

CITY OF KELOWNA

MEMORANDUM

Date: August 19, 2020
File No.: DP20-0147
To: Urban Planning Management (KB)
From: Development Engineer Manager (JK)
Subject: 230 Aurora Cres Form & Character

This memo contains the Development Engineering Branch comments and requirements regarding this Development Permit application for the Form & Character of a 6-storey, 104-unit multiple dwelling housing development. The Development Engineering Branch has no comments at this time related to the Form & Character DP. However, the following items will be required at the time of Building Permit. The Development Technician for this application is Jim Hager (jhager@kelowna.ca).

1. GENERAL

- a. The postal authorities must be contacted to determine whether a “community mailbox” will be utilized. Please contact the Canadian Post Corporation, Delivery Services, P.O. Box 2110, Vancouver, B.C. V6B 4Z3 (604) 662-1381 in this regard.
- b. The following requirements are valid for two (2) years from the reference date of this memo, or until the application has been closed, whichever occurs first. The City of Kelowna reserves the rights to update/change some or all items in this memo once these time limits have been reached.
- c. These Development Engineering comments/requirements are subject to the review and requirements from the Ministry of Transportation and Infrastructure (MoTI).
- d. There is a possibility of a high water table or surcharging of storm drains during major storm events. This should be considered in the design of the onsite system.

2. DOMESTIC WATER AND FIRE PROTECTION

- a. The subject lot is within the Black Mountain Irrigation District (BMID) water supply area. The Developer is required to make satisfactory arrangements with BMID for all water and fire protection-related issues. All charges for service connection(s) and upgrading costs, as well as any costs to decommission existing services, shall be the responsibility of the Developer.
- b. The Developer’s Consulting Mechanical Engineer will determine the fire protection requirements of this proposed development and establish hydrant requirements and service needs. All fire flow calculations approved by BMID are to be shared with the Development Engineering Branch upon submittal of off-site civil engineering drawings.
- c. Provide an adequately sized domestic water and fire protection system complete with individual lot connections. The water system must be capable of supplying domestic and fire flow demands of the project in accordance with the Subdivision,

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Development & Servicing Bylaw. No. 7900 (i.e., 150 L/s for fire flows for Apartments/Townhouses). Provide water flow calculations for this development to confirm bylaw conformance. Ensure every building site is located at an elevation that ensures water pressure is within the bylaw pressure limits. Note: Private pumps are not acceptable for addressing marginal pressure.

3. SANITARY SEWER SYSTEM

- a. Our records indicate that this property is currently serviced with a 150-mm diameter sanitary sewer service off Aurora Cres. The Applicant's Consulting Mechanical Engineer will determine the requirements of the proposed development and establish the service needs. Only one service will be permitted for this development. If required, the Applicant will arrange for the removal and disconnection of the existing service and the installation of one new larger service at the Applicant's cost.
- b. If a larger service is required, the design and location of the new larger service is to leverage the existing manholes for tie-in. The City's preference is that no additional overbuild manholes are installed within the roadway.
- c. If the existing service is to be maintained, it is to be completed with an inspection chamber (c/w Brooks Box) as per SS-S7.

4. STORM DRAINAGE AND EROSION AND SEDIMENT CONTROL

- a. The property is located within the City of Kelowna drainage service area. The City Engineer may permit use of individual ground water disposal systems, where soils are suitable. For on-site disposal of drainage water, a hydrogeotechnical report will be required complete with a design for the disposal method (i.e. trench drain / rock pit). The Lot Grading Plan must show the design and location of these systems for each lot.
- b. Provide the following drawings:
 - i. A detailed Lot Grading Plan (indicate on the Lot Grading Plan any slopes that are steeper than 30% and areas that have greater than 1.0 m of fill);
 - ii. A detailed Stormwater Management Plan for this subdivision; and,
 - iii. An Erosion and Sediment Control Plan is to be prepared by a Professional Engineer proficient in the field of erosion and sediment control. The plan is to be prepared as per section 3.14 of Schedule 4 of Bylaw 7900. If a line item for ESC is not included in the Engineer's cost estimate for off-site work, then an additional 3% will be added to the performance security based on the total off-site construction estimate.
- c. On-site detention systems are to be compliant with Bylaw 7900, Schedule 4, Section 3.11.1 Detention Storage.
- d. As per Bylaw 7900, Schedule 4, Section 3.1.3 Climate Change, the capacity of storm works will include an additional 15 percent (15%) upward adjustment and applied to the rainfall intensity curve stage (IDF) in Section 3.7.2.
- e. Show details of dedications, rights-of-way, setbacks and non-disturbance areas on the lot Grading Plan.

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- f. Register right of ways on private properties for all the storm water infrastructure carrying, conveying, detaining and/or retaining storm water that is generated from the public properties, public road right of ways, and golf course lands.
- g. Identify clearly on a contour map, or lot grading plan, all steep areas (>30 %). Provide cross sections for all steep areas at each property corner and at locations where there are significant changes in slope. Cross sections are to be perpendicular to the contour of the slope. Show the proposed property lines on the cross sections. Not all areas have a clear top of bank; and therefore, field reconnaissance by City staff and the applicant may be needed to verify a suitable location for property lines.
- h. If individual lot connections are required, ensure that payment of connection fees has been completed (please provide receipt).
- i. Where structures are designed or constructed below the proven high groundwater table, permanent groundwater pumping will not be permitted to discharge to the storm system. The City will approve designs that include provisions for eliminating groundwater penetration into the structure, while addressing buoyancy concerns. These design aspects must be reviewed and approved by the City Engineer.
- j. An Erosion and Sediment Control Plan is to be prepared by a Professional Engineer proficient in the field of erosion and sediment control. The plan is to be prepared as per section 3.14 of Schedule 4 of Bylaw 7900. If a line item for ESC is not included in the Engineer's cost estimate for off-site work, then an additional 3% will be added to the performance security based on the total off-site construction estimate.

5. ROAD IMPROVEMENTS

- a. The northeast corner of the property is currently rounded with on-street parking through the curve. A curb bulb extension on this corner that will protrude out and demark the end of the parking lane will be required. The curb bulb is to provide an opportunity for the planting of boulevard trees. A landscaping and irrigation plan will be required for the bulb out.
- b. Modify the northeast let down at the intersection of Hollywood Rd N and Aurora Cres with a curb extension that extends past the parking row and creates a letdown that points to the southeast let down.
- c. Further information on the design requirements (i.e., geometry) of the curb extension and bulb out, please contact the Development Technician.
- d. As per the submitted application, only one 6.0-m wide driveway will be permitted for this development. The letdown is to be constructed as per the non-residential specs of SS-C7, c/w continuous sidewalk throughout.
- e. The frontage of the subject lot does not currently host any streetlighting. A streetlighting plan will be required and streetlights are to be installed.

6. POWER AND TELECOMMUNICATION SERVICES

- a. All proposed service connections are to be installed underground. It is the developer's responsibility to make a servicing application with the respective electric power, telephone and cable transmission companies to arrange for these services, which would be at the applicant's cost.

7. GEOTECHNICAL STUDY

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- a. Provide a geotechnical report prepared by a Professional Engineer competent in the field of hydro-geotechnical engineering to address the items below: NOTE: The City is relying on the Geotechnical Engineer’s report to prevent any damage to property and/or injury to persons from occurring as a result of problems with soil slippage or soil instability related to this proposed subdivision.
- b. The Geotechnical reports must be submitted to the Development Services Department (Subdivision Approving officer) for distribution to the Development Engineering Branch and Inspection Services Division prior to submission of Engineering drawings or application for subdivision approval.
 - i. Area ground water characteristics, including any springs and overland surface drainage courses traversing the property. Identify any monitoring required.
 - ii. Site suitability for development.
 - iii. Site soil characteristics (i.e. fill areas, sulphate content, unsuitable soils such as organic material, etc.).
 - iv. Any special requirements for construction of roads, utilities and building structures.
 - v. Recommendations for items that should be included in a Restrictive Covenant.
 - vi. Recommendations for roof drains, perimeter drains and septic tank effluent on the site.
 - vii. Any items required in other sections of this document.
- c. If any blasting is proposed as part of this subdivision, a Soil Removal and Deposit Application must be made to the City for such works. The proposed blasting work is to comply with Amendment No. 1 to the Soil Removal and Deposit Regulation Bylaw No. 9612, specifically Section 6 PERMIT REQUIREMENTS – (k) and (g).
- d. Should any on-site retaining walls surpass the following limits, an Over Height Retaining Wall Permit will be required:

“Retaining walls on all lots, except those required as a condition of subdivision approval, must not exceed a height of 1.2 m measured from natural grade on the lower side, and must be constructed so that any retaining walls are spaced to provide a 1.2 m horizontal separation between tiers. The maximum number of tiers is two with a maximum total height of 2.4 m. Any multi-tier structure more than 2 tiers must be designed and constructed under the direction of a qualified professional engineer.”

The design of all retaining walls is to conform with Engineer & Geoscientists British Columbia’s *Professional Practice Guidelines for Retaining Wall Design*. Submission requirements for the Over Height Retaining Wall Permit include Engineer of Record documents (Appendix A of *Retaining Wall Design Guideline*) and any necessary independent reviews (as per EGBC’s *Documented Independent Review of Structural Designs*).
- e. Any modified slopes having a finished slope greater than 2H:V1 (50%) and an elevation change greater than 1.2 m must be installed under the direction of a qualified professional engineer.

8. DESIGN AND CONSTRUCTION

- a. Design, construction supervision, and inspection of all off-site civil works and site servicing must be performed by a Consulting Civil Engineer and all such work is subject to the approval of the City Engineer. Drawings must conform to City standards and requirements.

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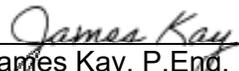
- b. Engineering drawing submissions are to be in accordance with the City's "Engineering Drawing Submission Requirements" Policy. Please note the number of sets and drawings required for submissions.
- c. Quality Control and Assurance Plans must be provided in accordance with the Subdivision, Development & Servicing Bylaw No. 7900 (refer to Part 5 and Schedule 3).
- d. A "Consulting Engineering Confirmation Letter" (City document 'C') must be completed prior to submission of any designs.
- e. Before any construction related to the requirements of this subdivision application commences, design drawings prepared by a professional engineer must be submitted to the City's Works & Utilities Department. The design drawings must first be "Issued for Construction" by the City Engineer. On examination of design drawings, it may be determined that rights-of-way are required for current or future needs.

9. SERVICING AGREEMENTS FOR WORKS AND SERVICES

- a. A Servicing Agreement is required for all offsite works and services on City lands in accordance with the Subdivision, Development & Servicing Bylaw No. 7900. The applicant's Engineer, prior to preparation of Servicing Agreements, must provide adequate drawings and estimates for the required works. The Servicing Agreement must be in the form as described in Schedule 2 of the bylaw.
- b. Part 3, "Security for Works and Services", of the Bylaw, describes the Bonding and Insurance requirements of the Owner. The liability limit is not to be less than \$5,000,000 and the City is to be named on the insurance policy as an additional insured.

10. CHARGES, FEES, AND SECURITIES

- a. Development Cost Charges (DCC's) are payable
- b. Fees per the "Development Application Fees Bylaw" include:
 - i. Street/Traffic Sign Fees: at cost (to be determined after design).
 - ii. Survey Monument, Replacement Fee: \$1,200.00 (GST exempt) – only if disturbed.
 - iii. Engineering and Inspection Fee: 3.5% of construction value (plus GST).
- c. Approved payment methods for Performance Security:
 - iv. Personal Cheques < \$5,000
 - v. Certified Cheque and Bank Draft > \$5,000
 - vi. Minimum Letter of Credit value is \$50,000


James Kay, P.Eng.
Development Engineering Manager

JKH

CITY OF KELOWNA

MEMORANDUM

Date: August 19, 2020
File No.: DVP20-0148
To: Urban Planning Management (KB)
From: Development Engineer Manager (JK)
Subject: 230 Aurora Cres Height from 4 to 6 storeys

This memo contains the Development Engineering Branch comments and requirements regarding this Development Variance Permit application to vary the building height from 4 storeys (15.0 m) permitted to 6 storeys (22.0 m) proposed.

The Development Engineering Branch has no additional comments related to the request for a variance in height. All other Development Engineering Branch comments are included in memo DP20-0147.



James Kay, P.Eng.
Development Engineering Manager

JKH



July 16, 2020

Community Planning
City of Kelowna
1435 Water Street
Kelowna, BC V1Y 1J4

Dear Ms. Brunet,

Re: Letter of Rationale for 230 Aurora Crescent, Kelowna, BC

Ironclad Developments Inc (ICD) is proposing a 6 storey development at 230 Aurora Crescent in the City of Kelowna. ICD is submitting an application for Urban Design Major Development Permit and Development Variance Permit.

The subject property is approximately 1.01 acres within the Rutland Urban District of Kelowna. The property is currently vacant land surrounded by a mixture of commercial and residential uses. Within walking distance or a short drive from the subject land there are a variety of amenities as described below:

- Nearby commercial includes a grocery store, liquor store, pharmacy, dollar store, gas station, car wash and second hand store
- Restaurants including eat in and fast food
- Parks and recreation opportunities (Ben Lee Park and Water Park, Rutland Centennial Park, Rutland Lions Park, Davie Park,
- Four parks within a 15-minute, including a splash pad a 7 minute walk away
- Existing schools (Pearson Elementary, Rutland Middle School, Rutland Senior Secondary School, Heritage Christian School, Springvalley Middle School, Springvalley Elementary School, Belgo Elementary School, Quigley Elementary School and Okanogan Christian School)

Development Proposal

ICD's proposed development will be comprised of two buildings, with a total of 105 residential units. Building A, on the west side of the property, will have an open main floor with ground floor parking and five storeys of residential units above. Building B, on the east side of the property will have amenity space on the main floor facing west and residential units facing east/Aurora Crescent, with five storeys of residential



Proposed rental apartment buildings on Aurora Crescent.





BUILDING THE FUTURE

IRONCLAD DEVELOPMENTS INC.

ATTACHMENT B

This forms part of application
DP20-0147 DVP20-0148



Planner
Initials KB
City of Kelowna
www.ironcladdevelopments.com

above. The wood frame buildings will be comprised of one, two and three-bedroom units, in a variety of sizes and floor plans. Each unit will be accessible from a common entryway and vestibule and will have private amenity space in the form of a balcony or patio. On site there will be a leasing office, fitness centre and additional indoor amenity space. Outdoor amenity space will include rooftop patios on both buildings above the lobbies and an outdoor plaza at the northeast corner of the site, adjacent to Aurora Crescent.



Main floor patios along Aurora Crescent with balconies above.

A combination of surface, ground floor and underground parking is proposed. The ground floor of Building A will be parking, accessed from the surface parking lot. The entrance to the underground parkade will be accessed from the south end of the surface parking lot. A total of 122 parking spaces will be provided on site, 18 spaces on the main floor under Building A, 26 spaces in the surface lot between the buildings, and 78 spaces in the underground parkade. The minimum parking requirement has been met and exceeded.

The buildings will consist of high-quality building materials in neutral colours with river stone accents. Building B will have a pushed out first floor along Aurora Crescent with a step back on the second floor. The main floor units facing Aurora will have patios and all other units will have balconies.



Building exteriors will use neutral colours and natural elements found in the region's landscape.



202-57158 SYMINGTON RD 20E
SPRINGFIELD, MANITOBA CANADA R2J 4L6
P: 204.777.1972 F: 204.777.2006 Toll Free: 855.385.5524
www.ironcladdevelopments.com





City of Kelowna Planning Policy Framework

Official Community Plan – Kelowna 2030

The subject property is situated along Aurora Crescent, which is within the Rutland Urban Centre and is identified as within the Urban Design DP Area in the Kelowna 2030 document. The proposed development meets the below policies outlined in the Official Community Plan:

- Objective 5.5 – Policy 1 – Located taller buildings in the geographic centre of Urban Centres and generally decrease height moving away from the centre, to a maximum of 4 storeys at the periphery of the Urban Centre, where adjoining land is designated for sign/two unit housing.
Rutland: Generally 4 storeys. Six storeys within C4 or C9 zoned areas.
- Chapter 14 Guidelines
 - 1.5 – Use colours found in the region’s natural and cultural landscape
 - 1.6- Provide generous outdoor spaces, including rooftops, balconies, patios and courtyards to allow residents to benefit from the favourable Okanagan weather
 - 2.7- Design developments with multiple buildings such that there is a sense of architectural unity or cohesiveness
 - 4.1- Mitigate the actual and perceived bulk of buildings by utilizing appropriate massing including:
 - Architectural elements (balconies)
 - Visually-interesting rooflines
 - Step back upper floors to reduce visual impact
 - Detailing that creates and rhythm and visual interest along the line of the building
 - Wall projections and indentations, windows and siding treatments as well as varies material textures should be used to create visual interest and articulate building facades
 - 4.3- Design developments with multiple, separate buildings such that individual buildings are of different but compatible shapes, masses and exterior finishes
 - 10.1- Incorporate decks, balconies and common outdoor amenity spaces into developments

ICD’s proposal for the property on Aurora Crescent meets the above policies from the Official Community Plan. The proposed development will provide two similar six storey buildings within the Rutland Urban Centre. The building exteriors will use colours found in nature around Kelowna, will provide private outdoor space for residents and be architecturally appealing to pedestrians by stepping back the upper floors.





BUILDING THE FUTURE

IRONCLAD DEVELOPMENTS INC.

City of Kelowna Zoning Bylaw (8000)

The property is currently zoned as C4- Urban Centre Commercial in the City of Kelowna Zoning Bylaw. Under the C4 zone, apartment housing is a permitted principal use. The following table summarizes the regulations in the C4 zone.

Zoning Summary, C4 Zone			
Zoning Provisions	Required	Provided	Compliance
Lot area (min)	1,300 sq m	4,099.81 sq m	✓
Lot width (min)	40 m	60.97 m	✓
Lot Depth (min)	30 m	67.79	✓
Building Height	4 storeys or 15 m	6 storeys/22 m	X
Site Coverage (max)	75%	42%	✓
Front Yard (min)	0 m	1.9 m	✓
Rear Yard (min)	0 m	4.6 m	✓
Exterior Side Yard (min)	0 m	2.6 m	✓
Interior Side Yard (min)	0 m	3.3 m	✓
Floor Area Ratio	1.68	1.82	X
Private Open Space	1,345 sq m	1,354.61 sq m	✓
Parking Spaces	100	122	✓
Bicycle Parking Spaces	92	122	✓

One variance is being requested for this development to vary the height of the two buildings. The height of the proposed buildings is 52.4 metres (172 feet) measured to the midpoint of the pitched roof.

Conclusion

ICD is of the opinion that the proposed Urban Design Major Development Permit application is appropriate for the subject property, and through the concurrent Development Permit Variance application will facilitate a development that is representative of sound planning principles expressed in the Kelowna Official Community Plan and Zoning Bylaw.

Respectfully submitted,

Breanne Jack



DEVELOPMENT PERMIT GUIDELINES

Comprehensive Development Permit Area

Consideration has been given to the following guidelines as identified in Section 14.A. of the City of Kelowna Official Community Plan relating to Comprehensive Development Permit Areas:

COMPREHENSIVE DEVELOPMENT PERMIT AREA	YES	NO	N/A
Authenticity and Regional Expression			
Do landscaping and building form convey a character that is distinct to Kelowna and the Central Okanagan?	✓		
Are materials in keeping with the character of the region?	✓		
Are colours used common in the region's natural landscape?	✓		
Does the design provide for a transition between the indoors and outdoors?	✓		
Context			
Does the proposal maintain the established or envisioned architectural character of the neighbourhood?	✓		
Does interim development consider neighbouring properties designated for more intensive development?			✓
Are façade treatments facing residential areas attractive and context sensitive?	✓		
Are architectural elements aligned from one building to the next?	✓		
For exterior changes, is the original character of the building respected and enhanced?			✓
Is the design unique without visually dominating neighbouring buildings?	✓		
For developments with multiple buildings, is there a sense of architectural unity and cohesiveness?	✓		
Relationship to the Street			
Do buildings create the desired streetscape rhythm?	✓		
Are parkade entrances located at grade?	✓		
For buildings with multiple street frontages, is equal emphasis given to each frontage?	✓		
Massing and Height			
Does the design mitigate the actual and perceived mass of buildings?	✓		
Does the height consider shading and view impacts for neighbouring properties and transition to less intensive areas?	✓		
Human Scale			
Are architectural elements scaled for pedestrians?	✓		
Are façades articulated with indentations and projections?	✓		

COMPREHENSIVE DEVELOPMENT PERMIT AREA	YES	NO	N/A
Are top, middle and bottom building elements distinguished?	✓		
Do proposed buildings have an identifiable base, middle and top?	✓		
Are building facades designed with a balance of vertical and horizontal proportions?	✓		
Are horizontal glazed areas divided into vertically proportioned windows separated by mullions or building structures?	✓		
Does the design incorporate roof overhangs and the use of awnings, louvers, canopies and other window screening techniques?	✓		
Is the visual impact of enclosed elevator shafts reduced through architectural treatments?	✓		
Exterior Elevations and Materials			
Are buildings finished with materials that are natural, local, durable and appropriate to the character of the development?	✓		
Are entrances visually prominent, accessible and recognizable?	✓		
Are higher quality materials continued around building corners or edges that are visible to the public?	✓		
Are a variety of materials used to create contrast, enhance the pedestrian environment and reduce the apparent mass of a building?	✓		
Are elements other than colour used as the dominant feature of a building?	✓		
Public and Private Open Space			
Does public open space promote interaction and movement through the site?			✓
Are public and private open spaces oriented to take advantage of and protect from the elements?		✓	
Is there an appropriate transition between public and private open spaces?	✓		
Are amenities such as benches, garbage receptacles, bicycle stands and community notice boards included on site?	✓		
Site Access			
Is the safe and convenient movement of pedestrians prioritized?	✓		
Are alternative and active modes of transportation supported through the site design?	✓		
Are identifiable and well-lit pathways provided to front entrances?	✓		
Do paved surfaces provide visual interest?		✓	
Is parking located behind or inside buildings, or below grade?	✓		
Are large expanses of parking separated by landscaping or buildings?	✓		
Are vehicle and service accesses from lower order roads or lanes?			✓
Do vehicle and service accesses have minimal impact on the streetscape and public views?			✓

COMPREHENSIVE DEVELOPMENT PERMIT AREA	YES	NO	N/A
Is visible and secure bicycle parking provided in new parking structures and parking lots?	✓		
Environmental Design and Green Building			
Does the proposal consider solar gain and exposure?		✓	
Are green walls or shade trees incorporated in the design?		✓	
Does the site layout minimize stormwater runoff?		✓	
Are sustainable construction methods and materials used in the project?	✓		
Are green building strategies incorporated into the design?		✓	
Decks, Balconies, Rooftops and Common Outdoor Amenity Space			
Are decks, balconies or common outdoor amenity spaces provided?	✓		
Does hard and soft landscaping enhance the usability of decks, balconies and outdoor amenity spaces?	✓		
Are large flat expanses of roof enhanced with texture, colour or landscaping where they are visible from above or adjacent properties?			✓
Amenities, Ancillary Services and Utilities			
Are loading, garage, storage, utility and other ancillary services located away from public view?	✓		
Are vents, mechanical rooms / equipment and elevator penthouses integrated with the roof or screened with finishes compatible with the building's design?	✓		
Landscape Development and Irrigation Water Conservation			
Does landscaping:	-	-	-
<ul style="list-style-type: none"> • Compliment and soften the building's architectural features and mitigate undesirable elements? 	✓		
<ul style="list-style-type: none"> • Maintain the dominant pattern of landscaping along the street and surrounding properties? 	✓		
<ul style="list-style-type: none"> • Enhance the pedestrian environment and the sense of personal safety? 	✓		
<ul style="list-style-type: none"> • Screen parking areas, mechanical functions, and garbage and recycling areas? 	✓		
<ul style="list-style-type: none"> • Respect required sightlines from roadways and enhance public views? 	✓		
<ul style="list-style-type: none"> • Retain existing healthy mature trees and vegetation? 		✓	
<ul style="list-style-type: none"> • Use native plants that are drought tolerant? 	✓		
<ul style="list-style-type: none"> • Define distinct private outdoor space for all ground-level dwellings? 	✓		
Do any fences and retaining walls create visual interest and enhance the pedestrian environment?			✓
Do parking lots have one shade tree per four parking stalls?		✓	

COMPREHENSIVE DEVELOPMENT PERMIT AREA	YES	NO	N/A
Does the Landscape Architect's Landscape Water Conservation Report:	-	-	-
<ul style="list-style-type: none"> Meet the requirements for Landscape Water Budget calculations for the landscaped area? 	✓		
<ul style="list-style-type: none"> Indicate how the development complies with or varies from the Landscape Water Conservation Guidelines? 	✓		
<i>Landscape Water Conservation Guidelines</i>			
Are plants grouped into "hydro-zones" of high, medium and low or unirrigated / unwatered areas?	✓		
Does at least 25% of the total landscaped area require no irrigation / watering?		✓	
Does at least 25% of the total landscaped area require low water use?	✓		
Does at most 50% of the total landscaped area require medium or high water use?	✓		
Is mulch cover provided for shrubs and groundcover to reduce soil evaporation?	✓		
Do water features such as pools and fountains use recirculated water systems?			✓
Do landscape installation standards meet the requirements of the BC Landscape Standard and / or the Master Municipal Construction Document?	✓		
Are the required written declarations signed by a qualified Landscape Architect?		✓	
<i>Irrigation System Guidelines</i>			
Is the Irrigation Plan prepared by a Qualified Professional?	✓		
Are irrigation circuits grouped into "hydro-zones" of high, medium and low or unirrigated / unwatered areas consistent with the landscaping plan?	✓		
Is drip or low volume irrigation used?	✓		
Are the required written declarations signed by a qualified Certified Irrigation Designer?	✓		
Crime prevention			
Are CPTED practices as related to landscaping, siting, form and exterior design included in the design?		✓	
Are building materials vandalism resistant?		✓	
Universal Accessible Design			
Is access for persons with disabilities integrated into the overall site plan and clearly visible from the principal entrance?	✓		
Are the site layout, services and amenities easy to understand and navigate?	✓		
Lakeside Development			
Are lakeside open spaces provided or enhanced?			✓
Are lake views protected?			✓
Does lakeside development act as a transition between the lake and inland development?			✓

COMPREHENSIVE DEVELOPMENT PERMIT AREA	YES	NO	N/A
Signs			
Do signs contribute to the overall quality and character of the development?			✓
Is signage design consistent with the appearance and scale of the building?			✓
Are signs located and scaled to be easily read by pedestrians?			✓
For culturally significant buildings, is the signage inspired by historical influences?			✓
Lighting			
Does lighting enhance public safety?	✓		
Is "light trespass" onto adjacent residential areas minimized?	✓		
Does lighting consider the effect on the façade, neighbouring buildings and open spaces?	✓		
Is suitably scaled pedestrian lighting provided?	✓		
Does exterior street lighting follow the International Dark Sky Model to limit light pollution?		✓	

Revitalization Development Permit Area

Consideration has been given to the following guidelines as identified in Section 14.B. of the City of Kelowna Official Community Plan relating to Revitalization Development Permit Areas:

REVITALIZATION DEVELOPMENT PERMIT AREA	YES	NO	N/A
Relationship to the Neighbourhood and Street			
Does the proposal maintain the established or envisioned architectural character of the neighbourhood?	✓		
Do developments adjacent to non-revitalization areas create an appropriate transition?			✓
Are spaces for pedestrian friendly amenities, such as street furniture, included on site?	✓		
Is the ratio of streetwall height to street width less than 0.75:1?	✓		
Does the building frontage occupy the entire length of the street, without drive aisles or other dead zones?	✓		
Building Design			
Are architectural elements aligned from one building to the next?	✓		
Are the effects of shadowing on public areas mitigated?	✓		
Are doors or windows incorporated into at least 75% of street frontage?	✓		
Do proposed buildings have an identifiable base, middle and top?	✓		
Are windows, entrances, balconies and other building elements oriented towards surrounding points of interest and activity?	✓		

REVITALIZATION DEVELOPMENT PERMIT AREA	YES	NO	N/A
Are architectural elements such as atriums, grand entries and large ground-level windows used to reveal active interior spaces?	✓		
Are buildings designed with individual entrances leading to streets and pathways rather than with mall style entrances and internal connections?		✓	
For multiple unit residential projects, is ground level access for first storey units provided?	✓		
Are buildings finished with materials that are natural, local, durable and appropriate to the character of the development?	✓		
Are prohibited materials such as vinyl siding, reflective or non-vision glass, plastic, unpainted or unstained wood, and concrete block not used in the design?	✓		
Are stucco and stucco-like finishes omitted as a principal exterior wall material?	✓		
Are vents, mechanical rooms/equipment and elevator penthouses integrated with the roof or screened with finishes compatible with the building's design?	✓		
View Corridors			
Are existing views preserved and enhanced?			✓
Vehicular Access and Parking			
Are at-grade and above-grade parking levels concealed with façade treatments?	✓		
Are garage doors integrated into the overall building design?			✓
Are pedestrian entrances more prominent features than garage doors and vehicle entrances?	✓		
Is surface parking located to the rear of the building or interior of the block?	✓		
Are truck loading zones and waste storage areas screened from public view?	✓		
Do parking lots have one shade tree per four parking stalls?		✓	
Are pedestrian connections provided within and between parking lots?	✓		
Are driving, parking, pedestrian and cycling areas distinguished through changes in colour or pattern of paving materials?		✓	
Signage			
Is signage design consistent with the appearance and scale of the building?			✓
Are corporate logos on signs complimentary to the overall building character?			✓
Is signage lighting minimized?			✓
Public Art			
Is public art incorporated into the project?		✓	
Tower Design (Building Greater than Six Stories)			
Do towers enhance views to and through the skyline?			✓
Are tower forms and the upper portions of buildings at once cohesive yet distinct from the overall design?			✓

REVITALIZATION DEVELOPMENT PERMIT AREA	YES	NO	N/A
Does the building design emphasize height rather than width?			✓
Does building design take into account micro-climates, shading and wind tunneling effects?			✓
Are new developments integrated into the established urban pattern through siting and building design?			✓
Are large flat expanses of roof enhanced with texture, colour or landscaping where they are visible from above or adjacent properties?			✓
Do elements such as gazebos, trellises, and pergolas provide visual interest and enhance usability of rooftop spaces?			✓
Are balconies recessed a minimum depth of 1 m within the adjoining building face?			✓
Are podiums designed to provide an animated pedestrian environment?			✓
Downtown Considerations			
Does the proposal maintain and extend the traditional block pattern?			✓
Is the street façade articulated in a vertical rhythm that is consistent with the traditional street pattern?			✓
Are windows set back from the building face and do they include headers and sills?			✓
Are windows at street level kept low for displays of retail goods and for high visibility into interior spaces?			✓
Is the height of upper floor windows at least 1.5 times their width?			✓
Are building materials and colours consistent with other prominent Downtown buildings, preferably brick or cut stone?			✓
Is signage appropriate to the neighborhood and not internally lit or neon?			✓



**IRONCLAD
DEVELOPMENTS INC.**

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Springfield, MB R2J 4L6
Ph: 204-777-1972
info@icdev.ca

Consultant



ROB GARVEY
ARCHITECTURE 77 INC.
201-57158 SYMINGTON RD 20E
SPRINGFIELD, MB R2J 4L6
T: 204.227.9274
E: RGARVEY@A77.CA

Project Number: 2004

Designed By: J.P.M.

Drawn By: V.K./D.D..

Checked By:

Date: 30th Apr. 2020

Rev.Date: 9th Dec. 2020

ATTACHMENT D

This forms part of application
DP20-0147 DVP20-0148

Planner Initials **KB**



City of
Kelowna
DEVELOPMENT PLANNING

230 Aurora Crescent
Kelowna, BC;

RENDERING
SCALE: N.T.S.



Ironclad Developments Inc.



Project Management
General Contracting
Design/ Build

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ATTACHMENT D

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DP20-0147 DVP20-0148



Planner Initials **KB**

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

RENDERINGS

Project Number: 2004	Rev Date 09-30-2020
04-30-2020	J.P.M./D.D.
Designed By	J.P.M.
Checked By	

ESP-5.0

Scale N.T.S



Ironclad Developments Inc.



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ATTACHMENT D

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Planner Initials **KB**

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

RENDERINGS

Project Number: 2004	
04-30-2020	Rev Date 09-30-2020
Drawn By	J.P.M./D.D.
Designed By	J.P.M.
Checked By	

ESP-5.1

Scale N.T.S



Ironclad Developments Inc.



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Design/ Build

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IRONCLAD DEVELOPMENTS INC.

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ATTACHMENT D

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DP20-0147 DVP20-0148



City of
Kelowna
DEVELOPMENT PLANNING

Planner Initials **KB**

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

RENDERINGS

Project Number: 2004	Rev Date: 09-30-2020
Drawn By: J.P.M./D.D.	Designed By: J.P.M.
Checked By:	

ESP-5.2

Scale: N.T.S.



Ironclad Developments Inc.



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ATTACHMENT D

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DP20-0147 DVP20-0148



Planner Initials **KB**

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

RENDERINGS

Project Number: 2004

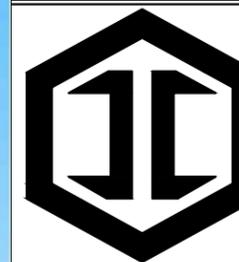
04-30-2020	Rev Date 09-30-2020
Drawn By	J.P.M./D.D.
Designed By	J.P.M.
Checked By	

ESP-5.3

Scale N.T.S



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ATTACHMENT D

This forms part of application
DP20-0147 DVP20-0148

Planner
Initials **KB**



REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

RENDERINGS

Project Number: 2004

04-30-2020

Rev Date 09-30-2020

Drawn By

J.P.M./D.D.

Designed By

J.P.M.

Checked By

ESP-5.4

Scale

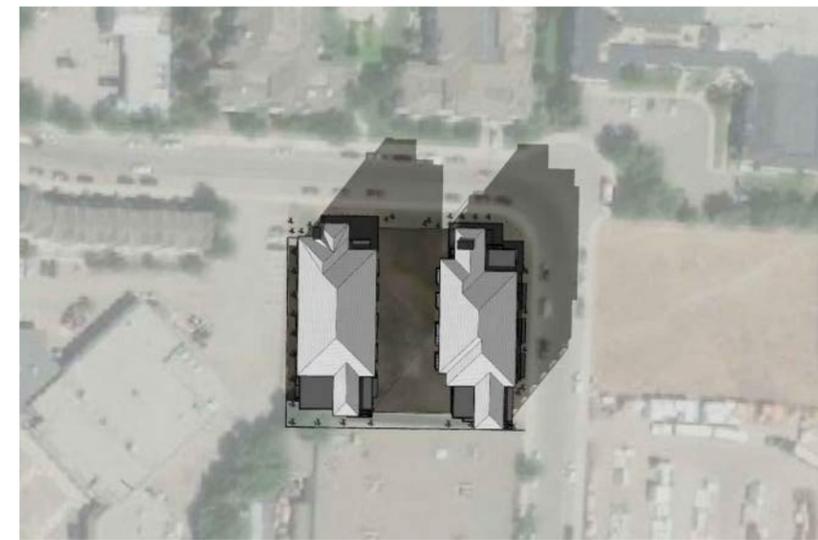
N.T.S



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 20th March- 09AM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 20th March- 12PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 20th March- 03PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st June- 09AM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st June- 12PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st June- 03PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st June- 06PM

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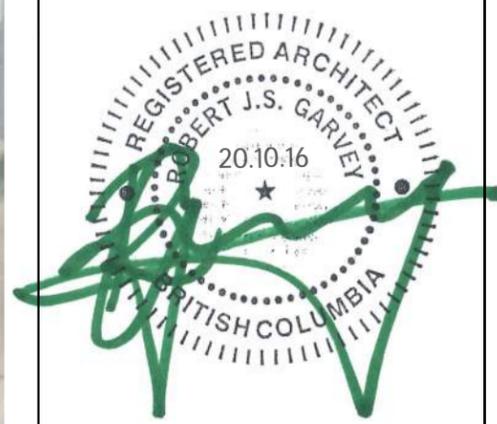
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REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

Shadow Study

Project Number: 2004

04-30-2020	Rev Date 09-30-2020
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Drawn By J.P.M./D.D.
Designed By J.P.M.
Checked By

ESP-7.0

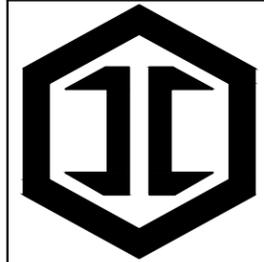
Scale N.T.S

ATTACHMENT E

This forms part of application
DP20-0147 DVP20-0148



Planner Initials **KB**

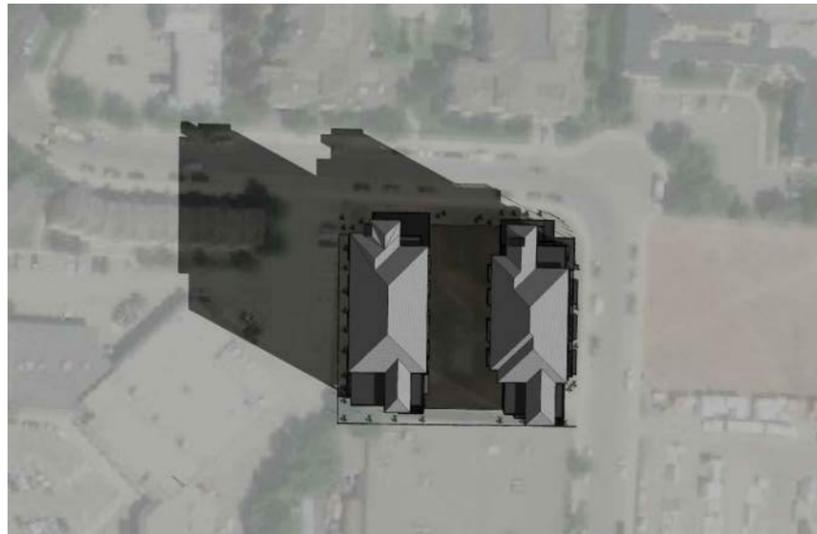
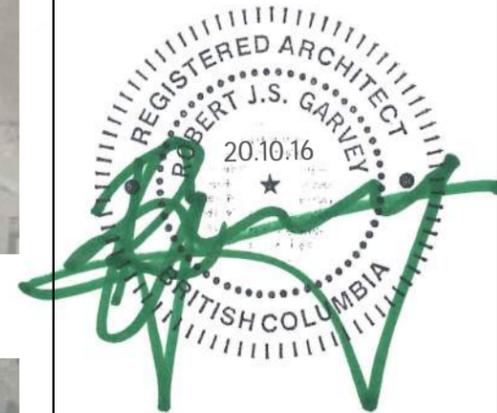


IRONCLAD
DEVELOPMENTS INC.

Consultant



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Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 22nd September- 09AM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 22nd September- 12PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 22nd September- 03PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st December- 09AM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st December- 12PM



Aurora Crescent, Kelowna BC.- Shadow Study
GMT -0700 21st December- 03PM

0	DEVELOPMENT APPLICATION	20.10.16
REV.	DESCRIPTION OF WORK REVISED	DATE

230 Aurora Crescent;
Kelowna BC;

Shadow Study

Project Number: 2004

04-30-2020

Rev Date 09-30-2020

Drawn By

J.P.M./D.D.

Designed By

J.P.M.

Checked By

ESP-7.1

Scale

N.T.S

ATTACHMENT E
This forms part of application
DP20-0147 DVP20-0148
Planner Initials **KB**
City of Kelowna
DEVELOPMENT PLANNING

Development Permit & Development Variance Permit

DP20-0147 DVP20-0148



This permit relates to land in the City of Kelowna municipally known as

230 Aurora Crescent

and legally known as

LOT 8 SECTION 26 TOWNSHIP 26 OSOYOOS DIVISION YALE DISTRICT PLAN KAP46961

and permits the land to be used for the following development:

Multiple Dwelling Housing

with variances to the following sections of Zoning Bylaw No. 8000:

Section 14.4.5(c): C4 – Urban Centre Commercial Development Regulations

To vary the required maximum height from 15.0 m or 4 storeys permitted to 22.0 m or 6 storeys proposed.

The present owner and any subsequent owner of the above described land must comply with any attached terms and conditions.

Date of Council Decision January 19, 2021

Decision By: COUNCIL

Development Permit Area: Comprehensive Development Permit Area & Rutland Revitalization Development Permit Area

Existing Zone: MXR – Mixed Use (Residential / Commercial)

Future Land Use Designation: C4r – Urban Centre Commercial (Residential Rental Tenure Only)

This is NOT a Building Permit.

In addition to your Development Permit, a Building Permit may be required prior to any work commencing. For further information, contact the City of Kelowna, Development Services Branch.

NOTICE

This permit does not relieve the owner or the owner's authorized agent from full compliance with the requirements of any federal, provincial or other municipal legislation, or the terms and conditions of any easement, covenant, building scheme or agreement affecting the building or land.

Owner: Ironclad Developments Aurora Inc., Inc.No. A0113910

Applicant: Ironclad Developments Inc.

Planner: K. Brunet

Terry Barton
Community Planning Department Manager
Planning & Development Services

Date



1. SCOPE OF APPROVAL

This Development Permit applies to and only to those lands within the Municipality as described above, and any and all buildings, structures and other development thereon.

This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this permit, noted in the Terms and Conditions below.

The issuance of a permit limits the permit holder to be in strict compliance with regulations of the Zoning Bylaw and all other Bylaws unless specific variances have been authorized by the Development Permit. No implied variances from bylaw provisions shall be granted by virtue of drawing notations that are inconsistent with bylaw provisions and that may not have been identified as required Variances by the applicant or Municipal staff.

2. CONDITIONS OF APPROVAL

- a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
- b) The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";
- c) Landscaping to be provided on the land be in accordance with Schedule "C"; and
- d) The applicant be required to post with the City a Landscape Performance Security deposit in the form of a "Letter of Credit" in the amount of 125% of the estimated value of the landscaping, as determined by a Registered Landscape Architect.

This Development Permit is valid for two (2) years from the date of approval, with no opportunity to extend.

3. PERFORMANCE SECURITY

As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Developer and be paid to the Developer or his or her designate if the security is returned. The condition of the posting of the security is that should the Developer fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the Municipality may enter into an agreement with the property owner of the day to have the work carried out, and any surplus shall be paid over to the property owner of the day. Should the Developer carry out the development permitted by this Permit within the time set out above, the security shall be returned to the Developer or his or her designate. There is filed accordingly:

- a) An Irrevocable Letter of Credit **OR** certified cheque in the amount of **\$79,817.59**

Before any bond or security required under this Permit is reduced or released, the Developer will provide the City with a statutory declaration certifying that all labour, material, workers' compensation and other taxes and costs have been paid.

5. INDEMNIFICATION

Upon commencement of the works authorized by this Permit the Developer covenants and agrees to save harmless and effectually indemnify the Municipality against:

- a) All actions and proceedings, costs, damages, expenses, claims, and demands whatsoever and by whomsoever brought, by reason of the Municipality said Permit.

All costs, expenses, claims that may be incurred by the Municipality where the construction, engineering or other types of works as called for by the Permit results in damages to any property owned in whole or in part by the Municipality or which the Municipality by duty or custom is obliged, directly or indirectly in any way or to any degree, to construct, repair, or maintain.

**The PERMIT HOLDER is the CURRENT LAND OWNER.
Security shall ONLY be returned to the signatory of the
Landscape Agreement or their designates.**

230 Aurora Crescent, Kelowna

ZONING PROVISION- C4 ZONE	REQUIRED	PROVIDED	COMPLIANCE
LOT AREA (MIN)	1,300 sq.m.	4,099.81 sq.m.	✓
LOT WIDTH (MIN)	40.0m	67.81	✓
BUILDING HEIGHT [S.14.4.5(C)]*	4 Storey (15.0m)	6 Storey (22.0m)	✗
SITE COVERAGE (MAX)	75%	42%	✓
FRONT YARD SETBACK (MIN)	0.00m	1.90m	✓
REAR YARD SETBACK (MIN)	0.00m	4.60m	✓
EXTERIOR SIDE YARD SETBACK (MIN)	0.00m	2.60m	✓
INTERIOR SIDE YARD SETBACK (MIN)	0.00m	3.30m	✓
FLOOR AREA RATIO (MAX)	1.68	1.82	✗
PRIVATE OPEN SPACE PROVISION (MIN)	1,345.00 sq.m	1,392.42 sq.m	✓
PARKING SPACES (MIN)	100	122	✓
VISITOR PARKING SPACES (MIN)	14% of total parking (17)	17	✓
SMALL CAR PARKING SPACES (MAX)	61	51	✓
BICYCLE PARKING SPACES	80 long term 12 short term	110 long term 12 short term	✓
LOADING SPACES	n/a	n/a	✓

2004 - Aurora Crescent, Kelowna BC; - General Suite Information

Suite Types	# of Bedroom	Sq.Ft./Suite	Sq.M./Suite	# of Bathroom	Balcony Area (Sq	Balcony Area (Sq.m.)
A1.2	1	584	54.25	1	46	4.27
A1.3	1	603.6	56.08	1	46	4.27
B1	1	940.9	87.41	1	170.16	15.81
B1.2	1	891.9	82.86	1	22.39	2.08
B1.3	1	1021.4	94.89	1	22.39	15.81
B2.1	2	921	85.56	2	40	3.72
B2.2	2	987.4	91.73	2	121.4	11.28
C1.0	3	1031	95.78	2	42	3.90

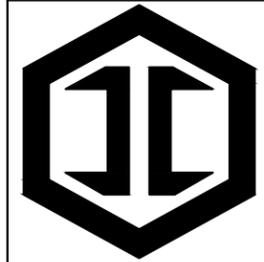
2004 - Aurora Crescent, Kelowna BC; Building A

Suite Types	# of units	Rentable Sq.Ft.	Rentable Sq.M.		Sq.Ft.	Sq.M.
				Underground Parking	31,466.10	2,923.27
A1.2	20	11,680.00	1,085	Covered Grade Parking	6,770.02	628.95
A1.3	0	-	-	Main Floor	1,631.44	151.56
B1	0	-	-	Second Floor	10,479.74	973.59
B1.2	20	17,838	1,657	Third Floor	10,022.57	931.12
B1.3	0	-	-	Fourth Floor	10,022.57	931.12
B2.1	5	4,605	428	Fifth Floor	10,022.57	931.12
B2.2	5	4,937	459	Sixth Floor	10,022.57	931.12
C1.0	0	-	-			
				Roof top Amenity	848.59	78.84
				Outdoor Amenity	3,676.87	341.59
				Indoor Amenity	599.62	55.71
				- Elevators	791.98	73.58
				- Staircases	5,602.24	520.46
Total/bldg	50	39,060	3,629			
1 bed (type A)	20	11,680.00	1,085.10			
2 bed (type B)	30	22,443.00	2,085.01			
3 bed (type C)	0	-	-	Suite Balconies (Total)	2,174.80	202.04
Total	50	34,123.00	3,170.10	Total Floor Area	52,201.46	4,849.63

2004 - Aurora Crescent, Kelowna BC; Building B

Suite Types	# of units	Rentable Sq.Ft.	Rentable Sq.M.		Sq.Ft.	Sq.M.
				Underground Parking	31,466.10	2,923.27
A1.2	19	11,096	1,031	Covered Grade Parking		
A1.3	6	3,622	336	Main Floor	10,190.65	946.73
B1	3	2,823	262	Second Floor	10,537.54	978.96
B1.2	17	15,162	1,409	Third Floor	9,776.13	908.22
B1.3	3	3,064	285	Fourth Floor	9,776.13	908.22
B2.1	0	-	-	Fifth Floor	9,776.13	908.22
B2.2	0	-	-	Sixth Floor	9,776.13	908.22
C1.0	6	6,186	575			
				Roof top Amenity	691.64	64.25
				Outdoor Amenity	-	-
				Indoor Amenity	3,903.71	362.66
Total/bldg	54	41,953	3,898			
				- Elevators	791.98	73.58
				- Staircases	5,602.24	520.46
1 bed (type A)	25	14,717.60	1,367			
2 bed (type B)	23	21,049.20	1,956			
3 bed (type C)	6	6,186.00	575	Suite Balconies (Total)	2,360.28	219.28
Total	54	41,952.80	3,898	Total Floor Area	59,832.71	5,558.59

Ironclad Developments Inc.



IRONCLAD DEVELOPMENTS INC.

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Consultant



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E: RGARVEY@A77.CA

DEVELOPMENT DESCRIPTION:

230 AURORA CRESCENT,
KELOWNA, BC

SITE AREA : 4,099.81 Sq.Ft
CURRENT ZONING: C4

PROPOSED UNITS: 104
1 BED = 45 UNITS
2 BED = 53 UNITS
3 BED = 6 UNITS

PARKING REQUIREMENTS:

TOTAL PARKING REQUIRED: 122 STALLS
(INCLUDING VISITOR AND ACCESSIBLE)

TOTAL PARKING PROVIDED: 122 STALLS
SURFACE PARKING: 44 STALLS
UNDERGROUND PARKING: 78 STALLS
SMALL CAR PARKING: 51 STALLS

BIKE PARKING (LONG TERM): 110 STALLS
BIKE PARKING (SHORT TERM): 12 STALLS

REV.	DESCRIPTION OF WORK REVISED	DATE

230 Aurora Crescent;
Kelowna BC;

PROPOSED FLOOR PLAN

Project Number: 2004

04-30-2020 Rev Date 09-30-2020

Drawn By J.P.M./D.D.

Designed By J.P.M.

Checked By

ESP-0.0

Scale N.T.S.

SCHEDULE A

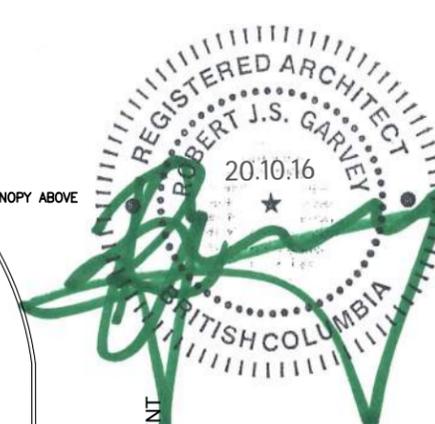
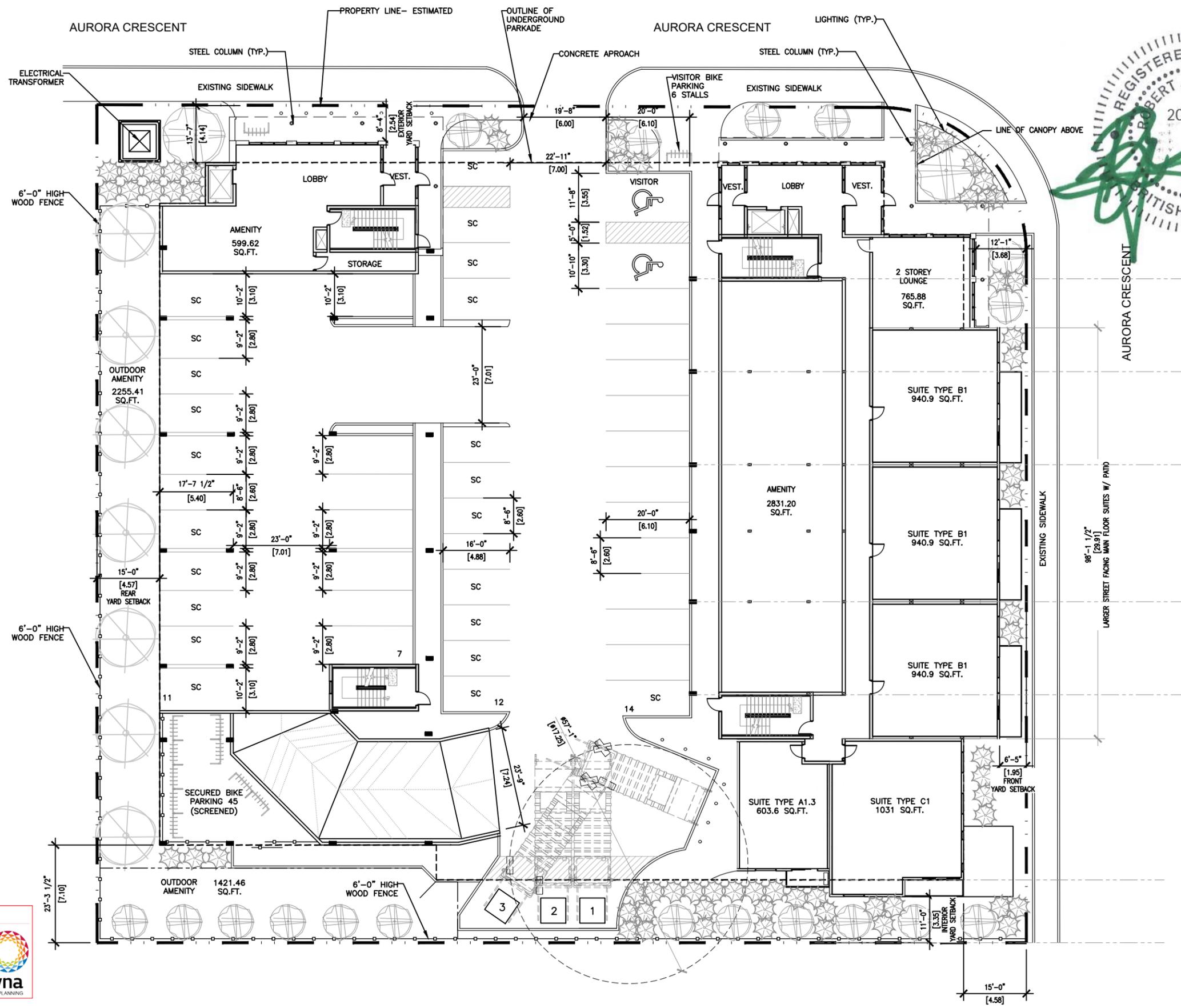
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DP20-0147 DVP20-0148

City of
Kelowna
DEVELOPMENT PLANNING

Planner Initials **KB**

GENERAL PROJECT INFORMATION

SCALE N.T.S.



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Consultant

RJSG
ARCHITECT INC.

ROB J.S. GARVEY, ARCHITECT
MAA, AIBC, LEED AP

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(INCLUDING VISITOR AND ACCESSIBLE)

TOTAL PARKING PROVIDED: 122 STALLS
SURFACE PARKING: 44 STALLS
UNDERGROUND PARKING: 78 STALLS
SMALL CAR PARKING: 51 STALLS

BIKE PARKING (LONG TERM): 110 STALLS
BIKE PARKING (SHORT TERM): 12 STALLS

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

**PROPOSED SITE PLAN
AND MAIN FLOOR PLAN**

Project Number: 2004

04-30-2020	Rev Date 09-30-2020
Drawn By	J.P.M.
Designed By	J.P.M.
Checked By	

ESP-1.0

Scale 1:300

SCHEDULE A

This forms part of application
DP20-0147 DVP20-0148

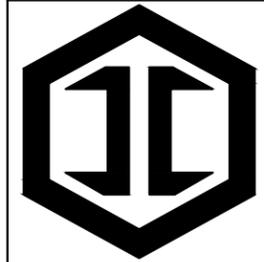
City of
Kelowna
DEVELOPMENT PLANNING

Planner Initials **KB**

PROPOSED SITE PLAN

SCALE 1:300





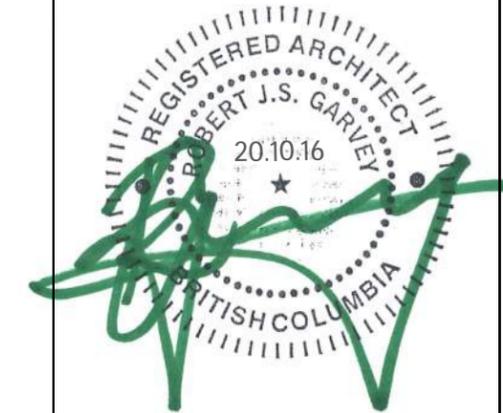
IRONCLAD
DEVELOPMENTS INC.

Consultant



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MAA, AIBC, LEED AP

201-57158 SYMINGTON RD 20E
SPRINGFIELD, MB R2J 4L6
T: 204.227.9274
E: RGARVEY@A77.CA



- T.O. ROOF MID-SEC. 172'-0"
- T.O. BEARING PLATE 162'-0"
- T.O. 6TH FLOOR 152'-0"
- T.O. 5TH FLOOR 142'-0"
- T.O. 4TH FLOOR 132'-0"
- T.O. 3RD FLOOR 122'-0"
- T.O. 2ND FLOOR 112'-0"
- T/O MAIN FLOOR 100'-0"



SCHEDULE B

This forms part of application
DP20-0147 DVP20-0148

Planner Initials **KB**

LEGEND

- (A) HARDIE PANEL (CAPPING)- STABLE GRAY
- (B) HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- (C) WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
- (D) CORRUGATED METAL SHEET- CHARCOAL GRAY
- (E) ROOF SHINGLES- MIDNIGHT BLACK
- (F) CONCRETE FINISH
- (G) 6" STRUCTURAL STEEL ROUND PIPE
- (H) HARDIE PANEL, SMOOTH, ARTIC WHITE COLOR MATCHED EZ TRIMS
- (J) HARDIE PANEL SIDING (SMOOTH)- IRON GRAY
- (K) CORRUGATED METAL SHEET- ARCTIC WHITE
- (L) ALUMINUM PICKET RAILING- GRAY
- (M) STONE VENEER- RIVER STONE
- (N) BLACK ALUMINUM STORE FRONTS WITH CLEAR GLASS
- (P) SIGNAGE- TO BE CONFIRMED
- (R) TRELLIS- TO BE CONFIRMED

PROPOSED EAST ELEVATION- BUILDING A
SCALE 1:250

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

PROPOSED ELEVATIONS

Project Number: 2004	
04-30-2020	Rev Date 09-30-2020
Drawn By	J.P.M./D.D.
Designed By	J.P.M.
Checked By	

ESP-4.0

T.O. ROOF MID-SEC. 172'-0"
 T.O. BEARING PLATE 162'-0"
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 T.O. 4TH FLOOR 132'-0"
 T.O. 3RD FLOOR 122'-0"
 T.O. 2ND FLOOR 112'-0"
 T/O MAIN FLOOR 100'-0"



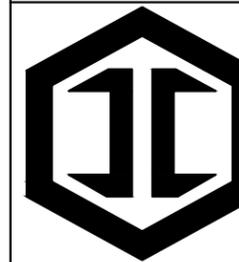
SCHEDULE B
 This forms part of application
 # DP20-0147 DVP20-0148
 City of Kelowna DEVELOPMENT PLANNING
 Planner Initials KB

PROPOSED WEST ELEVATION- BUILDING A
 SCALE 1:250

LEGEND

- Ⓐ HARDIE PANEL (CAPPING)- STABLE GRAY
- Ⓑ HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- Ⓒ WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
- Ⓓ CORRUGATED METAL SHEET- CHARCOAL GRAY
- Ⓔ ROOF SHINGLES- MIDNIGHT BLACK
- Ⓕ CONCRETE FINISH
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- Ⓛ ALUMINUM PICKET RAILING- GRAY
- Ⓜ STONE VENEER- RIVER STONE
- Ⓝ BLACK ALUMINUM STORE FRONTS WITH CLEAR GLASS
- Ⓟ SIGNAGE- TO BE CONFIRMED
- Ⓡ TRELLIS- TO BE CONFIRMED

Ironclad Developments Inc.



IRONCLAD DEVELOPMENTS INC.

Project Management
 General Contracting
 Design/ Build

101-57158
 Symington Rd.
 Springfield, MB
 R2J 4L6

PH:
 204-777-1972

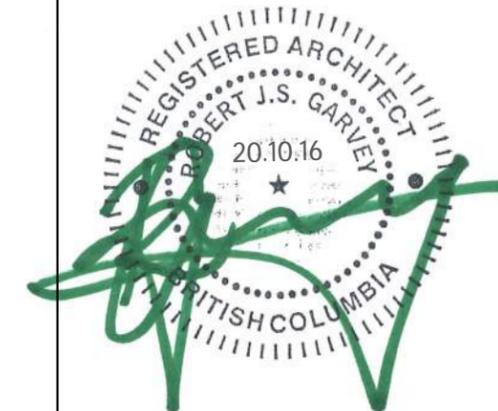
info@icdev.ca

Consultant



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0	DEVELOPMENT APPLICATION	20.10.16
REV.	DESCRIPTION OF WORK REVISED	DATE

230 Aurora Crescent;
 Kelowna BC;

PROPOSED ELEVATIONS

Project Number: 2004	Rev Date 09-30-2020
04-30-2020	

Drawn By J.P.M./D.D.

Designed By J.P.M.

Checked By

ESP-4.1

Scale 1:250



SCHEDULE B

This forms part of application
DP20-0147 DVP20-0148

Planner Initials **KB**

PROPOSED NORTH ELEVATION

SCALE 1:250

LEGEND

- Ⓐ HARDIE PANEL (CAPPING)- STABLE GRAY
- Ⓑ HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- Ⓒ WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
- Ⓓ CORRUGATED METAL SHEET- CHARCOAL GRAY
- Ⓔ HARDIE PANEL SIDING (SMOOTH)- IRON GRAY
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- Ⓖ CONCRETE FINISH
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- Ⓘ HARDIE PANEL, SMOOTH, ARTIC WHITE COLOR MATCHED EZ TRIMS
- ⓫ HARDIE PANEL SIDING (SMOOTH)- IRON GRAY
- ⓬ ALUMINUM PICKET RAILING- GRAY
- Ⓜ STONE VENEER- RIVER STONE
- Ⓝ BLACK ALUMINUM STORE FRONTS WITH CLEAR GLASS
- Ⓟ SIGNAGE- TO BE CONFIRMED
- Ⓡ TRELLIS- TO BE CONFIRMED

Ironclad Developments Inc.

Project Management
General Contracting
Design/ Build

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Symington Rd.
Springfield, MB.
R2J 4L6

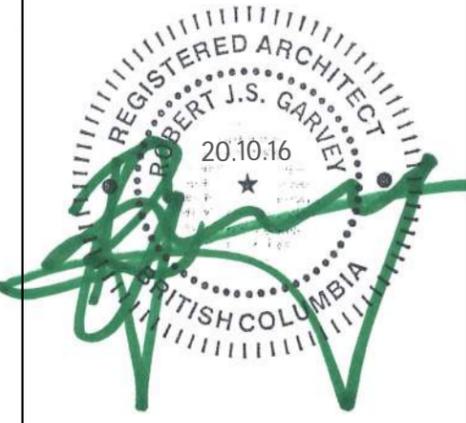
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REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

PROPOSED ELEVATIONS

Project Number: 2004

04-30-2020	Rev Date 09-30-2020
------------	---------------------

Drawn By J.P.M./D.D.
Designed By J.P.M.
Checked By

ESP-4.2

Scale 1:250

T.O. ROOF MID-SEC. 172'-0"
 T.O. BEARING PLATE 162'-0"
 T.O. 6TH FLOOR 152'-0"
 T.O. 5TH FLOOR 142'-0"
 T.O. 4TH FLOOR 132'-0"
 T.O. 3RD FLOOR 122'-0"
 T.O. 2ND FLOOR 112'-0"
 T/O MAIN FLOOR 100'-0"



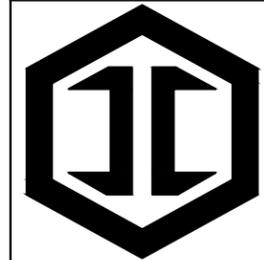
SCHEDULE B
 This forms part of application
 # DP20-0147 DVP20-0148
 City of Kelowna
 DEVELOPMENT PLANNING
 Planner Initials KB

PROPOSED WEST ELEVATION- BUILDING B
 SCALE 1:250

LEGEND

- (A) HARDIE PANEL (CAPPING)- STABLE GRAY
- (B) HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- (C) WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
- (D) CORRUGATED METAL SHEET- CHARCOAL GRAY
- (E) ROOF SHINGLES- MIDNIGHT BLACK
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- (L) ALUMINUM PICKET RAILING- GRAY
- (M) STONE VENEER- RIVER STONE
- (N) BLACK ALUMINUM STORE FRONTS WITH CLEAR GLASS
- (P) SIGNAGE- TO BE CONFIRMED
- (R) TRELLIS- TO BE CONFIRMED

Ironclad Developments Inc.



Project Management
 General Contracting
 Design/ Build

101-57158
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 Springfield, MB.
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PH:
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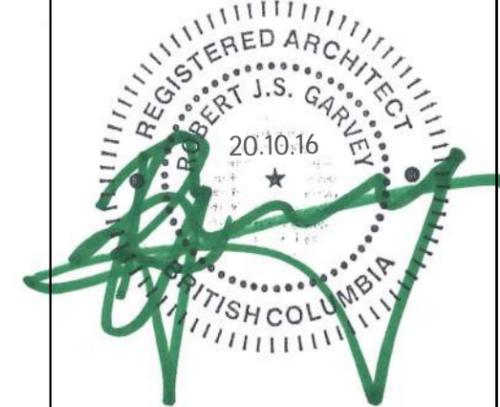
IRONCLAD DEVELOPMENTS INC.

Consultant



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REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
 Kelowna BC;

PROPOSED ELEVATIONS

Project Number: 2004	Rev Date 09-30-2020
04-30-2020	

Drawn By J.P.M./D.D.

Designed By J.P.M.

Checked By

ESP-4.3

Scale 1:250



SCHEDULE B
 This forms part of application
 # DP20-0147 DVP20-0148
 City of Kelowna
 DEVELOPMENT PLANNING
 Planner Initials **KB**

PROPOSED EAST ELEVATION- BUILDING B
 SCALE 1:250

LEGEND

- Ⓐ HARDIE PANEL (CAPPING)- STABLE GRAY
- Ⓑ HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- Ⓒ WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
- Ⓓ CORRUGATED METAL SHEET- CHARCOAL GRAY
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Ironclad Developments Inc.

Project Management
 General Contracting
 Design/ Build

101-57158
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 Springfield, MB.
 R2J 4L6

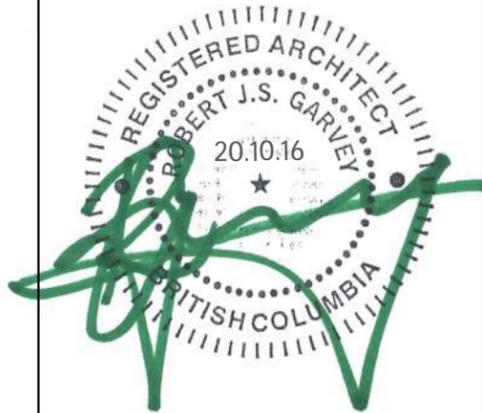
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REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
 Kelowna BC;

PROPOSED ELEVATIONS

Project Number: 2004

04-30-2020	Rev Date 09-30-2020
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 Designed By J.P.M.
 Checked By

ESP-4.4



SCHEDULE B

This forms part of application
 # DP20-0147 DVP20-0148

Planner Initials **KB**

City of Kelowna
DEVELOPMENT PLANNING

PROPOSED SOUTH ELEVATION

SCALE 1:250

LEGEND

- Ⓐ HARDIE PANEL (CAPPING)- STABLE GRAY
- Ⓑ HARDIE STAINED LAP SIDING-CEDERSTONE 2.0
- Ⓒ WHITE PVC FRAMED WINDOWS WITH CLEAR GLASS
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- Ⓟ SIGNAGE- TO BE CONFIRMED
- Ⓠ TRELLIS- TO BE CONFIRMED

Ironclad Developments Inc.

Project Management
General Contracting
Design/ Build

101-57158
Symington Rd.
Springfield, MB
R2J 4L6

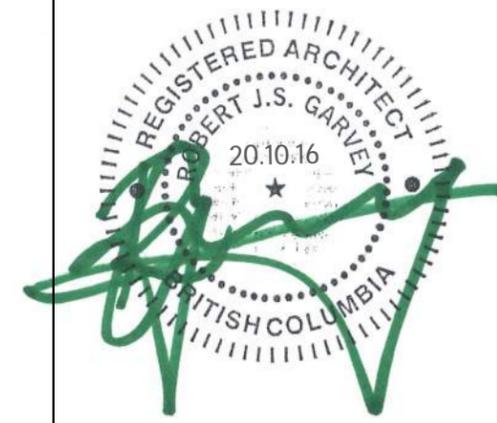
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REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

PROPOSED ELEVATIONS

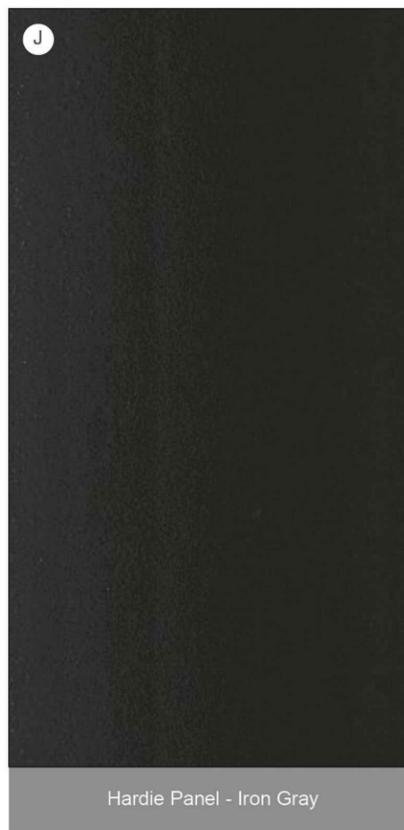
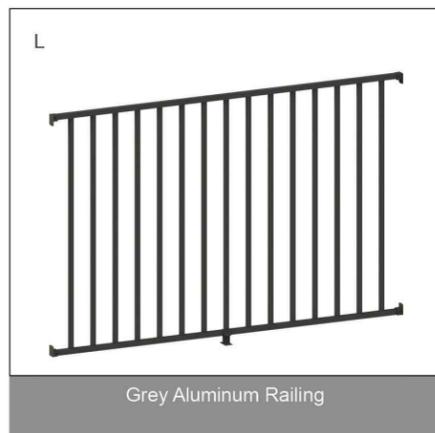
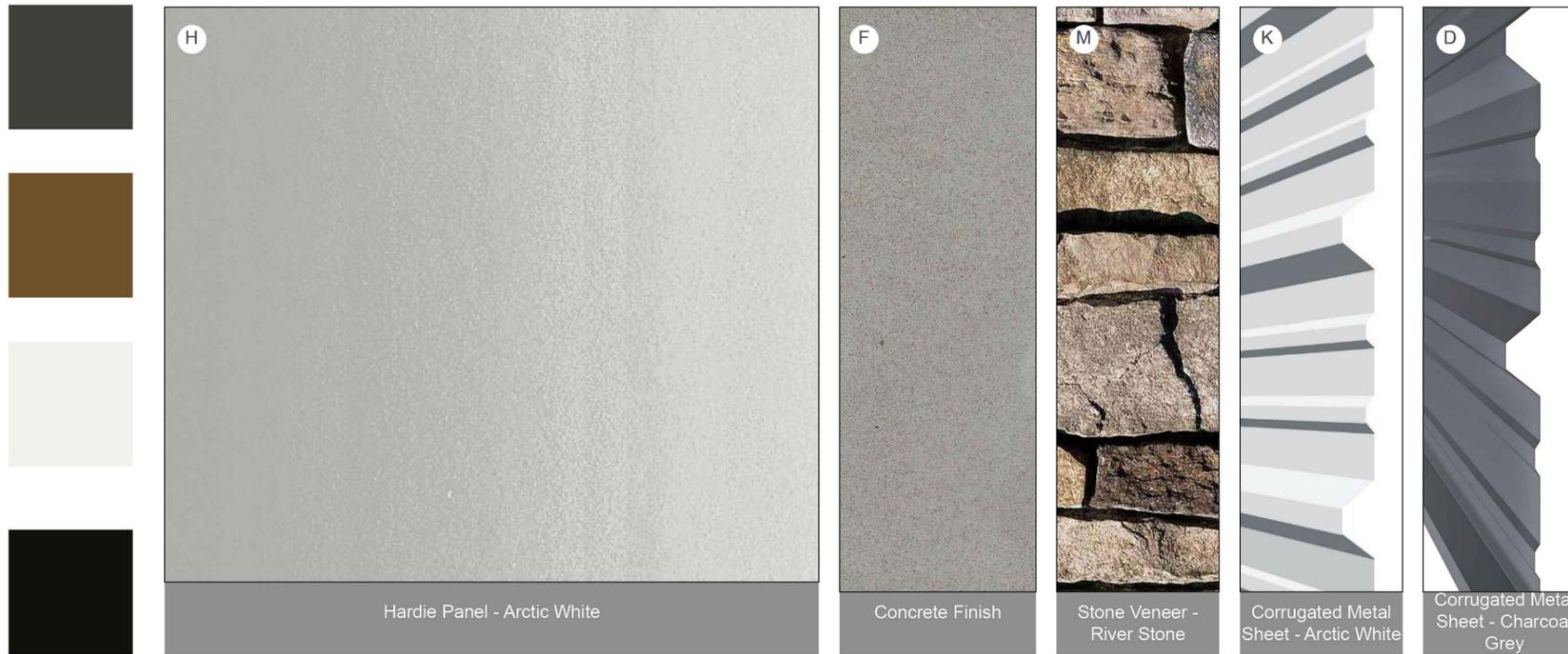
Project Number: 2004

04-30-2020	Rev Date 09-30-2020
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Drawn By J.P.M./D.D.
 Designed By J.P.M.
 Checked By

ESP-4.5

Scale 1:250



SCHEDULE B

This forms part of application
DP20-0147 DVP20-0148



City of
Kelowna
DEVELOPMENT PLANNING

Planner Initials **KB**



IRONCLAD
DEVELOPMENTS INC.

101-57158 Symington Road
Springfield, MB R2J 4L6
Ph: 204-777-1972
info@icdev.ca

Consultant

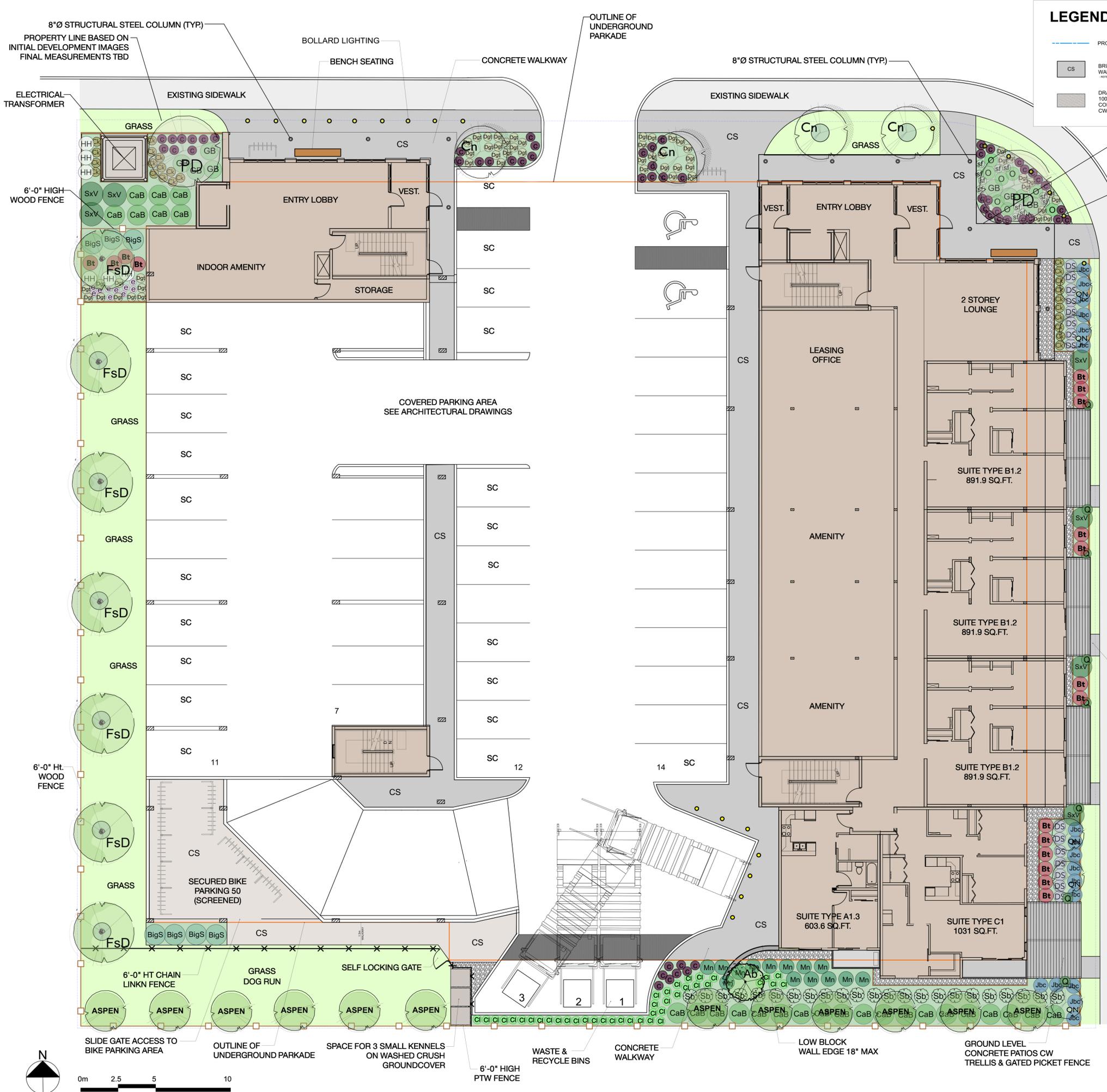


ROB GARVEY
ARCHITECTURE 77 INC.
201-57158 SYMINGTON RD 20E
SPRINGFIELD, MB R2J 4L6
T: 204.227.9274
E: RGARVEY@A77.CA

Project Number: 2004
Designed By: J.P.M.
Drawn By: V.K./D.D..
Checked By:
Date: 30th Apr. 2020
Rev.Date: 9th Dec. 2020

230 Aurora Crescent
Kelowna, BC;

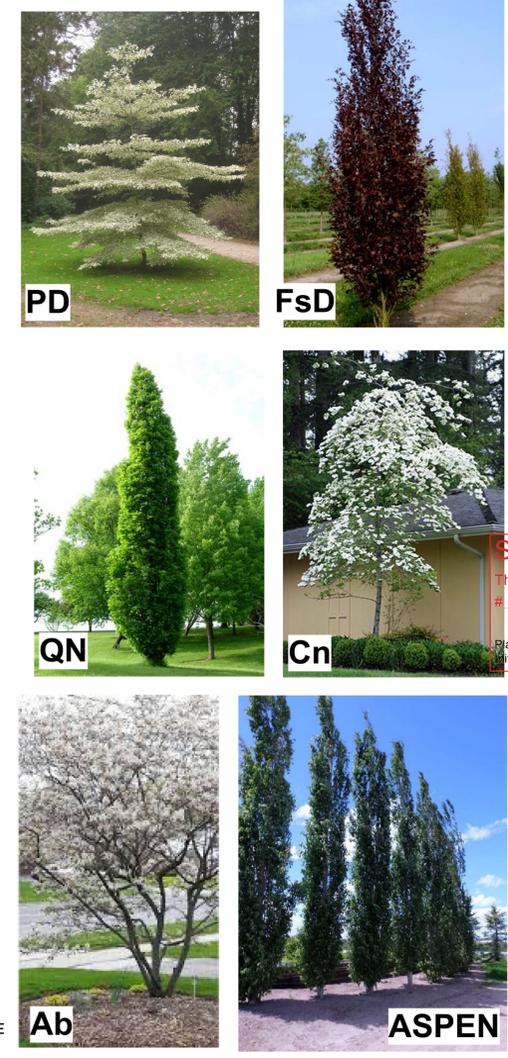
BUILDING MATERIALS
SCALE: N.T.S.



LEGEND

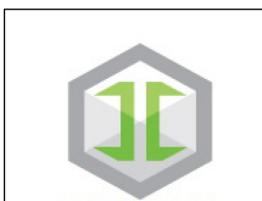
- PROPERTY LINES
- BRUSH FINISH CONCRETE WALKWAYS
- DRAIN ROCK 100 - 150 MM DEPTH 1" - 3" WASHED COBBLE ROCK ON FILTER FABRIC CW FT WOOD EDGERS.
- SEEDED LAWN ON 150MM DEPTH APPROVED GROWING MEDIUM
- PLANTING BED CW 60 MM DEPTH FIRE SMART WASHED ROCK GROUNDCOVER ON APPROVED FILTER FABRIC ON APPROVED GROWING MEDIUM. 450 MM MIN DEPTH FOR SHRUBS & 700 MM MIN FOR TREES
- PT WOOD PRIVACY FENCE 6' H. STAIN TO COMPLEMENT BLD
- CHAIN LINK DOG RUN FENCE 6' H. CW SELF LOCKING MAN GATE
- FEATURE LIGHT BOLLARD
- BENCH WITH BACK REST
- CORA BIKE RACK - COLOUR TBD

PROPOSED TREES



PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	COUNT	SIZE
Trees				
Ab	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	1	50mm Cal.
Cn	Cornus nuttallii x floridus 'Eddies White Wonder'	Eddies White Wonder Dogwood	4	60mm Cal.
PD	Cornus alternifolia	Pagoda Dogwood	2	50mm Cal.
FsD	Fagus sylvatica 'Dawycykii'	Fastigiate Beech	7	60mm Cal.
QN	Quercus x warei Nadler	Kindrid Spirit Oak	5	60mm Cal.
ASPEN	Populus tremula 'Erecta'	Swedish Aspen	12	60mm Cal.
Shrubs				
BigS	Artemisia tridentata	Big Sagebrush	7	#2pot
Bt	Berberis thunbergii 'Monbomb'	Cherry Bomb Barberry	17	#2pot
Cab	Cornus alba 'Bailhlo'	Ivory Halo Dogwood	26	#2pot
Jbc	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	17	#2pot
Mn	Mahonia nervosa	Low Oregon Grape	14	#2pot
HH	Rosa rugosa 'Henry Hudson'	White Flowering Shrub Rose	6	#2pot
SxV	Spirea x vanhouttei	Bridalweath Spirea	7	#2pot
Sb	Symphoricarpos albus	Snowberry	23	#2pot
Ornamental Grasses & Groundcover				
Ck	Calamagrostis x acutifolia 'Karl Foerster'	Feather Reed Grass	24	#1pot
Dgt	Deschampsia cespitosa	Tufted Hair Grass	51	#1pot
Ci	Chasmanthium latifolium	Northern Sea Oats	40	#1pot
Q	Parthenocissus quinquefolia	Virginia Creeper	8	#10pot
Perennials & Ferns				
GB	Aruncosa dioicus	Goatsbeard	7	#1pot
e	Echinacea purpurea	Purple Coneflower	10	#1pot
c	Heuchera micrantha 'Palace Purple'	Purple Leaved Coral Bells	53	#1pot
O	Matteuccia struthiopteris	Ostrich Fern	9	#1pot
sf	Polystichum munitum	Sword Fern	11	#1pot
DS	Perovskia atriplicifolia 'Little Spire'	Dwarf Russian Sage	15	#1pot



IRONCLAD DEVELOPMENTS INC.

Springfield Office
101-57158 Symington Rd.
Springfield, MB.
R2J 4L6

P: 204-777-1972

Date	Revisions	By
5 30 2020	Preliminary Draft For Review 1	LS
6 02 2020	Planting Plan For Review	LS
6 08 2020	For DP Submission	LS
7 14 2020	For Re Submission	LS



LAZZARIN SVISDAHL LANDSCAPE ARCHITECTS

203-1300 1st Avenue, Prince George B.C. V2L 2Y3
250-563-6158 www.lsla-landarch.com

SCHEDULE C

This forms part of application # DP20-0147 DVP20-0148
City of Kelowna
Planner Initials: KB

Project
IRONCLAD DEVELOPMENTS INC

230 Aurora Cr.
KELOWNA, BC

Sheet Title
Landscape Plan

Date
May 12, 2020

Scale
1:125 METERS

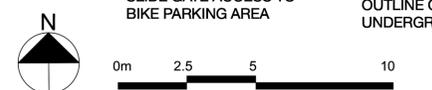
Drawn By
LS/SD

Project No.

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Drawing No.

L 1





DATE	ISSUE
SEPT. 04, 2020	ISSUED FOR DP
	DESIGN
	1
	2
	3
	4
	5
	6



WESTURBAN DEVELOPMENTS
230 AURORA CRES.
 KELOWNA, B.C.
IRRIGATION HYDROZONE PLAN

PROJECT: 2020-072
 SCALE: 1:125
 DRAWN BY: DEP
 DRAWING:

IR-01



HYDROZONE LEGEND

- WATERED MOWN LAWN - Fixed Pop-Up Spray Heads with Precision Spray Nozzles
- MODERATE WATER USE PLANTING - High Efficiency Sub-Surface Drip Emitters
- WASHED COBBLE ROCK ON FILTER FABRIC

HYDROZONE AREAS

1. PROPERTY AREA = 4,177 square meters
2. BUILDING AREA = 981 square meters
3. PAVEMENT/OTHER AREA = 2,508 square meters
4. WASHED ROCK AREA = 64 square meters
5. SHRUB/PLANTING AREA = 270 square meters
6. MOWN LAWN/TURF AREA = 418 square meters

HYDROZONE NOTES

DESIGN INTENT:
 THIS DRAWING ILLUSTRATES THE APPROXIMATE DESIGNED DIVISION OF THE LANDSCAPE INTO AREAS OF DIFFERENT WATERING REQUIREMENTS. IT IS NOT INTENDED TO BE USED FOR CONSTRUCTION.

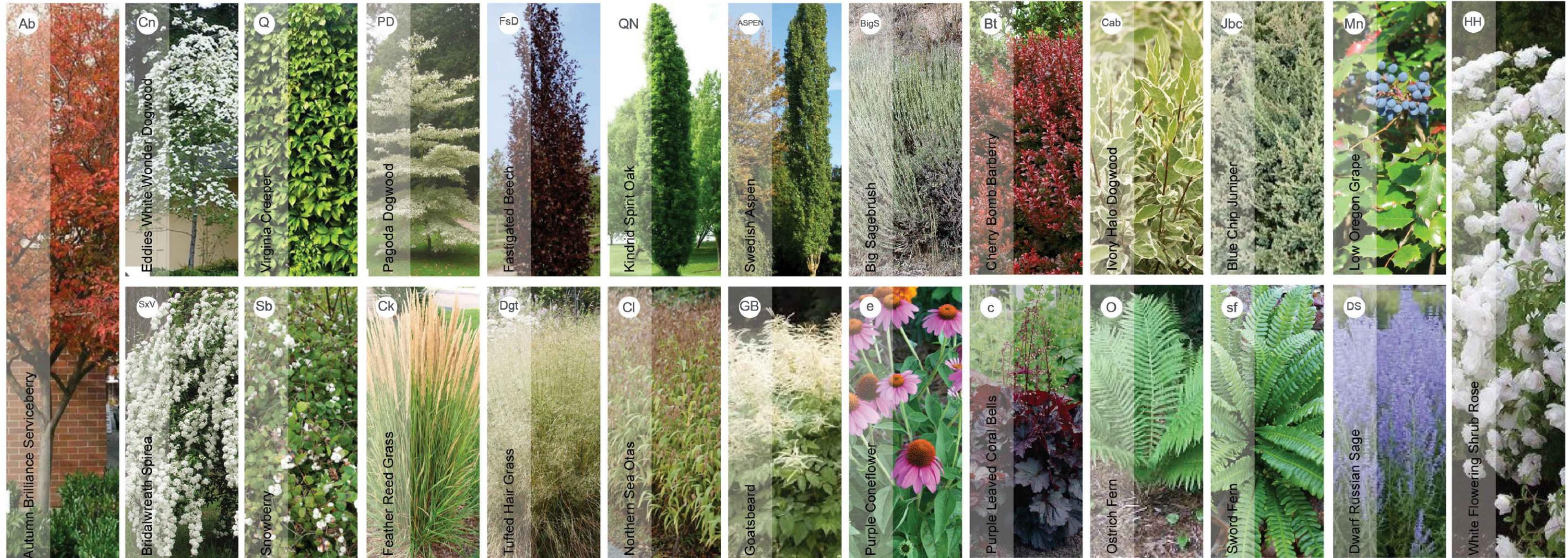
GROWING MEDIUM:
 ENSURE THAT ADEQUATE GROWING MEDIUM TYPE AND DEPTHS ARE INSTALLED. IT IS IMPORTANT IN ORDER TO STORE AND RETAIN WATER AND NUTRIENTS FOR PLANT SURVIVAL AND GROWTH. SEE ATTACHED WATER CONSERVATION CALCULATION SPREADSHEET.

ESTABLISHMENT WATER USE:
 ALL IRRIGATION ESTABLISHMENT AREA(S) SHALL BE TEMPORARY AND FOR ESTABLISHMENT AND DROUGHT CONDITIONS ONLY.

LANDSCAPE WATER BUDGET (WB) = 602 cu.m./yr.
ESTIMATED LANDSCAPE WATER USE (WU) = 598 cu.m./yr.
WATER BUDGET IS UNDER BY 4 cu.m./yr.



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SCHEDULE C
 This forms part of application
 # DP20-0147 DVP20-0148
 Planner Initials **KB**



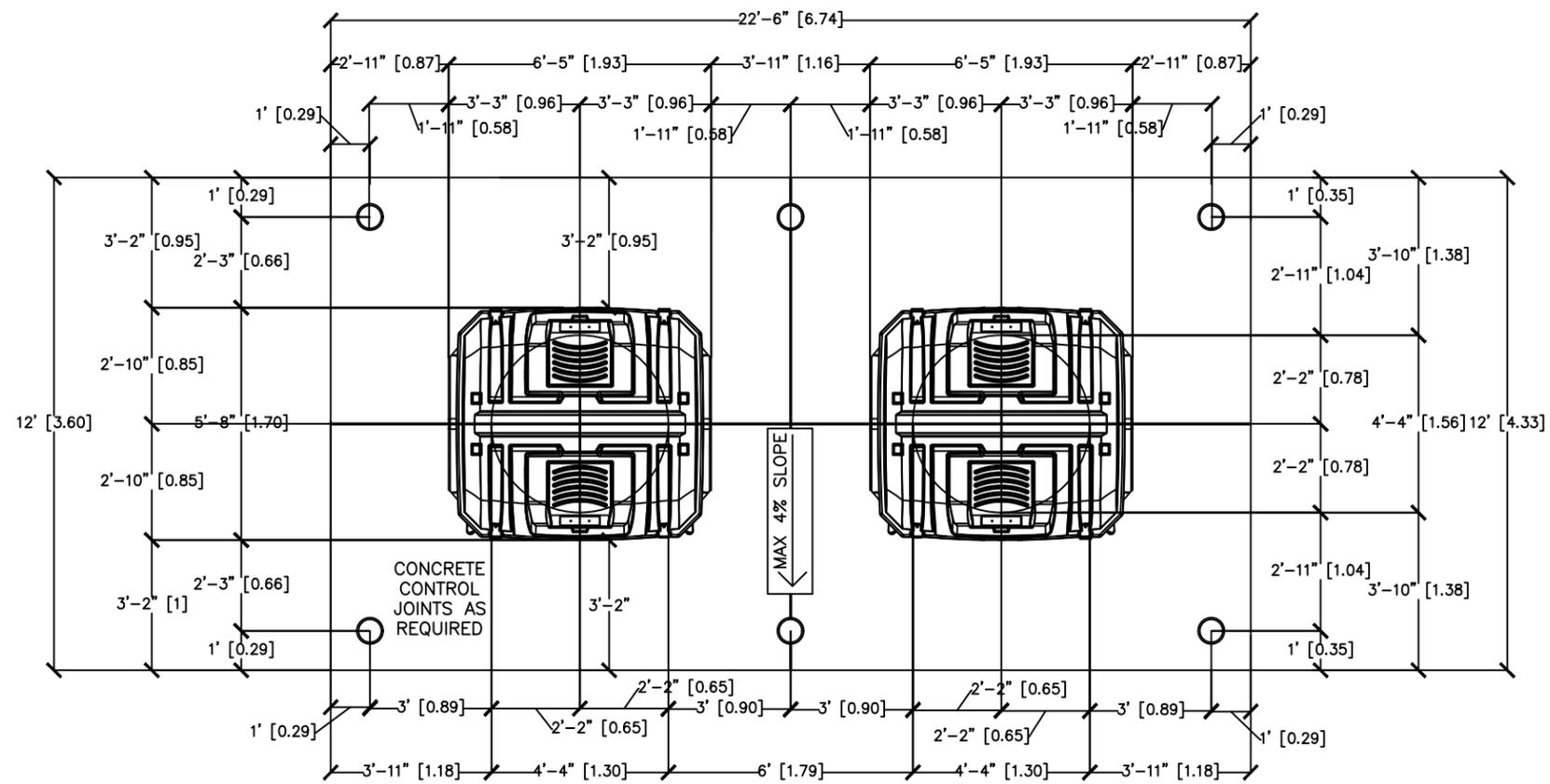

IRONCLAD DEVELOPMENTS INC.
 101-57158 Symington Road
 Springfield, MB R2J 4L6
 Ph: 204-777-1972
 info@icdev.ca

Consultant

ROB GARVEY ARCHITECTURE 77 INC.
 201-57158 SYMINGTON RD 20E
 SPRINGFIELD, MB R2J 4L6
 T: 204.227.9274
 E: RGARVEY@A77.CA

Project Number: 2004
 Designed By: J.P.M.
 Drawn By: V.K./D.D..
 Checked By:
 Date: 30th Apr. 2020
 Rev.Date: 9th Dec. 2020

230 Aurora Crescent
 Kelowna, BC;
LANDSCAPING MATERIAL
 SCALE: N.T.S.



EARTH BIN- FLOOR PLAN DETAIL

SCALE 1:30

SCHEDULE C

This forms part of application # DP20-0147 DVP20-0148

Planner Initials KB

City of Kelowna DEVELOPMENT PLANNING

Ironclad Developments Inc.

Project Management
General Contracting
Design/ Build

101-57158
Symington Rd.
Springfield, MB.
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PH:
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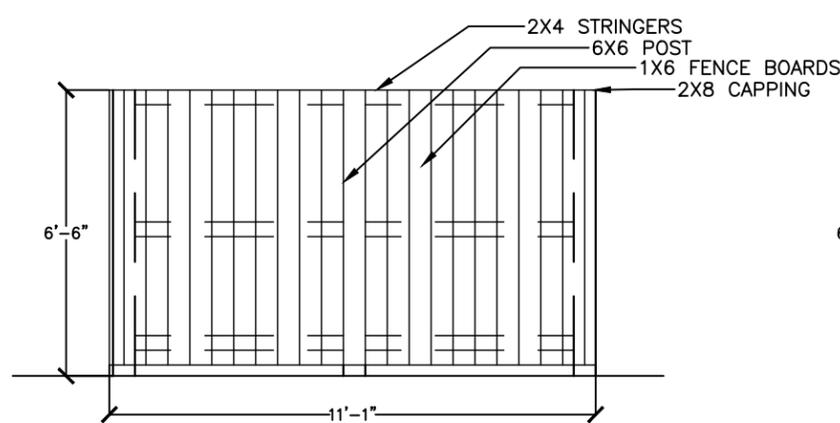
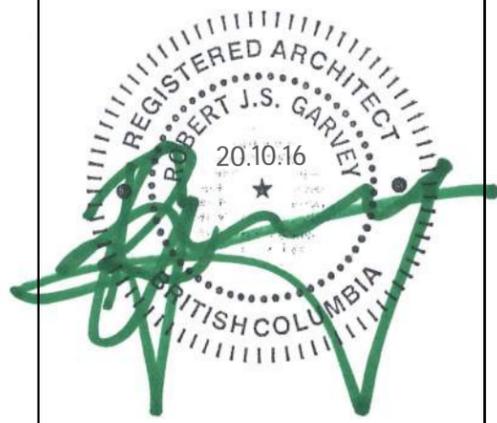
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ROB J.S. GARVEY, ARCHITECT
MAA, AIBC, LEED AP

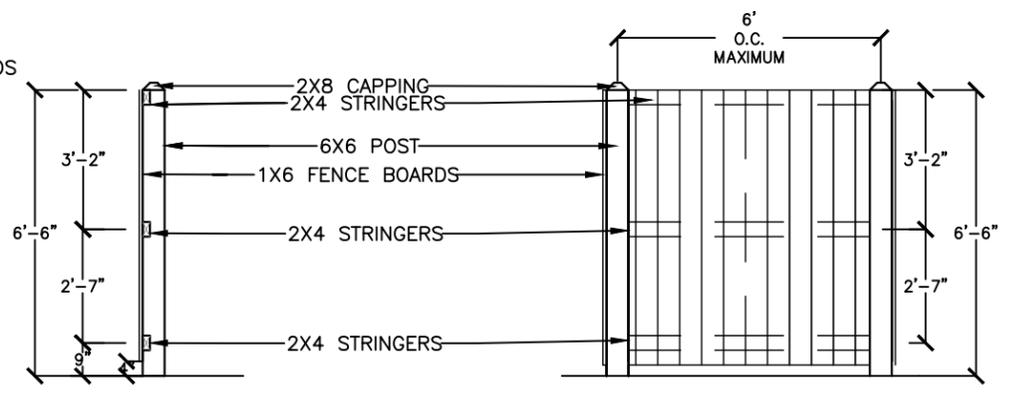
201-57158 SYMINGTON RD 20E
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E: RGARVEY@A77.CA

MAX SLOPE OF CONCRETE PAD IS 4%. 4% MAX SLOPE OF CONCRETE PAD FROM LEFT TO RIGHT TO SUPPORT TRUCK TIRES. CONTACT FACTORY SHOULD SLOPE BE MORE THAN 4%



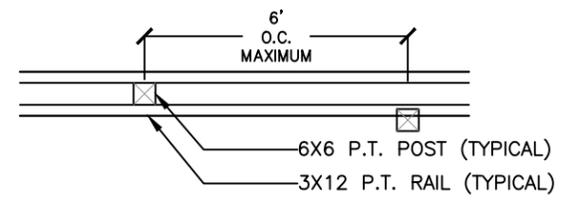
FENCE ELEVATION

SCALE 1:50



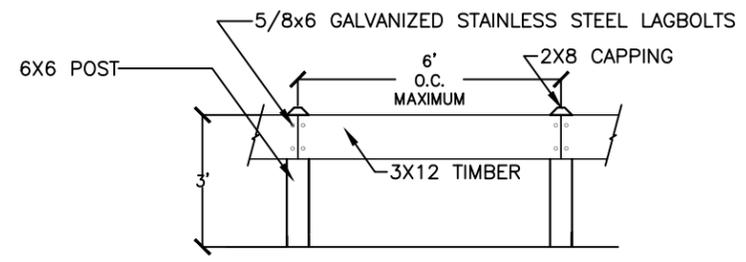
FENCE SECTION DETAIL

SCALE 1:50



FENCE DETAIL-ABOVE

SCALE 1:50



FENCE DETAIL-FRONT

SCALE 1:50



FENCE DETAIL-SIDE

SCALE 1:50

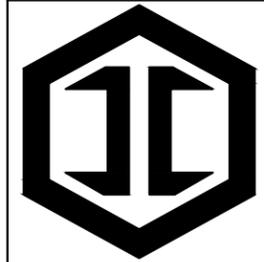
230 Aurora Crescent;
Kelowna BC;

Earth Bins/Fence Details

Project Number: 2004		
04-30-2020	Rev Date	09-30-2020
Drawn By	J.P.M./D.D.	
Designed By	J.P.M.	
Checked By		

ESP-6.0

Scale N.T.S.

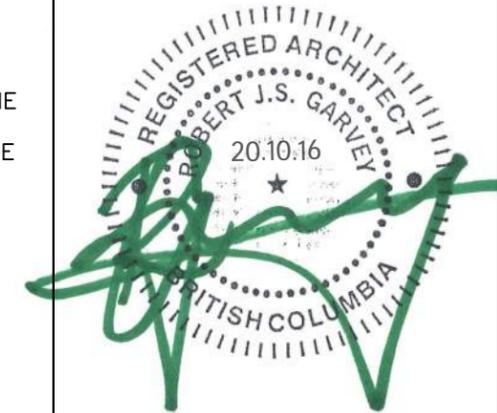


Consultant



ROB J.S. GARVEY, ARCHITECT
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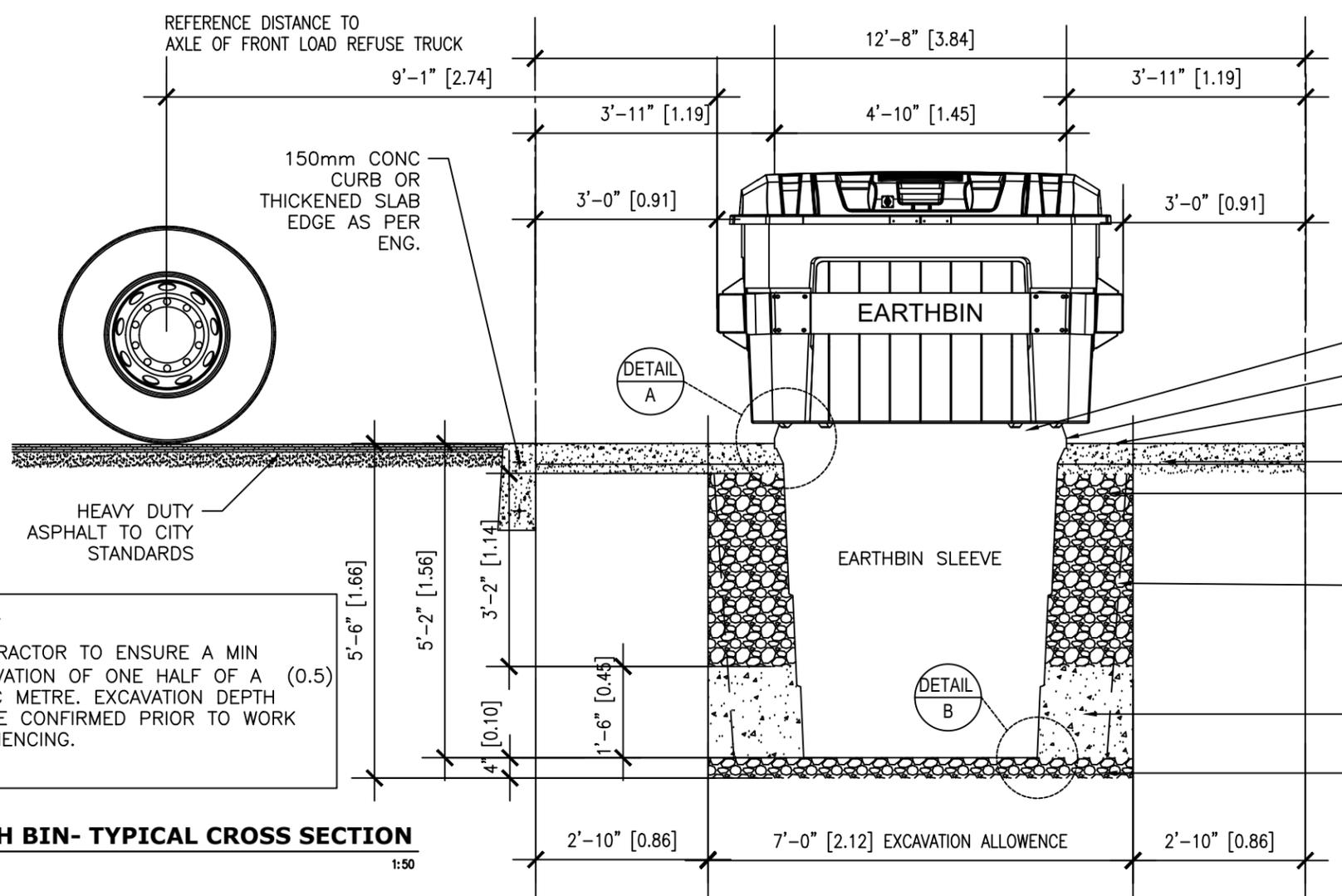
201-57158 SYMINGTON RD 20E
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NOTE:
CONTRACTOR TO ENSURE ADEQUATE SPACE TO PHYSICAL BARRIER OR OBSTRUCTION TO ALLOW BIN TO BE PICKED UP.

LINE OF PHYSICAL BARRIER OR OBSTRUCTION (REAR AND SIDE)

- GROUND SLEEVE
- EXPANSION JOINT
- CONCRETE PAD 2-4% GRADED SLOPE AWAY FROM SLEEVE
- HEAVY DUTY CONCRETE PAD
- 3/4" GRAVEL BACK FILL. SEE INSTALLATION GUIDE
- LANDSCAPE OR GEO-TEXTILE FABRIC TO LINE PIT TO PREVENT CONTAMINANTS FROM ENTERING BACKFILL. SEE INSTALLATION GUIDE
- CONCRETE
- 3/4" GRAVEL BACK FILL OR COMPACTED SAND BASE. SEE INSTALLATION GUIDE



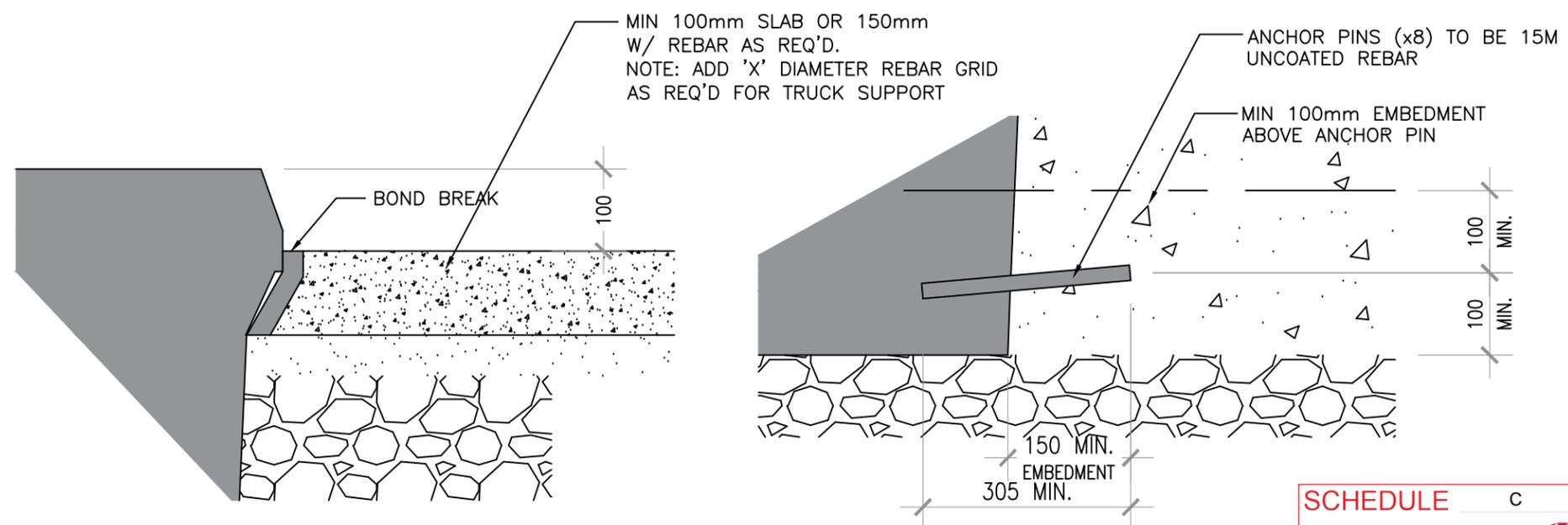
NOTE:
CONTRACTOR TO ENSURE A MIN EXCAVATION OF ONE HALF OF A (0.5) CUBIC METRE. EXCAVATION DEPTH TO BE CONFIRMED PRIOR TO WORK COMMENCING.

EARTH BIN- TYPICAL CROSS SECTION
SCALE 1:50

ANCHOR PIN NOTE:
PLACE ANCHOR PINS (X8) IN HOLES AROUND GROUND SLEEVE PRIOR TO POURING CONCRETE. ENSURE THERE IS A MIN 150mm EMBEDMENT FOR ANCHOR PINS. ANCHOR PINS ARE TO HAVE A MIN 100mm OF COVERAGE ABOVE AND BELOW.

NOTE:
THE USE OF SHIMS TO SET SLEEVE PRIOR TO POURING CONCRETE IS ALLOWED.

NOTE:
DRAWINGS AND SPECS COPIED FROM WEB SITE EARTH-BIN.



EARTH BIN- SLEEVE DETAIL A
SCALE 1:20

EARTH BIN- SLEEVE DETAIL B
SCALE 1:20

SCHEDULE C
This forms part of application # DP20-0147 DVP20-0148
City of Kelowna DEVELOPMENT PLANNING
Planner Initials KB

REV.	DESCRIPTION OF WORK REVISED	DATE
0	DEVELOPMENT APPLICATION	20.10.16

230 Aurora Crescent;
Kelowna BC;

Earth Bins/Fence Details

Project Number: 2004
04-30-2020 Rev Date 09-30-2020
Drawn By J.P.M./D.D.
Designed By J.P.M.
Checked By

ESP-6.1