILED DESIGN**

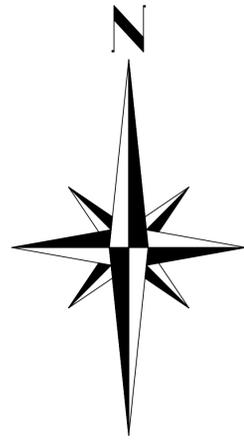
**TO SCALE ON 36X24
PRINT FORMAT ONLY**

COVER SHEET 0.0
REVISION 1

VERSION FOR RE-ZONING PURPOSES

COURTENAY DISTRICT, PLAN 4764 TOPOGRAPHIC SURVEY PLAN

1590 PIERCY AVENUE, COURTENAY
SCALE 1 : 150 (METRIC)



PROJECT DATA

ZONING R2 (TO BE RE-ZONED R3)
LOT AREA 0.5 ACRES (2030.5 SQ M)

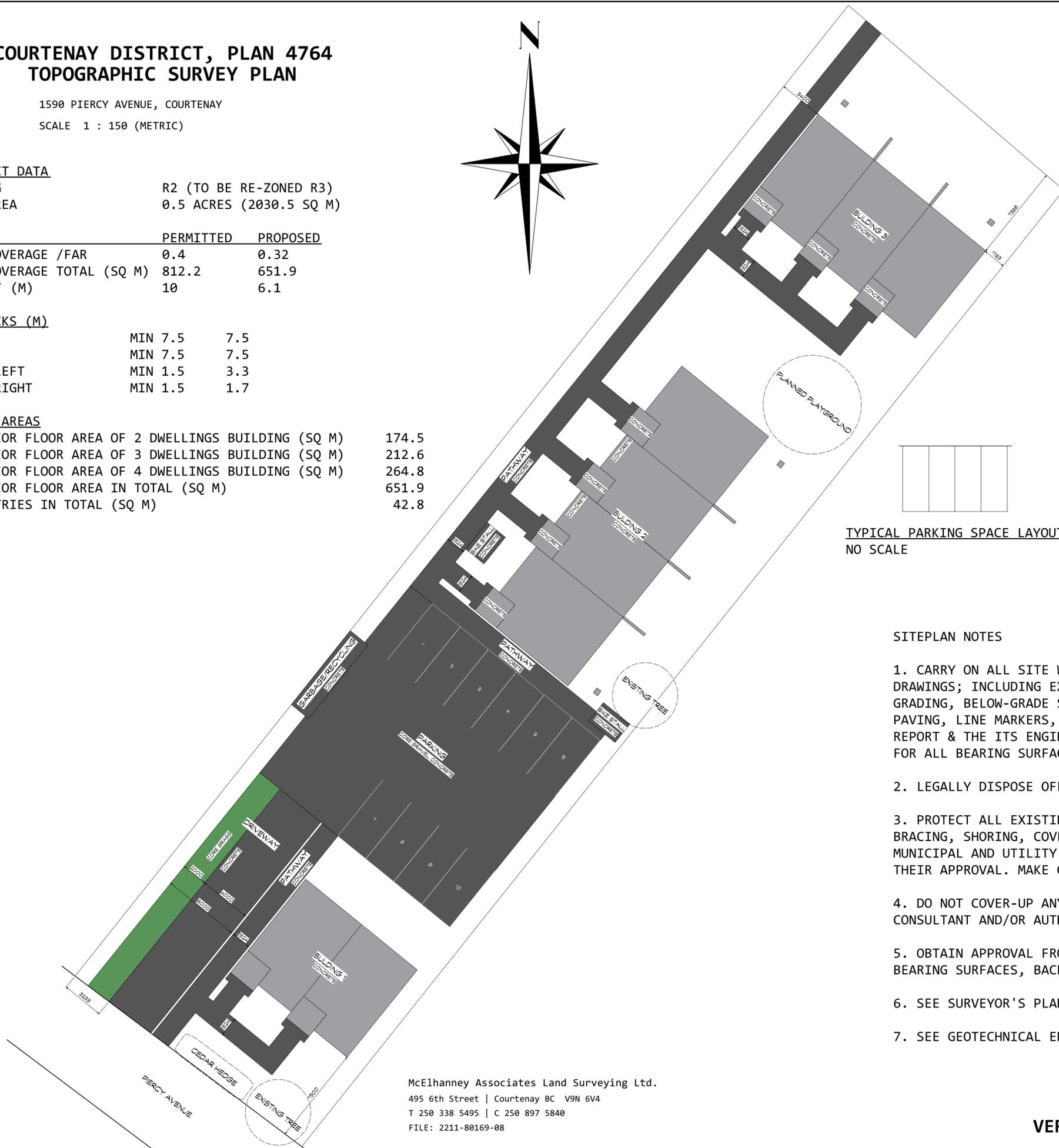
ITEMS	PERMITTED	PROPOSED
LOT COVERAGE /FAR	0.4	0.32
LOT COVERAGE TOTAL (SQ M)	812.2	651.9
HEIGHT (M)	10	6.1

SETBACKS (M)

	MIN	7.5	7.5
FRONT	MIN	7.5	7.5
REAR	MIN	7.5	7.5
SIDE LEFT	MIN	1.5	3.3
SIDE RIGHT	MIN	1.5	1.7

FLOOR AREAS

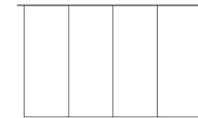
EXTERIOR FLOOR AREA OF 2 DWELLINGS BUILDING (SQ M)	174.5
EXTERIOR FLOOR AREA OF 3 DWELLINGS BUILDING (SQ M)	212.6
EXTERIOR FLOOR AREA OF 4 DWELLINGS BUILDING (SQ M)	264.8
EXTERIOR FLOOR AREA IN TOTAL (SQ M)	651.9
(9)ENTRIES IN TOTAL (SQ M)	42.8



OFF-STREET PARKING SPACES (PER DWELLING INCL.10% VISITOR PARKING)	REQUIRED	PROPOSED
	14 (1.5)	10 (1.1)

BICYCLE PARKING ADDITION

LONG TERM PARKING SPACES	-	30
SHORT TERM PARKING SPACES	-	8



TYPICAL PARKING SPACE LAYOUT
NO SCALE

OTHER PARKING LOT SPECIFICATIONS SHALL FOLLOW
DIVISION 7, BYLAW 2500 (2007) REQUIRMENTS

SEE PARKING STUDY ISSUED AND SIGNED BY WATT CONSULTING GROUP,
FILE NUMBER 2785.B01; MARCH 30, 2020

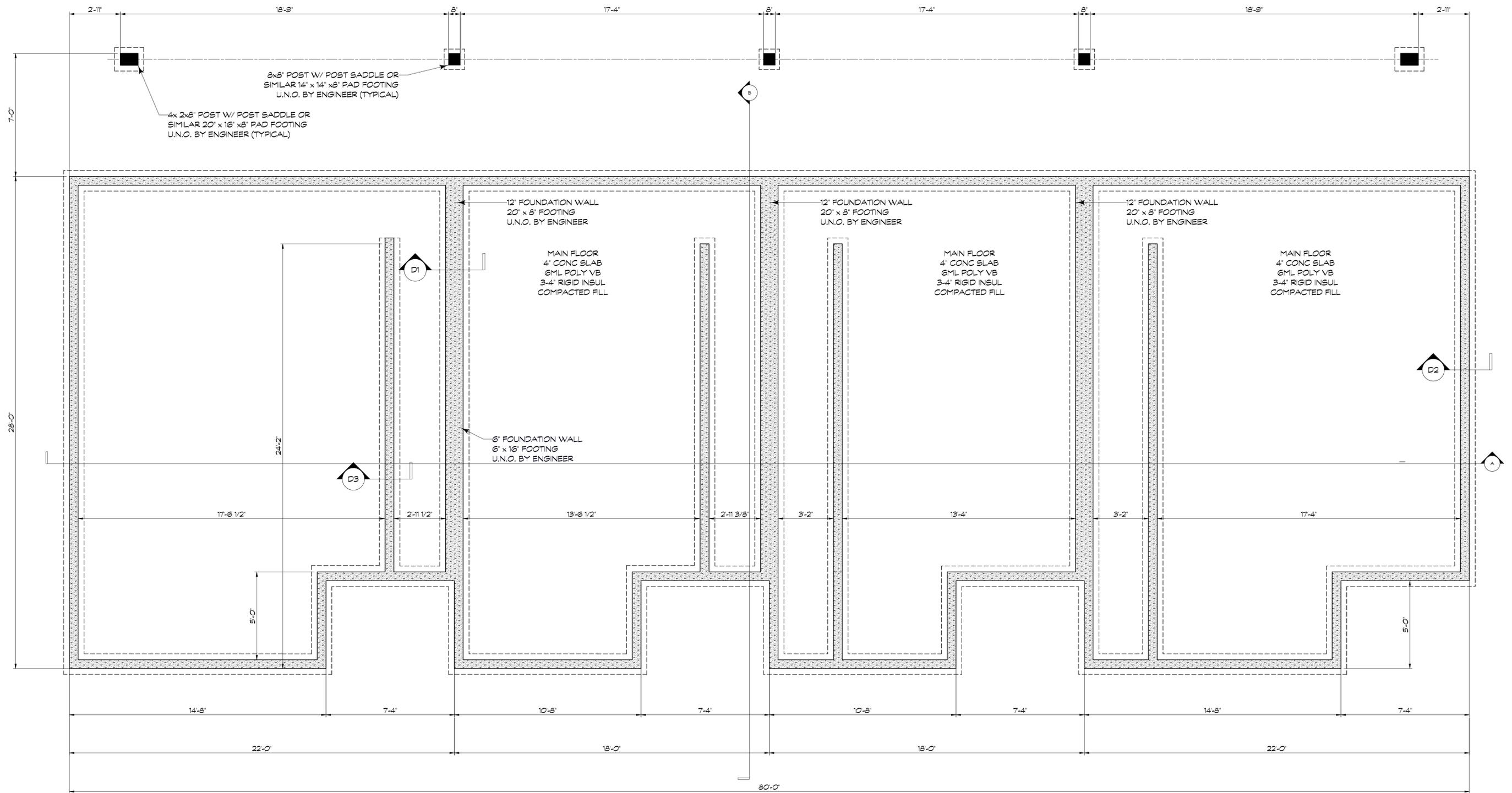
SITEPLAN NOTES

1. CARRY ON ALL SITE WORK SHOWN ON OR READILY INFERRABLE FROM THE PERMIT DRAWINGS; INCLUDING EXCAVATION, DEWATERING, BACKFILLING, ROUGH & FINISHED GRADING, BELOW-GRADE SERVICES, PLANTING, SODDING, FENCING, CURBING, PAVING, LINE MARKERS, SIGNAGE, ETC. CO-ORDINATE ALL WORK WITH THE SOIL REPORT & THE ITS ENGINEER. PROVIDE INSPECTIONS, TEST AND REPORTS, FOR ALL BEARING SURFACES, BACKFILL MATERIALS, AND COMPACTION.
2. LEGALLY DISPOSE OFF-SITE ALL EXCAVATED MATERIAL, & ITEMS REQUIRING REMOVAL.
3. PROTECT ALL EXISTING PUBLIC PROPERTY AND UTILITIES. PROVIDE HOARDINGS, BRACING, SHORING, COVERS, ETC. AS REQUIRED. CONTACT ALL REQUISITE MUNICIPAL AND UTILITY AUTHORITIES FOR LOCATES, AND CARRY OUT WORK TO THEIR APPROVAL. MAKE GOOD ANY DAMAGE.
4. DO NOT COVER-UP ANY WORK UNTIL PROPERLY INSPECTED BY THE PERTINENT CONSULTANT AND/OR AUTHORITY.
5. OBTAIN APPROVAL FROM GEOTECHNICAL / STRUCTURAL ENGINEER FOR ALL BEARING SURFACES, BACKFILL MATERIALS, AND COMPACTION.
6. SEE SURVEYOR'S PLAN FOR PROPERTY LINE DIMENSIONS AND DIRECTION.
7. SEE GEOTECHNICAL ENGINEER'S REPORT FOR SOIL / BEARING CONDITIONS.

McElhanney Associates Land Surveying Ltd.
495 6th Street | Courtenay BC V9N 6V4
T 250 338 5495 | C 250 897 5840
FILE: 2211-80169-08

VERSION FOR RE-ZONING PURPOSES

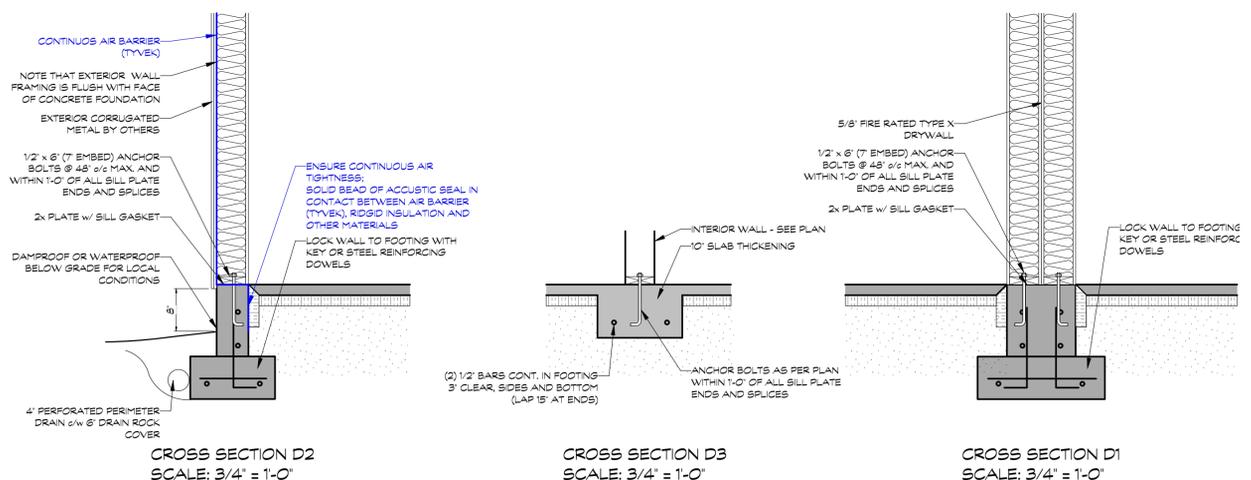
1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 1
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SITE PLAN	



FOUNDATION PLAN
SCALE: 3/8" = 1'-0"

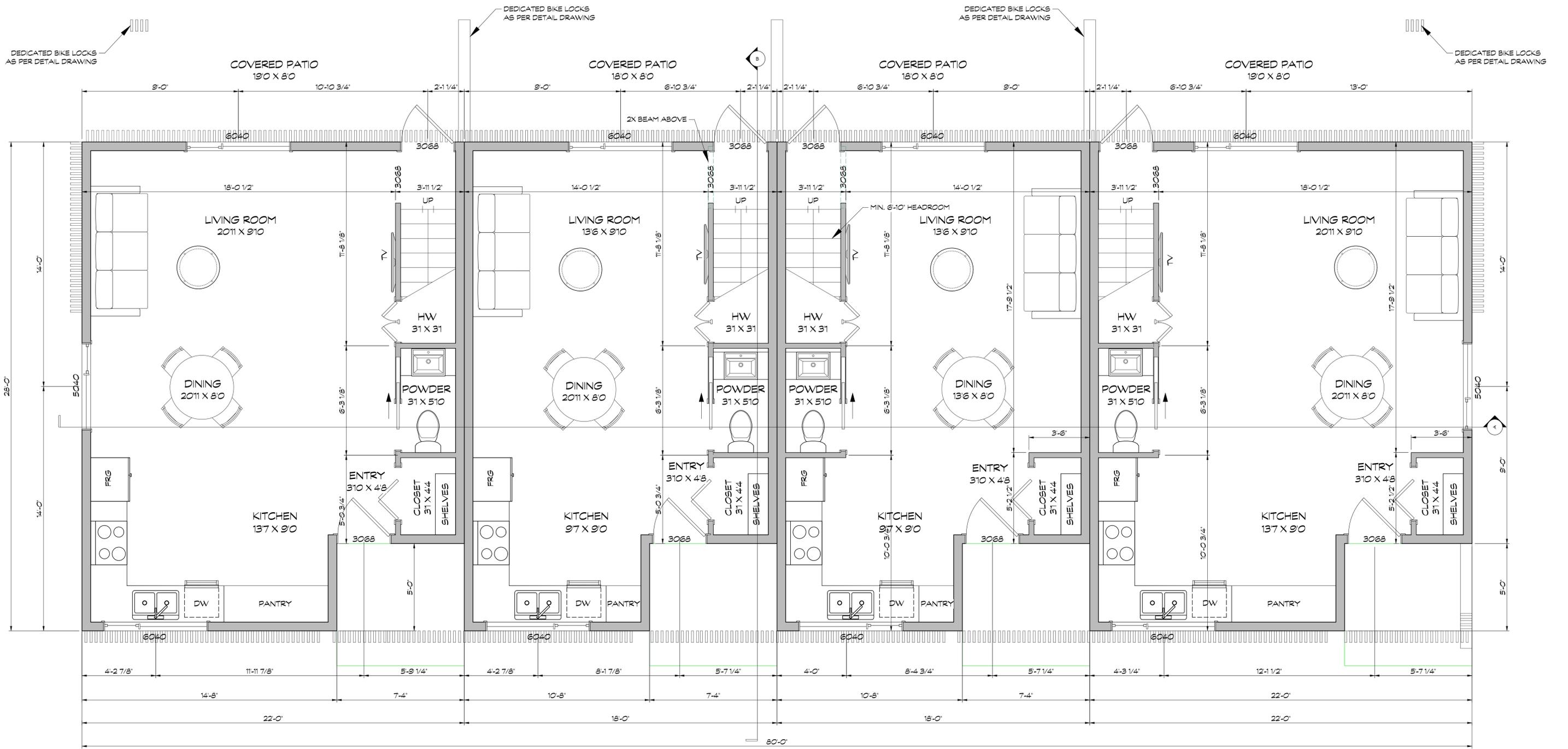
~68 LINEAR FT PER SURROUNDED DWELLING
~76 LINEAR FT PER CORNER DWELLING

NOTE:
ALL POINT LOADS MUST BE ASSESSED BY AN
ENGINEER AND FOOTING SIZES INCREASE AS
REQUIRED TO SUPPORT LOADS



VERSION FOR RE-ZONING PURPOSES

1.FEB01/21 Concept Design for Review	
ISSUE NOTES	
PERSPECTIVE	Sheet No. 2
Drawn by: MM	
PERSPECTIVE DESIGN BUILD LTD.	
Project Location: 1598 Piercy Rd., Courtenay, BC	
Project Title: NINE PEAKS	
Sheet Title: FOUNDATION PLAN	



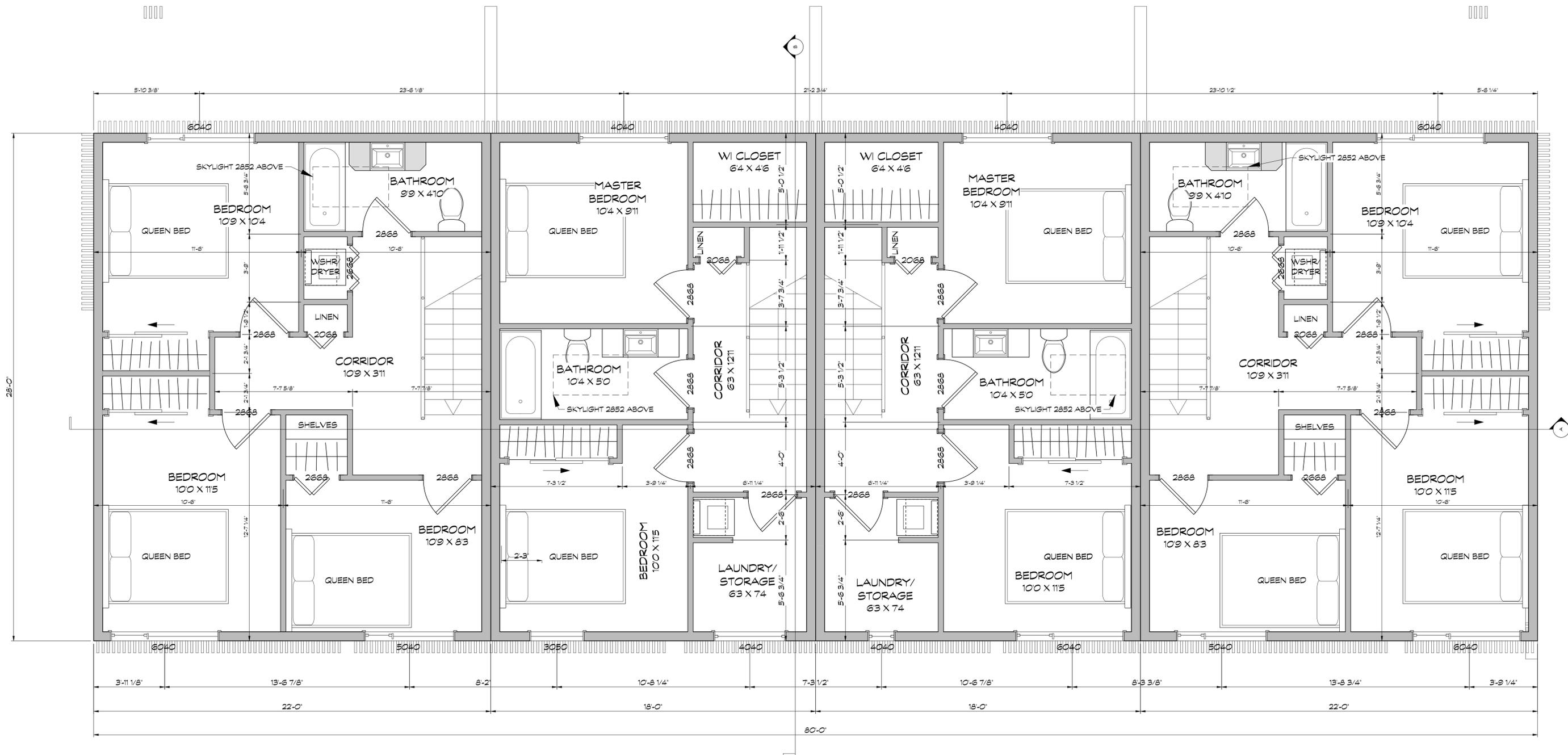
MAIN FLOOR PLAN
SCALE: 3/8" = 1'-0"

467 SQ FT (EXTERIOR FLOOR AREA PER 2BDRM DWELLING)
580 SQ FT (EXTERIOR FLOOR AREA PER 3BDRM DWELLING)
51 SQ FT (ENTRY SLAB PER DWELLING)

2094 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)
204 SQ FT (ENTRY SLABS IN TOTAL PER BUILDING)

VERSION FOR RE-ZONING PURPOSES

1.FEB01/21 Concept Design for Review Issue Notes	
PERSPECTIVE	Sheet No. 3
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title FLOOR PLANS	



UPPER FLOOR PLAN

SCALE: 3/8" = 1'-0"

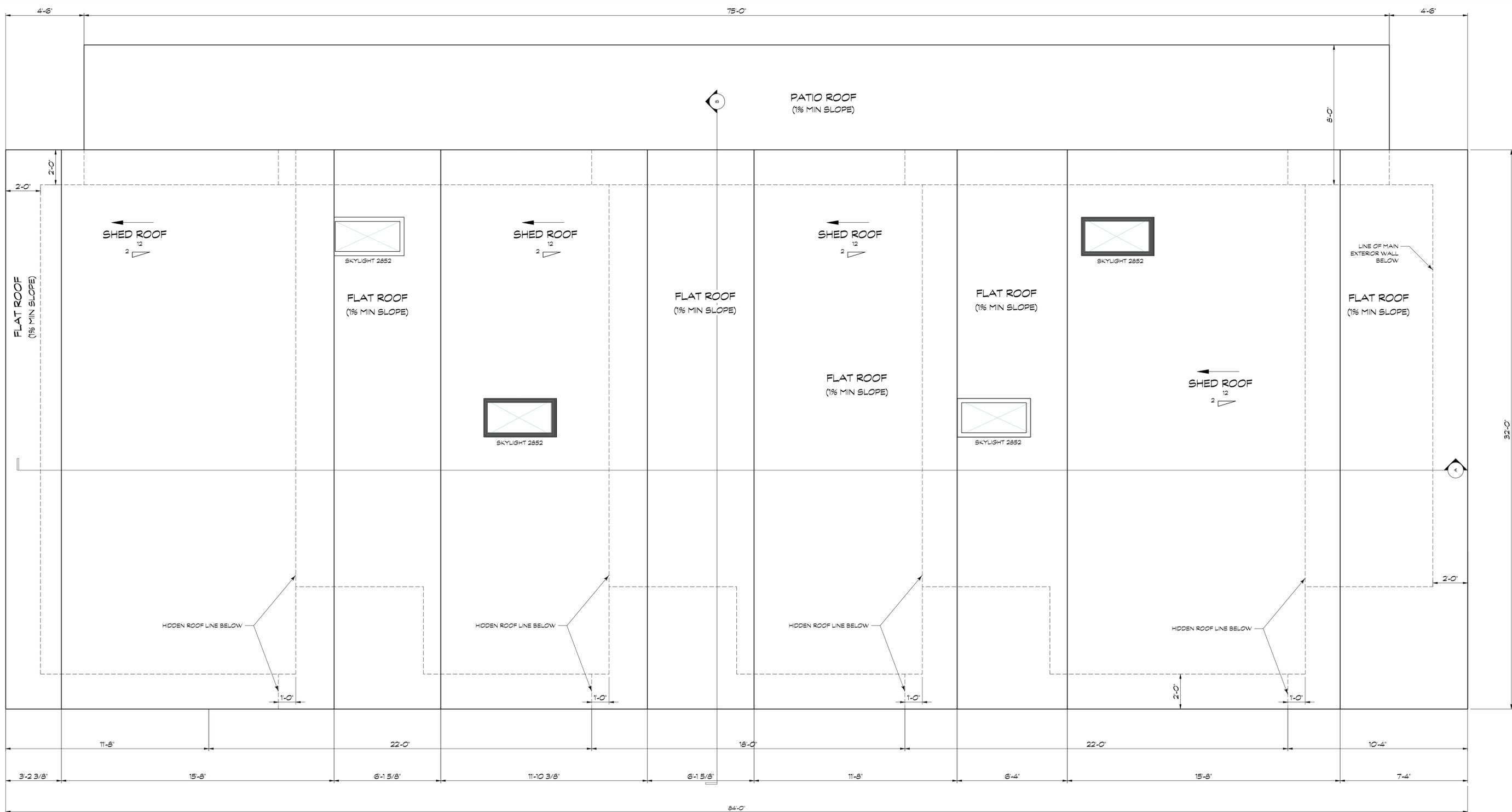
472 SQ FT (EXTERIOR FLOOR AREA IN PER 2BDRM DWELLING)

616 SQ FT (EXTERIOR FLOOR AREA IN PER 3BDRM DWELLING)

2176 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)

VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 4
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title 2ND FLOOR PLANS	

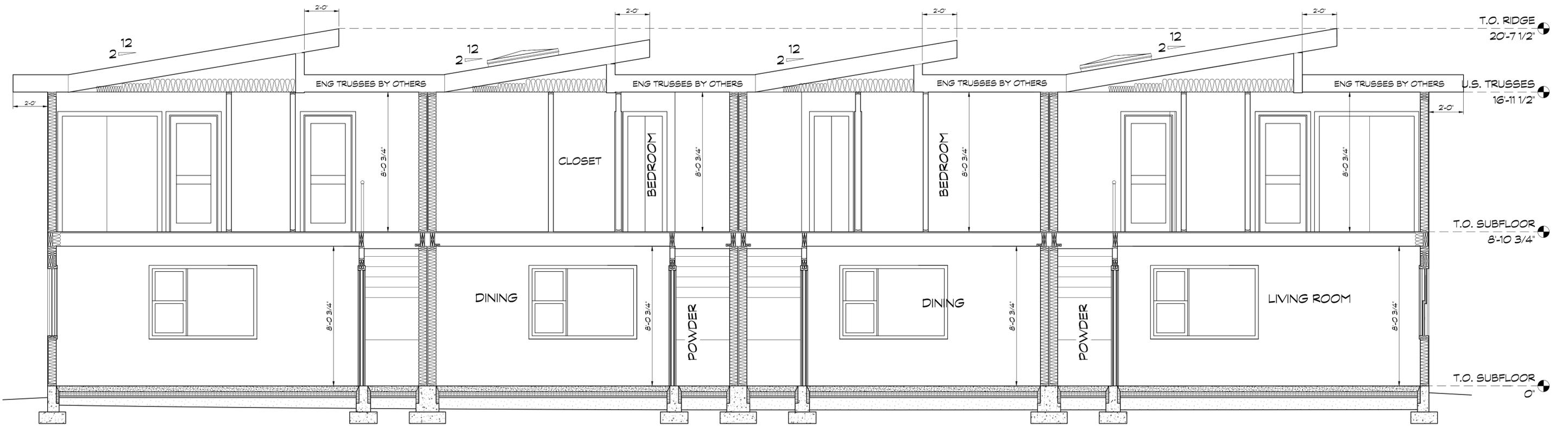


ROOF PLAN
 SCALE: 3/8" = 1'-0"

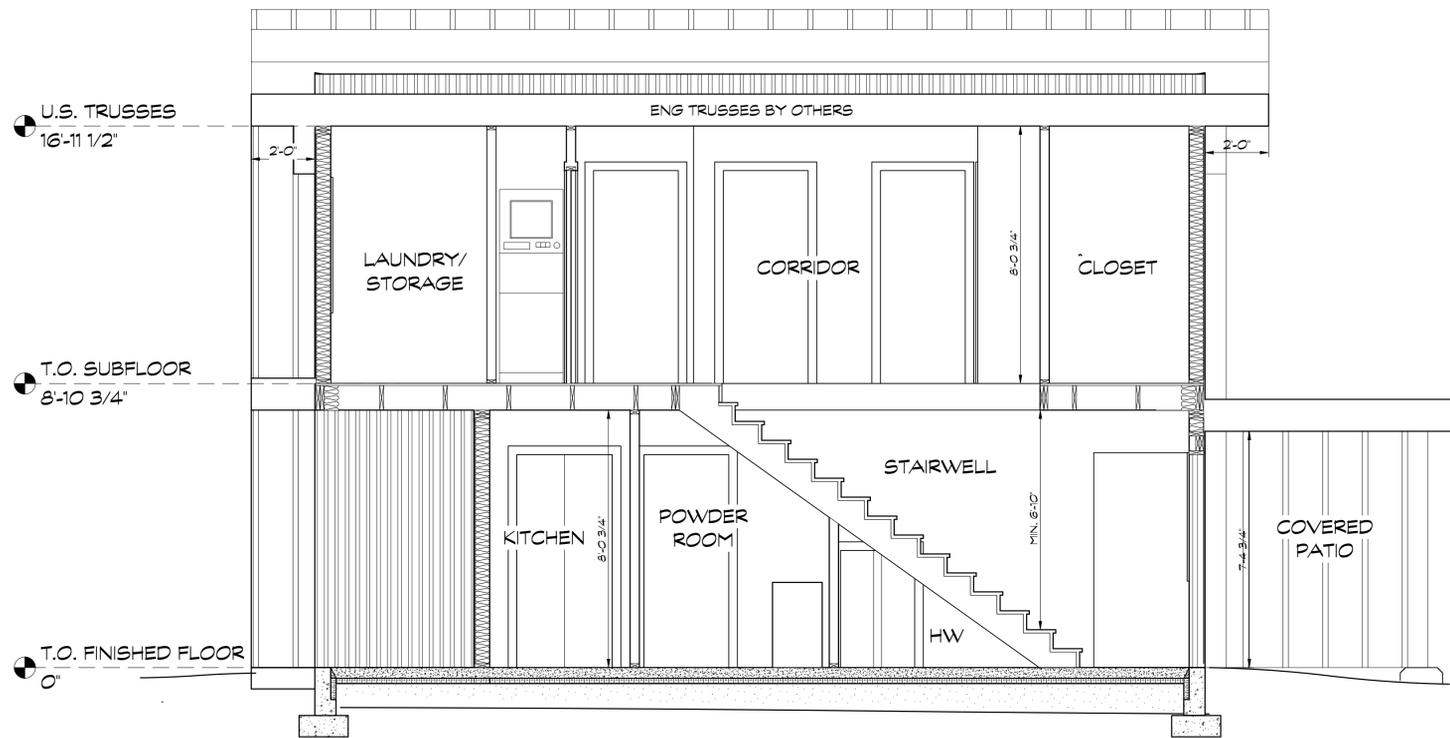
(1%) COVERED PATIO FLAT ROOF AREA = ~600 SQ FT
 (1%) FLAT ROOF AREA = ~1310 SQ FT
 (9.5°) SHED ROOF AREA = ~1569 SQ FT

VERSION FOR RE-ZONING PURPOSES

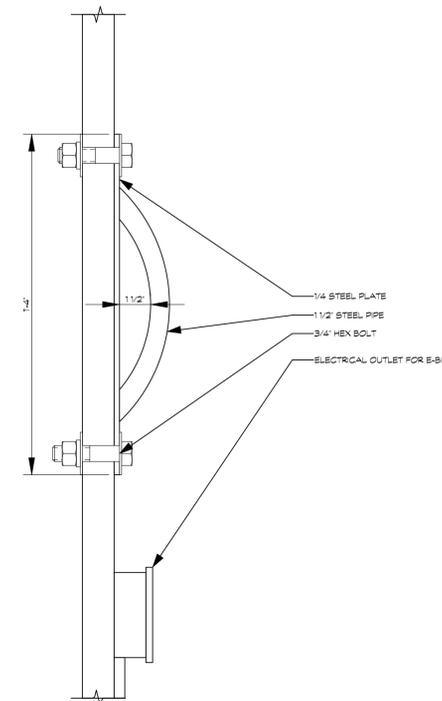
1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 5
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title ROOF PLAN	



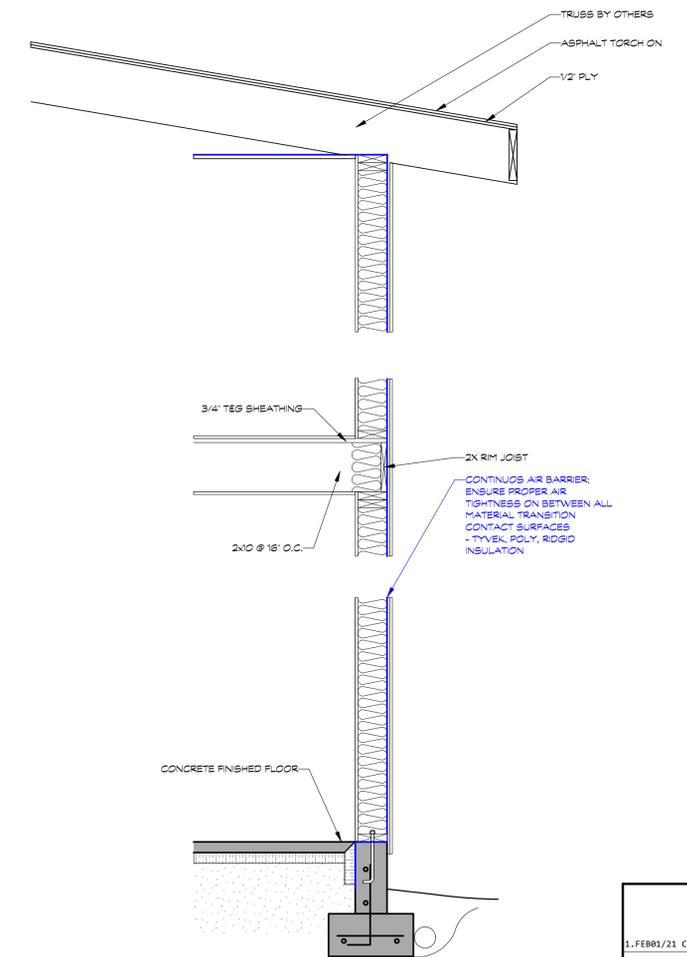
SECTION A
SCALE: 3/8" = 1'-0"



SECTION B
SCALE: 3/8" = 1'-0"



DEDICATED BIKE LOCK DETAIL DRAWING
SCALE: 3" = 1'-0"



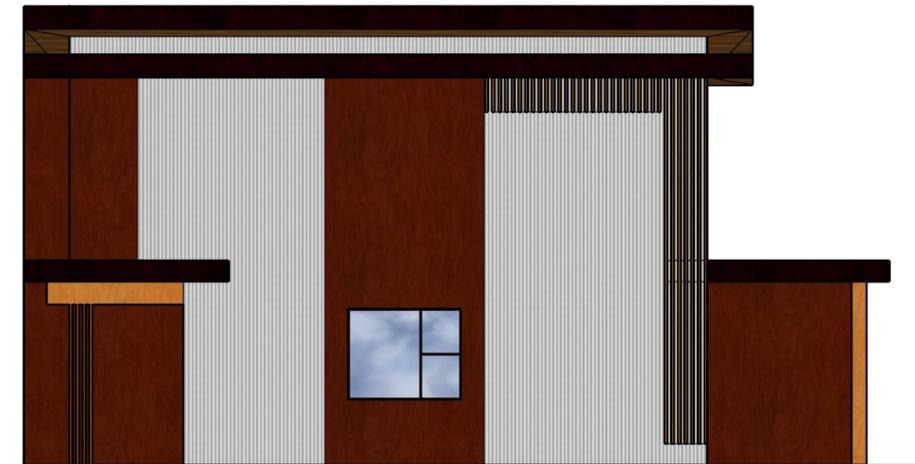
TYPICAL WALL SECTION
SCALE 3/4" = 1'-0"

VERSION FOR RE-ZONING PURPOSES

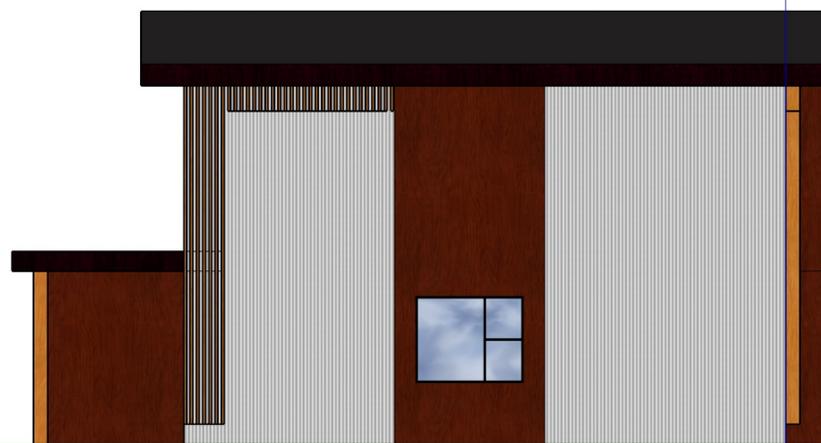
1.FEB01/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 6
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SECTIONS	



Rear Elevation- Not to scale



Right Elevation - Not to scale



Left Elevation - Not to scale

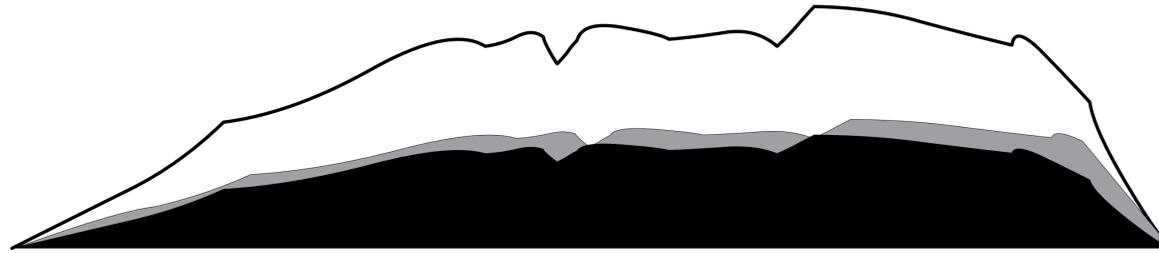


Front Elevation - Not to scale

Materials Legend	
 Wood Tone Fibre Cement Panel	 Fir Timber Framing and Ornamental Wooden Slats
 Cedar Siding	 Glazing
 Metal Siding	 Accent Paint
 Paint Grade Fibre Cement Panel	 Torch on Roofing Membrane

1.FE001/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 7
PERSPECTIVE DESIGN BUILD LTD.	
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title ELEVATIONS	

VERSION FOR RE-ZONING PURPOSES



NINE PEAKS

1590 PIERCY AVENUE, COURTENAY



**DRAWING INDEX
ARCHITECTURAL**

- P1 SITE PLAN
- P2 FOUNDATION PLAN
- P3 FLOOR PLANS
- P4 2ND FLOOR PLANS
- P5 ROOF PLAN
- P6 SECTIONS
- P7 ELEVATIONS



**PERSPECTIVE DESIGN
BUILD LTD.**
1160 4TH ST., COURTENAY
BRITISH COLUMBIA V9N 1H8

**TRIPLEX
DETAILED DESIGN**

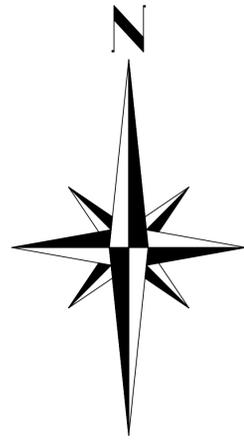
**TO SCALE ON 36X24
PRINT FORMAT ONLY**

COVER SHEET 0.0
REVISION July 20, 2021

VERSION FOR RE-ZONING PURPOSES

COURTENAY DISTRICT, PLAN 4764 TOPOGRAPHIC SURVEY PLAN

1590 PIERCY AVENUE, COURTENAY
SCALE 1 : 150 (METRIC)



PROJECT DATA

ZONING R2 (TO BE RE-ZONED R3)
LOT AREA 0.5 ACRES (2030.5 SQ M)

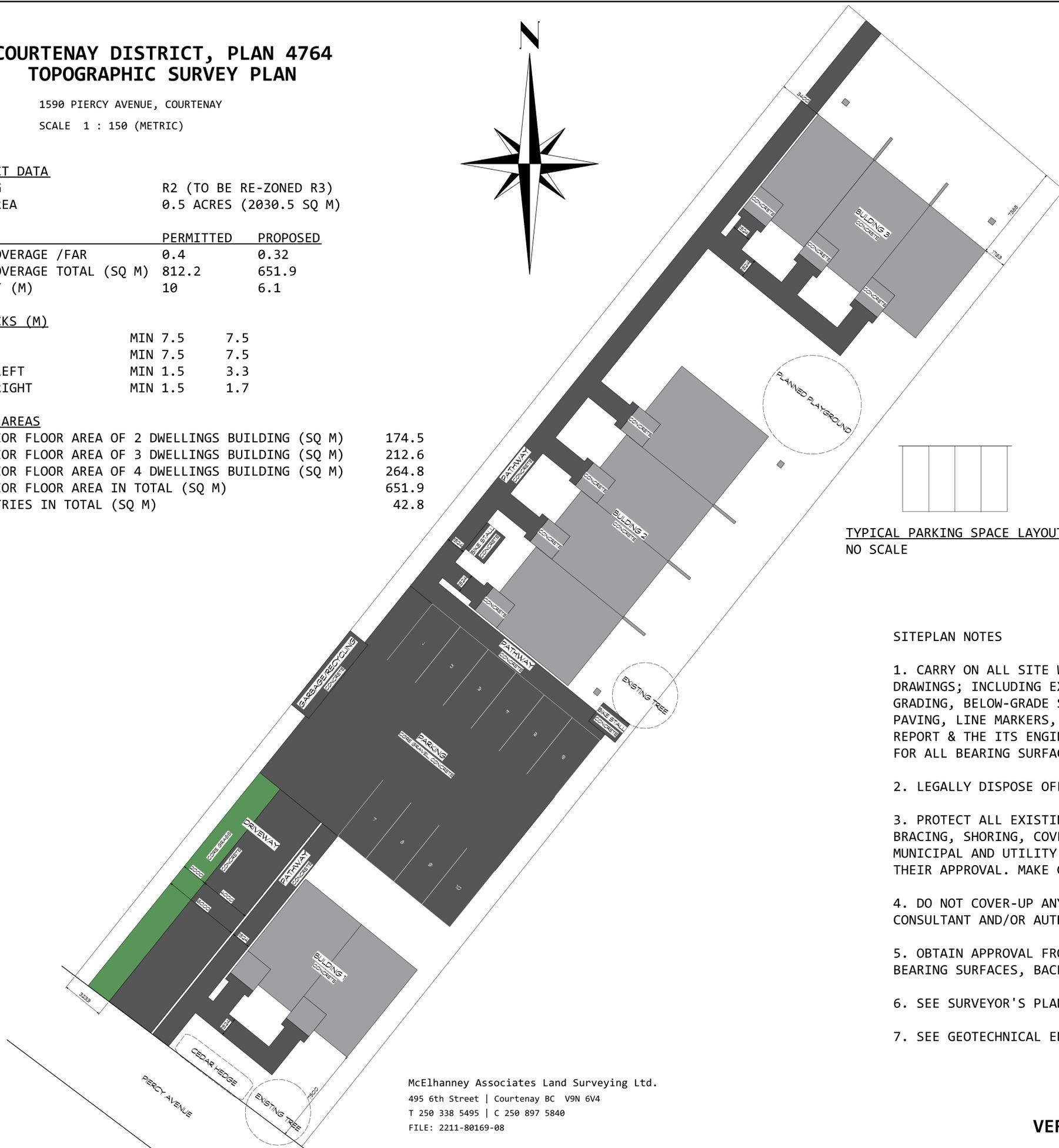
ITEMS	PERMITTED	PROPOSED
LOT COVERAGE /FAR	0.4	0.32
LOT COVERAGE TOTAL (SQ M)	812.2	651.9
HEIGHT (M)	10	6.1

SETBACKS (M)

FRONT	MIN 7.5	7.5
REAR	MIN 7.5	7.5
SIDE LEFT	MIN 1.5	3.3
SIDE RIGHT	MIN 1.5	1.7

FLOOR AREAS

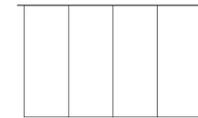
EXTERIOR FLOOR AREA OF 2 DWELLINGS BUILDING (SQ M)	174.5
EXTERIOR FLOOR AREA OF 3 DWELLINGS BUILDING (SQ M)	212.6
EXTERIOR FLOOR AREA OF 4 DWELLINGS BUILDING (SQ M)	264.8
EXTERIOR FLOOR AREA IN TOTAL (SQ M)	651.9
(9)ENTRIES IN TOTAL (SQ M)	42.8



OFF-STREET PARKING SPACES (PER DWELLING INCL.10% VISITOR PARKING)	REQUIRED	PROPOSED
	14 (1.5)	10 (1.1)

BICYCLE PARKING ADDITION

LONG TERM PARKING SPACES	-	30
SHORT TERM PARKING SPACES	-	8



TYPICAL PARKING SPACE LAYOUT
NO SCALE

OTHER PARKING LOT SPECIFICATIONS SHALL FOLLOW
DIVISION 7, BYLAW 2500 (2007) REQUIRMENTS

SEE PARKING STUDY ISSUED AND SIGNED BY WATT CONSULTING GROUP,
FILE NUMBER 2785.B01; MARCH 30, 2020

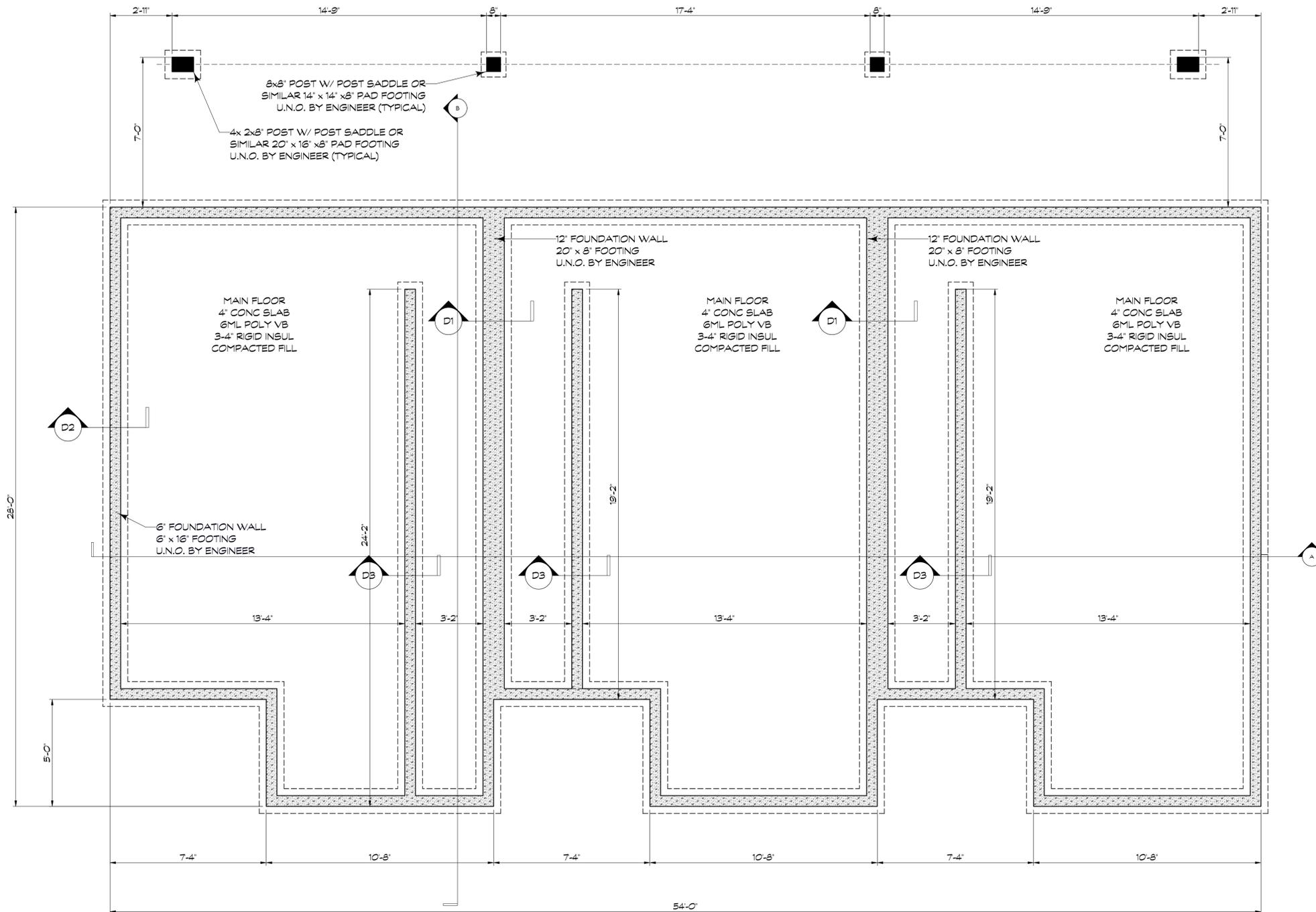
SITEPLAN NOTES

1. CARRY ON ALL SITE WORK SHOWN ON OR READILY INFERRABLE FROM THE PERMIT DRAWINGS; INCLUDING EXCAVATION, DEWATERING, BACKFILLING, ROUGH & FINISHED GRADING, BELOW-GRADE SERVICES, PLANTING, SODDING, FENCING, CURBING, PAVING, LINE MARKERS, SIGNAGE, ETC. CO-ORDINATE ALL WORK WITH THE SOIL REPORT & THE ITS ENGINEER. PROVIDE INSPECTIONS, TEST AND REPORTS, FOR ALL BEARING SURFACES, BACKFILL MATERIALS, AND COMPACTION.
2. LEGALLY DISPOSE OFF-SITE ALL EXCAVATED MATERIAL, & ITEMS REQUIRING REMOVAL.
3. PROTECT ALL EXISTING PUBLIC PROPERTY AND UTILITIES. PROVIDE HOARDINGS, BRACING, SHORING, COVERS, ETC. AS REQUIRED. CONTACT ALL REQUISITE MUNICIPAL AND UTILITY AUTHORITIES FOR LOCATES, AND CARRY OUT WORK TO THEIR APPROVAL. MAKE GOOD ANY DAMAGE.
4. DO NOT COVER-UP ANY WORK UNTIL PROPERLY INSPECTED BY THE PERTINENT CONSULTANT AND/OR AUTHORITY.
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6. SEE SURVEYOR'S PLAN FOR PROPERTY LINE DIMENSIONS AND DIRECTION.
7. SEE GEOTECHNICAL ENGINEER'S REPORT FOR SOIL / BEARING CONDITIONS.

McElhanney Associates Land Surveying Ltd.
495 6th Street | Courtenay BC V9N 6V4
T 250 338 5495 | C 250 897 5840
FILE: 2211-80169-08

VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 1
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SITE PLAN	



FOUNDATION PLAN
SCALE: 3/8" = 1'-0"
~68 LINEAR FT PER DWELLING

NOTE:
ALL POINT LOADS MUST BE ASSESSED BY AN ENGINEER AND FOOTING SIZES INCREASE AS REQUIRED TO SUPPORT LOADS

NOTES:

GENERAL NOTES

- ALL WORK SHALL CONFORM TO CURRENT BUILDING CODES AND LOCAL BYLAWS
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS

CONCRETE

- ALL CONCRETE TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 20MPA AT 28 DAYS
- FOOTINGS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR SOIL BEARING CAPACITY OF 2500 PSF. LOCAL CONDITIONS AND / OR LOCAL PRACTICE MAY NECESSITATE A MORE STRINGENT FOOTING DESIGN WHICH, MAY REQUIRE CONFIRMATION BY A CERTIFIED STRUCTURAL ENGINEER. THIS WILL BE THE RESPONSIBILITY OF THE OWNER / CONTRACTOR TO PROVIDE.
- CONCRETE FOOTINGS MUST BE PLACED ON UNDISTURBED OR COMPACTED SOIL TO AN ELEVATION BELOW FROST PENETRATION OR ALTERNATIVE METHOD SHALL BE USED TO ENSURE INSULATION OF FOUNDATION AS PER LOCAL BUILDING CODE
- ALL CONCRETE AND MASONRY FOUNDATION WALLS EXCEEDING LIMITS STATED IN BUILDING CODES REQUIRE DESIGN BY A REGISTERED STRUCTURAL ENGINEER
- ALL FOOTINGS TO HAVE 2 ROWS OF MIN. NO. 4 REBAR 3" CLEAR FROM SIDE AND BOTTOM
- ALL WOOD CONTACTING CONCRETE TO BE SEPARATED WITH APPROVED MATERIAL

STRUCTURAL

- ALL WOOD FRAMING TO BE #2 OR BETTER DOUGLAS FIR OR SPRUCE
- ALL UNTELS TO BE 2-2X10 #2 DOUGLAS FIR OR BETTER UNLESS OTHERWISE NOTED
- LAMINATE STUDDING UNDER ALL LOAD BEARING POINTS
- JOISTS ARE TO BE DOUBLED UNDER PARTITIONS
- ALL ENGINEERED COMPONENTS TO BE INSTALLED TO MANUFACTURES SPECS.

PLUMBING

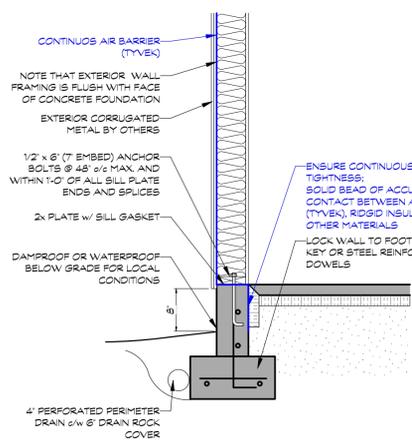
- PLUMBING FIXTURES AND FITTINGS SHALL MEET THE STANDARDS NOTED BELOW
- A) WATER CLOSET = 1.6 GAL PER FLUSH
- B) SHOWER HEAD = 2.5 GPM MAX
- C) LAVATORY FAUCETS = 2.2 GPM MAX
- D) SINK FAUCETS = 2.2 GPM MAX TITLE 24, VCBC, UPC

EGRESS WINDOWS (BEDROOMS)

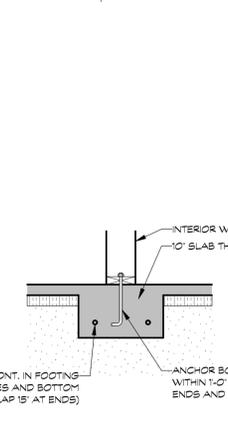
- FINISHED SILL 59" ABOVE FLOOR MAX.
- NET OPENING TO BE 3.77 SQUARE FEET MINIMUM, WITH NO DIMENSION LESS THAN 15"

MECHANICAL AND VENTILATION

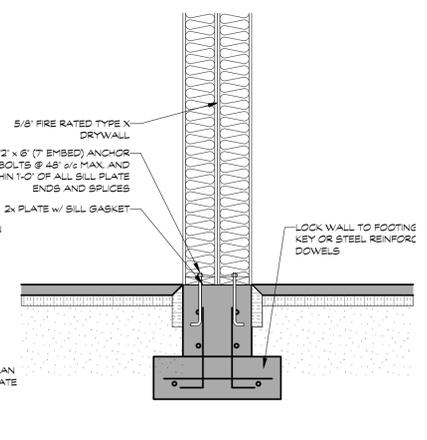
- BUILDING MUST BE PROVIDED WITH MECHANICAL VENTILATION DESIGN BY OTHERS
- ATTIC TO BE VENTED MINIMUM 1:300 OF AREA
- ONE HALF OF ROOF VENTS TO BE LOCATED IN UPPER PORTION OF ATTIC SPACE, AT LEAST 3'-0" HIGHER THAN EAVE OR CORNICE VENTS
- 22' x 30' MIN. ATTIC ACCESS. INSULATE AND WEATHER STRIP DOOR. 30' MIN. HEAD CLEARANCE



CROSS SECTION D2
SCALE: 3/4" = 1'-0"



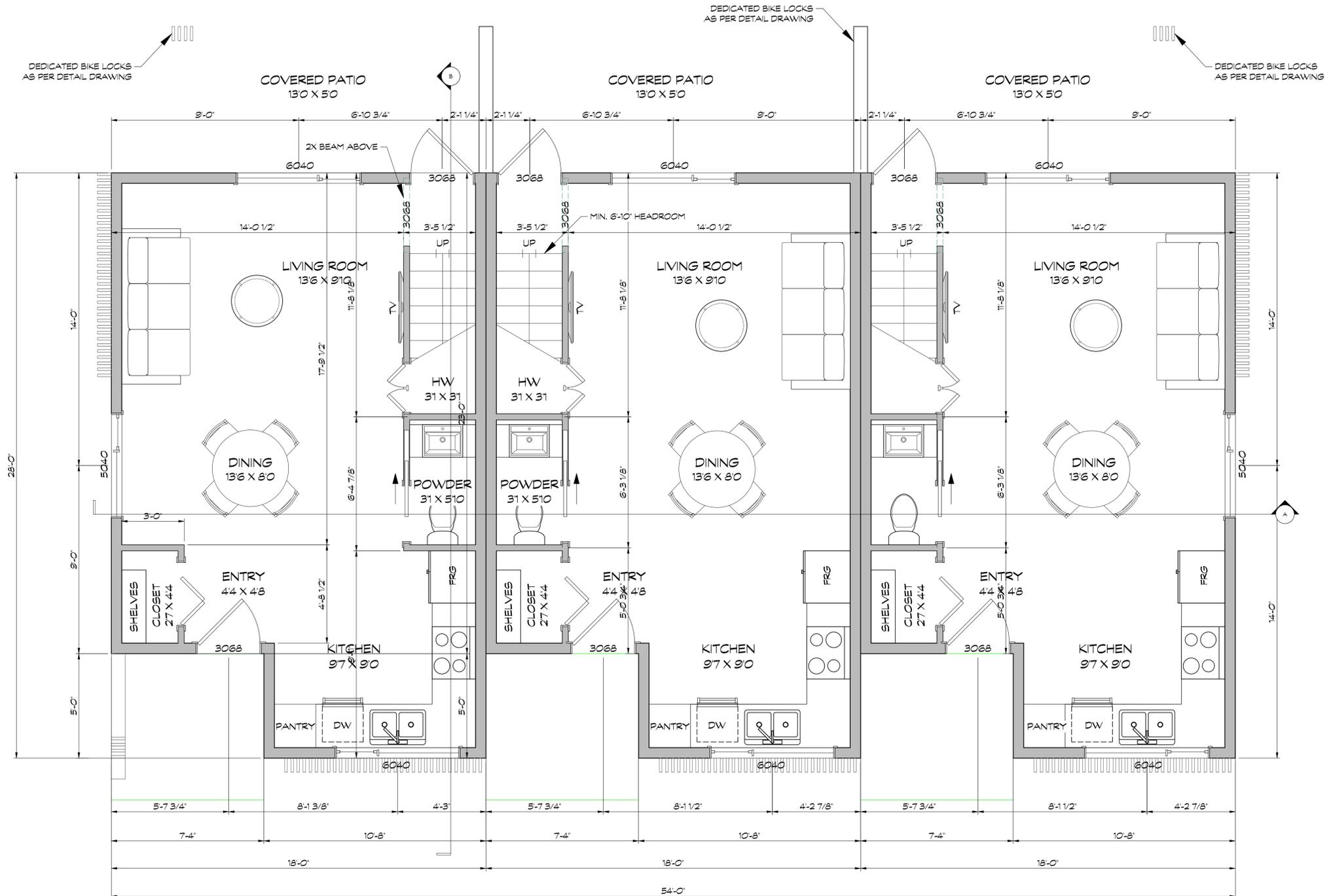
CROSS SECTION D3
SCALE: 3/4" = 1'-0"



CROSS SECTION D1
SCALE: 3/4" = 1'-0"

VERSION FOR RE-ZONING PURPOSES

1.FEB01/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 2
Drawn by: MM	
PERSPECTIVE DESIGN BUILD LTD.	
Project Location: 1598 Piercy Rd., Courtenay, BC	
Project Title: NINE PEAKS	
Sheet Title: FOUNDATION PLAN	



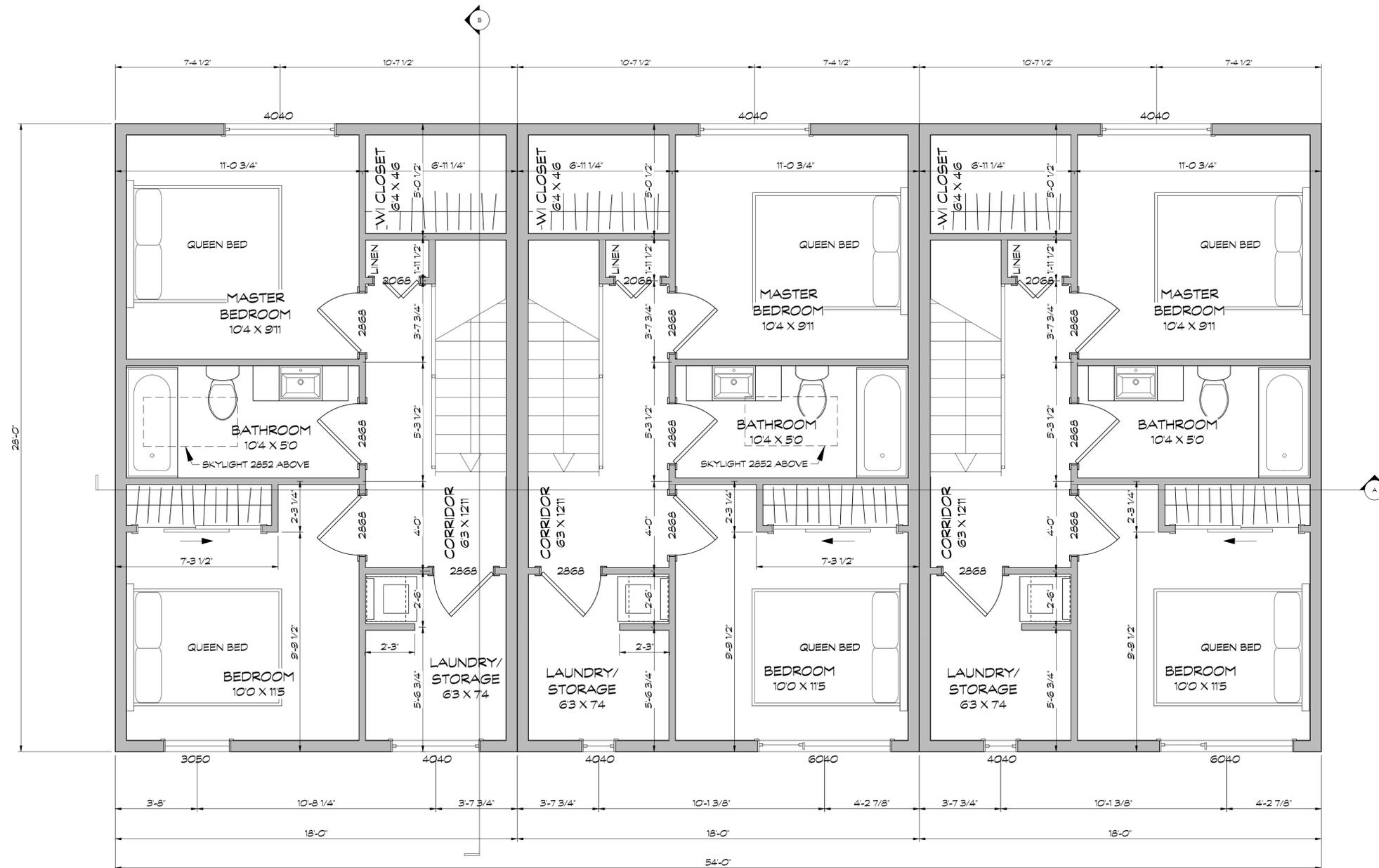
MAIN FLOOR PLAN
SCALE: 3/8" = 1'-0"

ALL 3 DWELLINGS IDENTICAL DIMENSIONS
467 SQ FT (EXTERIOR FLOOR AREA PER DWELLING)
51 SQ FT (ENTRY SLAB PER DWELLING)

1402 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)
153 SQ FT (ENTRY SLABS IN TOTAL PER BUILDING)

VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 3
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title FLOOR PLANS	



UPPER FLOOR PLAN

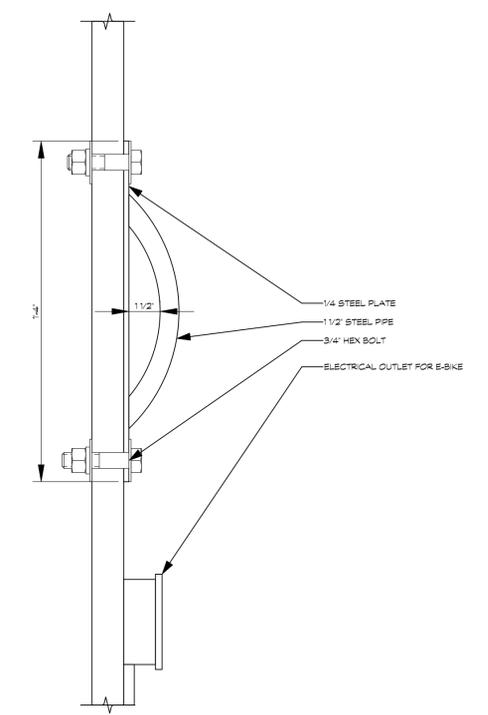
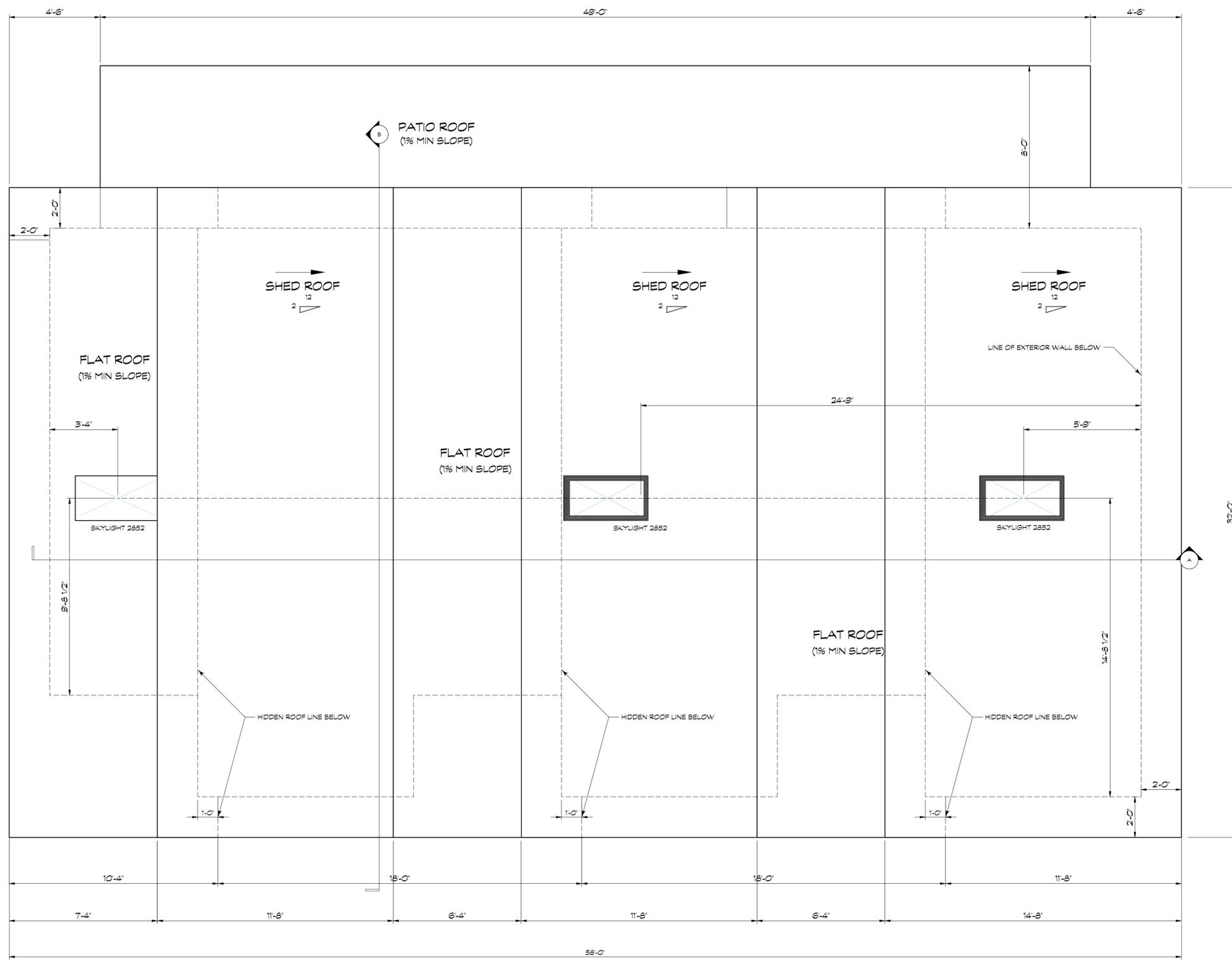
SCALE: 3/8" = 1'-0"

472 SQ FT (EXTERIOR FLOOR AREA IN PER DWELLING)

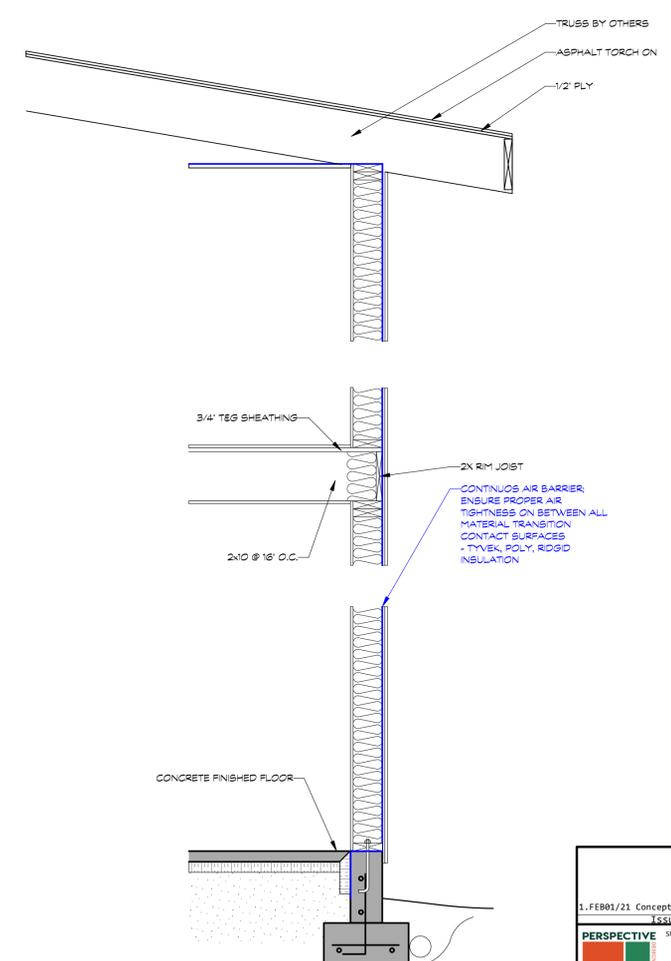
1445 SQ FT (EXTERIOR FLOOR AREA IN TOTAL PER BUILDING)

VERSION FOR RE-ZONING PURPOSES

1.FE001/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 4
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title 2ND FLOOR PLANS	



DEDICATED BIKE LOCK DETAIL DRAWING
SCALE: 3" = 1'-0"



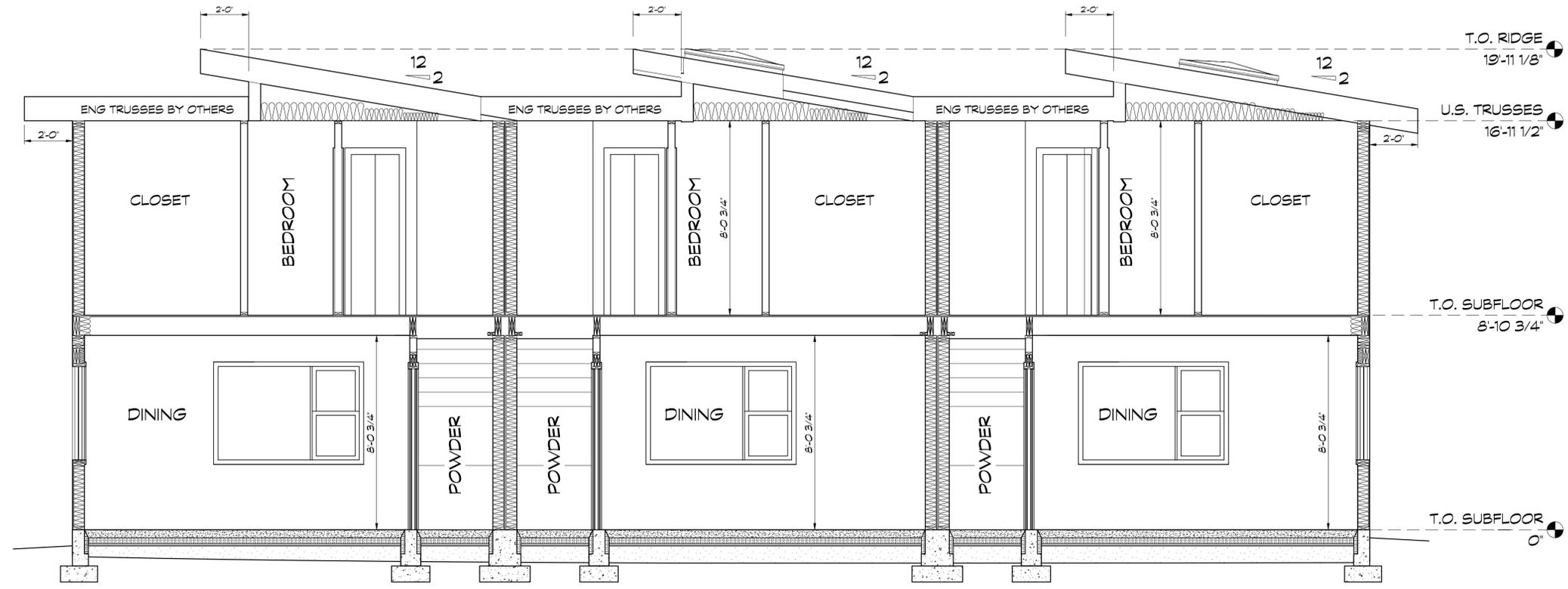
TYPICAL WALL SECTION
SCALE 3/4" = 1'-0"

1.FE801/21 Concept Design for Review	
ISSUE NOTES	
PERSPECTIVE	Sheet No. 5
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title ROOF PLAN	

ROOF PLAN
SCALE: 3/8" = 1'-0"

(1%) COVERED PATIO FLAT ROOF AREA = ~392 SQ FT
(1%) FLAT ROOF AREA = ~717 SQ FT
(9.5%) SHED ROOF AREA = ~1302 SQ FT

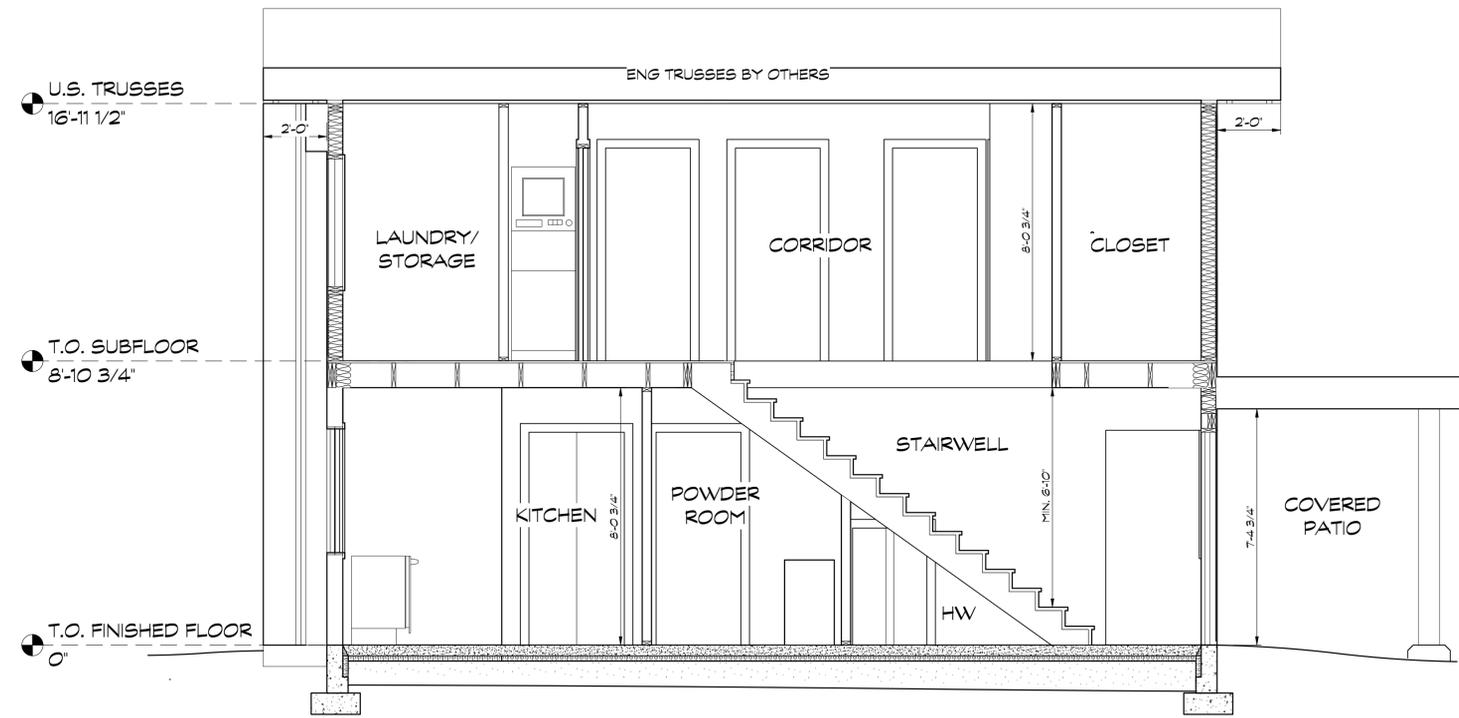
VERSION FOR RE-ZONING PURPOSES



SECTION A
SCALE: 3/8" = 1'-0"

SEALED POLYETHYLENE AIR BARRIER - CODE REFERENCES
 9.36.2.9. AIR TIGHTNESS
 9.36.2.10. CONSTRUCTION OF AIR BARRIER DETAILS

- ENSURE AIR BARRIER IS CONTINUOUS AND AIR TIGHT AT:
- PARTITION WALLS AT EXTERIOR WALLS AND CEILING
 - RECESSED LIGHTS
 - DRYER AND RANGE HOOD EXHAUSTS
 - EXTERIOR DOOR AND WINDOW PENETRATIONS
 - BATHROOM CEILING FANS
 - PLUMBING PENETRATIONS
 - MECHANICAL PENETRATIONS
 - INTERIOR AND EXTERIOR ELECTRICAL PENETRATIONS
 - RIM JOISTS
 - FOUNDATION WALL TRANSITION



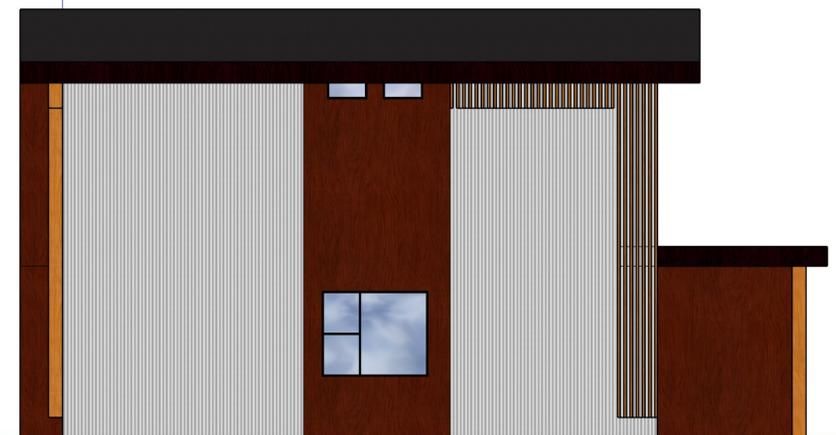
SECTION B
SCALE: 3/8" = 1'-0"

VERSION FOR RE-ZONING PURPOSES

1.FE801/21 Concept Design for Review	
Issue Notes	
PERSPECTIVE	Sheet No. 6
Project Location 1598 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title SECTIONS	



Front Elevation-not to scale



Right Elevation- not to scale



Left Elevation - not to scale



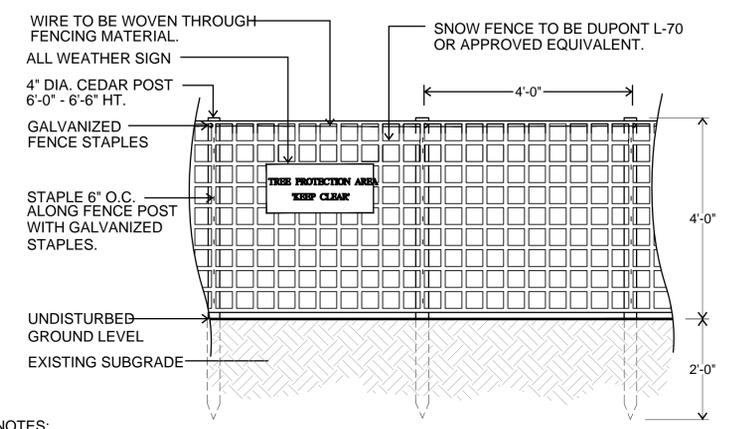
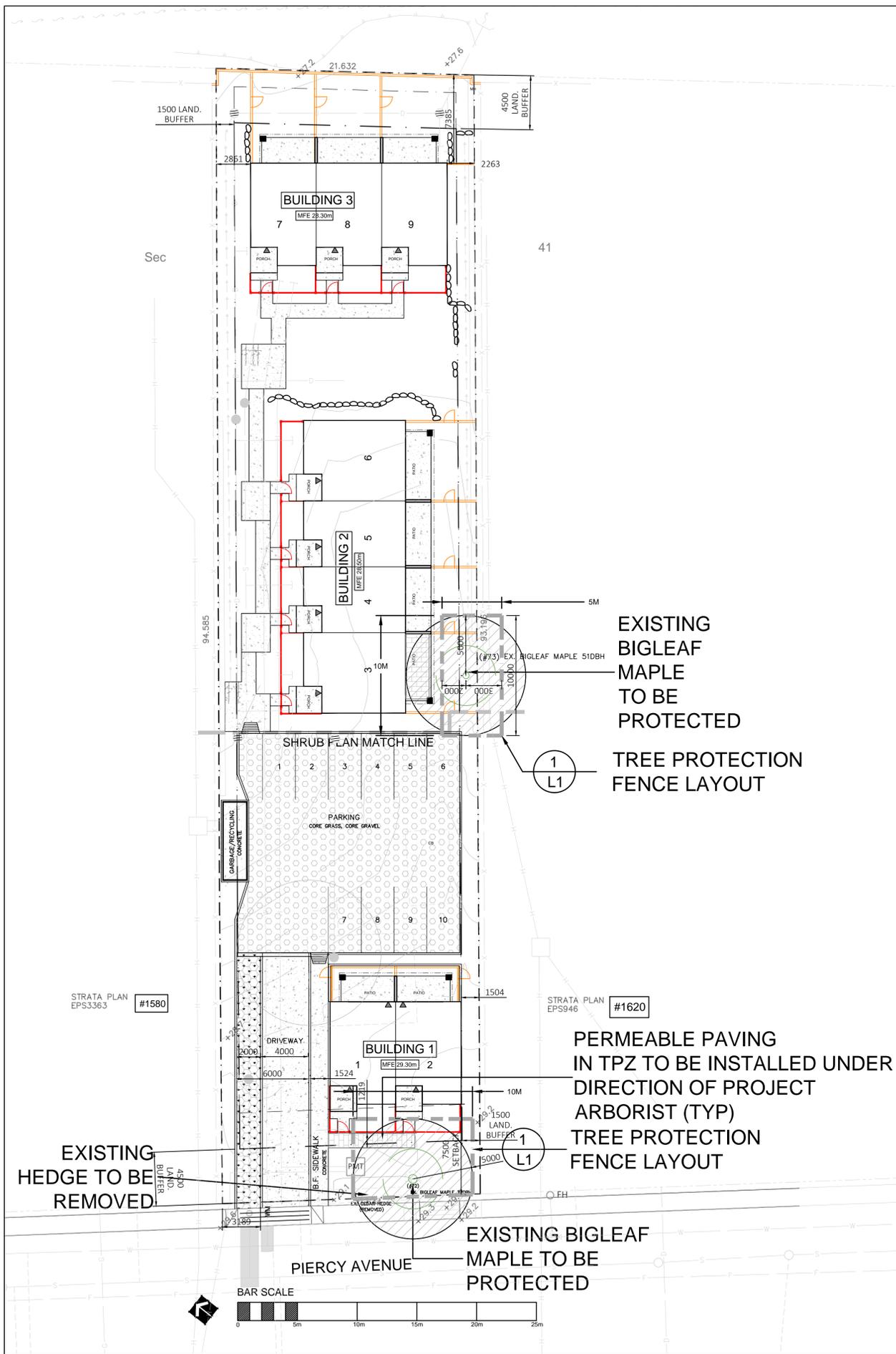
Rear Elevation- not to scale

Materials Legend			
	Wood Tone Fibre Cement Panel		Fir Timber Framing and Ornamental Wooden Slats
	Cedar Siding		Glazing
	Metal Siding		Accent Paint
	Paint Grade Fibre Cement Panel		Torch on Roofing Membrane

VERSION FOR RE-ZONING PURPOSES

1.FE001/21 Concept Design for Review	
ISSUE NOTES	
PERSPECTIVE	Sheet No. 7
Project Location 1590 Piercy Rd., Courtenay, BC	
Project Title NINE PEAKS	
Sheet Title ELEVATIONS	

SEAL:



- NOTES:**
1. TREE RETENTION FENCES TO BE IN PLACE PRIOR TO ANY WORK ON SITE.
 2. LANDSCAPE ARCHITECT TO VERIFY PLACEMENT.
 3. FENCE TO ENCLOSE ALL TREE RETENTION ZONES.

1 TREE RETENTION FENCE
SCALE 1:20

REFER TO ARBORIST REPORT FOR FULL TREE PROTECTION REQUIREMENTS:
GROW TREE CARE, 2640 COMOX ROAD, COURTENAY BC (250-702-3453)
WWW.GROWTREECARE.COM

Tree Retention Plan

Tree retention management works seek to protect rooting soils from compaction and contamination, and the tree's stems and branches from mechanical damage, by establishing Root Protection Areas (RPAs) about the subject trees. Additionally, efforts should be made to improve soil conditions within the RPAs to compensate for root loss outside of the RPAs.

- A sturdy wooden post-and-top-rail fence should be installed along the edges of the RPAs before any development works occur.
- The project arborist should inspect the fence location and construction after installation.
- The project arborist should be present when initial excavation works occur adjacent to Tree # 73 to inspect root distribution and to perform any root pruning works at the edge of the RPA.
- An eight (8) inch layer of arborist mulch should be applied to the entire surface of the RPAs to help moderate soil moisture conditions and to improve soil biology.
- Building materials and other should not be stored within the RPAs.
- Periodic deep watering should occur within the RPAs during the hot summer months.
- The project arborist should be contacted first if changes need to be made to the RPAs.

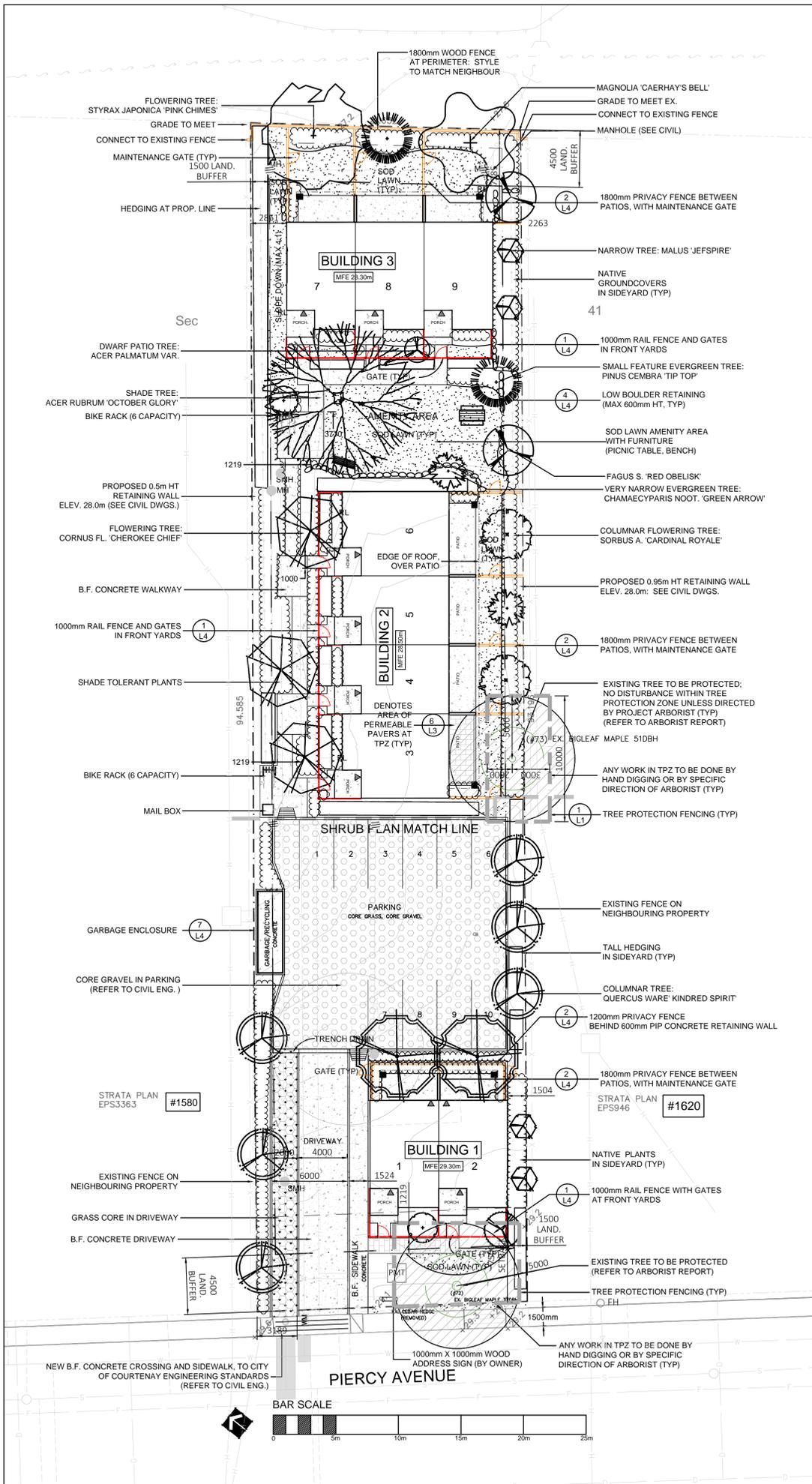
NO.	DATE	REVISION DESCRIPTION	DR.
6	21.JUL.28	REAR BUILDING RELOCATED	BJ
5	22.07.13	TREES ADDED, SETBACK REV., BLDG SHIFTED	BJ
4	21.09.23	LANDSCAPE BUFFER TABLE ADDED	BJ
3	21.APR.21	LANDSCAPE BUFFER DIMS ADDED	BJ
2	21.MAR.01	DP SUBMISSION	BJ
1	21.FEB.16	COORDINATION - IN PROGRESS	BJ

CLIENT:

PROJECT:
NINE PEAKS
1590 PIERCY AVENUE
COURTENAY, BC

DRAWING TITLE:
TREE MANAGEMENT PLAN

DATE: 20.09.20 DRAWING NUMBER:
SCALE: 1:200
DRAWN: BJ
DESIGN: **L1**
CHK'D: PCM OF 5



PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE	2	ACER GRISEUM	PAPERBARK MAPLE	6CM CAL; 1.8M STD; B&B
	2	ACER PALMATUM 'RED DRAGON'	RED DRAGON JAPANESE MAPLE	1.0M HT; TREE FORM
	1	ACER PALMATUM 'SHIN DESHOJO'	SHIN DESHOJO JAPANESE MAPLE	1.0M HT; TREE FORM
	1	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY MAPLE	6CM CAL; 2M STD; B&B
	2	CERCIS CANADENSIS 'THE RISING SUN'	THE RISING SUN REDBUD	4CM CAL; MIN. 1.5M STD, B&B
	2	CHAMAECYPARIS NOOTKATENSIS 'GREEN ARROW'	GREEN ARROW FALSECYPRESS	2.0M HT, B&B
	3	CORNUS FLORIDA 'CHEROKEE CHIEF'	RED FLOWERING DOGWOOD	6CM CAL; 1.8M STD; B&B
	2	EXISTING TREE TO BE PROTECTED	SEE ARBORIST PLAN	VARIES
	2	FAGUS SYLVATICA 'RED OBELISK'	RED OBELISK COLUMNAR BEECH	6CM CAL; 1.8m STD, B&B
	1	MAGNOLIA x 'CAERHAY'S BELL'	CAERHAY'S BELL MAGNOLIA	6CM CAL; 1.8M STD, B&B
	4	MALUS 'JEFSPIRE'	PURPLE SPIRE CRABAPPLE	5CM CAL; 1.8M STD; B&B
	2	PINUS CEMBRA 'TIP TOP'	TIP TOP SWISS STONE PINE	2.0M HT; B&B
	6	QUERCUS x 'WAREI' KINDRED SPIRIT ('NADLER')	KINDRED SPIRIT COLUMNAR OAK	6CM CAL; 1.8M STD, B&B
	2	SORBUS AUCUPARIA 'CARDINAL ROYALE'	CARDINAL ROYAL MT. ASH	6CM CAL; 1.8M STD, B&B
	1	STYRAX JAPONICUS 'PINK CHIMES'	PINK CHIMES JAPANESE SNOWBELL	6CM CAL; 1.8M STD; B&B
SHRUB	A2	AZALEA 'WHITE LIGHTS'	DECIDUOUS AZALEA; PINK	#3 POT; 50CM
	A4	AZALEA JAPONICA 'HARDIZER'S BEAUTY'	AZALEA; LIGHT PINK	#2 POT; 25CM
	BF	BUXUS MICROPHYLLA 'FAULKNER'	FAULKNER BOXWOOD	#2 POT
	GTB	BUXUS SEMPERVIRENS 'MONRUE'	GREEN TOWER BOXWOOD	1.0M HT, B&B
	C	CAMELLIA JAPONICA 'DEBUTANTE'	CAMELLIA; LIGHT PINK	#5 POT
	PAB	CAMELLIA SASANQUA 'MONDEL'	PINK-A-BOO CAMELLIA	#5 POT
	EU	EUONYMUS ALATA 'COMPACTUS'	COMPACT WINGED BURNING BUSH	#3 POT; 50CM
	AP	HAMAMELIS X INTER 'ARNOLD'S PROMISE'	ARNOLD'S PROMISE WITCH HAZEL	#10 POT; TREE FORM
	HYB	HYDRANGEA 'BLUSHING BRIDE'	BLUSHING BRIDE HYDRANGEA	#3 POT
	H	HYDRANGEA MACRO. 'ENDLESS SUMMER'	ENDLESS SUMMER BIGLEAF HYDRANGEA	#3 POT; 80CM
	KE	KALMIA LATIFOLIA 'ELF'	ELF MOUNTAIN LAUREL	#2 POT; 30CM
	KA	KALMIA LATIFOLIA 'OLYMPIC FIRE'	OLYMPIC FIRE MOUNTAIN LAUREL	#3 POT; 50CM
	KT	KALMIA LATIFOLIA 'TIDDLYWINKS'	TIDDLYWINKS MOUNTAIN LAUREL	#2 POT; 30CM
	M	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON GRAPE HOLLY	#3 POT; 40CM
	N	NANDINA DOMESTICA 'MONUM'	PLUM PASSION HEAVENLY BAMBOO	#3 POT
	NI	PHYSOCARPUS OPUULIFOLIUS 'LITTLE DEVIL'	LITTLE DEVIL NINEBARK	#3 POT
	P2	PIERIS JAPONICA 'COMPACTA'	DWARF JAPANESE PIERIS	#2 POT; 35CM
	R	RHODODENDRON 'BOW BELLS'	BOW BELLS RHODODENDRON	#2 POT
	RO2	ROSA 'FUSCHIA MEIDLAND'	FUSCHIA MEIDLAND ROSE	#2 POT
	SJ	SARCOCOCCA 'HOKOKANA VAR. 'HUMILIS'	HIMALAYAN SWEET BOX	#2 POT; 25CM
	SK	SKIMMIA JAPONICA (10% MALE)	JAPANESE SKIMMIA	#2 POT; 30CM
	YD	TAXUS X MEDIA 'DENSIFORMIS'	DWARF ENGLISH YEW	#3 POT
	Y	TAXUS X MEDIA 'HICKSII'	HICKS YEW	#3 POT; 80CM
	TH	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN CEDAR	1.5M HT; B&B
	V1	VIBURNUM P.T. 'SUMMER SNOWFLAKE'	SUMMER SNOWFLAKE DOUBLEFILE VIBURNUM	#3 POT; TREE FORM
GRASS	KF	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHERREED GRASS	#2 POT
	JA	HAKONECHLOA MACRA 'ALL GOLD'	ALL GOLD JAPANESE FOREST GRASS	#1 POT
VINE	HY	HYDRANGEA ANOMALA V. 'PETIOLARIS'	CLIMBING HYDRANGEA	#2 POT; STAKED
PERENNIAL	WMF	ADIANTUM ALEUTICUM	WESTERN MAIDENHAIR FERN	#1 POT
	CA	CAREX BUCHANANII 'VIRIDIS'	GREEN LEATHERLEAF SEDGE	#1 POT
	CF	CIMICIFUGA R. 'HILLSIDE BLACK BEAUTY'	HILLSIDE BLACK BEAUTY BUGBANE	#2 POT
	HM	HEUCHERA 'MIDNIGHT ROSE'	MIDNIGHT ROSE HEUCHERA	15CM POT
	HE	HEUCHERA 'PARIS'	PARIS CORAL BELLS	15 CM POT
	HEP	HEUCHERA 'PINOT NOIR'	PINOT NOIR CORAL BELLS	15 CM POT
	HF	HOSTA 'FRANCEE'	FRANCEE HOSTA	#1 POT; 1 EYE
	HAL	HOSTA 'HALCYON'	HALCYON HOSTA	#1 POT
	HS	HOSTA 'SUM AND SUBSTANCE'	SUM AND SUBSTANCE HOSTA	#1 POT; 1 EYE
	OF	MATTEUCIA STRUTHIOPTERIS	OSTRICH FERN	#1 POT
	F	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	#1 POT
	PU	PULMONARIA 'MILKY WAY'	MILKY WAY LUNGWORT	#1 POT
	S	SALVIA X SUPERBA 'EAST FRIESLAND'	EAST FRIESLAND SAGE	#1 POT
GC	EF	EUONYMUS JAPONICA 'EMERALD 'N GOLD'	EUONYMUS; GOLD VARIEGATED	#1 POT; 25CM

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARD. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

SITE FURNITURE



BENCH, 1.8M LENGTH
MAGLIN 'ICONIC' COLLECTION
THERMALLY MODIFIED ASH
POWDERCOAT COLOUR TBD
BY OWNER
SURFACE MOUNT TO CONCRETE
FOOTINGS



PICNIC TABLE WITH TWO BENCHES
MAGLIN 'ICONIC' COLLECTION
THERMALLY MODIFIED ASH
POWDERCOAT COLOUR TBD
BY OWNER
SURFACE MOUNT TO CONCRETE
FOOTINGS
(OR SIMILAR)



BIKE RACK
CORA 'EXPO 1500' RACK
STAINLESS STEEL FINISH
SURFACE MOUNT TO CONCRETE
(OR SIMILAR)

GENERAL IRRIGATION NOTES:

- LANDSCAPE CONTRACTOR TO PROVIDE SEPARATE CONTRACT TO LANDSCAPE INSTALLATION.
- ALL SOFT LANDSCAPE TO BE IRRIGATED WITH LOW FLOW IRRIGATION TO PLANTER BEDS, AND IN-GROUND SPRINKLER IRRIGATION TO LAWN AREAS.
- IRRIGATION CONTRACTOR TO PROVIDE AN EFFICIENT DESIGN-BUILD AUTOMATIC SYSTEM TO IAABC STANDARDS, WITH MOISTURE SENSORS, AUTOMATIC RAIN GAUGE.
- SYSTEM ACCESSED WITHIN BUILDING, WITH A MAIN CONTROLLER.
- REFER TO MECHANICAL AND ELECTRICAL CONSULTANT DRAWINGS FOR COORDINATION & FOR IRRIGATION STUB-OUT LOCATIONS.
- IRRIGATION PLAN TO MEET OR EXCEED ALL RELEVANT REQUIREMENTS FOR MUNICIPAL APPROVAL.
- IRRIGATION DESIGN TO BE REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT.

GENERAL PLANTING NOTES:

- LANDSCAPE CONTRACTOR TO PROVIDE 300mm MINIMUM GROWING MEDIUM DEPTH IN LAWN AREAS, AND 450mm MINIMUM GROWING MEDIUM DEPTH IN PLANTING BEDS.
- REFER TO SOFT LANDSCAPE SPECIFICATIONS.

Landscape Buffering (m)	Provided
Piercy Avenue (front)	4.5m (except for site access entry)
Side Yard (north)	Ranges from 1.2m to 3.4m
Side Yard (south)	Ranges from 1.5 to 1.8m
Rear	4.5m

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SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
6	21.JUL.28	REAR BUILDING RELOCATED	BJ
5	22.07.13	TREES ADDED, SETBACK REV., BLDG SHIFTED	BJ
4	21.09.23	LANDSCAPE BUFFER TABLE ADDED	BJ
3	21.APR.21	LANDSCAPE BUFFER DIMS ADDED	BJ
2	21.MAR.01	DP SUBMISSION	BJ
1	21.FEB.16	COORDINATION - IN PROGRESS	BJ

CLIENT:

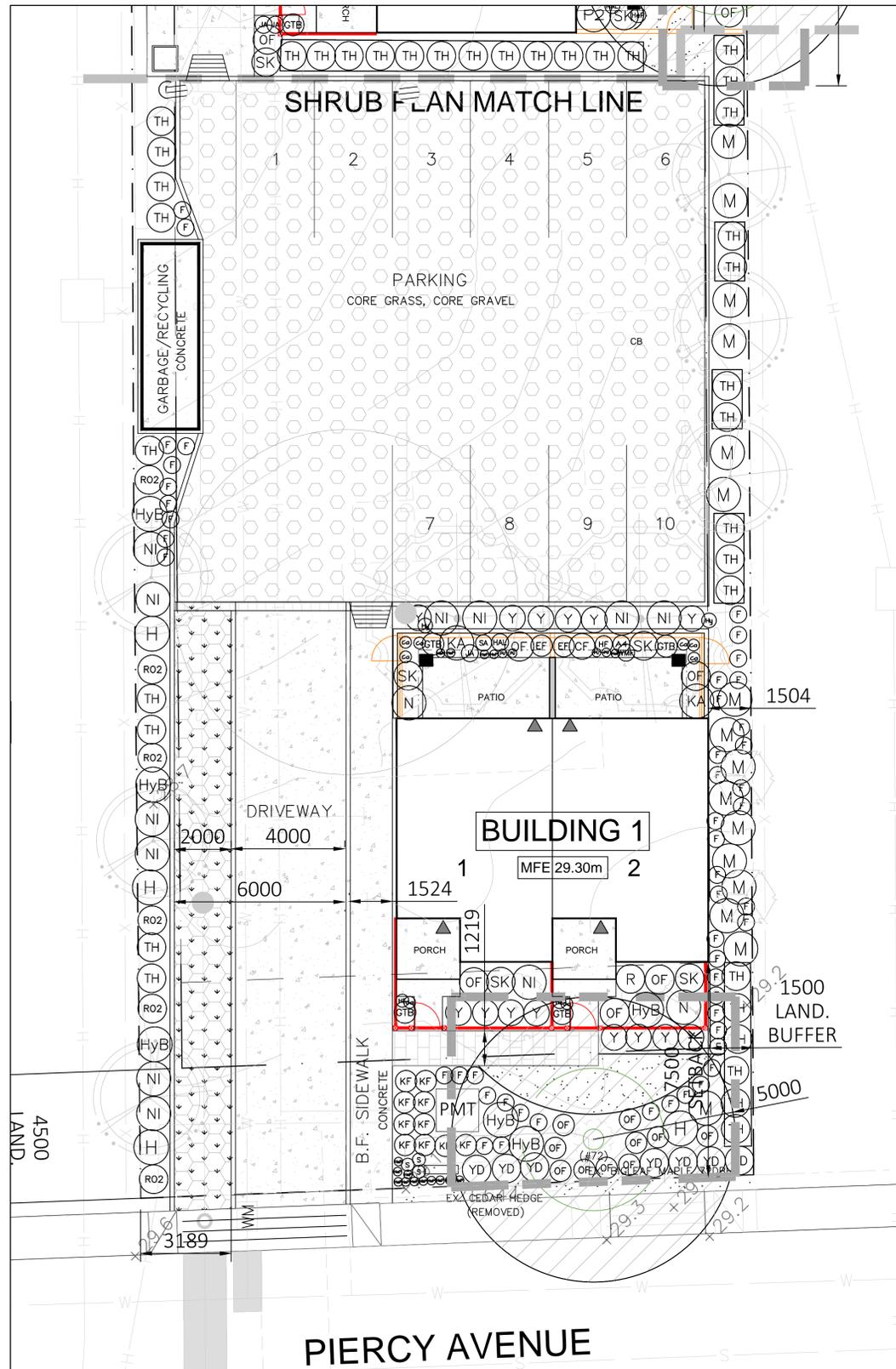
PROJECT:

NINE PEAKS
1590 PIERCY AVENUE
COURTENAY, BC

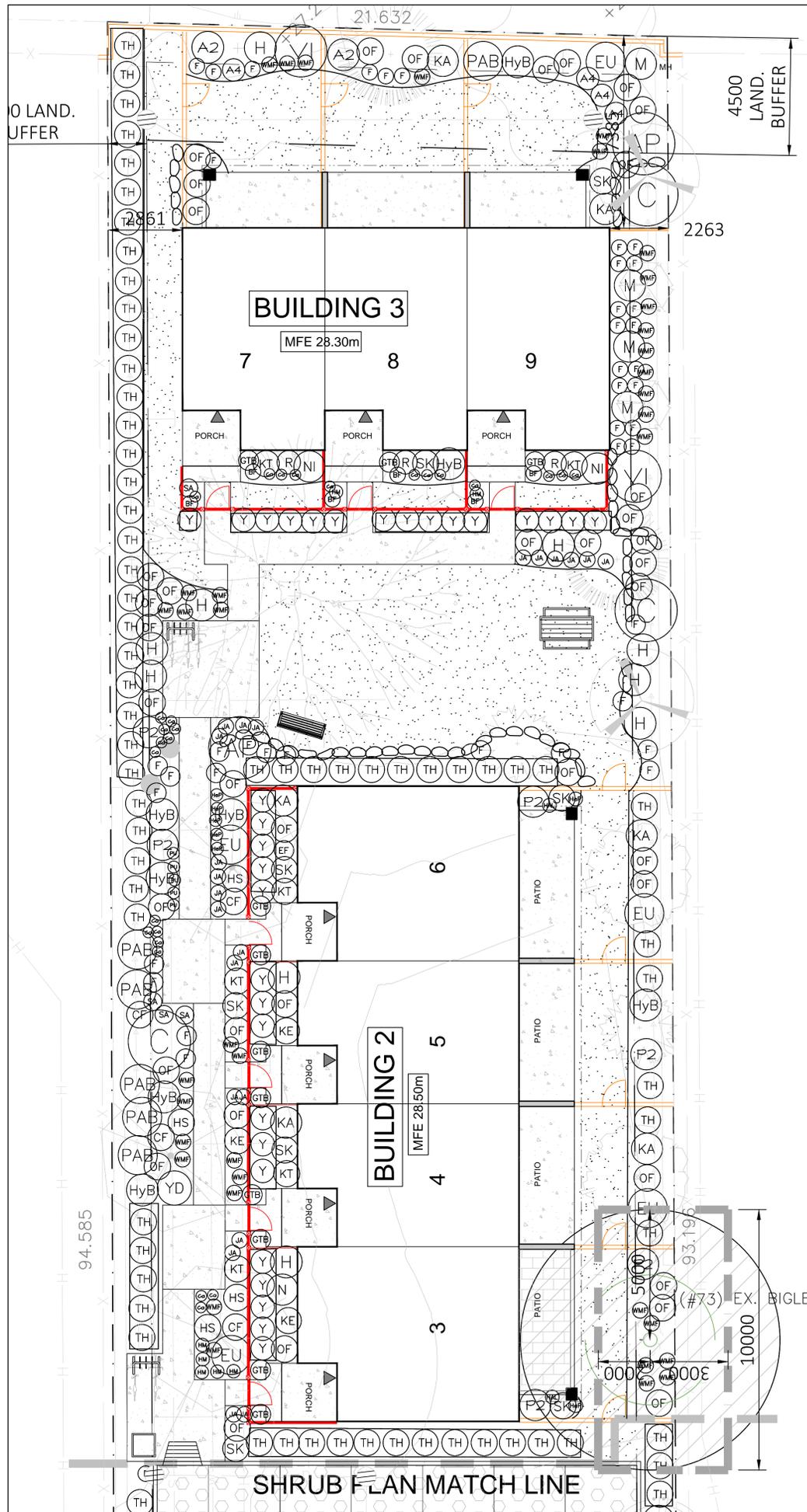
DRAWING TITLE:

LANDSCAPE PLAN

DATE: 20.09.20 DRAWING NUMBER:
SCALE: 1:200
DRAWN: BJ
DESIGN: BJ
CHK'D: PCM OF 5



SHRUB PLAN SOUTH



SHRUB PLAN NORTH

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p: 604 294-0011 ; f: 604 294-0022

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CLIENT:

PROJECT:

NINE PEAKS

**1590 PIERCY AVENUE
COURTENAY, BC**

DRAWING TITLE:

SHRUB PLAN

DATE: 20.09.20

DRAWING NUMBER:

SCALE: 1:100

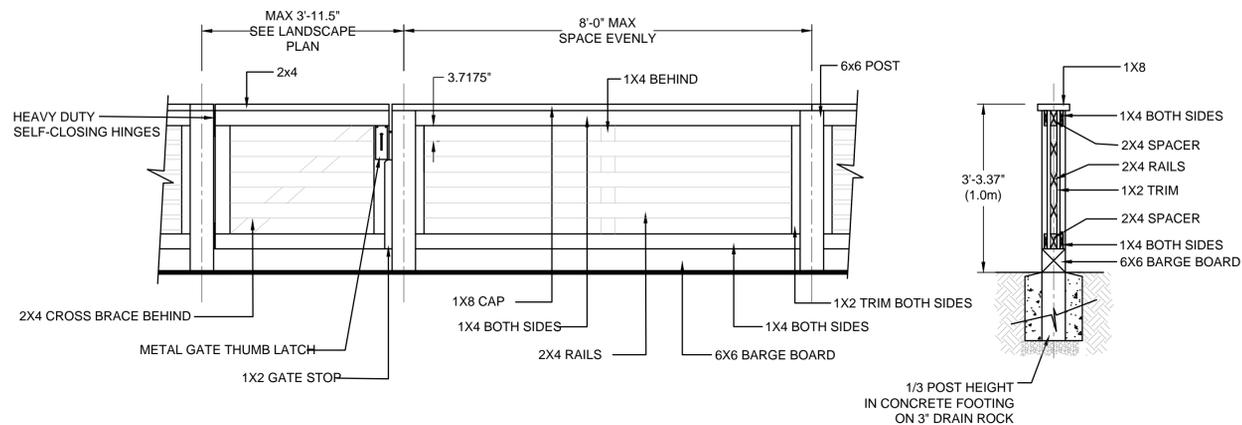
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DESIGN:

CHK'D: PCM

L3

OF 5



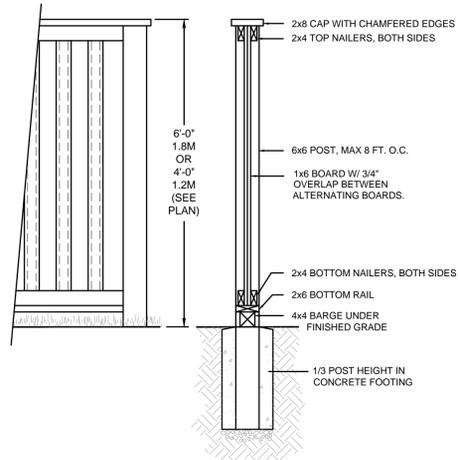
NOTE

1. ALL POSTS PRESSURE TREATED TO CSA STANDARD AND END CUTS TREATED WITH PRESERVATIVE.
2. ALL OTHER MEMBERS TO BE CEDAR, #2 (CONSTRUCTION) GRADE MINIMUM.
3. ALL HARDWARE HOT DIPPED GALVANIZED.
4. APPLY 2 COATS EXTERIOR STAIN TO MANUFACTURERS SPECIFICATION. FINISH SELECTION AS APPROVED BY PROJECT ARCHITECT.
5. ALL FENCES TO BE LEVEL. CHANGES IN GRADE TO BE IN 12"-18" STEPS (MAX). GAPS TO GRADE TO FOLLOW FINISH GRADE. GAP TO BE 3-6".
6. LATCH AND HINGES TO BE HEAVY DUTY, P.C. BLACK, TO BE PREAPPROVED BY OWNER - PROVIDE SAMPLE.



EVERBUILT THUMB LATCH (OR SIMILAR)

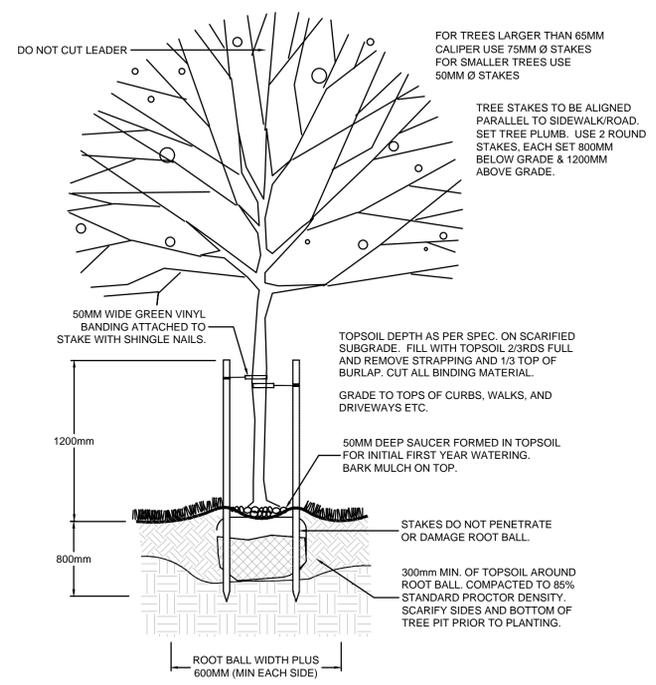
1 RAIL FENCE AND GATE
SCALE 1:20



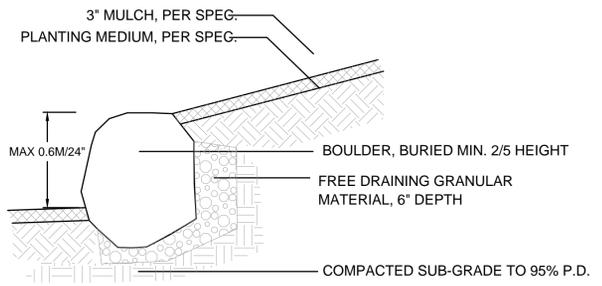
NOTE

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2. ALL OTHER MEMBERS TO BE HEM/FIR #2 (CONSTRUCTION) GRADE MINIMUM.
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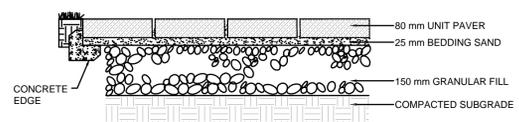
2 PRIVACY FENCE (1.8m/1.2m)
SCALE 1:20



3 TYPICAL TREE PLANTING
SCALE 1:25



4 BOULDER
SCALE 1:20

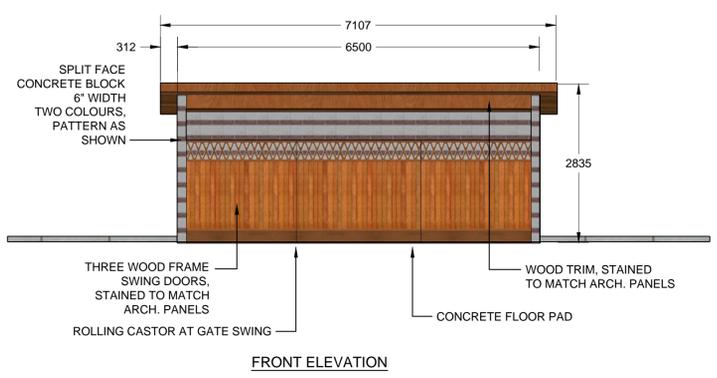


NOTE: PAVERS IN TPZ TO BE INSTALLED UNDER SUPERVISION OF PROJECT ARBORIST.

6 PERMEABLE PAVERS AND EDGE RESTRAINT
SCALE 1:10



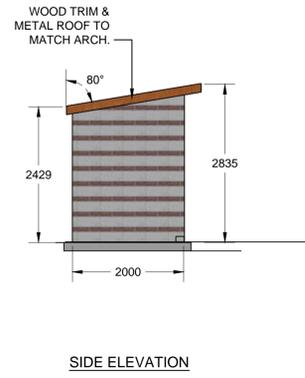
PERMEABLE PAVERS: ECO-PRIORA STANDARD PAVER RUNNING BOND PATTERN; PROVIDE COLOUR SAMPLE, TBD BY OWNER; OR SIMILAR, TO BE PREAPPROVED BY OWNER. INSTALL TO MEET ICPI & MANUFACTURER'S SPECIFICATIONS.



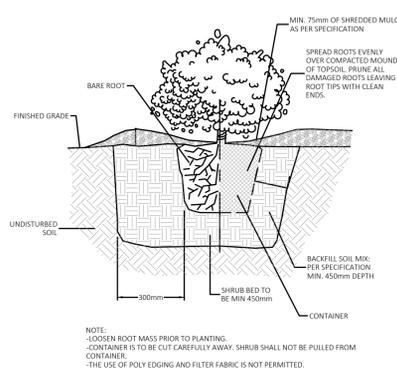
NOTE

1. ALL POSTS PRESSURE TREATED TO CSA STANDARD AND END CUTS TREATED WITH PRESERVATIVE.
2. ALL OTHER MEMBERS TO BE HEM/FIR #2 (CONSTRUCTION) GRADE MINIMUM.
3. ALL HARDWARE HEAVY DUTY, HOT DIPPED GALVANIZED.
4. APPLY 2 COATS EXTERIOR STAIN TO MANUFACTURERS SPECIFICATION. FINISH SELECTION AS APPROVED BY OWNER.
5. ALL PANELS TO BE LEVEL.

7 GARBAGE ENCLOSURE CONCEPT
SCALE 1:60



SIDE ELEVATION



NOTE:
-LOOSEN ROOT MASS PRIOR TO PLANTING.
-CONTAINER IS TO BE CUT CAREFULLY AWAY. SHRUB SHALL NOT BE PULLED FROM CONTAINER.
-THE USE OF POLY EDGING AND FILTER FABRIC IS NOT PERMITTED.

5 TYPICAL SHRUB PLANTING
SCALE 1:15

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pmg
LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
6	21.JUL.28	REAR BUILDING RELOCATED	BJ
5	22.07.13	TREES ADDED, SETBACK REV., BLDG SHIFTED	BJ
4	21.09.23	LANDSCAPE BUFFER TABLE ADDED	BJ
3	21.APR.21	LANDSCAPE BUFFER DIMS ADDED	BJ
2	21.MAR.01	DP SUBMISSION	BJ
1	21.FEB.16	COORDINATION - IN PROGRESS	BJ

CLIENT:

PROJECT:
NINE PEAKS
1590 PIERCY AVENUE
COURTENAY, BC

DRAWING TITLE:
DETAILS

DATE: 20.09.20 DRAWING NUMBER:
SCALE: VARIES
DRAWN: BJ
DESIGN:
CHK'D: PCM

L4
OF 5



Suite C100 - 4185 Still Creek Drive Burnaby, British Columbia, V5C 6G9 p: 604 294-0011 ; f: 604 294-0022

SEAL:

PROJECT:

DRAWING TITLE:
SOFT LANDSCAPE SPECIFICATIONS

DATE: 20.09.20 DRAWING NUMBER:

SCALE: NA

DRAWN: BJ

DESIGN: BJ

CHKD: PCM

OF 5

PMG PROJECT NUMBER: 20-114

PART ONE GENERAL REQUIREMENTS

- 11 REFERENCES
1.1 CCDC Doc 2 2008
1.2 B.C. Landscape Standard, 2012 edition, prepared by the B.C. Society of Landscape Architects and the B.C. Landscape & Nursery Association, jointly. All work and materials must meet standards as set out in the B.C. Landscape Standard unless superseded by this specification or as directed by Landscape Architect with written instruction.
1.3 MASTER MUNICIPAL SPECIFICATIONS & STANDARD DETAILS, 2000 edition, prepared by the Consulting Engineers of British Columbia, Roadbuilders and Heavy Construction Association, and the Municipal Engineers Division
1.4 STANDARD FOR LANDSCAPE IRRIGATION SYSTEM, 2008. Prepared by the Irrigation Industry Association of British Columbia.
1.5 MUNICIPAL BYLAWS AND ENGINEERING SPECIFICATIONS WHERE NOTED.

- 12 TESTING
1.1 A current foot more than one month test for all growing medium to be used on this site is required. Provide and pay for testing by an independent testing facility pre-approved by the Landscape Architect. Deliver growing medium test results to Landscape Architect for review and approval prior to placement. Refer to Section 3.4 Growing Medium Testing for procedure.
1.2 Owner reserves the right to test or re-test materials. Contractor responsible to pay for testing if materials do not meet specification.

- 13 SUBMITTALS
1.1 Any alternate products differing from that contained in the contract documents must be pre-approved by the Landscape Architect.
2.1 Submittals to consist of product sample or manufacturer's product description.

- 14 SITE REVIEW
1. Under the Terms of the Landscape Architect's Contract with the Owner and where the Landscape Architect is the designated reviewer, the Landscape Architect will observe construction as necessary in their opinion to confirm conformance to the plans and specifications.
1.1.1 Start Up Site Meeting, General Contract: Prior to any site disturbance, a meeting with the general contractor to review free preservation issues, general landscape issues and municipal requirements.
1.1.2 Start Up Site Meeting, Landscape Contract (if separate): At the start of work with Owner's Representative, Site Superintendent and Landscape Contractor; a meeting to be held to review expected work and to verify the acceptability of the subgrade and general site conditions to the Landscape Contractor. Provide growing medium test results for this meeting.
1.1.3 Progress Site Visits: To observe materials and workmanship as necessary through the course of the work. Review of different aspects of the work may be dealt with on any single visit. Such elements may include: Site Layout, Rough Grading, Growing Medium - quality, depths, finish grading, Drainage and Drains, Materials, Lawns or Grass areas; Planting - plant material including negotiations with suppliers, nursery inspections, plant sizes, quality, quantity, planting practice and layout, (tree support), Mulch, Irrigation Systems, Play Equipment, Site Furniture, and other elements of the site development where the Landscape Architect is the designated reviewer such as Pedestrian Paving, Fencing, Non-structural walls and stairs, Util Paving.
1.4 Substantial Performance: Review of all work, accounting of all substitutions, deletions, plant counts, preparations of deficiency list, and recommendations for completion.
1.5 Certificate of Completion Upon the declaration of Substantial Performance, a recommendation for the issuance of the Certificate of Completion will be made to the Payment Certifier as defined in the contract.
1.6 Deficiency Review: Prior to the completion of the holdback period, check for completion of deficiencies. Once completed, a Schedule 'C' will be issued where required.
1.7 Warranty Review: Prior to the completion of the warranty period (1-11 months after issuance of the Certificate of Completion), review all warranty material and report recommendations for warranty replacement.

- 15 WORKMANSHIP
1. Unless otherwise instructed in the Contract Documents, the preparation of the subgrade shall be the responsibility of the General Contractor. Placement of growing medium constitutes acceptance of the subgrade by the Landscape Architect. Any subsequent corrections to the subgrade required are the responsibility of the Landscape Contractor.
2. All work and superintendence shall be performed by personnel skilled in landscape contracting. In addition, all personnel applying herbicides and/or pesticides shall hold a current license issued by the appropriate authorities.
3. A site visit is required to become familiar with site conditions before bidding and before start of work.
4. Confirm location of all services before proceeding with any work.
5. Notify Landscape Architect of any discrepancies. Obtain approval from Landscape Architect prior to deviating from the plans.
6. Take appropriate measures to avoid environmental damage. Do not dump any waste materials into water bodies. Conform with all federal, provincial and local statutes and guidelines.
7. Collect and dispose of all debris and/or excess material from landscape operations. Keep paved surfaces clean and repair damage resulting from landscape work. Repairs are to be completed prior to final acceptance.
8. Where new work connects with existing, and where existing work is altered, make good to match existing undisturbed condition.

- 16 WARRANTIES
1. Guarantee all materials and workmanship for a minimum period of one full year from the date of Certificate of Completion.
2. Refer to individual sections for specific warranties.

PART TWO SCOPE OF WORK

- 21 SCOPE OF WORK
1. Other conditions of Contract may apply. Confirm Scope of Work at time of tender.
2. Work includes supply of all related items and performing all operations necessary to complete the work in accordance with the drawings and specifications and generally consists of the following:
2.1 Retention of Existing Trees where shown on drawings.
2.2 Finish Grading and Landscape Drainage.
2.3 Supply and placement of growing medium.
2.4 Testing of imported growing medium and/or site topsoil.
2.5 Supply and incorporation of additives to meet requirements of soil test and Table One.
2.6 Preparation of planting beds, supply of plant material and planting.
2.7 Preparation of rough grass areas, supply of materials and seeding.
2.8 Preparation of lawn areas, supply of materials and sodding.
2.9 Supply and placement of bark mulch.
2.10 Maintenance of planted and seeded/sodded areas until accepted by Owner.
2.11 SEPARATE PRICE: Establishment Maintenance, Section 3.11.
2.12 Other work: Work other than this list, not specified by Landscape Architect.

22 MATERIALS

1. Growing Medium: Conform to B.C. Landscape Standard for definitions of imported and on-site topsoil. Refer to Table One below.

TABLE ONE: PROPERTIES OF GROWING MEDIUM FOR LEVEL 2 GROUNDED AND LEVEL 1 MODERATE AREAS
Canadian System of Soil Classification Textural Class "Loamy Sand" to "Sandy Loam".

Table with columns: Applications (Trees and Large Shrubs, Low Traffic Areas, High Traffic Lawn Areas, Planting Areas and Planters), Growing Medium Types (Z1, 2H, ZP), and Percent Of Dry Weight of Total Growing Medium for various textures (Coarse Gravel, All Gravel, Sand, Silt, Clay) and Organic Content (coarse, intermediate, light).

- 2. Fertilizer: An organic and/or inorganic compound containing Nitrogen (N), Phosphate (P2), and Potash (Soluble 2) in proportions required by soil test.
3. Lime: Ground agricultural limestone. Meet requirements of the B.C. Landscape Standard.
4. Organic Additive: Commercial compost to the requirements of the B.C. Landscape Standard, 6th edition and pre-approved by the Landscape Architect.
5. Sand: Clean, washed pump sand to meet requirements of the B.C. Landscape Standard.
6. Composted Bark Mulch: 10mm (3/8") minus (F) Fleckback bark chips and fines, free of chunks and sticks, dark brown in colour and free of all soil, stones, roots or other extraneous matter. Fresh orange in colour bark will be rejected.
7. Herbicides and Pesticides: If used, must conform to all federal, provincial and local statutes.
8. Filter Fabric: A non biodegradable blanket or other filtering membrane that will allow the passage of water but not fine soil particles.
9. Drainage Piping: If required, Schedule 40 PVC nominal sizes.
10. Drain Rock: Clean, round, inert, durable, and have a maximum size of 19mm and containing no material smaller than 10mm.
11. Plant Material: To the requirements of the B.C. Landscape Standard. Refer to 3.9, Plants and Planting.
12. Sod: Refer to individual sections in this specification.
13. Supplier and installers of segmental block walls to provide engineered drawings for all walls; signed and sealed drawings for all walls, individually, in excess of 12m, or combinations of walls collectively in excess of 12m.
14. Miscellaneous: Any other material necessary to complete the project as shown on the drawings and described herein.

PART THREE SOFT LANDSCAPE DEVELOPMENT

- 3.1 RETENTION OF EXISTING TREES
1. Prior to any work on a pre-set individual trees or plant groupings indicated as retained on landscape plans including vegetation retention areas.
1.1 In some instances the Landscape Architect will tag trees or areas to remain. Discuss retention areas at a start-up meeting with the Landscape Architect.
2. A physical barrier must be installed to delineate clearing boundaries.
3. No machine travel through or within retention vegetation areas or under crowns of trees to be retained is allowed.
4. Do not stodge soil, construction materials, or excavated materials within retention areas.
5. Do not park, fuel or service vehicles within retention areas.
6. No debris fires, clearing fires or trash burning shall be permitted within retention areas without a review of the proposed encroachment by the Landscape Architect.
7. No excavations, drain or service trenches nor any other disruption shall be permitted within retention areas without a review of the proposed encroachment by the Landscape Architect.
8. Do not cut branches or roots of retained trees without the approval of the Landscape Architect.
9. Any damage to existing vegetation intended for preservation will be subject to evaluation by an I.S.A. Certified Arborist using the "Guide for Plant Appraisal", Eighth Edition, 1992.
9.1 Replacement of equivalent value to the disturbance will be required.
10. In municipalities with specific tree retention/replacement bylaws ensure compliance to bylaws.
11. In situations where required construction may disturb existing vegetation intended for preservation, contract Landscape Architect for review prior to commencing construction.

- 3.2 GRADES
1. Ensure subgrade is prepared to conform to depths specified in Section 3.5, Growing Medium Supply, below.
2. On slopes in excess of 3:1 trench subgrade across slope is 150mm (6") minimum at 1.5m (5 ft) intervals minimum.
3. Scarify the entire subgrade immediately prior to placing growing medium.
4. Eliminate standing water from all finished grades.
5. Slope not to exceed the following maximums: Rough Grass 3:1, Lawn 4:1, Landscape plantings 2:1
6. Slope not to exceed the following minimums: Rough Grass 3:1, Lawn 4:1, Landscape plantings 2:1
7. Finished soil/mulch elevation at building to comply with municipal requirements.
8. Inform Landscape Architect of completion of finish grade prior to placement of seed, sod, plants or mulch.

- 3.3 LANDSCAPE DRAINAGE
1. Related Work: Growing medium and Finish Grading, Grass areas, Trees Shrubs and Groundcovers, Planters, Crb Walls.
2. Work included: Site finish grading and surface drainage. Installation of any drainage systems detailed on landscape plans.
3. Coordinate all landscape drainage work with rest of site drainage.
4. Determine exact location of all existing utilities and structures and underground utilities prior to commencing work.
5. Excavation and backfilling in accordance with engineering details and specifications.
6. Lay drains as prepared bed, true to line and grade with invert's smooth and free of sags or high points.
7. Commence laying pipe at outlet and proceed in upstream direction.
8. Lay perforated pipes with perforations at 90m and 1.6m positions.
9. Make joints tight in accordance with manufacturer's directions.
10. Do not allow water to flow through the pipes during construction except as approved by Engineer.
11. Make watertight connections to existing drains, new or existing manholes or catchbasins where indicated or as directed by Landscape Architect.
12. Plug upstream ends of pipe with watertight clean out caps.
13. Surround and cover pipe with drain rock in uniform 50mm layers to various depths as shown in details, minimum 100mm.
14. Cover drain rock with non-woven filter cloth lap all edges and seams minimum 50mm.
15. Back fill remainder of trench as indicated.
16. Protect subdrains from floatation during installation.

3.4 GROWING MEDIUM TESTING

- 1. Submit representative sample of growing medium proposed for use on this project to an independent laboratory.
2. Test results to include:
2.1 Physical properties, % content of gravel, sand, silt, clay and organics.
2.2 Acidity (PH) and quantities of lime or sulphur required to bring within specified range.
2.3 Nutrient levels of principle and trace elements and recommendations for required soil amendments.
2.4 Carbon/Nitrogen level.

3.5 GROWING MEDIUM SUPPLY AND PLACEMENT

- 1. Supply all growing medium required for the performance of the Contract.
2. Supply all growing medium amendments as required by the soil test.
3. Thoroughly mix required amendments into the full depth of the growing medium.
4. Place the amended growing medium in all grass and planting areas.
5. Minimum depths of growing medium placed and compacted to 80%:
5.1 On-grade:
5.1.1 Seeded and sodded lawn. 100mm (4") (300mm)
5.1.2 Grass planted shrubs & groundcovers. 100mm (4") (500mm)
5.1.3 Groundcover only areas, if defined on plan. 90mm (3.5") (225mm)
5.1.4 Tree & large shrub pits. depth to conform to depth of rootball - width shall be at least twice the width of the root ball with saucer shaped edges.
5.2 40-80mm:
5.2.1 Sodded lawn. 100mm (4") (200mm)
5.2.2 Groundcover areas. 100mm (4") (300mm)
5.2.3 Lawn without automatic irrigation. 100mm (4") (500mm)
5.2.4 Shrubs & groundcover areas. 100mm (4") (300mm)
5.2.5 Trees and specimen shrubs. 200mm (8") over columns and/or edge of slab (verify column locations on-site for tree locations)
5.2.6 Depth noted includes 1" to 2" (25-50mm) sand over filter fabric.
5.2.7 Maximum 10" depth growing medium except where noted for trees over column pits.
6. Manually spread growing medium/planing soil around existing trees, shrubs and obstacles.
7. In perimeter seeded grass areas, feather growing medium into to nothing at edges and blend into existing grades.
7.1 Finished grades shall conform to the elevations shown on landscape and site plans.

3.6 ROUGH GRASS AREA - SEEDING

- 1. Design: Rough grass areas are noted on the drawings as "Rough Grass".
2. Preparation of Surface: To B.C. Landscape Standard Class 3 Areas (rough grass) Section 3.11.3
3. Time of Seeding: Seed from early spring (generally April 1st) to late fall (September 15th) of each year.
4. Seed Supply & Testing: All seed must be obtained from a recognized seed supplier and shall be No. 1 grass mixture delivered in containers bearing the following information:
4.1 Analysis of the seed mixture
4.2 Percentage of each seed type
5. Seed Mixture: All varieties shall be rated as strong performers in the Pacific Northwest and be subject to client approval.
5.1 100% Creeping Red Fescue 20% Annual Ryegrass
5.2 5% Saturo Perennial Ryegrass 5% Kentucky Bluegrass
6. For Meadow Areas use a mixture of Wildflowers with Hard Fescues (Tartanix Coastal Wildflowers) with Hard Fescue of pre-approved alternate.

- 6. Fertilizer: Mechanical seeding: Apply a complete synthetic slow-release fertilizer with maximum 35% water soluble nitrogen and a formulation ratio of 18-18-18 - 50% sulphur urea coated, 100 kg/ha(1000kg/acre) using a mechanical spreader.
7. Seeding: Apply seed at a rate of 100kg/ha (1000kg/acre) with a mechanical spreader.
8. Acceptance: Provide adequate protection of the seeded areas until conditions of acceptance have been met.

3.7 HYDRASEEDING

- 1. May be used as an alternate to mechanical seeding in rough grass areas.
2. May not be used in areas of lawn unless pre-approved by the Landscape Architect prior to bidding.
3. Preparation and Growing Medium
3.1 In areas of Rough Grass Comply with Section 3.6-Rough Grass.
3.2 Where approved for use in areas of lawn, comply with Section 3.8 Lawn Areas Seeding.
4. Protection: Ensure that fertilizer in solution does not come in contact with the foliage of any trees, shrubs, or other susceptible vegetation.
5. Mulch shall consist of virgin wood fibre or recycled paper fibre designed for hydraulic seeding and good coverage of monitoring application.
6. Water: Shall be free of any impurities that may have an injurious effect on the success of seeding or may be harmful to the environment.
7. Equipment: Use industry standard hydraulic seeder/mulcher equipment with the tank volume certified by an identification plate or sticker affixed in plain view on the equipment.
8. A review may be requested during the latter part of the warranty growing season.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

- 3.8 LAWN AREAS - SODDING
1. General: Treat all areas defined as lawn areas on the landscape plan between all property lines of the project including all boulevards to edge of roads and lanes.
2. Growing Medium: Comply with Section 2.2.1, Growing Medium.
3. Time of Sodding: Sod from April 1st to October 1st.
4. Sod Supply: Conform to all conditions of B.C. Landscape Standard, Section 8, B.C. Standard for Turfgrass Sod.
5. Specified Turfgrass: Refer to Table 2 below.
6. Line: The line shall be as defined in Section 2.2.3, Materials.
7. Fertilizer: Refer to Section 2.2.2, Materials.
8. Sodding: Prepare a smooth, firm, even surface for laying sod.
9. Maintenance: Begin maintenance immediately after sodding and continue for 60 days after Substantial Completion.
10. Acceptance of Lawn Areas: The sod shall be reasonably well established, with no apparent dead or bare spots.

TABLE 2 SPECIFIED TURFGRASS BY AREA
Table with columns: Area, Description, Quality Grade, Major Species.

- 3.9 PLANTS AND PLANTING
1. Conform to planting layout as shown on Landscape Plans.
2. Obtain approval of Landscape Architect for layout and preparation of planting prior to commencement of planting operations.
3. Make edge of beds with smooth clean defined lines.
4. Time of Planting:
4.1 Plant trees, shrubs and groundcovers only during periods that are normal for such work as determined by local weather conditions.
5. Standards:
5.1 Plant trees, shrubs and groundcovers to the requirements of the B.C. Landscape Standard, 7th edition 2008.
5.1.1 Refer to B.C. Landscape Standard, Section 9, Plants and Planting and to Section 12, BCLNA Standard for Container Grown Plants for minimum standards.
5.1.2 Refer to Plant Schedule for specific plant and container sizes and comply with requirements.
5.1.3 Plant material obtained from areas with less severe climatic conditions shall be grown to withstand the site climate.
6. Review:
6.1 Review at the source of supply and/or collection point does not prevent subsequent rejection of any or all planting stock at the site.
7. Area of search includes the Lower Mainland and Fraser Valley.
8. Substitution:
8.1 Obtain written approval of the Landscape Architect prior to making any substitutions to the specified material.
8.2 Allow a minimum of 5 days prior to delivery for request to substitute.
8.3 Substitutions are subject to B.C. Landscape Standard - definition of Conditions of Availability.
9. Plant Species Location:
9.1 Plants shall be true to name and of the height, caliper and size of root ball as shown on the landscape/site plan schedule.
9.2 Plant all specified species in the location as shown on the landscape drawings.
10. Excavation:
10.1 Trees and large shrubs.
11. Drainage of Planting Holes:
11.1 Provide drainage of planting pits where required.
12. Planting and Fertilizing Procedures:
12.1 Plant all trees and shrubs with the roots placed in their natural growth position.
13. Staking of Trees:
13.1 Use two 2"x2" stakes, unless superseded by municipal requirements.
13.2 Leave the tree carefully vertical.
13.3 The top pre-approved natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity.
13.4 Confirm source of supply water prior to beginning work.
13.5 Trees 6 ft. - on Wood or Concrete Decks: Guy as above using three deadend jibs, 2"x2"x4" buried to the maximum possible depth instead of stakes.
13.6 Mark all guy wires with visible flagging material.
14. Pruning:
14.1 Limit pruning to the minimum necessary to remove dead or injured branches.
15. Mulching:
15.1 Mulch all planting areas with an even layer of mulch to 2"-1/2" - 3" - 6" (75mm) depth.
15.2 Mulch all planting areas with an even layer of mulch to 2"-1/2" - 3" - 6" (75mm) depth.
15.3 Acceptance:
15.4 The establishment of all plant material is the responsibility of the Landscape Architect.
15.5 Plant Material Maintenance:
15.6 Maintain all plant material for 60 days after landscape work has received a Certificate of Completion.
15.7 Watering: Conform to B.C. Landscape Standard, Section 13.3.2 - Watering and generally as follows:
15.8 Plants to supplement natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity.
15.9 Plants to be replaced if fails to survive shall be replaced in the next appropriate season as determined by the Landscape Architect.
15.10 Repair tree guards, stakes, and guy wires, when necessary.
15.11 Maintain areas relatively weed free.
15.12 Maintain mulch to specified depths.
16. Plant Warranty:
16.1 Replace all unsatisfactory plant material except those designated "Specimen" for a period of one (1) year after the Certificate of Completion.
16.2 The top pre-approved natural rainfall such that the soil moisture content is kept to 50% to 100% of field capacity.
16.3 The plants identified as hardy within one zone of the Canada Department of Agriculture hardiness zone class, specified by the Landscape Architect and installed by the Landscape Contractor which are killed through normal temperature below the average of the extreme minimum temperature officially recorded in the area concerned, in the last 10 years, will not be replaced without cost of replacement borne by the Owner.
16.4 A review may be requested during the latter part of the warranty growing season.

PART THREE SOFT LANDSCAPE DEVELOPMENT - CONT

- 3.10 INSTALLING LANDSCAPE ON STRUCTURES
1. Verify that drainage and protection material is completely installed and acceptable before beginning work.
2. Coordinate work with construction of planters and planter drains.
3. Provide clean out at all through-slab drain locations.
4. Install drain rock evenly to a minimum depth of 4" (100mm) alternate sheet drain if specified.
5. Cover drain rock for alternate sheet drain if specified on drawing details with filter fabric lap 6" (150mm) at all edges.
6. Place an even layer of 25 - 50mm clean washed pump sand over filter fabric.
7. Place growing medium to depths specified in Section 3.5 above for various surface treatments.
8. Place growing medium to depths specified in Section 3.5 above for various surface treatments.
9. Installation of Establishments:
9.1 Watering: During the first growing season, water new plants at least every ten (10) days between April 1st and July 31st, and every twenty (20) days during August 1st and September 15th.
9.2 Weeding: Inspect all trees and shrubs at least every two months during the growing season.
9.3 Fertilizing: Once during the twelve month period of establishment maintenance fertilizer, shrubs, and groundcovers according to soil analysis requirements.
9.4 Grass Areas Establishment:
9.4.1 Watering: Use hoses and sprinklers, irrigation systems or other methods to apply water to Class 1 and Class 2 grassed areas.
9.4.2 Weeding: Inspect all trees and shrubs at least every two months during the growing season.
9.4.3 Fertilizing: Once during the twelve month period of establishment maintenance fertilizer, shrubs, and groundcovers according to soil analysis requirements.

3.11 ESTABLISHMENT MAINTENANCE (Provide a separate price for this section)

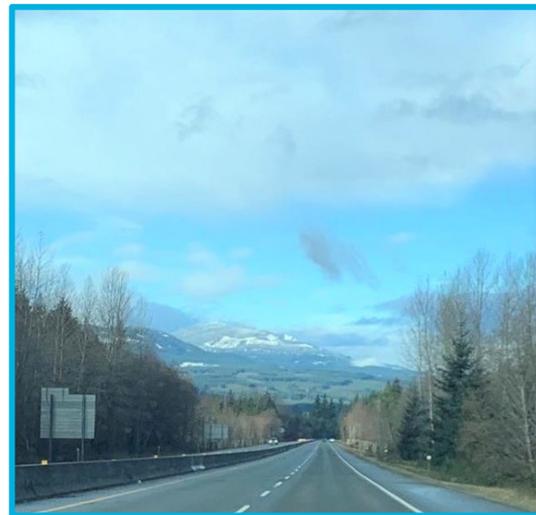
- 1. Intention: The intent of "establishment" maintenance is to provide sufficient care to newly installed plant material for a relatively short period of time to ensure or increase the long term success of the planting.
2. Maintenance Period: Provide maintenance of installed landscaping for 12 months following substantial completion.
3. Related Standards and Legislation: B.C. Landscape Standard, latest edition; Fertilizer Code, B.C. Pesticide Control Act.
4. Site Review: In addition to the inspections at substantial completion, at final progress code application, and at the end of the guarantee period, there should be three other reviews during the 12 months afforded by the Contractor and a designated representative of the Owner.
5. Scheduling: Prepare a schedule of anticipated visits and submit to designated representative at start-up.
6. Maintenance Level: Comply with B.C. Landscape Standard, Section 4, Table 4.2, Maintenance Level 2 "Greened".
7. Materials: Comply with Part Two of this specification.
7.1 Fertilizers: To the requirements of the B.C. Landscape Standard.
7.2 Weeding: Inspect all trees and shrubs at least every two months during the growing season.
7.3 Pruning: Inspect all trees and shrubs at least every two months during the growing season.
7.4 Pest and Disease Control: Inspect all planted areas for pests and diseases periodically and at least every two months during the growing season.
7.5 Tree Support: Maintain stakes, guy wires and ties one full growing season.
7.6 Looting, repair or replace ties as necessary.
7.7 Pruning: Inspect all trees and shrubs at least every two months during the growing season.
7.8 Fertilizing: Once during the twelve month period of establishment maintenance fertilizer, shrubs, and groundcovers according to soil analysis requirements.
7.9 Grass Areas Establishment:
7.9.1 Watering: Use hoses and sprinklers, irrigation systems or other methods to apply water to Class 1 and Class 2 grassed areas.
7.9.2 Weeding: Inspect all trees and shrubs at least every two months during the growing season.
7.9.3 Fertilizing: Once during the twelve month period of establishment maintenance fertilizer, shrubs, and groundcovers according to soil analysis requirements.



1590 PIERCY AVENUE

Parking Study

Build With Perspective Ltd.



WATT CONSULTING GROUP

2022 July 04

WATT VICTORIA
#302, 740 Hillside Avenue
Victoria, BC V8T 1Z4
(250) 388-9877



1590 PIERCY AVENUE

Parking Study

Matthew Lilly, B.Sc.
Transportation Technical Assistant

Author

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Reviewer

Prepared For: Build With Perspective Ltd.
Date: 2022 July 04
Our File No: 3328.B01

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1.0 INTRODUCTION

Watt Consulting Group (WATT) was retained by Build with Perspective Ltd. to conduct a parking study for the proposed townhouse development at 1590 Piercy Avenue in the City of Courtenay, BC. The purpose of this study is to determine the total parking demand for the subject site..

1.1 SUBJECT SITE

The proposed development is located at 1590 Piercy Avenue in the City of Courtenay (See **Figure 1**).



Figure 1. Subject Site



1.2 SITE CHARACTERISTICS & POLICY CONSIDERATIONS

The following provides information regarding services and transportation options in proximity to the subject site (see **Figure 2**). In addition, the City of Courtenay's Official Community Plan (OCP) and other community policies pertaining to sustainable transportation and parking management are summarised.

COMMUNITY POLICIES



The City of Courtenay updated its Official Community Plan in June of 2022.¹ The OCP contains policy direction on a number of topics pertaining to parking and including the distinct goal of "Functional Transportation Choices". This goal directs the City to rebalance its transportation system to provide a more functional spectrum of options that prioritises walking, cycling, and transit. This in turn will support active living and transportation, neighbourliness, economic vitality, affordable transportation, and lower carbon footprints.

Part C: Streets and Transportation of the OCP, outlines several objectives and policies directly relevant to this study including:

- Objective 2: Transportation investments prioritise walking, cycling, and transit
- Objective 6: The amount of land dedicated to parking is minimized
- Objective 7: Parking standards reflect electric vehicle and cycling needs



SERVICES

The site is located approximately 1.1 kilometres from commercial / retail amenities including restaurants, a grocery store (Thrifty Foods) and cafés. There are also a number of personal and professional services within this distance including medical services, accounting, and wealth management

¹ City of Courtenay. (2022). Bylaw 3070: Official Community Plan, Available online at: <https://pub-courtenay.escribemeetings.com/filestream.ashx?DocumentId=2454>



offices. Courtenay Elementary School is 600m from the site (7-minute walk).



TRANSIT

There are two bus stops at the intersection of Cumberland Road and Piercy Avenue that are within a 300m (6-minute walk) of the subject site. The bus stops are served by the 8 (Downtown / Anfield Centre), which provides service to a number of destinations in the community including downtown Courtenay, Driftwood Mall, Anfield Centre, and schools such as Puntledge Park Elementary School and Lake Trail Secondary School.

The site is also located about 900m (11-minute walk) from a bus stop at Fitzgerald Avenue and 16th Street, which is served by the 1 (Comox Mall / Anfield Centre). The 1 operates as the Frequent Transit Network (FTN) route offering 20-minute service at peak hours between the municipalities of Courtenay and Comox. It provides service to a number of destinations including downtown Courtenay, North Island College, North Island Hospital Comox Valley, and downtown Comox, among other destinations.



WALKING

According to Walk Score, the subject site* can be described as “somewhat walkable” with a walk score of 54, suggesting that some errands may be accomplished on foot.² Sidewalks are located on both sides of Piercy Avenue and serve to connect residents to nearby transit stops on Cumberland Road.

² More information about the site’s walk score is available online at: <https://www.walkscore.com/score/1580-piercy-ave-courtenay-bc-canada>

*1580 Piercy Avenue as used in place of 1590 Piercy Avenue as 1580 Piercy Avenue is more up to date with current amenities and conditions on Walkscore.com



The Rotary Trail is a multi-use pathway northeast of the subject site that is part of the City’s long-term pedestrian network. This pathway travels northwest and southeast, terminating at 5th Street and 29th Street respectively and increases active transportation (AT) connectivity throughout the city.



CYCLING

The subject site has access to cycling infrastructure Cumberland Road and 17th street travelling Northeast into town, and southwest towards Cumberland; additionally, the Rotary Trail – at the north eastern border of the subject site - provides additional access to multiple areas of the city. According to the City’s Transportation Master Plan, a buffered / painted bicycle lane on 17th Street is proposed for the medium-term **Figure 2**. This facility will allow for greater connectivity - and safety - for residents of the subject site travelling to destinations such as downtown Courtenay and further onto Comox or North Island College. As of June 2022, construction has begun on the 17th Street bicycle facility upgrades.

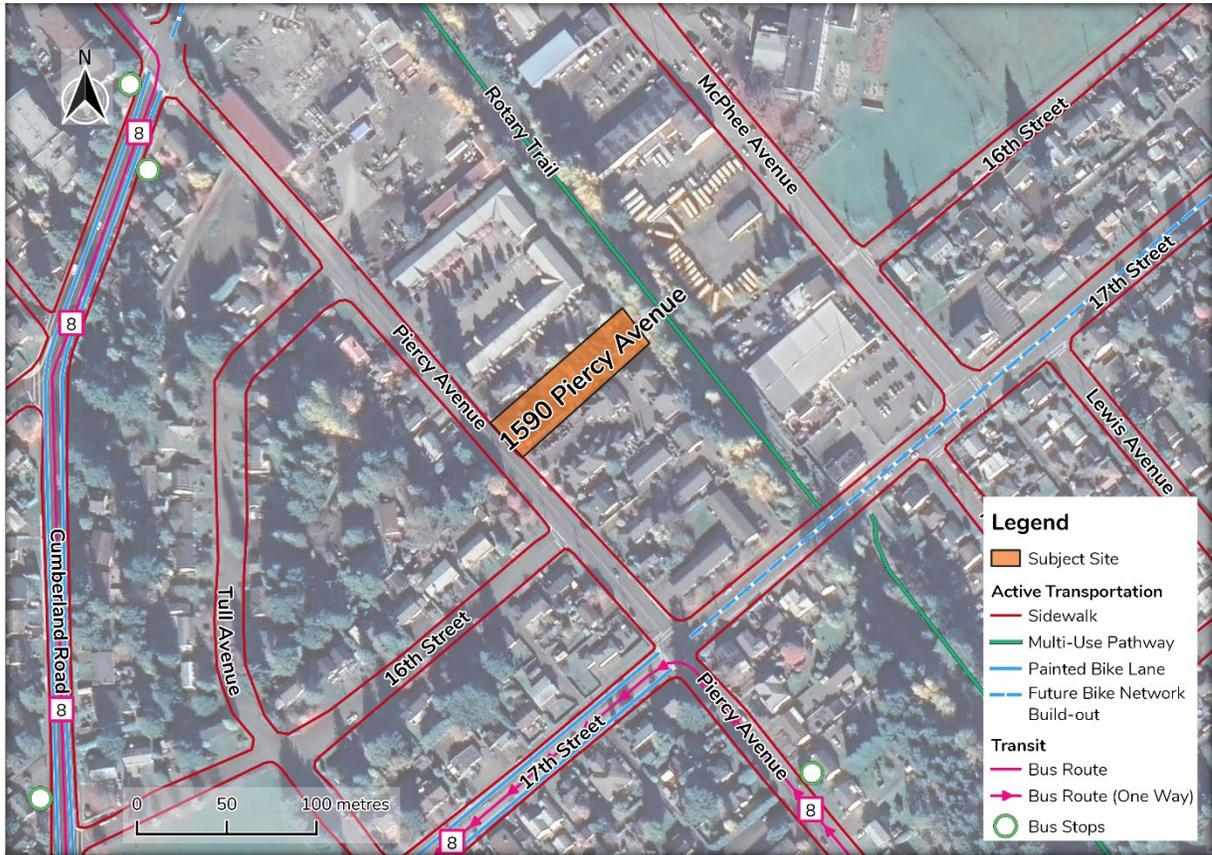


Figure 2. Transportation Options in Proximity to Site

1.3 CURRENT LAND USE

The site is currently zoned R-2 (Residential Two Zone) - which allows for single residential dwelling duplex, and accessory building uses – and is currently occupied by a single detached house.

2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The proposed development is for a nine-unit townhouse complex comprising 6 two-bedroom units and 3 three-bedroom units.



2.2 PROPOSED PARKING SUPPLY

2.2.1 RESIDENTIAL PARKING

A total of 10 parking spaces are proposed - a rate of 1.11 spaces per unit.

2.2.2 BICYCLE PARKING

The applicant is proposing one electrified long-term bicycle parking space per unit, in addition to two short term guest bicycle parking spaces. Section 6.0 includes specific bicycle parking recommendations for the applicant's consideration.

3.0 PARKING REQUIREMENT

3.1 VEHICLE PARKING

The City of Courtenay Bylaw No. 2500 (2007) determines the minimum parking supply requirement. Per the Bylaw, the site would be subject to the "Multi residential dwellings use" and be required to provide 1.5 parking spaces per residential unit with 10% of the required spaces being provided and retained for visitor parking.

With nine proposed units, this results in a requirement of 14 parking spaces (13.5 rounded), delineated as 13 spaces residential parking spaces and 1 as visitor parking spaces. This is four spaces greater than the proposed supply of 10 spaces parking spaces.

4.0 EXPECTED PARKING DEMAND

Expected parking demand for the site is estimated in the following sections to determine if the proposed supply will adequately accommodate demand. Expected parking demand is based on observations from other townhouse sites in Courtenay and Comox, as well as research from past parking studies.



4.1 RESIDENTIAL PARKING DEMAND

4.1.1 REPRESENTATIVE SITES

Observations were conducted at 8 townhouse sites in the City of Courtenay and Town of Comox, representing a total of 206 units. A breakdown of each site and how it corresponds to the site location can be found in **Table 1**.

- **Geographic Location |** All of the representative sites are located within the City of Courtenay and Town of Comox. This is based on walkability, access to transit, and access to commercial / retail amenities and is intended to encapsulate the unique socio-geographical features of the neighbourhood of the proposed development.
- **Walk Score |** This is a tool that ranks the walkability of a location based on its proximity to seven types of amenities: Dining and drinking, groceries, shopping, errands, parks, schools/education, and culture and entertainment. It is a useful tool for determining if a trip will require a vehicle, and may inform parking needs. The Walk Score of this development is 58, whereas the average Walk Score of the chosen representative sites is 30 (29.88, Rounded). This means that the proposed development will have greater walking access to amenities than most of the comparable townhouse developments in the region; thus, representative sites offer a more conservative estimate of parking demand.
- **Countable Parking Spaces.** The sites needed to have parking spaces that were visible and therefore countable. Many townhouse sites in the Comox Valley have enclosed garages or gated underground parking, making counting difficult.



TABLE 1. SUMMARY OF REPRESENTATIVE SITES

Address	Number of Units	Walk Score	Municipality
1500 Cumberland Ave	20	30	Courtenay
2061 Lake Trail Road // 2016 13th Street	33	31	Courtenay
2077 20th Street	40	19	Courtenay
1111 Edgett Road	24	37	Courtenay
1095 Edgett Road	21	29	Courtenay
1537 Noel Ave	36	14	Courtenay
1180 Braidwood	26	25	Comox
1580 Piercy Avenue	6	54	Courtenay

4.1.1 OBSERVATIONS

Observations were conducted during the following periods:

- Wednesday, 14 June 2022, from 12:00am to 1:00am
- Thursday, 15 June 2022, from 12:00am to 1:00am

Observations of parking utilisation were conducted at representative sites during the peak period for residential land uses (typically weekday evenings after 11:00pm). The peak observation for each site over the two observation periods was selected to calculate the parking demand (see **Table 2**). Parking demand ranged from 0.56 vehicles per unit to 1.25 vehicles per unit with an average parking demand of 0.96 vehicles per unit.



TABLE 2. OBSERVATIONS OF REPRESENTATIVE SITES

Site	Units	Observed Vehicles	Parking Demand (vehicles / unit)
1500 Cumberland Ave	20	25	1.25
2061 Lake Trail Road // 2016 13th Street	33	36	1.09
2077 20th Street	40	30	0.75
1111 Edgett Road	24	21	0.88
1095 Edgett Road	21	22	1.05
1537 Noel Ave	36	34	0.94
1180 Braidwood	26	24	0.92
1580 Piercy Avenue	6	7	1.17
		Average	1.01

4.2 VISITOR PARKING

A study conducted by Metro Vancouver concluded that visitor parking typically has a demand of less than 0.1 vehicles per unit.³ This is corroborated by findings of multiple studies conducted by WATT Consulting Group throughout Vancouver Island, suggesting that visitor parking is not strongly linked to location. With a total of 9 units, and applying a visitor parking demand rate of 0.1, the recommended visitor parking is **1 space** (0.9 spaces, rounded). Section 4.3 addresses on-street parking conditions. Based on the on-street parking assessment, it is anticipated that visitor vehicles will park on-street as there is available supply during the peak time.

4.3 ON-STREET PARKING ASSESSMENT

On-street parking conditions were observed to determine parking availability adjacent to the subject site. Observations were completed on Piercy Avenue, between Cumberland Road and 17th Street; on Tull Avenue, between Piercy Avenue between

³ Metro Vancouver. (2012). The Metro Vancouver Apartment Parking Study, Technical Report. Available online at: http://www.metrovancouver.org/services/regionalplanning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf



Piercy Avenue and 16th Street; and on 16th Street, between Tull Avenue and Piercy Avenue. Observations were conducted during the following periods:

- Tuesday, 13 June 2022, from 11:00pm to 12:00am
- Wednesday, 14 June 2022, from 11:00pm to 12:00am

Utilisation of the on-street parking spaces ranged from 20% to 23% with peak utilisation being observed during the 11:00pm to 11:30pm observation period on 13 June 2022 (see **Table 3**). This indicates that a few residents and/or visitors in the area are utilising the available and unrestricted on-street parking. A total of 110 spaces were vacant within this period indicating that parking is generally available during peak times when residents are expected to be home, and that visitor parking may be accommodated on-street.

TABLE 3. ON-STREET OBSERVATIONS DURING PEAK OCCUPANCY PERIOD

Street	Segment	Side	Available Spaces	Observed	% Occupied
Piercy Avenue	Cumberland Road – Tull Avenue	NE	17	0	0%
		SW	17	0	0%
	Tull Avenue – 16 th Street	NE	20	6	30%
		SW	18	2	11%
	16 th Street – 17 th Street	NE	7	1	14%
		SW	7	2	29%
Tull Avenue	Piercy Avenue – Schjelderup Place	E	3	3	100%
		W	4	4	100%
	Schjelderup Place – 16 th Street	E	2	2	100%
		W	3	3	100%
16th Street	Tull Avenue - Alleyway	NW	17	6	35%
		SE	17	3	18%



Street	Segment	Side	Available Spaces	Observed	% Occupied
	Alleyway – Piercy Avenue	NW	5	0	0%
		SE	5	0	0%
Totals			142	32	23%

4.4 SUMMARY OF EXPECTED PARKING DEMAND

The total expected parking demand for the proposed development is **10 vehicle parking spaces** (9.95 spaces, rounded), nine residential parking spaces (9.05 spaces, rounded), and one visitor parking space (0.9 spaces, rounded). This results in a total expected demand of 10 spaces, which is equal to the proposed supply.

5.0 CONCLUSIONS

The proposed development at 1590 Piercy Avenue is a 9-unit multi-family townhouse development that is providing 10 vehicle parking spaces (1.11 spaces per unit), which is four vehicle parking spaces fewer than the requirement of 14 parking spaces (13.5 rounded) from the City of Courtenay Zoning Bylaw. Furthermore, the proposed development is proposing 9 electrified long-term bicycle parking spaces.

Expected parking demand for this development was estimated based on observational data collected from representative townhouse sites in Courtenay and Comox. The expected parking demand is 10 spaces (nine residential spaces and one visitor space), which is equal to the proposed spaces. Finally, observations of on-street parking in the area indicate that there is sufficient capacity to accommodate visitor parking.

6.0 RECOMMENDATIONS

Based on the conclusions of this study, the proposed parking for the development is supported, with the following optional recommendations for consideration:

1. Increase the number of long-term secured bicycle parking spaces to a rate of 1.5 spaces per unit each with 110V charging outlets.



2. Increase the size of bicycle parking spaces to accommodate cargo bikes and other non-standard bicycles. The spaces should be designed to be a minimum of 3.0 metres in length and 0.9 metres wide. They should also be provided as ground anchored racks.
3. Provide addition to end of trip facilities such as a bicycle maintenance area to further support active transportation.



1590 PIERCY AVENUE

Parking Study

A handwritten signature in black ink, appearing to read "Matthew Lilly".

Author: Matthew Lilly

A handwritten signature in black ink, appearing to read "Tim Shah".

Reviewer: Tim Shah, RPP, MCIP

Prepared for: Build With Perspective Ltd.

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1.0 INTRODUCTION

Watt Consulting Group (WATT) was retained by Build with Perspective Ltd. to conduct a parking study for the proposed townhouse development at 1590 Piercy Avenue in the City of Courtenay, BC. The purpose of this study is to determine the parking demand for the site and identify transportation demand management strategies to help the applicant reduce the expected parking demand.

1.1 SUBJECT SITE

The proposed site is located at 1590 Piercy Avenue in the City of Courtenay. See **Figure 1**.

FIGURE 1. SUBJECT SITE



1.2 SITE CHARACTERISTICS & POLICY CONSIDERATIONS

The following provides information regarding relevant community policies, services and transportation options in proximity to the subject site.



COMMUNITY POLICIES

The City of Courtenay is in the process of updating its Official Community Plan (OCP), which will contain policy direction on a number of topics pertaining to parking including transportation and mobility, land use, and design of the built environment, among others. The City's existing OCP includes a number of goals and policies pertaining to transportation including goal #2, which is stated as follows:

“Development of a transportation system that provides choices for different modes of travel including vehicle, transit, pedestrian, cycling and people with mobility impairments”.

The City OCP contains a number of other policies that relate to sustainable transportation and transportation demand management as outlined in multiple sections including: 4.4.3, 4.6.5, 5.2, and 10.3.

4.4.3. Land Use Designations (Residential Policies):

- Increasing densities can reduce urban sprawl and benefit the environment and transportation system, while promoting healthy community and fiscal responsibility through the provision of services. This may be achieved by creating neighbourhoods that offer a variety of transportation choices.¹

4.6.5. Parks and Open Space (Greenway Strategy):

- The city requires safe, continuous, and convenient pedestrian routes from residences to public walkways, transit, and facilities.²

5.2 Transportation (Goals):

- Integrating land use changes with transportation planning to coordinate changes and increases in traffic patterns.
- Developing transportation systems that provide choices for different modes of travel including vehicle, transit, pedestrian, cycling, and people with mobility impairments.
- Supporting integration of transportation systems that reduce travel distances and congestion.³

¹ City of Courtenay (2016), Official Community Plan, Section 4.4.3: Land Use Designations Available online at: https://www.courtenay.ca/assets/Departments/Development-Services/Bylaw_2387_OCP.pdf.pdf

² Ibid, Section 4.6.5: Parks and Open Space.

³ Ibid, Section 5.2: Transportation.

10.3. Planning for Climate Change (Objectives and Policies):

- Aligning developments within the following transportation mode hierarchy:
 1. Walking
 2. Cycling
 3. Transit
 4. Commercial delivery of goods and services
 5. SOV
- Encouraging and supporting initiatives that reduce the number of SOV trips throughout the community.⁴



SERVICES

The site is located approximately 1.1 kilometres from commercial / retail amenities including restaurants, a grocery store (Thrifty Foods) and cafés. There are also a number of personal and professional services within this distance including medical services, accounting, and wealth management offices. Courtenay Elementary School is 600m from the site (7-minute walk).



TRANSIT

There are two bus stops at the intersection of Cumberland Road and Piercy Avenue that are within a 300m (6-minute walk) of the subject site. The bus stops are served by the 8 (Downtown / Anfield Centre), which provides service to a number of destinations in the community including downtown Courtenay, Driftwood Mall, Anfield Centre, and schools such as Puntledge Park Elementary School and Lake Trail Secondary School.

The site is also located about 900m (11-minute walk) from a bus stop at Fitzgerald Avenue and 16th Street, which is served by the 1 (Comox Mall / Anfield Centre). The 1 operates as the Frequent Transit Network (FTN) route offering 20-minute service at peak hours between the municipalities of Courtenay and Comox. It provides service to a number of commuting destinations including downtown Courtenay, North Island College, North Island Hospital Comox Valley, and downtown Comox, among other destinations.



WALKING

The subject site can be described as somewhat walkable with a walk score of 56, suggesting that some errands can be accomplished on foot.⁵ Sidewalks are located on both sides of Piercy Avenue and serve to connect residents to nearby transit stops on Cumberland Road.

⁴ City of Courtenay (2016), Official Community Plan, Section 10.3: Planning for Climate Change. Available online at: https://www.courtenay.ca/assets/Departments/Development-Services/Bylaw_2387_OCP.pdf.pdf

⁵ More information about the site's walk score is available online at: <https://www.walkscore.com/score/1590-piercy-ave-courtenay-bc-canada>

The recommended pedestrian network plan identified in the City's Transportation Master Plan shows a proposed multi-use pathway on Piercy Avenue between 29th Street and 5th Street.⁶ This specific multi-use pathway is part of the City's long-term pedestrian network and is intended to increase connectivity and comfort for pedestrians, cyclists, and other active travel users when travelling along Piercy Avenue.



CYCLING

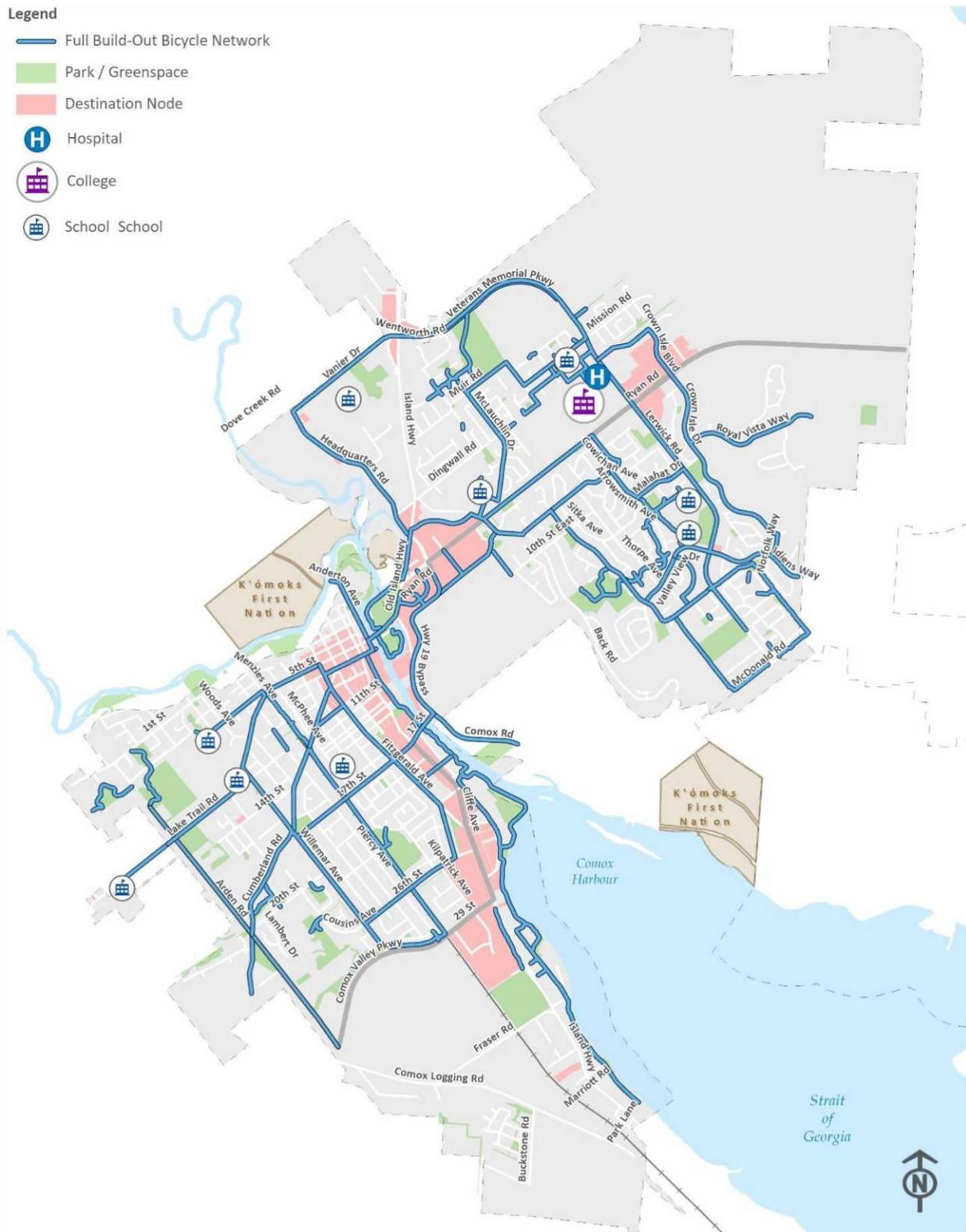
Piercy Avenue is currently designated as a 'Signed Bicycle Route'. According to the City's Transportation Master Plan and the Cycling Network Plan, there are no plans to upgrade Piercy Avenue to a better bicycle facility for all ages and abilities. However, the long-term pedestrian plan does identify a multi-use pathway on Piercy Avenue between 29th Street and 5th Street, which could facilitate trips for cyclists.

The Transportation Master Plan identifies a proposed buffered / painted bicycle lane on 17th Street in the medium-term.⁷ See **Figure 2**. This facility would make it easier for residents of the subject site to travel more directly to destinations such as downtown Courtenay and to further destinations such as North Island College using other proposed bike facilities along Fitzgerald Avenue and Old Island Highway. A bike facility is also planned for Piercy Avenue in the long-term; however, the specific facility type is not known at this time.

⁶ City of Courtenay & Urban Systems Ltd. (2019). Connecting Courtenay: Transportation Master Plan. Figure 5-3 Recommended Pedestrian Network Plan, pg. 43, available online at: <https://www.courtenay.ca/assets/City-Hall/Project-Gallery/2018-Master-Transportation-Plan/2019-09-30%20Connecting%20Courtenay%20-%20Transportation%20Master%20Plan%20FINAL.pdf>

⁷ Ibid, Figure 9-3, pg. 77.

FIGURE 2. CITY OF COURTENAY FUTURE CYCLING NETWORK PLAN⁸



⁸ City of Courtenay & Urban Systems Ltd. (2019). Connecting Courtenay: Transportation Master Plan.

1.3 CURRENT LAND USE

The site is currently zoned R-2 (Residential Two Zone), which allows for single residential dwelling duplex, and accessory building uses.

2.0 PROPOSED DEVELOPMENT

2.1 LAND USE

The proposed development is for a nine unit townhouse complex comprising of 6 two-bedroom units and 3 three-bedroom units.

2.2 PARKING SUPPLY

2.2.1 VEHICLE PARKING

A total of 10 parking spaces are proposed—a rate of 1.11 spaces per unit.

2.2.2 BICYCLE PARKING

The development will be providing 30 long-term and 6 short-term bicycle spaces. The long-term bicycle parking ratio results in 3.3 spaces per unit.

3.0 PARKING REQUIREMENT

The City of Courtenay Bylaw No. 2500 (2007) determines the minimum parking supply requirement. Per the Bylaw, the site would be subject to the multi residential dwellings use and be required to provide 1.5 parking spaces per residential unit with 10% of the required spaces being provided and retained for visitor parking. With nine proposed units, this results in a requirement of 14 residential spaces, of which 13 spaces are for residential and 1 as visitor parking. This is four spaces greater than the proposed supply (10 spaces).

4.0 EXPECTED PARKING DEMAND

Expected parking demand for the site is estimated in the following sections to determine if the proposed supply will adequately accommodate demand. Expected parking demand is based on [a] observations of other townhouse sites in Courtenay and Comox [b] research from past parking studies and [c] data from the Institute of Transportation Engineers Parking Generation Manual.

4.1 RESIDENT PARKING DEMAND

Observations were conducted at 8 townhouse sites in the City of Courtenay and Town of Comox, representing a total of 156 units. A breakdown of each site and how it corresponds to the site location can be found in **Table 1**.

Townhouse sites were selected based on two criteria, in the following priority order:

1. Countable Parking Spaces. The sites needed to have parking spaces that were visible and therefore countable. Many townhouse sites in the Comox Valley have enclosed garages or gated underground parking, making counting difficult.
2. Location. Where possible, townhouse sites were selected based on their location outside of downtown Courtenay and Comox. This was completed to ensure that the sites had comparable walkability and access to transportation options as the subject site.

TABLE 1. SUMMARY OF REPRESENTATIVE SITES

Site	Municipality	Units
1755 Willemar Avenue	Courtenay	31
1500 Cumberland Avenue	Courtenay	20
2061 Lake Trail Road // 2061 13 th Street	Courtenay	33
2077 20 th Street	Courtenay	40
1111 Edgett Road	Courtenay	24
1095 Edgett Road	Courtenay	21
1537 Noel Avenue	Comox	36
1180 Braidwood Road	Courtenay	26

4.1.1 OBSERVATIONS

Observations were conducted during the following periods:

- Wednesday, January 29, 2020, from 9:00pm to 11:30pm
- Thursday, January 30, 2020, from 9:00pm to 11:30pm

Observations of parking utilization were conducted at representative sites during the peak period for residential land uses (typically weekday evenings). The peak observation for each site over the two observation periods was selected to calculate the parking demand (see **Table 2**). Parking demand ranged from 0.53 vehicles per unit to 1.35 vehicles per unit with an average parking demand of 0.85 vehicles per unit.

TABLE 2. OBSERVATIONS OF REPRESENTATIVE SITES

Site	Units	Observed Vehicles	Parking Demand (vehicles / unit)
1755 Willemar Ave	31	9	0.75*
1500 Cumberland Ave	20	27	1.35
2061 Lake Trail Road // 2016 13 th Street	33	19	0.58
2077 20 th Street	40	33	0.83
1111 Edgett Road	24	21	0.88
1095 Edgett Road	21	21	1.00
1537 Noel Ave	36	19	0.53
1180 Braidwood	26	19	0.73
Average			0.85

*1855 Willemar Avenue has a total of 31 units, of which 19 have garages and 12 do not. Observations taken at this site reflect the 12 non-garaged units and demand is calculated based on the countable spaces (12).

4.1.2 ADJUSTMENT FACTORS

Observations are a useful method of assessing parking demand rates; however, there are limitations to this method. One of these limitations is that a resident(s) may not be present at the time of observation.

To mitigate this factor, observations were conducted after 9:00pm. However, there is still a chance that some residents may not be home at the time of observation due a multitude of reasons. As such, it can be expected that their vehicle would not be present at the time of observation. This problem was addressed by a study commissioned by Metro Vancouver recommended an adjustment factor of 10% should be applied when parking observations are conducted between after 9:00pm.⁹ This adjustment factor was applied to create an adjusted demand rate of 0.95. See **Table 3**.

⁹ Metro Vancouver. (2012). The Metro Vancouver Apartment Parking Study, Technical Report. Available online at: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf

TABLE 3. ADJUSTED PARKING DEMAND AT REPRESENTATIVE SITES

Site	Units	Parking Demand Rate (vehicles / unit)	Adjusted Parking Demand Rate (vehicles / unit)
1755 Willemar Ave	31	0.75	0.80
1500 Cumberland Ave	20	1.35	1.49
2061 Lake Trail Road // 2016 13 th Street	33	0.58	0.64
2077 20 th Street	40	0.83	0.91
1111 Edgett Road	24	0.88	0.97
1095 Edgett Road	21	1.00	1.10
1537 Noel Ave	36	0.53	0.58
1180 Braidwood	26	0.73	0.80
Average		0.85	0.95

4.1.3 INSTITUTE OF TRANSPORTATION ENGINEERS

As stated earlier, the majority of townhouse developments in Courtenay and Comox have garages and vehicle parking demand is therefore difficult to ascertain. Only a few townhouse developments have carports, which enabled the consultant team to conduct observations of sites that were deemed representative of the subject site.

Due to the limited sample, the Institute of Transportation Engineers (ITE) Parking Generation Manual was used to support and validate the findings of the data collection. The manual’s section on low-rise multifamily housing (Land Use 220) includes apartments, townhouses, and condominiums of at least three dwellings with one or two floors of residence; however, it does not include affordable housing developments. ITE reports the average parking demand is 1.21 vehicles per unit across 119 surveyed low-rise multi-family developments, with a lower and upper range of 0.58 vehicles per unit and 2.50 vehicles per unit, respectively.¹⁰

Using the ITE rate of 1.21 vehicles per unit, and the observed parking demand rate of 0.95 vehicles per unit, the two rates were averaged to increase the validity of the data collection findings. This results in a rate of 1.1 vehicles (spaces) per unit, which is the recommended rate for the resident parking demand for the site.

¹⁰ Institute of Transportation Engineers. (2020). ITEParkGen Web-based App, (220 – Multifamily Housing (Low-Rise)). Available online at: <https://iteparkgen.org/ParkGenQuery>

4.2 VISITOR PARKING

Observations of visitor parking were conducted at each of the representative sites and the average rate was 0.09 vehicles per unit. A study by Metro Vancouver concluded that visitor parking typically has a demand of less than 0.1 vehicles per unit.¹¹ Findings from similar studies conducted by WATT in the City of Langford and the City of Victoria support these findings, and suggest that visitor parking is not strongly linked to location.

Based on the available research and observational data, a rate of 0.1 is recommended for the subject site. With nine units and applying a visitor demand rate of 0.1, the recommended visitor parking is 1 space (0.9, rounded).

4.3 SUMMARY OF EXPECTED PARKING DEMAND

Based on adjusted observed parking demand results (0.95 vehicles per unit) as well as the ITE parking generation for low-rise multifamily dwellings (1.21 vehicles per unit), resident parking demand will be approximately 1.1 vehicles per unit. Visitor parking demand was calculated and determined as 0.1 vehicles per unit. This results in a residential requirement of 10 parking spaces and one (1) visitor space. This brings the total to 11 parking spaces, which is one greater than the proposed supply.

5.0 ON-STREET PARKING

On-street parking conditions were observed to determine parking availability around the subject site. Observations were completed on Piercy Avenue between Cumberland Road and 17th Street, and 16th Street. Counts were conducted on the following dates:

- Wednesday, January 29, 2020, at 9:00pm
- Thursday, January 30, 2020, at 9:00pm

These two count times were intended to capture the on-street conditions when local residents would have the highest likelihood of being home and/or when visitors might be visiting the neighbourhood.

Peak utilization was observed on Wednesday January 29, 2020 with 14 parked vehicles observed out of 157 total spaces, an occupancy rate of 9%. This indicates that very few residents and/or visitors in the area are utilizing the available unrestricted on-street parking. A total of 143 spaces were unoccupied, which means that a majority of parking is available during the peak time when residents are expected to be home and/or when visitors may be in the neighbourhood.

¹¹ Metro Vancouver. (2012). The Metro Vancouver Apartment Parking Study, Technical Report. Available online at: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Apartment_Parking_Study_TechnicalReport.pdf

6.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to policies, programs, and services that are designed to reduce reliance on single occupancy vehicles (SOVs) and parking demand by encouraging sustainable travel such as active transportation, public transit, carpools, and ride-share services.¹²

As a part of the proposed development, the applicant will be providing 30 long-term and six short-term bicycle spaces to manage vehicle parking demand and support sustainable transportation options at the site. This would align with policy direction in the OCP and TMP that broadly support increasing cycling mode share and providing residents the option of multiple transportation modes. In addition to bicycle parking, it is recommended that the applicant implement the following TDM measures to further justify the reduction in parking supply.

6.1 SHARED ELECTRIC BICYCLE PROGRAM

Electric bicycles (e-bikes) are an emerging transportation mode that provide convenient, zero emission transportation. With Courtenay's proposed Long Term Cycling Network connecting Piercy Avenue to downtown, destination nodes, and local schools, e-bikes would be a highly viable substitute or replacement for motorized vehicles reducing congestion and greenhouse gas emissions.

As an emerging transportation form, there is limited e-bike ownership data available in Courtenay. Six bicycle retailers operating in the Comox Valley were surveyed to assess current interest and sales levels among Courtenay residents. All six retailers reported electric bikes in their inventory and have shown a year-over-year increase in sales with a range of demographics purchasing and/or expressing interest. Some stores such as Black's Cycle and Trails Bicycles reported that e-bikes now represent approximately 25-30% of their total bike sales. These data indicate that e-bikes are growing in popularity in the region.

It is recommended that the applicant provide a shared e-bike program in the proposed development to make cycling a more attractive mode of transportation. The minimum recommended size of the fleet is two e-bikes, which could be purchased locally. As mentioned above, a number of bicycle stores in the Comox Valley sell e-bikes ranging in price with the urban and commuter bikes typically in the range of \$3,000-\$5,000. The operation parameters of the shared e-bike program would need to be determined through direct outreach with future residents and the strata.

With the commitment to 30 long-term bicycle spaces, it is recommended that 10% of these spaces be equipped with 110V outlets to allow e-bike users easy access to battery charging while parked. If used in conjunction with the shared e-bike program outlined above, five 110V outlets would be provided—three for residents and two for the e-bike share program.

¹² Definition based on Transport Canada, TDM for Canadian Communities, March 2011

Lastly, cargo e-bikes are elongated bicycles (~ 2.5m versus ~1.8m) that allow transportation of children, groceries, or cargo. This increased capacity would allow significantly more trips to be accomplished by bicycle or e-bike, especially for young families; however, they require a longer bike rack to account for the additional length. Accounting for this, it is recommended that the bike racks outfitted with the 110V outlet also be designed to accommodate longer cargo e-bikes.

6.2 IMPACTS OF ELECTRIC BICYCLES

E-bikes are still an emerging form of mobility and there is limited research that has quantified the impact they have on vehicle ownership/parking demand; however, it is anticipated that they will have a positive impact on reducing vehicle ownership at this proposed development. A recent survey of North American e-bike owners reported the capacity of e-bikes to replace various modes of transportation commonly used for both recreational and utilitarian trips such as SOVs, public transit, and regular bicycles.

The study found that 62% of e-bike trips replaced car based transportation. Of that 62%, 45.8% were commuting to and from work or school, 44.7% were for entertainment, errands, and cordial visits, and 9.4% were for exercise or recreation. The average distance for each of these trips was about 15 kilometres.¹³ Additionally, other studies have shown that 39 kilometres of car based transportation was displaced by utilization of an e-bike.¹⁴

6.3 TDM SUMMARY

Overall findings in the available research confirms that e-bikes do replace trips that would otherwise use a car or gas powered vehicle. With the provision of a shared e-bike program and 110V outlets supplied to 10% of the long-term bicycle spaces, a 15% reduction in resident parking demand is supported. This would reduce the number of resident vehicle parking spaces by two and bring the total site demand to nine spaces (eight resident and one visitor), which is one space lower than the parking supply (10 spaces).

7.0 CONCLUSIONS

The proposed development at 1590 Piercy Avenue is a nine unit townhouse complex with nine residential and one visitor parking spaces (one parking space per unit). In addition to this the applicant is also proposing to include 30 long-term and six short-term bicycle parking spaces (3.3 long-term spaces per unit).

Parking demand for this development was estimated based on observational data collected from representative townhouse sites in Courtenay and Comox, and was informed from previously conducted studies. To improve the rigor of the analysis, the observation data was also adjusted based on data from the Institute of Transportation Engineers Parking Generation

¹³ MacArthur, J., Harpool, M., & D. Scheppke. (2018). A North American Survey of Electric Bicycle Owners. National Institute for Transportation and Communities, NITC-RR-1041.

¹⁴ Bigazzi, A & E Berjisian. (2019). Electric Bicycles: Can they reduce driving and emissions in Canada. Plan Canada Fall 2019.

Manual. Based on these observations the peak parking demand rate is 11 parking spaces (ten residential and one visitor spaces), one greater than the proposed supply of 10 (nine residential and one visitor spaces). To accommodate this discrepancy TDM measures were recommended with the goal of reducing parking demand by up to 15%.

7.1 RECOMMENDATIONS

The provision of nine resident and one visitor parking spaces is supported if the applicant commits to adopting the following TDM recommendations:

- Provision of a resident shared e-bike program.
- Supplying 10% of long-term bicycle spaces with 110V outlets to enhance e-bike viability for the development.
- Designing 10% of long term bicycle parking spaces to accommodate cargo bicycles.

ATTACHMENT A

Part 66 – Comprehensive Development 39 Zone (CD-39) (1590 Piercy Avenue)

8.66.1 Intent

The CD-39 Zone is intended to accommodate a strata development of three buildings with 9 units on the property legally described as Lot 3, Section 41, Comox District, Plan 4764, Shown Outlined in Red on Plan 1402-R. The property shall be developed substantially in accordance with Schedules A and B which form part of this zone.

8.66.2 Permitted Uses

The following uses are permitted and all other uses are prohibited except as otherwise noted in this bylaw:

- (1) *Dwelling, duplex*
- (2) *Dwelling, townhouse*
- (3) *Accessory buildings and structures*
- (4) *Home occupation*

8.66.3 Minimum Lot Size

A lot shall have an area of not less than 2,030 m².

8.66.4 Floor Area Ratio

Providing all other applicable size, shape and siting conditions are met, the maximum *floor area ratio* shall not exceed 0.40.

8.66.5 Setbacks

Except where otherwise specified in this bylaw the following minimum *building setbacks* shall apply for the principle buildings:

- (1) *Front Yard* 7.5 m
- (2) *Rear Yard* 7.3 m
- (3) *Side Yard* - shall total 4.0 m, with a minimum *side yard setback* on one side of 1.5 m.

8.66.6 Height of Building

Maximum *building height* shall be 7.0 m.

8.66.7 Useable Open Space

Useable open space must be provided on a lot in the amount of 30.0 m² for each one-bedroom *dwelling unit* and 50.0 m² for each *dwelling unit* with two or more bedrooms.

8.66.8 Accessory Buildings and Structures

Shall not be permitted except for a waste and recycling enclosure and exterior bicycle storage areas:

- (1) The side yard setback for the waste and recycling enclosure shall be 0.0 m.

8.66.9 Off-Street Parking and Loading

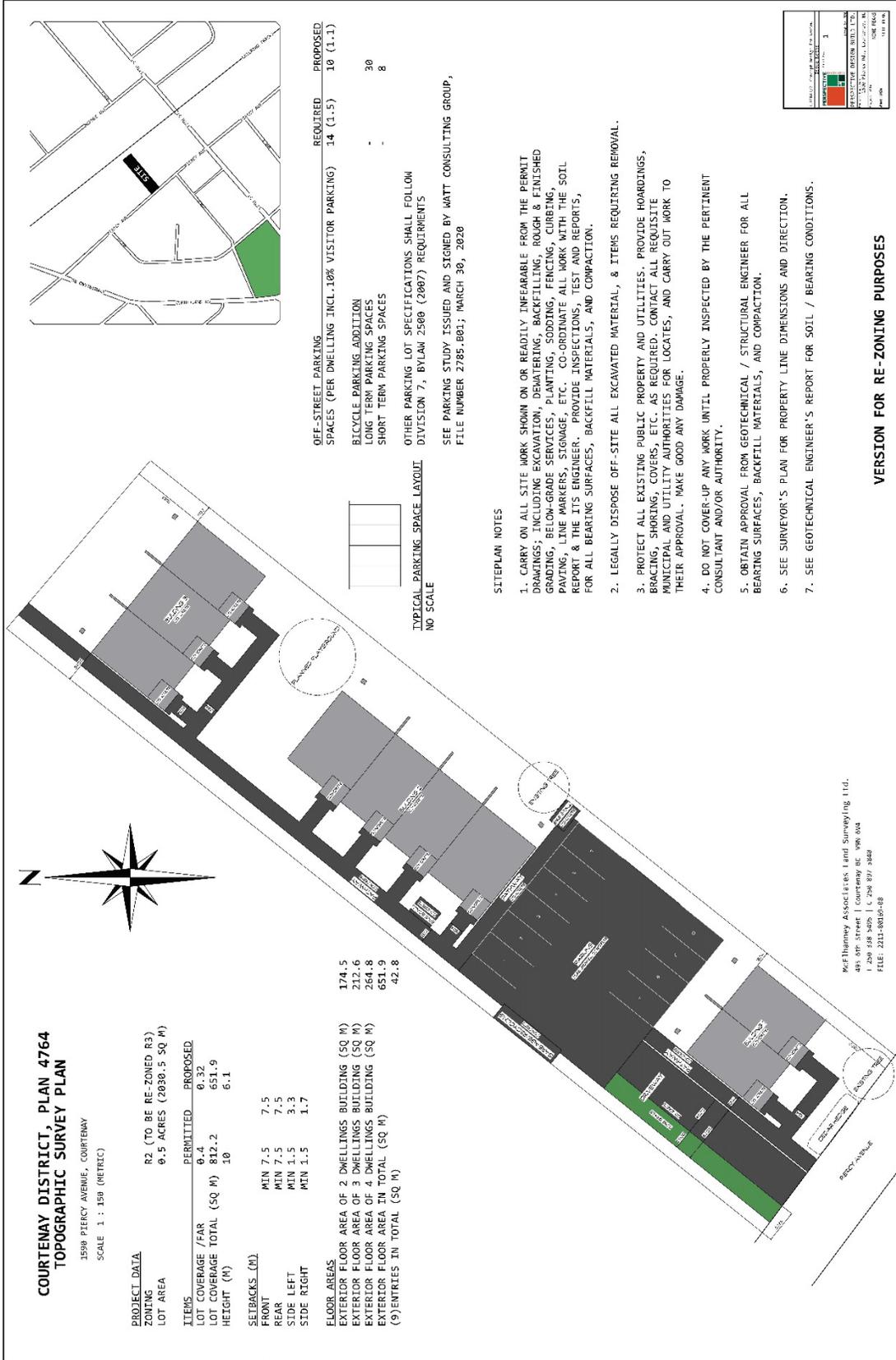
- (1) Off-street parking shall be provided and maintained in accordance with the requirements of Division 7 of this bylaw except in this zone, parking shall be provided at a rate of 1.11 parking spaces per dwelling unit inclusive of visitor parking;
- (2) Bicycle parking shall be provided and maintained in accordance with the requirements of Division 7, Part 3 of this bylaw.

8.66.10 Landscaping and Screening

In addition to the Landscape Requirements in Part 14 of this bylaw, the following landscape requirements shall be met:

- (1) Landscaping shall be used to ensure privacy and to complement the overall development.
- (2) A 4.5 m landscape buffer in the rear and front yard, except for the driveway.
- (3) A 1.5 m landscape buffer for both side yards, except for the driveway and garbage enclosure.

SCHEDULE A



SCHEDULE B

Front Elevation - Not to scale

Left Elevation - Not to scale

Right Elevation - Not to scale

Rear Elevation - Not to scale

LEGEND

- Dark Grey: Metal Roof / Copper Downspout
- Light Grey: Cedar Siding
- Dark Brown: Hard Siding
- Light Brown: Hard Siding
- Dark Brown: Hard Siding / Metal Roof
- Dark Brown: Hard Siding / Metal Roof

PROJECT INFORMATION

PROJECT NO.: 17-000000000000000000
 PROJECT NAME: 17-000000000000000000
 SHEET NO.: 6
 DATE: 11/15/17

VERSION FOR RE-ZONING PURPOSES



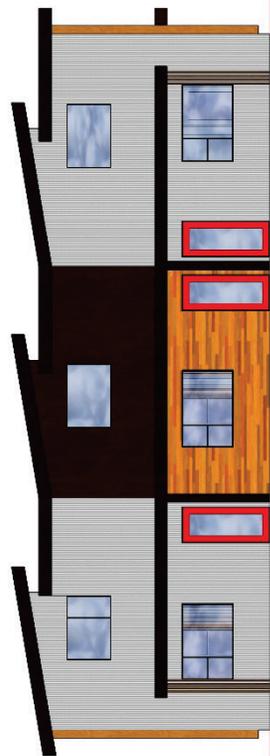
Front Elevation - not to scale



Right Elevation - not to scale



Left Elevation - not to scale



Rear Elevation - not to scale

Materials Legend

Wood Trim/Flat Concrete Panel	3" Timber Framing/Jamb/ Casement/Lit/Wooden Sills
Copper Siding	Shading
Metal Siding	Acoustic Panel
Paint (White/Black/Charcoal/Blue)	Roofs on Rising Membrane

PROJECT NO.	7
DATE	11/15/2023
PROJECT NAME	REAR PORCH ADDITION
OWNER	1111111111
ARCHITECT	1111111111

VERSION FOR RE-ZONING PURPOSES



Rear Elevation- Not to scale



Right Elevation - Not to scale



Left Elevation - Not to scale



Front Elevation - Not to scale

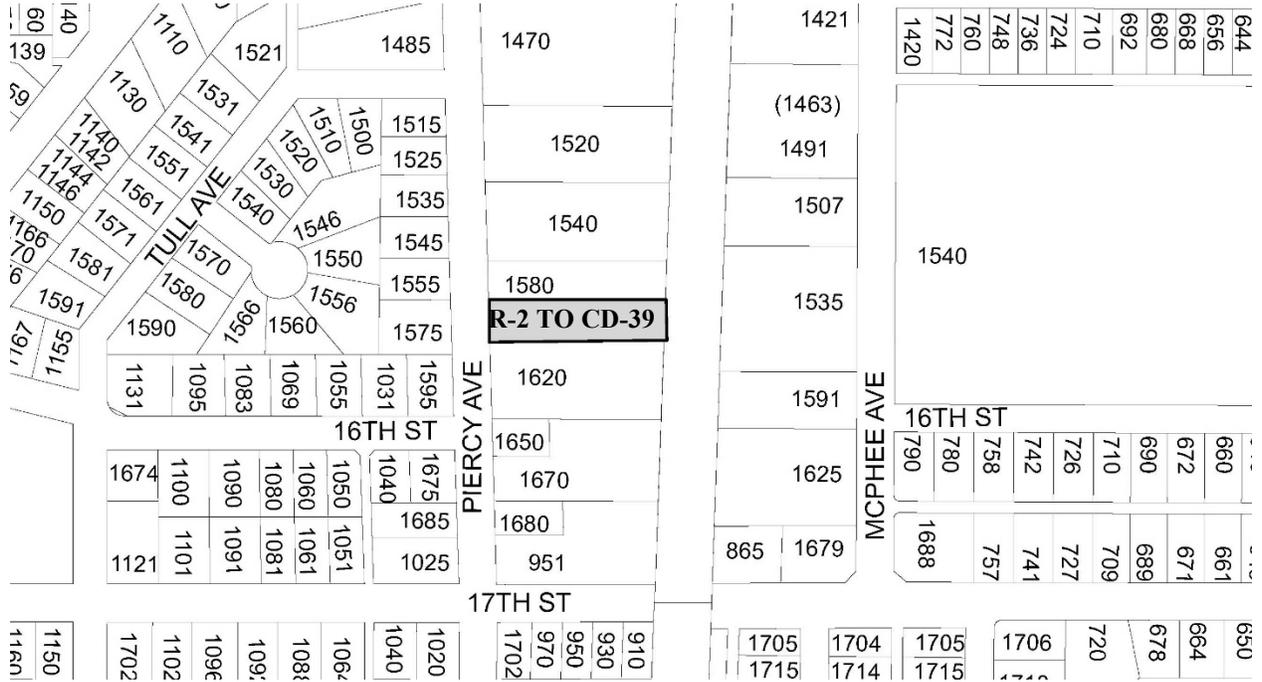
Materials Legend

	Wood Tone Fiber Cement Panel		Fiber Timber Framing and Ornamental Wooden Slat
	Dark Siding		Glassing
	Light Siding		Accent Panel
	Paint Grade Fiber Cement Panel		Torch on Roofing Membrane

M. J. ARCHITECTS, INC.	
7	
SUBMITTALS	
DATE: 10/20/2018	
PROJECT: 18-001-001	
DRAWING: 18-001-001-001	
SCALE: 1/8" = 1'-0"	
DATE: 10/20/2018	

VERSION FOR RE-ZONING PURPOSES

ATTACHMENT B



THE CITY OF COURTENAY
Attachment "B"
 Part of Bylaw No. 3037, 2023
 Amendment to the
 Zoning Bylaw No. 2500, 2007



1160 – 4th Street
Courtenay, BC V9N 1H8
Phone: (778) 647-2266
Email: office@buildwithperspective.com

May 2, 2022

City of Courtenay – City Council

Re: Rezoning Application for 1590 Piercy Avenue (Nine Peaks project)

Dear Council,

Perspective Design Build Ltd. commends Council for their interest in promoting affordable housing within our community and your understanding of the urgency of the matter.

We also share this interest and have created our plans for Nine Peaks with this in mind. By taking property that once only had a small, single-family home on it and in its place adding a multi-family complex with 9 livable units, we are giving people the opportunity to enter homeownership at a more affordable price point than for a single-family home. Our target market is working singles and families or retirees with a median income. The future potential of renting these units out opens the door for those that do not qualify for homeownership.

The units will be offered for sale at a fair sale price. However, we understand the severe need for affordable housing. We realize that this is an ongoing issue with no quick resolution. To that end, Perspective Design Build Ltd. would like to offer the City of Courtenay two options to show our commitment to affordable housing.

Option 1 – A One Time contribution of \$40,000.00 to the Affordable Housing Fund.

This option would allow the funds to be directed where most needed by the Fund. Be it in support of emergency or supportive housing services, the development of new affordable housing projects or used as leverage in negotiations for additional non-market affordable housing units.

Option 2 – A Discount of \$40,000.00 on one of our strata units.

This option could be further discussed and may or may not include covenants whereby potential homeowners would be subject to qualification. Things like income qualification and covenants on title restricting resale price can be sorted out to ensure that this opportunity is held in perpetuity to any future owners of the discounted strata unit.

We look forward to hearing from City Council.

Yours Truly,

A handwritten signature in black ink, appearing to read "George Slomp".

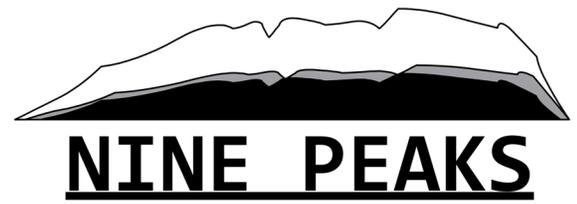
George Slomp and Peter Bain
Owners of Perspective Design Build Ltd.

A handwritten signature in black ink, appearing to read "Peter Bain".



1590 Piercy Avenue





May 28, 2021

To Whom It May Concern:

Re: 1590 Piercy Avenue Rezoning Application (RZ000058)

Perspective Design Build LTD is applying to change the Zoning of 1590 Piercy Avenue, Courtenay, BC V9N 3E9 from R-2 to a Comprehensive Development Zone for the purpose of constructing nine townhouse units. Seven of these townhouses will be two-bedroom units and two will be three-bedroom units. They will be separated into three buildings: a two-unit building facing Piercy Avenue, a four unit building in the heart of the property and a three unit building along the rear.

The lot will be developed to have a driveway, onsite parking, a garbage enclosure, bicycle parking facilities, green space, an amenity area, pathways, and a variety of native and ornamental plants and trees. Two large maple trees on the property will be retained.



View relevant documents on The City of Courtenay website www.courtenay.ca/devapptacker (search by file number or address)

If you have any comments regarding this application, please return your comments to the City of Courtenay by one of the following methods by Jun 11, 2021:

Drop your comment sheet off in the drop box located at the front entrance of the City of Courtenay or

mail: *City of Courtenay, Planning Services Department, 830 Cliffe Avenue, Courtenay BC V9N 2J7*

Email your comments to planning@courtenay.ca Fax your comments to 250-334-4241

Regards,

George Slomp and Peter Bain, Owners

Perspective Design Build Ltd.



Email: george@buildwithperspective.com Phone: (778) 647-2266 or (250) 218-6939

Schedule No. 7

Comments received for Zoning Amendment 1590 Piercy Ave
and Staff Responses

COMMENT

Hello,

I am hoping there is a chance that the garbage bin area for the proposed 1590 Piercy Ave rezoning application (RZ000058) can be moved to the other side of the parking lot. I live at 1580 Piercy (so will be direct neighbors of the new complex) and the garbage bin will be right beside my small patio and house. The housing complex on the other side (1620 Piercy) have their garbage bin on the side against the new build so it would make sense to have them both together. Thank you for considering my request.

Jessica Cote (email 9/1/2021)

RESPONSE

The garbage can't be moved as the suggested location is not accessible for garbage/recycling collection. The garbage enclosure for 1580 Piercy is located along the fenceline that is adjacent to a rear patio and dwelling unit. This is a similar location to what is proposed for this application.

COMMENT

I live at 1620 Piercy so would be the most impacted by this development. Our living room and back patio is 4 ft from the fence line. Our concern is how close the building will be to the fence line? I can't decipher from the sketch plan. If there is no space, we will lose privacy. For the 3 units most affected, developers should be made to put bigger trees as a buffer, not the little ones proposed. We planted 5 big maples on our side of the fence in the front portion, which will benefit their development. I think they should do the same on their side. In general, like the looks of the project. In our strata we have parking for all units plus 4 visitor spots. Will they be parking on the street? Please make our concerns known to council.

Thank you...Doug Vollet (email 6/24/2021)

RESPONSE

The proposed duplex dwelling units will be located between 1.5 m (4.95 ft) and the rear triplex 2.2 m (7.3 ft) from the property lines. These are both side elevations and have limited windows. The units are proposed to be located a similar distance to the unit sitting on the neighbouring property. A large maple is being retained in the rear of the triplex building and a landscape buffer is proposed to be planted around the perimeter of the property.

COMMENT

[REDACTED]
Courtenay, B.C
V9N 3E9
June 7th, 2021

RE: 1590 Piercy Avenue Nine Peaks Development

Dear Sir/Madam,

I am writing with respect to the application to rezone the above listed property (RZ000058). I am a resident of Railside Lane Townhouse Complex at 1620 Piercy Avenue which borders the intended property for redevelopment.

I do support the development of this property, however, after having read through the documents to accompany this application I have a number of concerns.

- 1) Geotech Assessment Document: The date on this document is from June of 2017 with the sampling having been done in April of 2017. This document is 4 years old, and I ask **is there a time limit on when a report as important as this for recommending what may need to be done to prepare for foundations?** Further to this, the report states multiple times that plans for what may be built have yet to be decided. As such they can only make possible recommendations based on what they have found at the test sites. I ask, **does this testing need to be carried out again prior to approval of the proposed 9 units?** Lastly, within this document there is reference to Piercy Avenue as Piercy Creek Road. These are two different locations.
- 2) Landscape Plans Document: The one question that I have with respect to these plans is **how does the plan support the biodiversity within the local area, particularly along the back portion of the property nearest to the rail line?** I can see that there are plans to keep a minimal number of the mature foliage in the area. However, a number of animals use these areas on a regular basis: raccoons, rabbits, deer (on the odd occasion), rats, a number of different bird species (including and not limited to Hummingbirds, Steller's Jay, Pileated Woodpeckers, Robins, Starlings, Great Horned Owls, Barred Owl, Northern Flicker). So I ask again, **how is the landscaping going to support this biodiversity?**
- 3) Parking Study Document: I can see that this document is taking into consideration use of the space for vehicle parking as well as alternative conventional bike and electric bike storage. As we push forwards into the future to go more green, the 30 bike storage units is definitely a great way forward. However, I can also see that the current Courtenay bylaw states that there should be a minimum of 1.5 parking spaces per unit and should include visitor parking. Present plans of 9 resident parking spaces and one visitor parking space does not meet this requirement. The study conducted on January 29th and 30th, 2021 at 9pm on 8 townhouse sites within the City of Courtenay and Comox has several flaws. 1) This data was collected during a pandemic in which residents may have been impacted economically and as such have had to reduce their household vehicle numbers. 2) The data was collected during a particularly cold and rainy part of the year and in the evening in which residents and visitors alike may not be actively out. 3) Statistically, data should be collected over multiple time periods, under multiple weather conditions in order to be valid. 4) **Why were the adjacent units/complexes on Piercy Avenue not included in this study? Would it not make more sense to see how those individuals already residing in the area use the road and complexes?** 5) The study does not include information about a Family Day Care that resides almost directly across the road from the proposed development. **If there are more residents having to park on the road then how are**

Parents/Guardians going to find safe spaces to drop off and pick up their children? 6) Of the sites that were observed, **what was the socio-economic status of these properties? How many belong to individuals that are retired? Single parent families?** 7) Surely, properties with garages should also be included in the report. I understand that the proposed re-development does not include garages for the residents, however, this still supports the need for parking. 8) The observation of On-Street Parking is also flawed. It states that there is a possible 157 parking spaces available. However, there is not mention of the end of Piercy Road closest to Cumberland Road being primarily commercial property and a Licensed Day Care Centre. Again, safe access to drop off and pick up children is vital and if more road parking is used this becomes a concern. 9) Another proposed development is in the works by Habitat for Humanity at the end of Piercy Road near Cumberland Road. **How much on-street parking will result from this development?** Again, this has an impact on the 157 'available spaces'. 10) Even though there is an increase in the Comox Valley for demand on E-Bikes, **how many of those individuals within the age bracket that will either rent or reside in the proposed properties? How many e-bikes were observed on January 29th and 30th? Where do the individuals who are currently purchasing these products residing within the Valley?** Just because the bike shops are seeing an increase within the Comox Valley does not mean that individuals who choose to reside locally will be using them instead of a car. And let's be honest, my husband and I have conventional bikes and are in our mid-forties and have not used our bikes in over two years for a variety of reasons. 11) The proposed development is for multi-family use. The majority of families in today's current climate have a minimum of 2 vehicles. This is in part due to the fact that both parents have to work in order to support the family. Even with individuals wanting to be more 'green' they tend to choose a hybrid or electric vehicle over an electric bike.

- 4) Plans and Elevation Duplex Document: The parking plan document references 6 short term bike spaces, however, the plans and elevation duplex document references 8. **Could someone please clarify which one it is?** This information is repeated on the Plans and Elevation Triplex Document.
- 5) Plans and Elevation Complex Document: **Is there information missing from this?** I cannot see the detailed drawings similar to those for the Duplex and Triplex portion. I am assuming that Units 3 and 6 will be the 3-bedroom, but as there is no drawing to show this, it is unclear. It is unclear where the placement of windows along the back side are and how this may affect the properties possibly being overlooked located in the Railside Lane Townhouse Complex.
- 6) Project Summary Document: This only refers to 30 bike spaces and references 10% having e-bike accommodation. This needs to be clarified as the previous documentation states different information.
- 7) 9 Units: I also have concerns as to the number of properties that are being proposed to occupy this space. The Railside Lane Townhouse Complex is twice the size of the proposed 1590 property and consists of 10 units. The Habitat for Humanity Complex which borders the proposed 1590 property on the other side is a similar size and only contains 6 units. The front and back proposed properties do not appear to have windows that would be facing the other properties. However, the middle complex of four properties do have windows that face into the Railside Lane Complex. Further, to the above concern about the need for more parking the middle complex should be reduced in size to accommodate it and possibly the direction in which it faces should be changed to ensure that the windows do not overlook other properties privacy.

I look forward to your response to the above. Please feel free to contact me by email at

Kind Regards

Christina Kurshumliu

Resident of Railside Lane Townhouse Complex and Strata Treasurer - letter in email 6/7/2021

RESPONSE

1. Geotech Assessment Document
There are no steep slopes on this property. The geotechnical engineer on record has confirmed the site is safe for the intended use.
The building department may require a revised geotechnical report at the time of building permit application if that is deemed necessary.
2. Landscape Plan and biodiversity
There are no environmentally sensitive areas identified on DP Guidelines Map 5, Terrestrial Environmentally Sensitive Areas. A 4.5 m wide landscape buffer will be planted in the rear and lesser buffers around the perimeter of the proposed development.
3. Parking study
This comment resulted in the applicant providing an updated parking study. The two studies are attached to the staff report. The consultants concluded that the proposed number of on-site parking stalls is suitable for the proposed use and that there is adequate on street parking for the residential use.
The specific questions asked about purchasers of EV bicycles are beyond the scope for evaluating the suitability of the proposed use. This is a requirement in the Zoning Bylaw.
4. Elevation drawings
Revised elevation drawings were provided by the applicant. Windows are proposed on the rear elevation on the first and second floors. Overlooking onto adjacent properties is avoidable with infill and more dense developments. Landscaping will provide some screening.
The landscape plan shows and the applicant has confirmed that the required number of bicycle parking stalls, both class I and II, are being provided.
5. Numbers of units
The proposed density is a .4 floor area ratio and is a consistent density to the existing R-3 zone and other multi-unit developments.

COMMENT

I've received an information sheet regarding the 'Nine Peaks' proposed development and have the following concerns:

1. **Traffic** - This development, along with the one at 1435 Piercy, will add significant traffic along Piercy. The intersection at 17th St. and Piercy is currently a problem and there needs to be a traffic light installed to facilitate vehicles turning off of Piercy onto 17th.
I have raised this before but I have been ignored and it is an accident waiting to happen. Given that Council has approved bike Lanes along 17th, it would make sense to rectify the situation at the same time. As well, the intersection at Piercy and Cumberland will be affected and the traffic signals should be adjusted.

2. **Consultation area** - As indicated previously, the 100 meter community consultation perimeter is inadequate. In this case, it will not even include both intersections and the impact of the development will even go beyond this.
3. **Business plan** - The City does not require a copy of the business plan (the banks/funders do). There is no indication as to the proposed sale or rental revenue anticipated and how affordable or unaffordable these units will be. Will it alleviate any of the local housing pressure?; or is it a money grab to attract new residents from areas such as the Lower Mainland.
4. **Infrastructure** - *We are already impacted by water restrictions several times a year. How will this development exacerbate this? As well, several trees will require removal and how will the city demand compliance with the recent policies?*

Sincerely,

Fred Muzin (email 6/7/2021)


Courtenay V9N 1X8

RESPONSE

1. Traffic light – a traffic light has been determined to not be warranted in
The City's Transportation Plan (2019) does not identify this intersection as one where a high number of collisions take place as a result this intersection is not identified for future improvements for vehicular traffic. Nor does the plan does not propose pedestrian or cycling related improvements for this intersection.
Piercy itself is a recognized cycling route in the City's Cycling Network Plan. Cycling improvements at the intersection of Piercy and 17th are budgeted in the 2023 work plan.
2. Consultation area – the 100 m notification area is established in the Development Application Procedure Bylaw No. 2790. This bylaw is under review as part of the Bill 26 review and this includes notice distances.
3. Business Plan – the City does not require a business plan as part of an application. This matter is not part of evaluating the suitability of the proposed land use.
4. Infrastructure – Residents in this development will also be subject to water restrictions. The arborist report notes that trees located in the perimeter are cottonwood or red-alder and are not suitable for the landscape plan. And other trees have structural characteristics which preclude them from maturing into healthy, defect free trees.
The landscape plan shows protection of two mature maple trees and tree replacement for those that are being removed (32 new trees).