City of Kelowna Regular Council Meeting AGENDA



Pages

Monday, September 9, 2024 1:30 pm Council Chamber City Hall, 1435 Water Street

1. Call to Order

I would like to acknowledge that we are gathered today on the traditional, ancestral, unceded territory of the syilx/Okanagan people.

This Meeting is open to the public and all representations to Council form part of the public record. A live audio-video feed is being broadcast and recorded on kelowna.ca.

2.	Confirmation of Minutes	5 - 8
	PM Meeting - August 26, 2024	

3. Reports

3.1 RCMP - Public Q1 and Q2 Report 9 - 24

To present Council with an update on mid-year service, public safety, and crime data.

4. Development Application Reports & Related Bylaws

4.1	Cactus Rd 1115 - Z24-0015 (BL12696) - 1417489 B.C. Ltd., Inc.No. BC1417489	25 - 41
	To rezone the subject property from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone to facilitate a townhouse development.	
4.2	Coronation Ave 627-659 - Z23-0070 (BL12697) - Coronation Holdings Ltd., Inc.No. BC1299864	42 - 64
	To rezone the subject properties from the UC1 – Downtown Urban Centre zone to the	

UC1r – Downtown Urban Centre Rental Only zone to facilitate a rental apartment housing development.

4.3 Drysdale Blvd 305 - Z24-0026 (BL12698) - Will McKay and Co. Ltd., Inc.No. BC0306923

To rezone the subject property from the MF₃ – Apartment Housing zone to the VC1r – Village Centre Rental Only zone to facilitate a rental apartment housing development.

4.4 Pandosy St 2124 - Z24-0027 (BL12699) - Necessary Homes Ltd., Inc.No. BC0850280 88 - 112

To rezone the subject property from the MF₄ – Transit Oriented Areas zone to the MF₄r – Transit Oriented Areas Rental Only zone to facilitate a change of uses to long-term residential rental only, while retaining and protecting the existing heritage asset known as Cadder House.

4.5 Richter St 1080-1090 - DVP24-0087 - LL23-0007 - Bromaxx Property Group Ltd., 113 - 134 Inc.No. BC1021305

To issue a Development Variance Permit to vary required parking to 0 (zero) stalls for a maximum of 30 individual single day events per calendar year to facilitate additional events on site with a maximum event capacity of 750-persons. To seek Council's support for a permanent change to the liquor licence to add a special event area endorsement, increase the event capacity and to change the opening time from 12:00 PM to 9:00 AM seven days a week.

4.6	Belaire Ave 1310, 1320 - BL12652 (Z23-0031) - 432623 B.C. Limited, Inc.No. BC1007009	135 - 135
	To adopt Bylaw No. 12652 in order to rezone the subject properties from the UC2 – Capri-Landmark Urban Centre zone to the UC2r – Capri-Landmark Urban Centre Rental Only zone.	
4.7	Belaire Ave 1310 and 1320 - DP23-0095 - 432623 B.C. Limited, Inc. No. BC1007009	136 - 183
	To issue a Development Permit for the form and character of rental apartment housing.	
4.8	Lanfranco Rd 1007 - BL12669 (Z24-0008) - 1445833 B.C. Ltd, Inc.No. BC1445833	184 - 184
	To adopt Bylaw No. 12669 in order to rezone the subject property from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone.	

4.9 Lanfranco Rd 1007, DP24-0057 - 1445833 B.C. Ltd, Inc. No. BC1445833 185 - 246

To issue a Development Permit for the form and character of a townhouse development.

5. Bylaws for Adoption (Development Related)

65 - 87

5.1 Updates to Various Sections - BL12682 (TA24-0009) - City of Kelowna

To adopt Bylaw No. 12682 in order to amend the following sections of Zoning Bylaw No. 12375: Section 5 - Definitions & Interpretations, Section 5 - Definitions - Short-Term Rental Accommodation, Section 6 – General Development Regulations, Section 7 – Site Layout, Section 8 – Parking & Loading, Section 10 – Agriculture & Rural Residential Zones, Section 13 – Multi-Dwelling Zones, and Section 14 – Core Area & Other Zones.

5.2	Swainson Rd 1785 - BL12693 (Z24-0012) - G.P. Sandher Holdings Ltd., Inc.No. BC1392723	259 - 260
	To adopt Bylaw No. 12693 in order to rezone a portion of the subject property from the A1 – Agriculture zone to the RU1 – Large Lot Housing zone.	
Non-I	Development Reports & Related Bylaws	
6.1	Rental Housing Grant Program - Grant Authorization 2024 2025	261 - 271
	To consider the approval of six rental housing grants as part of the enhanced Rental Housing Grants Program for 2024/2025.	
6.2	Transit Operations and Maintenance Facilities Project Updates	272 - 287
	To update Council on the status of the Transit Operations and Maintenance Facilities projects.	
6.3	10-Year Capital Plan 2025-2034	288 - 334
	To review and adopt the 10-Year Capital Plan 2025-2034.	
6.4	Amendment to Kelowna Vernon Biosolids Management Agreement	335 - 368
	To amend the existing Regional Biosolids Composting Facility Joint Operating Agreement between Kelowna and Vernon.	
6.5	City Signature Sign - Milestone Check-In	369 - 383
	To provide a milestone check-in and update City Signature Sign Project.	
6.6	North Entry Monument - Recommended Concept	384 - 411
	To present the recommended north entry monument concept to City Council for approval and advancement into detail design and implementation.	

7. Bylaws for Adoption (Non-Development Related)

6.

247 - 258

7.1BL12694 Amendment No. 28 to Subdivision, Development and Servicing Bylaw No.412 - 68779007900

To give adopt Bylaw No. 12694.

8. Mayor and Councillor Items

9. Termination



City of Kelowna Regular Council Meeting _{Minutes}

Date: Mor Location: Cou

Monday, August 26, 2024 Council Chamber City Hall, 1435 Water Street

Councillor Gord Lovegrove

Members Present

Members Participating Remotely

Staff Present

City Manager, Doug Gilchrist; City Clerk, Laura Bentley; General Manager, Corporate Services, Joe Sass*; Business Systems Analyst, Naomi Pears*; Business Systems Analyst, Kevin Stehle*; Business Systems Analyst, Elise Bauer*; Divisional Director, Planning, Climate Action & Development Services, Ryan Smith*; Development Planning Department Manager, Nola Kilmartin*; Asset Management & Capital Planning Manager, Joel Shaw*; Planner Specialist, Tracy Guidi*; Urban Forestry Supervisor, Todd Cashin*; Planner Specialist, Jennifer Miles*; Long Range Planning Manager, Robert Miles*; Planner, Alissa Cook

Mayor Tom Dyas, Councillors Ron Cannan, Maxine DeHart*, Charlie Hodge,

Mohini Singh, Luke Stack, Rick Webber and Loyal Wooldridge

Staff Participating Remotely

Legislative Coordinator (Confidential), Arlene McClelland

Guest Participating Remotely Amelia Needoba, Diamon Head Consulting*

(* Denotes partial attendance)

1. Call to Order

Mayor Dyas called the meeting to order at 1:32 p.m.

I would like to acknowledge that we are gathered today on the traditional, ancestral, unceded territory of the syilx/Okanagan people.

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2. Confirmation of Minutes

Moved By Councillor Hodge/Seconded By Councillor Wooldridge

THAT the Minutes of the Regular Meetings of August 12, 2024 be confirmed as circulated.

Carried

3. Reports

3.1 Special Achievement in GIS Award

Staff:

 Commented on the receipt of the 2024 Esri Special Achievement in Geographic Information System Award.

4. Development Application Reports & Related Bylaws

4.1 Rezoning Bylaws Supplemental Report to Council

City Clerk:

- Commented on notice of first reading and no correspondence received.

4.2 Rezoning Applications

- 4.2.1 St. Amand Rd 3150 3210 3220 KLO Rd 1559 BL12690 (Z24-0002) Acacia Garden Properties Development Corp., Inc. No. BC1440521
- 4.2.2 St. Paul St 1428 BL12691 (Z24-0025) City of Kelowna
- 4.2.3 Badke Rd 765 BL12692 (Z24-0021) Kerr Properties 002 Ltd., Inc. No. BC0813930
- 4.2.4 Swainson Rd 1785 BL12693 (Z24-0012) G.P. Sandher Holdings Ltd., Inc. No. BC1392723

Moved By Councillor Singh/Seconded By Councillor Wooldridge

THAT Bylaw Nos. 12690, 12691, 12692 and 12693 each be read a first, second and third time.

Carried

4.3 Rezoning Applications

4.3.1 Jim Bailey Cr 8860 - BL12689 (Z24-0020) - 0983997 B.C. Ltd., Inc. No. BC0983997

Moved By Councillor Singh/Seconded By Councillor Wooldridge

THAT Bylaw No. 12589 be read a first, second and third time and adopted.

Carried

4.4 Solly Ct 865 - DP24-0020 - 865 Solly Ct LTD., INC., NO. BC1389060

Councillor DeHart declared a conflict of interest as their employer is involved in this application and left the meeting at 1:39 p.m.

Staff:

 Displayed a PowerPoint Presentation summarizing the application and responded to questions from Council.

Moved By Councillor Stack/Seconded By Councillor Hodge

THAT Council authorizes the issuance of Development Permit No. DP24-0020 for Lot 2 Section 26 Township 26 ODYD Plan 20566, located at 865 Solly Ct, Kelowna, BC subject to the following:

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

AND THAT the applicant be required to complete the above noted conditions of Council's approval of the Development Permit Application in order for the permit to be issued;

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

Carried

Councillor DeHart returned to the meeting at 1:44 p.m.

Bylaws for Adoption (Development Related)

5.1 Monterey Ct 1095-1097 - BL12672 (Z23-0076) - 1280331 BC Ltd., Inc. No. BC1280031

Moved By Councillor Stack/Seconded By Councillor Webber

THAT Bylaw No. 12672 be adopted.

Carried

6. Non-Development Reports & Related Bylaws

6.1 Subdivision Development and Servicing Bylaw No. 7900 Amendment

Staff:

Displayed a PowerPoint Presentation summarizing the amendments to the Subdivision Development and Servicing Bylaw and responded to questions from Council.

Moved By Councillor DeHart/Seconded By Councillor Webber

THAT Council receives, for information, the report from Corporate Services, dated August 26, 2024, with respect to amending the Subdivision, Development and Servicing Bylaw No. 7900 and Council Policy No. 101;

AND THAT Bylaw No. 12694, being Amendment No. 28 to Subdivision, Development and Servicing Bylaw No. 7900 be forwarded for reading consideration;

AND FURTHER THAT Council Policy No. 101, being Conversion of Overhead Power Lines to Underground Installation, be revised as outlined in the Report from Corporate Services dated August 26, 2024.

Carried

6.2 BL12694 Amendment No. 28 to Subdivision, Development and Servicing Bylaw No. 7900

Moved By Councillor Webber/Seconded By Councillor DeHart

THAT Bylaw No. 12694 be read a first, second and third time.

Carried

6.3 2024 Sustainable Urban Forest Strategy

Staff:

Displayed a PowerPoint Presentation providing an overview of the 2024 Sustainable Urban Forest Strategy and responded to questions from Council.

Moved By Councillor Hodge/Seconded By Councillor Singh

THAT Council receives, for information, the report from Parks Services & Long Range Planning, dated August 26, 2024, with respect to the 2024 Sustainable Urban Forest Strategy;

AND THAT Council adopt the 2024 Sustainable Urban Forest Strategy as attached to the report from Parks Services & Long Range Planning dated August 26, 2024.

Carried

Mayor and Councillor Items

Councillor Singh:

- Congratulated David Rush and band on the successful Rock the Foundation Fundraiser event.

Councillor Lovegrove:

- Spoke to their participation at the JoeAnna's House Share a Meal program and serving dinner with the Rotary Club.
- Provided an update on automated noise cameras and noted it is a provincial authority matter.
- Providing a presentation today regarding light rail transit research in Victoria, B.C.

Councillor DeHart:

- Spoke to their attendance at the 76th Anniversary of the Ukrainian Catholic Church.
- Spoke to their attendance at the Grand Opening of a Veterinarian Clinic on Vaughan Avenue.
- Commented that the Civic Awards 50th Anniversary is next year in 2025.

Mayor Dyas:

- The Memorial Cup Bid Committee is advancing their proposal.
- Spoke to their attendance at the Freedom's Door Car Wash Fundraiser.
- Commented that the DCC relief for treatment facilities was a recommendation from the Mayor's Task Force on Crime Reduction.
- Spoke to their attendance at the Ukrainian Independence Day event.

8. Termination

This meeting was declared terminated at 2:41 p.m.

La c. City Clerk

Mayor Dyas

lb/acm





Date:	September 9, 2024
То:	Council
From:	City Manager
Subject:	RCMP 2024 – Q1 & Q2 Report
Department:	RCMP Superintendent

Recommendation:

THAT Council receive the RCMP 2024 Mid-Year, Quarters 1 & 2, Key Performance Indicator Report from the Officer in Charge, Kelowna RCMP Detachment, dated September 9, 2024.

Purpose:

To present Council with an update on mid-year service, public safety, and crime data.

Council Priority Alignment: Crime & Safety

Background:

In April 2024, Council updated and refined the priorities, and goals for its contracted police services as per the provisions in the Municipal Police Unit Agreement (MPUA). The following objective under the Crime and Safety priorities were identified by City Council for the RCMP:

- Increase visibility on traffic behavior and crime;
- Strengthen police-community relations and public safety awareness;
- Ensure responsiveness to calls; and
- Advance alternate call response and flexible deployment models.

Police performance measurement is a complex undertaking. Crime statistics are rarely exclusively impacted by policing alone. For this reason, best practices, such as the <u>Canadian Police Performance</u> <u>Metrics framework</u>, include several other dimensions besides crime and victimization statistics, such as public perception, police resources, and response to calls for service. Police performance measurement also considers whether police achieve their stated priorities.

Aligned with Council priorities, objectives in Kelowna RCMP's 2024-2026 Strategic Plan, *Policing for Greater Impact*, is designed to release capacity for proactive policing and call responsiveness. Accordingly, **Appendix A** contains Key Performance Indicators (KPIs), strategically selected for Kelowna's public safety context, and a further breakdown of crime incidence.

Summary Analysis:

The Kelowna RCMP Detachment remains committed to public safety as our primary focus and is continuously looking for opportunities to improve efficiency and effectiveness through proactive police work, operational excellence processes, and innovation. With the assistance of data-led analysis, hot spot patrols, and specialized repeat offender programming, these key approaches adopted last year continue to have a positive impact.

Increase visibility on traffic behavior and crime

Property Offences Overall

In 2024, improvement in relation to property offences with an overall decline of 11 per cent and a consistent decline in all related categories (except arson) compared to 2023 will continue in 2024. This can be attributed to proactive, and data driven approaches that focus on repeat locations and offenders.

Research indicates that repeat offenders, a small facet of our community, commit a disproportionate number of crimes and Kelowna RCMP is, increasingly and relentlessly, focused on repeat offenders. Kelowna RCMP is a leader in the Provincial Repeat Violent Offending Intervention Initiative and established a made-for-Kelowna Repeat Property Offender Management Program. The notable reductions in 2023, which have carried into 2024, indicate the right path is being taken. By continuing to target identified repeat offenders, there is optimism for the continuance of lower incidence of these crime types.

Arson continues to rise, with an 81 per cent increase since 2023. Reporting procedures have improved with the Kelowna Fire Department (KFD) which is a large driver contributing to the noted increase. There is active collaboration with KFD to investigate these incidents and support community education about safe fire practices. The goal is to reduce the occurrences of arson and enhance public safety. Arson involves any damage caused by fire, whether intentional or reckless. For instance, a dumpster fire qualifies as arson, whereas a small, contained fire used to keep warm does not. If a fire is reported and found unattended, it is classified as arson.

Kelowna RCMP acknowledges the impact of property crime on business owners and residents. Using data-led enforcement initiatives, and strategies targeting repeat offenders, proactive engagement will continue. Given the integral role of citizens in crime prevention, the RCMP and City Community Safety Department collaboratively launched a <u>Community Safety Toolkit</u> and <u>Business Safety Toolkit</u> to provide education to the community on emerging trends.

Persons Offences Overall:

Theft with violence (robbery) and assaults have increased by 27 per cent and 8 per cent, respectively, since 2023. Many of these incidents occur in non-residential and non-commercial settings and often involve people impacted by vulnerabilities such as homeless, mental health and substance use. The police thoroughly investigate person offences and collaborate closely with those offering services for the unhoused, mental health and substance abuse by factors increasing their vulnerability to decrease the risk of violence.

<u>Traffic</u>

The City of Kelowna and the Province are coordinating to enhance education, and enforcement for safer roads. Efforts include conducting more proactive projects, supported by news releases, to raise driver awareness and influence behavior, particularly targeting distracted driving, impaired driving, and aggressive driving.

For example, in collaboration with BC Highway Patrol on the "Slow Down and Move Over" campaign, drivers were educated about the importance of slowing down to 60 km/h and changing lanes when passing active emergency vehicles. Other initiatives have focused on distracted driving, seatbelt enforcement, school zones, and motorcycle safety.

Strengthen police-community relations and public safety awareness

The Kelowna RCMP are committed to strengthening relationships with the community and promoting public safety awareness. To this end, the detachment has developed a Communications Plan that uses data-driven metrics to educate the public on current crime trends such as fraud, child exploitation sexual abuse material, and shoplifting. The detachment actively participates in numerous community campaigns such as Pink Shirt Day and Red Dress Day and attends community events such as Farmers Markets, Pride events, the Vaisakhi Parade, and the Ratha Yatra Festival, among others. There is pride in this volunteerism by members of police services in countless activities throughout the community.

In addition, the police engage in regular community meetings with partners, including the Ministry of Children and Family Development, Interior Health, BC Coroners Service, BC Prosecution Service, WorkSafe BC, Central Okanagan Search and Rescue, the Child and Youth Advocacy Centre, UBC Okanagan, and School District 23. Through these meetings and presentations, the police continue to build relationships and foster a collaborative working environment to better meet the needs of the community. Attendance at meetings such as KOAST, Community Safety Plan and the Property Compliance Standards Team are demonstrative of our continued commitment to promote the right agencies to respond and address police calls for service upstream.

Ensure responsiveness to calls

Average response times to Priority 1 and 2 calls are consistent with historical trends; 8.1 and 10 minutes, respectively. Significantly, average response times to Priority 3 calls have improved from 72 minutes in 2022 to 51 minutes, which indicates improved resourcing and staffing, and the work of our innovative Watch Support Officer model. To maintain public safety and address the most urgent matters promptly, the police and Operational Communications Centre prioritize calls systematically based on their urgency.

- **Priority 1 Calls** these are very urgent and require immediate dispatch. They involve major incidents or ongoing situations that necessitate immediate police presence to prevent or respond to a loss of life.
- **Priority 2 Calls** these are urgent and dispatched as soon as possible. While there may not be an immediate threat to life, there is potential for escalation of violence that requires prompt police intervention.
- **Priority 3 Calls** these are routine and dispatched as soon as reasonably possible. They involve reports that do not require immediate police presence or action.

Callers reporting non-urgent matters or those that do not require immediate police action may experience longer response times. In cases where the issue is for information only, not criminal in nature, or resolved before police arrival, the caller may not observe police attendance, or receive a follow-up call from an officer, although each call from a citizen is carefully reviewed and managed appropriately.

The community is encouraged to utilize the online reporting system <u>Online Crime Reporting | Kelowna</u> <u>RCMP (rcmp-grc.gc.ca)</u> for non-urgent matters to help manage resources effectively and ensure timely responses to critical incidents.

Advance alternate call response and flexible deployment models

The police will continue to "promote the right providers for mental health and addictions care and housing needs." The RCMP - Community Safety Unit, through the Integrated Community Response Team, pairs a nurse with a police officer to respond to calls involving individuals in crisis. This collaborative approach ensures that people in need receive the appropriate care and support, addressing both their immediate safety and their long-term well-being. Repeated use of these services is tracked and the RCMP looks forward to working with partners to advance alternate response providers.

Further, the RCMP continues to work in support of the <u>Community Safety Plan | City of Kelowna</u>, and provincial partners to advance initiatives that focus on getting the right professionals to the right calls, while reserving finite police resources for priority calls.

Conclusion:

The metrics and data in this report are continuously monitored and used by the police to inform evidencebased decisions and responses to crime and public safety in Kelowna. This includes advocacy for system changes at the Provincial and National levels. The Officer in Charge is committed to driving transformative change with a focus on sustainable workloads, appropriate staffing levels, and the wellness of all police professionals. By prioritizing the well-being of our people and leveraging intelligence and data-led targeted enforcement, there is ongoing dedication to "Policing for Greater Impact" in the community.

Internal Circulation:

Community Safety Department Communications Department

Considerations applicable to this report: *Legal/Statutory Authority:* Article 5.3 Municipal Police Unit Agreement (April 2012)

Considerations not applicable to this report: Legal/Statutory Procedural Requirements: Existing Policy: Financial/Budgetary Considerations: Consultation and Engagement: Communications Comments:

Submitted by: K. Triance, Superintendent, Kelowna RCMP Detachment

Approved for inclusion:

S. Leatherdale, General Manager, People & Protective Services

CC:

D. Caul, Community Safety Director

T. White, Police Services Branch Manager

APPENDIX A:

	Total Property Offences	2022	2023	2024	% Change (2023 to 2024)
1a	Property crime rate per 100,000	3,663	3,026	2,707	-11%
	Auto Theft	300	186	163	-12%
	Theft from Motor Vehicle	1,016	759	614	-19%
	Break & Enter – Business	431	280	167	-40%
	Shoplifting	919	965	792	-18%
	Break & Enter – Residential	124	111	100	-10%
	Bike Theft	248	179	125	-30%
	Fraud	636	644	599	-7%
	Mischief	925	799	785	-2%
	Arson[i]	84	67	121	81%
	Persons recommended for Charges[ii]	216	256	185	-28%
	Total Persons Offences	2022	2023	2024	% Change
	Assault (Common)	585	580	627	8%
	Intimate Partner Violence	332	366	311	-15%
	Sex Offences[iii]	93	114	103	-10%
	Theft with Violence (known as robbery)	54	37	47.	2 7%
	Assaults with Weapon	223	245	209	-15%
	Traffic Safety	2022	2023	2024	% Change
1b	Traffic Interactions	828	2820	2109	-25%
1C	Collisions with Injuries	82	115	113	-2%
	Community Involvement	2022	2023	2024	% Change
2a	Number of police-led presentations, meetings and posts	Data not available	Data not available	308	Data not available

RCMP Year to date (January 1 to June 30) Service KPIs and Crime Statistics

2b	Number of community meetings police participate in[iv]	Data not available	Data not available	201	Data not available
	Police Responsiveness and Deployment	2022	2023	2024	% Change (2023 to 2024)
за	Response Time for Priority 1 Calls (in minutes)	8.0	8.0	8.1	1%
3p	Response Time for Priority 2 Calls (in minutes)	10.2	10.0	10.0	∎• 0%
3с	Response Time for Priority 3 Calls (in minutes)	72.0	59.3	51.0	-14%
3q	% of Calls for Service receiving Callback[v]	21%	40%	77%.	1 37%
4a	Total Calls for Service per 100,000	19,393	17,173	16,670	-3%
4b	Percent of files completed by alternate personnel[vi]	6.40%	5.80%	6.20%	0.40%
4C	Percent of mental health-related calls where police are co-responders	49%	44%	49%	1 5%

Kelowna RCMP Service Key Performance Indicators – 2024 Q1 & Q2

Presented by: Superintendent Kara Triance, Officer in Charge

Purpose



To equip Council with 2024, Mid-Year (Jan 1 to Aug 31) Key Performance Indicators for Kelowna RCMP service



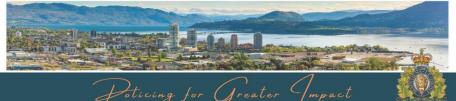
Service Priorities

Indicators reflect Council's Crime and Safety objectives and Kelowna RCMP's corresponding Strategic Plan

KELOWNA 2024 - 2026 RCMP STRATEGIC PLAN



ERVE WITH EXCELLENCE | TAKE RESPONSIBILITY | DEMONSTRATE COMPASSION | ACT WITH INTEGRITY | SHOW RESPECT





Crime & Safety

Council Priority Actions

- 1. Advance implementation of Mayor's Task Force on Crime Reduction recommendations, including Business Improvement Area support
- 2. Reduce property crime; including break and enters and theft
- 3. Demonstrate effectiveness of visibility on high-risk traffic behaviour (e.g. speeding, texting) and crime
- 4. Support retention of current policy restricting use of drugs in public spaces
- Partner with ministries responsible for mental health and addictions on initiatives (i.e. Community Safety Plan) that improve local conditions, including alternative response models and advocacy

How we measure progress on the priority

- Business break and enters and thefts are decreasing (reported # of property crime)
- · Resident sense of safety in our community is increasing (% residents that feels safe).
- Public safety resources are increasing (e.g. police, bylaw and fire)

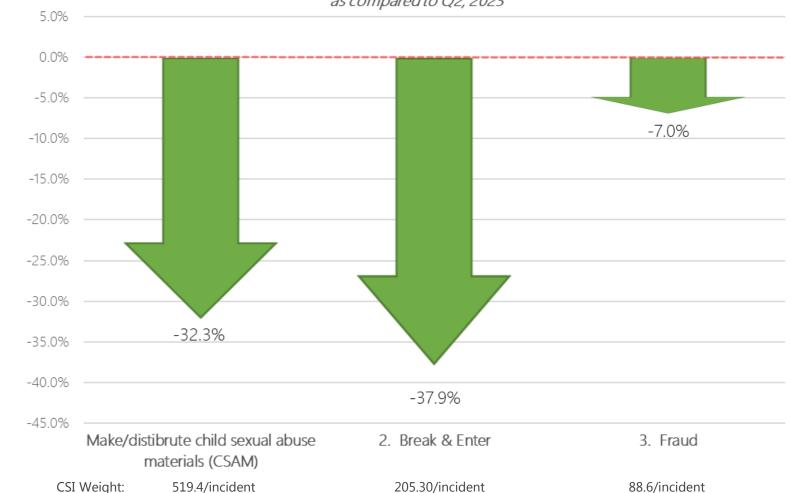
The results we want to see

- # or % of residents who feel safe in Kelowna increases.
- · Decrease in business break and enters and thefts.
- Public safety resources keep pace with community growth (e.g. police, bylaw and fire).



Crime Severity Index

Insights into factors behind the index that publicly spotlights change in crime



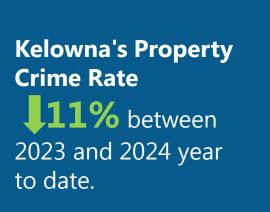
Q2 2024 Top Crime Severity Index (CSI) Drivers Annual Change (%) as compared to Q2, 2023

Crime Severity Index since 2022: 7.3%

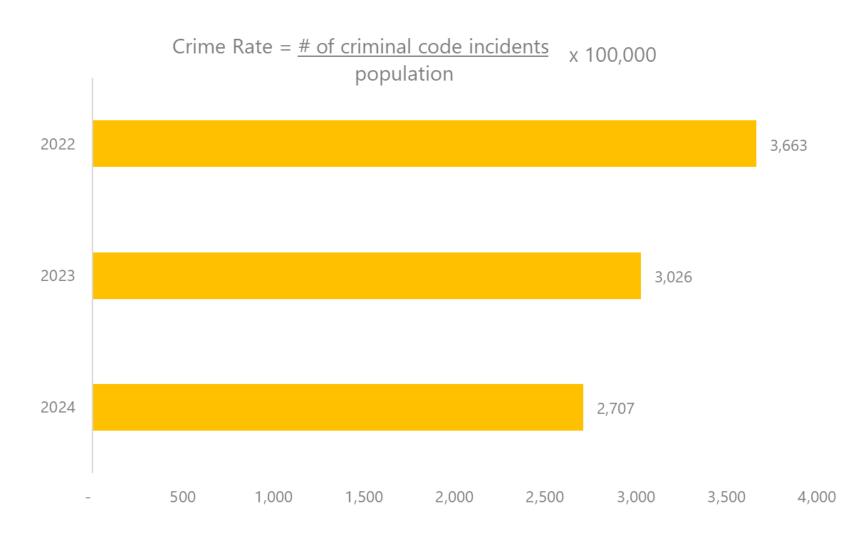
Detailed crime data included in accompanying Memo

Property Crime Rate

Insights into factors behind the index that publicly spotlights change in crime

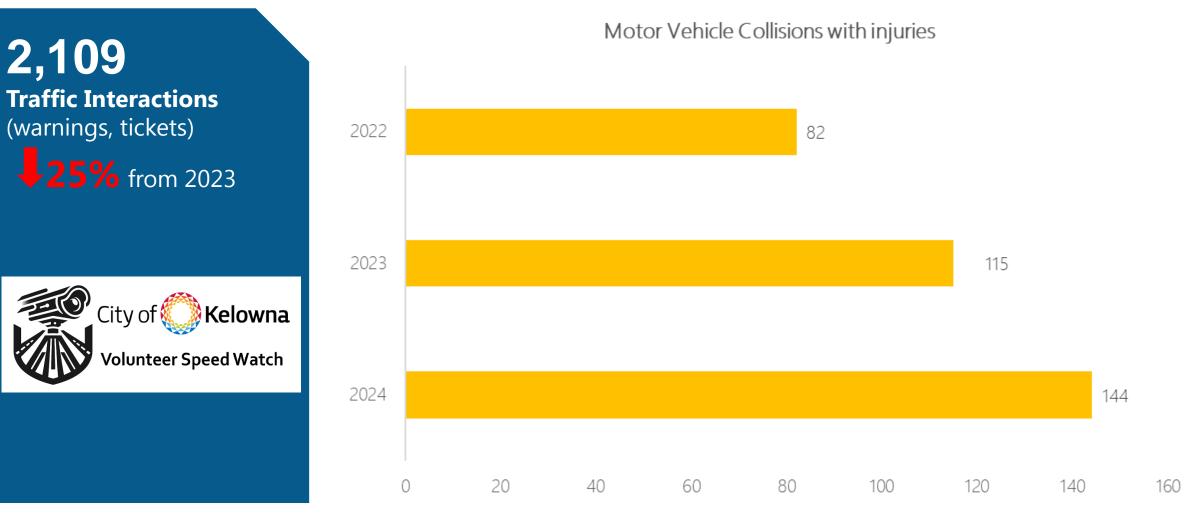


Detailed crime data included in accompanying Memo



Traffic Interactions & Collisions with Injuries

Monitors the impact of increased visibility and enforcement on traffic behaviour & crime

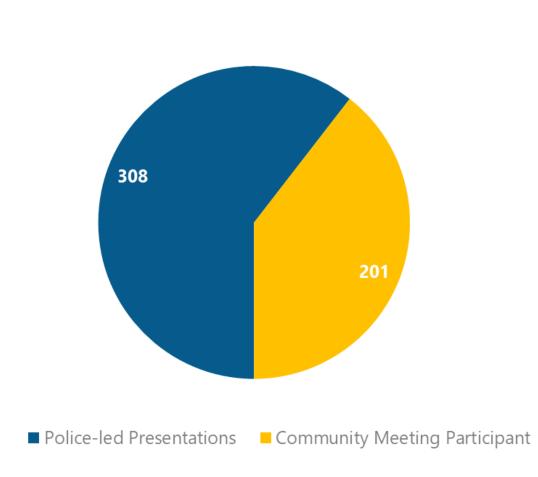


Police-Community Relations

Signals efforts to strengthen police-community relations and public safety awareness

Community Relations

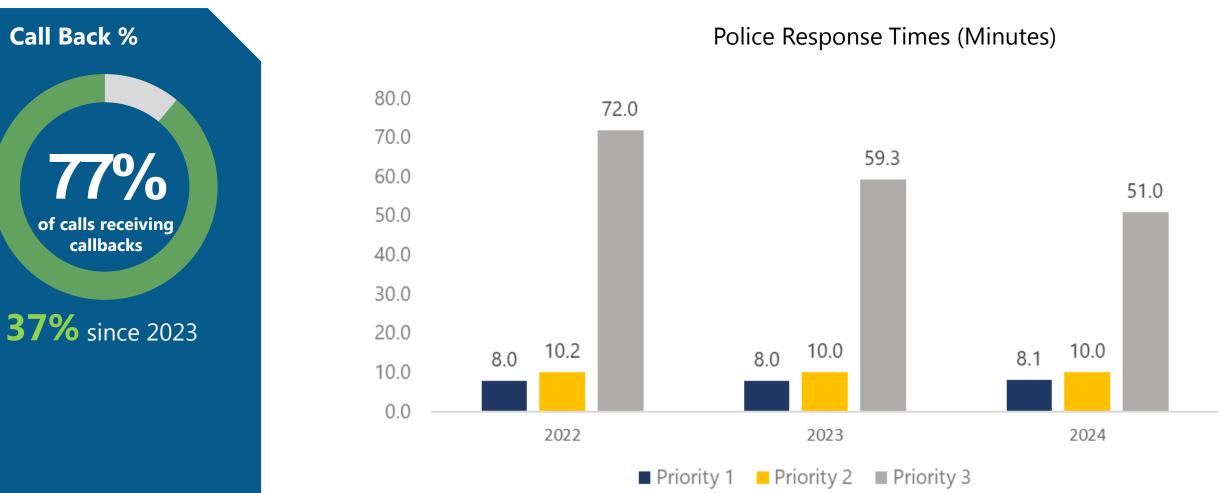
- Pink Shirt Day
- Red Dress Day
- Kelowna Pride
- Vaisakhi Parade
- BC Prosecution Service
- School District 23
- Work Safe BC
- Volunteerism





Responsiveness

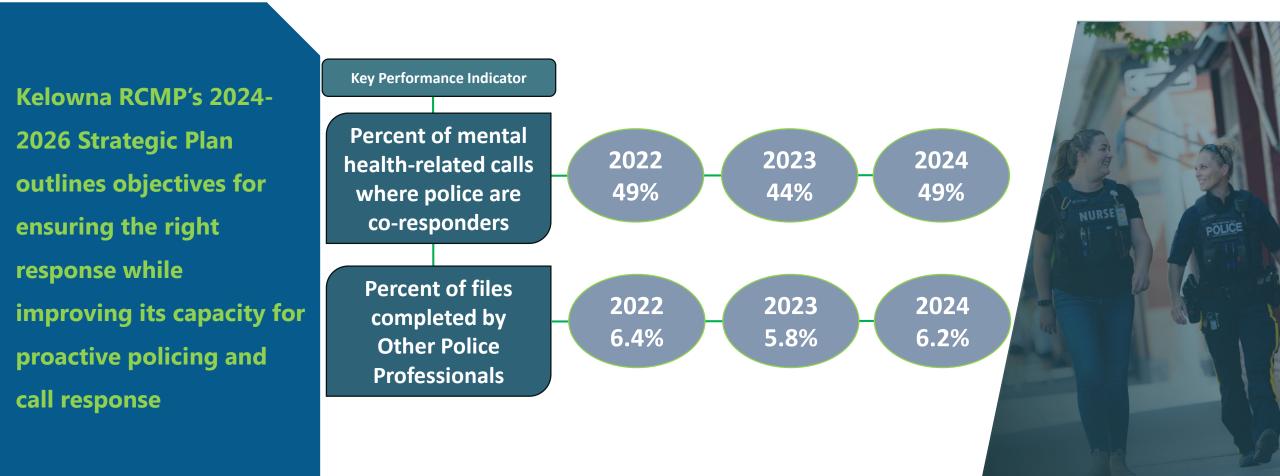
Indicates timeliness of response to calls



<mark>2</mark>2

Right Response to the Right Call

Kelowna RCMP's progress towards stated objectives that can help improve its capacity



Discussion

REPORT TO COUNCIL REZONING



Date:	September 9, 2024	Kelowna
То:	Council	
From:	City Manager	
Address:	1115 Cactus Rd	
File No.:	Z24-0015	
	Existing	Proposed
OCP Future Land Use:	C-NHD – Core Area Neighbourhood	C-NHD – Core Area Neighbourhood
Zone:	MF1 – Infill Housing	MF2 – Townhouse Housing

1.0 Recommendation

THAT Rezoning Application No. Z24-0015 to amend the City of Kelowna Zoning Bylaw No. 12375 by changing the zoning classification of Lot B Section 23 Township 26 ODYD Plan 28071, located at 1115 Cactus Rd, Kelowna, BC from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone, be considered by Council.

2.0 Purpose

To rezone the subject property from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone to facilitate a townhouse development.

3.0 Development Planning

Staff support the proposed rezoning from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone to facilicate a townhouse development. The subject property has an Official Community Plan (OCP) Future Land Use Designation of C-NHD – Core Area Neighbourhood. The intent of Core Area Neighbourhood is to accommodate much of the City's growth through sensitive residential infill such as ground-oriented multi-unit housing and low-rise buildings. The proposal aligns with the OCP Policy for the Core Area to encourage a diverse mix of low and medium density housing.

Lot Area	Proposed (m ²)
Gross Site Area	1,862 m²
Road Dedication	n/a
Undevelopable Area	n/a
Net Site Area	1,862 m²

4.0 Site Context & Background

Orientation	Zoning	Land Use
North	MF1 – Infill Housing	Duplex Housing
East	RU1 — Large Lot Housing	Single Detached Dwelling
South	RU1 — Large Lot Housing	Single Detached Dwelling
West	P ₄ – Utilities	Utility Services, Infrastructure



Subject Property Map: 1115 Cactus Rd

The subject property is located on the north side of Springfield Rd at the south end of the Cactus Rd cul-desac. There are transit stops located on both sides of Springfield Rd approximately 100m west of the subject property. There is an existing pedestrian walkway located west of the adjacent property located at 2982 Springfield Rd. The proposed development is near Mission Creek Regional Park.

The surrounding neighbourhood context largely consists of properties that are zoned $RU_1 - Large Lot$ Housing and $MF_1 - Infill$ Housing with $P_4 - Utilities$ located adjacent to the subject site.

5.0 Current Development Policies

5.1 <u>Kelowna Official Community Plan (OCP)</u>

Objective 5.3 Des	ign residential infill to be sensitive to neigbourhood context			
Policy 5.3.1 Core Area Neighbourhood Infill	Encourage ground-oriented residential uses such as house-plexes, townhouses and narrow lot housing up to approximately 3 storeys to fit with the existing neighbourhood development pattern. Consider larger infill projects, including those where lot consolidation is required, where they are in a Transit Supportive Corridor transition area, on a block end or near community amenities including, but not limited to, parks and schools			
	The subject site is a large lot located in close proximity to parks and schools			
Objective 5.11 Increase the diversity of housing forms and tenure to create an inclusive, affordable and complete Core Area				
Policy 5.11.1 Diverse Housing Forms	Ensure a diverse mix of low and medium density housing forms in the Core Area to support a variety of household types and sizes, income levels and life stages. The proposal adds increased density into the established single detached housing neighbourhood.			

6.0 Application Chronology

Application Accepted:	April 29, 2024
Neighbourhood Notification Summary Received:	July 31, 2024

Report prepared by:	Andrew Ferguson, Planner II
Reviewed by:	Jocelyn Black, Urban Planning Manager
Reviewed by:	Nola Kilmartin, Development Planning Department Manager
Approved for Inclusion:	Ryan Smith, Divisional Director, Planning, Climate Sustainability &
	Development Services

Attachments: Attachment A: Draft Site Plan Attachment B: Neighbourhood Notification Summary

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.







Summary of Neighbor Notification for 1115 Cactus rd

-July 13th letters where hand delivered to Neighbors

-Addresses include

1480 Hollywood rd s

1095-1097 Monterey ct

385 Monterey rd

405 Monterey rd

1210 Neptune rd

1220 Neptune rd

2978-2980 Springfield rd

2982 Springfield rd

2983 Springfield rd

2989 Springfield rd

-All the details of the letter can be found in the attached sample letter

-No feedback was received either by phone or email

-No changes have been made as a result of the Neighbour Notification

CITY OF KELOWNA

BYLAW NO. 12696 Z24-0015 1115 Cactus Road

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of Lot B Section 23 Township 26 ODYD Plan 28071 located on Cactus Road, Kelowna, BC from the MF1 Infill Housing zone to the MF2 Townhouse Housing zone.
- 2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk



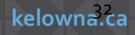
Z24-0015 1115 Cactus Rd

Rezoning Application

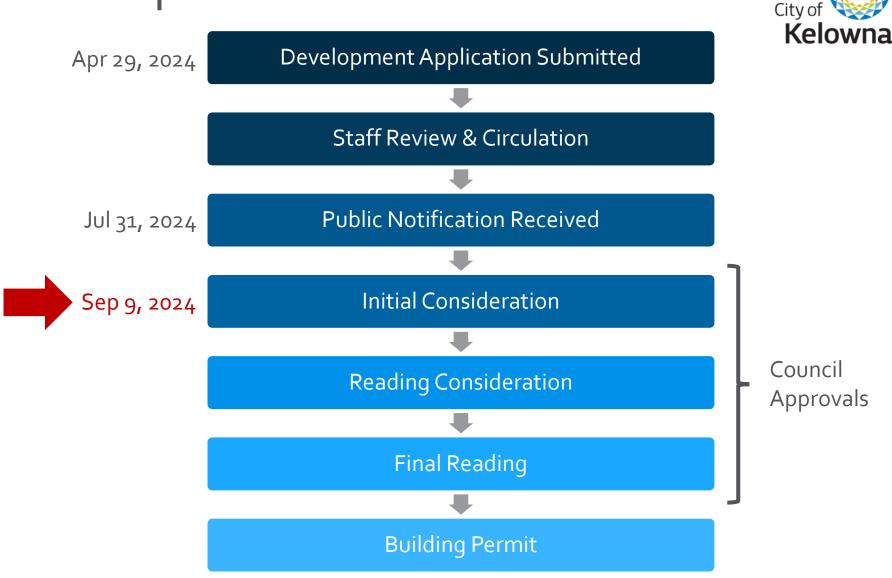


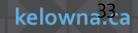
Purpose

To rezone the subject property from the MF1 – Infill Housing zone to the MF2 – Townhouse Housing zone to facilitate a townhouse development.



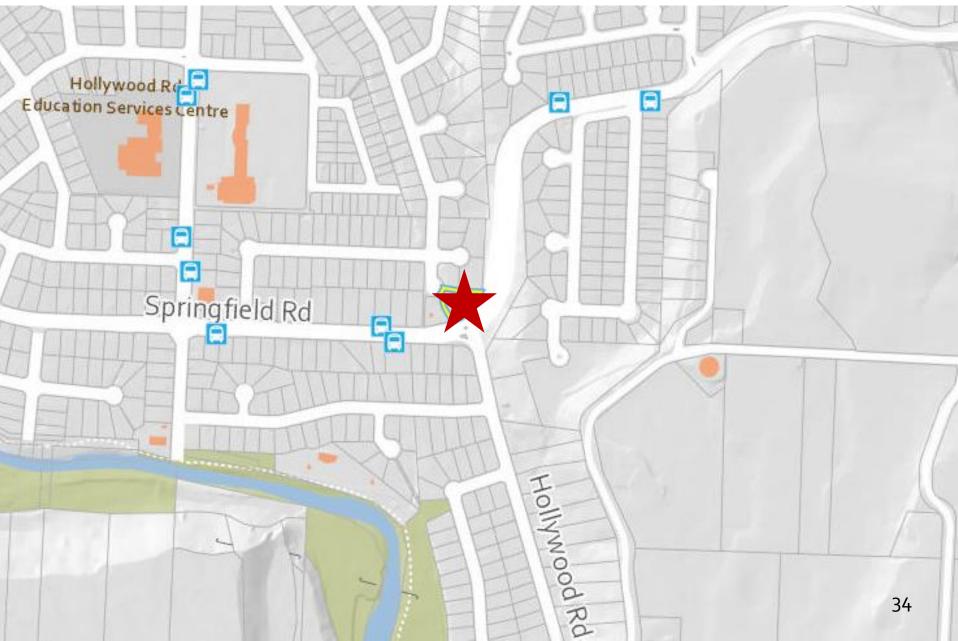
Development Process



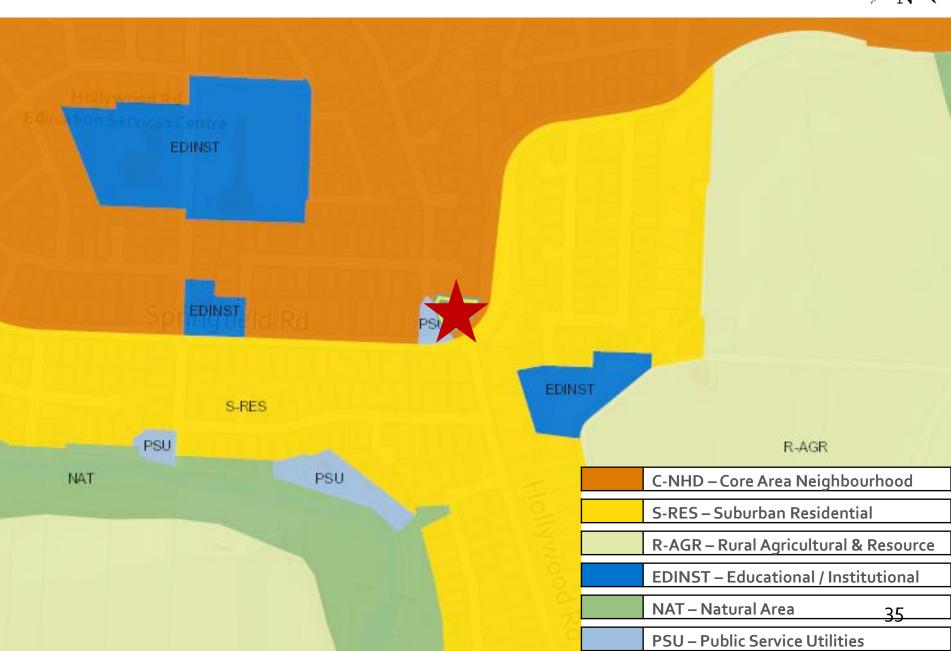


Context Map



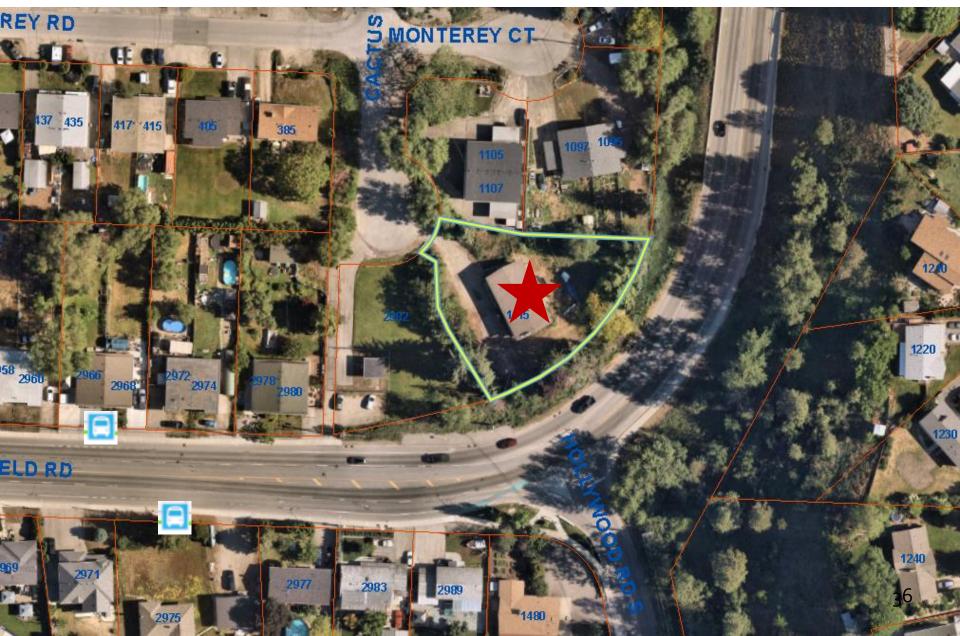


OCP Future Land Use



Subject Property Map





MF2 – Townhouse Housing Zone

Purpose

 To provide a zone for ground-oriented multiple housing (typically townhouses) up to 3 storeys on serviced urban lots.

Summary of Uses

- Townhouses
- Stacked Townhouses
- Duplex Housing
- Semi-Detached Housing
- Home Based Businesses

MF2 – Townhouse Housing Zone

Regulation	Maximum Permitted
Height	11.0 m & 3 storeys
Unit Count Potential	7
Floor Area Ratio	1.0 + Bonus opportunities
Site Coverage Buildings	55%



OCP Objectives – Climate Resilience K

Climate Criteria

Dark Green – Meets Climate Criteria Light Green– Will Meet Criteria Soon Yellow – Does not meet Climate Criteria

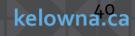
10 min Walk to Retail/Restaurants	
5 min Walk to Park	
10 min Bike to Public School	
20 min Bus to Urban Centre/Village Centre/Employment Hub	
Retaining Trees and/or Adding Trees	
OCP Climate Resilience Consistency	





OCP Objectives & Policies

- Future Land Use Core Area Neighbourhood
- Policy 5.3.1. Core Area Neighbourhood Infill
 - Consider larger infill projects for lots located near community amenities including parks and schools.
- Policy 5.11.1 Diverse Housing Forms
 - Ensure a diverse mix of low and medium density housing forms in the Core Area to support a variety of household types and sizes, income levels and life stages.

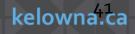




Staff Recommendation

Staff recommend support for the proposed rezoning as it is consistent with:

- OCP Future Land Use C-NHD
- OCP Objectives in Chapter 5 Core Area
 - Core Area Neighbourhood Infill
 - Diverse Housing Forms



REPORT TO COUNCIL REZONING



Date:	September 9, 2024 Kelowna	
То:	Council	
From:	City Manager	
Address:	627-659 Coronation Ave	
File No.:	Z23-0070	
	Existing	Proposed
OCP Future Land Use:	UC – Urban Centre	UC – Urban Centre
Zone:	UC1 – Downtown Urban Centre	UC1r – Downtown Urban Centre Rental Only

1.0 Recommendation

THAT Rezoning Application No. Z23-0070 to amend the City of Kelowna Zoning Bylaw No. 12375 by changing the zoning classification of:

- Lot 38 District Lot 139 ODYD PLAN 1037, located at 627 Coronation Ave, Kelowna, BC;
- Lot 39 District Lot 139 ODYD PLAN 1037, located at 635 Coronation Ave, Kelowna, BC;
- Lot 40 District Lot 139 ODYD PLAN 1037, located at 643 Coronation Ave, Kelowna, BC;
- Lot 41 District Lot 139 ODYD PLAN 1037, located at 651 Coronation Ave, Kelowna, BC;
- Lot 42 District Lot 139 ODYD PLAN 1037, located at 659 Coronation Ave, Kelowna, BC;

from the UC1 – Downtown Urban Centre zone to the UC1r – Downtown Urban Centre Rental Only zone, be considered by Council;

AND THAT final adoption of the Rezoning Bylaw be considered subsequent to the outstanding conditions of approval as set out in Attachment "A" attached to the Report from the Development Planning Department dated September 9, 2024.

2.0 Purpose

To rezone the subject properties from the UC1 – Downtown Urban Centre zone to the UC1r – Downtown Urban Centre Rental Only zone to facilitate a rental apartment housing development.

3.0 Development Planning

Staff recommend support for the proposed rezoning to the UC1r – Downtown Urban Centre Rental Only zone. The properties are currently zoned UC1 – Downtown Urban Centre, so the request to add the rental only subzone would restrict any building or bareland stratification of future residential housing units, supporting households seeking rental housing. The utilization of the rental only subzone supports key direction within the Official Community Plan (OCP) and Healthy Housing Strategy to promote and protect rental housing.

Lot Area	Proposed (m ²)
Gross Site Area	1,889 m²
Road Dedication	86.6 m ²
Undevelopable Area	n/a
Net Site Area	1,802.4 m²

4.0 Site Context & Background

Orientation	Zoning	Land Use
North	UC1 – Downtown Urban Centre	Apartment Housing and Single Detached Housing
East	UC1 – Downtown Urban Centre	Single Detached Housing
South	UC1 – Downtown Urban Centre	Apartment Housing
West	UC1 – Downtown Urban Centre	Single Detached Housing

Subject Property Map: Coronation Ave 627-659



The subject properties are located on the south side of Coronation Ave, between St. Paul St and Richter St and are within the Downtown Urban Centre. The rezoning application includes five lots that currently each contain single detached dwellings. The dwellings would be demolished, and the lots consolidated, to facilitate the proposed development.

5.0 Current Development Policies

5.1 Kelowna Official Community Plan (OCP)

Objective 4.1 Stren	Objective 4.1 Strengthen the Urban Centres as Kelowna's primary hubs of activity.		
Policy 4.1.6. High	Direct medium and high density residential development to Urban Centres to		
Density	provide a greater mix of housing near employment and to maximize use of		
Residential	existing and new infrastructure, services and amenities.		
Development.	This proposed high density development is located within the Downtown Urban		
	Centre, including existing infrastructure, services and amenities.		

Objective 4.12. Increase the diversity of housing types and tenures to create inclusive, affordable and complete Urban Centres.		
Policy	4.12.1.	Ensure a diverse mix of medium density and high density housing forms that
Diverse	Housing	support a variety of households, income levels and life stages.
Forms.		The proposed UC1r – Downtown Urban Centre Rental Only zone would permit high
		density housing forms, and the rental only subzone would prohibit any building or
		bareland stratification, supporting households seeking rental housing.

6.0 Application Chronology

Application Accepted: Neighbourhood Notification St	ummary Received:	October 10, 2023 August 12, 2024
Report prepared by: Reviewed by: Reviewed by: Approved for Inclusion:	Nola Kilmartin, Dev	anner Specialist n Planning Manager elopment Planning Department Manager nal Director, Planning, Climate Action & Development

Attachments: Attachment A: Development Engineering Memo Attachment B: DRAFT Site Plan Attachment C: Summary of Neighbourhood Notification

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.



CITY OF KELOWNA

MEMORANDUM

Date:	November 6, 2023	
File No.:	Z23-0070	
То:	Urban Planning (KB)	
From:	Development Engineering Manager (NC)	
Subject:	627-659 Coronation Ave	UC1 to UC1r

The Development Engineering Department has the following comments associated with this application to rezone the subject properties rezone the subject property from UC1 – Downtown Urban Centre to UC1r – Downtown Urban Centre (Rental Only) to facilitate a rental apartment housing development with a childcare centre, major.

Works and Services attributable at time of Building Permit are contained in the Development Engineering memo under file DP23-0184.

The Development Engineering Technologist for this file is Sarah Kelly (skelly@kelowna.ca).

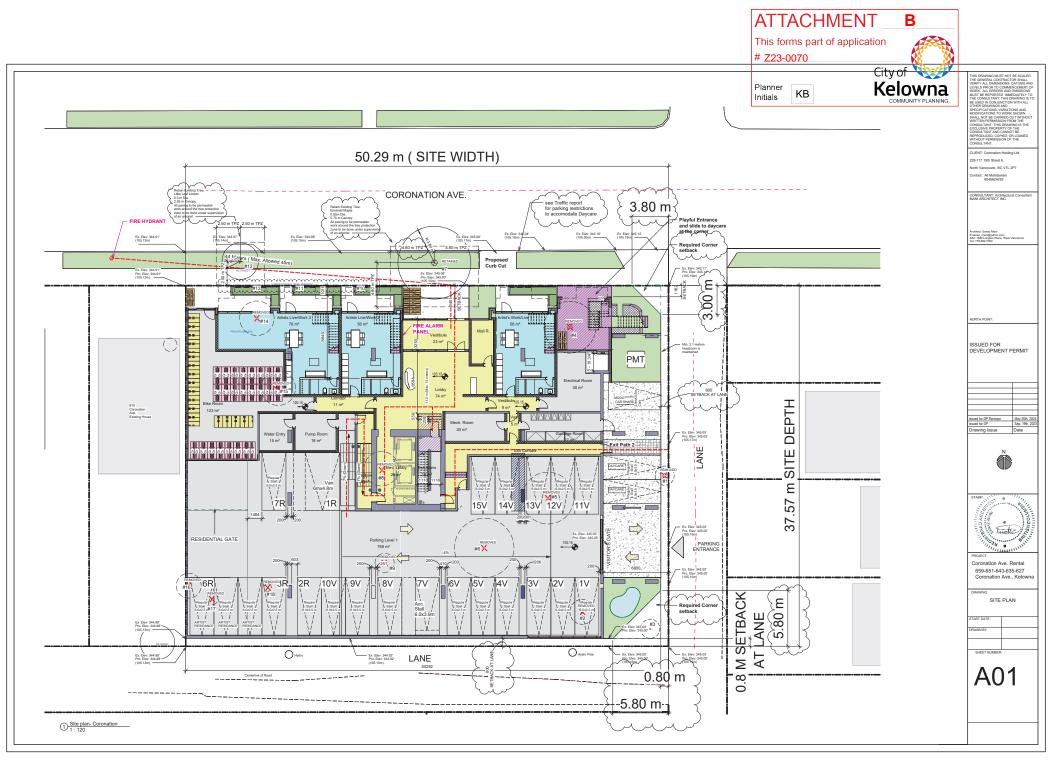
1. <u>GENERAL</u>

a. The following comments and requirements are valid for a period of one (1) year 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 modify some or all items in this memo if the zone amendment bylaw is not adopted within this time.

2. PROPERTY-RELATED REQUIREMENTS

- a. A Transportation Assessment is required of this development to assess connectivity with and impacts to the surrounding transportation network. The results of this assessment may inform additional requirements. Please contact the development technician for this file to obtain terms of reference for completing the analysis.
- b. Approximately 0.8 m road dedication along the entire frontage of North-South Lane is required to achieve a ROW width of 7.6 m in accordance with OCP Functional Road Classification objectives.
- c. Approximately 0.8 m road dedication along the entire frontage of East-West Lane is required to achieve a ROW width of 7.6 m in accordance with OCP Functional Road Classification objectives.
- d. Road dedication at the corner of Coronation Ave and North-South Lane is required as necessary to provide 3m x 3m corner cut.
- e. Road dedication at the corner of North-South Lane and East-West Lane is required as necessary to provide 5m x 5m corner cut.

Nelson Chapman, P.Eng. Development Engineering Manager



Mani ARCHITECT Inc.

Summary Report

NEIGHBOUR NOTIFICATION SUMMARY REPORT:

DATE: Aug. 12th, 2024 PROJECT: Rental Towers, Kelowna ADDRESS: 627-659 Coronation Ave., Kelowna, BC

DATE OF THE MAIL OUT: All mail was sent out to the addresses within the 50 meter radius of the site on July 1st of 2024. A copy of the notification report is at the end of this summary report.

FEEDBACK OR KEY ISSUES: We received one feedback from a neighbor that was asking if the enclosure of the parking is a blank concrete wall in front of his apartment. We explained that it is not a concrete wall. It's a perforated metal mesh with planters that have evergreen hanging plants above it to cover the enclosure with greenery. The same neighbor was concerned about the number of parking stalls being too low. We explained that there will be a MODO car available to the residents plus bonus number of bicycle storage that are designed to be easily accessible.

ADDRESSES: We have attached the addresses that were used for mail out at the end of this summary report.

CHANGES FOLLOWING THE FEEDBACK: We have not made changes as the result of the feedback period.

Architect's Signature: Sanaz Mani

DATE:Aug. 12th, 2024



SANAZ MANI, ARCHITECT AIBC



Phone: 778.862.7093 Sanaz_mani@ayahoo.com



NEIGHBOUR NOTIFICATION:

DESCRIPTION: Dear neighbours we are notifying you regarding a new Rental Only Housing Development near your property that will be presented to council.

REZONING APPLICATION: UC1 – Downtown Urban Centre to UC1r – Downtown Urban Centre Rental Only.STOREYS: Requesting the variance to increase the height from 15 storeys to 19 storeys.UNITS: 138FSR: 4.75 (Meets max. allowed FSR of 4.75)HEIGHT: 55.7m (Meets Max. allowed height of 56 m)

LOCATION: 659-651-643-635-627 Coronation Ave., Kelowna BC

PARKING: 92 residential, 2 Daycare stalls, 1 Car share

This project consists of 138 purpose-built rental apartment homes, plus a child care center. The development aims to create a community within a tower that celebrates and fosters Kelowna's art community, children, and the environment. This project proposes the minimum number of parking stalls by taking advantage of all the parking reduction bylaws, providing bonus number of bicycle stalls and one carshare.

The proposed childcare center will supply the neighbourhood with much needed child care services with its own separate access and elevator at the corner of Coronation Ave and the lane. The child care center connects to the neighbourhood by a small playground at its entrance. Three unique artist residences at grade will integrate art into the fabric of the city. Bird friendly design for the windows is one of the sustainable measures utilized in this project that protects Kelowna's wildlife and biodiversity.



The development commits to contributing to the public amenity and street scape funding.

FILE NUMBERS: Z23-0070, DP23-0184 and DVP23-0185

APPLICANT'S CONTACT INFORMATION:

Mani Architect Inc. Architect: Sanaz Mani Email: Sanaz.bouthouse@gmail.com Telephone: 7788627093

STAFF'S CONTACT INFORMATION:

Kimberly Brunet RPP, MCIP Planner Specialist | City of Kelowna 250-469-8637 | <u>kbrunet@kelowna.ca</u>





Addresses used for mail out – 50 m radius to 627-659 Coronation Ave.

	Address
586	Cawston Ave V1Y6Z4
590	Cawston Ave V1Y6Z4
594	Cawston Ave V1Y6Z4
101	604 Cawston Ave
102	604 Cawston Ave
103	604 Cawston Ave
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611 Coronation Ave V1Y7A2
619 Coronation Ave V1Y7A2
620 Coronation Ave
627 Coronation Ave V1Y7A2
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659 Coronation Ave V1Y7A2
675 Coronation Ave V1Y7A2
678 Coronation Ave V1Y7A1
1234 Richter St V1Y2K9
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1266 Richter St V1Y2L2
1272 Richter St V1Y2L2
1276 Richter St V1Y2L2
1278 Richter St V1Y2L2

CITY OF KELOWNA

BYLAW NO. 12697 Z23-0070 627-659 Coronation Avenue

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of:
 - Lot 38 District Lot 139 ODYD PLAN 1037, located on Coronation Ave, Kelowna, BC;
 - Lot 39 District Lot 139 ODYD PLAN 1037, located on Coronation Ave, Kelowna, BC;
 - Lot 40 District Lot 139 ODYD PLAN 1037, located on Coronation Ave, Kelowna, BC;
 - Lot 41 District Lot 139 ODYD PLAN 1037, located on Coronation Ave, Kelowna, BC; and
 - Lot 42 District Lot 139 ODYD PLAN 1037, located on Coronation Ave, Kelowna, BC;

from the UC1 – Downtown Urban Centre zone to the UC1r – Downtown Urban Centre Rental Only zone.

2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk



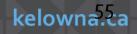
Z23-0070 Coronation Ave 627-659

Rezoning Application

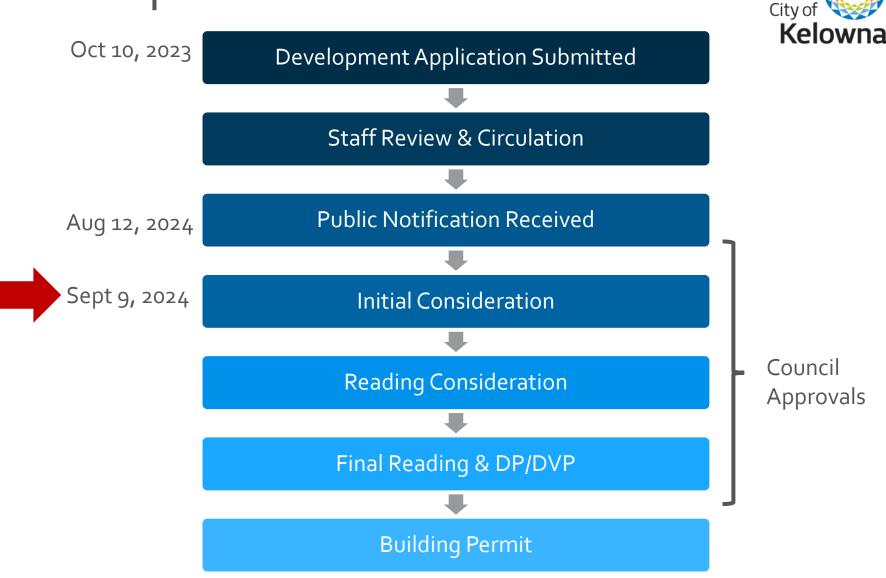


Purpose

To rezone the subject properties from the UC1 – Downtown Urban Centre zone to the UC1r – Downtown Urban Centre Rental Only zone to facilitate a rental apartment housing development.



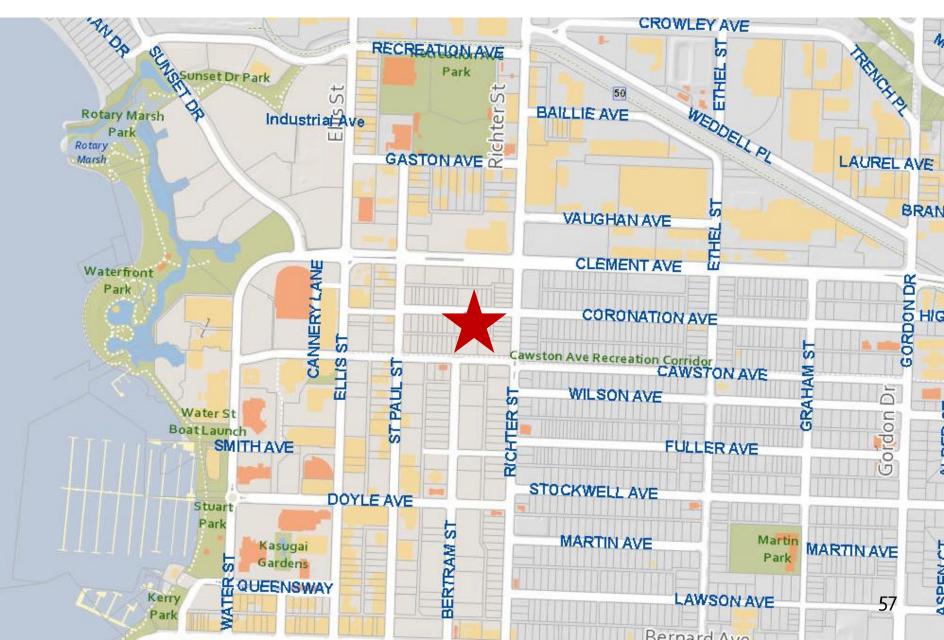
Development Process





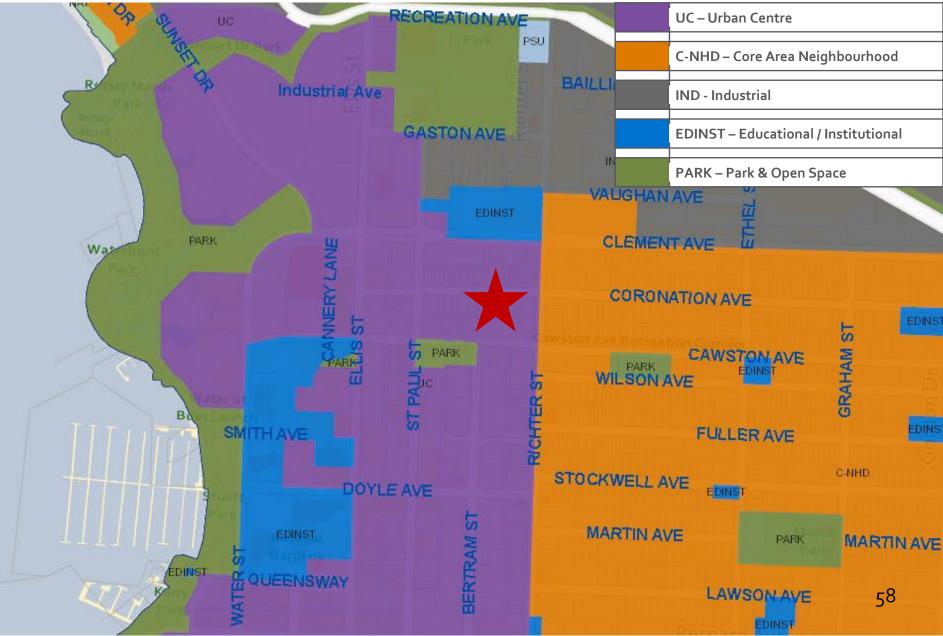
Context Map





OCP Future Land Use





Subject Property Map





"r" – Rental Only Subzone

Purpose

 To provide a sub-zone that restricts the dwelling units to a rental only tenure & to prohibit any building or bareland stratification.

Summary of Uses

- Dwelling units must be long-term rental only
- Eligible to apply for Revitalization Tax Exemption

"r" – Rental Only Subzone

Regulation	Maximum Permitted
Bonus Height	56.0 m & 15 storeys
Bonus Floor Area Ratio	Rental/Affordable: 0.3
Parking Reduction	20% Urban Centre



OCP Objectives – Climate Resilience K

Climate Criteria

Dark Green – Meets Climate Criteria Light Green– Will Meet Criteria Soon Yellow – Does not meet Climate Criteria

10 min Walk to Retail/Restaurants		
5 min Walk to Park		
10 min Bike to Public School		
20 min Bus to Urban Centre/Village Centre/Employment Hub		
Retaining Trees and/or Adding Trees		
OCP Climate Resilience Consistency		





OCP Objectives & Policies

- Future Land Use Urban Centre
- Policy 4.1.6. High Density Residential Development
 - Direct medium and high density residential development to Urban Centres
- Policy 4.12.1. Diverse Housing Forms
 - Encourage a range of rental and ownership tenures





Staff Recommendation

Staff recommend support for the proposed rezoning as it is consistent with:

- OCP Future Land Use Urban Centres
- OCP Chapter 4 Urban Centres Objectives
 - High density residential development
 - Diverse housing types
- Healthy Housing Strategy
 - Rental Housing
- Development Permit to follow for Council consideration



REPORT TO COUNCIL REZONING



Date:	September 9, 2024
То:	Council
From:	City Manager
Address:	305 Drysdale Blvd
File No.:	Z24-0026
	-

	Existing	Proposed
OCP Future Land Use:	VC – Village Centre	VC – Village Centre
Zone:	MF ₃ – Apartment Housing	VC1r – Village Centre Rental Only

1.0 Recommendation

THAT Rezoning Application No. Z24-0026 to amend the City of Kelowna Zoning Bylaw No. 12375 by changing the zoning classification of Parcel A (Being a Consolidation of Lots 4 and 5, See CA9869654) Section 33 Township 26 ODYD Plan EPP48909, located at 305 Drysdale Blvd, Kelowna, BC from the MF3 – Apartment Housing zone to the VC1r – Village Centre Rental Only zone, be considered by Council.

2.0 Purpose

To rezone the subject property from the MF_3 – Apartment Housing zone to the VC_{1r} – Village Centre Rental Only zone to facilitate a rental apartment housing development.

3.0 Development Planning

Staff recommend support for the proposed rezoning to the VC1r – Village Centre Rental Only zone. The proposed rezoning will facilitate the development of a rental apartment building which aligns with the Official Community Plan (OCP) Future Land Use Designation of Village Centre. The proposed rezoning is consistent with OCP Policies which encourage medium density residential development and diverse housing tenures within the Core Area.

Lot Area	Proposed (m ²)
Gross Site Area	1,764 m²
Road Dedication	n/a
Undevelopable Area	n/a
Net Site Area	1,764 m²

4.0 Site Context & Background

Orientation	Zoning	Land Use
North	MF1 – Infill Housing	Single Detached Dwelling
East	MF ₃ – Apartment Housing	Apartment Housing
South	MF ₃ – Apartment Housing	Apartment Housing
West	MF2 – Townhouse Housing	Townhouses



Subject Property Map: 305 Drysdale Blvd

The subject property is located within the Glenmore Village Centre and is near a variety of commercial shopping areas and parks. The property is currently vacant and is adjacent to multi-dwelling housing and apartment housing currently under construction.

4.1 <u>Background</u>

On September 20, 2022, Council supported a Development Permit for a 6 storey, 37-unit housing development. The Development Permit has since expired and a proposal for a new Development Permit under the Village Centre Rental Only zone has been submitted.

5.0 Current Development Policies

5.1 Kelowna Official Community Plan (OCP)

Objective	Objective 5.1 Encourage Village Centres as Kelowna's secondary hubs of activity.		
Policy	5.1.6	Support development in the Glenmore Village Centre to serve citizens in	
Glenmore	Village	neighbourhoods in north Kelowna, such as Glenmore, Wilden, and McKinley.	
Centre		Development in the Glenmore Village Centre should share the following	
		characteristics:	
		 Commercial uses located east of Glenmore Road; 	
		 Buildings up to six storeys in height; and 	
		 Orientation of buildings along Brandt's Creek towards the creek and 	
		trail system.	

		The proposed VC1r – Village Centre Rental Only zone aligns with objectives to develop the Glenmore Village Centre.
Objectiv	e 5.11 Incr	ease the diversity of housing forms and tenure to create an inclusive, affordable
and com	plete Core	Area
Policy	5.11.1	Ensure a diverse mix of low and medium density housing forms in the Core Area
Diverse	Housing	to support a variety of household types and sizes, income levels and life stages.
Forms		The proposed VC1r – Village Centre Rental Only zone would permit a medium
		density housing form with a variety of unit sizes for different income levels and life
		stages.

6.0 Application Chronology

Application Accepted: Neighbourhood Notification	Summary Received:	June 7, 2024 August 15, 2024	
Report prepared by:	Jason Issler, Planner II		
Reviewed by:	Jocelyn Black, Urban Planning Manager		
Reviewed by:	Nola Kilmartin, Development Planning Department Manager		
Approved for Inclusion:	Ryan Smith, Divisional Director, Planning, Climate Action & Development		

Services

Attachments:

Attachment A: Summary of Neighbourhood Notification Attachment B: Draft Site Plan

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.



Neighbour Consultation Form (Council Policy No.367)

A summary of neighborhood consultation efforts, feedback and response must be provided to City staff, identifying how the efforts meet the objectives of this Policy. This form must be filled out and submitted to the File Manager a minimum of 20 days prior to initial consideration by Council.

I, __Jeff Nishimura _____, the applicant for Application No. 224-0026 & DVP24-0111

for rezoning a property from MF3 to VC1r with 2 variances.

(brief description of proposal)

at <u>305 Drysdale Boulevard</u> have conducted the required neighbour

(address) consultation in accordance with Council Policy No. 367.

- My parcel is located **outside** of the Permanent Growth Boundary and I have consulted all owners & occupants within a 300m radius
- ☑ My parcel is located **inside** of the Permanent Growth Boundary and I have consulted all owners & occupants within a 50m radius

I have consulted property owners and occupants by doing the following:

leaving notification letters in the mailbox with the owner/occupant

or reception with the exception of 310 Glen Park and 340 Valley Road

where emails were sent to the owners due to restricted access.

Please initial the following to confirm it has been included as part of the neighbour consultation:

- $_{JN}$ Location of the proposal;

- JN Contact information for the appropriate City department;

Please return this form, along with any feedback, comments, or signatures to the File Manager **20 days prior to the anticipated initial consideration by Council date**. On the back of this form please list those addresses that were consulted.



City of Kelowna 1435 Water Street Kelowna, BC V1Y 1J4 TEL 250 469-8600 FAX 250 862-3330 **kelowna.ca**

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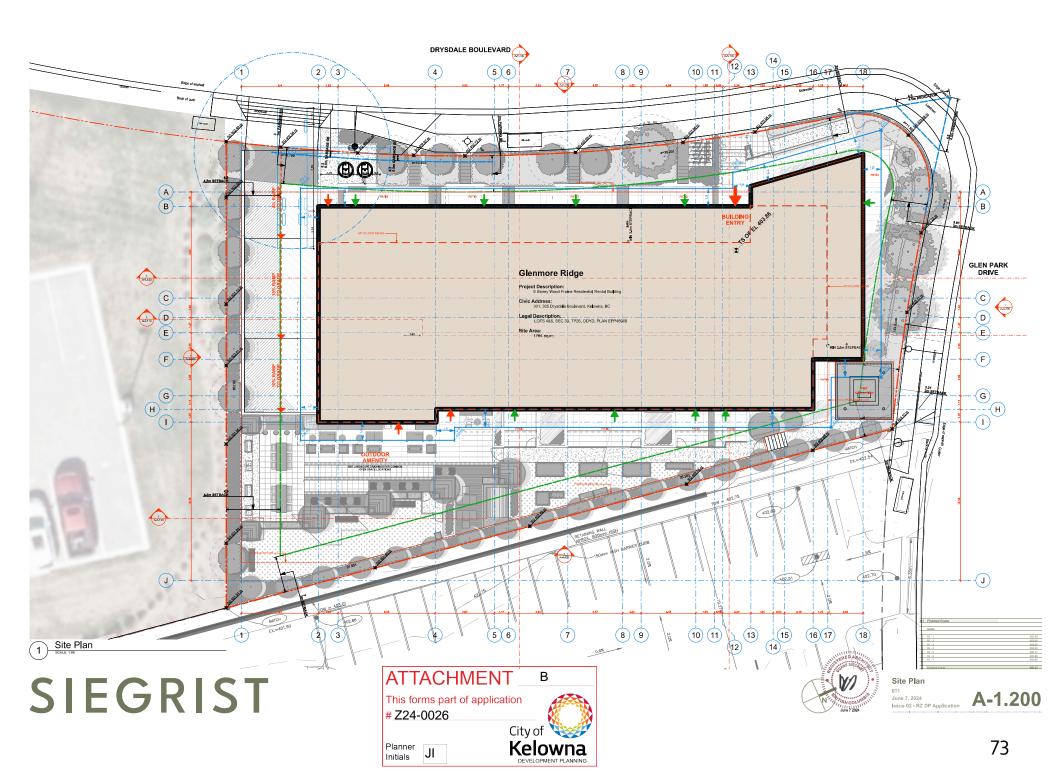
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ATTACHMENT		
This forms part of ap # Z24-0026	oplication	
# 224-0020	City of	
Planner Initials JI	Kelowna DEVELOPMENT PLANNING	



CITY OF KELOWNA

BYLAW NO. 12698 Z24-0026 305 Drysdale Blvd

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of Parcel A (Being a Consolidation of Lots 4 and 5, See CA9869654) Section 33 Township 26 ODYD Plan EPP48909, located on Drysdale Blvd, Kelowna, BC from the MF3 – Apartment Housing zone to the VC1r – Village Centre Rental Only zone.
- 2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk



Z24-0026 305 Drysdale Blvd

Rezoning Application



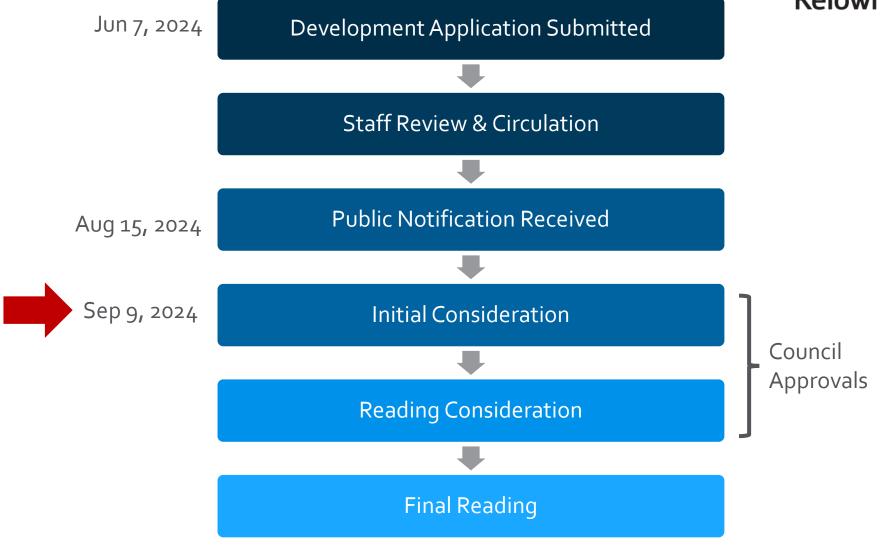
Purpose

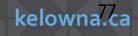
To rezone the subject property from the MF3 – Apartment Housing zone to the VC1r – Village Centre Rental Only zone to facilitate a rental apartment housing development.



Development Process

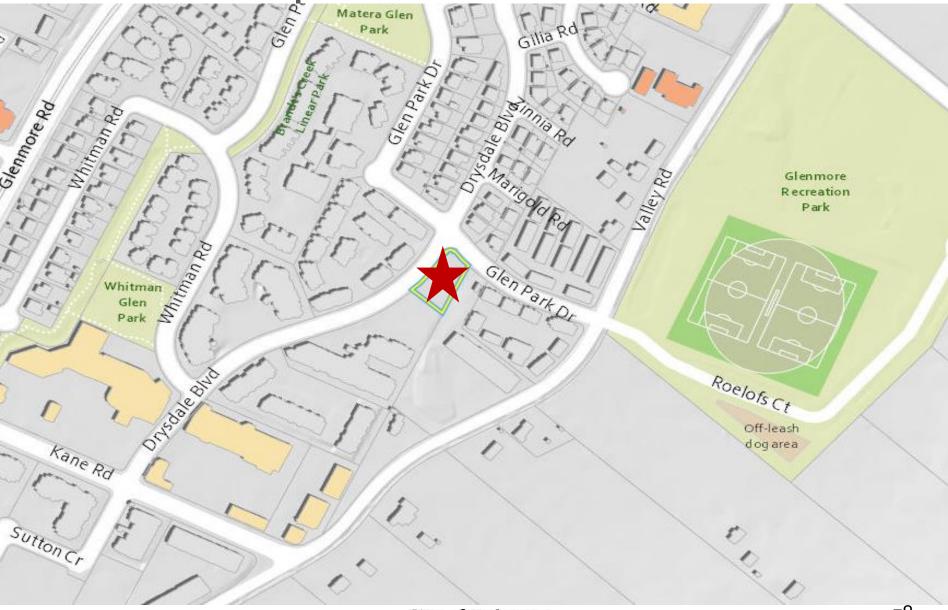






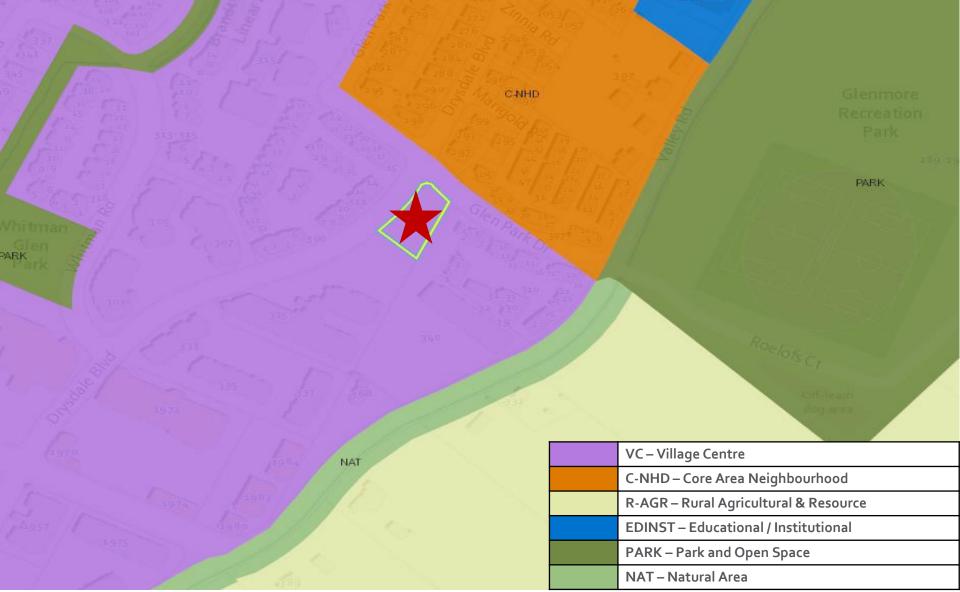
Context Map





OCP Future Land Use





City of Kelowna

Subject Property Map





VC1–Village Centre Zone

Purpose

 To provide a zone for a comprehensive mixed-use area which can include a variety of uses specified for each Village Centre (as identified with the OCP).

Summary of Uses

- Apartment Housing
- Stacked Townhouses
- Townhouses
- Small-scale and specialty retail
- Limited offices
- Restaurants at grade
- Health Services
- Personal Services
- Restaurants & Liquor Primary

"r" – Rental Only Subzone

Purpose

 To provide a sub-zone that restricts the dwelling units to a rental only tenure and to prohibit any building or bareland stratification.

Summary of Uses

- Dwelling units must be long-term rental only
- Eligible to apply for Revitalization Tax Exemption

VC1–Village Centre Zone

Regulation	Maximum Permitted
Maximum Height	6 storeys & 22.0 m
Potential Unit Count	66
Building Site Coverage	75%

"r" – Rental Only Subzone

Regulation	Maximum Permitted
Bonus Height	n/a
Bonus Floor Area Ratio	Rental/Affordable: 0.3
Parking Reduction	10% Core Area



OCP Objectives – Climate Resilience K

Climate Criteria

Dark Green – Meets Climate Criteria Light Green– Will Meet Criteria Soon Yellow – Does not meet Climate Criteria

10 min Walk to Retail/Restaurants	
5 min Walk to Park	
10 min Bike to Public School	
20 min Bus to Urban Centre/Village Centre/Employment Hub	
Retaining Trees and/or Adding Trees	
OCP Climate Resilience Consistency	





OCP Objectives & Policies

- Future Land Use: VC Village Centre
- Objective 5.1 Encourage Village Centres as Kelowna's secondary hubs of activity.
 - Encourage the development of a range of services, small scale and specialty retail, and limited office employment in scale with supporting low rise residential development
- Objective 5.11 Increase the diversity of housing forms and tenure to create an inclusive, affordable and complete Core Area.
 - Ensure a diverse mix of low and medium density housing forms in the Core Area to support a variety of household types and sizes, income levels and life stages.





Staff Recommendation

Staff recommend support for the proposed rezoning as it is consistent with:

- OCP Future Land Use –Village Centre
- OCP Objectives in Chapter 5 Core Area
 - Encourage Village Centres as secondary hubs of activity
 - Housing Diversity
- Development Permit and Development Variance Permit to follow for Council consideration



REPORT TO COUNCIL

Sentember o 2024

REZONING

Date



Date.	September 9, 2024	ιλτιυψιια		
То:	Council			
From:	City Manager			
Address:	2124 Pandosy St			
File No.:	Z24-0027			
	Existing	Proposed		
OCP Future Land Use:	C-HTH – Core Area – Health District	C-HTH – Core Area – Health District		
Zone:	MF4 – Transit Oriented Areas	MF4r – Transit Oriented Areas		

1.0 Recommendation

THAT Rezoning Application No. Z24-0027 to amend the City of Kelowna Zoning Bylaw No. 12375 by changing the zoning classification of Lot 1 District Lot 14 ODYD Plan EPP129773, located at 2124 Pandosy St, Kelowna, BC from the MF4 – Transit Oriented Areas zone to the MF4r – Transit Oriented Areas Rental Only zone, be considered by Council;

AND THAT Council consider the repeal of Bylaw No. 11124 – Heritage Revitalization Agreement Authorization Bylaw for the property legally known as LOT 1 DL 14 ODYD PLAN EPP129773, located at 2124 Pandosy Street, Kelowna, BC;

AND FURTHER THAT final adoption of the Zoning Amendment Bylaw and Heritage Revitalization Agreement Repeal Bylaw be considered in conjunction with Council's consideration of a Heritage Alteration Permit for the subject property.

2.0 Purpose

To rezone the subject property from the MF4 – Transit Oriented Areas zone to the MF4r – Transit Oriented Areas Rental Only zone to facilitate a change of uses to long-term residential rental only, while retaining and protecting the existing heritage asset known as Cadder House.

3.0 Development Planning

Introduction:

Staff are supportive of the overall objective of this development proposal, which is to add 16 purpose-built rental townhouses on the northern portion of the subject property, while protecting the existing heritage asset known as Cadder House, and preserving the majority of mature landscaping. The development proposal aligns with Official Community Plan (OCP) objectives and policies related to Future Land Use, Heritage Preservation, Transit Supportive Corridor Densities, and an Equitable Community.

The subject property currently has two heritage related bylaws in place. Heritage Revitalization Agreement Bylaw No. 11124 permits short-term rentals and limited commercial uses within the existing seven units; and Heritage Designation Bylaw No. 9198 secures long-term protection of the Cadder House property by requiring Council approval of a Heritage Alteration Permit (HAP) for any changes to the building or site plan. There are three applications for Council to consider to facilitate this development proposal outlined in two separate Council reports. This is the first Council report to consider repealing the existing Heritage Revitalization Agreement Bylaw and rezoning the property to add the "r" rental only subzone. Should Council support the repeal Bylaw and the Zoning Amending Bylaw, Staff will bring forward a second Council report for consideration of a Heritage Alteration Permit to evaluate the form and character and development specifics of 16 proposed purpose-built rental townhouse units.

Bylaw or Application	Purpose of Bylaw or Application	Action	Reason	Date of Council Consideration
Heritage Revitalization Agreement Bylaw No. 11124 (2015) Repeal	Permit short-term rentals, offices, and wellness studio	Repeal	No longer required	September 9, 2024
"r" Rental Only Subzone Z24-0027 Rezoning	To ensure long- term rental uses only	Rezone	To reflect current and proposed uses on the property	September 9, 2024
Heritage Alteration Permit HAP23-0015	Form and character evaluation	Approve	To consider 16 new rental townhouses on northern portion of site	Fall 2024
Heritage Designation Bylaw No. 9198 (2004)	Protect heritage asset known as Cadder House	No Action	To maintain long term heritage protection of Cadder House	Maintain bylaw, no consideration required

Heritage Revitalization Agreement Bylaw Repeal & "r" Rental Only Subzone:

Staff recommend support for the proposed rezoning to add the "r" rental only subzone to the existing MF₄ – Transit Oriented Areas zone and to repeal the existing Heritage Revitalization Agreement Bylaw on the subject property. This will change the permitted uses of the seven units on the subject property from short-term rentals and limited commercial uses to residential long-term rental only as secured by the rental only subzone, and ensure that the future proposed 16 new townhouses would be long-term rental only.

The OCP Future Land Use Designation of the subject property is C-HTH, Core Area – Health District. The purpose of C-HTH is to encompass a range of residential uses that are intended to support the hospital as well as transition between the hospital and the surrounding heritage area. Residential uses envisioned in this area include ground-oriented forms such as row housing, stacked townhouses, and low-rise apartments.

The development proposal meets key Official Community Plan objectives and policies including:

- Increasing residential density along Transit Supportive Corridors by removing the commercial uses associated with the Heritage Revitalization Agreement and securing long-term rental units;
- Providing diverse housing tenures and unit types in close proximity to jobs, recreation, and services;
- Long term heritage protection of Cadder House and mature trees on the east side of property by retaining the Heritage Designation Bylaw;
- Incorporating an equity lens into planning decisions by supporting rental only tenure in a neighbourhood that has been predominantly exclusive to single dwelling housing ownership.

Lot Area	Proposed (m ²)
Gross Site Area	2,420 m ²
Road Dedication	21 M ²
Net Site Area	2,399 m²

4.0 Site Context & Background

Orientation	Zoning	Land Use
North	MF4 – Transit Oriented Areas	Single Dwelling Housing
East	MF4 – Transit Oriented Areas	Single Dwelling Housing
South	MF4 – Transit Oriented Areas	Single Dwelling Housing
West	MF4 – Transit Oriented Areas	Single Dwelling Housing

Subject Property Map: 2124 Pandosy St



The subject property is within 200.0 m of the new Hospital Exchange Transit Oriented Area, mandated by Provincial Bill 47, which permits heights up to 6 storeys with no minimum parking requirements. There are two three-storey apartment buildings in close proximity along Royal Ave, one of which is under construction with 38 purpose-built rental units, and the other is mixed-use with four dwelling units.

The subject property is located on the Pandosy St Transit Supportive Corridor, with a BC Transit stop immediately out front, which will be improved as a function of this project. It is within a five minute walk to the Kelowna General Hospital and the Cadder Ave Beach Access, and a 15 minute walk to both Downtown

and Pandosy Urban Centres. A.S. Matheson Elementary School is a 15 minute walk or a four minute bicycle ride, and the nearest corner store is within a three minute bicycle ride.

4.1 <u>Background</u>

Cadder House was built in 1908, and was reportedly the largest residence in Kelowna when it was built. The original property extended from Pandosy St in the east to Abbott St in the west, covering all city blocks between Cadder Ave and Glenwood Ave. Over time the property was incrementally subdivided into approximately 30 residential lots, leaving the 2,420 m² remainder lot where Cadder House is today.

As early as the 1920's the property shifted from single detached housing to multi-family and institutional uses for various medical support facilities, and building permit records indicate it operated as a boarding house in 2000. Heritage Designation Bylaw No. 9198 was adopted in 2004 to ensure the long term preservation of the building. In 2015, Heritage Revitalization Agreement Bylaw No. 11124 was adopted permitting short-term rentals in seven residential units, as well as offices and a wellness studio.

In 2022 – 2023, the property fell into foreclosure, indicating that the current uses and business model was not sustainable, and the future preservation of Cadder House was uncertain. The new owner began working with Staff to explore future opportunities on the site that would ensure the preservation of the heritage building. The owner dissolved the existing strata in July 2023, ceased operations of short-term rentals, and began renting the residential units long-term with the intention of adding additional townhouse units on the north side of the property. As the short-term rentals, offices, and wellness studio uses are no longer required, the Heritage Revitalization Bylaw can be repealed.

In December 2023, Provincial Bill 47 – Transit Oriented Areas came into effect, and in March 2024 the property was rezoned to MF4 – Transit Oriented Areas zone which permits building heights up to six storeys with no minimum residential parking requirements.

5.0 Current Development Policies

5.1 Kelowna Official Community Plan (OCP)

Chapter 5: The	Core Area		
Objective 5.2. Focus residential density along Transit Supportive Corridors.			
Policy 5.2.1. Transit Supportive Corridor Densities.	Encourage development that works toward a long term population density of between 50 – 100 people per hectare within 200 metres of each corridor to achieve densities that support improved transit service and local services and amenities.		
	The repeal of the existing Heritage Revitalization Agreement that permitted short- term rentals and commercial uses reverts the property back to 100% residential uses, increasing residential density along the Pandosy Transit Supportive Corridor.		
Chapter 5: The Core Area			
Objective 5.11. Increase the diversity of housing forms and tenure to create an inclusive,			

Objective 5.11. Increase the diversity of housing forms and tenure to create an inclusive, affordable, and complete Core Area.

Encourage a range of rental and ownership tenures that support a variety of
households, income levels, and life stages.

Policy 5.11.2. Diverse Housing Tenures	The rental only subzone ensures long-term rental tenures, helping to create an inclusive and complete Core Area.				
Chapter 9: Equitab	le Community				
Objective 9.1. In community.	Objective 9.1. Incorporate equity into planning decisions and resource allocation in our community.				
Policy 9.1.1. Equity in Planning Decisions	Incorporate an equity lens into land-use planning decisions and resource allocation in our community.				
	There are currently very few purpose-built rentals (40 units total) in the Heritage Conservation Area, an area which has historically been exclusively single and two dwelling housing ownership. The proposed rental only subzone incorporates equity into planning decisions by increasing opportunities for people to live in the Heritage Conservation Area who may be unable to attain home ownership.				
Chapter 11: Herita	ge				
Objective 11.1. Ide	ntify, conserve, and protect historic places.				
Policy 11.2.5. Protection of Historic Places.	Prioritize the legal protection of historic places using the tools identified in the <i>Local Government Act:</i> Heritage Designation Bylaws, Heritage Revitalization Agreements, and Heritage Covenants.				
	The proposed rental only rezoning does not require any changes to the existing Heritage Designation Bylaw on Cadder House that provides long term protection of the Cadder House.				

6.0 Application Chronology

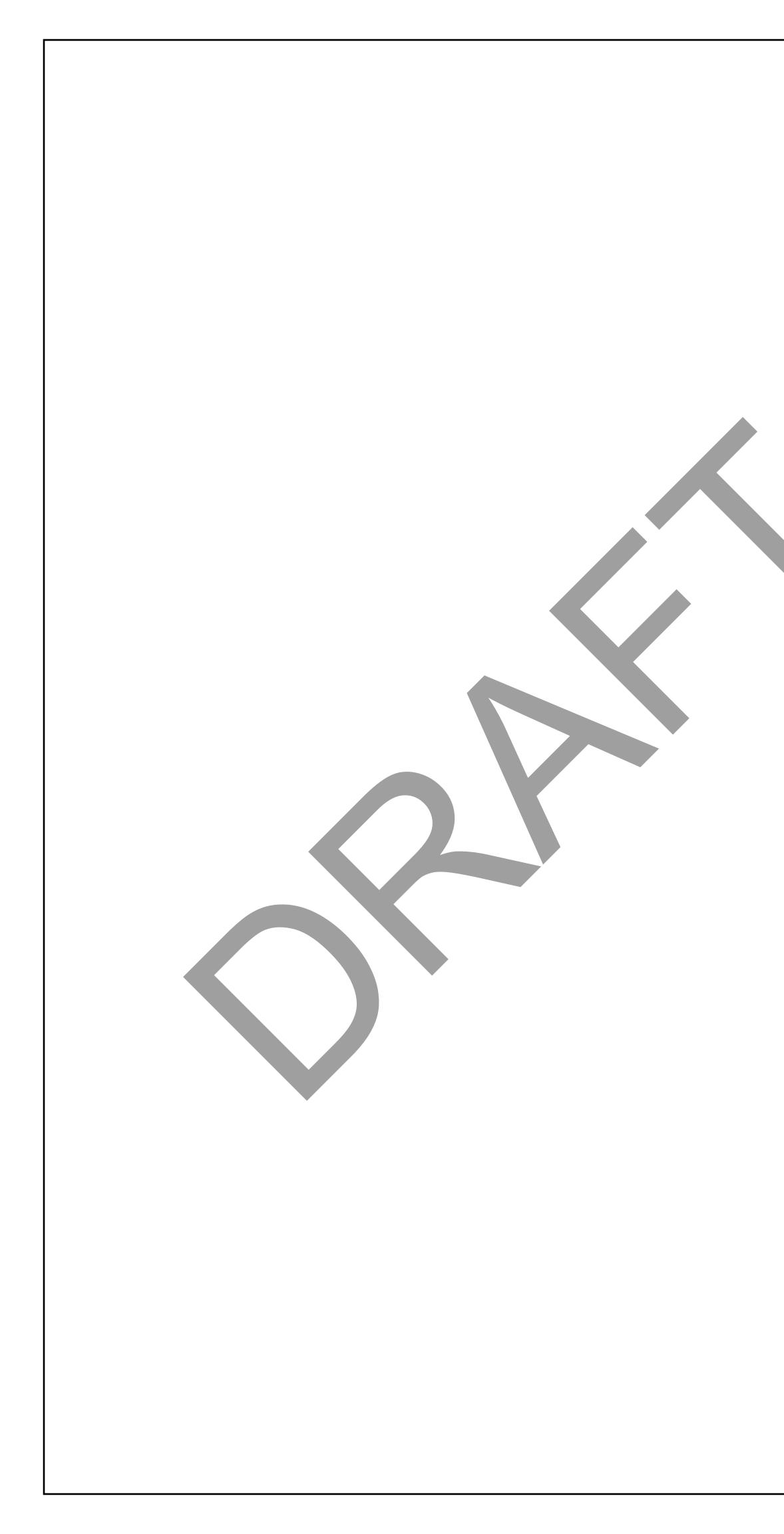
Application Accepted:October 11, 2023Neighbourhood Notification Summary Received:July 16, 2024

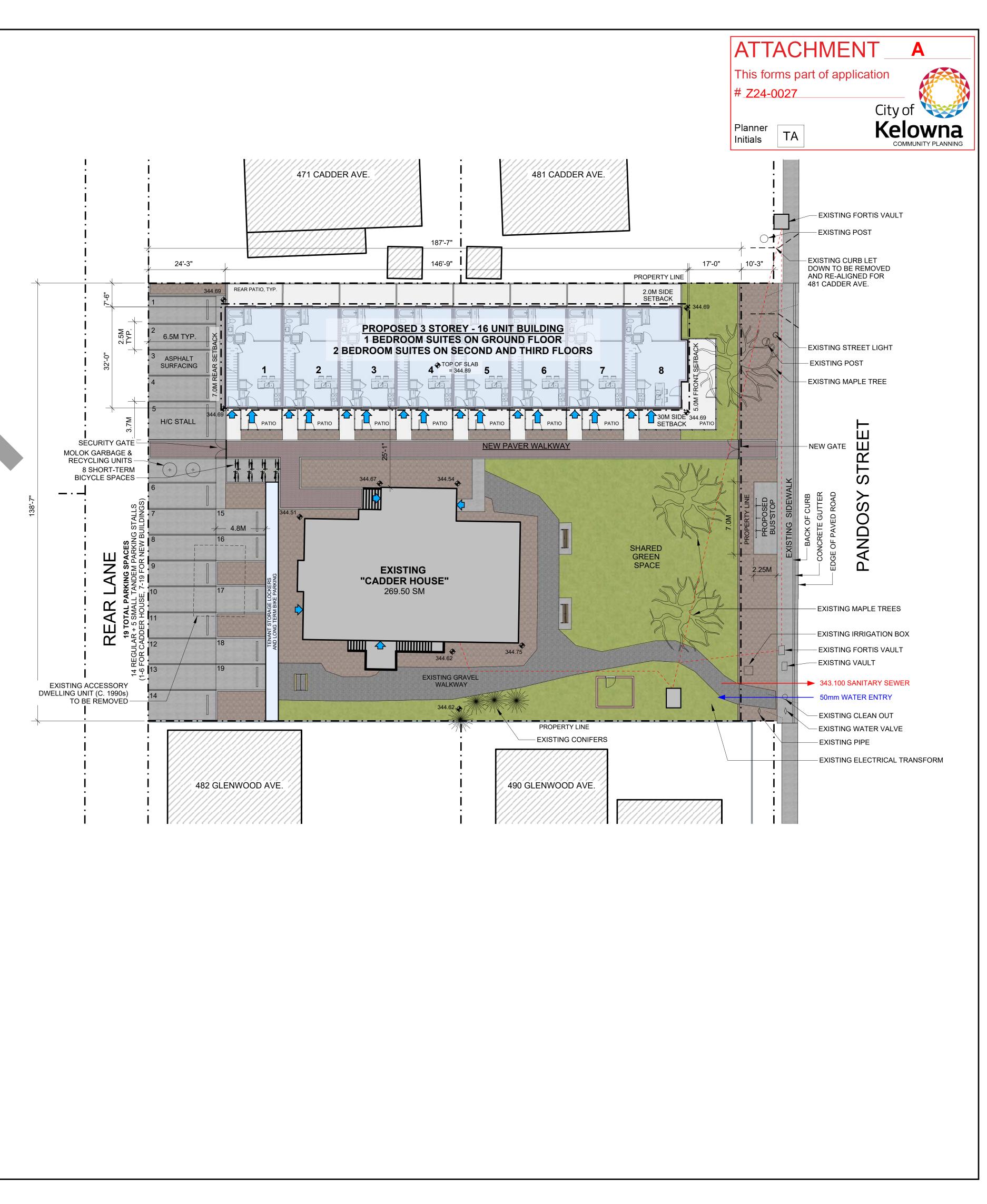
Report prepared by:	Trisa Atwood, Planner Specialist
Reviewed by:	Jocelyn Black, Urban Planning Manager
Reviewed by:	Nola Kilmartin, Development Planning Department Manager
Approved for Inclusion:	Ryan Smith, Divisional Director, Planning, Climate Action & Development
	Services

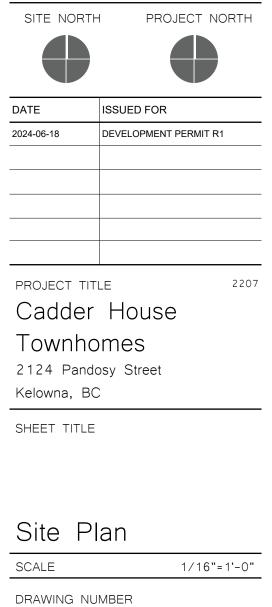
Attachments:

Attachment A: DRAFT Site Plan Attachment B: Summary of Neighbour Notification

For	additional	information,	please	visit	our	Current	Developments	online	at
www.kelowna.ca/currentdevelopments									







ATTACHMENT

В

K

This forms part of application
Z24-0027

Property Address	Email	Met In Person	Flyer Dropped In Mail Box	Date City of	Share Star
443 Cadder Ave		Spoke with Owner's Contractor	Yes _{Planner}	12/14/24	
450 Cadder Ave			YesInitials TA	12-50-24	NIL
450 Cadder Ave			Yes	12-Jul-24	FEANNING
451 Cadder Ave			Yes	12-Jul-24	
		Several in person meetings for previous design,			
461 Cadder Ave	Yes	have yet to meet in person for revised design	Yes	15-Jul-24	
464-468 Cadder Ave	105		Yes	12-Jul-24	
471 Cadder Ave	Yes	Met in person July 5th		12 501 21	
474 Cadder Ave			Yes	12-Jul-24	
480 Cadder Ave			Yes	12-Jul-24	
		Away on vacation hoping to connect when back,			
481 Cadder Ave	Yes	spoke several times about previous design	Yes	12-Jul-24	
486 Cadder Ave			Yes	12-Jul-24	
452-454 Glenwood Ave			Yes	12-Jul-24	
459 Glenwood Ave			Yes	12-Jul-24	
465 Glenwood Ave			Yes	12-Jul-24	
466 Glenwood Ave			Yes	12-Jul-24	
475 Glenwood Ave			Yes	12-Jul-24	
		Met in person about previous design, yet to			
478 Glenwood Ave		discuss revision	Yes	12-Jul-24	
		Met in person about previous design, yet to			
482 Glenwood Ave	Yes	discuss revision	Yes	12-Jul-24	
490 Glenwood Ave	Yes	Met in person July 12th	Yes	12-Jul-24	
540 Glenwood Ave			Yes	12-Jul-24	
2089 Pandosy St			Yes	12-Jul-24	
2109 Pandosy St	Yes	Phone Meeting July 8th			
2119 Pandosy St			Yes	12-Jul-24	
2124 Pandosy St	Yes	To all tenants of Cadder House		16-Jul-24	
2127 Pandosy St			Yes	12-Jul-24	
2137 Pandosy St			Yes	12-Jul-24	
2154 Pandosy St			Yes	12-Jul-24	
		This is interior health and I'm trying to find			
2169 Pandosy St		appropriate contact			

CITY OF KELOWNA

BYLAW NO. 12699 Z24-0027 2124 Pandosy Street

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of Lot 1 District Lot 14 ODYD Plan EPP129773, located on Pandosy Street, Kelowna, BC from the MF4 Transit Oriented Areas zone to the MF4r Transit Oriented Areas Rental Only zone.
- 2. AND THAT Bylaw No. 11124 Heritage Revitalization Agreement Authorization HRA15-0001 – 2124 Pandosy Street, and all amendments thereto, be repealed.
- 3. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk

City of Kelowna

Z24-0027 2124 Pandosy St

Rezoning Application



Introduction

Development Proposal: Add 16 purpose built rentalonly townhouses to the northern portion of the site, maintain and protect Cadder House

Two Existing Heritage Bylaws:
 1. Heritage Revitalization Agreement (HRA) Bylaw No. 11124
 2. Heritage Designation Bylaw No. 9198

Council Considerations:

- 1. Repeal HRA Bylaw & apply "r" Rental Only Subzone
- 2. Heritage Alteration Permit



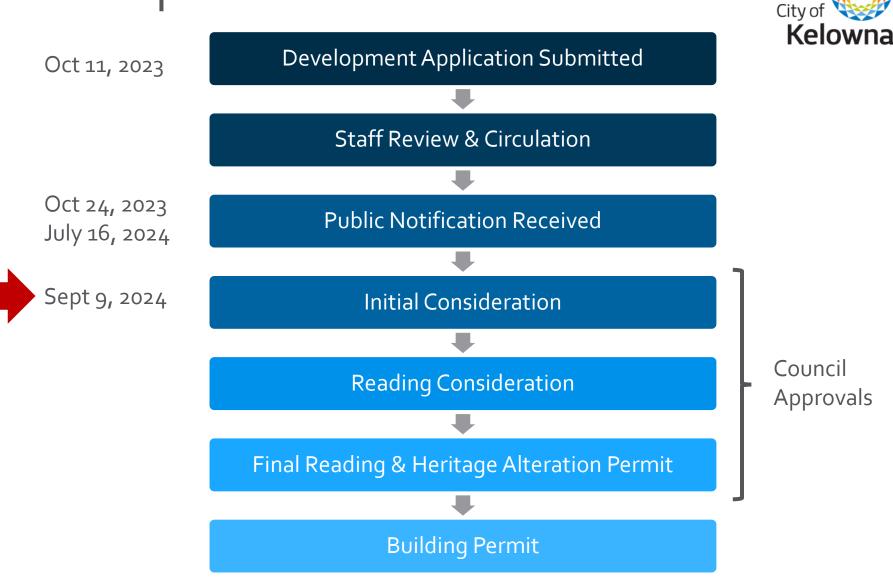


Purpose

To rezone the subject property from the MF4 – Transit Oriented Areas zone to the MF4r – Transit Oriented Areas Rental Only zone and to repeal a Heritage Revitalization Agreement Bylaw to facilitate a change of uses from short-term rentals and limited commercial to long-term residential rental only, while retaining and protecting the existing heritage asset known as Cadder House.

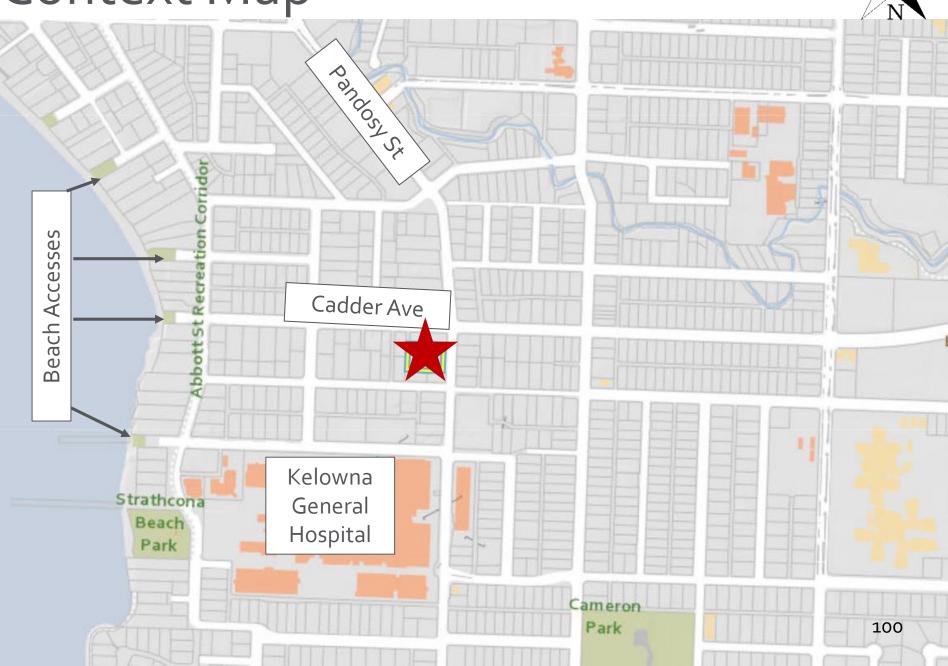


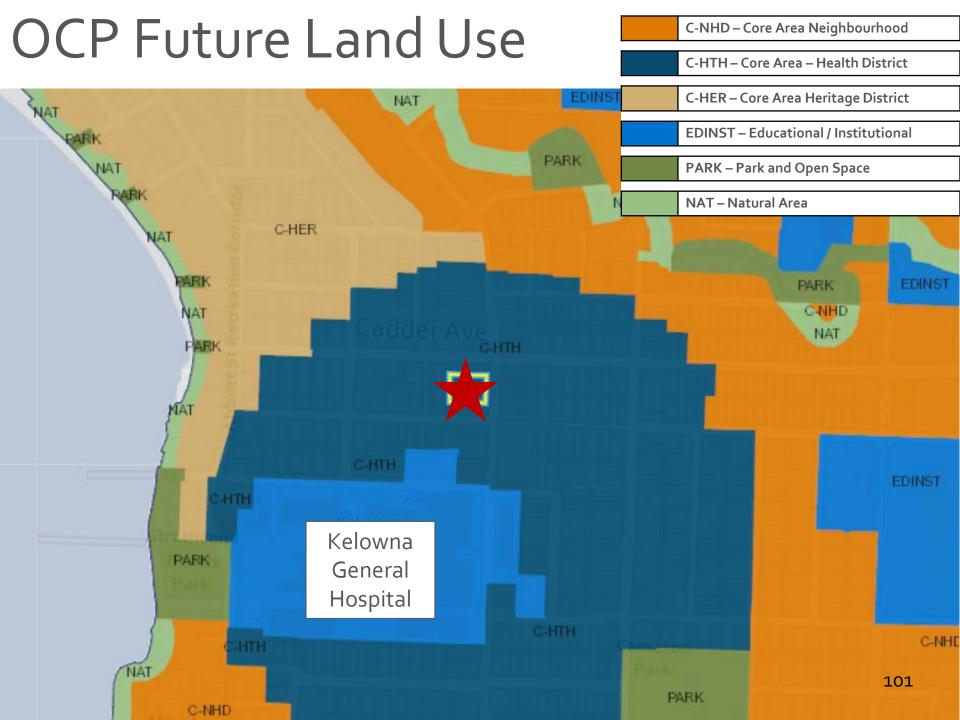
Development Process



kelowna??a

Context Map





Subject Property Map







Pandosy looking west



Pandosy looking west

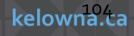


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Background

- 1908: Cadder House Built for single dwelling housing residential use
- 1920's: Cadder House used for multi-family & institutional uses
- > 2000: Cadder House used as boarding house
- 2004: Heritage Designation Bylaw adopted
 Long term protection of Cadder House
- > 2015: Heritage Revitalization Agreement adopted
 > Short term rentals, limited commercial uses





Background

> 2022-2023: Property in foreclosure

- ► 2023: New ownership
- July 2023: Ceased short-term rental operations
 - Currently rented out long-term
- December 2023: Transit Oriented Areas Bill 47
 - Permits 6 storey apartment buildings
 - No minimum residential parking requirements

Technical Details

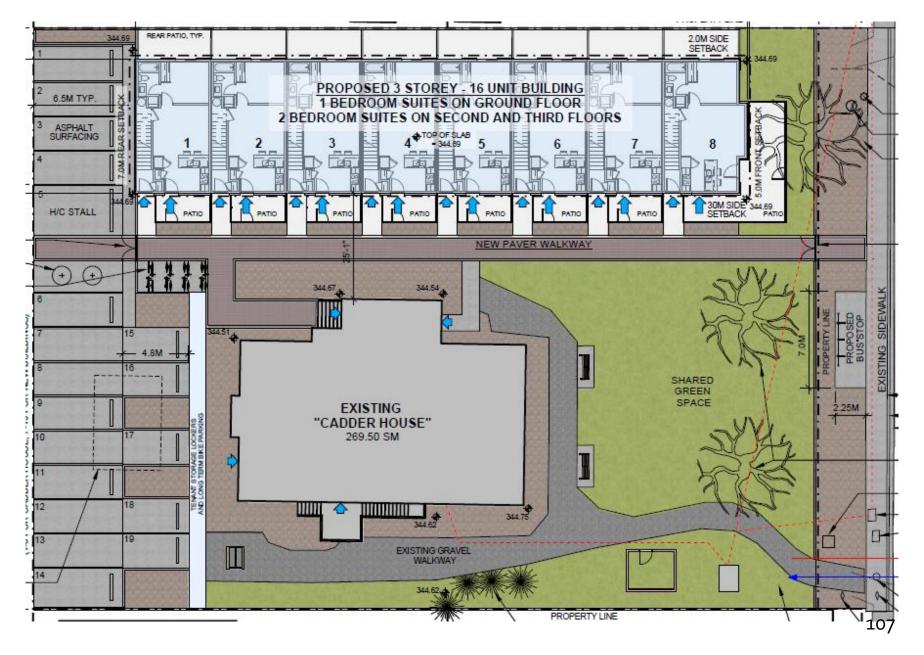


Repeal Heritage Revitalization Agreement Bylaw

- Permits short-term rentals, wellness studio, offices
- Uses are no longer required
- Does not impact heritage protection of Cadder House
- Apply "r" Rental Only Subzone
 - Secure long-term rental only (residential) for existing units
 - Secures long-term rental only for proposed new units
 - Allows applicant to apply for Revitalization Tax Exemption



DRAFT Site Plan





OCP Objectives – Climate Resilience K

Climate Criteria

Dark Green – Meets Climate Criteria Light Green– Will Meet Criteria Soon Yellow – Does not meet Climate Criteria

10 min Walk to Retail/Restaurants			
5 min Walk to Park			
10 min Bike to Public School			
20 min Bus to Urban Centre/Village Centre/Employment Hub			
Retaining Trees and/or Adding Trees			
OCP Climate Resilience Consistency			

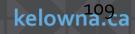




OCP Policies & Objectives

► Future Land Use C-HTH – Core Area – Health District

- Envisions row housing, stacked townhomes, apartments
- Transition from Hospital to Heritage Conservation Area
- 5.2. Focus residential density along Transit Supportive Corridors
 - Remove commercial uses associated with Heritage Revitalization Agreement
 - Return property to 100% residential
- ▶ 5.11. Increase diversity of housing forms & tenures
 - Long-term rental only subzone





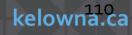
OCP Policies & Objectives

▶ 9.1. Incorporate equity into planning decisions

- Increase the number of purpose-built rentals in Heritage Conservation Area
- Area typically reserved for single dwelling housing ownership

▶ 11.1 Identify, conserve, and protect historic places

- Maintain Heritage Designation Bylaw
- Long Term Protection of Cadder House
- Requires Council Approval for any changes to building or site plan



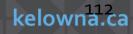
Summary of Council Considerations

Bylaw or Application	Purpose of Bylaw or Application	Action	Reason	Date of Council Consideration
Heritage Revitalization Agreement Bylaw No. 11124 (2015) Repeal	Permit short- term rentals, offices, and wellness studio	Repeal	No longer required	September 9, 2024
"r" Rental Only Subzone Z24-0027 (2024) Rezoning	To permit long- term rental uses only	Rezone	To reflect current and proposed uses on the property	September 9, 2024
Heritage Alteration Permit HAP23-0015 (2024)	Form and character evaluation	Approve	To consider 16 new townhomes on northern portion of site	Fall 2024
Heritage Designation Bylaw No. 9198 (2004)	Protect heritage asset known as Cadder House	No Action	To maintain long term heritage protection of Cadder House	Maintain bylaw, no consideration required



Staff Recommendation

- Staff recommend support for the proposed "r" rental only subzone and the repeal of the Heritage Revitalization Agreement Bylaw:
 - Aligns with Future Land Use Designation of Core Area Health District
 - Aligns with OCP Objectives & Policies
 - Transit Supportive Corridors
 - Housing Diversity
 - Preserve Cadder House
 - Equity Lens



REPORT TO COUNCIL SUPPLEMENTAL

Date:	September 9, 2024	
То:	Council	
From:	City Manager	
Address:	1080-1090 Richter St	
File No.:	DVP24-0087 & LL23-0007	



	Existing	Proposed
OCP Future Land Use:	IND - Industrial	IND - Industrial
Zone:	I2 - General Industrial	I2 - General Industrial

1.0 Recommendation

THAT Council authorizes the issuance of Development Variance Permit No. DVP24-0087 for Lot 1 District Lot 139 ODYD Plan 7858, located at 1080-1090 Richter St, Kelowna, BC;

AND THAT variances to the following section of Zoning Bylaw No. 12375 be granted as shown on Schedule "A":

Table 8.3.4: Industrial, Parking Requirement

To vary the required parking from 7 stalls to 0 (zero) stalls proposed for a maximum of 30 individual single day events per calendar year.

AND THAT this Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

AND FURTHER THAT Council directs Staff to forward the following Recommendation to the Provincial Liquor and Cannabis Regulation Branch (LCRB):

In accordance with 'Division 9 (71)' of the Liquor Control and Licensing Regulation and Council Policy 359, BE IT RESOLVED THAT:

- 1. Council recommends support of an application from Red Bird Brewing for a special event area endorsements / license amendment for Lot 1 District Lot 139 ODYD Plan 7858, located at 1080-1090 Richter St, Kelowna, BC for the following reasons:
- 2. Council's comments on LCLB's prescribed considerations are as follows:
 - a. The location of the special event area:

The subject property is located in the north end of the City adjacent to Recreation Avenue Park to the west. The applicant is proposing a special event area endorsement that will include the existing rear building, seasonal patio area located between the building and street & surface parking lot area adjacent to Richter St.

b. <u>The proximity of the special event area to other social or recreational facilities and public</u> <u>buildings:</u> The subject site is located adjacent to Recreation Avenue Park to the west which includes recreational facilities and public buildings. The liquor service area proposed for the site predominantly faces Richter St and the building location and orientation on-site provides a natural buffer to Recreation Avenue Park.

c. <u>The person capacity of the special event area endorsement:</u>

The existing establishment has a maximum capacity of 500-persons including a maximum of 186-persons inside the rear building with the remaining 314-person capacity located in the seasonal outdoor area located between the building and street. The application proposes increasing the maximum site capacity for events to 750 people, inclusive of staff, entertainment, and security. Of the 750-person capacity for events a maximum of 186-persons would be located inside the building with the remaining 564-person capacity located outside the building.

d. Traffic, noise, parking and zoning:

Expanding the existing liquor service for the site to increase the maximum capacity from 500persons existing to 750-persons will increase the potential conflict for traffic, noise, and parking demand. Should Council support the parking variance, the existing surface parking lot containing seven parking stalls could be converted for event use for a maximum of 30 individual single day events per calendar year. The combination of a capacity increase of 250-persons during events and zero available on-site parking will subsequently create increased competition for street parking in the immediate area, especially when events are being held. This could have a negative impact on street parking availability for other businesses in the area. Additionally, a vast majority of the site's capacity would be located outside the building which creates a larger potential for noise conflicts within the neighbourhood, especially with a patio closure time of 12 AM which exceeds the standard 11 PM closure time for outdoor spaces.

e. <u>The impact on the community if the application is approved:</u>

Red Bird Brewing hosts a variety of annual events. The number of hosted events has ranged over the last few years but has typically been between 10-18 individual event days. The increase to host up to 30 individual single day events will increase local traffic demands, parking and potential for noise conflict with other businesses and uses.

3. Council's comments on the views of residents are as contained within the minutes of the meeting at which the application was considered by Council. The methods used to gather views of residents were as per Council Policy #359 "Liquor Licensing Policy and Procedures."

2.0 Purpose

To issue a Development Variance Permit to vary required parking to 0 (zero) stalls for a maximum of 30 individual single day events per calendar year to facilitate additional events on site with a maximum event capacity of 750-persons. To seek Council's support for a permanent change to the liquor licence to add a special event area endorsement, increase the event capacity and to change the opening time from 12:00 PM to 9:00 AM seven days a week.

3.0 Background

The Development Variance Permit and Liquor License Applications were considered by Council on August 13, 2024. After Council's discussion the application was deferred as there were concerns with the proposed liquor occupant capacity of 900 persons.

The existing establishment is approved for a maximum liquor occupant capacity of 500 people including 186persons inside the rear building with the remaining 314-person capacity located in the outdoor seasonal area. The applicant was previously seeking a capacity increase of 400 people (from 500 to 900 persons).

Resolution	Date			
The following resolution was Deferred:	August 13, 2024			
THAT Council authorizes the issuance of Development Variance Permit No. DVP24-0087 for Lot 1 District Lot 139 ODYD Plan 7858, located at 1080-1090 Richter St, Kelowna, BC;				
AND THAT variances to the following section of Zoning Bylaw No. 12375 be granted as shown on Schedule "A":				
Table 8.3.4: Industrial, Parking Requirement To vary the required parking from 7 stalls to 0 (zero) stalls proposed for a maximum of 30 individual single day events per calendar year.				
AND THAT this Development Variance Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend;				
AND FURTHER THAT Council directs Staff to forward the following Recommendation to the Provincial Liquor and Cannabis Regulation Branch (LCRB):				
In accordance with 'Division 9 (71)' of the Liquor Control and Licensing Regulation and Council Policy 359, BE IT RESOLVED THAT:				
 Council recommends support of an application from Red Bird Brewing for a special event area endorsements / license amendment for Lot 1 District Lot 139 ODYD Plan 7858, located at 1080-1090 Richter St, Kelowna, BC for the following reasons: 				
 2. Council's comments on LCLB's prescribed considerations are as follows: a. <u>The location of the special event area:</u> 				
 <u>The proximity of the special event area to other social or</u> recreational facilities and public buildings: 				
c. The person capacity of the special event area endorsement:				
d. <u>Traffic, noise, parking and zoning</u> .				
e. <u>The impact on the community if the application is approved:</u>				

3.	Council's comments on the views of residents are as contained within	
	the minutes of the meeting at which the application was considered by	
	Council. The methods used to gather views of residents were as per	
	Council Policy #359 "Liquor Licensing Policy and Procedures."	

4.0 Discussion

Subsequent to Council's decision on August 13, 2024, the applicant has reduced the proposed maximum site liquor occupancy to 750-persons which represents a 150-person reduction from the previous 900-person capacity that was proposed.

Of the revised 750-person liquor capacity proposed, the rear building allows for a maximum of 186-persons inside with the remaining 564-person capacity located in the outdoor seasonal area adjacent to the building.

5.0 Application Chronology

Application Accepted:	March 8, 2023
Previous Council Consideration:	<u>August 13, 2024</u>
Report prepared by: Reviewed by: Reviewed by: Approved for Inclusion:	Andrew Ferguson, Planner II Jocelyn Black, Urban Planning Manager Nola Kilmartin, Development Planning Department Manager Ryan Smith, Divisional Director, Planning, Climate Sustainability & Development Services

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.

Development Variance Permit





DVP24-0087

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

1080-1090 Richter St

and legally known as

Lot 1 District Lot 139 ODYD Plan 7858

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

General Industrial

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

Date of Council Approval:	September 9, 2024
Development Permit Area:	N/A
Existing Zone:	I2 – General Industrial
Future Land Use Designation:	IND – Industrial

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

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:

Bromaxx Property Group Ltd., Inc. No. BC1021305

Applicant:

Reb Bird Brewing

Nola Kilmartin Development Planning Department Manager Planning & Development Services Date of Issuance



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

THAT Council authorizes the issuance of Development Variance Permit No. DVP24-0087 for Lot 1 District Lot 139 ODYD Plan 7858 located at 1080-1090 Richter St, Kelowna, BC, subject to the following:

a) The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";

AND THAT variances to the following section of Zoning Bylaw No. 12375 be granted:

Table 8.3.4: Industrial Parking Regulations

To vary required parking from 7 stalls to 0 (zero) stalls proposed for a maximum of 30 individual single day events per calendar year.

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Manager approval, with no opportunity to extend.

3. PERFORMANCE SECURITY

None required.

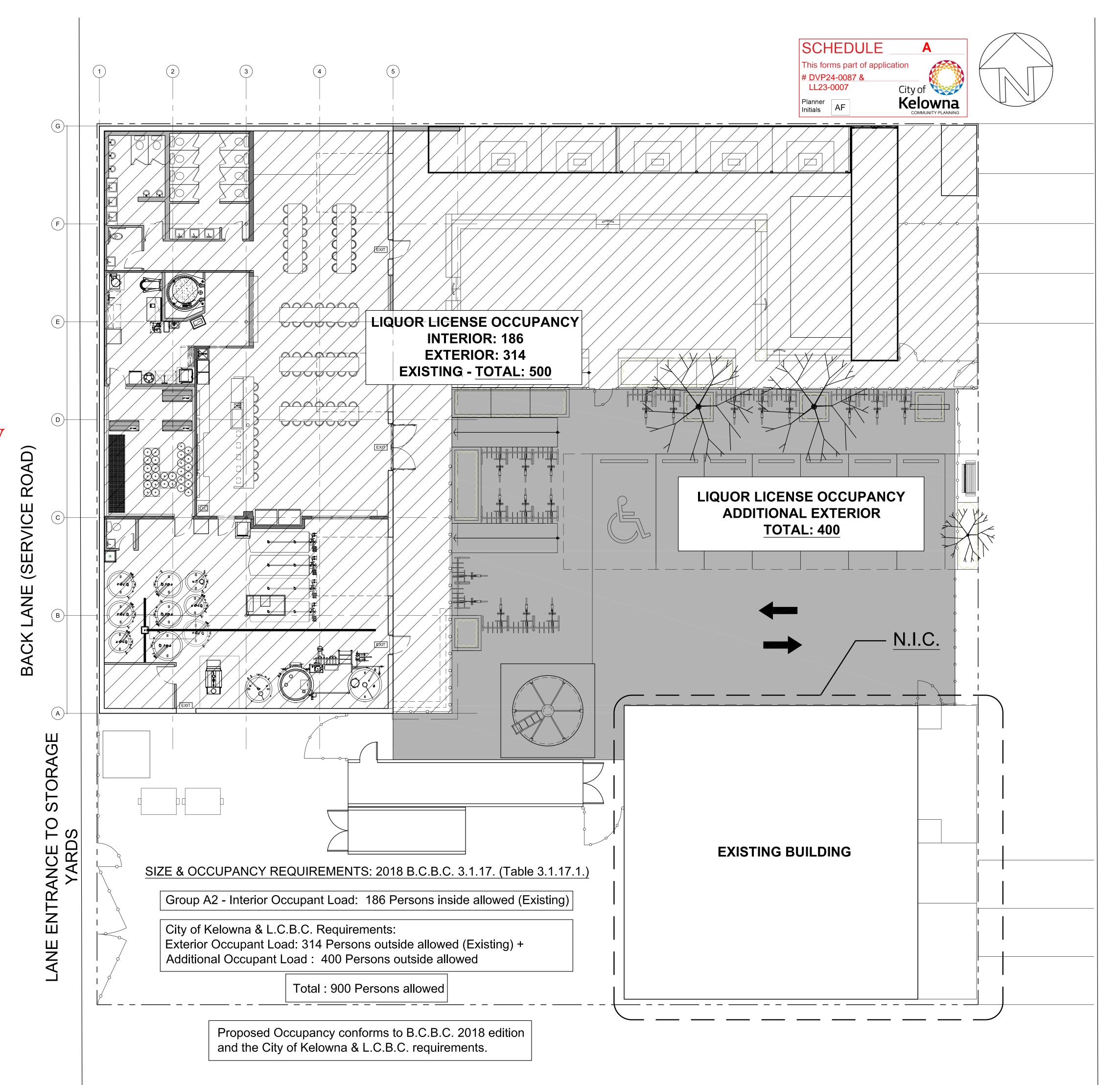
4. INDEMNIFICATION

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 <u>CURRENT LAND OWNER</u>. Security shall <u>ONLY</u> be returned to the signatory of the Landscape Agreement or their designates. Liquor License Occupancy endorsement per City of Kelowna: Additional exterior total is 250 persons, for a total of 750 persons, not 900 persons. 900 persons is based on B.C.B.C. Occupancy area calculations.



RICHTER STREE

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© Copyright Reserved. This drawing and design are, and at all times remain, the property of Patrick McCusker Architecture

Inc., and can be reproduced only with written consent. All drawings shall be read in conjunction with specification and consultant details.

All work shall be carried out in accordance with Canadian standards, specifications, British Columbia Building Code (Current Edition) and local authority by-laws and regulations

abulated scales refer to Arch D size drawing sheet

This drawing must not be scaled.

11	2202.11.30	Occupancy Update
10	2022.11.14	Occupancy Update
09	2022.04.20	Issued for BP Amendment
80	2022.04.06	Issued As-Builts
07	2021.04.08	Updated IFC's
06	2021.04.08	Occupancy Update
05	2021.03.31	Occupancy Update
04	2021.03.05	Issued for Construction
03	2020.06.25	Issued for Building Permit
02	2020.06.25	Re-Issued for Development Permit
01	2019.12.11	Issued for Development Permit
No.	Date	Description
Rev	isions	



N.T.S.

checked PMC drawing no.

drawn

DP2.01



Jan 16th, 2024



Community Planning

1435 Water Street Kelowna, BC V1Y 1J4

Attention:	City of Kelowna
Project:	Red Bird Brewing-Liquor License Revision
Subject:	Project Rationale for Special Event Area (SEA)

We regularly host outdoor events throughout the year in our parking lot area as indicated on the drawing provided. This area can be closed off with a sliding fence gate. Our location in the industrial brewery district of the Kelowna north end, lends itself well to events in this proposed area. The plan is to host events such as the following:

• Music concerts, markets, fundraising events, festivals, cultural events.

Our history of music and other events on site spans 6 years. We schedule events such that we **always** end the amplified, outdoor music portion by 11:00pm.

Currently we are only allowed to host 6 multi-day events per year. Due to the small number of events allowed we have to prioritize and focus on concerts as it is our major revenue driver. We would like to, however, host more events that are community and family focused such as markets, sporting events (youth skatebord competition for example), fundraisers (leaning on our local Falcons, Rockets and some NHL players in the area). We're actually chatting with a mobile petting zoo from the coast to come down and setup for a weekend to give families a truly one-of-a kind experience.

These events really do require the special event area to be not only financially feasible but also to make them a fantastic experience for our guests. A great example is the success we've seen from markets in the previous years when customers are able to carry their beer (or other beverage) with them into the parking lot area while shopping as opposed to not having the space licensed for the day. The sales achieved by the local vendors comparitively is night and day and essentially rules out the possibility to host these markets without the license as the vendors aren't interested in setting up without the potential for higher sales.

This revision to our licesed area will eliminate the need for one-off special event applications throughout the year. We are seeking approval for 30 individual days per calendar year to host licensed events in our parking lot.

Additionally we are asking for an hours change to our liquor license. We are currently licensed from noon until midnight, 7 days a week. We would like to change this to 9am to midnight, 7 days a week. These earlier hours will give us the opportunity to host more family-based events

Attention: Subject: Page **2** of **2**



earlier in the day (such as yoga sessions on the weekends, or earlier start times for an easter egg hunt or other family oriented events).

Although we are licensed until midnight everyday, we **always** end the amplified music portion by 11pm. We typically end beverage service around 11:15pm and never later than 11:30pm

If you have questions or require further clarification regarding this submission, please contact Adam Semeniuk on cell at 778-821-0404 or by email at <u>adam@redbirdbrewing.com</u>

Prepared By: Adam Semeniuk - Operations Manager



Development Variance Permit & Liquor Licence Applications

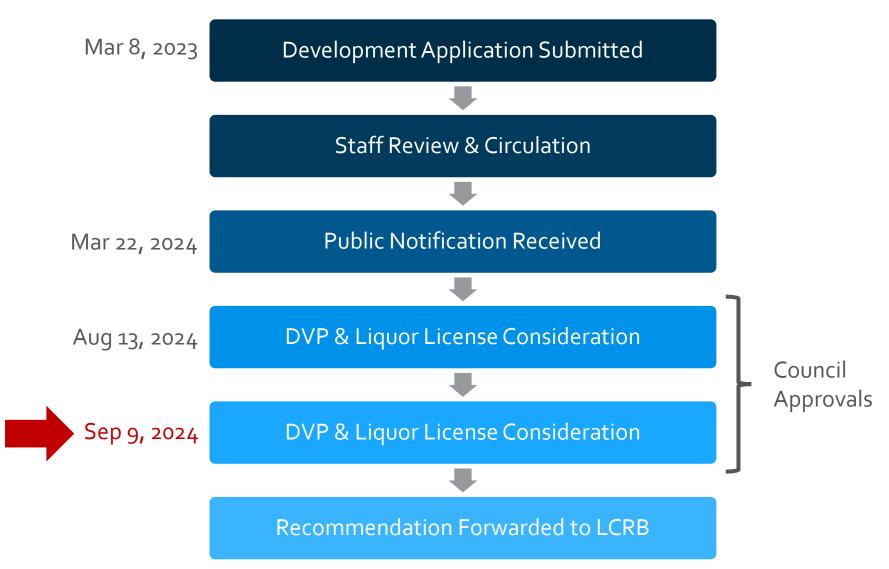
City of

Kelowna

Purpose

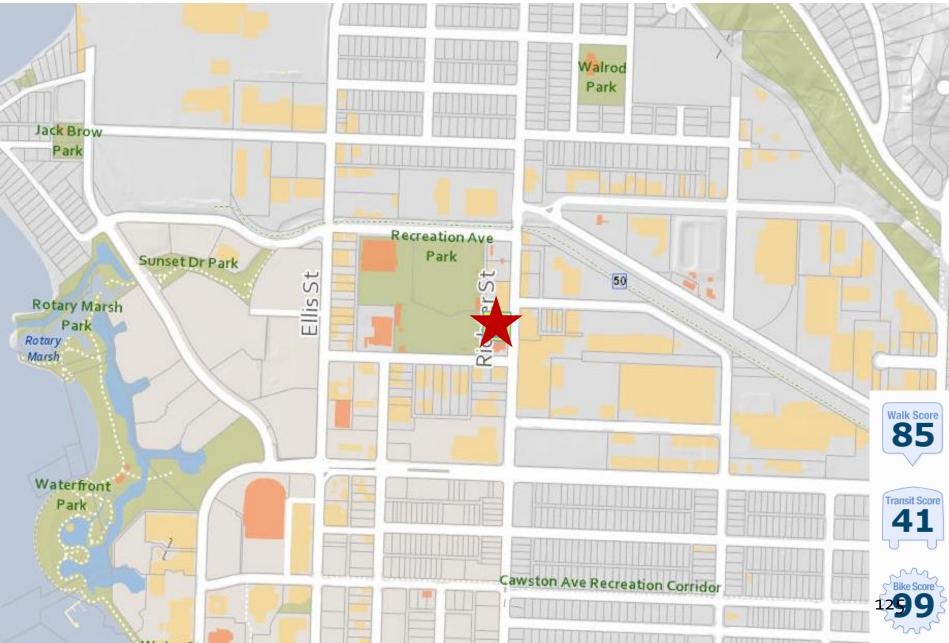
To issue a Development Variance Permit to vary required parking to o (zero) stalls for a maximum of 30 individual single day events per calendar year to facilitate additional events on site with a maximum event capacity of 750-persons. The applicants are seeking Council's support for a permanent change to the liquor licence to add a special event area endorsement, increase the event capacity and to change the opening time from 12:00 PM to 9:00 AM seven days a week.

Development Process



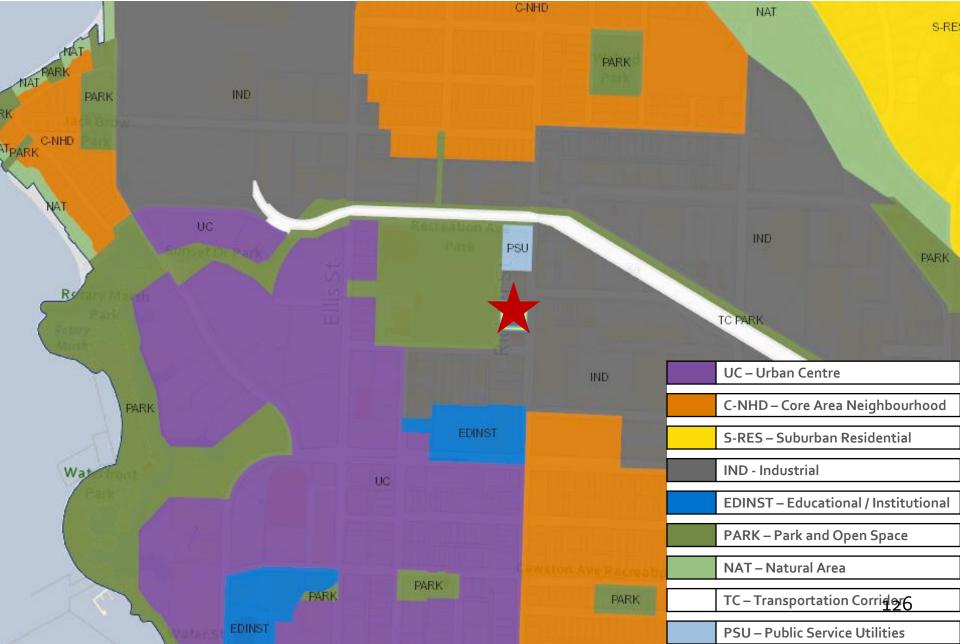
Context Map



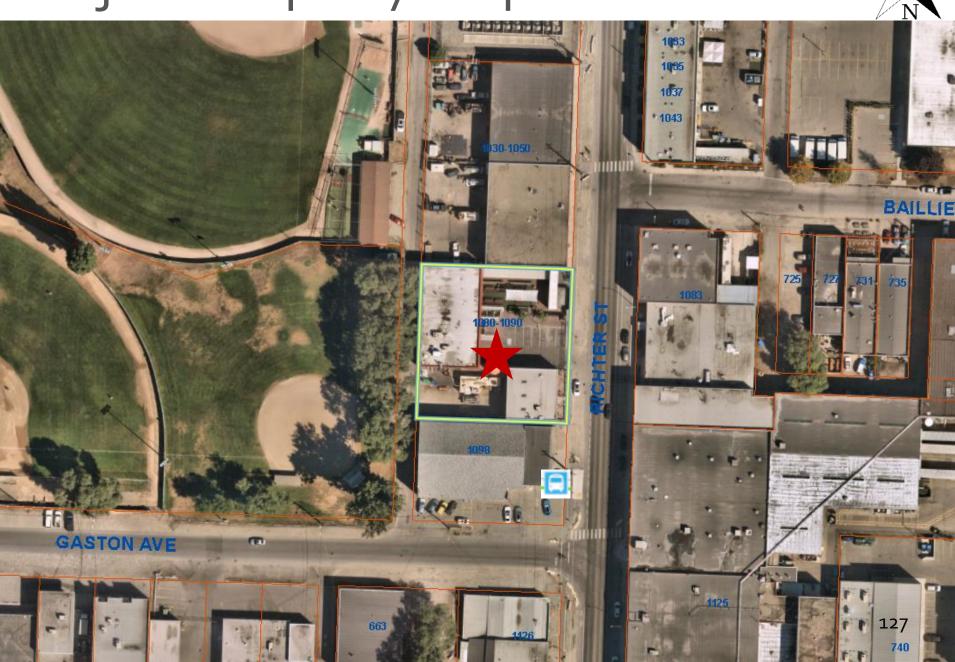


OCP Future Land Use





Subject Property Map



Hours of Sale

Existing:

		Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Open		12:00 PM						
Class	Indoor	12:00 AM						
Close	Outdoor	12:00 AM						

Proposed:

		Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Open		9:00 AM						
Class	Indoor	12:00 AM						
Close	Outdoor	12:00 AM						

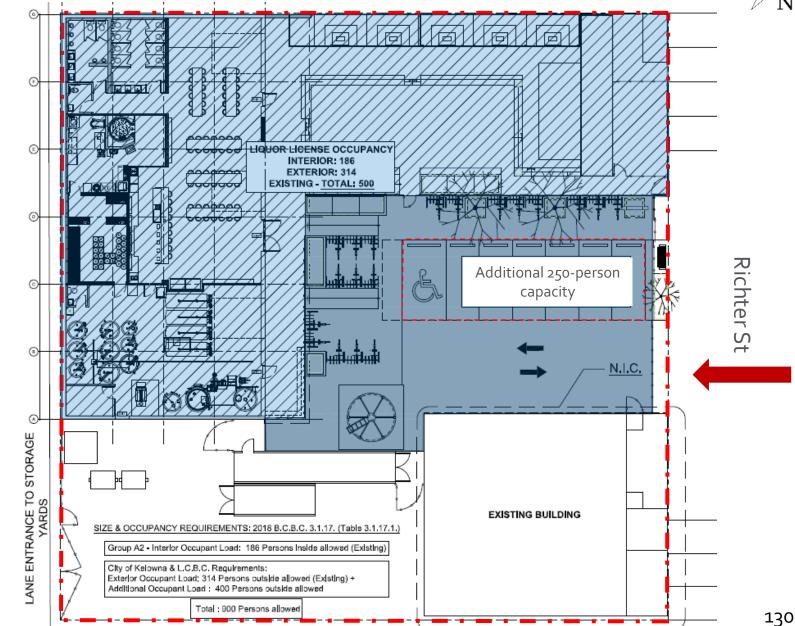
Occupant Load

	Existing	Proposed
Indoor	186 persons	186 persons
Outdoor	314 persons	564 persons**
Total	500 persons	750 persons**

**The additional 250-person capacity will only be permitted when events are being held (30 event maximum per calendar year).

Site Plan





Lane

Project Details

- Industrial OCP Designation
- I2 General Industrial zone
- ► Variance
 - To convert required parking to event space for a maximum of 30 days per year
 - ► 7 on-site parking stalls
 - Event capacity of 750-persons
- Special Event Area Endorsement
- Hour Change
 - I2 PM to 9 AM seven days a week

OCP Objectives & Policies

Policy 5.8.1: Protection of Industrial Lands

- Discourage re-designation of industrial lands to protect employment, production, manufacturing, warehousing, logistics and repair functions.
- Policy 5.8.3. North End Industrial Lands
 - Support additional opportunities for specialty retail in the north end industrial area

Council Policy #359

Where appropriate, support alternative entertainment options, and/or establishments which are less focused on alcohol consumption

Staff Recommendation

- Staff recommend support for the proposed Development Variance Permit and Liquor License applications as both are consistent with:
 - OCP Future Land Use of Industrial
 - OCP Objectives in Chapter 5 Core Area
 - Protection of Industrial Lands
 - North End Industrial Lands
 - Liquor Licence Policy #359

CITY OF KELOWNA

BYLAW NO. 12652 Z23-0031 1310, 1320 Belaire Avenue

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of Lot 29 District Lot 137 ODYD Plan 10011 and Lot 30 District Lot 137 ODYD Plan 10011 located on Belaire Avenue, Kelowna, BC from the UC2 – Capri-Landmark Urban Centre zone to the UC2r – Capri-Landmark Urban Centre Rental Only zone.
- 2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this 6th day of May, 2024.

Approved under the Transportation Act this 7th day of May, 2024.

Audrie Henry

(Approving Officer – Ministry of Transportation)

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk

REPORT TO COUNCIL DEVELOPMENT PERMIT



Date:	September 9, 2024
То:	Council
From:	City Manager
Address:	1310 & 1320 Belaire Ave
File No.:	DP23-0095
Zone:	UC2r – Capri-Landmark Urban Centre Rental Only

1.0 Recommendation

THAT final adoption of Rezoning Bylaw No. 12652 be considered by Council;

AND THAT Council authorizes the issuance of Development Permit No. DP23-0095 for Lot 29 District Lot 137 ODYD Plan 10011, located at 1310 Belaire Ave and Lot 30 District Lot 137 ODYD Plan 10011, located at 1320 Belaire Ave, Kelowna, BC subject to the following:

1. The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";

2. The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";

3. Landscaping to be provided on the land be in accordance with Schedule "C";

4. The applicant be required to post with the City a Landscape Performance Security deposit in the amount of 125% of the estimated value of the Landscape Plan, as determined by a Registered Landscape Architect;

AND THAT the applicant be required to complete the above noted conditions of Council's approval of the Development Permit Application in order for the permits to be issued;

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

2.0 Purpose

To issue a Development Permit for the form and character of rental apartment housing.

3.0 Development Planning

Staff support the proposed Development Permit for the form and character of a rental apartment housing development. The proposal generally conforms to the Official Community Plan (OCP) Form and Character Design Guidelines for Low & Mid-Rise Residential Development. Key guidelines that are met include:

• Orienting building facades to both fronting streets to create street edge definition and activity and avoiding blank walls at-grade;

- Incorporating a range of architectural features and details into building facades to create visual interest, and using an integrated, consistent range of materials and colours that provide variety; and
- Providing ground-oriented units with individual entrances to the fronting street, with semi-private entry zones to allow for entryways and patios.

The building is six storeys in height and will stepback at the fifth storey adjacent to both front yards located along Belaire Ave and Harvey Ave. The 3.0 m stepback at both front yards will reduce the perceived massing of the building and create a stronger interface between the building and the street. The main apartment entry faces south toward Belaire Ave and is flanked by ground-oriented units on each side of the main entry with direct access to the street.

Vehicle access to the site is provided from Belaire Ave with no vehicle access being permitted from Harvey Ave. Parking is provided fully below grade for the residential units including visitor parking and a portion of required long-term bicycle parking. The remainder of required long term bicycle parking is located in a dedicated bike room on the first floor. An outdoor amenity area on top of the parkade is provided in addition to an indoor gym. The outdoor amenity area includes seating (benches, lounge chairs with fire pit) a pergola for shade, dog run, raised garden plots, and complementary landscaping.

Exterior building materials include off-white, sand and charcoal coloured fiber cement board, light grey horizontal siding, off-white masonry panels, and black building accents.

4.0 Subject Property & Background

4.1 Subject Property Map



The subject properties are located mid-block near the Chandler St / Harvey Ave intersection at the northern boundary of the Capri-Landmark Urban Centre. Harvey Ave is designated as a Transit Supportive Corridor (TSC). Transit stops are located along Harvey Ave and the sites are within walking distance of Mary Ann Collinson Memorial Park.

AREA & UNIT STATISTICS			
Gross Lot Area	2,082.8 m ²		
Total Number of Units	62		
1-bed	23		
2-bed	39		

5.0 Zoning Bylaw Regulations Summary

DEVELOPMENT REGULATIONS				
CRITERIA	UC2r ZONE	PROPOSAL		
Total Maximum Floor Area Ratio	2.1	2.025		
Base FAR	1.8	1.8		
Bonus FAR	o.3 (rental designation)	0.225		
Max. Site Coverage (buildings)	85%	79.4%		
Max. Site Coverage (buildings, parking, driveways)	90%	85%		
Max. Height	22.0 m & 6 storeys	21.5 m & 6 storeys		
Setbacks				
Min. Front Yard (north)	4.5 m (Provincial Highway setback)	4.5 M		
Min. Front Yard (south)	2.0 M	2.0 M		
Min. Side Yard (east)	0.0 M	1.8 m		
Min. Side Yard (west)	o.o m	0.45 m		
Setbacks (above 16.0m in building height	ght)			
Min. Front Yard (north)	3.0 m	7.5 M		
Min. Front Yard (south)	3.0 m	6.o m		
Min. Side Yard (east)	4.0 m	5.5 m		
Min. Side Yard (west)	4.0 m	6.7 m		
Step backs				
Min. Fronting Street (north)	3.0 m	3.0 m		
Min. Flanking Street (south)	3.0 m	3.0 M		
Amenity Space				
Total Required Amenity Space	815 m ²	1,117.8 m²		
Common	248 m ²	483.7 m²		
Landscaping				
Min. Number of Trees	9 trees	9 trees		
Min. Large Trees	5 trees	5 trees		

PARKING REGULATIONS				
CRITERIA	UC2r ZONE REQUIREMENTS	PROPOSAL		
Total Required Vehicle Parking	49 stalls	49 stalls		
Residential	42 stalls			
Visitor	7 stalls			
"r" Subzone Reduction	-14 stalls			
Bonus Bicycle Parking	-5 stalls			
Ratio of Regular to Small Stalls	Min. 50% Regular Max. 50% Small	53% Regular 47% Small		
Bicycle Stalls Short-Term	6 stalls	6 stalls		
Bicycle Stalls Long-Term	88 stalls	88 stalls		
Bonus Stalls Provided for Parking Reduction	У	У		
Bike Wash & Repair	У	У		

6.0 Application Chronology

Application Accepted:	February 17, 2023
Public Information Session:	February 26, 2024
Neighbour Notification Received:	February 27, 2024
Adoption of Zone Amending Bylaw:	August 26, 2024

Report prepared by:	Andrew Ferguson, Planner II					
Reviewed by:	Jocelyn Black, Urban Planning Manager					
Reviewed by:	Nola Kilmartin, Development Planning Department Manager					
Approved for Inclusion:	n: Ryan Smith, Divisional Director, Planning, Climate Sustainability &					
Development Services						

Attachments:

Attachment A: Draft Development Permit DP23-0095 Schedule A: Site Plan & Floor Plans Schedule B: Elevations, Sections & Renderings Schedule C: Landscape Plan

Attachment B: OCP Form and Character Development Permit Guidelines

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.

Development Permit

DP23-0095





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

1310 & 1320 Belaire Ave and legally known as Lot 29 District Lot 137 ODYD Plan 10011 & Lot 30 District Lot 137 ODYD Plan 10011 and permits the land to be used for the following development: **Apartment Housing**

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

Date of Council Approval:	September 9, 2024
Development Permit Area:	Form and Character
Existing Zone:	UC2r – Capri-Landmark Urban Centre Rental Only
Future Land Use Designation:	UC – Urban Centre
This Development Demoit is valid	I fam have (a) we are from the date of a new well with me

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

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:

432623 B.C. Limited, Inc. No. BC1007009

Applicant:

BlueGreen Architecture Inc

Nola Kilmartin **Development Planning Department Manager Planning & Development Services**

Date of Issuance



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

THAT Council authorizes the issuance of Development Permit No. DP23-0095 for Lot 29 District Lot 137 ODYD Plan 10011 located at 1310 Belaure Ave, Kelowna, BC and Lot 30 District Lot 137 ODYD Plan 10011, subject to the following:

- 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";
- d) The applicant be required to post with the City a Landscape Performance Security deposit in the amount of 125% of the estimated value of the Landscape Plan, as determined by a Registered Landscape Architect;

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Manager 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 use 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 as per the conditions of this permit, the security shall be returned to the Developer or his or her designate following proof of Substantial Compliance as defined in Bylaw No. 12310. There is filed accordingly:

a) An Irrevocable Letter of Credit OR certified cheque OR a Surety Bond in the amount of \$215,138.00

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.

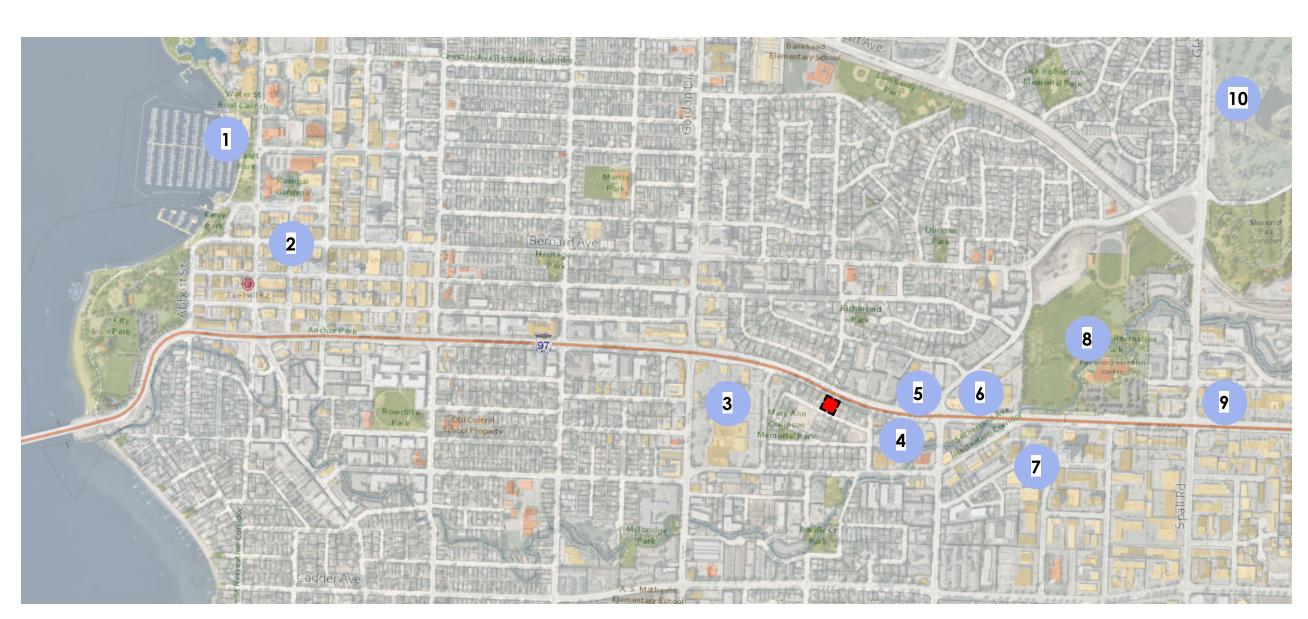
4. INDEMNIFICATION

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 <u>CURRENT LAND OWNER</u>. Security shall <u>ONLY</u> be returned to the signatory of the Landscape Agreement or their designates.



NEIGHBOURHOOD CONTEXT - AMENITY

- KELOWNA YACHT CLUB 1. 2.5 KM / 32 MINUTE WALK
- DOWNTOWN KELOWNA 2. 2 KM / 26 MINUTE WALK
- CAPRIS CENTRE 3. 500 M / 6 MINUTE WALK
- CENTRE 97 4. 400 M / 5 MINUTE WALK
- 5. BURTCH PLAZA 450 M / 6 MINUTE WALK

ZONING INFORMATION

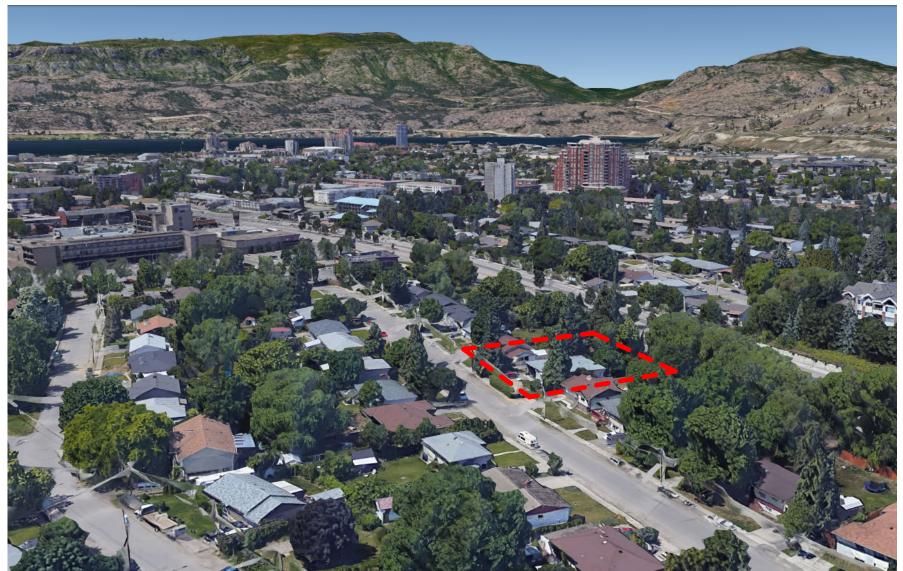
600 M / 8 MINUTE WALK 7. LANDMARK DISTRICT

GATEWAY PLAZA

- 1 KM / 12 MINUTE WALK
- 8. PARKINSON RECREATION CENTRE 1.4 KM / 14 MINUTE WALK
- SPALL PLAZA 9. 1.6 KM / 20 MINUTE WALK
- 10. KELOWNA GOLF & COUNTRY CLUB 2.4 KM / 30 MINUTE WALK

CIVIC ADDRESS:	1310 & 1320 Belaire Avenue	PARKING REQUIREMENT:	CARS		
LEGAL INFORMATION:	PLAN KAP10011 LOT 29 DISTRICT LOT 137	1-BED AND 1-BED + DEN :			
	PLAN KAP10011 LOT 30 DISTRICT LOT 137	41 UNITS x 0.9/DWELLING UN 2-BED :	IT, 36.9		
PROPOSED ZONING:	UC2r	21 UNITS x 1.0/DWELLING UN	IT, 21.0 57.9		
LOT AREA:	2,082.894 m ² (22,420.08 sq.ft) (0.514 Acres)		57.7		
		14% FOR VISITOR,	8.868 (62 x 0.14)		
PROPOSED SETBACKS: REQUIRE	ED PROPOSED	SUB TOTAL	66.768	VISITOR CAR S	
	round oriented) 2.0m	-20% REDUCTION FOR RENTA	L, -13.376	(INCLUDING)	
SIDE: 0.0m (U	C) 0.45m & 1.8m @ 1.6m AFL	-5 BONUS BICYCLE PARKING		ACCESSIBLE C	CAR SPACES
		TOTAL	49.200		
FRONT: 4.5m	4.5m	TOTAL: PROVIDED:	48.392 49	•	I 2 ACCESSIBLE) R 26 REGULAR CA
MAX. BLDG HEIGHT:	6 Storeys/22 metres 6 Storeys (21.545m)	49 x 14% VI		7 REGULAR CA	
SETBACK 3 METRES ABOV	E 16m IN BUILDING HEIGHT				
	SOUTH ELEVATION SET BACK 2.0m TO TITLE ABUTTING BELAIRE AT	BICYCLE PARKING			(ING PROVISION
	GROUND LEVEL, 3.0 m FROM LEVEL 2	0.75 x STUDIO, 1 BED, 2 BED		GROUND ORI	22
FLOOR AREA RATIO		BONUS BICYCLE PARKING		LEVEL 01	24
		STUDIO x 1.25	0	SUB TOTAL	46
BUILDING GFA = 5198.7 r		1 BED x 1.25 x 23	28.75		
BUILDING NET = $4,218.1$	m² 4,374.1 m² PERMITTED (BASE 1.8 + RENTAL BONUS 0.3)	2 BED x 1.5 x 39 SUB TOTAL	58.5 87.25	WALL HUNG BASEMENT	17
4,226.0 / 2,082.894 = 2.02		SHORT TERM	6 PER ENTRANCE	LEVEL 01	24
				SUB TOTAL	40
<u>SITE COVERAGE</u>		TOTAL	93		
LOT AREA = 2,082.894m ²	(0.514 Acros)				ENTED (PUBLIC)
LUT AREA - 2,002.0741112	(0.314 ACIES)			LEVEL 01	6
	$P47.7m^2$ BUILDING + 707m ² PARKADE = 1,654.7m ²			TOTAL	93
1,654./m ² /2,082.894 m ²	= 79.4% (85% PERMITTED)	AMENITY SPACE (1 BED 10 m	$2 2 \text{ RED } 15\text{m}^2$		
SITE COVERAGE = 1,774.4	4 m^2 / 2,082.894 m ² = 85% (90% PERMITTED)				
			EXTERNAL PRIVATE	EXTERNAL PUB	-
<u>UNIT MIX</u>		GROUND	83.8 m ²	440 m ²	43.7 m ²
1-BEDROOM:	18 UNITS	SECOND FLOOR THIRD FLOOR	97.8 m² 91.9 m²		
		FOURTH FLOOR	91.9 m ²		
<u>1-BEDROOM + DEN:</u>	5 UNITS	FIFTH FLOOR	97.8 m ²		
2-BEDROOM:	39 UNITS	SIXTH FLOOR	170.9 m ²		
TOTAL NUMBER OF UNITS:	62 UNITS	SUB TOTALS	667.0 m ²	440 m ²	43.7 m ²
REFUSE CONTAINERS		TOTAL AMENITY	1,117.8 m²	(740 m² Requi	ired)
		COMMON AMENITY (NOT IN			
1 x 5m ³ , 2 x 3m ³ IN GRO	UND MOLOKS: REQUIRED SETBACK 0.5m PROPOSED: 0.575m	REQUIRED: (4 x 62 TENANCIE	•	PROVIDED (C	LEAR OF SETBACKS





LOCAL CONTEXT - ADJACENT DEVELOPMENT / DENSIFICATION

- A. SUBJECT PROPERTY : 62 TENANCIES 6 STOREY APARTMENT BUILDING
- FIVE CROSSINGS : 206 TENANCIES Β. 6 STOREY APARTMENT BUILDING
- C. THE ANACAPRIS : 100 TENANCIES 6 STOREY APARTMENT BUILDING
- PRIDHAM 1319 : 85 TENANCIES D. 5 1/2 STOREY CONDOMINIUM BUILDING

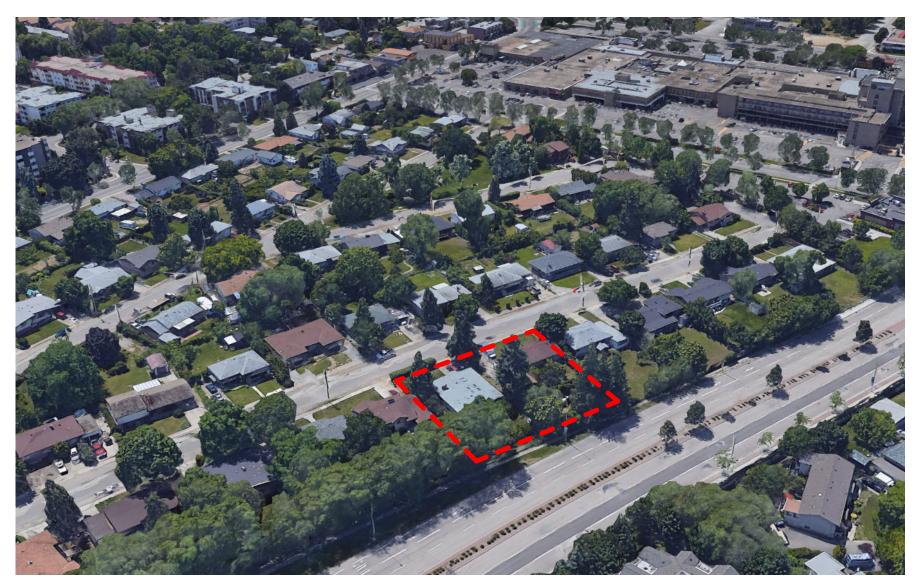
248m²

7 42 2 1 BLE) JLAR CAR

ISION

NTERNAL PUBLIC 3.7 m²

TBACKS): 483.7 m²



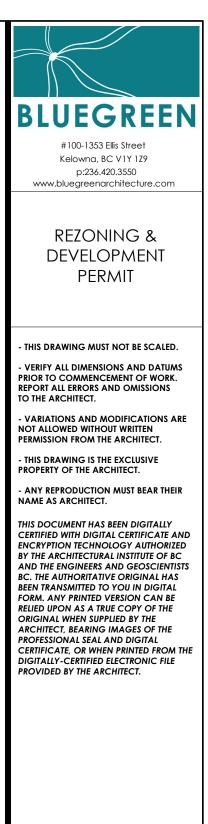


AERIAL VIEW FROM SOUTH EAST

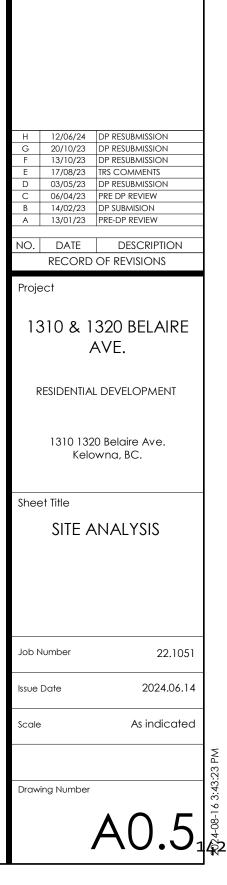
AERIAL VIEW FROM NORTH EAST

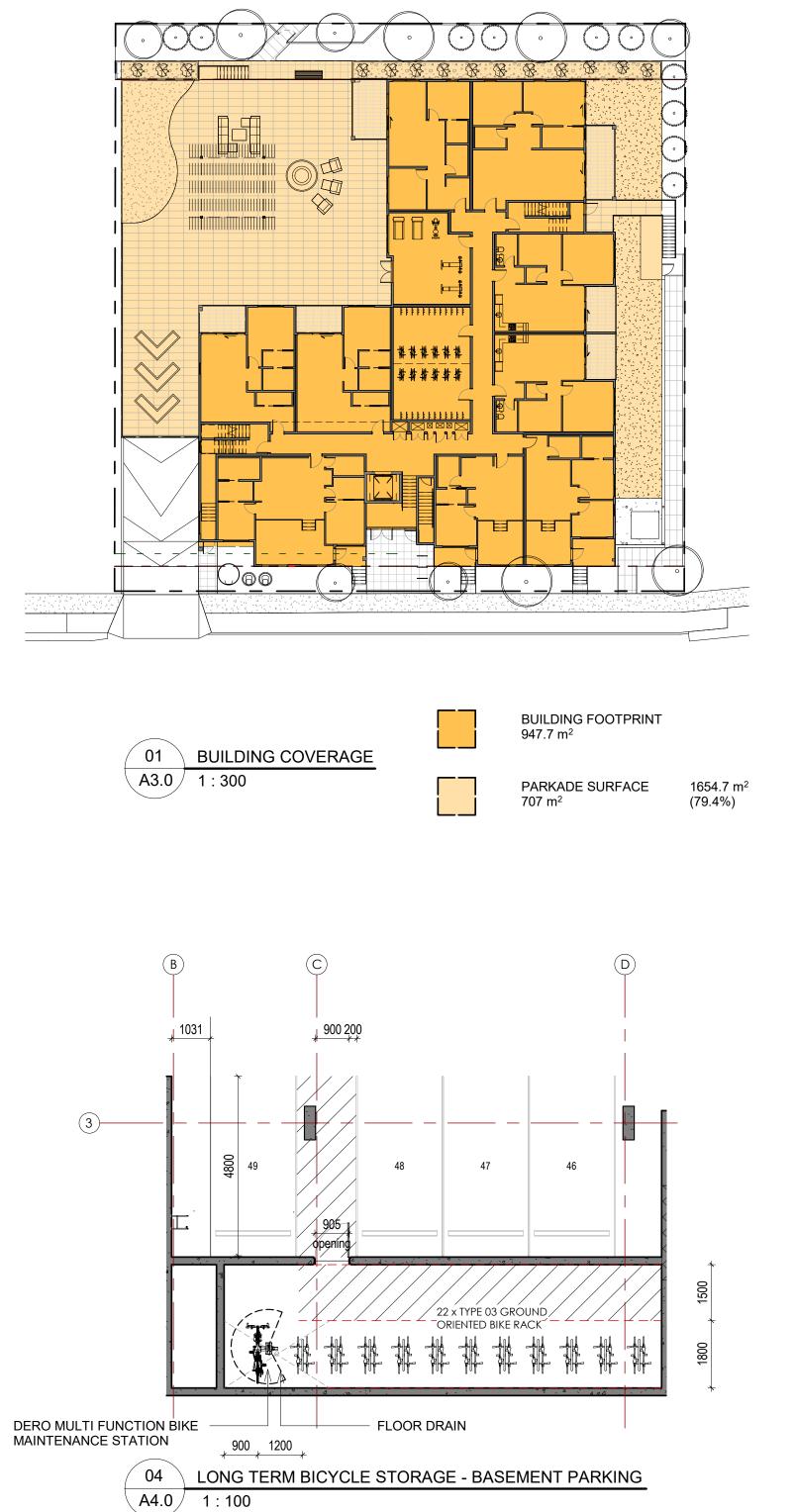
AERIAL VIEW FROM SOUTH WEST

SCHEDULE This forms part of application #_DP23-0095 City of Kelowna Planner Initials AF





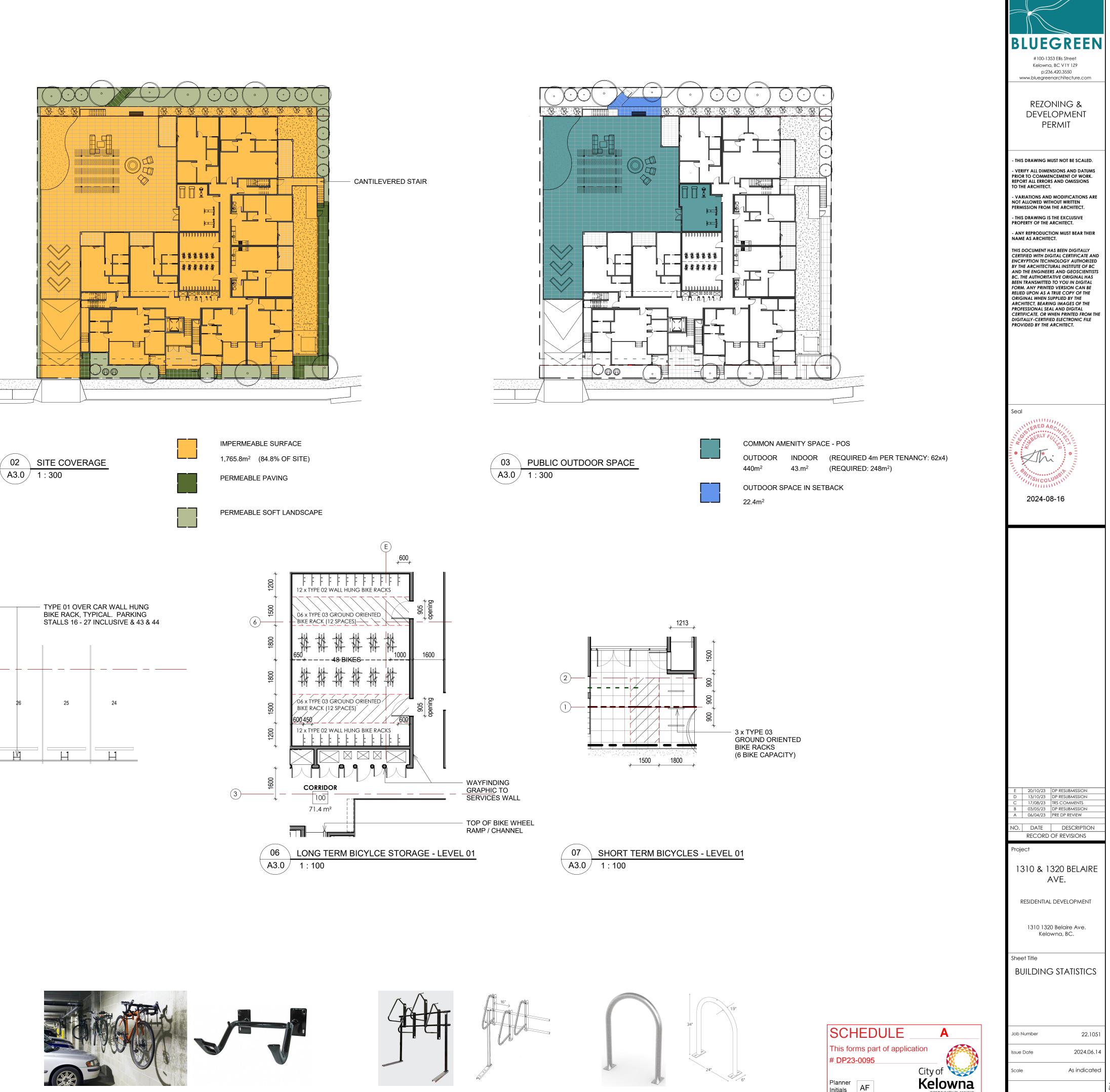


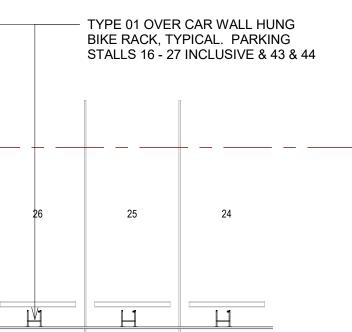


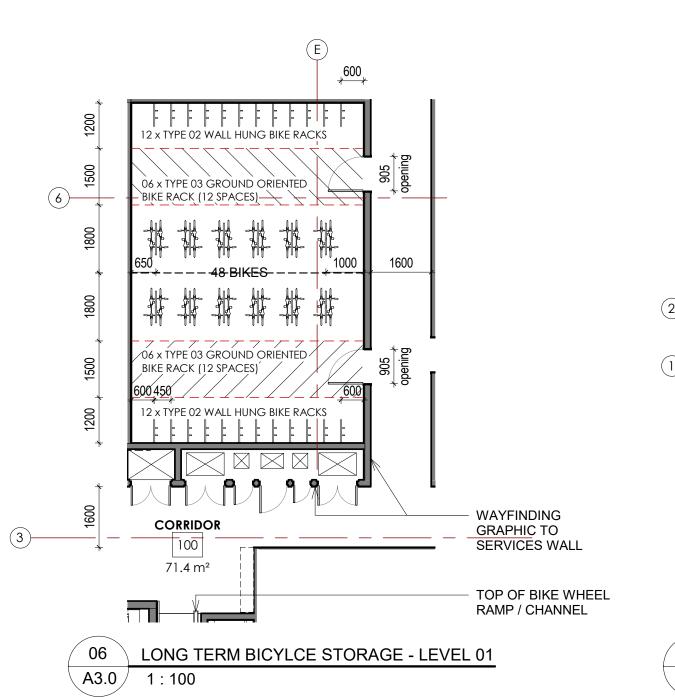
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ТҮРЕ	BASEMENT PARKING	LEVEL 01	TOTAL BICYCLE PARKING	PERCENTAGE MIX
TYPE 01 BIKE RACK WALL HUNG BIKE RACK - PRIVATE DERO 'WALL RACK' OR EQUIVALENT BICYLES PARKED @ END OF PARKING STALLS 1-16	14		14	15.5%
TYPE 02 BIKE RACK WALL HUNG BIKE RACK - PRIVATE DERO 'ULTR SPACE SAVER' OR EQUIVALENT BICYCLES HUNG @ 450mm CENTRES		24	24	26.7%
TYPE 03 BIKE RACK GROUND ORIENTED BIKE RACK CLASSIC DISPLAYS 'ARCH' OR EQUIVALENT BICYCLES PARKED @ 900MM CENTRES	22	30 (24 LONG TERM, 6 SHORT TERM)	52	57.8%
TOTALS	36	54	90 (INCLUDES 6 PUBLIC)	42% WALL 58% GROUND

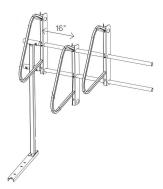












TYPE 01

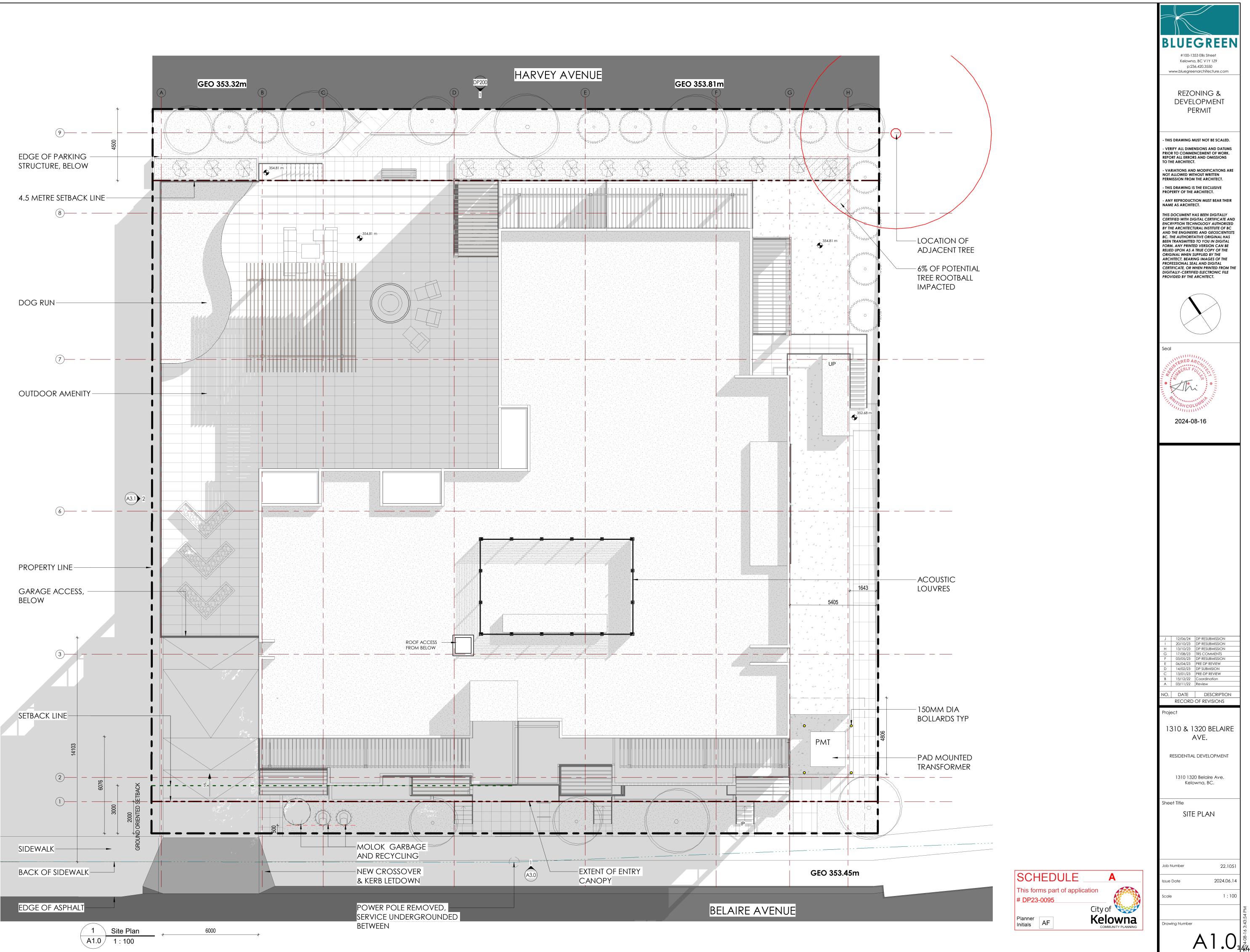
TYPE 02

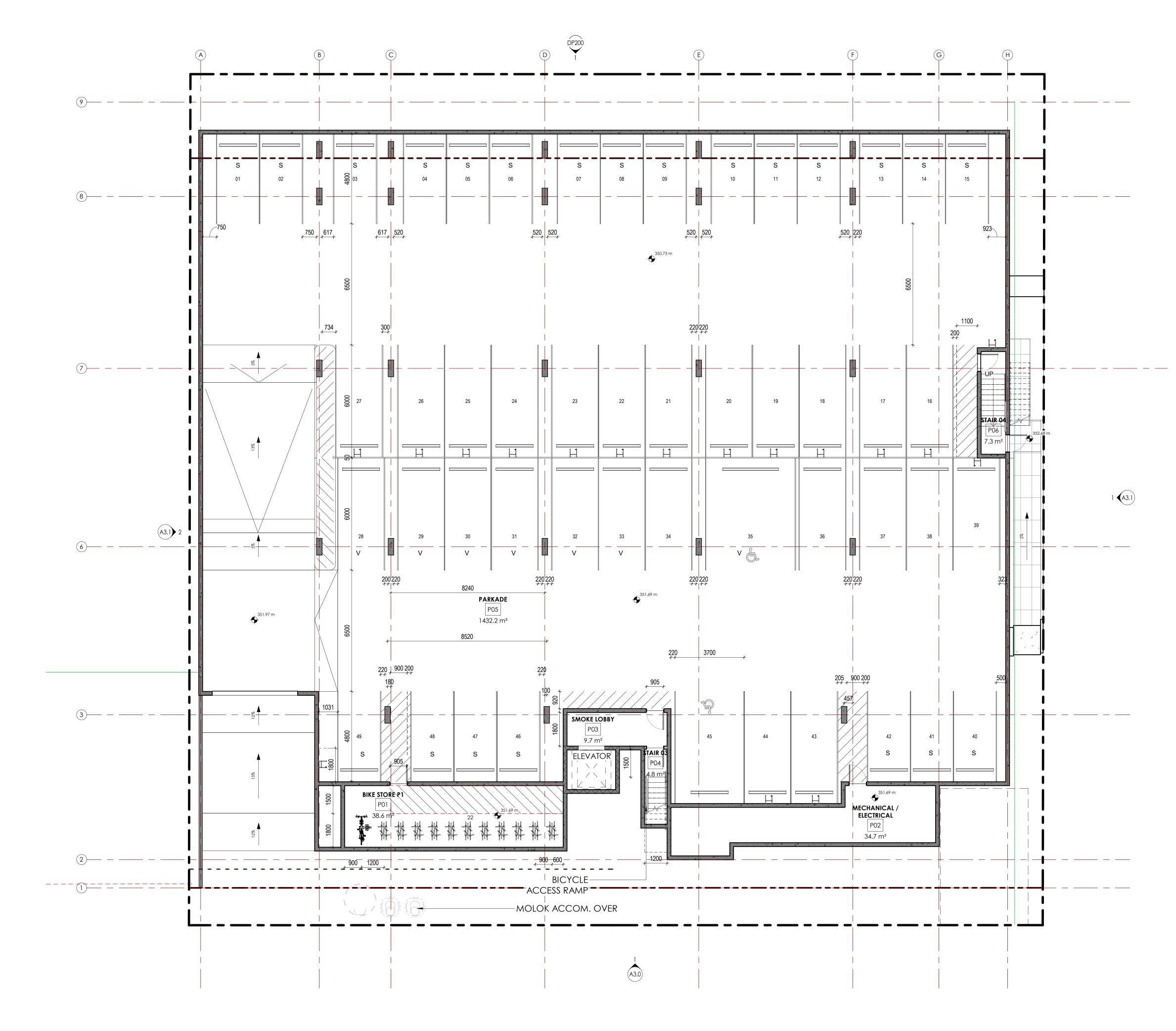
TYPE 03

Planner Initials AF

A0.6

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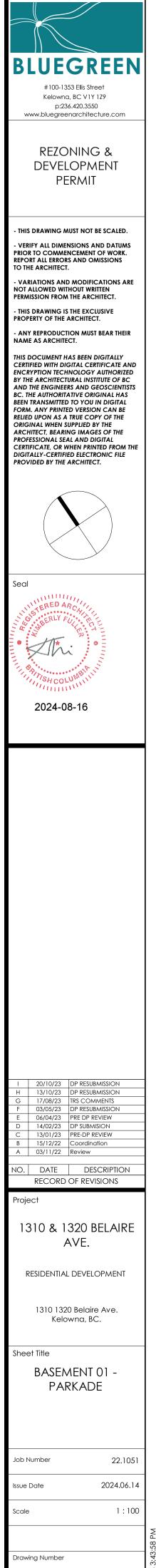




Parkade Level 1 A2.0 1 : 100

PARKING SCHEDULE				
Mark	Si	ze	Туре	
01	2300(w)	x4800(d)	SMALL - END	
02		x4800(d)	SMALL - END	
03		x4800(d)	SMALL - END	
04		x4800(d)	SMALL - END	
05	2300(w)	x4800(d)	SMALL	
06	2300(w)	x4800(d)	SMALL - END	
07	2300(w)	x4800(d)	SMALL - END	
08	2300(w)	x4800(d)	SMALL	
09	2300(w)	x4800(d)	SMALL - END	
10	2300(w)	x4800(d)	SMALL - END	
11		x4800(d)	SMALL	
12	2300(w)	x4800(d)	SMALL - END	
13	()	x4800(d)	SMALL - END	
14		x4800(d)	SMALL	
15	,	x4800(d)	SMALL - END	
16		x6000(d)	REGULAR - END	
17		x6000(d)	REGULAR - END	
18		x6000(d)	REGULAR - END	
19	. ,	x6000(d)	REGULAR	
20		x6000(d)	REGULAR - END REGULAR - END	
21		x6000(d)		
22		x6000(d)	REGULAR REGULAR - END	
23 24	· · · · ·	x6000(d) x6000(d)	REGULAR - END	
24			REGULAR	
25		x6000(d) x6000(d)	REGULAR - END	
20		x6000(d)	REGULAR - END	
28		x6000(d)	VISITOR, REGULAR - END	
29	. ,	x6000(d)	VISITOR, REGULAR - END	
30		x6000(d)	VISIGTOR, REGULAR	
31		x6000(d)	VISITOR, REGULAR - END	
32		x6000(d)	VISITOR, REGULAR - END	
33	,	x6000(d)	VISIGTOR, REGULAR	
34	. ,	x6000(d)	VISITOR, REGULAR - END	
35	4800(w)x6	000(d)_U/A AN	VAN ACCESSIBLE	
36	2500(w)	x6000(d)	REGULAR - END	
37	2500(w)	x6000(d)	REGULAR - END	
38	2500(w)	x6000(d)	REGULAR	
39	2500(w)	x6000(d)	SMALL - END	
40	()	x4800(d)	SMALL - END	
41		x4800(d)	SMALL	
42		x4800(d)	SMALL - END	
43		x6000(d)	SMALL - END	
44		x6000(d)	REGULAR	
45	,	000(d)_U/A	ACCESSIBLE SPACE	
46		x4800(d)	SMALL - END	
47	()	x4800(d)	SMALL	
48		x4800(d)	SMALL - END	
49	2300(w)	x4800(d)	SMALL - END	

TY	COU	% of			
		TOTAL	ΤĽΟ		
SMALL	2	47 %	(OF 50%)		
STANDARD	2	53 %	(OF		
(STANDARD CAR COUNT INCLUDES TWO ACCESSIBLE SPACES)					



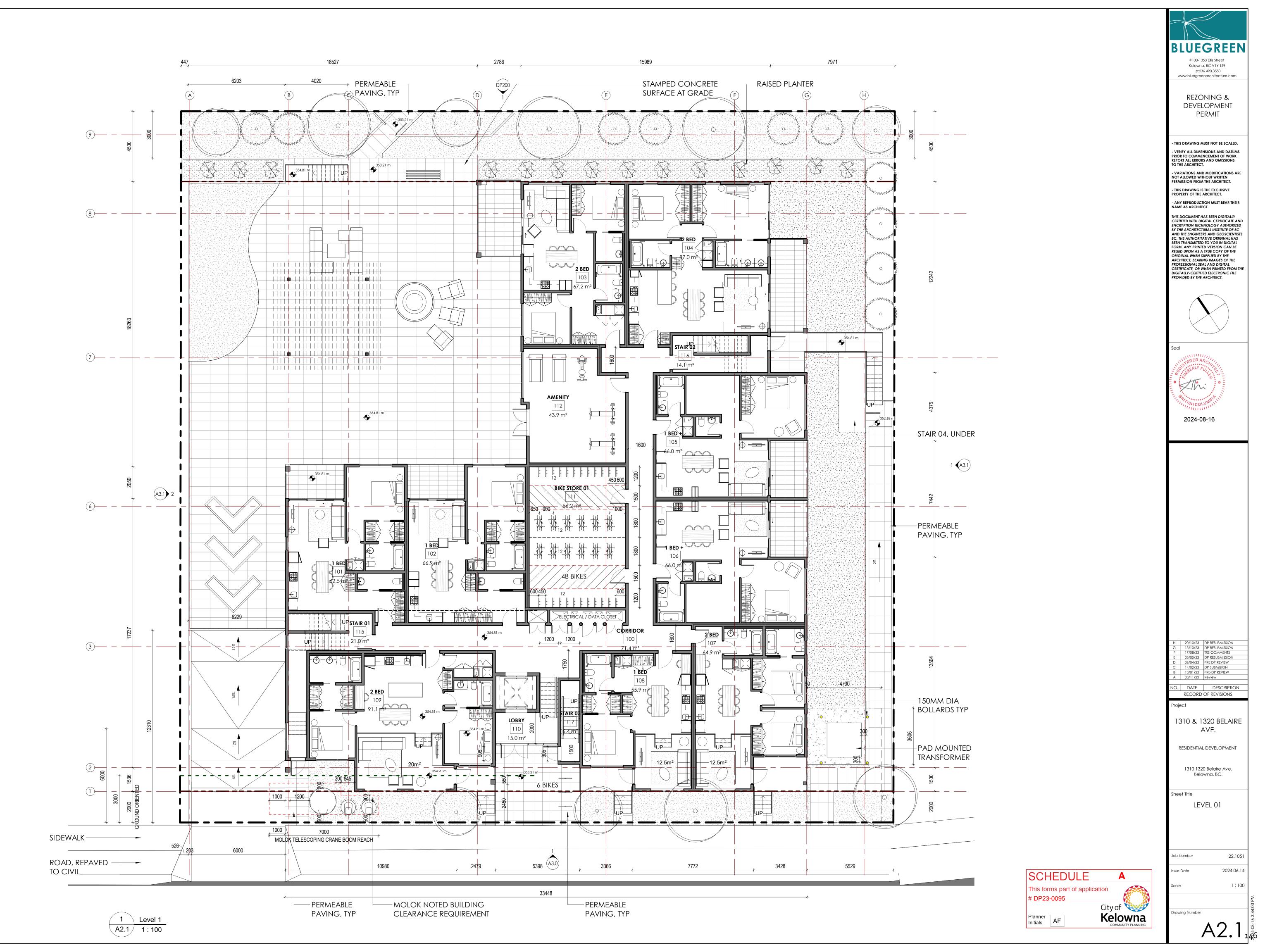
#_DP23-0095

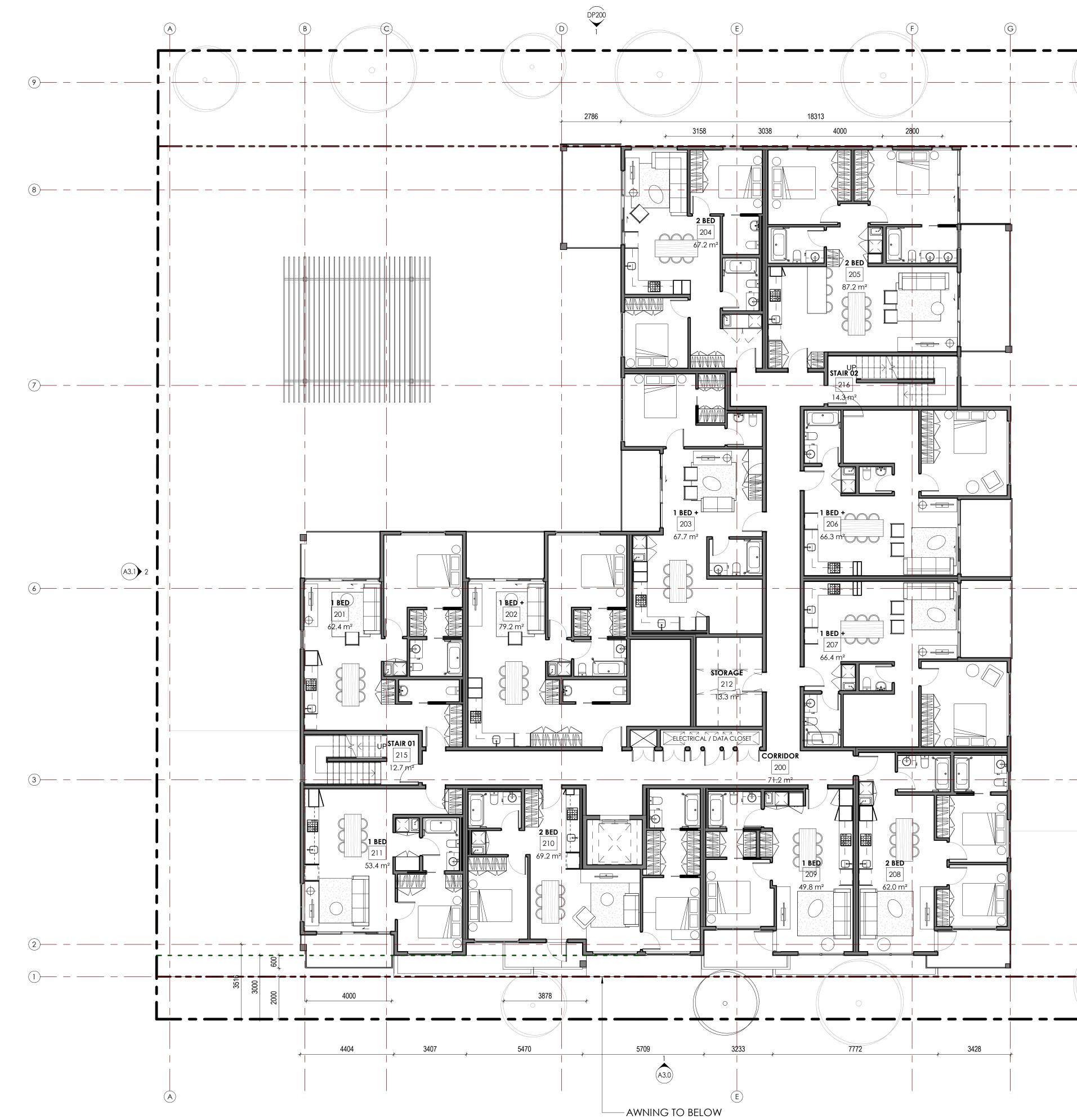
SCHEDULE

This forms part of application City of **Kelowna**

A2.0

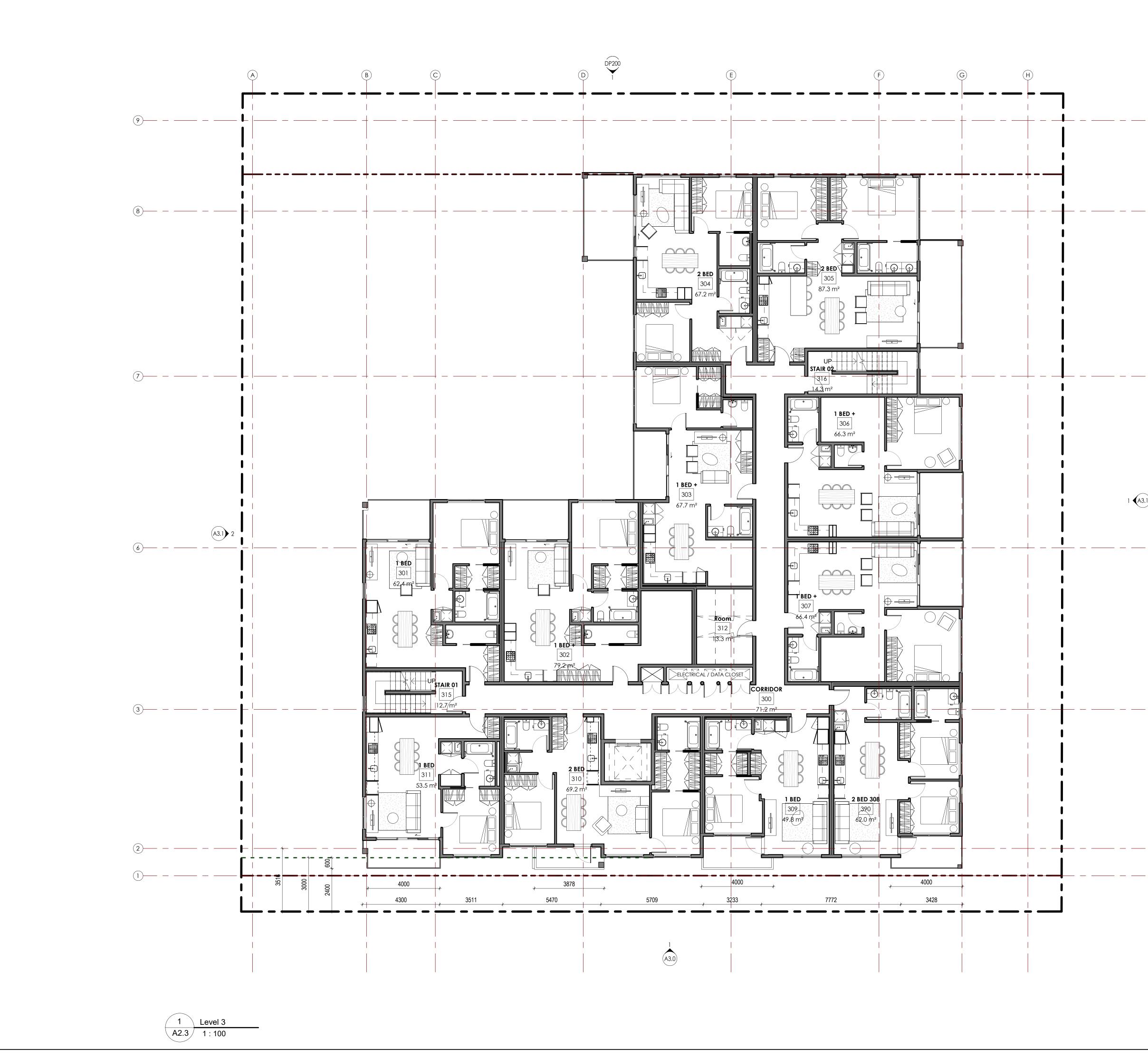
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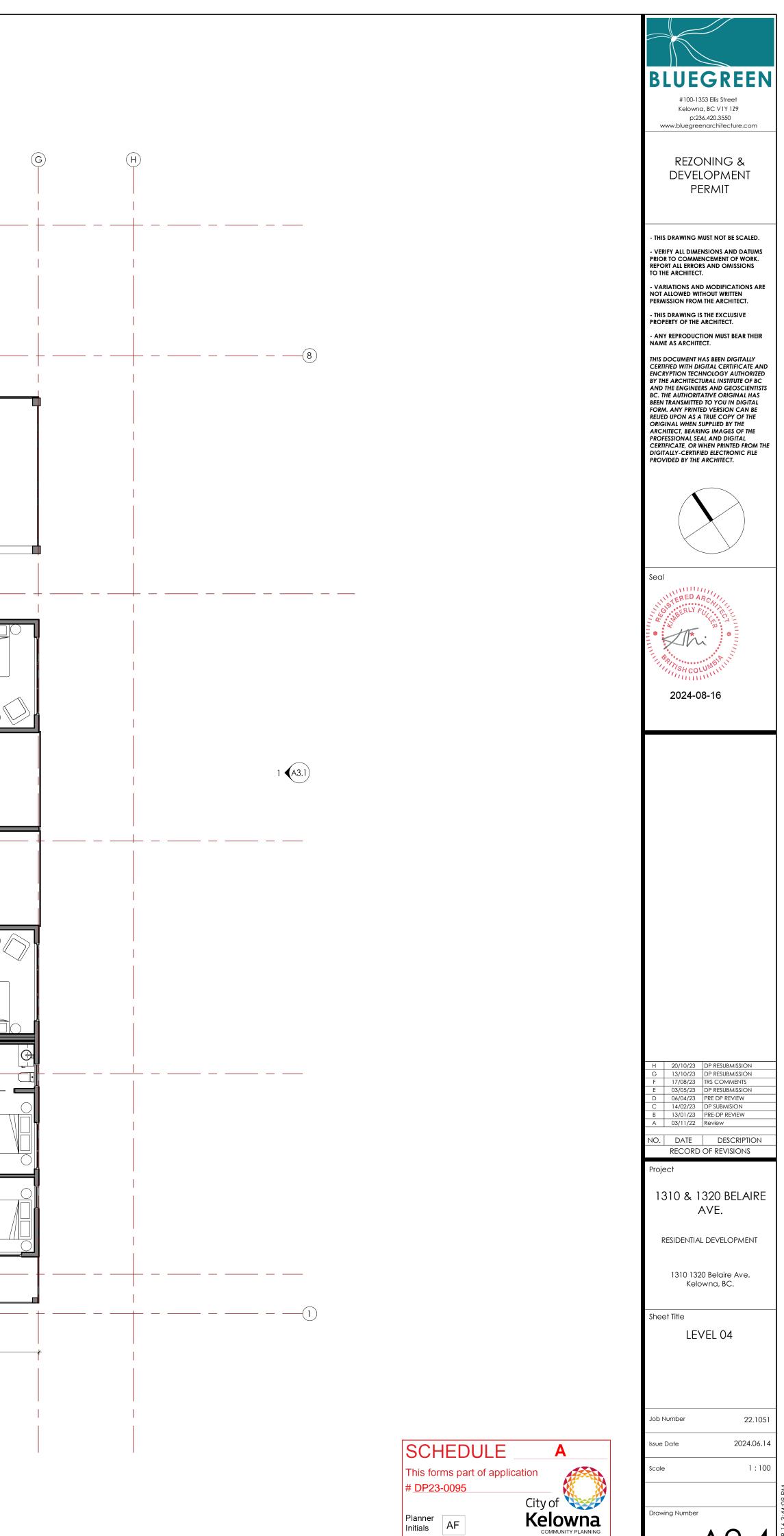
1 Level 2 A2.2 1 : 100

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		THE RED ARCHIER
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		C 14/02/23 DP SUBMISION B 13/01/23 PRE-DP REVIEW A 03/11/22 Review NO. DATE
		RECORD OF REVISIONS Project
		1310 & 1320 BELAIRE AVE.
		RESIDENTIAL DEVELOPMENT
		1310 1320 Belaire Ave. Kelowna, BC.
		Sheet Title LEVEL 02
		Job Number 22.1051
	SCHEDULE A	Issue Date 2024.06.14
	This forms part of application #_DP23-0095 City of	Scale 1:100
	Planner Initials AF City of Kelowna COMMUNITY PLANNING	Drawing Number

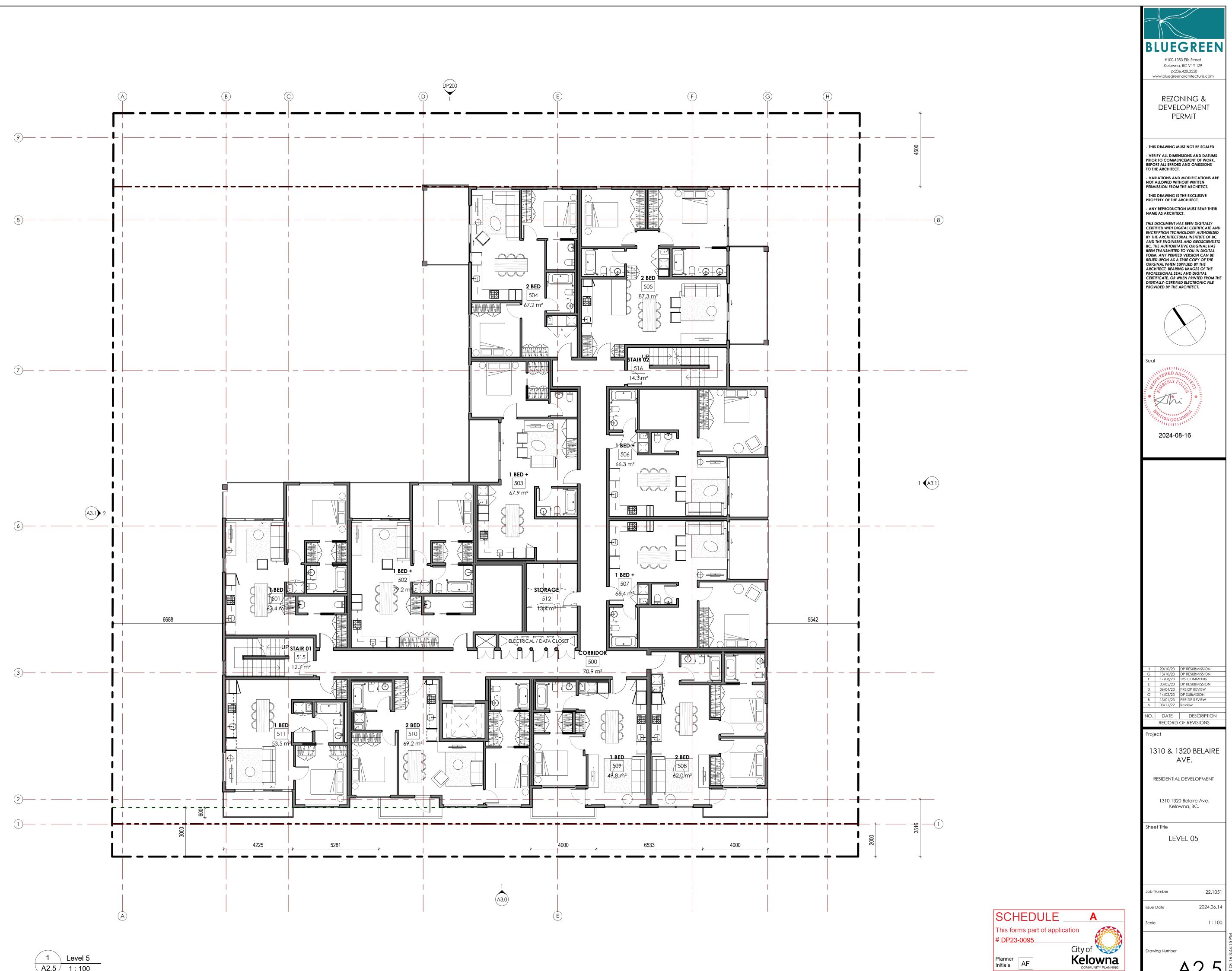






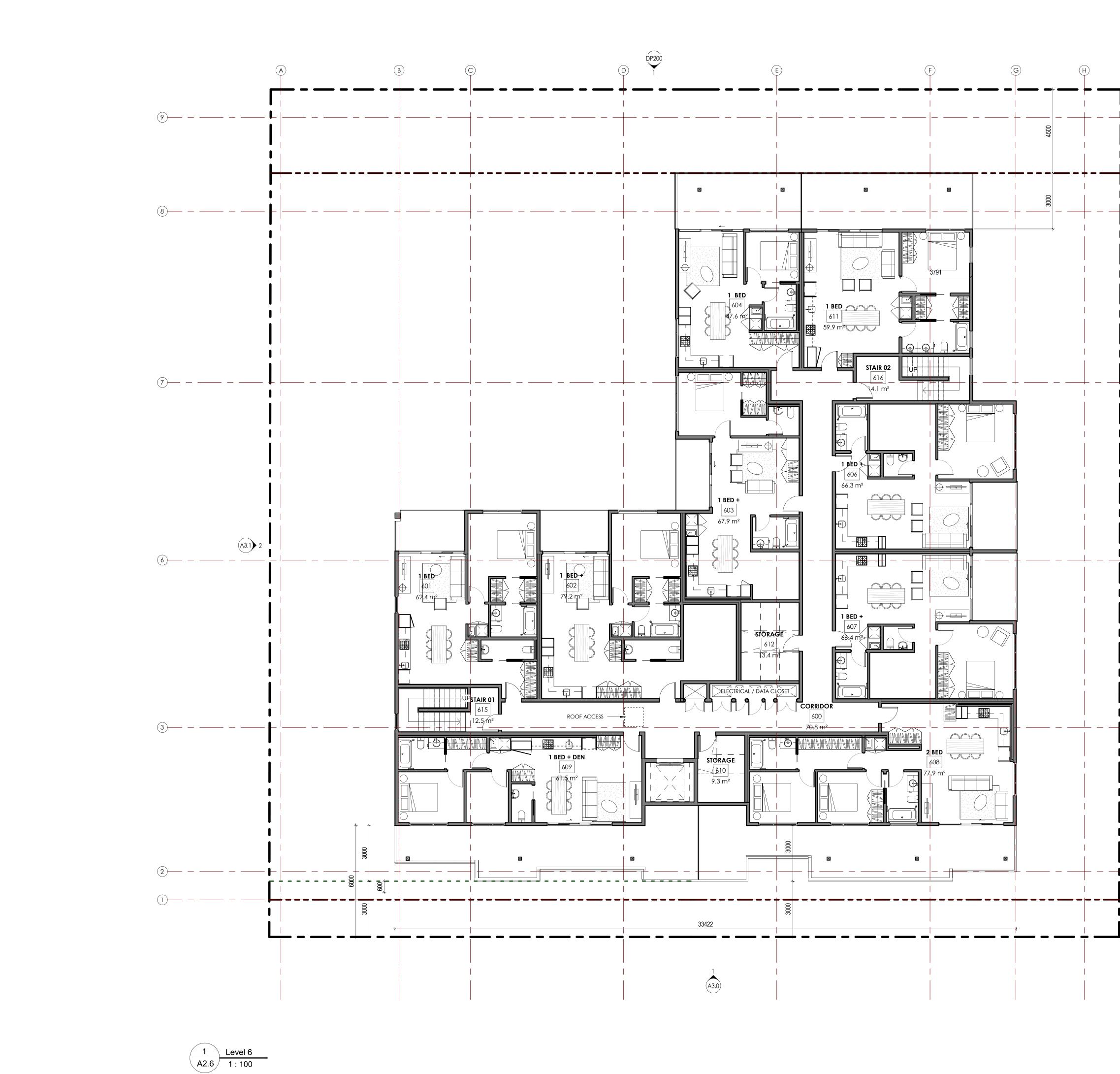


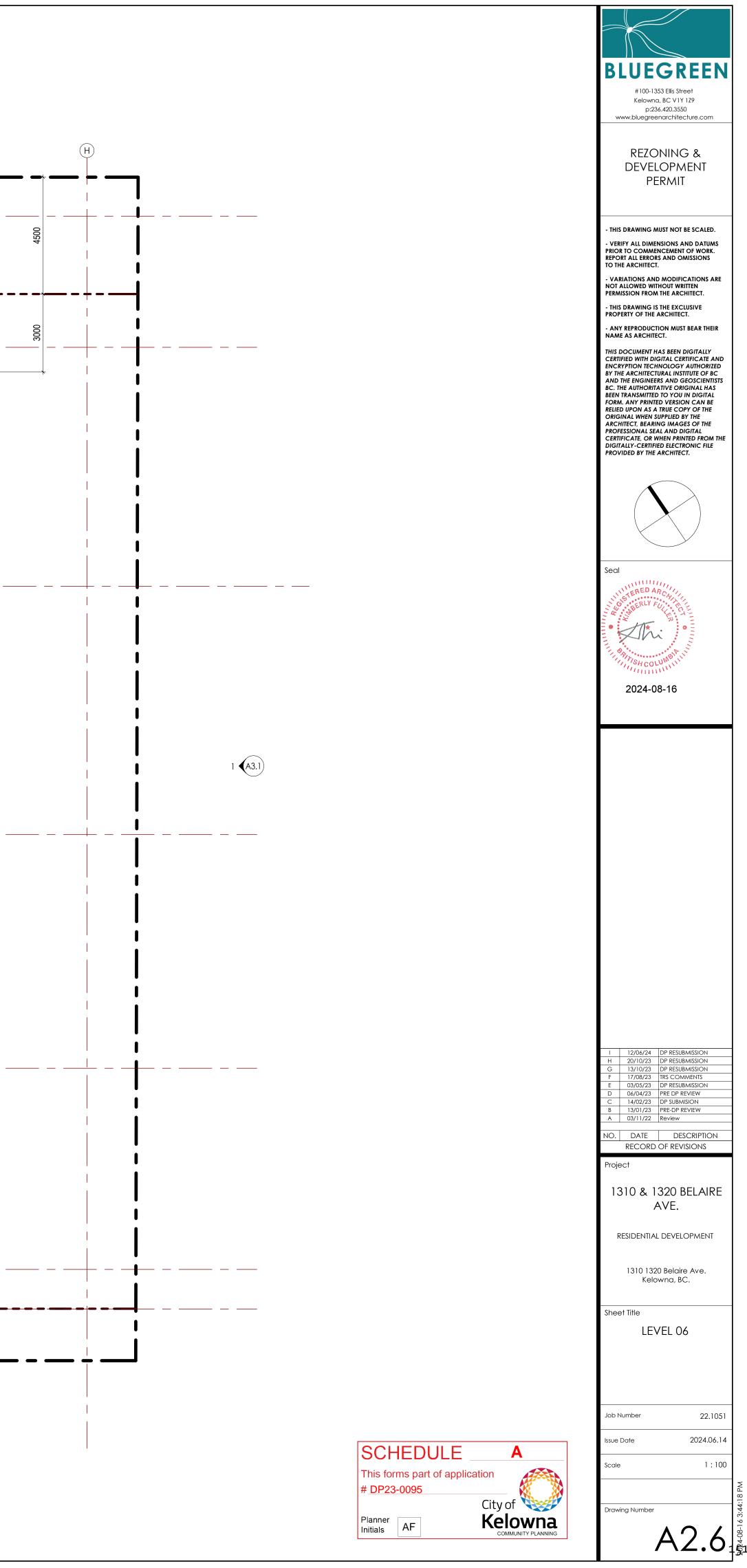
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A2.5

1 Level 5 A2.5 1 : 100





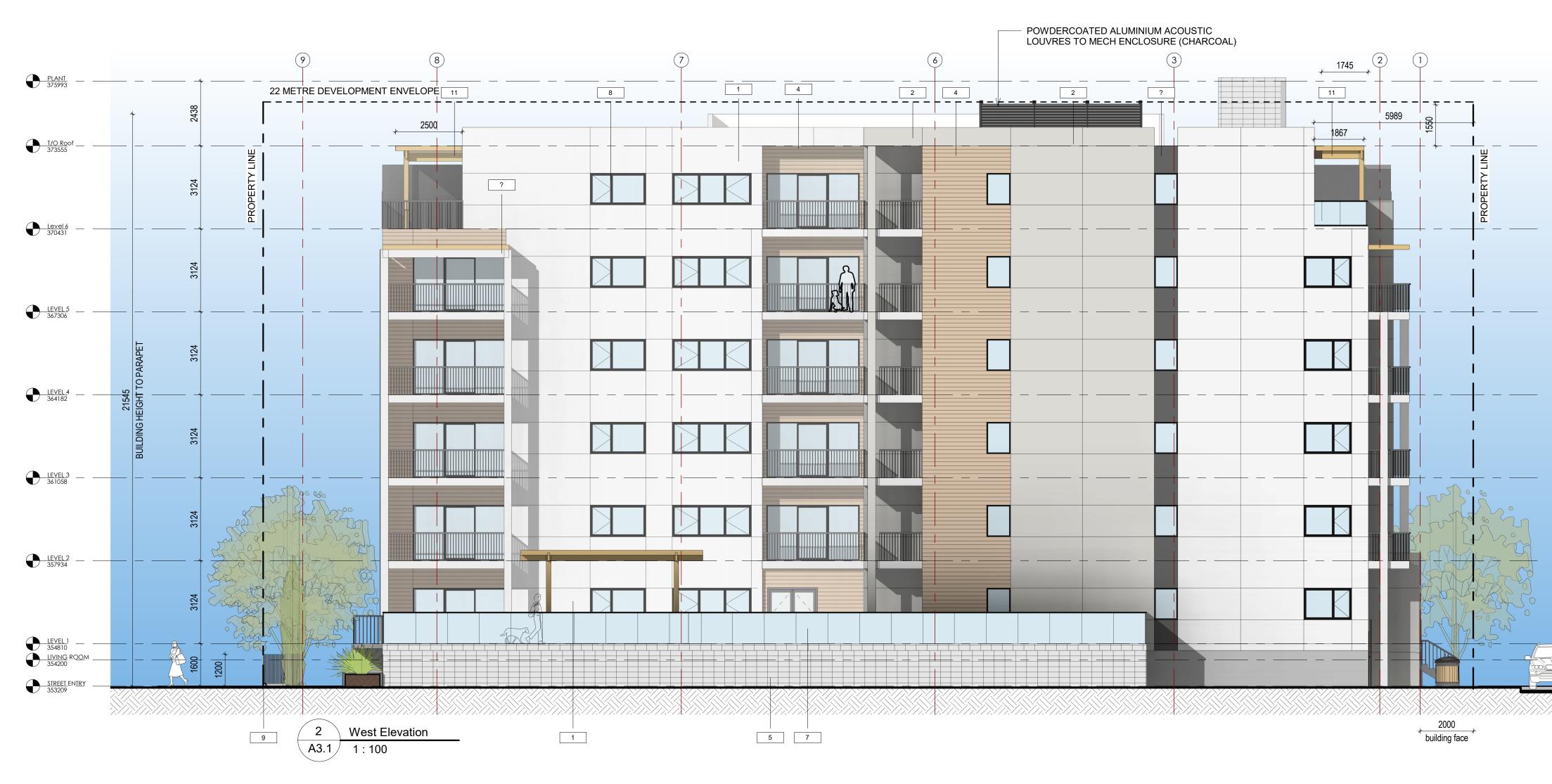


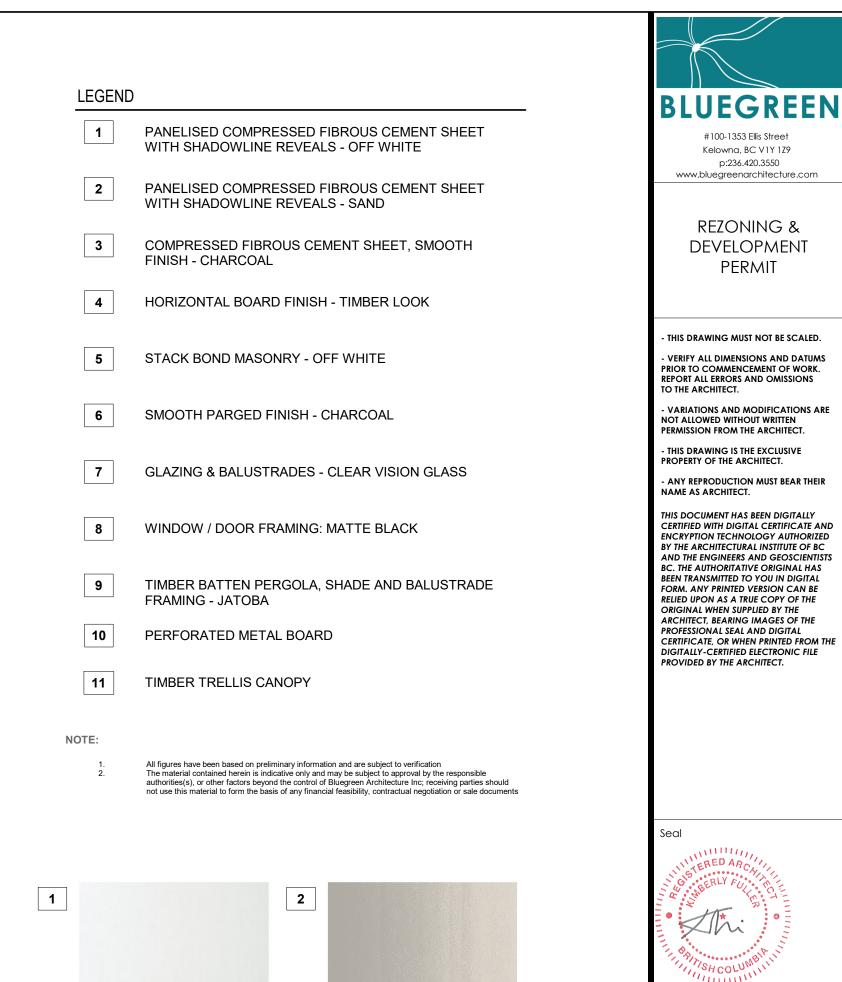
LEGEND	PANELISED COMPRESSED FIBROUS CEMENT SHEET	BLUEGREEN #100-1353 Ellis Street
2	WITH SHADOWLINE REVEALS - OFF WHITE PANELISED COMPRESSED FIBROUS CEMENT SHEET	Kelowna, BC V1Y 129 p:236.420.3550 www.bluegreenarchitecture.com
3	WITH SHADOWLINE REVEALS - SAND COMPRESSED FIBROUS CEMENT SHEET, SMOOTH FINISH - CHARCOAL	REZONING & DEVELOPMENT
4	HORIZONTAL BOARD FINISH - TIMBER LOOK	PERMIT
5	STACK BOND MASONRY - OFF WHITE	THIS DRAWING MUST NOT BE SCALED. VERIFY ALL DIMENSIONS AND DATUMS PRIOR TO COMMENCEMENT OF WORK.
6	SMOOTH PARGED FINISH - CHARCOAL	REPORT ALL ERRORS AND OMISSIONS TO THE ARCHITECT. - VARIATIONS AND MODIFICATIONS ARE NOT ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
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10	PERFORATED METAL BOARD	ORIGINAL WHEN SUPPLIED BY THE ARCHITECT, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE, OR WHEN PRINTED FROM THE DIGITALLY-CERTIFIED ELECTRONIC FILE PROVIDED BY THE ADCULTECT
11	TIMBER TRELLIS CANOPY	PROVIDED BY THE ARCHITECT.
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1		2024-08-16
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5		1 12/06/24 DP RESUBMISSION H 20/10/23 DP RESUBMISSION G 13/10/23 DP RESUBMISSION F 17/08/23 TRS COMMENTS E 03/05/23 DP RESUBMISSION D 06/04/23 PRE DP REVIEW C 14/02/23 DP SUBMISION B 13/01/23 PRE-DP REVIEW
7		A 03/11/22 Review NO. DATE DESCRIPTION RECORD OF REVISIONS
8	10	Project 1310 & 1320 BELAIRE
		AVE.
		RESIDENTIAL DEVELOPMENT 1310 1320 Belaire Ave.
		Kelowna, BC. Sheet Title
	11 1200 mm	BUILDING ELEVATIONS
	Image: Ward of the system Adak 3,0 m ³	Job Number 22.1051 Issue Date 2024.06.14 Scale 1:100
	Adok 3,0 m ³ Mobk 5,f m ³	Issue Date 2024.06.14

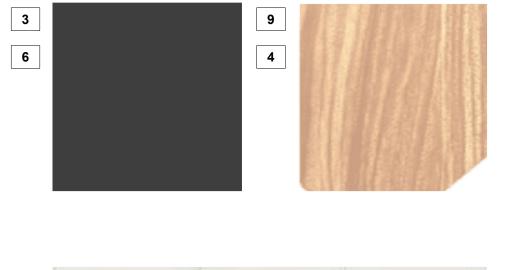


POWDERCOATED ALUMINIUM ACOUSTIC

1East ElevationA3.11 : 100



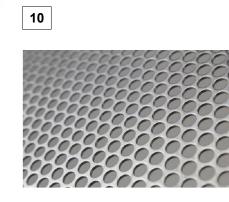


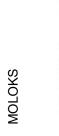


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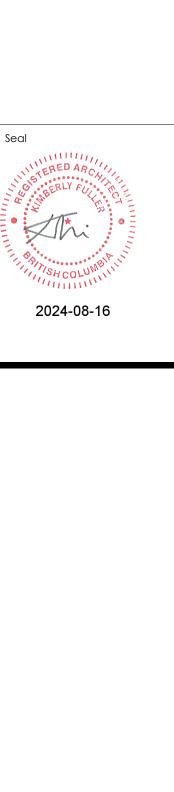


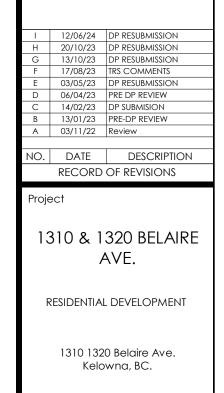


Molok 3,0 m³ Ø 1300 mm









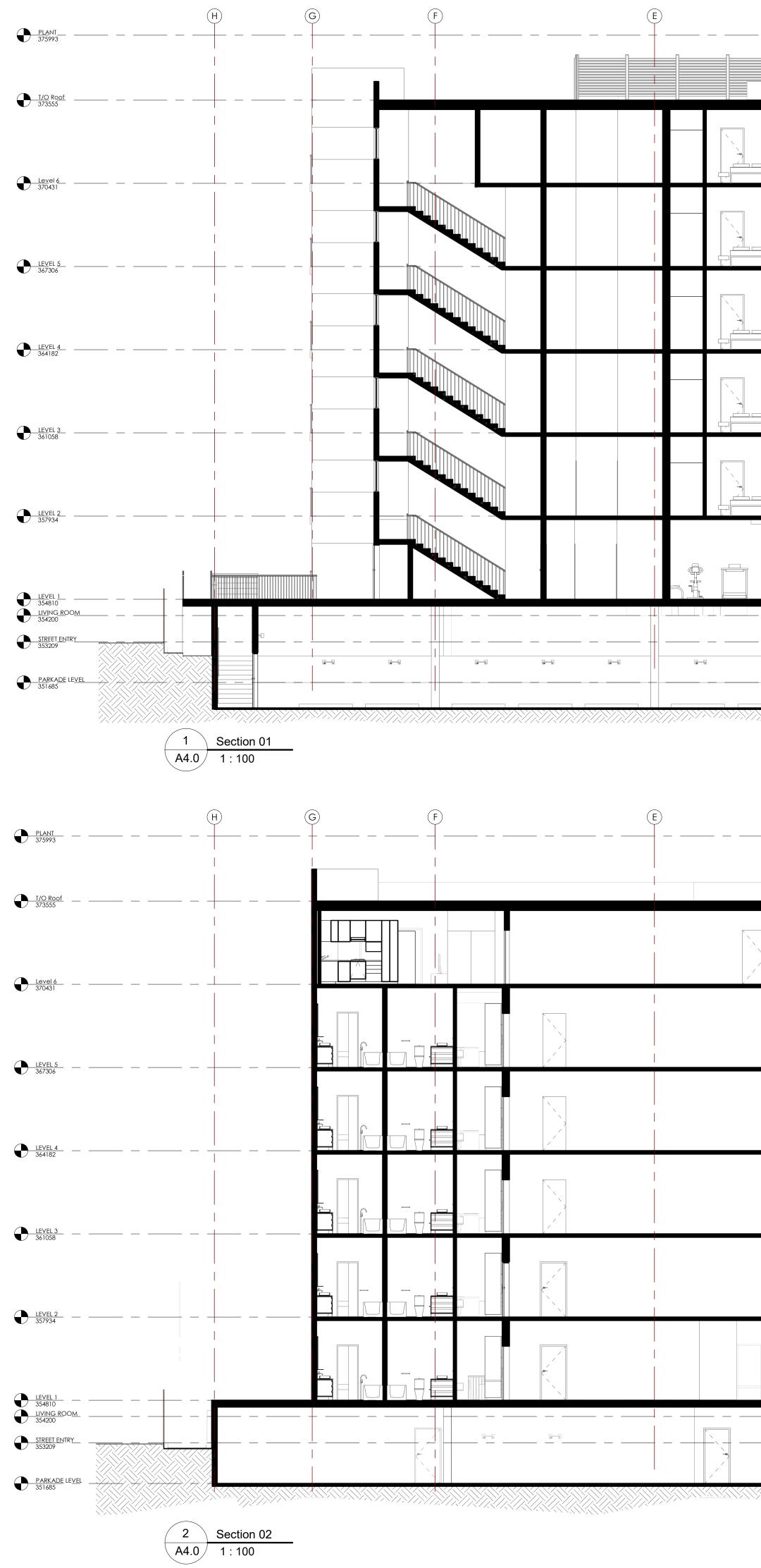
Sheet Title BUILDING ELEVATIONS

Job Number 22.1051 ssue Date 2024.06.14

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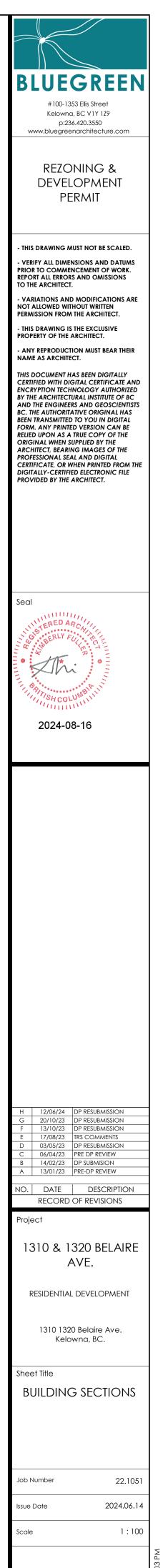
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NO. DATE DESCRIPTION RECORD OF REVISIONS
Project
1310 & 1320 BELAIRE AVE.
RESIDENTIAL DEVELOPMENT
1310 1320 Belaire Ave. Kelowna, BC.
Sheet Title
BUILDING SECTIONS
Job Number 22.1051
Issue Date 2024.06.14
Scale 1:100

A4.0

SCHEDULE	В
This forms part of appli # DP23-0095	ication
Planner Initials AF	City of Kelowna



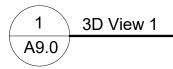




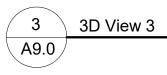
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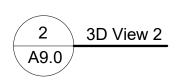




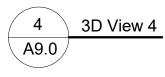












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DP RESUBMISSIO 12/06/24 DP RESUBMISSION DP RESUBMISSION 7/08/23 TRS COMMENTS 03/05/23 DP RESUBMISSION 06/04/23 PRE DP REVIEW
 14/02/23
 DP SUBMISION

 13/01/23
 PRE-DP REVIEW
 . DATE DESCRIPTION **RECORD OF REVISIONS** Project 1310 & 1320 BELAIRE AVE. RESIDENTIAL DEVELOPMENT 1310 1320 Belaire Ave. Kelowna, BC. Sheet Title

PERSPECTIVES

Job Number 22.1051

2024.06.14

A9.0

rawing Number

sue Date

:ale



NOTES

COMMON OR PRIVATE PROPERTIES.

PLANT LIST

BOTANICAL NAME

TREES

CORNUS KOUSA Koelreuteria paniculata PINUS NIGRA 'ARNOLD SENTINEL' QUERCUS MACROCARPA TILIA CORDATA 'CORZAM'

SHRUBS BUXUS 'GREEN VELVET'

EUONYMUS ALATUS 'COMPACTA' PHYSOCARPUS OPULIFOLIUS 'SMPOTW' SPIRAEA JAPONICA 'GOLDMOUND' VIBURNUM TRILOBUM 'BAILEY COMPACT'

PERENNIALS, GRASSES & GROUNDCOVERS ASTER ALPINUS 'DARK BEAUTY' Aster Alpinus 'Goliath' ASTER FRIKARTII 'MONCH' CALAMAGROSTIS X ACUTIFLORA 'KARL FOEREST ECHINACEA PURPUREA 'MAGNUS' ECHINACEA PURPUREA 'PRAIRIE SPLENDOR' HAKONECHLOA MACRA HELICTOTRICHON SEMPERVIRENS IRIS GERMANICA 'CRANBERRY ICE' LAVANDULA ANGUSTIFOLIA 'HIDCOTE' SALVIA NEMOROSA 'MAY NIGHT'



1. PLANT MATERIAL AND CONSTRUCTION METHODS SHALL MEET OR EXCEED CANDAIAN LANDSCAPE STANDARDS. ALL OFFSITE LANDSCAPE WORKS TO MEET CITY OF KELOWNA BYLAW 12375 STANDARDS.

2. ALL SOFT LANDSCAPE AREAS SHALL BE WATERED BY A FULLY AUTOMATIC TIMED UNDERGROUND IRRIGATION SYSTEM.

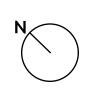
3. TREE AND SHRUB BEDS TO BE DRESSED IN A MINIMUM 75mm WOOD MULCH. DO NOT PLACE WEED MAT UNDERNEATH TREE AND SHRUB BEDS.

4. GROWING MEDIUM SHALL BE PLACED AT 300mm MIN. DEPTH IN ALL PLANTING AREAS, AND 1 cu.m. MIN. DEPTH IN TREE PITS, AS SHOWN ON DRAWINGS, EXCEPT WHERE CANADIAN LANDSCAPE STANDARDS DESIGNATES A GREATER DEPTH BASED ON SEVERITY OF COMPACTION AND GRADING, UNLESS OTHERWISE NOTED. CONTRACTOR TO IMPORT GROWING MEDIUM OR SCREEN, AMEND & PLACE STOCKPILED ONSITE TOPSOIL. GROWING MEDIUM IS TO MEET TYPE 2P FOR PLANTING AREAS AND TREE PITS AS PER TABLE T-6.3.5.3 IN THE LATEST EDITION OF THE CANADIAN LANDSCAPE STANDARD.

5. SITE GRADING AND DRAINAGE WILL ENSURE THAT ALL STRUCTURES HAVE POSITIVE DRAINAGE AND THAT NO WATER OR LOOSE IMPEDIMENTS WILL BE DISCHARGED FROM THE LOT ONTO ADJACENT PUBLIC,

DWARF BURNING BUSH9#02 CONT. /2.0M O.C. SPACINTINY WINE NINEBARK25#02 CONT. /1.2M O.C. SPACINGOLDMOUND SPIRAEA25#02 CONT. /1.2M O.C. SPACINBAILEY COMPACT AMERICAN CRANBERRY11#02 CONT. /1.2M O.C. SPACINDARK BEAUTY ALPINE ASTER31#01 CONT. /0.6M O.C. SPACINGOLIATH ALPINE ASTER31#01 CONT. /0.6M O.C. SPACINFRIKART'S ASTER8#01 CONT. /0.6M O.C. SPACINSTER'KARL FOERESTER REED GRASS14MAGNUS CONEFLOWER11#01 CONT. /0.9M O.C. SPACINPRAIRIE SPLENDOR CONEFLOWER31#01 CONT. /0.6M O.C. SPACIN				
GOLDENRAIN TREE14 cm CALARNOLD SENTINEL AUSTRIAN BLACK PINE102.5m HT.BUR OAK35 cm CALLITTLELEAF LINDEN25 cm CALGREEN VELVET BOXWOOD36#02 CONT. / 1.0M O.C. SPACINDWARF BURNING BUSH9#02 CONT. / 2.0M O.C. SPACINTINY WINE NINEBARK25#02 CONT. / 1.2M O.C. SPACINGOLDMOUND SPIRAEA25#02 CONT. / 1.2M O.C. SPACINBAILEY COMPACT AMERICAN CRANBERRY11#01 CONT. / 0.6M O.C. SPACINBAILEY COMPACT AMERICAN CRANBERRY11#01 CONT. / 0.6M O.C. SPACINSTER'KARL FOERESTER REED GRASS14#01 CONT. / 0.6M O.C. SPACINMAGNUS CONEFLOWER11#01 CONT. / 0.6M O.C. SPACINMAGNUS CONEFLOWER11#01 CONT. / 0.6M O.C. SPACINJAPANESE FOREST GRASS31#01 CONT. / 0.6M O.C. SPACINBULE OAT GRASS31#01 CONT. / 0.6M O.C. SPACINBULE OAT GRASS31#01 CONT. / 0.6M O.C. SPACINBULE OAT GRASS31#01 CONT. / 0.6M O.C. SPACINBLUE OAT GRASS31#01 CONT. / 0.6M O.C. SPACINBERRY RED BEARDED IRIS11#01 CONT. / 0.6M O.C. SPACINHIDCOTE ENGLISH LAVENDER31#01 CONT. / 0.6M O.C. SPACIN		COMMON NAME	QTY	SIZE/SPACING & REMARKS
ARNOLD SENTINEL AUSTRIAN BLACK PINE BUR OAK LITTLELEAF LINDEN GREEN VELVET BOXWOOD DWARF BURNING BUSH TINY WINE NINEBARK GOLDMOUND SPIRAEA BAILEY COMPACT AMERICAN CRANBERRY DARK BEAUTY ALPINE ASTER GOLIATH ALPINE ASTER FRIKART'S ASTER KARL FOERESTER REED GRASS MAGNUS CONEFLOWER NAGNUS CONEFLOWER JAPANESE FOREST GRASS BLUE OAT GRASS BERRY RED BEARDED IRIS HIDCOTE ENGLISH LAVENDER 31 #01 CONT. /0.6M O.C. SPACIN 11 #01 CONT. /0.6M O.C. SPACIN 12 #01 CONT. /0.6M O.C. SPACIN 13 #01 CONT. /0.6M O.C. SPACIN 14 #01 CONT. /0.6M O.C. SPACIN 15 #01 CONT. /0.6M O.C. SPACIN 16 #01 CONT. /0.6M O.C. SPACIN 17 #01 CONT. /0.6M O.C. SPACIN 18 #01 CONT. /0.6M O.C. SPACIN 19 #01 CONT. /0.6M O.C. SPACIN		KOUSA DOGWOOD	2	3cm CAL
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PROJECT TITLE

1310 & 1320 BELAIRE AVE

Kelowna, BC

DRAWING TITLE

CONCEPTUAL LANDSCAPE PLAN

ISSU	JED FOR / REVISION	
1	23.01.24	Issued for DP
2	23.04.20	Issued for DP
3	23.09.14	Issued for DP
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PROJECT NO	22-1261	
DESIGN BY	PH	
dravvn by	MC / PH	
CHECKED BY	FB	
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DRAWING NUMBER

LS-101

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Consideration has been given to the following guidelines as identified in Chapter 18 of the City of Kelowna 2040 Official Community Plan:

	SECTION 2.0: GENERAL RESIDENTIAL AND MIX	KED US	δE				
RA	TE PROPOSALS COMPLIANCE TO PERTINENT GUIDELINE	N/A	1	2	3	4	5
	s least complying & 5 is highly complying)						
2.1	General residential & mixed use guidelines						
2.1	.1 Relationship to the Street	N/A	1	2	3	4	5
a.	Orient primary building facades and entries to the fronting street						✓
	or open space to create street edge definition and activity.						
b.	On corner sites, orient building facades and entries to both	✓					
	fronting streets.						
с.	Minimize the distance between the building and the sidewalk to						✓
	create street definition and a sense of enclosure.						
d.	Locate and design windows, balconies, and street-level uses to						
	create active frontages and 'eyes on the street', with additional						✓
	glazing and articulation on primary building facades.						
e.	Ensure main building entries are clearly visible with direct sight						✓
	lines from the fronting street.						
f.	Avoid blank, windowless walls along streets or other public open						✓
	spaces.						
g.	Avoid the use of roll down panels and/or window bars on retail and	✓					
	commercial frontages that face streets or other public open						
	spaces.						
h.	In general, establish a street wall along public street frontages to						✓
	create a building height to street width ration of 1:2, with a						
	minimum ration of 11:3 and a maximum ration of 1:1.75.						
•	Wider streets (e.g. transit corridors) can support greater streetwall						
	heights compared to narrower streets (e.g. local streets);						
•	The street wall does not include upper storeys that are setback						
	from the primary frontage; and						
•	A 1:1 building height to street width ration is appropriate for a lane						
	of mid-block connection condition provided the street wall height						
	is no greater than 3 storeys.						
	2 Scale and Massing	N/A	1	2	3	4	5
а.	Provide a transition in building height from taller to shorter	✓					
	buildings both within and adjacent to the site with consideration						
	for future land use direction.						
b.	Break up the perceived mass of large buildings by incorporating						✓
	visual breaks in facades.			<u> </u>		<u> </u>	$ \downarrow $
с.	Step back the upper storeys of buildings and arrange the massing						✓
	and siting of buildings to:						
•	Minimize the shadowing on adjacent buildings as well as public						
	and open spaces such as sidewalks, plazas, and courtyards; and						



•	Allow for sunlight onto outdoor spaces of the majority of ground						
	floor units during the winter solstice.						
		N/A	1	2	3	4	5
a.	Site and design buildings to respond to unique site conditions and						•
	opportunities, such as oddly shaped lots, location at prominent						
	intersections, framing of important open spaces, corner lots, sites						
	with buildings that terminate a street end view, and views of natural features.						
h							
b.	Use Crime Prevention through Environmental Design (CPTED)						•
	principles to better ensure public safety through the use of						
	appropriate lighting, visible entrances, opportunities for natural						
	surveillance, and clear sight lines for pedestrians.						✓
C.	Limit the maximum grades on development sites to 30% (3:1)	 ✓ 					•
d.	Design buildings for 'up-slope' and 'down-slope' conditions	•					
	relative to the street by using strategies such as:						
•	Stepping buildings along the slope, and locating building						
	entrances at each step and away from parking access where						
	possible;						
•	Incorporating terracing to create usable open spaces around the						
	building						
•	Using the slope for under-building parking and to screen service						
	and utility areas;						
•	Design buildings to access key views; and						
•	Minimizing large retaining walls (retaining walls higher than 1 m						
	should be stepped and landscaped).						
e.	Design internal circulation patterns (street, sidewalks, pathways)						✓
	to be integrated with and connected to the existing and planed						
	future public street, bicycle, and/or pedestrian network.						
f.	Incorporate easy-to-maintain traffic calming features, such as on-	✓					
	street parking bays and curb extensions, textured materials, and						
	crosswalks.						
g.	Apply universal accessibility principles to primary building entries,						
	sidewalks, plazas, mid-block connections, lanes, and courtyards						✓
	through appropriate selection of materials, stairs, and ramps as						
	necessary, and the provision of wayfinding and lighting elements.						
2.1	4 Site Servicing, Access, and Parking	N/A	1	2	3	4	5
a.	Locate off-street parking and other 'back-of-house' uses (such as						✓
	loading, garbage collection, utilities, and parking access) away						
	from public view.						
b.	Ensure utility areas are clearly identified at the development						✓
	permit stage and are located to not unnecessarily impact public or						
	common open spaces.						
с.	Avoid locating off-street parking between the front façade of a						✓
	building and the fronting public street.						
d.	In general, accommodate off-street parking in one of the						✓
	following ways, in order of preference:						
•	Underground (where the high water table allows)						



				_			
•	Parking in a half-storey (where it is able to be accommodated to						
	not negatively impact the street frontage);						
•	Garages or at-grade parking integrated into the building (located						
	at the rear of the building); and						
•	Surface parking at the rear, with access from the lane or						
	secondary street wherever possible.						
e.	Design parking areas to maximize rainwater infiltration through	✓					
	the use of permeable materials such as paving blocks, permeable						
6	concrete, or driveway planting strips.						
f.	In cases where publicly visible parking is unavoidable, screen using	•					
	strategies such as:						
•	Landscaping;						
•	Trellises;						
•	Grillwork with climbing vines; or						
•	Other attractive screening with some visual permeability.						
g.	Provide bicycle parking at accessible locations on site, including:						v
•	Covered short-term parking in highly visible locations, such as						
1	near primary building entrances; and				1		
•	Secure long-term parking within the building or vehicular parking				1		
	area.						✓
h.	Provide clear lines of site at access points to parking, site						v
	servicing, and utility areas to enable casual surveillance and safety.						 ✓
i.	Consolidate driveway and laneway access points to minimize curb						v
	cuts and impacts on the pedestrian realm or common open						
j.	spaces. Minimize negative impacts of parking ramps and entrances						~
J.	through treatments such as enclosure, screening, high quality						•
	finishes, sensitive lighting and landscaping.						
2 1	5 Streetscapes, Landscapes, and Public Realm Design	N/A	1	2	3	4	5
a.	Site buildings to protect mature trees, significant vegetation, and		-	2	5	4	5
u.	ecological features.						
b.	Locate underground parkades, infrastructure, and other services						✓
~.	to maximize soil volumes for in-ground plantings.						
с.	Site trees, shrubs, and other landscaping appropriately to						✓
	maintain sight lines and circulation.						
d.	Design attractive, engaging, and functional on-site open spaces						✓
	with high quality, durable, and contemporary materials, colors,						
	lighting, furniture, and signage.						
e.	Ensure site planning and design achieves favourable microclimate					1	✓
	outcomes through strategies such as:						
•	Locating outdoor spaces where they will receive ample sunlight						
	throughout the year;						
•	Using materials and colors that minimize heat absorption;						
•	Planting both evergreen and deciduous trees to provide a balance				1		
1	of shading in the summer and solar access in the winter; and				1		
•	Using building mass, trees and planting to buffer wind.				1		
			1				



C	The leader of a contract leader of the device of the state of the stat		r –	1	r –		
f.	Use landscaping materials that soften development and enhance the public realm.						×
g.	Plant native and/or drought tolerant trees and plants suitable for the local climate.						~
h.	Select trees for long-term durability, climate and soil suitability, and compatibility with the site's specific urban conditions.						~
i.	Design sites and landscapes to maintain the pre-development flows through capture, infiltration, and filtration strategies, such as the use of rain gardens and permeable surfacing.						~
j.	Design sites to minimize water use for irrigation by using strategies such as:	√					
•	Designing planting areas and tree pits to passively capture rainwater and stormwater run-off; and						
•	Using recycled water irrigation systems.						
k.	Create multi-functional landscape elements wherever possible, such as planting areas that also capture and filter stormwater or landscape features that users can interact with.						
Ι.	Select materials and furnishings that reduce maintenance requirements and use materials and site furnishings that are	√					
m.	sustainably sourced, re-purposed or 100% recycled. Use exterior lighting to complement the building and landscape	~					
	design, while:						
•	Minimizing light trespass onto adjacent properties; Using full cut-off lighting fixtures to minimize light pollution; and						
•	Maintaining lighting levels necessary for safety and visibility.						
n.	Employ on-site wayfinding strategies that create attractive and						✓
	appropriate signage for pedestrians, cyclists, and motorists using a 'family' of similar elements.						
2.1	.6 Building Articulation, Features and Materials	N/A	1	2	3	4	5
a.	Express a unified architectural concept that incorporates variation in façade treatments. Strategies for achieving this include:						~
•	Articulating facades by stepping back or extending forward a portion of the facade to create a series of intervals or breaks;						
•	Repeating window patterns on each step-back and extension interval;						
•	Providing a porch, patio, or deck, covered entry, balcony and/or bay window for each interval; and						
•	Changing the roof line by alternating dormers, stepped roofs, gables, or other roof elements to reinforce each interval.						
b.	Incorporate a range of architectural features and details into building facades to create visual interest, especially when approached by pedestrians. Include architectural features such as: bay windows and balconies; corner feature accents, such as turrets or cupolas; variations in roof height, shape and detailing; building entries; and canopies and overhangs.						



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	Include architectural details such as: Masonry such as tiles, brick,				
	and stone; siding including score lines and varied materials to				
	distinguish between floors; articulation of columns and pilasters;				
	ornamental features and art work; architectural lighting; grills and				
	railings; substantial trim details and moldings / cornices; and				
	trellises, pergolas, and arbors.				
с.	Design buildings to ensure that adjacent residential properties			٦	~
	have sufficient visual privacy (e.g. by locating windows to				
	minimize overlook and direct sight lines into adjacent units), as				
	well as protection from light trespass and noise.				
d.	Design buildings such that their form and architectural character			١	✓
	reflect the buildings internal function and use.				
e.	Incorporate substantial, natural building materials such as		✓		
	masonry, stone, and wood into building facades.				
f.	Provide weather protection such as awnings and canopies at			١	✓
	primary building entries.				
g.	Place weather protection to reflect the building's architecture.			١	✓
h.	Limit signage in number, location, and size to reduce visual clutter	✓			
	and make individual signs easier to see.				
i.	Provide visible signage identifying building addresses at all	✓			
	entrances.				

	SECTION 4.0: LOW & MID-RISE RESIDENTIAL MIXED USE										
RA	TE PROPOSALS COMPLIANCE TO PERTINENT GUIDELINE	N/A	1	2	3	4	5				
(1)	is least complying & 5 is highly complying)										
-	4.1 Low & mid-rise residential & mixed use guidelines										
4.1	1.1 Relationship to the Street	N/A	1	2	3	4	5				
i.	Ensure lobbies and main building entries are clearly visible from						✓				
	the fronting street.										
j.	Avoid blank walls at grade wherever possible by:						\checkmark				
•	Locating enclosed parking garages away from street frontages or										
	public open spaces;										
•	Using ground-oriented units or glazing to avoid creating dead										
	frontages; and										
•	When unavoidable, screen blank walls with landscaping or										
	incorporate a patio café or special materials to make them more										
	visually interesting.										
Re	sidential & Mixed Use Buildings										
k.	Set back residential buildings on the ground floor between 3-5 m						\checkmark				
	from the property line to create a semi-private entry or transition										
	zone to individual units and to allow for an elevated front										
	entryway or raised patio.										
•	A maximum 1.2 m height (e.g. 5-6 steps) is desired for front	1									
	entryways.										



	Eventions can be made in cases where the water table requires		1	T			
•	Exceptions can be made in cases where the water table requires						
	this to be higher. In these cases, provide a larger patio and screen parking with ramps, stairs and landscaping.						
١.	Incorporate individual entrances to ground floor units accessible						✓
1.	from the fronting street or public open spaces.						
m	Site and orient buildings so that windows and balconies overlook			-			✓
	public streets, parks, walkways, and shared amenity spaces while						ľ
	minimizing views into private residences.						
. 1	2 Scale and Massing	N/A	1	2	3	4	5
4.	Residential building facades should have a maximum length of 60		-	2	5	4	⊃ ✓
u.	m. A length of 40 m is preferred.						
b.	Residential buildings should have a maximum width of 24 m.						✓
с.	Buildings over 40 m in length should incorporate a significant	✓					-
с.	horizontal and vertical break in the façade.	•					
/ 1	.3 Site Planning	N/A	1	2	2	,	-
	On sloping sites, floor levels should step to follow natural grade		-	2	3	4	5
a.	and avoid the creation of blank walls.						
b.	Site buildings to be parallel to the street and to have a distinct						✓
	front-to-back orientation to public street and open spaces and to						
	rear yards, parking, and/or interior court yards:						
•	Building sides that interface with streets, mid-block connections						
	and other open spaces and should positively frame and activate						
	streets and open spaces and support pedestrian activity; and						
•	Building sides that are located away from open spaces (building						
	backs) should be designed for private/shared outdoor spaces and						
	vehicle access.						
с.	Break up large buildings with mid-block connections which should	✓					
	be publicly-accessible wherever possible.						
d.	Ground floors adjacent to mid-block connections should have	✓			1		
	entrances and windows facing the mid-block connection.						
4.1	4 Site Servicing, Access and Parking	N/A	1	2	3	4	5
a.	Vehicular access should be from the lane. Where there is no lane,						✓
	and where the re-introduction of a lane is difficult or not possible,						
	access may be provided from the street, provided:						
•	Access is from a secondary street, where possible, or from the						
	long face of the block;						
•	Impacts on pedestrians and the streetscape is minimised; and						
•	There is no more than one curb cut per property.						
b.	Above grade structure parking should only be provided in						✓
	instances where the site or high water table does not allow for				1		
	other parking forms and should be screened from public view with						
	active retail uses, active residential uses, architectural or				1		
	landscaped screening elements.						
с.	Buildings with ground floor residential may integrate half-storey			1		1	✓
	underground parking to a maximum of 1.2 m above grade, with						
	the following considerations:						
	2	1		1	1	1	1



 Semi-private spaces should be located above to soften the edge and be at a comfortable distance from street activity; and Where conditions such as the high water table do not allow for this condition, up to 2 m is permitted, provided that entryways, stairs, landscaped terraces, and patios are integrated and that blank walls and barriers to accessibility are minimized. 4.1.5 Publicly-Accessible and Private Open Spaces N/A 1 2 3 4 5 Integrate publicly accessible private spaces (e.g. private courty ards accessible and available to the public) with public open areas to create seamless, contiguous spaces. b. Locate semi-private open spaces to maximize sunlight penetration, minimize noise disruptions, and minimize 'overlook' from adjacent units. Outdoor amenity areas C. Design intermal courtyards to: Provide abalance of hardscape and softscape areas to meet the specific needs of surrounding residents and/or users. Dosign shared rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and rooftop amenity spaces (such as outdoor recreation space and tall shrubs to the roof deck; and Controlling sight lines from overlooking residential units to outdoor amenity space reas through the use of pergolas or covered areas where privacy is desired; and Controlling sight lines from the outdoor amenity space into adjacent or nearby residential units by using fencing, landscaping, or architectural screening. Reduce the heat island affect by including plants or designing a green roof, with the following considerations: Secure trees and tall sh								
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and ensure drainage is accommodated.N/AIZ345 4.1.6 Building Articulation, Features, and Materials N/AIZ345a. Articulate building facades into intervals that are a maximum of 15 m wide for mixed-use buildings and 20 m wide for residential buildings. Strategies for articulating buildings should consider the potential impacts on energy performance and include:III <td>•</td> <td>Ensure soil depths and types are appropriate for proposed plants</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	•	Ensure soil depths and types are appropriate for proposed plants						
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 portion of the façade to create a series of intervals in the façade; Repeating window pattern intervals that correspond to extensions 	•	Façade Modulation – stepping back or extending forward a					1	
Repeating window pattern intervals that correspond to extensions								
	•							
		and step backs (articulation) in the building façade;					1	
Providing a porch, patio, deck, or covered entry for each interval;	•							



		r			
•	Providing a bay window or balcony for each interval, while				
	balancing the significant potential for heat loss through thermal				
	bridge connections which could impact energy performance;				
•	Changing the roof line by alternating dormers, stepped roofs,				
	gables, or other roof elements to reinforce the modulation or				
	articulation interval;				
•	Changing the materials with the change in building plane; and				
•	Provide a lighting fixture, trellis, tree or other landscape feature				
	within each interval.				
b.	Break up the building mass by incorporating elements that define				✓
	a building's base, middle and top.				
с.	Use an integrated, consistent range of materials and colors and				✓
	provide variety, by for example, using accent colors.				
d.	Articulate the façade using design elements that are inherent to				✓
	the buildings as opposed to being decorative. For example, create				
	depth in building facades by recessing window frames or partially				
	recessing balconies to allow shadows to add detail and variety as a				
	byproduct of massing.				
e.	Incorporate distinct architectural treatments for corner sites and				✓
	highly visible buildings such as varying the roofline, articulating				
	the façade, adding pedestrian space, increasing the number and				
	size of windows, and adding awnings or canopies.				
f.	Provide weather protection (e.g. awnings, canopies, overhangs,				✓
	etc.) along all commercial streets and plazas with particular				
	attention to the following locations:				
•	Primary building entrances;				
•	Adjacent to bus zones and street corners where people wait for				
	traffic lights;				
•	Over store fronts and display windows; and				
•	Any other areas where significant waiting or browsing by people				
	occurs.				
g.	Architecturally-integrate awnings, canopies, and overhangs to the				✓
5	building and incorporate architectural design features of buildings				
	from which they are supported.				
h.	Place and locate awnings and canopies to reflect the building's				✓
	architecture and fenestration pattern.				
i.	Place awnings and canopies to balance weather protection with				✓
	daylight penetration. Avoid continuous opaque canopies that run				
	the full length of facades.				
j.	Provide attractive signage on commercial buildings that identifies	✓			
	uses and shops clearly but which is scaled to the pedestrian rather				
	than the motorist. Some exceptions can be made for buildings				
	located on highways and/or major arterials in alignment with the				
	City's Sign Bylaw.				
k.	Avoid the following types of signage:	✓			
•	Internally lit plastic box signs;				
•	Pylon (stand alone) signs; and				
L		1	1		1



DP23-0095 September 9, 2024

•	Rooftop signs.				
Ι.	Uniquely branded or colored signs are encouraged to help	✓			
	establish a special character to different neighbourhoods.				

DP23-0095 1310 & 1320 Belaire Ave

Development Permit

City of

Kelowna

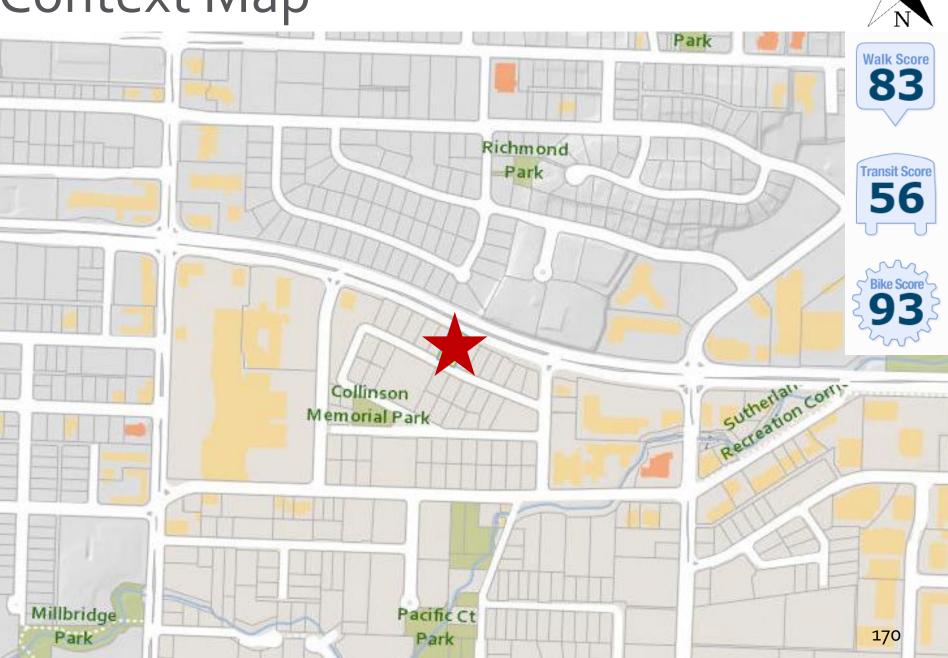
Purpose

To issue a Development Permit for the form and character of rental apartment housing.

Development Process



Context Map



Subject Property Map





Technical Details

UC2r – Capri-Landmark Urban Centre Rental Only

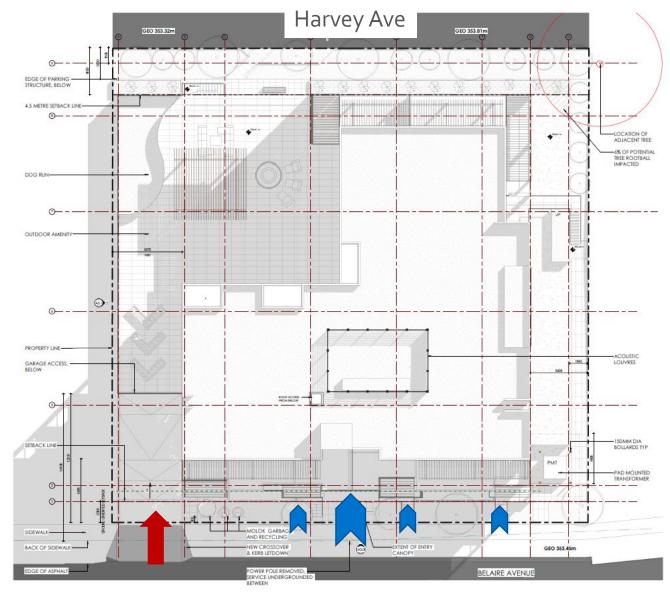
62 units

- 23 one-bedroom
- ▶ 39 two-bedroom
- 6 storeys in height
- 49 Parking Stalls
- 88 Long-term Bicycle Parking Stalls

▶ 5 Large Trees

Site Plan





Belaire Ave

Elevation – South



Elevation – North



Elevation – East

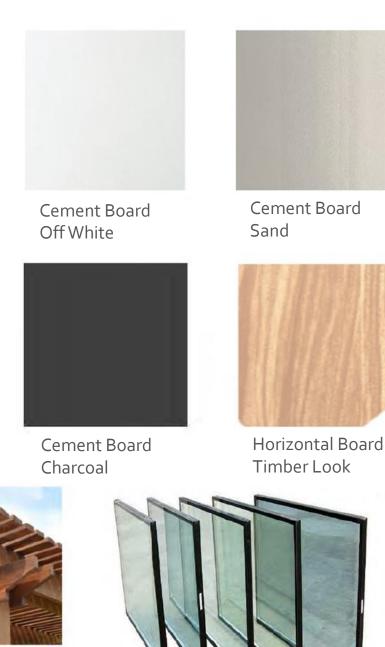


Elevation – West



Materials Board





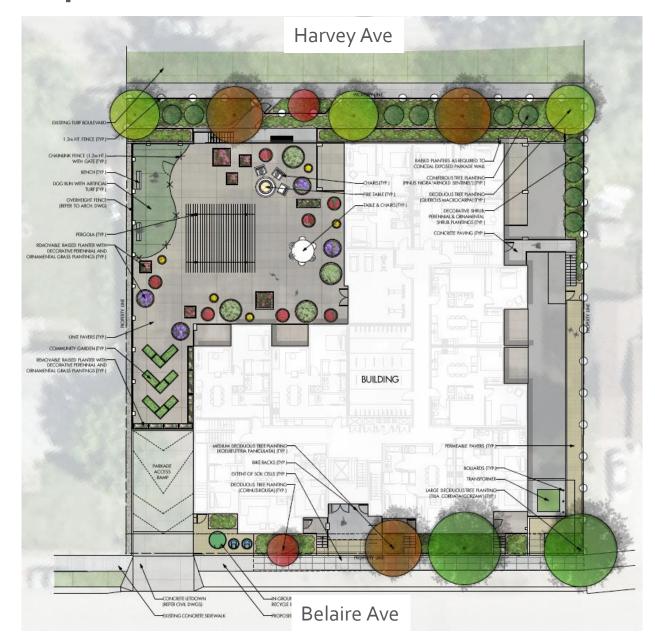
Stacked Bond Masonry

Off White

Timber Trellis

Landscape Plan





Rendering – NW



Rendering – Amenity Level



OCP Design Guidelines

- Orienting the primary building facades and entries to both streets (Belaire Ave, Harvey Ave)
- Incorporating a range of architectural features and details to create visual interest using an integrates mix of materials and colours
- Providing ground-oriented units with individual entrances to allow for semi-private landscaping and patios

Staff Recommendation

- Staff recommend support for the proposed development permit as it:
 - Meets majority of OCP Design Guidelines
 - Supports Healthy Housing Strategy (Rental Housing)
 - No variances

CITY OF KELOWNA

BYLAW NO. 12669 Z24-0008 1007 Lanfranco Road

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

- 1. THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of Lot C District Lot 135 ODYD Plan 20294 located on Lanfranco Road, Kelowna, BC from the MF1 Infill Housing zone to the MF2 Townhouse Housing zone.
- 2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this 17th day of June, 2024.

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk

REPORT TO COUNCIL DEVELOPMENT PERMIT



Date:	September 9, 2024
То:	Council
From:	City Manager
Address:	1007 Lanfranco Rd
File No.:	DP24-0057
Zone:	MF2 – Townhouse Housing

1.0 Recommendation

THAT final adoption of Rezoning Bylaw No. 12669 be considered by Council;

AND THAT Council authorizes the issuance of Development Permit No. DP24-0057 for Lot C District Lot 135 ODYD Plan 20294, located at 1007 Lanfranco Road, Kelowna, BC subject to the following:

- 1. The dimensions and siting of the building to be constructed on the land be in accordance with Schedule "A";
- The exterior design and finish of the building to be constructed on the land be in accordance with Schedule "B";
- 3. Landscaping to be provided on the land be in accordance with Schedule "C";
- 4. The applicant be required to post with the City a Landscape Performance Security deposit in the amount of 125% of the estimated value of the Landscape Plan, as determined by a Landscape Designer;

AND THAT the applicant be required to complete the above-noted conditions of Council's approval of the Development Permit Application in order for the permits to be issued;

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Council approval, with no opportunity to extend.

2.0 Purpose

To issue a Development Permit for the form and character of a townhouse development.

3.0 Development Planning

Staff support the proposed Development Permit for the form and character of an eight-unit townhouse development on a corner lot located at Barberry St. and Lanfranco Rd. The proposal generally conforms to the Official Community Plan (OCP) Form and Character Development Permit Design Guidelines for Townhouses. Key guidelines that are met include:

- Ensure main building entries are clearly visible with direct sight lines from the fronting street;
- Incorporating a range of architectural features and details into building facades to create visual interest, and breaking up the building with an integrated, consistent range of materials and colours that provide variety;

- Apply universal accessibility principles to primary building entries, sidewalks and courtyards through appropriate selection of materials, stairs, and ramps as necessary;
- Site buildings to protect significant vegetation, and
- Design buildings to ensure that adjacent residential properties have sufficient visual privacy.

The applicant is proposing to construct eight townhouse units. The units facing Barberry St. and Lanfranco Rd. will have ground-oriented access from these streets. The proposed unit composition consists of the following:

- One fourplex townhouse building with four 4-bedroom units;
- One duplex building with two 4-bedroom units, and;
- One duplex building with one 4-bedroom unit and one 3-bedroom unit.

Although common and private amenity space are not required for developments under 10 dwelling units in the MF₂ – Townhouse Housing zone, the applicant is proposing rooftop decks and second-floor balconies at each unit, as well as yard space for the 4-townhouse units located on the eastern building. Additionally, seven out of the eight units are proposed to have elevator access. Finally, the proposed materials and colour palate consists of cream stucco, taupe concrete panel and dark gray horizontal siding with brick accents, creating visual interest and breaking up the buildings with an integrated, consistent range of materials and colours that provide variety.

Through the application process, Staff received neighbourhood comments regarding some aspects of the proposed development and design. Key comments consisted of the following themes:

- 1. Too much height and density for the location and neighbourhood.
- 2. Insufficient off-street parking resulting in street parking and increased traffic.
- 3. Lack of privacy between the eastern and southern property neighbours, insufficient landscaping and trees.

Staff worked with the applicant to address these comments through building and landscape design. These design and development regulation considerations are further discussed below for each theme.

Height and Density:

The following table summarizes a comparison of the permitted and proposed development and subdivision regulations for the MF1 and MF2 zones as per the Zoning Bylaw:

Regulation	MF1 (Max Permitted)	MF ₂ (Max Permitted)	Proposed
Subdivision	3 new lots with up to 6-units	N/A	N/A
	per lot, for a maximum of 18		
	units		
FAR	6 units / lot	1.0	0.79 (8 units)
Site Coverage of all	55%	55%	38%
Buildings			
Site Coverage of all	75%	80%	69.4%
Buildings, Structures, and			
Impermeable Surfaces			
Proposed side yard	1.8 m	2.1 M	3.0 M
setback (east)			

Parking:

The total required minimum number of off-street parking spaces, including visitor stalls, for the proposed development is 15 stalls. The applicant is proposing 15 garage parking stalls and one parking stall, for a total of 16 stalls, exceeding the required total number of stalls.

Privacy:

To aid in and improve privacy between the eastern and southern neighbours, the applicant incorporated the following design concepts to the proposed development:

- A certified arborist developed a "Hedge/Tree Protection Plan" to preserve the existing mature hedging along the eastern property boundary.
- Four columnar trees are proposed between the breaks in the hedging along the eastern property boundary for added privacy and landscaping.
- Installation of a 1.8 m solid fence along the east and south property boundary.
- All rooftop decks are stepped back minimum 1.2m of all buildings that face east and south neighbouring properties.
- Rooftop deck panel heights were increased to 1.5m along the east and south side, and the panels are proposed to be frosted.

The proposed design and landscaping plan mitigates and addresses surrounding neighbourhood concerns through the choice of building materials, colour palate, privacy features such as solid fencing, frosted glass railings, and through preservation of existing hedging and planting additional trees along the eastern perimeters of the property.

Based on the Development Permit guidelines and the design consideration that were included, Staff believe the building will fit well into the immediate area.

4.0 Subject Property

Subject Property Map: 1007 Lanfranco Rd



The subject property is a corner lot located at Lanfranco Rd and Barberry St. It is immediately south of the Pandosy Urban Centre and is approximately 300 m west of Gordon Dr. Transit Supportive Corridor and across the street from the Okanagan Collage Exchange Transit Oriented Area. There are transit stops located near the intersection of Lanfranco Rd and Gordon Dr to the east (approx. 300 m) and at Lanfranco Rd and Casorso Rd to the west (approx. 500 m). The proposed development site is within walking distance of Boyce-Gyro Beach Park, near Casorso Rd and Lakeshore Rd Recreation Corridors, as well as several educational institutions including Casorso Elementary and KLO Middle School, and Okanagan College.

The surrounding neighbourhood context predominantly consists of MF1 – Infill Housing zone with single detached housing and UC5 – Pandosy Urban Centre zone to the north with townhouses. Additionally, there are four lots that are zoned MF4 – Transit Oriented Areas immediately west of the subject lot.

5.0 Zoning Bylaw Reg	Julations Summary
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AREA & UNIT STATISTICS		
Gross Lot Area 1,439.95 m ²		
Total Number of Units	8	
Townhouses	8	

DEVELOPMENT REGULATIONS			
CRITERIA MF2 ZONE PROPOSAL			
Total Maximum Floor Area Ratio	1.0	0.79	
Max. Site Coverage (buildings)	55%	38%	
Max. Site Coverage (buildings, parking, driveways)80%69.4%			
Max. Height	11.0m / 3 storeys	10.13 m / 3 storeys	
Setbacks			
Min. Front Yard (Lanfranco Rd - North)	2.0M	2.0M	
Min. Flanking Side Yard (Barberry St - West)	2.0M	2.0M	
Min. Side Yard (East)	2.1M	3.om	
Min. Rear Yard (South)	4.5m	4.5M	
Landscaping			
Min. Number of Trees	15 trees	15 trees	
Min. Large Trees	9 trees	9 trees	

PARKING REGULATIONS			
CRITERIA MF2 ZONE REQUIREMENTS PROPOSAL			
Total Required Vehicle Parking 15 stalls 16 stalls			
Residential	14	15	
Visitor	1	1	
Ratio of Regular to Small Stalls	Min. 50% Regular	100 % Regular	
	Max. 50% Small	o % Small	
Bicycle Stalls, Short-Term	4 stalls	4 stalls	

6.0 Application Chronology

Application Accepted:	March 8, 2024
Neighbour Notification Received:	May 14, 2024
Date Revised Drawings Received:	June 19, 2024
Adoption of Zone Amending Bylaw:	Sept 9, 2024

Report prepared by:	Barbara B. Crawford, Planner II
Reviewed by:	Jocelyn Black, Urban Planning Manager
Reviewed by:	Nola Kilmartin, Development Planning Department Manager
Approved for Inclusion:	Ryan Smith, Divisional Director, Planning & Development Services

Attachments:

Attachment A: Draft Development Permit DP24-0057 Schedule A: Site Plan & Floor Plans Schedule B: Elevations & Sections Schedule C: Landscape Plan Attachment B: OCP Form and Character Development Permit Guidelines Attachment C: Streetscape Plan and Renderings

For additional information, please visit our Current Developments online at <u>www.kelowna.ca/currentdevelopments</u>.

Development Permit





DP24-0057

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

1007 Lanfranco Rd

and legally known as

Lot C District Lot 135 ODYD Plan 20294

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

Townhouse Housing

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

Date of Council Approval:	September 9, 2024
Development Permit Area:	Multi-Family Form and Character
Existing Zone:	MF2- Townhouse Housing
Future Land Use Designation:	C-NHD – Core Area Neighbourhood

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

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:

1445833 B.C. LTD, INC.NO. BC1445833

Applicant:

Stirling Frazer

Nola Kilmartin Development Planning Department Manager Planning & Development Services Date of Issuance

ATTACHM	ENT A
This forms part of a # DP24-0057	pplication
Planner Initials BC	City of Kelowna

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

THAT Council authorizes the issuance of Development Permit No. DP24-0057 for Lot C District Lot 135 ODYD Plan 20294

located at 1007 Lanfranco Rd, Kelowna, BC, subject to the following:

- 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";
- d) The applicant be required to post with the City a Landscape Performance Security deposit in the amount of 125% of the estimated value of the Landscape Plan, as determined by a Landscape Designer;

AND THAT the applicant be required to complete the above-noted conditions of Council's approval of the Development Permit Application in order for the permits to be issued;

AND FURTHER THAT this Development Permit is valid for two (2) years from the date of Manager 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 use 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 as per the conditions of this permit, the security shall be returned to the Developer or his or her designate following proof of Substantial Compliance as defined in Bylaw No. 12310. There is filed accordingly:

a) An Irrevocable Letter of Credit OR certified cheque OR a Surety Bond in the amount of \$59,632.81

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.

4. 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.

ATTACHMENT A This forms part of application # DP24-0057 City of Planner Initials BC City of Kelowna Development FLAMMAS

Security shall <u>ONLY</u> be returned to the signatory of the Initials BC Landscape Agreement or their designates.

DP24-0057 Page 3 of 3 192

1007 LANFRANCO RD 8-UNIT TOWNHOUSE PROJECT KELOWNA, BC **RESIDENTIAL DEVELOPMENT**

PROJECT INFO:

CIVIC ADDRESS: LEGAL DESCRIPTION: PROPERTY TYPE: CURRENT ZONING: PROPOSED ZONING:

1007 LANFRANCO RD, KELOWNA, BC PLAN KAP20294, LOT C P - TYPICAL PROPERTY RU1 MF2

PROPOSED:

LOT AREA:

1,439 SQ.M / 15,493 SQ.FT.

8-UNITS (8 DWELLING UNITS)

DATA SUMMARY:

	PERI	MITTED	PROPOSED
MIN. SITE AREA:	900 S	GQ.M.	1,439.35 SQ.M.
MAX. SITE COVERAGE			
OF ALL BUILDINGS:	55%		38.75% (557.79m2/1,439.35m2)
MAN SITE COVEDACE			
MAX. SITE COVERAGE BUILDINGS & IMPERM			
SURFACES:	80%		69.43% (999.36/1,439.35m2)
	2.0		2.0
MIN. FRONT YARD: SIDE YARD EAST:	2.0m		2.0m
SIDE YARD WEST:	3.0m 2.0m		3.0m 2.0m
MIN. REAR YARD:	4.5m		4.5m
	1.5111		1.5111
BUILDING HEIGHT:	11.0n	n OR 3 STORIES	10.13m (3 STOREYS)
DENSITY:	1.0 FA	AR	0.791 FAR
PROPOSED UNITS:	8 UN	ITS	
OFF-STREET PARKING			1 ACCESSIBLE VISITOR STALL
FLOOR AREA:	GROSS AREA		NET AREA
	SPACES & ST	ARAGES, MECH	(EXCLUDES GARAGES, MECH SPACES & STAIRS)
			officie a official
UNIT 1	2,356 SQ.FT.	(218.88 SQ.M)	1,572 SQ.FT. (146.04 SQ.M)
UNIT 2	2,356 SQ.FT.	(218.88 SQ.M)	1,572 SQ.FT. (146.04 SQ.M)
UNIT 3	•	(218.88 SQ.M)	1,572 SQ.FT. (146.04 SQ.M)
UNIT 4	•	(173.64 SQ.M)	1,279 SQ.FT. (118.82 SQ.M)
UNIT 5	•	(221.20 SQ.M)	1,551 SQ.FT. (144.09 SQ.M)
UNIT 6	2,356 SQ.FT.		1,572 SQ.FT. (146.04 SQ.M)
UNIT 7 UNIT 8	2,356 SQ.FT. 2,356 SQ.FT.		1,572 SQ.FT. (146.04 SQ.M) 1,572 SQ.FT. (146.04 SQ.M)
011110	2,330 3Q.P1.	(210.00 SQ.M)	1,572 5Q.P1. (140.04 5Q.M)
LIST OF DRAWINGS: A1 COVER	PAGE		
A2 PERSPE			
A3 SITE PL	AN		
	ATION PLAN		
A5 MAIN L			
A6 SECONE			
A7 THIRD I A8 ROOF T	LEVEL OP LEVEL		
	LAN MAIN LEVEL		
A10 ROOF PLAN SECON LEVEL			
A11 ROOF PLAN THIRD LEVEL			
A12 ROOF PLAN ROOF TOP LEVEL			
	& 2 ELEVATIONS		
	& 4 ELEVATIONS 6, 7, & 8 ELEVATIONS		
,	6, 7, & 8 ELEVATIONS 6, 7, & 8 ELEVATIONS		
	& WEST ELEVATION CC	DLORED RENDERINGS	
	& EAST ELEVATION CO		
A19 SITE SE			
A20 STREET			
A21 STREET			
A22 RENDER			

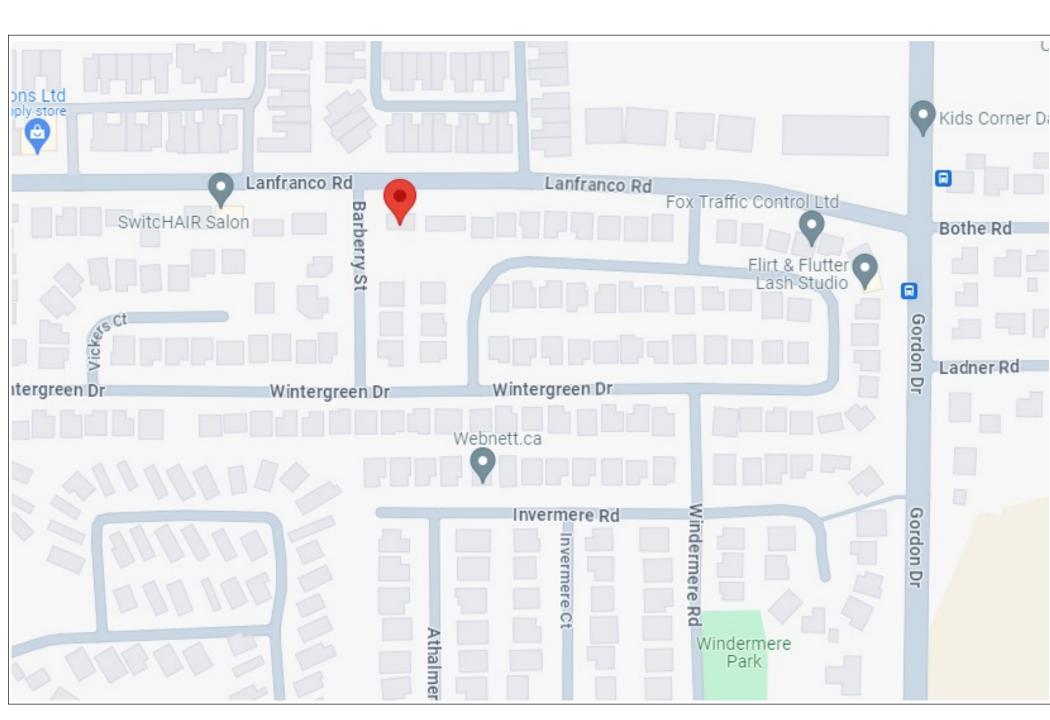
RENDERINGS

RENDERINGS

A22

A23

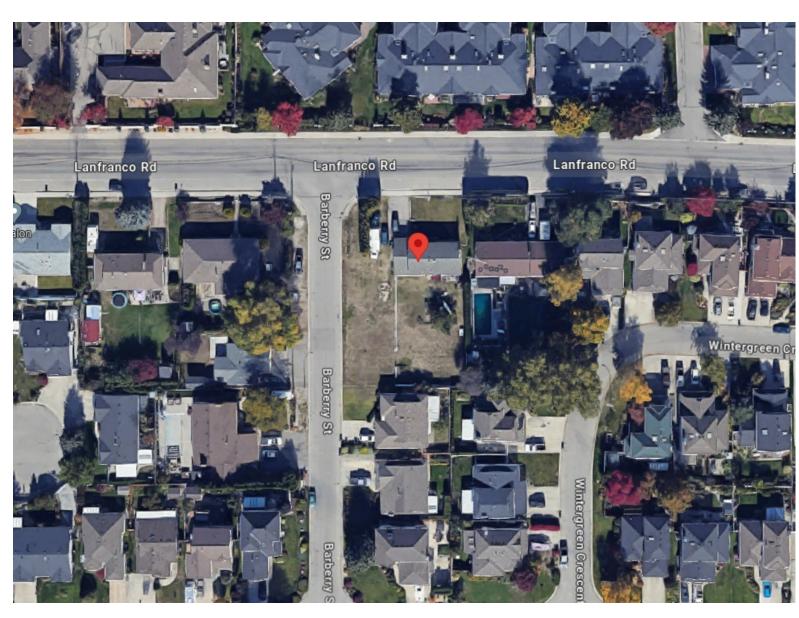
CONTACT:	
DESIGN:	Saba Wolfe INARTIFEX DESIGN LTD. 778.403.1055 saba@inartifex.com
LANDSCAPE DESIGNER:	Shelley Lynn Design 250.681.1826 shelleylynndesign@gmail.com
SURVEYOR:	AllTerra Land Surveying 250.762.0122



VICINITY MAP







OVERVIEW



STREETVIEW WEST (BARBERRY ST)

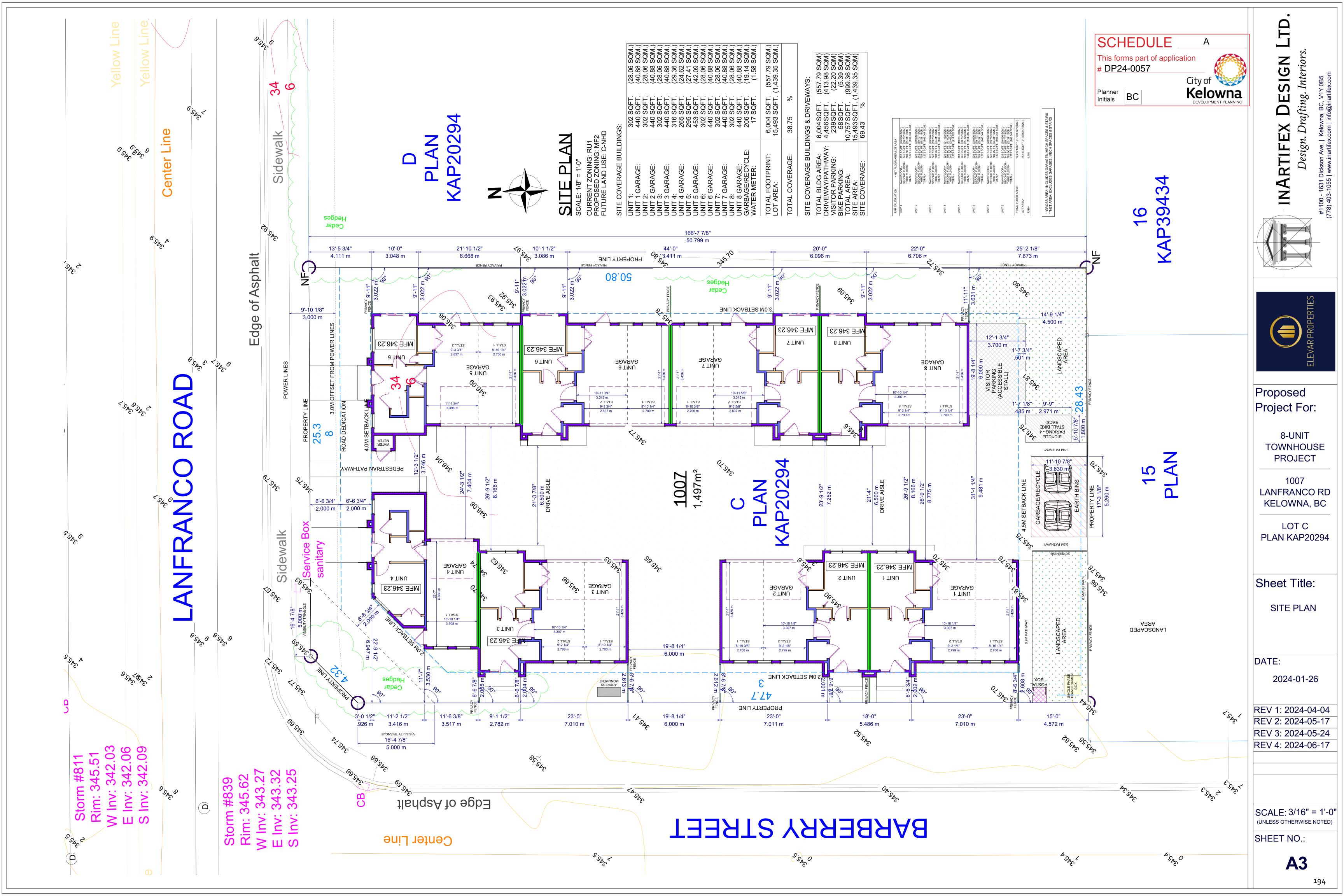


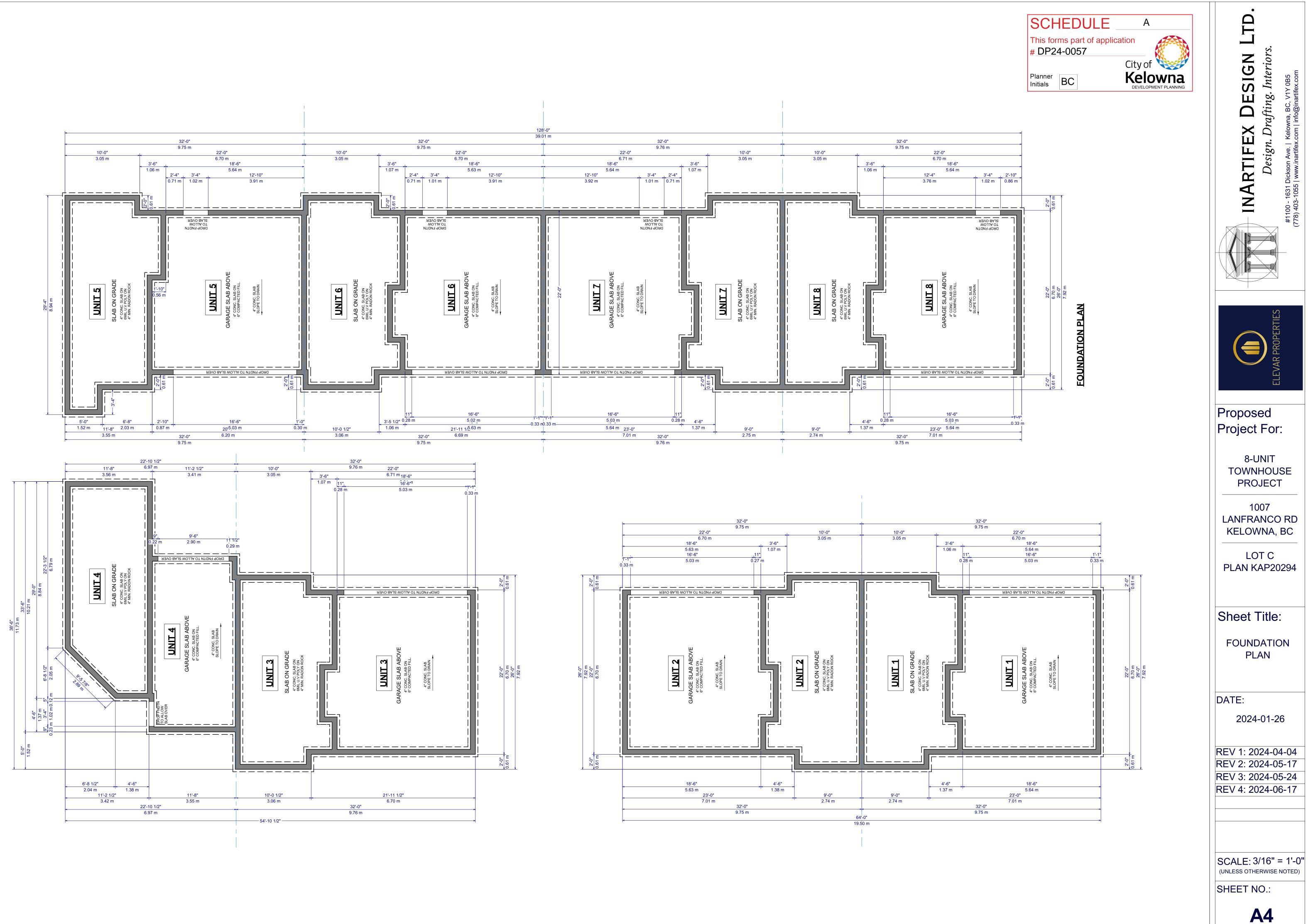


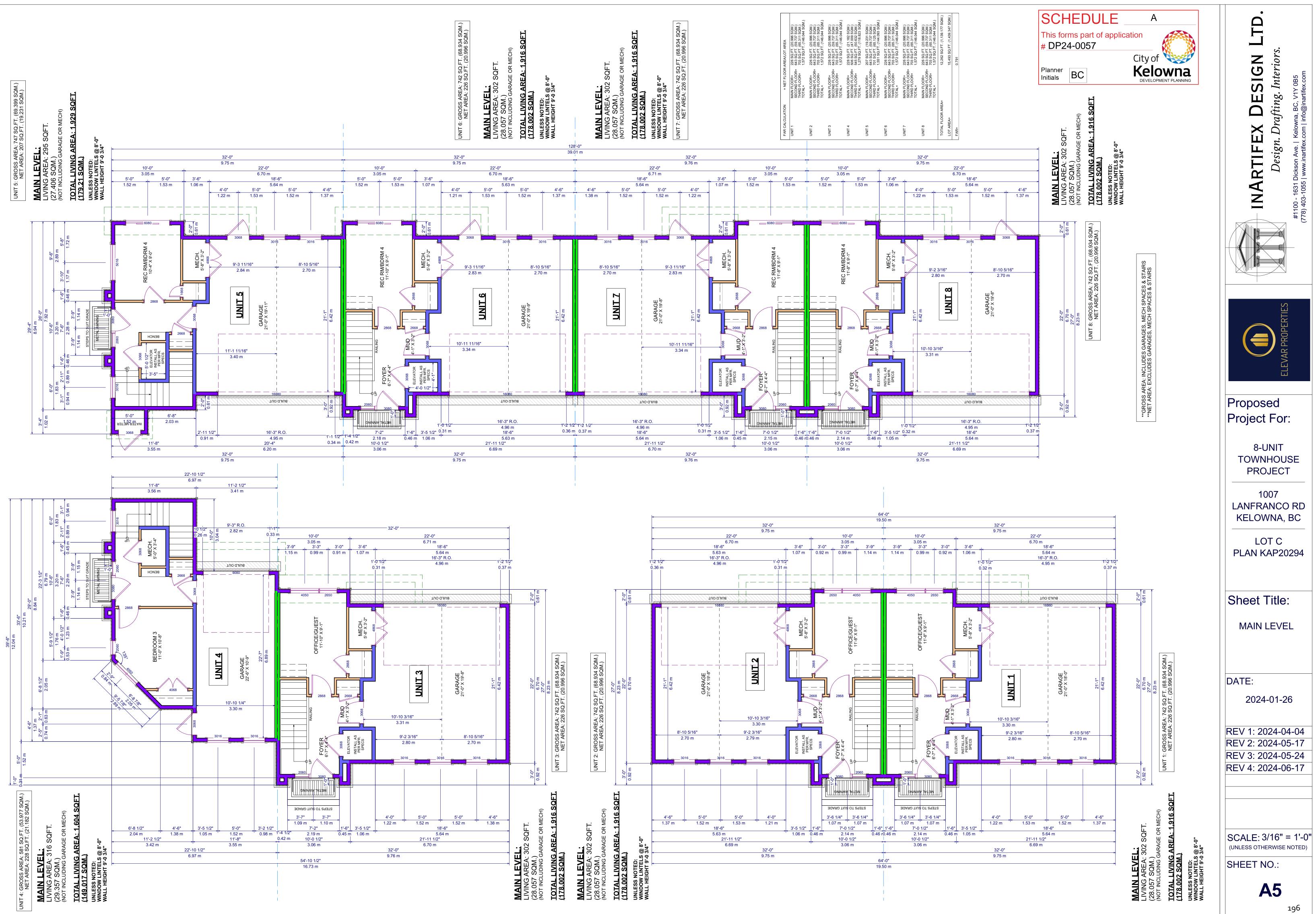


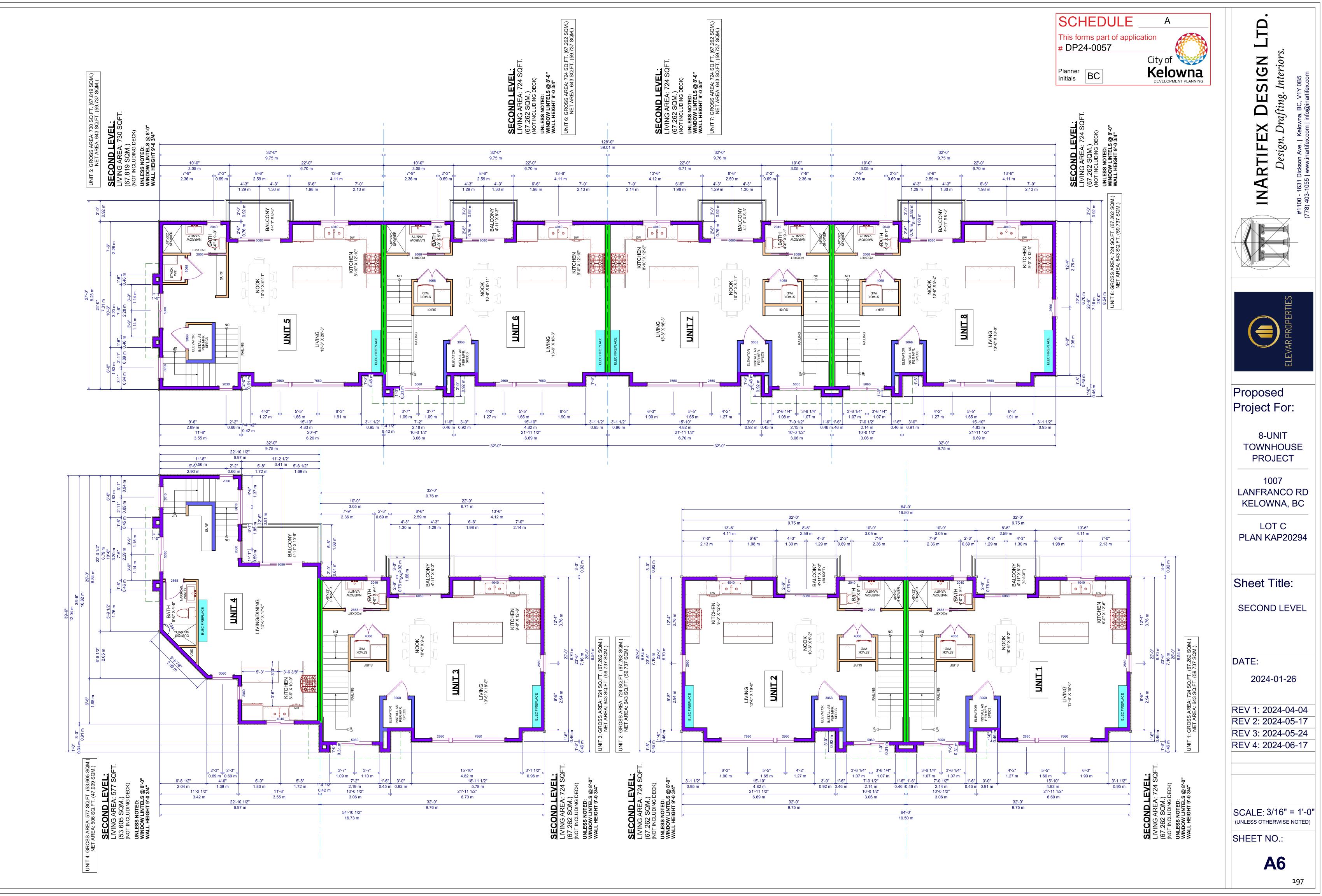
INARTIFEX DESIGN LTD.	Design. Drafting. Interiors.	#1100 - 1631 Dickson Ave. Kelowna, BC, V1Y 0B5 (778) 403-1055 www.inartifex.com info@inartifex.com
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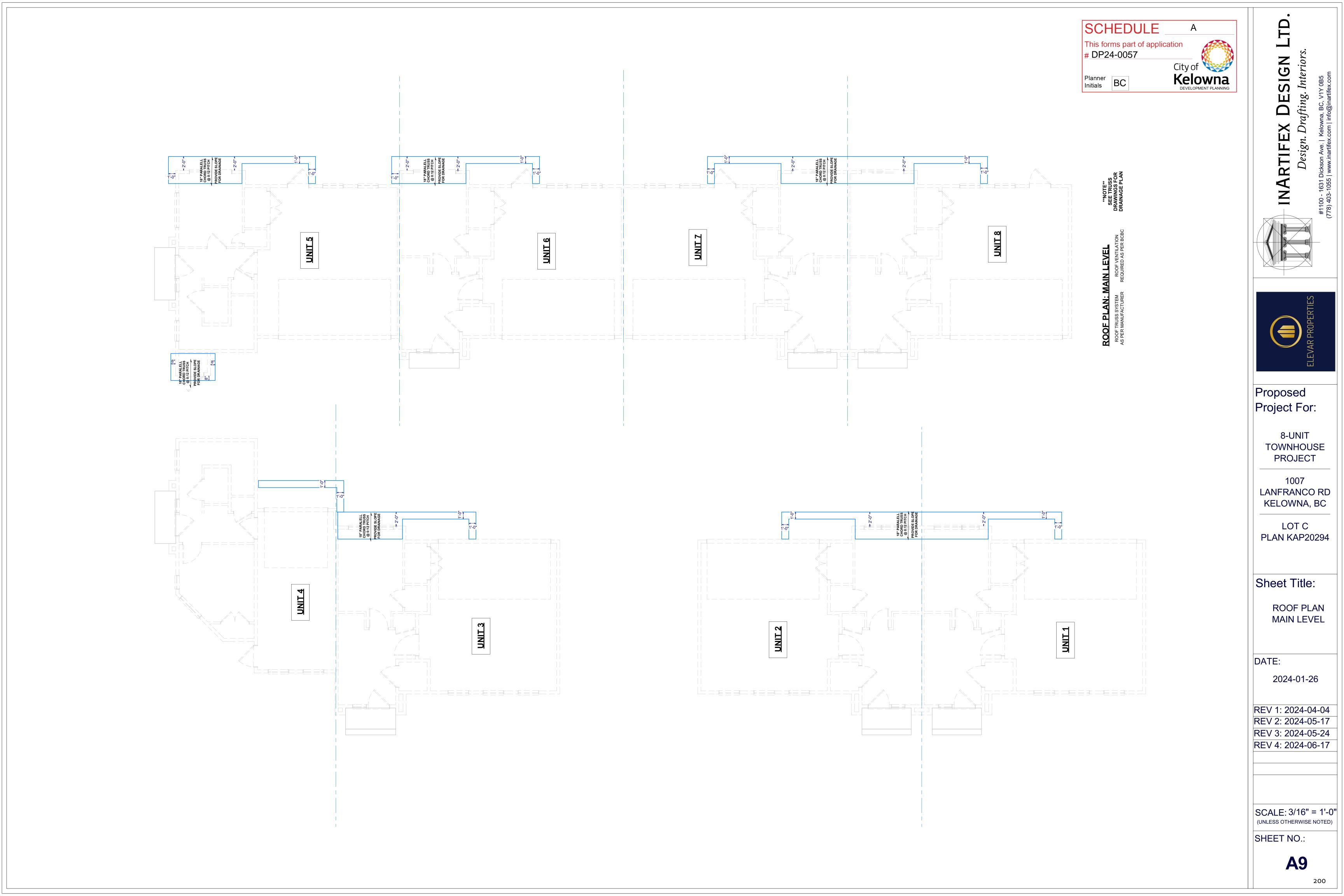


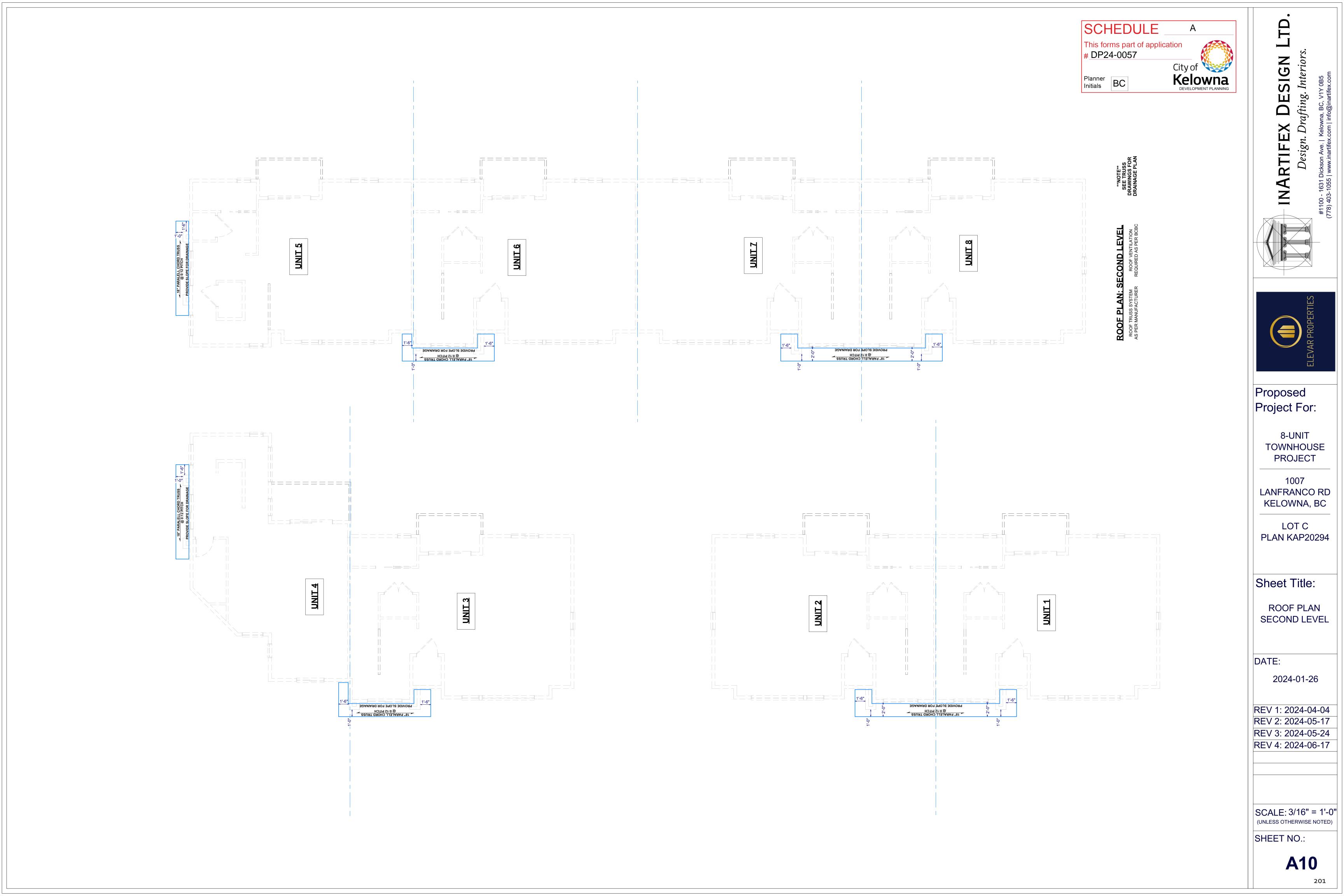


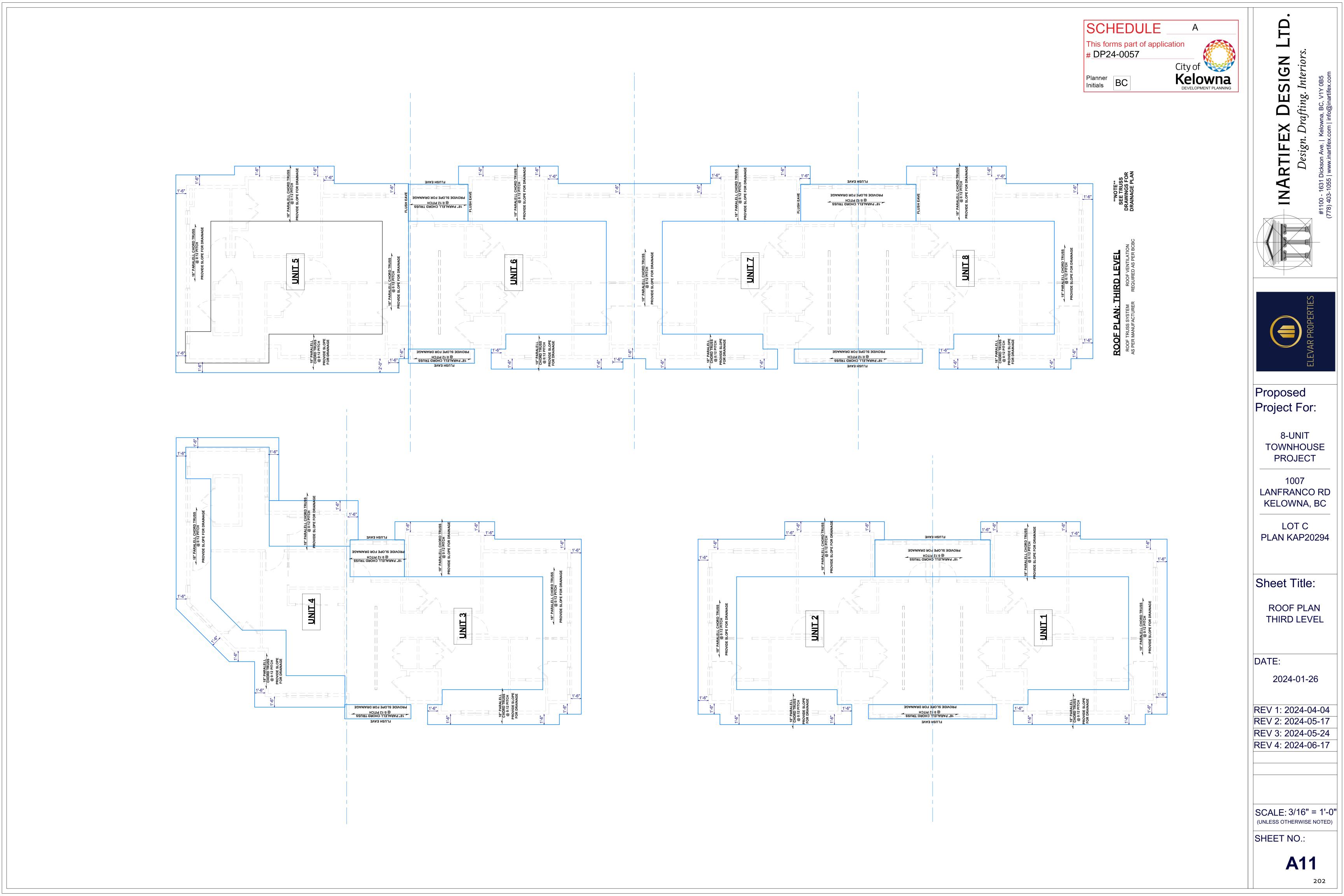


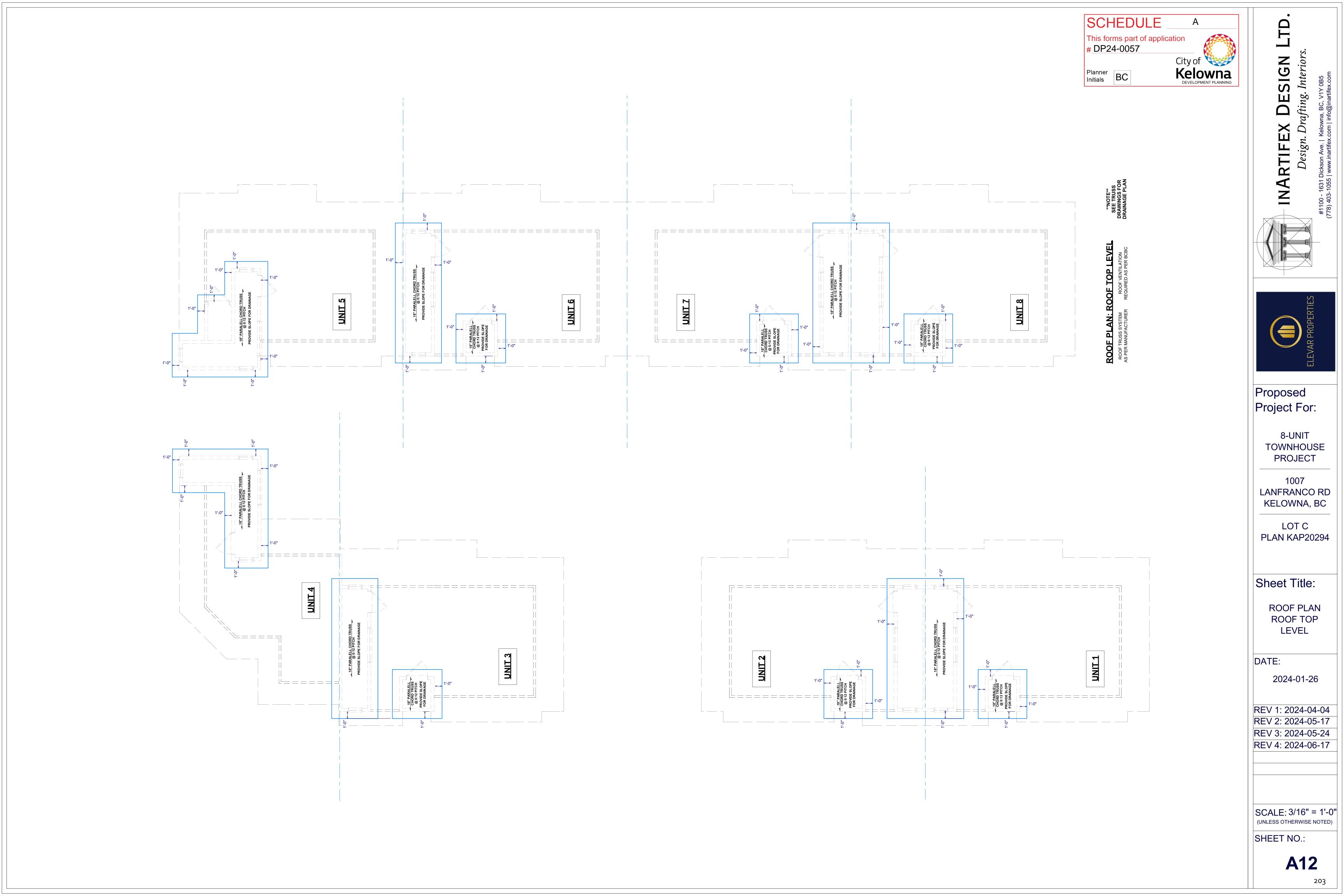


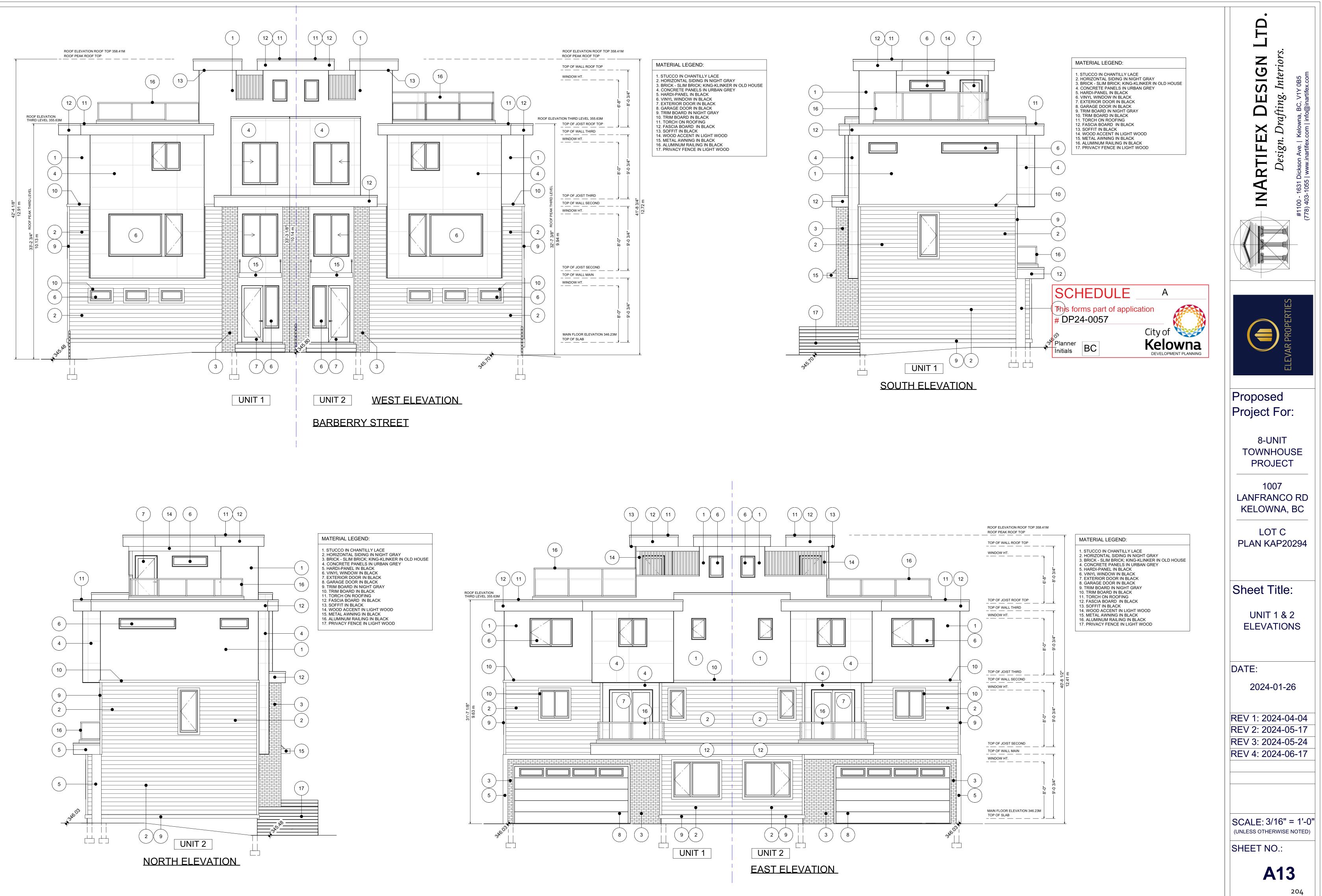


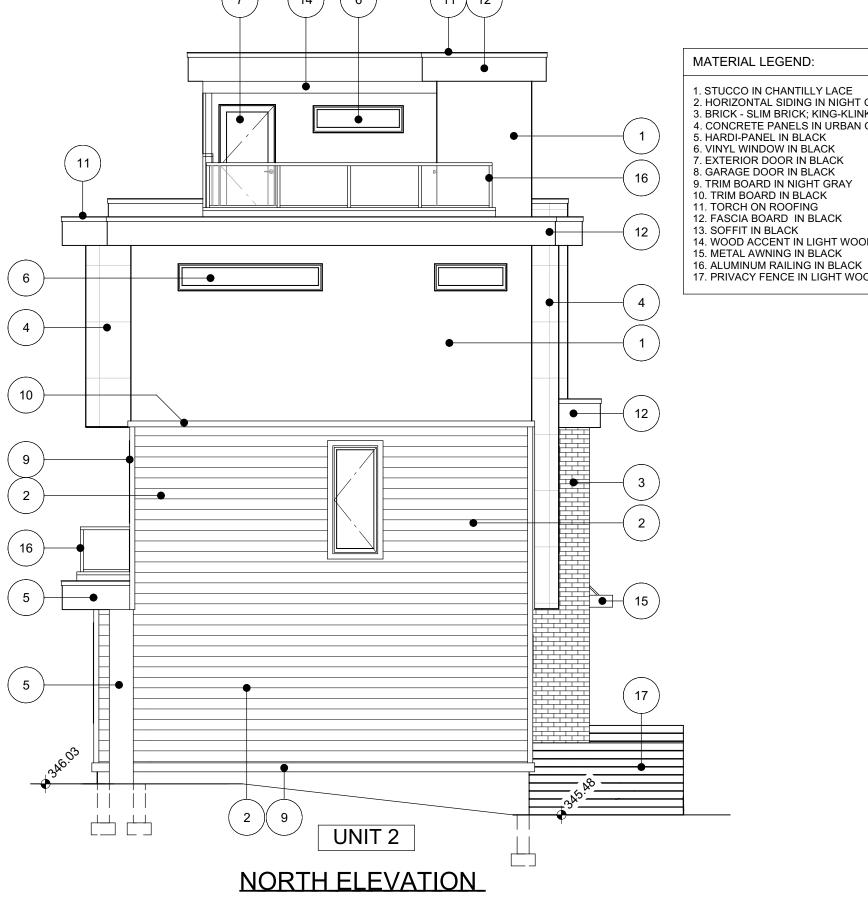


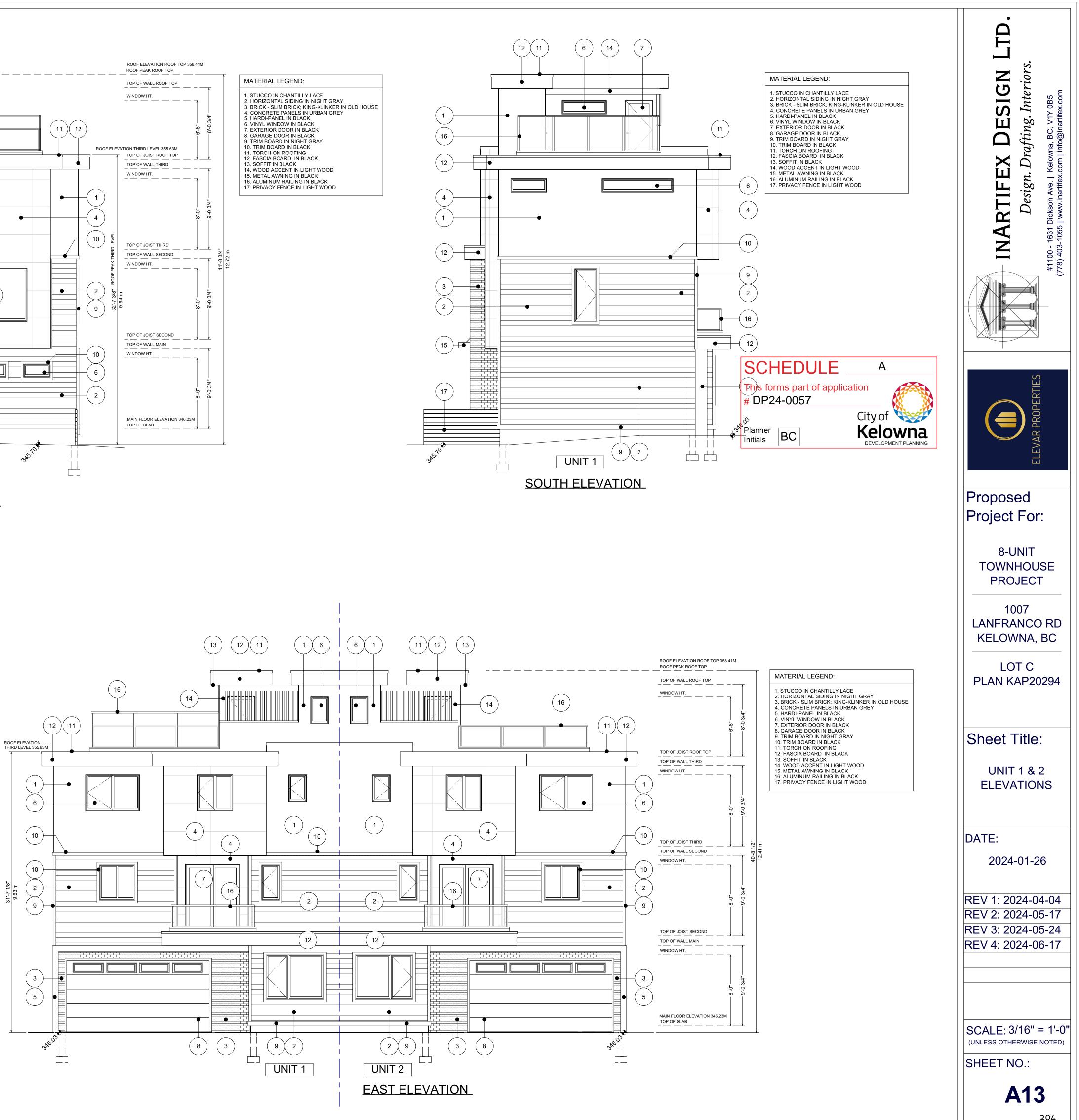


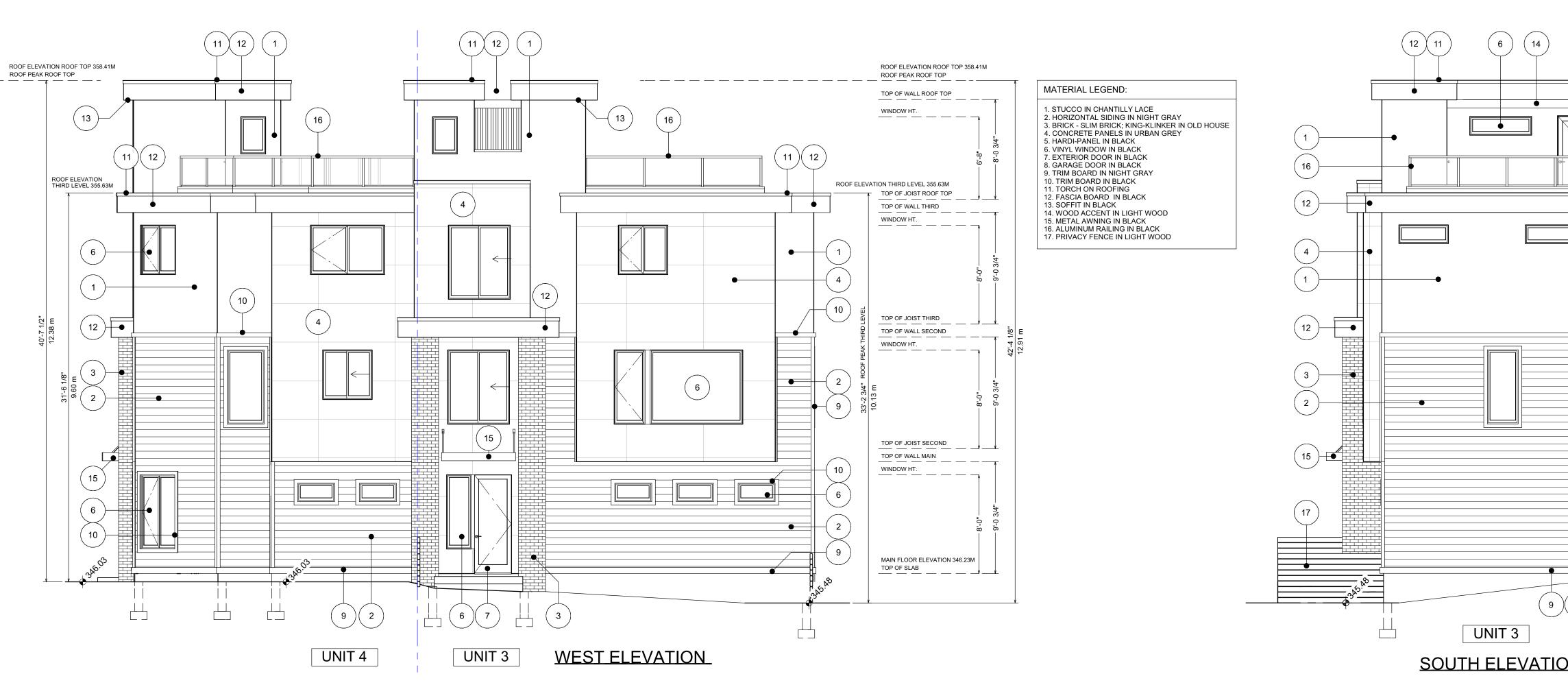




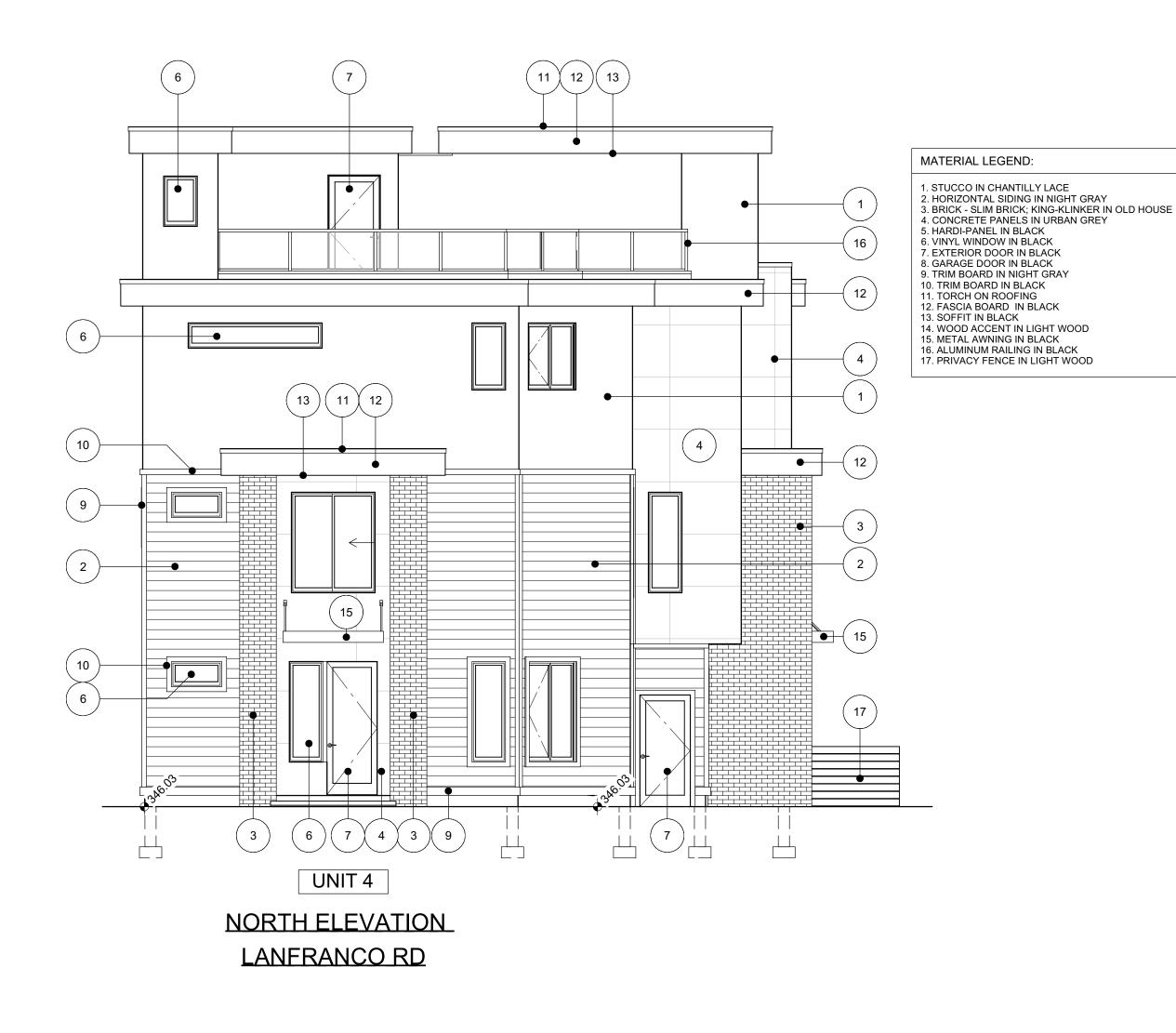






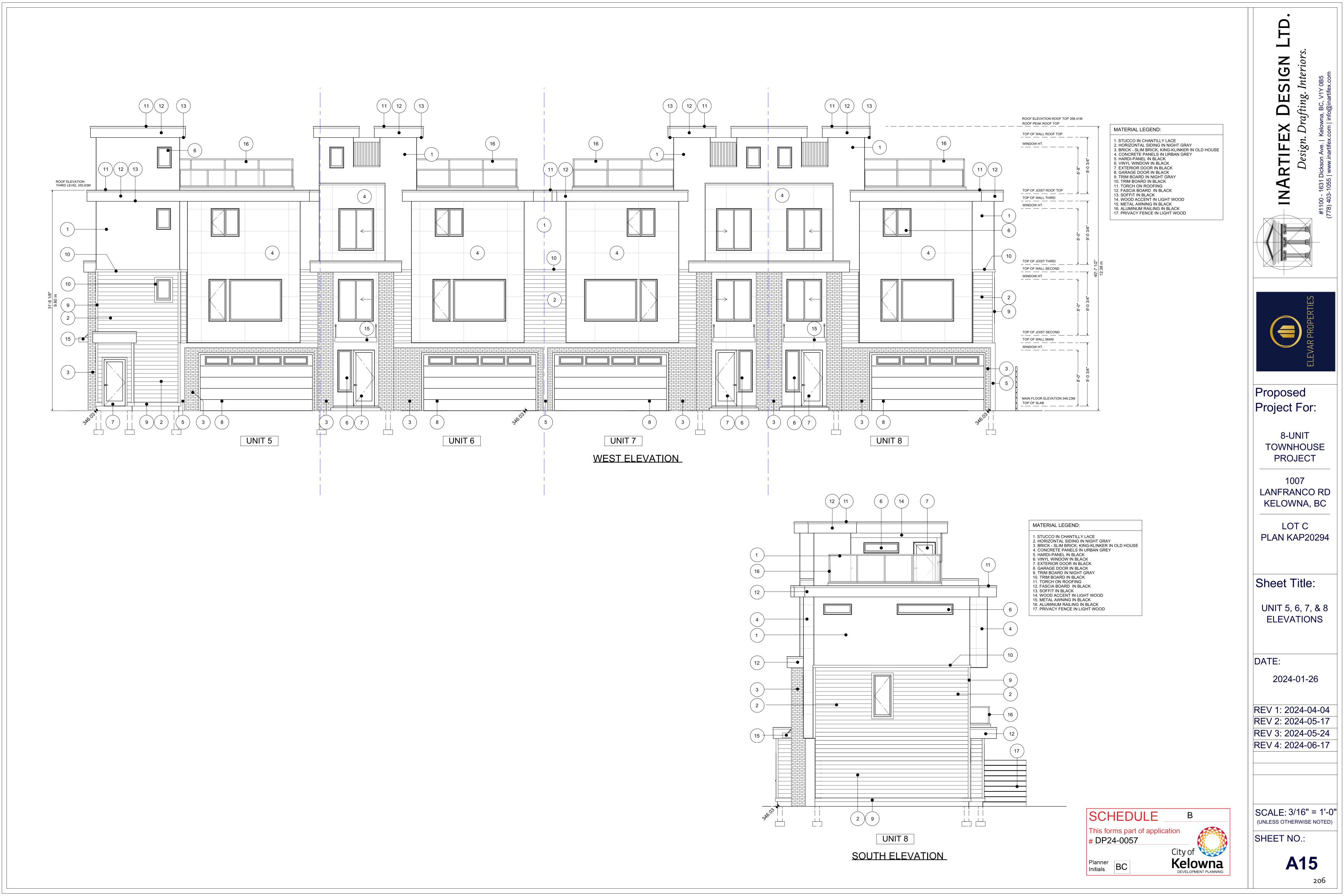


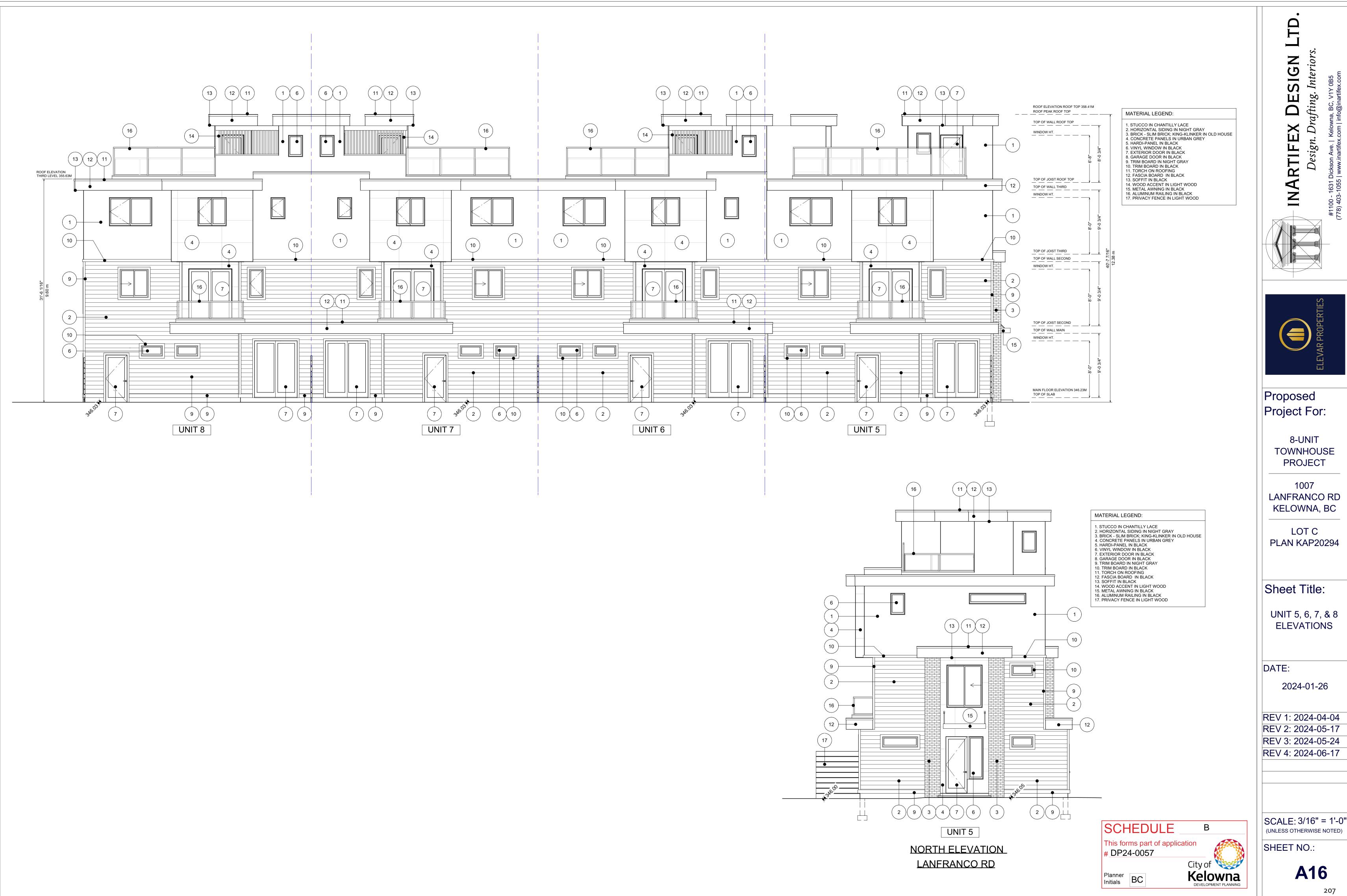
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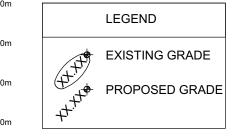




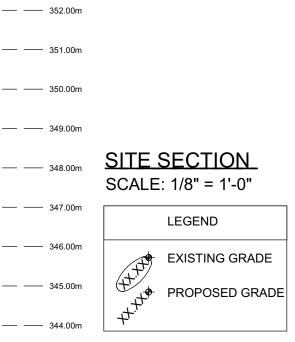




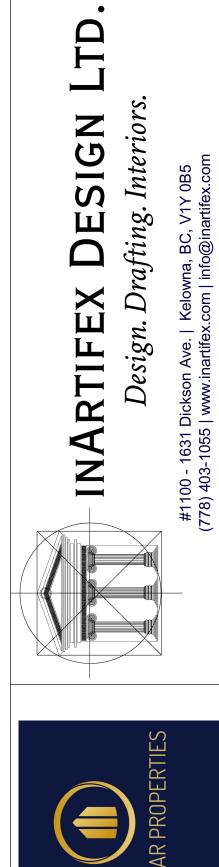




SCALE: 1/8" = 1'-0"



355.00



Proposed Project For:

8-UNIT

TOWNHOUSE

PROJECT

1007

LANFRANCO RD

KELOWNA, BC

LOT C

PLAN KAP20294

Sheet Title:

DATE:

SITE SECTIONS

2024-01-26

REV 1: 2024-04-04

REV 2: 2024-05-17

REV 3: 2024-05-24

REV 4: 2024-06-17

SCALE: 3/16" = 1'-0"

(UNLESS OTHERWISE NOTED)

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EARTH MATTERS LANDSCAPING

SUITE 126 - 93151 LAKESHORE ROAD

KELOWNA BC VIW 359

250-763-9399



Landscape Construction Proposal

Prepared for:

1445833 BC Ltd

1445833 BC Ltd PO Box 29005 RPO Okanagan Mission, Kelowna, BC February 10, 2024

	SCH	HEDUL	E c	:
		rms part of a 24-0057	application	
	Planner Initials	BC		f WWD DWNA PMENT PLANNING
250-763-9	399			

SCOPE OF PROJECT: 1007 LANFRANCO ROAD

Irrigation

Supply and install 14 zones of irrigation for all planting beds and all lawn spaces Supply and install a wifi controlled smart irrigation timer

\$ 12750 + GST

Edging Supply and install 260 linear ft of 4 inch black bend a board edging \$ 1755 + GST

Landscape Fabric Supply and install 3700 sq ft of premium landscape fabric (Commercial grade) \$ 2775 + GST

Turf

Supply and install 1450 sq ft of new turf in lawn areas \$ 3045 + GST

Soil Supply and install 90 yards of Natures gold Tradditions soil for turf and planting areas \$ 12150 + GST

Mulch

Supply and install 32 yards of 1-2 inch Kettle Valley Granite to all planting bed areas \$ 5280 + GST

Plants

\$7680 + GST

Subtotal \$ 45435 GST \$ 2271.75

Total \$47706.75

Additional Services

All additional services not outlined in this contract will be priced separately from this agreement and put forth in a separate contract prior to commencement of work.

Insurance

Earth Matters Landscaping agrees to maintain adequate liability insurance and Worksafe BC coverage for all employees Current Insurance carrier Gore Mutual Policy # 8424393 Worksafe BC # 798912-AA(053)

ATTACHN	IENT B	
This forms part of # DP24-0057	application	€ €
Planner Initials BC	City of Kelowr	

24-0057 9, 2024

FORM & CHARACTER – DEVELOPMENT PERMIT GUIDELINES

Chapter 2 - The Design Foundations: apply to all projects and provide the overarching principles for supporting
creativity, innovation and design excellence in Kelowna.
Facilitate Active Mobility
 Use Placemaking to Strengthen Neighbourhood Identity
 Create Lively and Attractive Streets & Public Spaces
Design Buildings to the Human Scale
Strive for Design Excellence

The General Residential and Mixed Use Guidelines : provide the key guidelines that all residential and mixed use projects should strive to achieve to support the Design Foundations.

• The General Guidelines are supplement by typology-specific guidelines (e.g., Townhouses & Infill on page 18-19, High-Rise Residential and Mixed-Use on page 18-42), which provide additional guidance about form and character.



ATT	ACI	HMENT B	
This for	ms pa	rt of application	
# DP24-0057			
		City of 🔍	
Planner Initials	BC	Kelowna DEVELOPMENT PLANNING	

DP24-0057 September 9, 2024

Consideration has been given to the following guidelines as identified in Chapter 18 of the City of Kelowna 2040 Official Community Plan:

	SECTION 2.0: GENERAL RESIDENTIAL AND MIX	(ED US	E				
RA	TE PROPOSALS COMPLIANCE TO PERTINENT GUIDELINE	N/A	1	2	3	4	5
(1 i	s least complying & 5 is highly complying)						-
	General residential & mixed use guidelines						
2.1	1 Relationship to the Street	N/A	1	2	3	4	5
a.	Orient primary building facades and entries to the fronting street					~	
	or open space to create street edge definition and activity.						
b.	On corner sites, orient building facades and entries to both						\checkmark
	fronting streets.						
с.	Minimize the distance between the building and the sidewalk to					\checkmark	
	create street definition and a sense of enclosure.						
d.	Locate and design windows, balconies, and street-level uses to					\checkmark	
	create active frontages and 'eyes on the street', with additional						
	glazing and articulation on primary building facades.						
e.	Ensure main building entries are clearly visible with direct sight						\checkmark
	lines from the fronting street.						
f.	Avoid blank, windowless walls along streets or other public open						\checkmark
	spaces.						
g.	Avoid the use of roll down panels and/or window bars on retail and	\checkmark					
-	commercial frontages that face streets or other public open						
	spaces.						
h.	In general, establish a street wall along public street frontages to				\checkmark		
	create a building height to street width ration of 1:2, with a						
	minimum ration of 11:3 and a maximum ration of 1:1.75.						
•	Wider streets (e.g. transit corridors) can support greater streetwall						
	heights compared to narrower streets (e.g. local streets);						
•	The street wall does not include upper storeys that are setback						
	from the primary frontage; and						
•	A 1:1 building height to street width ratio is appropriate for a lane						
	of mid-block connection condition provided the street wall height						
	is no greater than 3 storeys.						
2.1	2 Scale and Massing	N/A	1	2	3	4	5
a.	Provide a transition in building height from taller to shorter				~		
	buildings both within and adjacent to the site with consideration						
	for future land use direction.						
b.	Break up the perceived mass of large buildings by incorporating			ſ	ſ		\checkmark
	visual breaks in facades.						
с.	Step back the upper storeys of buildings and arrange the massing				~		
	and siting of buildings to:						
•	Minimize the shadowing on adjacent buildings as well as public						
	and open spaces such as sidewalks, plazas, and courtyards; and						
•	Allow for sunlight onto outdoor spaces of the majority of ground						
	floor units during the winter solstice.						



	Initials	DEVELO	PMENT PLAN	NING			
2.1	.3 Site Planning	N/A	1	2	3	4	5
a.	Site and design buildings to respond to unique site conditions and					\checkmark	
	opportunities, such as oddly shaped lots, location at prominent						
	intersections, framing of important open spaces, corner lots, sites						
	with buildings that terminate a street end view, and views of						
	natural features.						
b.	Use Crime Prevention through Environmental Design (CPTED)					\checkmark	
	principles to better ensure public safety through the use of						
	appropriate lighting, visible entrances, opportunities for natural						
	surveillance, and clear sight lines for pedestrians.						
с.	Limit the maximum grades on development sites to 30% (3:1)	\checkmark					
d.	Design buildings for 'up-slope' and 'down-slope' conditions	~					
	relative to the street by using strategies such as:						
•	Stepping buildings along the slope, and locating building						
	entrances at each step and away from parking access where						
	possible;						
•	Incorporating terracing to create usable open spaces around the						
•	building						
•	Using the slope for under-building parking and to screen service						
•	and utility areas;						
•	Design buildings to access key views; and						
•							
•	Minimizing large retaining walls (retaining walls higher than 1 m						
_	should be stepped and landscaped).						
e.	Design internal circulation patterns (street, sidewalks, pathways)				\checkmark		
	to be integrated with and connected to the existing and planed						
f.	future public street, bicycle, and/or pedestrian network.						
Τ.	Incorporate easy-to-maintain traffic calming features, such as on-	\checkmark					
	street parking bays and curb extensions, textured materials, and						
	crosswalks.						
g.	Apply universal accessibility principles to primary building entries,						\checkmark
	sidewalks, plazas, mid-block connections, lanes, and courtyards						
	through appropriate selection of materials, stairs, and ramps as						
	necessary, and the provision of wayfinding and lighting elements.						
	.4 Site Servicing, Access, and Parking	N/A	1	2	3	4	5
a.	Locate off-street parking and other 'back-of-house' uses (such as					\checkmark	
	loading, garbage collection, utilities, and parking access) away						
	from public view.						
b.	Ensure utility areas are clearly identified at the development					\checkmark	
	permit stage and are located to not unnecessarily impact public or						
	common open spaces.						
с.	Avoid locating off-street parking between the front façade of a						\checkmark
	building and the fronting public street.						
d.	In general, accommodate off-street parking in one of the						
	following ways, in order of preference:						
•	Underground (where the high water table allows)						
•	Parking in a half-storey (where it is able to be accommodated to						
	not negatively impact the street frontage);			1	1		

ATTACHMENT	В
This forms part of applicat # DP24-0057	ion
Planner Initials BC	City of Kelowna

	Initiais	DEVELOPME	NT PLANNING				
•	Garages or at-grade parking integrated into the building (located						
	at the rear of the building); and						
•	Surface parking at the rear, with access from the lane or						
	secondary street wherever possible.						
e.	Design parking areas to maximize rainwater infiltration through		\checkmark				
	the use of permeable materials such as paving blocks, permeable						
	concrete, or driveway planting strips.						
f.	In cases where publicly visible parking is unavoidable, screen using	\checkmark					
	strategies such as:						
•	Landscaping;						
•	Trellises;						
•	Grillwork with climbing vines; or						
٠	Other attractive screening with some visual permeability.						
g.	Provide bicycle parking at accessible locations on site, including:						\checkmark
•	Covered short-term parking in highly visible locations, such as						
	near primary building entrances; and						
•	Secure long-term parking within the building or vehicular parking						
	area.						
h.	Provide clear lines of site at access points to parking, site					\checkmark	
	servicing, and utility areas to enable casual surveillance and safety.						
i.	Consolidate driveway and laneway access points to minimize curb					\checkmark	
	cuts and impacts on the pedestrian realm or common open						
	spaces.						
j.	Minimize negative impacts of parking ramps and entrances	\checkmark					
	through treatments such as enclosure, screening, high quality						
	finishes, sensitive lighting and landscaping.						
2.1	.5 Streetscapes, Landscapes, and Public Realm Design	N/A	1	2	3	4	5
a.	Site buildings to protect mature trees, significant vegetation, and						\checkmark
	ecological features.						
b.	Locate underground parkades, infrastructure, and other services	 ✓ 					
	to maximize soil volumes for in-ground plantings.						
с.	Site trees, shrubs, and other landscaping appropriately to						\checkmark
-1	maintain sight lines and circulation.						
d.	Design attractive, engaging, and functional on-site open spaces					\checkmark	
	with high quality, durable, and contemporary materials, colors,						
_	lighting, furniture, and signage.					-	
e.	Ensure site planning and design achieves favourable microclimate					\checkmark	
	outcomes through strategies such as:						
•	Locating outdoor spaces where they will receive ample sunlight						
•	throughout the year;						
•	Using materials and colors that minimize heat absorption;						
•	Planting both evergreen and deciduous trees to provide a balance						
	of shading in the summer and solar access in the winter; and						
•	Using building mass, trees and planting to buffer wind.				+	-	
f.	Use landscaping materials that soften development and enhance					\sim	
	the public realm.	1	1				



				1			
g.	Plant native and/or drought tolerant trees and plants suitable for the local climate.					~	
h.	Select trees for long-term durability, climate and soil suitability, and compatibility with the site's specific urban conditions.						~
i.	Design sites and landscapes to maintain the pre-development flows through capture, infiltration, and filtration strategies, such as the use of rain gardens and permeable surfacing.	~					
j.	Design sites to minimize water use for irrigation by using strategies such as:	~					
•	Designing planting areas and tree pits to passively capture rainwater and stormwater run-off; and						
• k.	Using recycled water irrigation systems. Create multi-functional landscape elements wherever possible, such as planting areas that also capture and filter stormwater or landscape features that users can interact with.	~					
I.	Select materials and furnishings that reduce maintenance requirements and use materials and site furnishings that are sustainably sourced, re-purposed or 100% recycled.	~					
m.	Use exterior lighting to complement the building and landscape design, while:						~
•	Minimizing light trespass onto adjacent properties; Using full cut-off lighting fixtures to minimize light pollution; and Maintaining lighting levels necessary for safety and visibility.						
n.	Employ on-site wayfinding strategies that create attractive and appropriate signage for pedestrians, cyclists, and motorists using a 'family' of similar elements.						~
2.1	.6 Building Articulation, Features and Materials	N/A	1	2	3	4	5
a. • •	Express a unified architectural concept that incorporates variation in façade treatments. Strategies for achieving this include: Articulating facades by stepping back or extending forward a portion of the façade to create a series of intervals or breaks; Repeating window patterns on each step-back and extension interval; Providing a porch, patio, or deck, covered entry, balcony and/or bay window for each interval; and Changing the roof line by alternating dormers, stepped roofs, gables, or other roof elements to reinforce each interval.						~
b.	Incorporate a range of architectural features and details into building facades to create visual interest, especially when approached by pedestrians. Include architectural features such as: bay windows and balconies; corner feature accents, such as turrets or cupolas; variations in roof height, shape and detailing; building entries; and canopies and overhangs. Include architectural details such as: Masonry such as tiles, brick, and stone; siding including score lines and varied materials to distinguish between floors; articulation of columns and pilasters;						

ATTACHMENT B This forms part of application # DP24-0057 City of Planner Initials BC DEVELOPMENT FLUMING

DP24-0057 September 9, 2024

ornamental features and art work; architectural lighting; grills and					
railings; substantial trim details and moldings / cornices; and					
Design buildings to ensure that adjacent residential properties					\checkmark
have sufficient visual privacy (e.g. by locating windows to					
minimize overlook and direct sight lines into adjacent units), as					
well as protection from light trespass and noise.					
Design buildings such that their form and architectural character					<
reflect the buildings internal function and use.					
Incorporate substantial, natural building materials such as					~
masonry, stone, and wood into building facades.					
Provide weather protection such as awnings and canopies at		\checkmark			
primary building entries.					
Place weather protection to reflect the building's architecture.			~		
Limit signage in number, location, and size to reduce visual clutter	\checkmark				
and make individual signs easier to see.					
Provide visible signage identifying building addresses at all				\checkmark	
entrances.					
	railings; substantial trim details and moldings / cornices; and trellises, pergolas, and arbors. Design buildings to ensure that adjacent residential properties have sufficient visual privacy (e.g. by locating windows to minimize overlook and direct sight lines into adjacent units), as well as protection from light trespass and noise. Design buildings such that their form and architectural character reflect the buildings internal function and use. Incorporate substantial, natural building materials such as masonry, stone, and wood into building facades. Provide weather protection such as awnings and canopies at primary building entries. Place weather protection to reflect the building's architecture. Limit signage in number, location, and size to reduce visual clutter and make individual signs easier to see. Provide visible signage identifying building addresses at all	railings; substantial trim details and moldings / cornices; and trellises, pergolas, and arbors.Design buildings to ensure that adjacent residential properties have sufficient visual privacy (e.g. by locating windows to minimize overlook and direct sight lines into adjacent units), as well as protection from light trespass and noise.Design buildings such that their form and architectural character reflect the buildings internal function and use.Incorporate substantial, natural building materials such as masonry, stone, and wood into building facades.Provide weather protection such as awnings and canopies at primary building entries.Place weather protection to reflect the building's architecture.Limit signage in number, location, and size to reduce visual clutter and make individual signs easier to see.Provide visible signage identifying building addresses at all	railings; substantial trim details and moldings / cornices; and trellises, pergolas, and arbors.Image: cornices and arbors and billings to ensure that adjacent residential properties have sufficient visual privacy (e.g. by locating windows to minimize overlook and direct sight lines into adjacent units), as well as protection from light trespass and noise.Image: cornices and cornices are arbors and architectural character reflect the buildings internal function and use.Incorporate substantial, natural building materials such as masonry, stone, and wood into building facades.Image: cornices arbors ar	railings; substantial trim details and moldings / cornices; and trellises, pergolas, and arbors. Design buildings to ensure that adjacent residential properties have sufficient visual privacy (e.g. by locating windows to minimize overlook and direct sight lines into adjacent units), as well as protection from light trespass and noise. Design buildings such that their form and architectural character reflect the buildings internal function and use. Incorporate substantial, natural building materials such as masonry, stone, and wood into building facades. Provide weather protection such as awnings and canopies at primary building entries. Place weather protection to reflect the building's architecture. Limit signage in number, location, and size to reduce visual clutter and make individual signs easier to see. Provide visible signage identifying building addresses at all	railings; substantial trim details and moldings / cornices; and trellises, pergolas, and arbors.Image: Cornices and a cornice and make individual signs easier to see.Image: Cornices and a cornice and a

	SECTION 4.0: TOWNHOUSES & INFILL						
	RATE PROPOSALS COMPLIANCE TO PERTINENT GUIDELINE		1	2	3	4	5
	s least complying & 5 is highly complying)						
-	Townhouses & Infill			1			•
3.1	.1 Relationship to the Street	N/A	1	2	3	4	5
а.	Design primary unit entrances to provide:					\checkmark	
•	A clearly visible front door directly accessible from a public street						
	or publicly accessible pathway via a walkway, porch and/or stoop;						
•	Architectural entrance features such as stoops, porches, shared						
	landings, patios, recessed entries, and canopies;						
•	A sense of transition from the public to the private realm by						
	utilizing strategies such as changes in grade, decorative railings,						
	and planters; and						
•	Punctuation, articulation, and rhythm along the street						
b.	A maximum 1.2 m height (e.g. 5-6 steps) is desired for front						\checkmark
	entryways or stoops. Exceptions can be made in cases where the						
	water table requires this to be higher.						
с.	In the case of shared landings that provide access to multiple	\checkmark					
L.	units, avid having more than two doors in a row facing outward.		-				
d.	For buildings oriented perpendicularly to the street (e.g. shotgun						\checkmark
	townhomes), ensure that the end unit facing the street is a custom						
	street-oriented unit with primary entry directly accessible from						
<u> </u>	the fronting street and primary living space at grade.						
e.	For large townhouse projects (e.g. master planned communities	\checkmark					
	with internal circulation pattern), Guidelines 3.1.1.a-d apply for						

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			City of Kelowna Development planning						E C	Septerr		-005
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	units facing strata roads as well as those units fronting	onto public										
	streets.											
	.2 Scale and Massing		N/A	1	2	3	4	5				
a.	Wherever possible, reflect the positive attributes of ad					\checkmark						
	housing while integrating new higher density forms of	housing as										
<u> </u>	envisioned in the OCP.											
b.	Scale and site buildings to establish consistent rhythm						\checkmark					
	street by, for example, articulating individual units thro	•										
	integration of recessed entries, balconies, a change in	materials										
_	and slight projection/recess in the façade. Limit the number of connected townhouse units to a n	a a vina vina a f										
с.	6 units before splitting into multiple buildings.	IIAXIIIIUIII OI										
	In larger townhouse developments (e.g., master plann	ad										
•	communities with internal circulation pattern), integra											
	proportion of 4 unit townhouse buildings to create a fi											
	development and limit visual impacts.	ner grun or										
3.1	.3 Site Planning		N/A	1	2	3	4	5				
<u>э</u> .	Gated or walled communities are not supported.		\checkmark	_	_			5				
b.	For large townhouse projects, consider including comr	munal	· ·									
	amenity buildings.		·									
Со	nnectivity											
с.	Provide pedestrian pathways on site to connect:					\checkmark						
•	Main building entrances to public sidewalks and open s	spaces;										
•	Visitor parking areas to building entrances;											
•	From the site to adjacent pedestrian/trail/cycling netw	orks (where										
	applicable).											
d.	When pedestrian connections are provided on site, fra	me them				\checkmark						
	with an active edge – with entrances and windows faci	ng the path										
	or lane.											
e.	For large townhouse projects (e.g. master planned con	nmunities	\checkmark									
	with internal circulation pattern):											
•	Design the internal circulation pattern to be integrated											
_	connected t the existing and planned public street net	work.										
	ing Distances and Setbacks	·			1							
f.	Locate and design buildings to maintain access to sunl	-										
-	reduce overlook between buildings and neighbouring											
g.	Separate facing buildings on site a minimum of $10 - 12$					\checkmark						
h.	provide ample spatial separation and access to sunligh Limit building element projections, such as balconies,					~						
	areas, streets, and amenity areas to protect solar acces											
i.	Front yard setbacks on internal roads should respond t							-				
'.	of townhouses, with taller townhouses (e.g. 3 storeys)											
	greater setbacks to improve liveability and solar access	•										
3.1	.4 Open Spaces	-										
<u>э.</u>	Design all units to have easy access to useable private	or semi-					\checkmark					
	private outdoor amenity space.											

	This forms part of applie # DP24-0057 Planner Initials BC	TB cation City of Kelo DEVELOPM		L S	Septen		-0057 , 2024
b.	Design front yards to include a path from the fronting street to the primary entry, landscaping, and semi-private outdoor amenity space.					~	
c.	Avoid a 'rear yard' condition with undeveloped frontages along streets and open spaces.					~	
d.	Design private outdoor amenity spaces to:					\checkmark	
•	Have access to sunlight;					•	
•	Have railing and/or fencing to help increase privacy; and						
•	Have landscaped areas to soften the interface with the street or open spaces/						
e.	Design front patios to:				~		
•	Provide an entrance to the unit; and				•		
•	Be raised a minimum of 0.6 m and a maximum of 1.2 m to create a semi-private transition zone.						
f.	Design rooftop patios to:					\checkmark	
•	Have parapets with railings;						
•	Minimize direct sight lines into nearby units; and						
•	Have access away from primary facades.						
g.	Design balconies to be inset or partially inset to offer privacy and					\checkmark	
5	shelter, reduce building bulk, and minimize shadowing.						
•	Consider using balcony strategies to reduce the significant						
	potential for heat loss through thermal bridge connections which						
	could impact energy performance.						
h.	Provide a minimum of 10% of the total site area to common outdoor amenity spaces that:					~	
•	Incorporate landscaping, seating, play space, and other elements						
•	that encourage gathering or recreation; and						
•	Avoid isolated, irregularly shaped areas or areas impacted by						
•	parking, mechanical equipment, or servicing areas.						
i.	For large townhouse projects, provide generous shared outdoor	~					
	amenity spaces integrating play spaces, gardening, storm water	•					
	and other ecological features, pedestrian circulation, communal						
	amenity buildings, and other communal uses.						
j.	Design internal roadways to serve as additional shared space (e.g.		\checkmark				
5	vehicle access, pedestrian access, open space) using strategies						
	such as:						
•	High quality pavement materials (e.g. permeable pavers); and						
•	Providing useable spaces for sitting, gathering and playing.						
3.1	5 Site Servicing, Access, and Parking	N/A	1	2	3	4	5
a.	Provide landscaping in strategic locations throughout to frame						\checkmark
	building entrances, soften edges, screen parking garages, and				1		
	break up long facades.						
Site	e Servicing						
b.	Exceptions for locating waste collection out of public view can be made for well-designed waste collection systems such as Molok bins.						~
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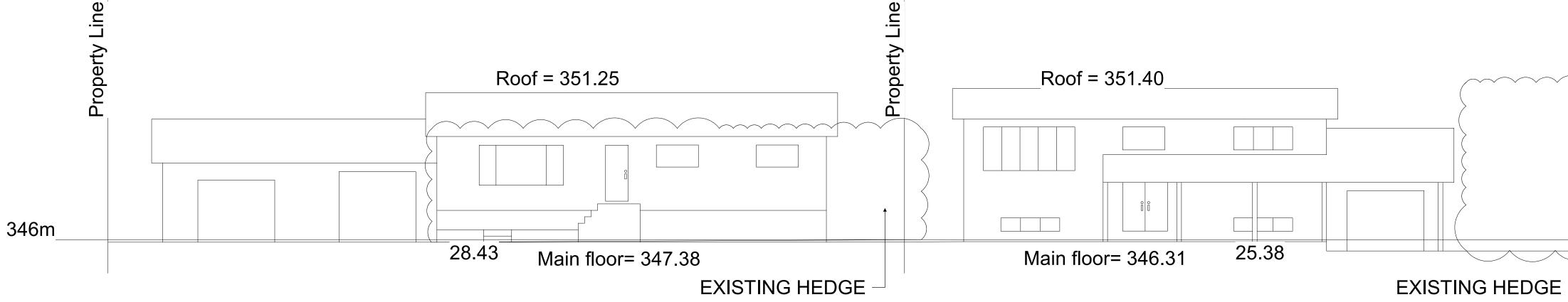


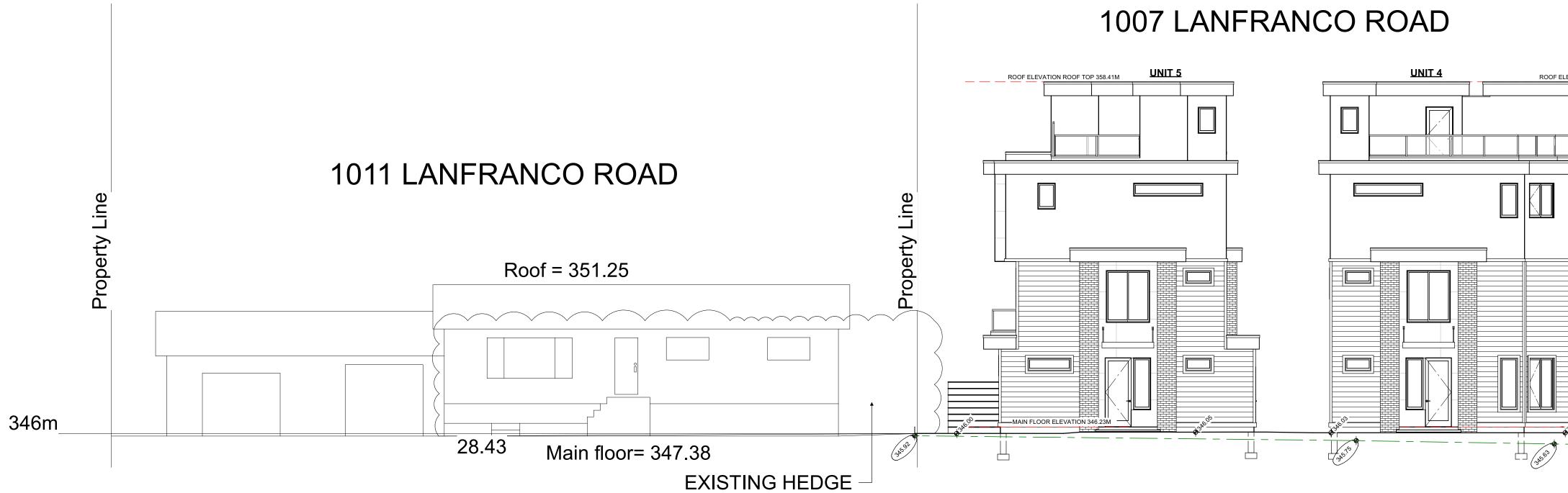
с.	Rear-access garage or integrated tuck under parking is preferred						\checkmark
	in townhouses, in general, and is required for townhouses facing						
	public streets.						
d.	Centralized parking areas that eliminate the need to integrate	\checkmark					
	parking into individual units are supported.						
e.	Front garages and driveway parking are acceptable in townhouses	\checkmark					
	facing internal strata roads, with the following considerations:						
•	Architecturally integrate the parking into the building and provide						
	weather protection to building entries; and						
•	Design garage doors to limit visual impact, using strategies such						
	as recessing the garage from the rest of the façade.						
f.	Provide visitor parking in accessible locations throughout the site					\checkmark	
	and provide pedestrian connections from visitor parking to						
	townhouse units. Acceptable locations include:						
•	Distributed through the site adjacent to townhouse blocks; and						
•	Centralized parking, including integration with shared outdoor						
	amenity space						
	iess	1		1	1		1
g.	Ensure that internal circulation for vehicles is designed to					\checkmark	
	accommodate necessary turning radii and provides for logical and						
	safe access and egress.						
h.	For large townhouse projects (e.g. master planned communities	\checkmark					
	with internal circulation pattern), a minimum of two access/egress						
	points to the site is desired.						
i.	Locate access points to minimize impacts of headlights on					\checkmark	
	building interiors.						
j.	Design the internal circulation patter and pedestrian open space				\checkmark		
	network to be integrated with and connected to the existing and						
	planned public street and open space network.	N1/A	_	_	-		_
	6 Building Articulation, Features, and Materials	N/A	1	2	3	4	5
a.	Design facades to articulate the individual units while reflecting					\checkmark	
	positive attributes of neighbourhood character. Strategies for						
	achieving this include:						
•	Recessing or projecting facades to highlight the identity of individual units; and						
•	Using entrance features, roofline features, or other architectural						
•	elements.						
b.	To maximize integration with the existing neighbourhood, design						
D.	infill townhouses to:					~	
•	Incorporate design elements, proportions, and other						
	characteristics found within the neighbourhood; and						
•	Use durable, quality materials similar or complementary to those						
-	fond within the neighbourhood.						
I I		L		<u> </u>			
c	Maintain privacy of units on site and on adjacent properties by					. /	
с.	Maintain privacy of units on site and on adjacent properties by minimizing overlook and direct sight lines from the building using					\checkmark	
с.	Maintain privacy of units on site and on adjacent properties by minimizing overlook and direct sight lines from the building using strategies such as:					~	

	ATTACHMEN This forms part of applic # DP24-0057	_		Septer	DP24 [.] nber 9,	
•	Off-setting the location of windows in facing walls and locating					
	doors and patios to minimize privacy concerns from direct sight					
	lines;					
•	Use of clerestory windows;					
•	Use of landscaping or screening; and					
•	Use of setbacks and articulation of the building.					
d.	In larger townhouse developments (e.g. master planned	 				
	communities with internal circulation pattern), provide modest					
	variation between different blocks of townhouse units, such as					
	change in colour, materiality, building, and roof form.					

EXISTING VIEW FROM LANFRANCO ROAD

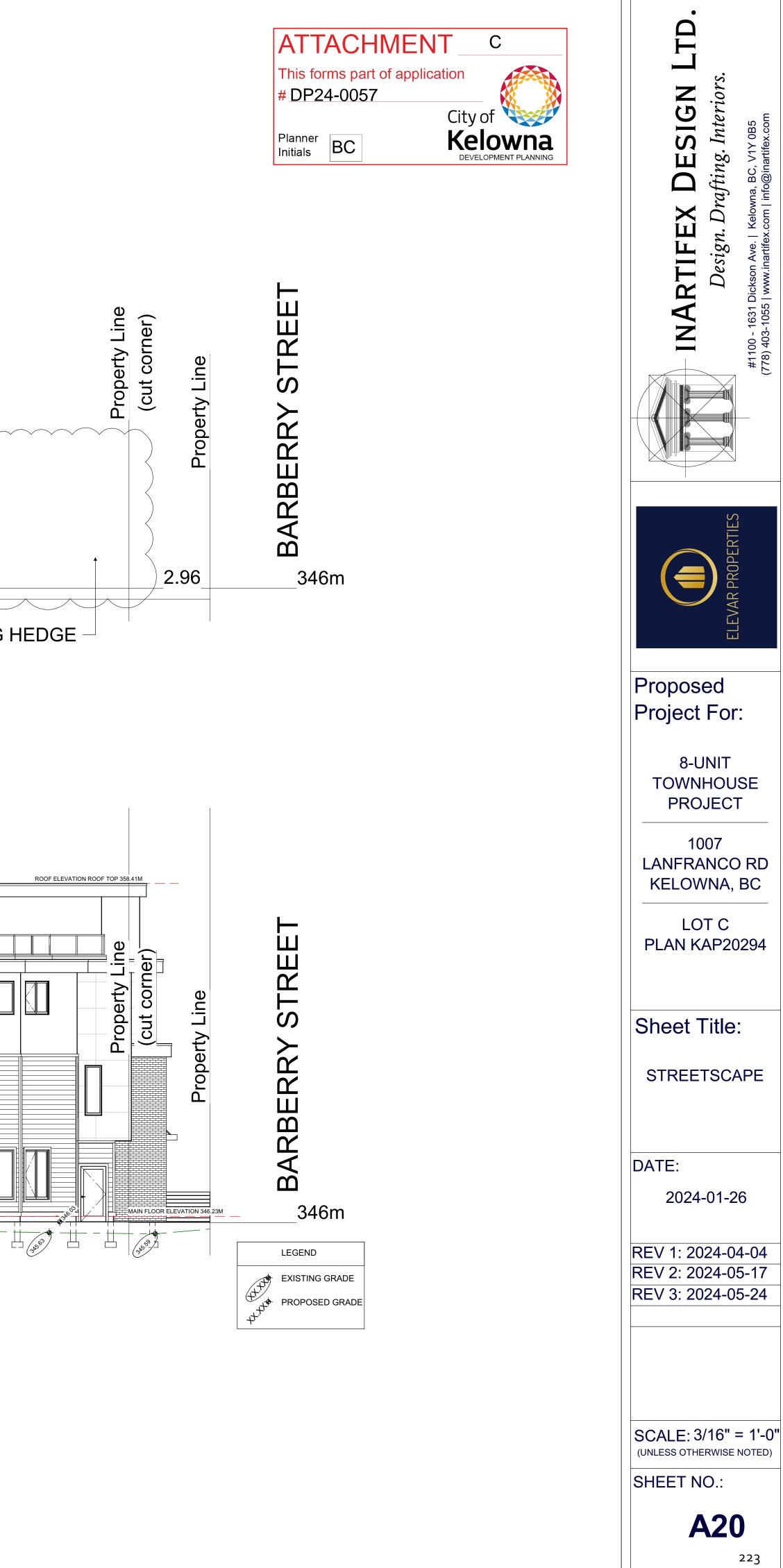
1011 LANFRANCO ROAD





1007 LANFRANCO ROAD

PROPOSED VIEW FROM LANFRANCO ROAD







RENDERING - CORNER OF LANFRANCO & BARBERRY







SHEET NO .:

A2 225



NORTH ELEVATION COLORED RENDERINGS UNITS 5 & 4

LANFRANCO RD



WEST ELEVATION COLORED RENDERINGS UNITS 4 & 3, UNITS 2 & 1

BARBERRY ST





SOUTH ELEVATION COLORED RENDERINGS

UNITS 1 & 8



EAST ELEVATION COLORED RENDERINGS UNITS 8, 7, 6 & 5









DP24-0057 1007 Lanfranco Rd

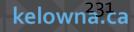
Development Permit

City of Kelowna



Purpose

To issue a Development Permit for the form and character of a townhouse development

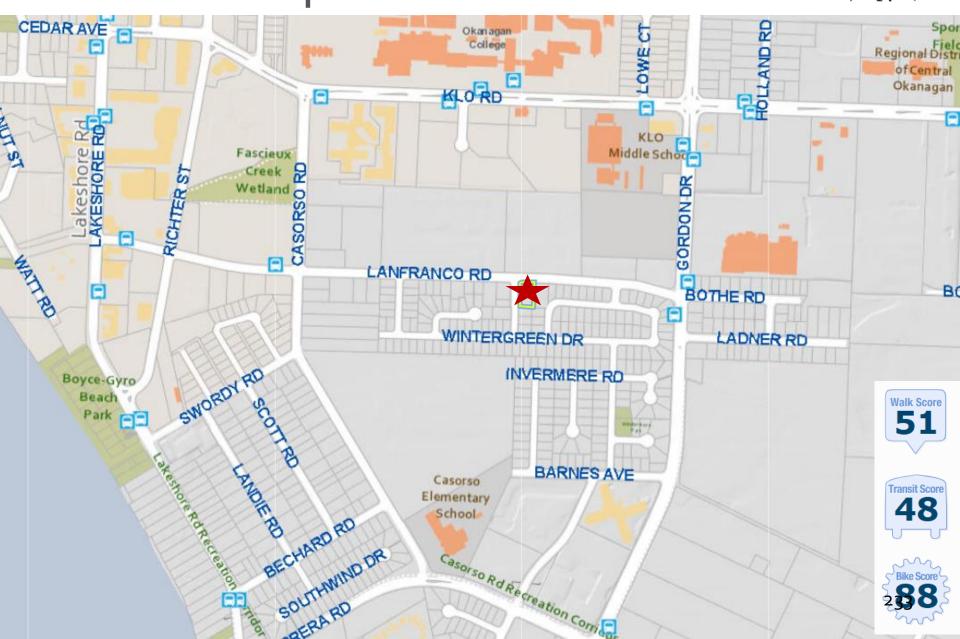


Development Process



kelowna.ca

Context Map



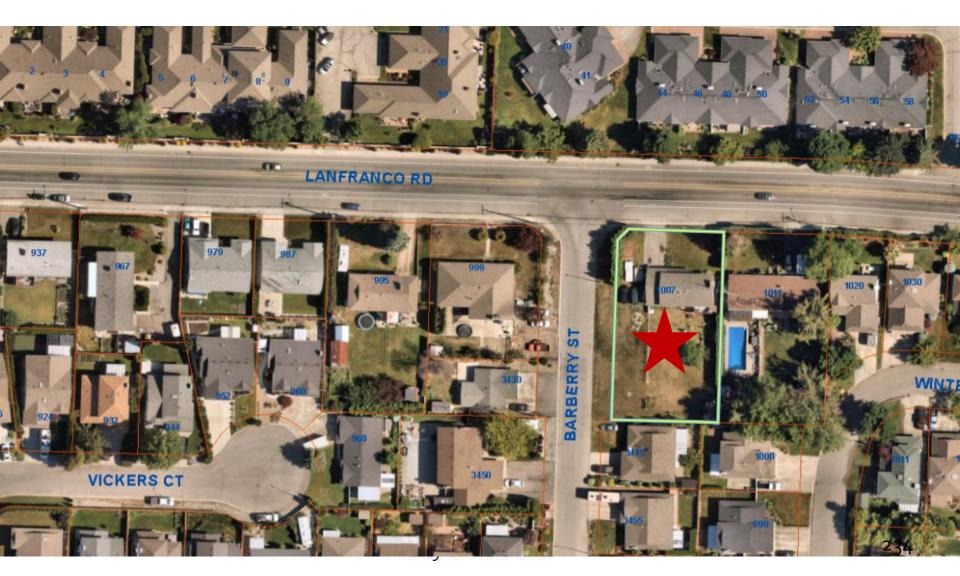
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Subject Property Map





Technical Details



MF2 – Townhouse Housing

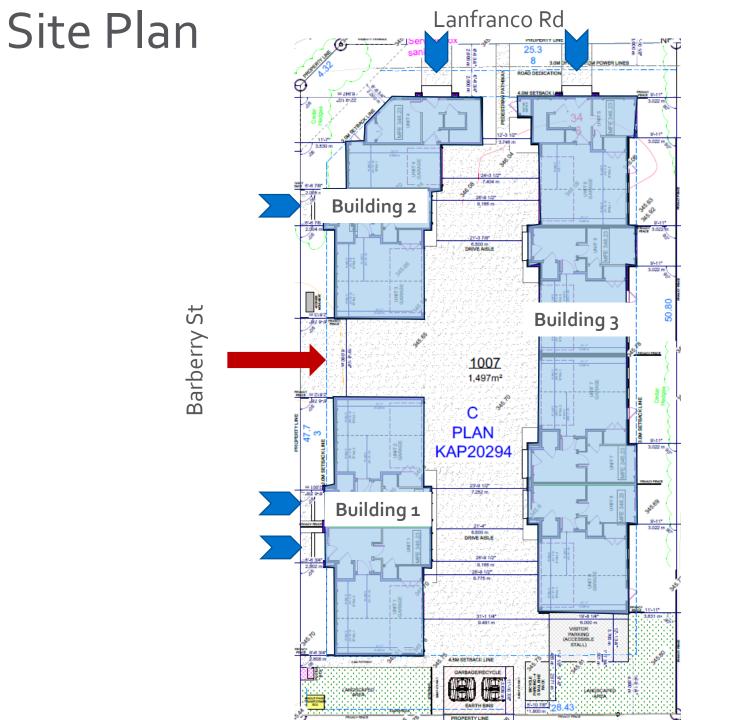
- ▶ 8 ground-oriented townhouse units
 - One unit with 3-bedrooms
 - Seven units with 4-bedrooms
- ▶ 7 Units with Elevator Access
- ▶ 3 Storeys Plus Rooftop Deck, Balconies & Yard
- ▶ 16 Parking Stalls
- ► 4 Short-Term Bicycle Parking Stalls
- ▶ 15 Trees -> 9 Large Trees



Neighourhood Comments

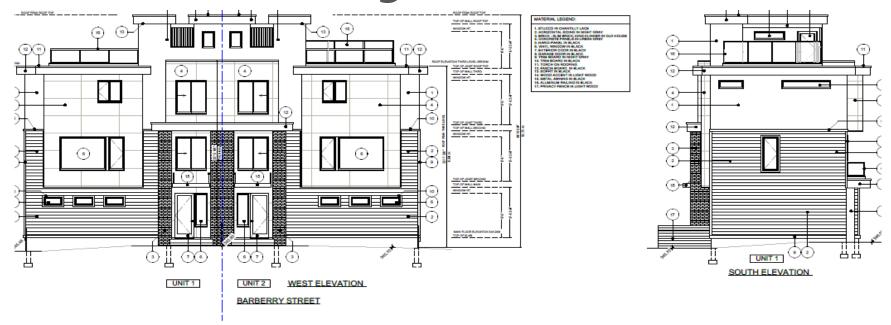


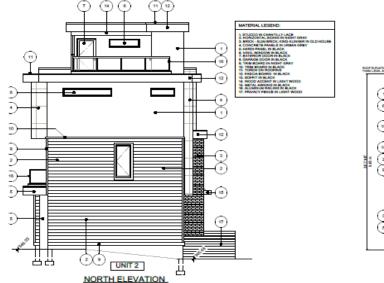
- Height and Density
 - Proposed lower height, FAR, site coverage & larger side-yard setbacks
 - Subdivision would allow 3 lots, up to 18 units
- Parking
 - Required 15 parking stalls, provided 16 stalls
 - Garage parking
- Privacy
 - Protect & preserve existing mature hedge
 - Four columnar trees along east
 - 1.8m solid fence along east & south
 - Stepped back rooftop decks along east & south
 - Frosted rooftop panel increased to 1.5m along east & south

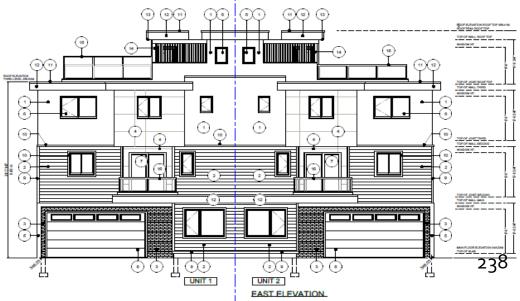




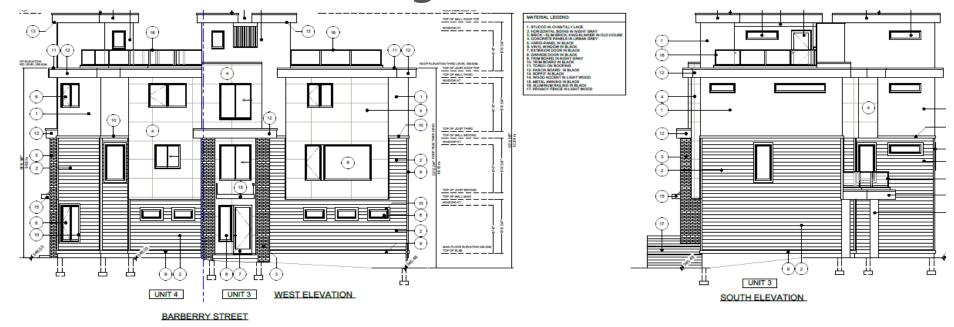
Elevation – Building 1

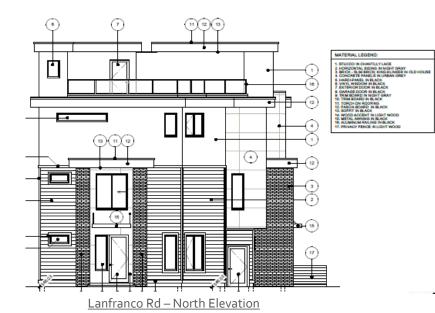


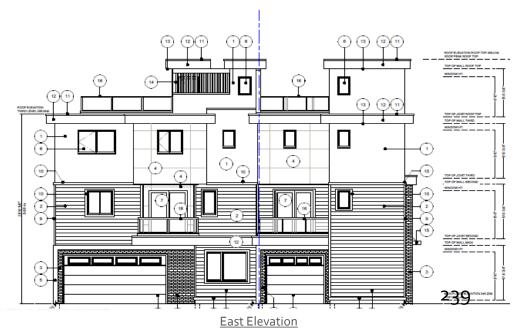




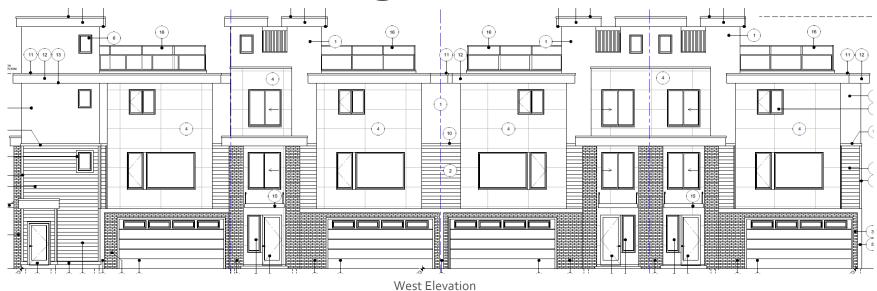
Elevation – Building 2







Elevation – Building 3





Street Context



View from Lanfranco Rd





Rendering – Looking East



Rendering – Looking NE



OCP Design Guidelines

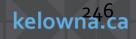


- Clearly visible ground-oriented entries with direct sight lines from the fronting street
- Range of architectural features and details
- Universal accessibility principles elevator access
- Site buildings to protect significant vegetation
- Design buildings to ensure that adjacent residential properties have sufficient visual privacy



Staff Recommendation

Staff recommend support for the proposed development permit as it:
 Meets majority of OCP Design Guidelines
 Mitigate and address neighbour comments
 No Variances



CITY OF KELOWNA

BYLAW NO. 12682 TA24-0009 — Updates to Various Sections

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts that City of Kelowna Zoning Bylaw No. 12375 be amended as follows:

- THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, BUILDING ENVELOPE AREA be amended by adding ", or easements & statutory rights-of-way" after "or geotechnical purposes";
- AND THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, COMMON AND PRIVATE AMENITY SPACE be amended by adding "exclusively" before "for the recreational use of the residents";
- 3. AND THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, GROWING MEDIUM be deleted in its entirety;
- 4. AND THAT **Section 5 Definitions & Interpretations, 5.3 General Definitions** be amended by adding the following in its appropriate location:

"INFILL HOUSING means any form of development on a lot within the C-NHD - Core Area Neighbourhood or the S-RES – Suburban Residential future land use designation outlined within the OCP that contains or will contain three to six dwelling units and / or any form of development on a MF1, MF4, RU1, RU2, or RU3 zoned lot that contains or will contain three to six dwelling units.";

- 5. AND THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, LOT LINE, FRONT – URBAN AND RURAL RESIDENTIAL be amended by adding "or bareland strata road" after "a lot line separating the lot from the street";
- AND THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, SHORT-TERM RENTAL ACCOMMODATION be amended by deleting "29 days or less" and replacing it with "time of less than 90 consecutive days";
- 7. AND THAT **Section 5 Definitions & Interpretations, 5.3 General Definitions** be amended by adding the following in its appropriate location:

"**SOFT LANDSCAPING** means soil-based groundcover within the landscape area, including landscaping with a minimum 150mm of growing medium and plants including natural turf, ground covers such as perennials and grasses, shrubs and trees. Soft landscaping does not

include areas without growing medium and plant materials such as areas that are predominately rock, artificial turf, rubberized surfacing or hard surfacing such as but not limited to pavers.";

8. AND THAT Section 5 – Definitions & Interpretations, 5.3 – General Definitions be amended by adding the following in its appropriate location:

"**SOIL VOLUME** means the growing medium material that plants grow in. The growing medium shall follow the standards identified in the Canadian Landscape Standard (CLS).";

- 9. AND THAT Section 5 Definitions & Interpretations, 5.3 General Definitions, STEPBACK be amended as follows:
 - a) By adding ", measured from the face of the building wall," after "recessing of the building façade", and
 - b) By adding "Eaves can project into the stepback no greater than 0.6 meters." after "requiring to meet the stepback.";
- AND THAT Section 6 General Development Regulations, 6.1 Swimming Pools, 6.1.1 be amended by adding "or flanking side yard" after "a required front yard";
- 11. AND THAT Section 6 General Development Regulations, 6.1 Swimming Pools, 6.1.3 be amended by adding "or flanking side yard" after "a required front yard";
- 12. AND THAT Section 7 Site Layout, 7.2 Landscaping Standards, Table 7.2 Tree & Landscaping Planting Requirements be deleted in its entirety and replaced with Table 7.2 outlined in Schedule A as attached to and forming part of this bylaw;
- 13. AND THAT Section 7 Site Layout, 7.5 Fencing and Retaining Walls be deleted in its entirety and replaced with 7.5 – Fencing and 7.6 – Retaining Walls outlined in Schedule B as attached to and forming part of this bylaw;
- 14. AND THAT Section 8 Parking and Loading, 8.2 Off Street Parking Regulations, Tandem Parking, 8.2.6 be deleted in its entirety and replaced with the following

"8.2.6 Tandem parking spaces are permitted only for:

(a) developments with 6 or less dwelling units and:

i. only one tandem parking space is permitted in front of any garage or carport;

ii. a tandem space cannot be used for different principal dwelling units;

iii. parking spaces for secondary suites, carriage houses, and Child Care Centre, Major can be in tandem with the principal dwelling unit(s).

(b) townhouses with 7 or more dwelling units where the lot is located within the Core Area and:

i. visitor parking stalls cannot be configured in tandem;

ii. a tandem space cannot be used for different principal dwelling units.";

- 15. AND THAT Section 8 Parking and Loading, 8.2 Off Street Parking Regulations, Table 8.2.7.a Dimensions of Parking Spaces and Drive Aisles, Drive Aisles: be amended by adding "or greater" after "One way drive aisles (60 degree parking";
- AND THAT Section 8 Parking and Loading, 8.2 Off Street Parking Regulations, Table
 8.2.17 Amount of Accessible Parking Spaces be deleted in its entirety and replaced with Table
 8.2.17 outlined in Schedule C as attached to and forming part of this bylaw;
- 17. AND THAT Section 8 Parking and Loading, 8.3 Required Off-Street Parking Requirements, Table 8.3 – Required Residential Off-Street Parking Requirements, FOOTNOTE ^{.12} be amended by deleting "The parking spaces for the secondary suites and carriage houses can be located in the driveway and in tandem with the single detached dwelling parking as long as two additional off-street parking spaces are provided for the principal dwelling. Notwithstanding Section 8.1.4, parking for secondary suites or carriage houses can be surfaced with a dust-free material.";
- 18. AND THAT Section 8 Parking and Loading, 8.3 Required Off-Street Parking Requirements, Residential Parking Exemptions Map 8.3.d Rutland Exchange be deleted in its entirety and replaced with Map 8.3.d outlined in Schedule D as attached to and forming part of this bylaw;
- 19. AND THAT Section 10 Agriculture & Rural Residential Zones, Section 10.3 Permitted Land Uses, Single Detached Dwelling be amended as follows:
 - a) By deleting ".6" under "A1", and
 - b) By adding ".13" under "A1", "A2", "RR1", and "RR2";
- 20. AND THAT Section 10 Agriculture & Rural Residential Zones, 10.3 Permitted Land Uses, FOOTNOTES, ^{.6} be amended by deleting ", unless another residence is permitted within the Agriculture Land Reserve as described in the Agricultural Land Commission Act (and related regulation and policy)";
- 21. AND THAT Section 10 Agriculture & Rural Residential Zones, 10.3 Permitted Land Uses, FOOTNOTES, ¹² be amended by deleting "[Deleted]" and replacing it with "A bed & breakfast can only occur if there is only one dwelling unit on the lot.";
- 22. AND THAT Section 10 Agriculture & Rural Residential Zones, 10.3 Permitted Land Uses, FOOTNOTES be amended by adding the following in its appropriate location:

"¹³ Maximum of one Single Detached Dwelling unit is permitted per lot, except on A1 zoned ALR land when another residence is permitted within the Agriculture Land Reserve as described in the Agricultural Land Commission Act (and related regulation and policy).";

- 23. AND THAT Section 13 Multi-Dwelling Zones, Section 13.3 Permitted Land Uses, Child Care Centre, Major be amended by deleting "S" under "MF1" and replacing it with "P⁻³";
- 24. AND THAT Section 13 Multi-Dwelling Zones, Section 13.3 Permitted Land Uses, FOOTNOTES, ⁻³ be amended by deleting "[Deleted]" and replacing it with "The lot must have a child care sub-zone 'cc' on the property for a child care centre, major to be permitted.";
- 25. AND THAT Section 13 Multi-Dwelling Zones, Section 13.5 Development Regulations, FOOTNOTES, ² be amended by adding the following after "party wall agreement.":

"For MF1 lots garages and carports can have a side yard setback of 1.2 metres when the lot has access to a rear or side lane. Any residential space on those MF1 lots above the garage or carport must meet the 1.8 m side yard setback.";

- 26. AND THAT Section 13 Multi-Dwelling Zones, Section 13.5 Development Regulations, FOOTNOTES, ^{.9} be amended by adding "For all apartment buildings, at least 75 m² of the required portion of common area shall be configured indoors." after "fee simple townhouses.";
- 27. AND THAT Section 13 Multi-Dwelling Zones, Section 13.6 Density and Height Development Regulations, FOOTNOTES, ¹ be amended by adding "If a parkade entrance / exit has a lower finished grade than the surrounding area then this portion of the parkade can be excluded from height calculations." before "The base height";
- 28. AND THAT Section 14 Core Area & Other Zones, Section 14.9 Principal and Secondary Land Uses, FOOTNOTES, ^{.6} be amended by deleting "the uppermost floor within a building" and replacing it with "above the first floor";
- 29. AND THAT Section 14 Core Area & Other Zones, Section 14.11 Commercial and Urban Centre Zone Development Regulations, FOOTNOTES, ^{.3} be amended by deleting "core area neighbourhood (C-NHD) or an education / institutional" and replacing it with "Core Area Neighbourhood (C-NHD), Suburban -Residential (S-RES), Suburban - Multiple Unit (S-MU), or an Education / Institutional";
- 30. AND THAT Section 14 Core Area & Other Zones, Section 14.14 Density and Height be amended by adding "^{1,15}" after "For areas identified as PARK = 0.5 FAR ⁹" under the "Min. Density (if applicable) & Max. Base Density FAR ^{1,1,7}" column in the "UC1 (Downtown)" row, the "UC2 (Capri / Landmark)" row, the "UC3 (Midtown)" row, the "UC4 (Rutland)" row, and the "UC5 (Pandosy)" row;
- 31. AND THAT Section 14 Core Area & Other Zones, Section 14.14 Density and Height, Max. Base Height be amended by adding ".14" after "Max. Base Height .1, .7";
- 32. AND THAT Section 14 Core Area & Other Zones, Section 14.14 Density and Height, FOOTNOTES, ¹³ be amended by deleting "Lots identified in a Transit Oriented Area identified by Map 8.3.b, Map 8.3.c, or Map 8.3.d have the base FAR for the 6-storey category increased

from 1.8 FAR to 2.5 FAR." and replacing it with "Lots that have a 6 storey Building Height category and are within a Transit Oriented Area as identified by Map 8.3.b, Map 8.3.c, or Map 8.3.d then have their density increased from 1.8 base FAR to 2.5 base FAR.";

33. AND THAT Section 14 – Core Area & Other Zones, Section 14.14 – Density and Height, FOOTNOTES be amended by adding the following in its appropriate location:

"¹⁴ If a parkade entrance / exit has a lower finished grade than the surrounding area then this portion of the parkade can be excluded from height calculations.";

34. AND FURTHER THAT Section 14 – Core Area & Other Zones, Section 14.14 – Density and Height, FOOTNOTES be amended by adding the following in its appropriate location:

".¹⁵ If a lot has a Park Building Height category and is within a Transit Oriented Area as identified by Map 8.3.b, Map 8.3.c, or Map 8.3.d then: if the lot is within 200 metres of the Transit Exchange the lot can be developed in accordance with the 12 storey base height and density category and if the lot is between 200 and 400 metres of the Transit Exchange the lot can be developed in accordance with the 6 storey the base height and density category.";

35. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first time by the Municipal Council this 22nd day of July, 2024.

Considered at a Public Hearing on this 13th day of August, 2024.

Read a second and third time by the Municipal Council this 13th day of August, 2024.

Approved under the Transportation Act this 21st day of August, 2024.

Audrie Henry

(Approving Officer – Ministry of Transportation)

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk

Schedule A

Table 7.2 – Tree & Landscaping Planting Requirements cm =centimetres / m = metres / m ² = square metres / m ³ = metres cubed								
Criteria		Regulations						
Standard Requireme	nts for Minimum Trees, Soft	landscaping, and Soil Volu	me for all Developments .1					
Minimum Number of Trees within Landscape Areas ¹	1 tree per 10 linear metres of landscape area							
Minimum Soft Landscaping Area ^{.2} See Visual Example Figure 7.2.1	75% of the landscape area shall be soft landscaping							
		Single Tree	Shared					
Minimum Soil	Large Tree	20 m ³	15 m ³					
Volume per Tree -3	Medium Tree	18 m ³	12 M ³					
	Small Tree	15 M ³	10 M ³					
Area specifi	c modification to Trees, Soft	landscaping, and Soil Volu	me Requirements					
Overhead Power Lines for any zone Landscape Areas and Boulevards for Infill Housing	can be planted outside th abutting: boulevard, front y power lines that would inte There is no minimum num within the front yard or fla within the boulevard and installed.	vard and / or flanking yard c rfere with the growth of the ber of trees onsite and no anking yard landscape area	ontains overhead electrical e trees. minimum soft landscaping a if large trees are planted					
Landscape Areasand Boulevards forany: MF2, MF3,MF4 * zone or anyzone within Section14 Core Area andOther Zones								
	Universal Lands	cape Requirements						
Minimum Landscaping for any surface parking lot over 15 vehicles ^{.5}	landscape area. (b) landscaped islands are (c) the maximum number	with the street must have a required at the end of each	a minimum 1.5 metres parking aisle; ecutive row is 14 with a					
	(d) landscaped islands are	not to be longer than the a	djacent parking space;					

Table 7.2 — Tree & Landscaping Planting Requirements cm =centimetres / m = metres / m ² = square metres / m ³ = metres cubed			
Criteria	Regulations		
	(e) landscaped islands shall be clearly delineated as separate and in addition to required parking and loading spaces;		
	 (f) locate landscaped islands such that loading and unloading vehicles can gain access without undue interference; 		
	(g) a minimum of one tree must be included in a landscaped island; and		
	(h) landscape islands must have a minimum 75% soft landscaping or soil cells.		
Minimum / Maximum Tree Spacing	Minimum tree spacing is based on site requirements for sightlines or accessibility along with standard planting practices for the tree species. Trees may be planted closer together as needed and additional trees are highly encouraged. Spacing is not dictated by requirements for the number of trees required in the Landscape Area.		
Minimum Setback from buildings, raised patios, and	Large: 3 m radius from centre of tree to the building Medium: 2 m radius from centre of tree to the building Small: 1 m radius from centre of tree to the building		
balconies to on-site trees	Any underground parkade, underground building, underground structure (such as a stormwater detention tank) must be setback at least 1 metre volumetrically measured from the centre of the tree at finished grade (trunk flare).		
Minimum Deciduous Tree Planting Stock Caliper ^{.6}	Large: 5 cm Medium: 4 cm Small: 3 cm		
Minimum Coniferous Tree Planting Stock Height	250 cm		
Minimum Ratio between Tree size ^{.7}	Large: Min 50% Medium: No min or max Small: Max 25%		

FOOTNOTES (Section 7.2):

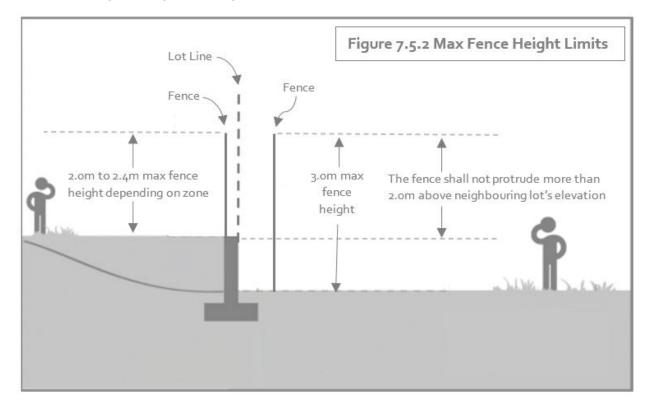
- ¹⁴ The linear metre calculation is used to determine the minimum number of trees to be planted within the landscape area (not the minimum spacing). At least one tree per landscape area is required, unless there is an area specific modification. The minimum landscaping and number of trees is required for all developments, except, for residential developments that contains two or less dwelling units per lot.
- ² Electrical transformers and driveways within the landscape areas can be excluded from the minimum percentage of soft landscaping area. If soil cells are installed for all the required trees in the front yard or flanking yard landscape area, then there is no minimum soft landscaping requirement.
- ⁻³ Soil volume may be shared through the landscape area (tree, turf, and shrub). For the soil volume calculation, any continuous growing medium the roots can reach on the subject property to a

Table 7.2 — Tree & Landscaping Planting Requirements cm =centimetres / m = metres / m ² = square metres / m ³ = metres cubed			
Criteria	Regulations		
 calculation only whand the soil volume This category applied primarily commercies The minimum num calculations and calculations and	nber of trees within landscape areas and within parking islands are separate nnot be double counted to meet minimum numbers. Trees in adjacent parking nay share soil volume with the adjacent landscape area to meet the minimum il volume amounts. shall have a minimum clear stem height of 1.5 m. ined in the City of Kelowna's Urban Tree Guide, if only one tree is required, it must conifer. All columnar trees shall be considered a medium or small tree for e tree size ratio. These columnar trees require the equivalent large tree soil volume. adding the trees within the landscape area and the trees within parking lot landscape		

Schedule B

7.5 Fencing

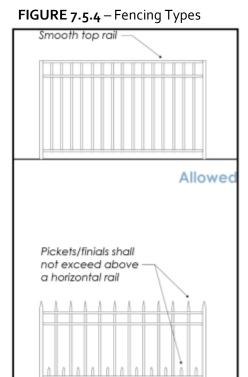
- 7.5.1 Screening fences shall be opaque double-sided construction. Where screening fences are allowed or required by this Bylaw, they shall be of an opaque or a combination of opaque and lattice design.
- 7.5.2 The maximum height for fences constructed from natural grade shall be:
 - (a) 2.0 metres in rural residential zoned properties except; where abutting an agricultural, industrial, or commercial zone commercial zone, then the maximum height shall be 2.4 metres.
 - (b) 2.0 metres in suburban residential, multi-dwelling, village centre, or urban centre zoned lots except; that it shall not exceed 1.2 metres in height within the minimum front yard or flanking yard setbacks.
 - (c) 2.4 metres in commercial, public and institutional, or industrial zoned properties.
 - (d) Notwithstanding S.7.5.2 (a), (b), & (c); the maximum height of a fence that abuts a neighbouring lot which is higher in elevation and is erected on the low side is 3.0 metres, as long as, the fence does not protrude more than 2.0 metres above the elevation of the neighbouring lot (see Figure 7.5.2)



- 7.5.3 Lots in industrial zones are to have an opaque 2.4 metres high fence around all storage yards, along all lot lines abutting non-industrial zones and around wrecking yards that are visible from a street abutting the lot.
- 7.5.4 No metal fence shall be constructed or erected that have the ends of the fence pickets or finials extend above a horizontal rail (see Figure 7.5.4).
- 7.5.5 No barbed wire fencing shall be constructed or erected in any rural residential, suburban residential, multidwelling, or core area & other zone, except in the P1 zone where the site is used for detention and correction services.
- 7.5.6 No razor wire fences shall be constructed or erected in any zone except were associated with penitentiaries, jails, or places of incarceration.
- 7.5.7 No fencing shall be constructed or erected at or below the high-water mark (geodetic elevation of 343 metres) of Okanagan Lake.

7.6 Retaining Walls

- 7.6.1 No individual retaining wall shall exceed a height of 1.2 metres measured from grade on the lower side.
 - (a) Except, where the grade of the subject lot is lower than the abutting property then any retaining walls must not exceed a height of 3.0 metres measured from grade on the lower side.
 - (b) Except, retaining walls can be any height subject to condition of subdivision approval.
- 7.6.2 Notwithstanding S.7.6.1; any individual retaining wall greater than 1.2 metres in height must be constructed with a professional design by a qualified professional engineer.
- 7.6.3 Notwithstanding S.7.6.1; any tiered retaining walls must be spaced horizontally a minimum of 1.2 metres between tiers. The maximum number of tiers that may be constructed without a professional design by a qualified professional engineer is two. The maximum total height of any retaining wall system that may be constructed without a professional design by a qualified professional engineer is 2.4 metres.

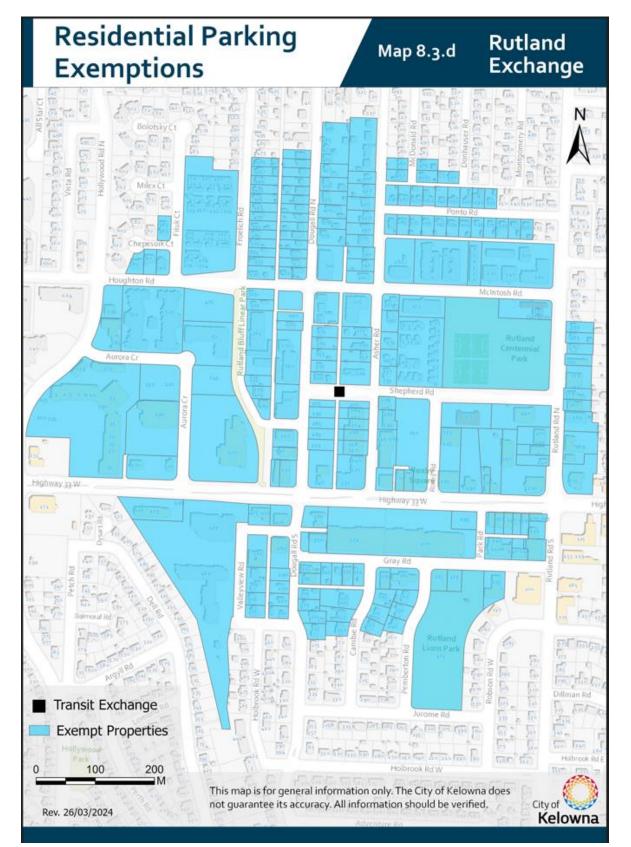


Not Allowed

Schedule C	Sch	edu	ule	С
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Table 8.2.17 Amount of Accessible Parking Spaces				
Total Number of Parking Spaces Onsite.	Min. Number of Required Accessible Parking Spaces	Min. Number of Required Van- Accessible Parking Spaces		
1–6 spaces	o spaces	o spaces		
7 – 36 spaces	1 space	o spaces		
37 – 68 spaces	2 spaces	1 space		
69 – 100 spaces	3 spaces	1 space		
101-150 spaces	4 spaces	1 space		
151-200 spaces	5 spaces	1 space		
201-300 spaces	6 spaces	2 spaces		
301-400 spaces	7 spaces	2 spaces		
401-500 spaces	8 spaces	2 spaces		
Over 500 spaces2% of the total spaces2 spaces				
Note: The number of van-accessible parking spaces is included in the minimum required accessible				
parking spaces. For example: if six (6) accessible parking spaces are required and two (2) van accessible				
parking spaces are required the total number of accessible parking spaces is six (6) and two (2) of which				
must be van accessible.				





CITY OF KELOWNA

BYLAW NO. 12693 Z24-0012 1785 Swainson Road

A bylaw to amend the "City of Kelowna Zoning Bylaw No. 12375".

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts as follows:

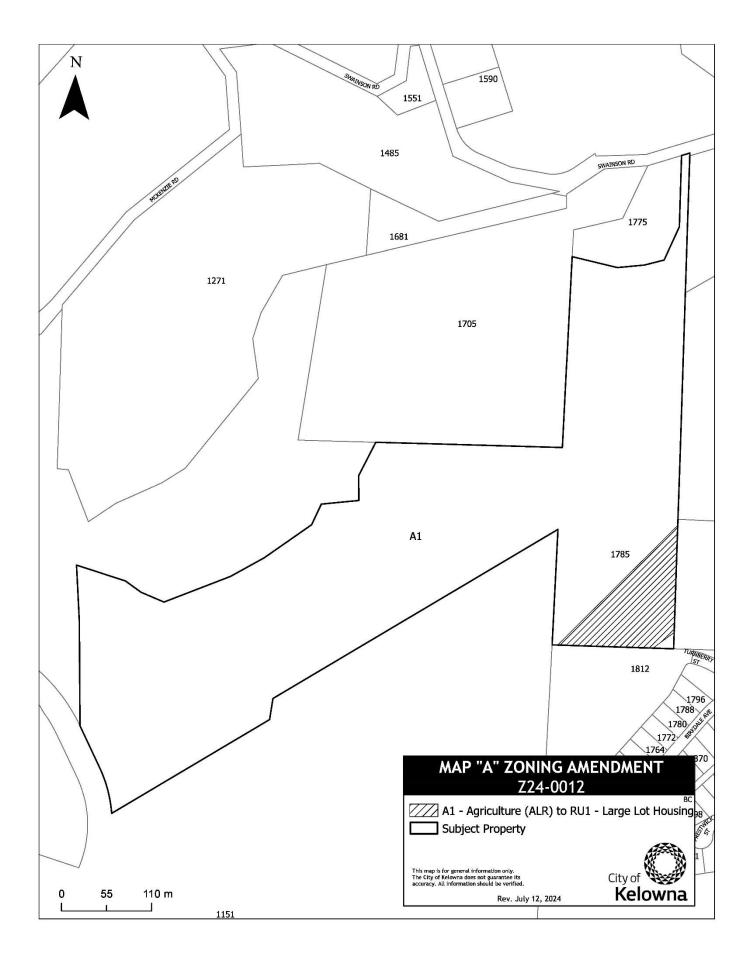
- THAT City of Kelowna Zoning Bylaw No. 12375 be amended by changing the zoning classification of portions of Lot A Sections 19 and 30 Township 27 and of Section 24 Township 26 ODYD Plan EPP120799 located on Swainson Road, Kelowna, BC from the A1 – Agriculture zone to the RU1 – Large Lot Housing zone as shown on Map "A" attached to and forming part of this bylaw.
- 2. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this 26th day of August, 2024.

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk



Report to (Council
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Date:	September 9, 2024
То:	Council
From:	City Manager
Subject:	Rental Housing Grant Program – Grant Authorization 2024/2025
Department:	Housing Policy & Programs

Recommendation:

THAT Council receives, for information, the report from Housing Policy and Programs dated September 9, 2024;

AND THAT Council approve the 2024/2025 Rental Housing Grants as outlined in the Report from Housing Policy and Programs dated September 9, 2024.

Purpose:

To consider the approval of six rental housing grants as part of the enhanced Rental Housing Grants Program for 2024/2025.

Council Priority Alignment:

Affordable Housing

Background:

The Rental Housing Grants Program encourages the creation of non-market – also called 'affordable' or 'subsidized' – rental housing by distributing funding to eligible projects. The grant is applied against the Development Cost Charge (DCC) fees for the project. Council Policy #335 – Rental Housing Grants Eligibility establishes the criteria for the Rental Housing Grants Program.

At the Regular Council Meetings of May 27, 2024 and August 12, 2024, Council approved temporary enhancements to the Rental Housing Grants Program for 2024/2025, by increasing the available pool of funding, increasing the maximum possible grant amounts, and expanding the eligible areas of the City.

Discussion:

The enhanced Rental Housing grants program was open for applications until August 20, 2024. Six eligible applications were received, and are recommended to receive Rental Housing Grants for 2024/2025, as outlined in the following table:

Project Address	Applicant	# of Non- Market Units Proposed	Recommended Grant	Estimated DCCs	Type of Rental Units
1330, 1340 & 1350-1352 Belaire Ave	Freedom's Door	12	\$88,392.86	\$241,782.00	Townhouses
115 & 175 Kneller Rd	Okanagan Metis & Aboriginal Housing Society	48	\$471,428.57	\$1,288,368.00	Apartments
175, 235 & 239 Kneller Rd, 1161 Kneller Ct	Kelowna Women's Shelter	49	\$481,250.00	\$1,318,884.00	Apartments
2160 Wilkinson St	NOW Canada Society	28	\$265,178.57	\$763,201.00	Apartments
1451 Bertram St	BC Housing	114 (of 176 total units)	\$1,109,821.43	\$4,796,470.00 (including 62 market units)	Apartments
1370 Rutland Rd	Metis Community Services Society of BC	90	\$883,928.57	\$2,471,436.92	Apartments

The eligible applications received represent a total of 341 non-market housing units. This constitutes a substantial portion of the Housing Accelerator Fund Housing target for 416 affordable housing units to be issued Building Permits by October 2026. Incentivizing below-market housing aligns with the City's Housing Needs Assessment and Healthy Housing Strategy which identifies subsidized rental housing as a key element of the housing wheelhouse. It also aligns with Council's priority of affordable housing.

A total combined grant amount of \$3.3 million would offset approximately 35% to 37% of the total DCCs attributable to the non-market units for each project. If some of the projects obtain a Building Permit issuance in 2024, there is an additional \$300,000.00 previously allocated to the previous year's Rental Housing Grants program that may also be distributed accordingly among the above-noted projects.

Subject to Council approval, grant recipients will be notified by letter of the amount of the grant. In order to receive the grant, each project must have a housing agreement in place with the City to secure the rental dwellings for a minimum of ten years, or a long-term operating agreement in place with BC Housing.

Grants will be applied as a deduction from the total DCCs payable at Building Permit issuance. Building Permits must be issued by December 31, 2025, with a one-time extension until May 31, 2026 available for projects that are reasonably expected to proceed to Building Permit by that date.

Conclusion:

Rental Housing Grants support non-profit housing providers in the creation of non-market housing. Authorization of grants for the six eligible projects will support the development of 341 affordable housing units which aligns with HAF targets, the Housing Needs Assessment, Healthy Housing Strategy, and the Council priority of affordable housing.

Internal Circulation:

Communications Financial Services Long Range Planning Development Planning Real Estate Services Social Development

Considerations applicable to this report:

Legal/Statutory Authority: Local Government Act, s. 563

Legal/Statutory Procedural Requirements:

Housing Opportunities Reserve Fund Bylaw No. 8593

Existing Policy:

Council Policy #335 - Rental Housing Grants Eligibility

Financial/Budgetary Considerations:

Available funds from the \$300,000 annual budget and \$3,000,000 from HAF funding would be dispersed as outlined in the report.

An additional \$300,000, previously allocated to the prior year's Rental Housing Grant program, may be distributed accordingly to supplement the above funding, depending on the timing of Building Permit issuance for eligible projects. This would be dependent on some of the approved projects achieving Building Permit in 2024.

Communications Comments:

Grant recipients will be notified by letter of the amount of the grant and required next steps to receive grant funding.

Considerations not applicable to this report:

Consultation and Engagement:

Submitted by:

M. Tanner, Planner Specialist

Approved for inclusion: J. Moore, Housing Policy and Programs Manager



Rental Housing Grants

2024/2025 Grant Authorizations Housing Policy & Programs

Background

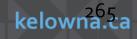


Rental Housing Grants Program

- Non-market rental housing
- Non-profit housing providers
- Offsets DCCs

2024/2025 Enhancements – Housing Accelerator Fund

- Increased available pool of funding
- Increased maximum grant amounts
- Expanded eligibility area

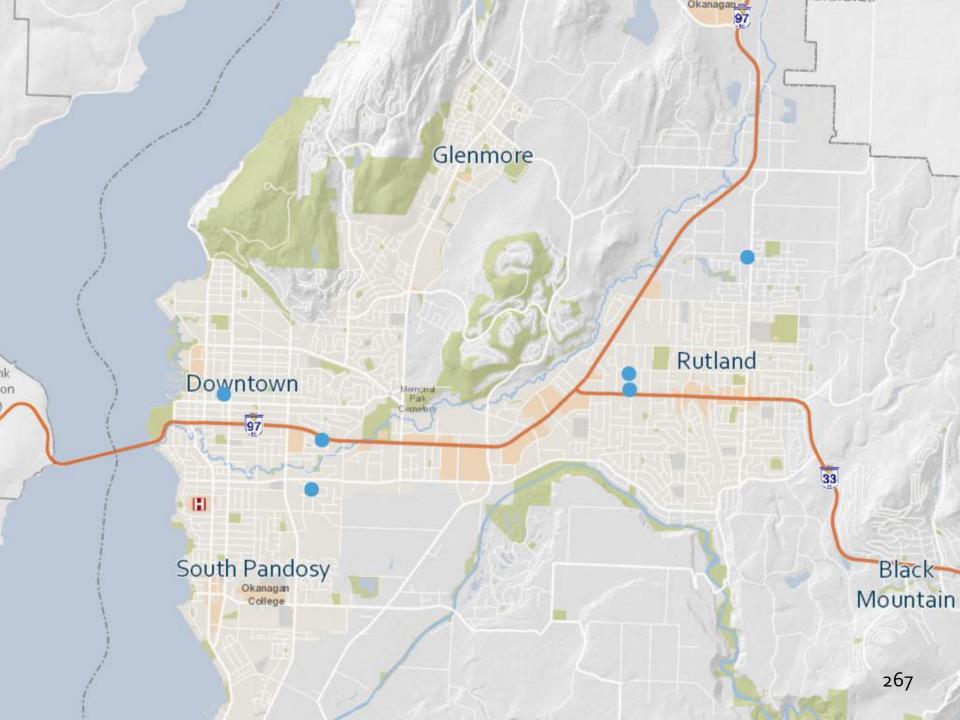


Grant Applications



Civic Address	Applicant	Non-Market Units Proposed	Type of Units
1330, 1340 & 1350- 1352 Belaire Ave	Freedom's Door	12	Townhouses
115 & 175 Kneller Rd	Okanagan Metis & Aboriginal Housing Society	48	Apartments
175, 235 & 239 Kneller Rd, 1161 Kneller Ct	Kelowna Women's Shelter	49	Apartments
2160 Wilkinson St	NOW Canada Society	28	Apartments
1451 Bertram St	BC Housing	114	Apartments
1370 Rutland Rd	Metis Community Services Society	90	Apartments





Grant Applications



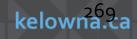
Civic Address	Recommended Grant	Estimated DCCs	% of DCCs Covered by Grant
1330, 1340 & 1350- 1352 Belaire Ave	\$88,392.86	\$241,782.00	37%
115 & 175 Kneller Rd	\$471,428.57	\$1,288,368.00	37%
175, 235 & 239 Kneller Rd, 1161 Kneller Ct	\$481,250.00	\$1,318,884.00	36%
2160 Wilkinson St	\$265,178.57	\$763,201.00	35%
1451 Bertram St	\$1,109,821.43	\$4,796,470.00	23%
1370 Rutland Rd	\$883,928.57	\$2,471,436.92	36%

Policy Alignment



HAF housing targets

- 416 affordable housing units
- Healthy Housing Strategy
 - Encourages reducing the cost of affordable, purpose-built rental housing
- Housing Needs Assessment
 - Shortage of subsidized rental housing in Kelowna
- Council Priorities
 - Affordable Housing



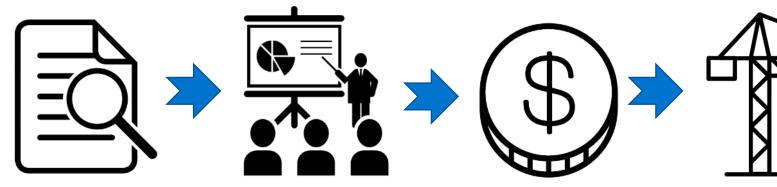
Next Steps & Timeline

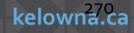


- Notify successful applicants
- Grant applied as a credit on DCC payment at time of Building Permit issuance
- Building Permits must be issued by Dec 31, 2025, with one-time extension to May 31, 2026

Applications Received Council Approves Grant Amounts

DCC Credits at Building Permit Construction Of New Rental Units





Staff Recommendation



- Staff recommend support for the Rental Housing Grants:
 - Applications met eligibility criteria
 - Aligns with:
 - HAF housing targets
 - Healthy Housing Strategy
 - Housing Needs Assessment
 - Council Priorities



Report to Council



Date:	September 9, 2024	K
То:	Council	
From:	Transit and Programs Manager	
Subject:	Transit Operations and Maintenance Facilities Project Update	es
Department:	Integrated Transportation	

Recommendation:

THAT Council receives for information, the report from Integrated Transportation dated September 9, 2024, with regards to the Transit Operations and Maintenance Facilities.

Purpose:

To update Council on the status of the Transit Operations and Maintenance Facilities projects.

Council Priority Alignment:

Transportation

Background:

The Kelowna Regional Transit System operates throughout Central Okanagan, including Kelowna, Lake Country, West Kelowna, Westbank First Nation, Peachland, and the Regional District of Central Okanagan. All the buses operating within this system are stored and maintained at the existing Hardy Street Transit Operations and Maintenance (O&M) facility. The Region's Transit Future Plan provides a long-term vision for the Kelowna Regional Transit System (KRTS) and a strategy that includes significant transit service level increases, which will require additional buses and consequently an expanded transit O&M facility.

The current KRTS fleet is comprised of 110 buses that include a mix of heavy-duty (70), medium-duty (5), and light-duty (35) vehicles. The Transit Future Action Plan, completed in 2018, identified the need for 20 additional buses and 50,000 additional service hours over seven years - with a forecast need for an additional 100 buses over 25 years.

The Hardy Street O&M facility was built in 1998 and was designed to support 70 conventional vehicles. Since that time, modifications were made to the site allowing it to support the current 110 bus fleet. The City of Kelowna owns the land for the Hardy O&M facility, which is leased to BC Transit. To support transit service expansions needed to serve the growing region, a new O&M facility will be required and is being planned. The future new facility is a Council priority including, an advocacy priority with high orders of government.

Discussion

Hardy Street Transit O&M Facility

Both parties (BC Transit & City) agree on extending the operational life of the Hardy facility until the new facility is ready. Design work is well advanced to expand the existing site and allow for the inclusion of infrastructure to support battery electric buses. Changes will increase facility capacity to 125 buses, supporting transit service expansions until a new O&M facility is complete. Improvements include added bus storage capacity, electric bus charging infrastructure and improved administrative, maintenance and bus wash functions. No further additional capacity can be realized on the site.

This \$9 million dollar project is funded through a mix of Federal, Provincial and local contributions. After successful application to the Investing in Canada Infrastructure Program (ICIP), the Kelowna Regional Transit partner's share of project costs will be just over \$2.1 million, of which, Kelowna's share is approximately \$1.8 million and is being funded through the Annual Transit Operating Agreement. Construction is expected to be completed late summer of 2025 after which transit service expansions planned for the next few years can be accommodated.

Hollywood Road Transit O&M Facility

The Hollywood Transit O&M Facility will be located on the former Serwa family Lands, south of UBCO, which was purchased by the City of Kelowna. A rezoning report will come before Council shortly to take steps towards preparing the site for construction of the O&M facility.

Planning for the facility commenced in 2022, led by BC Transit with support from Infrastructure BC and the City of Kelowna. A Business Plan for the future Hollywood O&M facility is being developed to support a submission to the provincial budget process. The plan will also inform requests to secure local government funding commitments. Planning for the new facility is enabled by a \$3.65 million (\$972,000 local region share) ICIP grant, and includes a review of various facility capacity, funding and delivery schedule scenarios and considers approaches to scaling down, and ultimately ceasing operations at the Hardy facility. The target completion date for the new facility is presently between 2030 and 2032.

Conceptual site layout and functional plan options, with associated cost estimates, are being advanced and will be evaluated. A preferred option is expected to be selected this fall. The preferred option will be refined in an Indicative Design stage. This stage is a critical milestone required to meet the targeted Business Plan submission date to the Provincial Government in the summer of 2025.

<u>Funding</u>

BC Transit is actively pursuing funding opportunities to reduce the contribution required from local government partners. One potential source is the Canada Public Transit Fund (CPTF), which will allocate \$3 billion annually for public transit and active transportation infrastructure starting in 2026-27.

Since the CPTF program was recently announced, BC Transit and City staff are working together to gather details on the fund, potential contribution levels, and its applicability to the Project and to prepare an Expression of Interest for the KRTS. The region is eligible to apply under multiple funding streams, including a Baseline and Metro Funding Agreement streams¹, which could provide stable and predictable funding following applications made over the next 12 – 18 months. There will be significant engagement with the federal government to maximize the funding available to offset local government costs of the new transit O&M facility and subsequent battery-electric bus procurement.

The KRTS share of costs for the new facility may be funded through a lease fee payable over the asset's life as a part of the community's Annual Operating Agreements, or through a one-time contribution or combination of the two.

Status by Site:

Site	Completed tasks	Ongoing tasks and next steps
Hardy Transit	ICIP grant approval	95%, 100% design stages
Facility	Stakeholder engagement	Tender for construction
	60% design	Award
	BC Transit secured construction	Construction (2024-2025)
	management team	
Hollywood	Property: ALR conditional exclusion	Rezoning/subdivision & final ALR exclusion
Transit Facility	ICIP grant approval (for business	Site servicing design including road access
	plan development)	Stakeholder engagement
	Initial options development & initial	Options & cost estimation refinement
	cost estimation	Preferred option identification
		Indicative Design/costing
		Business Plan completion & Provincial
		review
		CPTF application process
		Advocacy

Individual projects for each site are in varying stages of progress as summarized in the table below:

Next Steps:

The Hollywood Transit Facility is currently in the final options refinement stage and will move to evaluation and selection of a preferred option this fall. BC Transit will continue to advance the Business

¹ Metro Region Agreements applications require development of Integrated Regional Plans that tie local transit and housing objectives together and propose priority regional transit and active transportation projects.

Plan for the Project to prepare for submission to the Provincial government in Spring 2025. Local Government Partners' support will be required with the submission.

Staff will soon bring forward a required rezoning bylaw for the property for consideration by Council. If approved the property will be subdivided. A development permit will be brought forward for further consideration by Council regarding the proposed facility's form and character.

The following table provides a high-level timeline for the next steps on the Hollywood Transit Facility project. The schedule is subject to change based on procurement model, and local, Provincial and federal funding.

Hollywood Transit Facility	Date
Targeted Project Milestones	
Rezoning and subdivision	Fall 2024
Completion of ALC exclusion process	Fall 2024
Selection of Preferred Design Option	Winter 2024-25
Completion of Indicative Design	Winter 2024-25
Completion of Class C Cost Estimate	February 2025
Completion of Business Plan	Spring 2025
Provincial/Federal/Local Government Approval	Summer-Winter 2025
Process	
Project Procurement	Winter 2025 – Spring 2027
Construction Commencement	Spring 2027
Substantial Completion	2030

Internal Circulation:

Partnerships Office Strategic Land Development Financial Planning Infrastructure Engineering Community Engagement Existing Policy **TMP Policy 3.7** – Support BC Transit's efforts to electrify the transit fleet by 2040. **TMP Policy 3.2** – As growth is focused along Transit Supportive Corridors, add corresponding increases to transit service to support growth and build transit ridership. **TMP Policy 3.9** – Focus the bulk of new service investment on the best performing routes that offer the highest return in terms of emissions and congestion reduction.

Considerations not applicable to this report:

Legal/Statutory Authority Legal/Statutory Procedural Requirements Personnel Implications Communications Comments Alternate Recommendation

Prepared by:

B. Depner, Transit Infrastructure Coordinator

City Manager September 9, 2024 Page **5** of **5**

Reviewed by:	M. Kittmer, Transit and Programs Manager
Reviewed by:	B. Hallam, Integrated Transportation Department Manager
Approved for inclusion:	M. Logan, Infrastructure General Manager

Attachment: Transit Facility Update Presentation

cc: Divisional Director, Partnerships & Investments Partnerships Office Director Divisional Director, Planning, Climate Action & Development Development Services Director Communications Director Infrastructure Operations Department Manager B. Walman, Senior Manager, Government Relations, BC Transit M. Lockley, Planning Manager, BC Transit



Transit Operations and Maintenance Facilities Update

September 9, 2024



Purpose

To update Council on the status of the Transit Operations and Maintenance (O&M) Facilities projects.



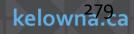


Immediate and Future Needs

Current fleet of 110 buses.

- The Transit Future Plan forecasts that the fleet should grow to 240 buses by 2045.
- Near-term fleet growth projected at +20 buses (50,000 service hours) per 2018 Transit Future Action Plan.







Current Hardy Street Facility

- The facility, built in 1998 was originally designed to support 70 buses.
- Past upgrades allowed for growth to current fleet size of 110 buses.
- Further upgrades will increase the capacity to 125 buses.





Hardy Transit Facility Project Kelowna

- Investing In Canada Infrastructure Program (ICIP) grant.
- \$9 million facility upgrade (regional share -\$2.1m/Kelowna \$1.8m).
- Added maintenance, cleaning, admin capacity, electric bus charge infrastructure.
- Construction is expected to be completed late summer 2025.





Hardy Facility 60% Design

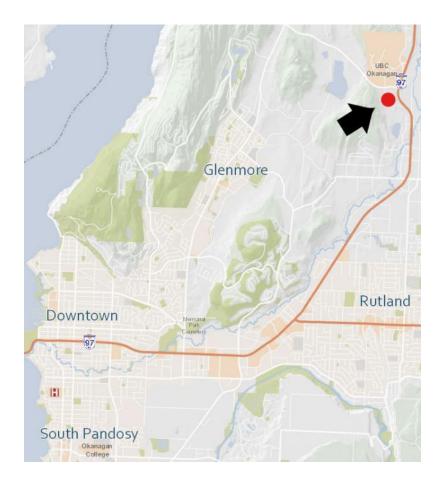
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Future Transit Facility Site

- New site is located on the former Serwa Family Lands, south of UBCO.
- 2022 conditional approval to remove a portion of the property from the Agricultural Land Reserve.
- A rezoning report will come before Council to support final ALR exclusion.





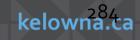


Hollywood Road Facility Project

- \$3.65m ICIP grant to support developing Business Plan.
- Includes review of various facility layout, capacity, funding and delivery schedule options.
- A preferred option selection, design refinement.



1 of 4 conceptual layouts





Canada Public Transit Fund (CPTF)

- \$3 billion annually for public transit, active transportation infrastructure starting in 2026-27.
- The Region is eligible to apply to Baseline and Metro Region Agreement (MRA) streams.
- Expressions of interest being submitted for both streams imminently.
- Integrated Regional Plan required when applying to MRA stream.
- Future Hollywood transit O&M facility is a priority.



Hollywood Project Milestones

Hollywood Transit Facility Project Milestones	Date
Selection of Preferred Design Option	Winter 2024
Completion of Indicative Design	Winter 2024
Completion of Class C Cost Estimate	February 2025
Completion of Business Plan	Spring 2025
Provincial/Federal/Local Government Approval Process	Summer-Winter 2025
Project Procurement	Winter 2025 – Spring 2027
Targeted Construction Commencement	Spring 2027
Targeted Substantial Completion	2030



Questions?





September 9 th , 2024
Council
City Manager
10-Year Capital Plan

Department: Corporate Services

Recommendation:

THAT Council receives, for information, the report from Corporate Services dated September 9th, 2024, with respect to this year's annual update to the 10-Year Capital Plan.

AND THAT Council adopt the 10-Year Capital Plan.

Purpose:

To review and adopt the 10-Year Capital Plan 2025-2034.

Background:

This year's Capital Plan update includes three touchpoints for Council to shape its direction. This report is the third in the sequence. The first report provided an overview of the capital planning process, objectives and highlighted the adjustments from the current Capital Plan. The second report offered a comprehensive review of the Capital Plan and allowed Council to ask questions and provide quidance.

Previous Council Resolution

Resolution	Date
THAT Council receives, for information, the report from Corporate Services dated August 12, 2024, with respect to this year's annual update to the 10-Year Capital Plan.	Aug 12, 2024
THAT Council receives, for information, the report from Corporate Services dated August 26, 2024, with respect to this year's annual update to the 10-Year Capital Plan.	Aug 26, 2024

Summarized below is the guidance received from Council in the past workshop.

- Transit Operation & Maintenance Facility should be identified for inclusion in the Capital Plan.
- Other major projects not in the Capital Plan should be clearly identified along with current project activities and next steps for inclusion in the Capital Plan.
- Project delivery needs to keep pace with revenue, including external sources like DCCs.
- Provide definitions for Maintain and Enhance categories of infrastructure.

The following responds to Council's guidance and demonstrates that the Capital Plan is delivering on Council priorities and meeting the needs of our growing community.

Capital Plan Investment

The Capital Plan projects an expenditure of \$2.57 billion in the next decade (2025 – 2034). Guided by Council and Corporate Priorities, capital investment will focus on the following:

- Accelerating transportation & mobility infrastructure making it easier for people to get around by vehicle, transit, cycling and walking.
- Community amenities like recreation and community centres to keep pace with Kelowna's population growth and the evolving needs of its residents.
- Parks acquisition and development with big investment plans for recreation and waterfront parks.
- Airport development that supports growth in the region and economy.
- Reducing environmental footprint and future-proofing infrastructure to be more resilient in the face of changing climate.
- Renewal of critical infrastructure.

Table 1 - Capital Plan investment by Cost Centre.

Capital Cost Centre		pital Plan nillion)	apital Plan nillion)
Transportation		\$ 373	\$ 726
Buildings		\$ 416	\$ 441
Parks		\$ 288	\$ 358
Airport		\$ 371	\$ 342
Water		\$ 147	\$ 201
Wastewater		\$ 211	\$ 194
Stormwater		\$ 44	\$ 86
Real Estate & Parking		\$ 46	\$ 80
Vehicles		\$ 53	\$ 55
Solid Waste		\$ 73	\$ 52
Fire		\$ 14	\$ 18
Information Services		\$ 12	\$ 12
	TOTAL	\$ 2,048	\$ 2,565

Anticipated investment in infrastructure and equipment over the next 10 years of \$342 million ensures additional air service can be accepted to support the continued growth of the regional economy. Significant projects over the next 10 years include:

- Airport Terminal Building Expansion \$139.0 million
- Airside Pavement Rehabilitation and Expansion \$94.6 million
- Airport Airside Equipment \$27.2 million
- Airport Combined Operations Building \$15.1 million
- Airport Passenger Boarding Bridges \$11.9 million

Projects in the Capital Plan are classified into two categories; *Maintain* and *Enhance*. The *Maintain* category is for those projects that maintain or renew existing assets whereas *Enhance* includes projects that support growth and improve service levels. Two-thirds of investment in the Capital Plan is allocated to Enhance infrastructure, while the remaining third is dedicated to Maintain existing assets.

Transportation is a Council Priority. In response, the City plans to double investment in transportation infrastructure including major road networks, active transportation, traffic safety, and transit. The City considers all road users when designing its streets. While projects may have different emphasis depending on the context - they all consider

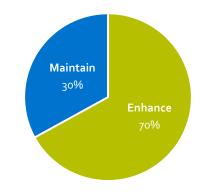


Figure 1. Enhance (Growth/New) and Maintain (Renewal) infrastructure investment. Total investment \$2.57 billion.

factors such as traffic capacity, safety, active transportation, transit, and impacts on residents and businesses. As an example, all the projects in the Transportation Accelerator Program include active transportation components - some of them significant. Improvements on Burtch Rd are focused on increasing vehicle capacity and filling gaps in the road network while also including sidewalk improvements and protected bike lanes. Improvements along Lakeshore Rd include some vehicle improvements and significant benefits to the active transportation network by filling gaps in the Lakeshore ATC between Gyro Park and the Lower Mission.

Significant investment in the next decade for Transit focuses on major transit exchanges, upgraded bus stops, and service improvements. The Transit Operation & Maintenance Facility, located on Hollywood Rd, is in the planning and preliminary design phase with expected project delivery in 2030 – 2032 timeframe. BC Transit and the City are partnering on this major project and are working together to finalize project scope, cost and funding strategy. This project will be included in the Capital Plan once these details have been finalized. In the meantime, the Hollywood Rd extension from Sexsmith to John Hindle Rd is being advanced to service the new Transit O&M Facility.

The rapid growth that pressures our infrastructure and services also contributes to financing infrastructure through Development Cost Charges (DCCs). Out of the \$2.57 billion allocated for infrastructure investment in the next decade, it is projected that 26% will be covered by DCC revenue. With the rapid rate of development, DCC revenue has risen in recent years. This prompted the City to advance several infrastructure projects earlier than anticipated in the <u>20-Year Servicing Plan</u> to keep pace with growth and revenue.

The Capital Plan is Council's funded and approved projects. These have certainty and help achieve defined service levels. In addition to the Capital Plan-ready projects, there are a number of other projects in the pre-planning stages. Many of these are being identified in the City's infrastructure Master Plans and other initiatives that are currently in-progress. Following completion of this critical step, these projects will then go through a prioritization filter, relative to service level obligations, and brought forward to Council for funding approval and inclusion in the Capital Plan.

Project	Current Status	Next Step
Transit Operations & Maintenance Facility	Planning & design led by Infrastructure BC, in partnership with the City & BC Transit	Determined by Partners. Include in Operating Budget. Construct of Hollywood Rd.
Rotary Centre for the Arts - Expansion	Third Party Leased Facilities Master Plan in- progress. Completion Q4 2024.	Informed by Master Plan.
Community Theatre Replacement	Community Task Force on the Performing Arts in- progress. Completion Q4 2024.	Determined by Task Force.
Kelowna Art Gallery Envelope Replacement	Third Party Leased Facilities Plan in-progress. Completion Q4 2024.	Informed by Master Plan.
KLO Fire Hall – New Construction	Fire Service Master Plan update in-progress. Completion Q4 2024.	Informed by Master Plan.
Rutland Fire Hall - Renovation	Fire Service Master Plan update in-progress. Completion Q4 2024.	Informed by Master Plan.
Civic Yards Replacement	Operational Facility Master Plan in-progress. Completion Q1 2025.	Informed by Master Plan
Parks Operations Yard Renewal	Operational Facility Master Plan in-progress. Completion Q2 2025.	Informed by Master Plan.
Kelowna Police Services Building Expansion	Police Services Master Plan in-progress. Completion Q1 2025.	Informed by Master Plan.
North Glenmore Policing Office	Police Services Master Plan in-progress. Completion Q1 2025.	Informed by Master Plan.
Rutland Community Policing Office	Police Services Master Plan in-progress. Completion Q1 2025.	Informed by Master Plan.
Water Treatment Facility	Land purchase planned in 2028.	Purchase land. Ongoing monitoring.
Wastewater Digester Facility	Actively working with partners to expand biosolid management.	Ongoing monitoring.

Table 2. Major projects that are currently not in the Capital Plan, but actively pursued.

The Capital Plan focuses on delivering more infrastructure and the next few years will see infrastructure investment at historic highs. The Capital Plan is ambitious, and we'll need to increase delivery capacity significantly to execute the Plan. This will require innovative procurement strategies to balance delivery capacity with the planned projects.

Capital investment is higher in the first few years of the Capital Plan and lower in the back half (Figure 2). This is intentional as the City aims to deliver more infrastructure faster but also leaving capacity in later years to bring in the projects noted above.

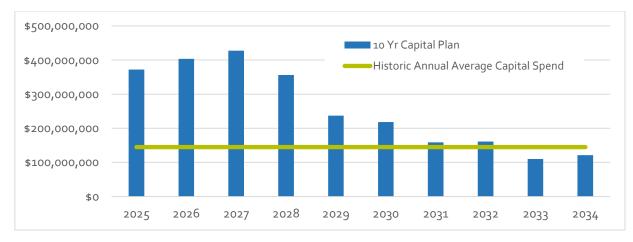


Figure 2. Forecasted Capital Plan investment by year compared to historic annual average capital expenditure.

Financial/Budgetary Considerations:

The Capital Plan is based on sound financial information and assumptions and will be used to guide the annual capital plan as part of the annual budgeting process. The Capital Plan is a forecast of infrastructure projects, as Council's approval of these projects occurs during the annual budget process.

Internal Circulation:

General Manager, Corporate Services Divisional Director, Partnership & Investment General Manager, Infrastructure Division Asset Manager Financial Planning Manager Budget Supervisor Fire Chief Fleet Services Manager Information Services Department Manager Infrastructure Operations Department Manager Parks & Buildings Planning Manager Transportation Engineering Manager Utility Planning Manager Utility Services Manager

Considerations not applicable to this report:

Legal/Statutory Authority: Legal/Statutory Procedural Requirements: Existing Policy: Personnel Implications: External Agency/Public Comments: Communications Comments: Alternate Recommendation:

Submitted by:

J. Shaw, Asset Management and Capital Planning Manager

Approved for inclusion:

J. Sass, General Manager, Corporate Services

Attachment 1 - 10-Year Capital Plan (2025 – 2034) Attachment 2 - 10-Year Capital Plan Presentation

cc: Director Strategic Investments Divisional Director, Active Living and Culture Divisional Director, Corporate and Protective Services Divisional Director, Corporate Strategic Services Divisional Director, Financial Services Divisional Director, Infrastructure Division Fire Chief Infrastructure Operations Department Manager

City of Kelowna



CITY OF KELOWNA'S 10-YEAR CAPITAL PLAN Building a City of the Future 2025 - 2034

SUMMARY

This year's annual update to 10-Year Capital Plan (Capital Plan) details the City's planned infrastructure investment to support growth, improve services, and renew existing assets for the coming decade (2025 – 2034).

The City has many competing infrastructure demands, necessitating tough decisions to optimize spending, maximize community value, and balance wants versus needs. To guide these decisions, the City maintains a rigorous capital planning process that aligns with <u>Council Priorities 2023-2026</u>, Imagine Kelowna, the Official Community Plan and infrastructure master plans.

The Capital Plan projects a total expenditure of \$2.57 billion over the next decade. 70% percent of this investment will enhance services and support growth in the community and 30% will maintain services and renew existing assets.

Guided by Council and Corporate Priorities, capital investment will focus on the following:

- Maintaining direction set by Council in last year's Capital Plan,
- Accelerating transportation & mobility infrastructure making it easier for people to get around by vehicle, transit, cycling and walking.
- Building community amenities like recreation and community centres to keep pace with Kelowna's population growth and the evolving needs of its residents.
- Parks acquisition and development with big investment plans for recreation and waterfront parks.
- Airport development.
- Reducing environmental footprint and future-proofing infrastructure to be more resilient in the face of changing climate.
- Increased investment in stormwater infrastructure and flood protection.
- Renewal of critical infrastructure.

There are several projects not in the Capital Plan for a variety of reasons. These projects require additional planning and design before being prioritized, funded, and included in subsequent capital planning cycles.

The City continues to deliver world-class infrastructure and services. Many capital projects continue to be completed; delivering on Council priorities and meeting the needs of the community.



86% Citizen satisfaction in level & quality of City services



\$2.57 Billion To enhance & maintain public infrastructure services



35% External Funding: DCCs & grants



73% Investment in Parks, Buildings, Airport & Transportation



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TERRITORY ACKNOWLEDGEMENT

We acknowledge that our community is located on the traditional, ancestral, and unceded territory of the syilx/Okanagan people.

1 OVERVIEW

The 10-Year Capital Plan (the Capital Plan) is part of the City of Kelowna's rigorous capital planning process. It aligns with Council priorities, Imagine Kelowna and the Official Community Plan and provides the framework for long-term planning and fiscal management. It is updated annually to respond to evolving community needs, maintain alignment with Council priorities and adapt to external factors like the pandemic, rapidly rising inflation, shortage of contractors and supply chain challenges.

The Capital Plan allows the City of Kelowna (the City) to look ahead and answer four fundamental questions:

- "What do we need?"
- "Why do we need it?"
- "How are we going to pay for it?"
- "How much will it cost to operate and maintain?"

Answering these questions allows the City to anticipate current and future cost pressures, stretch the limits of revenues by source, and make the necessary decisions to put in place essential infrastructure to support a future Kelowna. By doing so, this plan will help maximize infrastructure investment in the community where and when it is most needed.

CONSIDERATIONS

The Capital Plan contains infrastructure projects and programs for all 12 capital cost centres for the 10years from 2023-2032. Several documents have been used in its preparation. These include:

- Council priorities 2023 2026
- 10-Year Capital Plan 2023– 2032 (last year's plan)
- 2040 Official Community Plan
- Imagine Kelowna
- 2040 Transportation Master Plan
- 20 Year Servicing Plan & Financing Strategy
- Principles & Strategies for Financial Strength & Stability
- Infrastructure Master Plans and Asset Management Plans
- 2045 Airport Master Plan and Airport 10-Year Capital Plan



10-YEAR CAPITAL PLAN 2025 - 2034 5

FOCUS AREAS

Guided by Council and Corporate Priorities, capital investment will focus on the following areas:

- Maintaining direction set by Council in last year's Capital Plan.
- Accelerating transportation & mobility infrastructure making it easier for people to get around by vehicle, transit, cycling and walking.
- Providing community amenities like recreation and community centres to keep pace with Kelowna's population growth and the evolving needs of its residents.
- Parks acquisition and development with big investment plans for recreation and waterfront parks.
- Airport development.
- Reducing environmental footprint and future-proofing infrastructure to be more resilient in the face of changing climate.
- Increased investment in stormwater infrastructure and flood protection.
- Renewal of critical infrastructure.

INFLUENCING FACTORS & EMERGING ISSUES

Rapid Growth. Kelowna continues to be one of the fastest growing cities in Canada. It's rapidly evolving, its economy is diversifying, neighbourhoods are changing, and people are choosing new ways to move around. By 2040, Kelowna is expected to be home to another 50,000 people. This transition is exciting, bringing new energy, amenities, employment, and educational opportunities. Signs indicate this pace will continue.

Rapid growth puts pressure on the capital program as demands increase for more infrastructure to support growth. That is why this Capital Plan focuses 70% of the investment in enhancing infrastructure that will increase or improve service levels.

Renewal of Aging Assets. In this era of rapid growth and change, there are complex choices to be made. The City must find a balance between funding to support growth and improve services and funding to support renewal of existing infrastructure to maintain services. These choices are rarely easy and often involve making difficult trade-offs.

The City has a robust asset management program that tracks the age and condition of City owned assets (i.e. civic buildings, roads, bridges, sewer, water infrastructure, etc.). Some of these assets are nearing the end of their service life and will need to be renewed to maintain service levels. The City will invest 30% of the Capital Plan in infrastructure to maintain service levels. This will need to increase in the future as assets age and their condition deteriorates.

Inflation & Borrowing Costs. There are many factors influencing the Capital Plan that are beyond the City's control. These include labour shortages, supply chain challenges, inflation, and higher interest rates. Infrastructure construction costs and interest rates have increased significantly in the past few years and this places pressure on the capital program. Inflation and interest rates are reducing, but time will tell if construction costs decrease.

10-YEAR CAPITAL PLAN 2025 - 2034 6

WHAT WE ARE DOING

Listening to Council. Since this Council took office in 2022, more time has been dedicated to informing them about the process used to develop the Capital Plan and hearing from them about what is important to the community.

Alternative Funding through Partnerships, Grants & Advocacy. The City continues to pursue non-tax revenue, grants, partnerships, and advocacy to advance Council and corporate priorities. The City's Intergovernmental Relations program focuses on advocacy through the strategic development of relationships with senior levels of government to advance investments and policy changes that supports Council's priorities and City projects. Through advocacy, the City ensures priority infrastructure projects and program initiatives are consistently and proactively in front of provincial and federal ministers and their staff. As one of Canada's fastest growing communities, advocacy work includes positioning Kelowna as a leading municipality and a strong partner for senior governments to invest in.

The City's Partnerships Program is centered on building relationships and forming partnerships with a diverse array of external organizations, including businesses, non-profits, government agencies, and academic institutions. While each partnership is unique, they generally fall into one or more of the following categories: providing community facilities, programs, and services; operating and maintaining City-owned assets; and administering City funding. Through these collaborations, the City aims to enhance the quality of life for its residents and more effectively address community needs.

Planning for the Future. The Capital Plan is supported by a foundation of good planning, including:

Official Community Plan (OCP). The 2040 OCP optimizes infrastructure investment through more compact development where services can be more efficiently used by a greater percentage of the community population.

Transportation Master Plan (TMP). The 2040 TMP works with the OCP to support growth, and help residents make more efficient and sustainable transportation choices through the development of reliable transit, improved road connections, comfortable bicycle routes and walkable neighbourhoods.

Parks Master Plan (in-progress). This Master Plan will establish priorities between five park types: city-wide, recreation, community, neighbourhood and linear. As well as identify needs of different stakeholder groups and create a plan for future park development and renewal moving forward.

Strategic Facilities Master Plan (in-progress). This Master Plan will create a vision and model to assess both infrastructure renewal and new construction to match growth, assess provision and distribution of built services and amenities across the City as well as prioritize needs between the different building types.

10-YEAR CAPITAL PLAN 2025 - 2034 | 7

Asset Management & Data-Driven Decisions. The City owns and operates approximately \$7.5 billion in infrastructure assets. Efficient operation and timely renewal are critical to continued service delivery and financial sustainability. The City has advanced its asset management program and is considered one of the leaders in BC. The implementation of a computerized asset management system (Cityworks) supports service-based budgeting through data-driven decisions and inform infrastructure planning, improve operational efficiency, and extend asset service life. Small improvements make a big financial impact when you own and operate \$7.5 billion in infrastructure.

Infrastructure Standards. It is important that new infrastructure the City is building today is high quality, long lasting and state-of-art. That is why the City actively maintains its design and construction standards. The Subdivision, Development and Servicing Bylaw (Bylaw 7900) outlines these standards, and a dedicated working group continuously reviews and updates them in consultation with key stakeholders and the community.



2 FUNDED PROJECTS

INFRASTRUCTURE INVESTMENT

This Capital Plan forecasts \$2.57 billion infrastructure investment to enhance and maintain service levels.

Enhance comprises of infrastructure projects aimed at supporting growth and improving services. Maintain refers to the infrastructure needed to sustain current service levels through the renewal of existing assets.

Infrastructure required to enhance services accounts for 70% of total investment. Investment of approximately 30% is allocated to maintain existing services.

COST CENTRE FORECAST

The Capital Plan forecasts \$2.57 billion of capital investment across 12 cost centres.

- Transportation, Parks and Buildings cost centres account for 59% of overall investment to deliver on Council Priorities, invest in infrastructure renewal and meet community expectations.
- Water, Wastewater, Storm Drainage and Solid Waste is 21% to meet regulatory requirements.
- Airport is 13%.
- The remaining 7% supports Fire, Vehicles, Information Services and Real Estate & Parking.

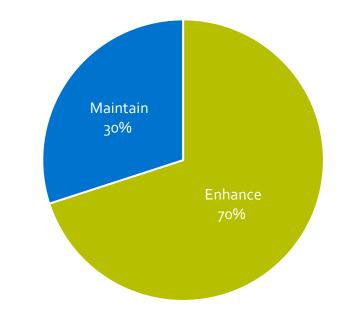
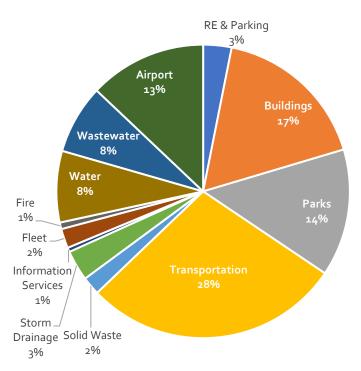


Figure 1. Enhance and Maintain investment %.



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MAJOR CHANGES FOR FUNDED PROJECTS

Overall, the City's infrastructure investment has increased \$517 million from the previous plan across 12 capital cost centres. The primary drivers for the change include:

- Doubling investment in Transportation to align with this Council Priority,
- Including current approved budgets in the Capital Plan,
- Construction inflation.

The following table shows the City's total investment for funded projects in each cost centre in this Capital Plan compared to the previous plan.

Cost Centre	Previous Plan (\$ million)	This Plan (\$ million)	Difference (\$ million)
Real Estate & Parking	\$46	\$80	\$34
Buildings	\$416	\$441	\$25
Parks	\$288	\$358	\$70
Transportation	\$373	\$726	\$353
Solid Waste	\$73	\$52	\$(21)
Storm Drainage	\$44	\$86	\$42
Information Services	\$12	\$12	\$0
Vehicle & Mobile Equipment	\$53	\$55	\$2
Fire	\$14	\$18	\$4
Water	\$147	\$201	\$54
Wastewater	\$211	\$194	\$(17)
Airport	\$371	\$342	\$(29)
TOTAL	\$2,048	\$2,565	\$517

Table 1. Summary of changes from the previous plan and this Capital Plan for funded projects (\$ million).

10-YEAR CAPITAL PLAN 2025 - 2034 | 10

Real Estate & Parking. Investment focuses on strategic land acquisition and providing state-of-the-art, well-maintained parking facilities. New parkades are planned for South Pandosy and Downtown in response to rapid growth. Overall, investment in Real Estate & Parking infrastructure is \$80 million with large investment in:

- General Land Acquisition \$18 million
- Parking Infrastructure including Electric Vehicles infrastructure \$12 million
- Downtown Parkade \$35 million
- South Pandosy Parkade \$15 million

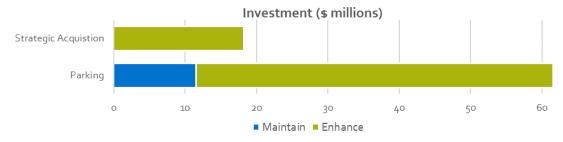


Table 2. Real Estate & Parking Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
General Land Acquisition		1,800	1,800	1,800	1,800	1,800	9,000	18,000
Marine Facilities		100	100	-	-	-	-	200
Parking Infrastructure & Facilities		3,300	600	2,100	600	2,100	2,856	11,556
PROJECTS	Total Cost							
South Pandosy Parkade	15,000	500	1,500	6,500	6,500	-	-	15,000
New Downtown Parkade	35,000	-	-	-	-	1,500	33,500	35,000
TOTAL		\$5,700	\$4,000	\$10,400	\$8,900	\$5,400	\$45,356	\$79,756

10-YEAR CAPITAL PLAN 2025 - 2034 | 11

Buildings. This is a large investment area with a total forecast at \$441 million. There are big investment plans to expand recreational, cultural, and protective services facilities to support a growing community. As well, the existing Building portfolio will see significant investment in renewal and modernization. Big projects include:

- PRC Redevelopment \$189 million
- Building Renewal \$80 million
- MNP Expansion \$43 million
- Glenmore Protective Services Building- \$39 million
- Mission Activity Centre \$28 million
- Glenmore Activity Centre \$24 million
- Rutland Lions Activity Centre \$23 million

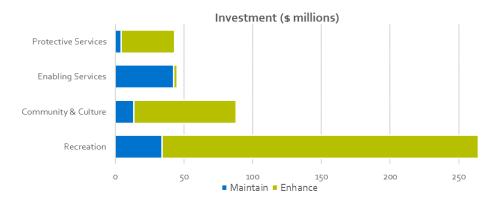


Table 3. Buildings Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Building Systems & Infrastructure		3,080	2,330	1,775	975	725	3,625	12,510
Community & Culture Facilities		230	230	230	230	230	1,150	2,300
Facilities Portfolio Planning		1,770	2,030	1,400	1,400	1,400	7,000	15,000
Placemaking		250	-	-	-	-	-	250
PROJECTS	Total Cost							
EV Infrastructure Installations	1,500	500	500	500	-	-	-	1,500
LED Lighting Upgrades	1,500	400	400	200	-	-	-	1,000
MNP Place Expansion	43,450	-	-	-	4,345	15,207	23,898	43,450
Glenmore Protective Services Building	39,000	2,700	9,450	12,150	14,700	-	-	39,000
Parkinson Recreation Centre Redevelopment	189,100	18,660	65,230	84,000	18,660	-	-	186,550
Activity Centres								
Glenmore Activity Centre	24,229	2,415	8,454	10,870	2,415	-	-	24,154
Mission Activity Centre	27,784	2,750	9,626	12,378	2,750	-	-	27,504
Rutland Lions Activity Centre	22,800	1,140	1,140	7,980	10,260	2,280	-	22,800
Building Renewal & Improvements								
City Hall	16,700	1,761	1,103	7,837	4,310	-	-	15,011
Enterprise Fire Hall #1	4,350	1,350	1,625	1,225	150	-	-	4,350
Gymnastics Centre (Rutland)	2,050	100	850	1,000	100	-	-	2,050
H2O Centre	5,270	2,674	1,960	335	-	-	-	4,969
Memorial Arena	4,650	450	2,000	2,000	200	-	-	4,650
MNP Place	7,245	7,000	200	-	-	-	-	7,200
Prospera Place	8,060	3,960	3,600	400	-	-	-	7,960
Rotary Centre for the Arts Rutland Arena	9,900	-	150 775	4,785	4,745	470	-	10,150
	7,345 1,025	2,025 125	450	4,500 450	-	-	-	7,300 1,025
Sarson's Activity Centre TOTAL	1,025					¢20,212	62E 672	\$440,683
TOTAL		\$53,340	\$112,103	\$154,015	\$65,240	\$20,312	\$35,673	ə440,083

10-YEAR CAPITAL PLAN 2025 - 2034 | 12

305

Parks. In the next 10-years, the City plans to invest \$358 million in parks creating vibrant, animated spaces for the community to connect, enjoy and experience. Big Park projects in the next 10-years include:

- Parkland Acquisition \$166 million
- Parkinson Recreation Park \$41 million
- Glenmore Recreation Future Phases \$41 million
- Dehart Park \$11 million
- Rutland Recreation Park \$8 million
- Neighbourhood Parks approximately 1 per year \$4 million/park

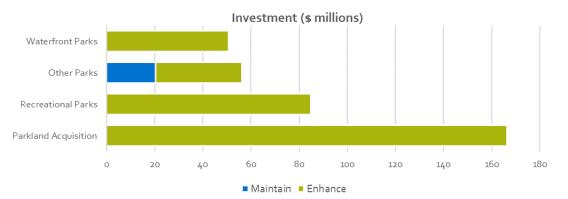


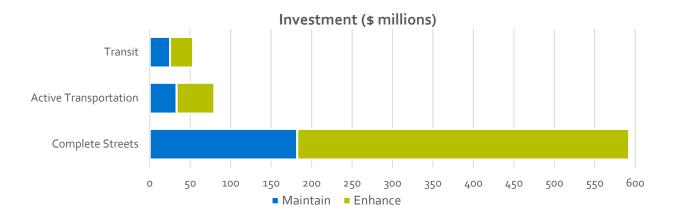
Table 4. Parks Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS		(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	Total
Park Development		447	172	3,261	172	3,261	7,038	14,351
Park Infrastructure & Facilities		1,971	2,423	1,181	2,828	1,159	10,472	20,034
Parkland Acquistion		20,823	21,618	20,823	15,180	14,385	73,515	166,344
Placemaking		1,305	705	887	110	-	-	3,007
PROJECTS	Total Cost							
Ben Lee Park	1,086	250	-	-	-	-	-	250
Burne Park	3,311	1,000	1,300	591	-	-	-	2,891
Chichester Wetland Park	3,886	195	195	3,496	-	-	-	3,886
City Park	30,765	740	1,365	6,307	8,280	3,750	9,922	30,364
Cook Beach Park	3,750	325	937	2,288	300	-	-	3,850
DeHart Park	11,480	1,818	402	134	-	-	-	2,354
Glenmore Recreation Park	41,270	9,500	3,000	7,000	7,000	3,500	-	30,000
Island Stage Rejuvenation	1,650	1,000	600	-	-	-	-	1,600
Kelowna's Newest Waterfront Park	2,060	608	1,156	196	-	-	-	1,960
Manhattan Point Park	4,915	235	235	2,827	1,413	-	-	4,710
Mill Creek Linear Park	8,727	300	1,119	1,000	1,119	1,000	4,238	8,776
Mission Recreation Park	5,543	774	3,140	1,570	-	-	-	5,484
Parkinson Recreation Park	41,162	4,115	14,409	18,523	4,115	-	-	41,162
Queensway Improvements	150	50	50	50	-	-	-	150
Rotary Beach Park	2,470	708	1,122	600	-	-	-	2,430
Rutland Recreation Park	8,360	3,893	3,406	811	-	-	-	8,110
Tower Ranch Park #2	660	-	330	330	-	-	-	660
Truswell Park	5,806	-	-	580	2,500	2,500	226	5,806
TOTAL		\$50,057	\$57,684	\$72,455	\$43,017	\$29,555	\$105,411	\$358,179

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Transportation. Transportation is a Council priority and the largest infrastructure investment area at \$726 million. The City is doubling its investment to make it easier for people to get around by vehicle, transit, cycling and walking. Notable projects include:

- Highway 33 / Clement Extension \$135 million
- Burtch Rd \$58 million
- Sutherland Rd \$52 million
- Active Transportation Corridors \$47 million
- Glenmore Rd \$43 million
- Hollywood Rd \$35 million
- Lakeshore Rd \$29 million
- Richter St \$24 million
- KLO Bridge Replacement \$18 million
- Orchard Park Transit Exchange \$17 million
- Frost Rd Ext. to Chute Lake \$5 million



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Table 5. Transportation Capital Programs and Projects summary for 2025-2034.

· · · ·			-		-			
		2025	2026	2027	2028	2029	2030-34	10-Year
PROCEMME		(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	(\$ 000)	Total
PROGRAMS		2 400	2.005	2 705	2 002	2 00 4	40.024	22.405
Active Transportation		2,408	3,005	2,785	2,982	3,084	18,931	33,195
Bridges		450	540	1,140	1,270	1,270	7,435	12,105
Road Network		8,390	11,696	12,788	14,932	16,517	105,790	170,113
Transit		616	944	1,503	1,767	3,014	17,163	25,007
Active Transporation	Total Cost							
Abbott St	12,919	-	2,475	-	414	630	9,400	12,919
Bertram St	8,489	1,620	6,869	-	-	-	-	8,489
Ethel St (Rail Trail - Cawston)	3,877	-	352	3,525	-	-	-	3,877
Leon Ave & Lawrence Ave (Waterfront - Ethel)	15,225	-	-	-	420	805	14,000	15,225
Pandosy Village (Raymer - Abbott)	4,102	-	70	168	840	3,024	-	4,102
Rutland Neighbourhood	2,000	1,000	1,000	-	-	-	-	2,000
Roads								
Burtch Rd Upgrades	58,079	12,355	29,939	5,811	210	-	9,764	58,079
Commonwealth Rd (Hwy 97 - Jim Bailey) Upgrades	13,229	313	1,474	11,443	-	-	-	13,230
Frost Rd Upgrades (w/utilities)	5,480	5,043	-	-	-	-	-	5,043
Glenmore Rd Upgrades	42,883	10,425	2,470	5,619	3,700	-	20,669	42,883
Glenwood Ave Upgrades (w/utilities)	2,050	2,050	-	-	-	-	-	2,050
Highway 33 / Clement Extension	135,300	2,800	3,000	4,500	75,000	45,000	5,000	135,300
Hollywood Rd Upgrades	34,612	5,667	13,600	3,750	575	3,515	7,505	34,612
KLO Bridge Replacement (w/utilities)	18,364	16,564	1,800	-	-	-	-	18,364
Lakeshore Rd Upgrades	29,272	4,690	8,920	8,834	-	-	5,368	27,812
Morrision Ave Upgrades (w/utilities)	1,950	1,950	-	-	-	-	-	1,950
Parkinson Recreation Centre Road Improvements	3,290	400	2,537	-	-	-	-	2,937
Richter St Upgrades	23,785	-	450	1,120	1,120	1,120	19,975	23,785
Stewart Rd Upgrades	9,842	800	-	-	280	4,632	-	5,712
Stockwell Upgrades (w/utilities)	1,150	1,150	-	-	-	-	-	1,150
Sutherland Rd Upgrades	51,534	130	5,150	-	4,038	4,800	-	14,118
Intersections								
Clement & Gordon Intersection	4,800	-	-	300	500	4,000	-	4,800
Longhill & Rifle Roundabout	3,000	-	68	168	2,764	-	-	3,000
Springfield & Belgo Roundabout	2,220	-	-	2,220	-	-	-	2,220
Springfield & Dilworth Improvements	10,945	2,472	2,150	6,323	-	-	-	10,945
Springfield & Rutland Roundabout	2,167	-	88	2,079	-	-	-	2,167
Transit								
Mission Recreation Transit Exchange & Mobility Hub	3,750	750	1,000	2,000	-	-	-	3,750
Okanagan College Exchange Capacity Expansion	2,300	500	800	1,000	-	-	-	2,300
Orchard Park Exchange	17,449	30	661	-	1,288	-	15,470	17,449
Rutland Park & Ride, Mobility Hub, Operations Facility	2,992	992	1,000	1,000	-	-	-	2,992
YLW Transit Hub	3,010	-	1,005	1,005	-	-	-	2,010
TOTAL		\$83,565	\$103,063	\$79,081	\$112,100	\$91,411	\$256,470	\$725,690

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Solid Waste. Efficient and effective daily operations and long-range capital planning ensures the Glenmore Landfill will continue to serve Kelowna and surrounding communities well into the future. That is why \$52 million worth of capital investment is planned in the next 10 years to ensure the site is future-ready and there are continued plans to:

- Expand the landfill footprint.
- Manage the Stockpile and Reprocessing Areas.
- Implement a new stormwater management program.

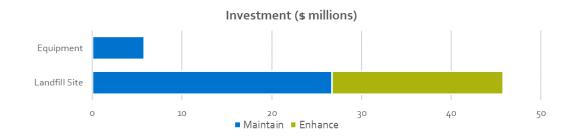


Table 6. Solid Waste Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Solid Waste Equipment		1,150	1,050	450	450	450	2,250	5,800
Solid Waste Infrastructure & Facilities		4,600	4,200	4,150	1,885	1,860	10,025	26,720
PROJECTS	Total Cost							
Composting System Expansion	9,200	700	3,000	3,700	500	1,300	-	9,200
Surface Water Bypass	9,850	4,750	-	350	4,750	-	-	9,850
TOTAL		\$11, 200	\$8,250	\$8,650	\$7,585	\$3,610	\$12,275	\$51,570

Storm Drainage. Investment in drainage infrastructure will utilize natural and engineered solutions to improve resiliency, flood mitigation and water quality which are increasingly important in the face of a changing climate. Recent capital investment to improve Mill Creek capacity and divert more flow to Mission Creek through an upgraded diversion structure prevents Mill Creek from spilling its banks during periods of heavy rainfall. To keep going with this critical work, Storm Drainage plans to invest \$86 million in the next 10 years.

- Mill Creek Flood \$51 million.
- Renewal of aging drainage infrastructure.

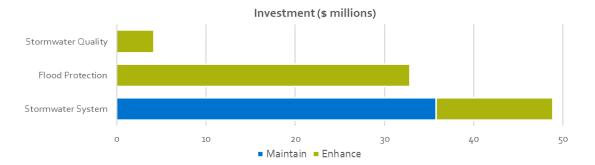


Table 7. Storm Drainage Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Stormwater Network & Facilities		3,627	4,690	4,300	5,950	3,700	13,500	35,767
Stormwater Quality		219	360	500	400	500	2,200	4,179
PROJECTS	Total Cost							
Frost Rd Upgrades (w/utilities)	750	750	-	-	-	-	-	750
Mill Creek Flood Protection	51,395	7,080	14,800	10,950	-	-	-	32,830
Stormwater System Upgrades	12,380	110	990	300	2,710	5,470	2,800	12,380
TOTAL		\$11,786	\$20,840	\$16,050	\$9,060	\$9,670	\$18,500	\$85,906

310

Information Services. Information services is a small but important investment area as the City continues its digital-first transformation. To get there, investment of \$12 million is planned in the next 10 years. As the City embraces more cloud-based technology, the focus is n:

- Major systems projects to eliminate legacy systems.
- Refreshing the user-experience by streamlining the access to information.
- Enabling staff to be more mobile by purchasing hardware that allows for greater flexibility.

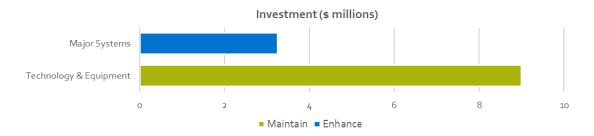


Table 8. Information Services Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Communications Systems		200	200	200	200	200	1,000	2,000
Front Office Equipment		550	550	550	550	550	2,750	5,500
Major Systems		500	500	500	250	250	1,250	3,250
Server & Data Storage		150	150	150	150	150	750	1,500
PROJECTS	Total Cost							
N/A		-	-	-	-	-	-	-
TOTAL		\$1,400	\$1,400	\$1,400	\$1,150	\$1,150	\$5,750	\$12,250

Vehicle or Mobile Equipment. This cost centre funds all the City's vehicles and equipment except for fire trucks and equipment. The City maintains a reliable, sustainable fleet and continues to modernize it by going Green to reduce GHGs by purchasing EV, hybrid or hydrogen vehicles where available. The \$55 million capital investment will go towards:

Investment (\$ millions)

Replacing aging vehicles and adding to the fleet to accommodate growth.

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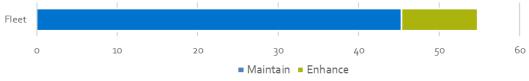


Table 9. Vehicles or Mobile Equipment Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Vehicles & Equipment - Growth		1,257	1,179	888	859	799	4,470	9,452
Vehicles & Equipment - Renewal		3,910	4,100	4,290	4,500	4,720	23,805	45,325
PROJECTS	Total Cost							
N/A		-	-	-	-	-	-	-
TOTAL		\$5,167	\$5,279	\$5,178	\$5,359	\$5,519	\$28,275	\$54,777

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Fire. The well-established capital program at the Fire Department ensures fire trucks, equipment and communication systems remain up-to-date in order to keep firefighters and the community safe. It is a relatively small capital program as most costs are operational and fire stations are accounted for in the Buildings cost centre. Investment in the Fire cost centre is forecasted at \$18 million. Big projects include:

- Vehicle/Equipment Renewal
- Communication Systems
- New Fire trucks and equipment to support growth

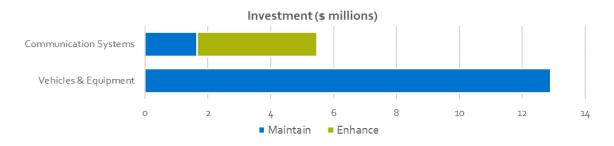


Table 10. Fire Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Communications Systems		92	850	552	11	11	145	1,661
Vehicles & Equipment		1,091	854	204	3,717	2,806	4,229	12,901
PROJECTS	Total Cost							
NG911 Implementation	3,810	1,905	1,905	-	-	-	-	3,810
TOTAL		\$3,088	\$3,609	\$756	\$3,728	\$2,817	\$4,374	\$18,372

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Airport. Anticipated investment in infrastructure and equipment over the next 10 years of \$342 million ensures additional air service can be accepted to support the continued growth of the regional economy. Significant projects over the next 10 years include:

- Airport Terminal Building Expansion \$139.0 million
- Airside Pavement Rehabilitation and Expansion \$94.6 million
- Airport Airside Equipment \$27.2 million
- Airport Combined Operations Building \$15.1 million
- Airport Passenger Boarding Bridges \$11.9 million

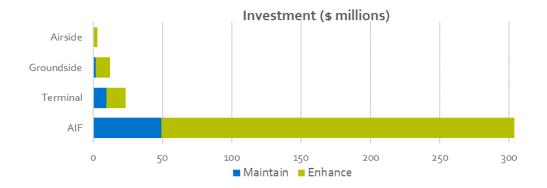


Table 11. Airport Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS					(0000)	(0000)	(0000)	- ocui
Airside Pavement Rehabilitations & Expansion		10,251	2,874	15,590	15,862	16,952	33,057	94,586
Airport Airside Equipment		3,973	519	3,427	4,454	1,648	13,203	27,224
Lifecycle Replacement & Upgrades		5,641	969	3,901	771	1,610	5,288	18,180
Loading Bridges		707	2,368	247	2,828	2,938	2,763	11,851
Carbon Neutral Initiatives		1,229	4,501	2,959	100	100	500	9,389
Land Development		113	-	-	-	-	3,367	3,480
PROJECTS	Total Cost							
Airport Terminal Building Expansion Phase 1	128,467	39,642	26,624	5,920	4,477	-	-	76,663
Airport Terminal Building Expansion Phase 2	64,558	-	-	-	3,527	-	61,031	64,558
Combined Operations Building	24,300	11,250	3,800	-	-	-	-	15,050
Airside Lighting and Supporting Infrastructure	8,950	8,710	-	-	-	-	-	8,710
Mill Creek Flood Protection	5,103	871	1,650	2,367	-	-	-	4,888
Airport Hotel and Parkade Enabling Works	4,600	3,381	-	-	-	-	-	3,381
Child Care Facility Expansion	2,550	2,550	-	-	-	-	-	2,550
Integrated Operations Centre	1,970	-	278	1,692	-	-	-	1,970
TOTAL		\$88,318	\$43,583	\$36,103	\$32,019	\$23,248	\$119, 20 9	\$342,480

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Water. Infrastructure investment is forecasted at \$201 million that focuses on delivering high-quality drinking water and reliable irrigation water to all City customers. This is evident in the upcoming planned transition of the Glenmore Ellison Improvement District (GEID) to the City's water utility which improves supply and resiliency through better interconnectivity and interoperability of both systems. In the next 10 years, infrastructure to:

- Support growth \$97 million
- Renew existing infrastructure \$34 million.

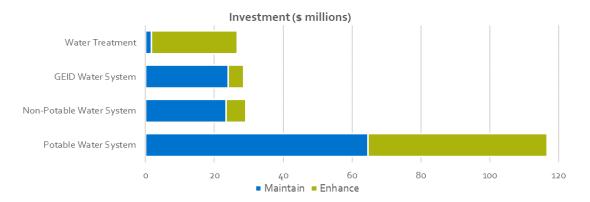


Table 12. Water Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
GEID Water Network & Facilities		-	-	3,000	3,000	3,000	15,000	24,000
Non-Potable Water Network & Facilites		1,406	2,640	2,740	3,240	3,240	10,200	23,466
Potable Water Network & Facilities		7,570	6,100	6,350	8,250	7,900	28,500	64,670
Water Treatment		1,285	400	-	-	-	-	1,685
PROJECTS	Total Cost							
Frost Rd Upgrades (w/utilities)	200	200	-	-	-	-	-	200
GEID Integration	5,150	3,850	600	-	-	-	-	4,450
KLO Bridge Replacement (w/utilities)	2,000	2,000	-	-	-	-	-	2,000
Non-Potable Water System Upgrades	5,700	400	2,000	3,300	-	-	-	5,700
Potable Water System Upgrades	52,306	2,897	5,450	10,500	7,450	10,000	13,500	49,797
Water Treatment Facility (Land Only)	25,000	-	-	-	25,000	-	-	25,000
TOTAL		\$19,608	\$17,190	\$25,890	\$46,940	\$24,140	\$6 <mark>7,200</mark>	\$200,968

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Wastewater. The City treats close to 40 million litres of wastewater from homes, businesses, and industry each day. With the community's expected growth, this volume will continue to increase. The focus is to ensure environmental stewardship, community preparedness and resiliency while meeting regulatory requirements. That is why the City plans to invest \$194 million in the next 10 years. Major investment includes:

- Infrastructure to support growth and renewal of aging assets.
- Septic removal projects to provide wastewater service to the remaining areas of the City that are still on aging septic systems.

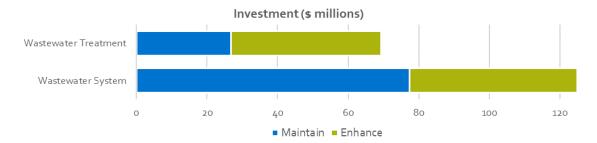


Table 13. Wastewater Capital Programs and Projects summary for 2025-2034.

		2025 (\$ 000)	2026 (\$ 000)	2027 (\$ 000)	2028 (\$ 000)	2029 (\$ 000)	2030-34 (\$ 000)	10-Year Total
PROGRAMS								
Wastewater Network & Facilities		4,637	5,488	9,950	8,707	8,086	40,430	77,298
Wastewater Treatment		5,615	4,250	3,000	2,000	2,000	10,000	26,865
PROJECTS	Total Cost							
Frost Rd Upgrades (w/utilities)	100	100	-	-	-	-	-	100
Hydro-Vac Disposal Facility	2,500	250	1,000	1,250	-	-	-	2,500
KLO Bridge Replacement (w/utilities)	1,000	800	200	-	-	-	-	1,000
Sewer Connection Areas	25,196	6,958	2,981	380	-	-	-	10,319
Wastewater System Upgrades	41,775	19,794	11,764	1,600	-	300	2,700	36,158
WWTF Expansion	40,000	500	500	1,000	10,000	10,000	18,000	40,000
TOTAL		\$38,654	\$26,183	\$17,180	\$20,707	\$20,386	\$71,130	\$194,240

OPERATIONS & MAINTENANCE IMPACTS

Infrastructure investment decisions consider asset lifecycle costs which includes both capital and operating expenses. Municipal infrastructure is designed to last a long time, varying from 20 - 100 years, and the operating expense can amount to 70 - 80% of the lifecycle cost. This is why it is important to consider operational impacts when making capital investment decisions.

The Capital Plan forecasts \$1.5 billion in infrastructure to enhance service levels and accommodate growth. This enhanced infrastructure may require additional funding to operate and maintain. The operational impacts for the General Fund and Utilities will require approximately \$30.05 million and \$11.35 million respectively of additional annual funding by 2034. The General Fund cost centres will be primarily funded by taxation while Utilities and Solid Waste will be accounted for in their respective utility funding models.

Renewal of existing infrastructure is assumed to have no operational impacts because operational budgets are currently in place to support existing infrastructure.

	Cost Centre	Enhanced Service Level Capital Investment (\$ million)	O&M Capital Investment % (10-Year Average)	O & M Forecast by 2034 (\$ million)
	Real Estate & Parking	\$68	3.88%	\$2.64
	Buildings	\$346	1.48%	\$5.12
	Parks	\$338	2.98%	\$10.07
General Fund	Transportation	\$485	2.08%	\$10.09
	Storm Drainage	\$50	3.54%	\$1.77
	Information Services	\$3	3.02%	\$0.09
	Vehicles & Equipment	\$9	2.99%	\$0.27
	TOTAL	\$1,299	2.31%	\$30.05
Utilities	Solid Waste (Self-funded)	\$19	11.15%	\$2.12
& Self-	Water (Utility)	\$90	2.24%	\$2.02
Funded	Wastewater (Utility)	\$87	8.09%	\$7.04
	TOTAL	\$196	5.79%	\$11.35

Table 14. Forecasted operational and maintenance (O&M) impacts for each service area based on historical data.

Information for Airport and Fire cost centres not included.

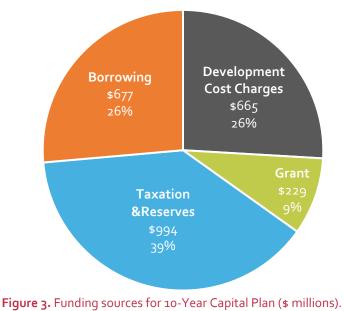
3 FUNDING SOURCES

FUNDING SOURCES

Funding for the Capital Plan comes from 4 primary sources totaling \$2.57 billion. Approximately 35% of funding is from external sources comprised of Development Cost Charges and Grants from senior governments. City funding sources include General Taxation and Reserves and Borrowing totaling approximately 65%.

General Taxation and Reserves

General Taxation and Reserves fund approximately \$994 million (39%) of the plan. These sources are grouped due to similarities in funding flexibility permitting the City discretion in meeting its strategic financial plan to help ensure equity between current and future taxpayers. The primary sources in the Reserve category include the General Fund, Restricted Reserves and the user pay funded Water, Wastewater and Airport Utilities.



Total \$2.57 billion.

Development Cost Charges

Development cost charge (DCC) funding accounts for \$665 million (26%) of all capital investment. Eligible road, storm, sewer, water and park projects align with the 20-Year Servicing Plan & Financing Strategy and growth forecast in the 2040 Official Community Plan.

Borrowing

Debenture borrowing of \$677 million (26%) is forecasted to fund major one-time capital projects such as the Building Stronger Kelowna suite of recreation projects. The exact timing and allocation of debt will be evaluated continually as projects near phases of significant cash outlay and monitored against targeted Council approved debt limits and prevailing interest rates.

Grants

A total of \$229 million (9%) in this Capital Plan is project to fund the plan from various provincial and federal grant programs; these includes project specific grants such as the Disaster Mitigation Assistance Fund for works along Mill Creek, to the more generalized Federal infrastructure funding streams like the Housing Accelerator Fund and Community Works Fund (previously known as "gas tax") and Provincial Growing Communities Fund. Grants will only be pursued for the City's priority projects and grant funding will not increase the scope of a project without Council endorsement. This plan's long-term financial strategy relies on unconditional grant opportunities only.

4 PROJECTS NOT IN THE PLAN

FUTURE CAPITAL PLANS

The Capital Plan is Council's funded and approved projects. These have certainty and help achieve defined service levels. In addition to the Capital Plan-ready projects, there are a number of other projects in the pre-planning stages. Many of these are being identified in the City's infrastructure Master Plans and other initiatives that are currently in-progress. Following completion of this critical step, these projects will then go through a prioritization filter, relative to service level obligations, and brought forward to Council for funding approval and inclusion in the Capital Plan. The following table summarizes major projects not in the Capital Plan and outlines anticipated outcomes.

Table 15. Major projects details currently not in the Capital Plan.

Project	Current Status	Next Step
Transit Operations &	Planning & design led by Infrastructure BC, in	Determined by Partners.
Maintenance Facility	partnership with the City & BC Transit	Include in Operating Budget.
Data w Cantus fautha	Third Datty Leased Casilities Master Dian in	Construct of Hollywood Rd.
Rotary Centre for the	Third Party Leased Facilities Master Plan in-	Informed by Master Plan.
Arts - Expansion Community Theatre	progress. Completion Q4 2024. Community Task Force on the Performing Arts in-	Determined by Task Force.
Replacement	progress. Completion Q4 2024.	Determined by Task Force.
Kelowna Art Gallery	Third Party Leased Facilities Plan in-progress.	Informed by Master Plan.
Envelope Replacement	Completion Q4 2024.	informed by Master Flan.
KLO Fire Hall – New	Fire Service Master Plan update in-progress.	Informed by Master Plan.
Construction	Completion Q4 2024.	
Rutland Fire Hall -	Fire Service Master Plan update in-progress.	Informed by Master Plan.
Renovation	Completion Q4 2024.	,
Civia Varda Danla concent	Operational Facility Master Plan in-progress.	Informed by Master Plan
Civic Yards Replacement	Completion Q1 2025.	
Parks Operations Yard	Operational Facility Master Plan in-progress.	Informed by Master Plan.
Renewal	Completion Q2 2025.	
Kelowna Police Services	Police Services Master Plan in-progress.	Informed by Master Plan.
Building Expansion	Completion Q1 2025.	
North Glenmore	Police Services Master Plan in-progress.	Informed by Master Plan.
Policing Office	Completion Q1 2025.	
Rutland Community	Police Services Master Plan in-progress.	Informed by Master Plan.
Policing Office	Completion Q1 2025.	Durchass land
Water Treatment	Land purchase planned in 2028.	Purchase land.
Facility Wastowator Digostor	Actively working with partners to expand biosolid	Ongoing monitoring.
Wastewater Digester Facility	Actively working with partners to expand biosolid management.	Ongoing monitoring.
racincy	management.	

Capital Project Delivery

The Capital Plan focuses on delivering more infrastructure and the next few years will see infrastructure investment at historic highs. The Capital Plan is ambitious, and we'll need to increase delivery capacity significantly to execute the Plan. This will require innovative procurement strategies to balance delivery capacity with the planned projects.

10-YEAR CAPITAL PLAN 2025 - 2034 | 26

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As shown in Figure 4 below, capital investment is higher in the first few years of the Capital Plan and lower in the second half. This strategy supports the City's goal to deliver more infrastructure faster while also leaving capacity in future years to bring in the projects noted above.

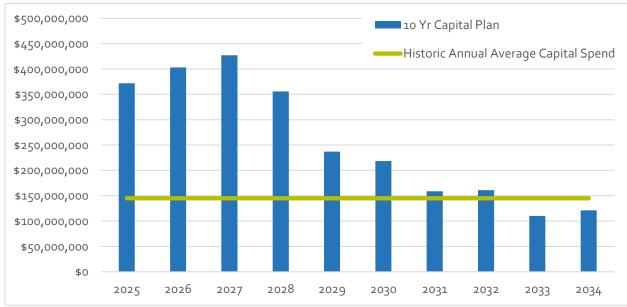


Figure 4. Forecasted Capital Plan investment by year compared to historic annual average capital expenditure.

Determining the Deficit

Previously, the Capital Plan presented Priority 1 projects (funded) and Priority 2 projects (unfunded). Priority 2 projects were used to calculate the Infrastructure Deficit (ID), annually reported to the Council. The ID quantifies the City's funding responsibility for all P2 projects after deducting contributions from external sources like DCCs, grants, utilities, or partnerships. Staff are currently reassessing the methodology for determining the ID, as it encompasses several variables. The following table is from last year's Capital Plan and is reported here for reference.

Table 16. Summary of Infrastructure Deficit (ID) by year (\$ million).

	2018	2019	2020	2021	2022	2023
ID (\$millions)	\$463	\$396	\$388	\$430	\$610	\$612
ID % of funded capital	44%	31%	29%	29%	37%	30%





1435 Water Street Kelowna BC V1Y 1J4 TEL: 250-469-8500 ask@kelowna.ca

10-Year Capital Plan Final Review & Adoption

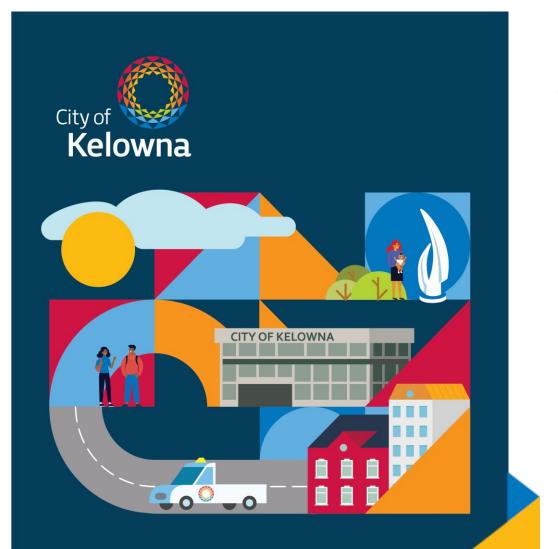
Bernard

September 9th, 2024

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Agenda

- ► Timeline
- Capital Plan overview
- Guidance received from Council
- ► Follow-up

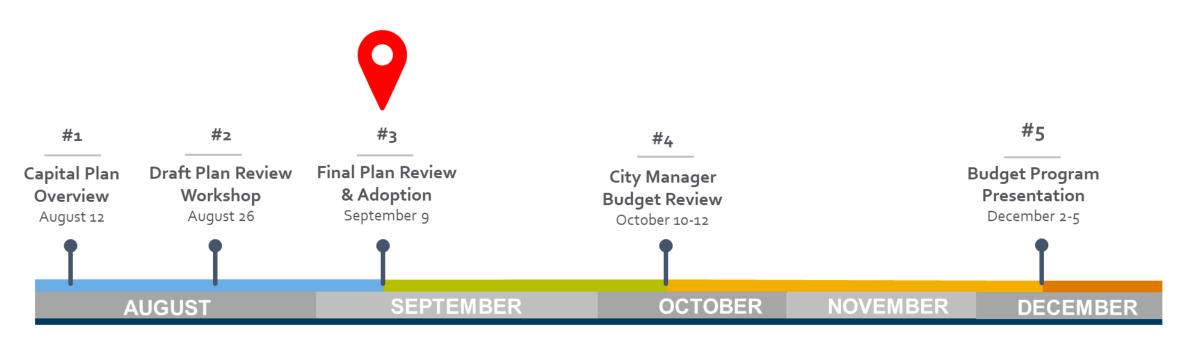


CITY OF KELOWNA'S 10-YEAR CAPITAL PLAN Building a City of the Future 2025-2034





Roadmap to Preliminary Budget







10-Year Infrastructure Investment Forecast





\$2.57 Billion investment in new, upgraded & renewed public infrastructure



73% Allocated to Transportation, Buildings, Parks & Airport



3570 External Funding DCCs, partnerships & grants



Last Capital Plan This Capital Plan **Capital Cost Centre** (\$ million) (\$ million) **Transportation** \$ 726 \$ 373 **Buildings** 416 \$ \$ 441 Parks 288 \$ 358 \$ Airport \$ 371 \$ 342 Water \$ 147 \$ 201 Wastewater \$ 211 \$ 194 **Stormwater** 86 \$ \$ 44 **Real Estate** 46 80 \$ \$ Vehicles \$ \$ 53 55 Solid Waste \$ 73 \$ 52 Fire 18 \$ \$ 14 Information Services \$ 12 12 \$ TOTAL \$ 2,048 \$ 2,565

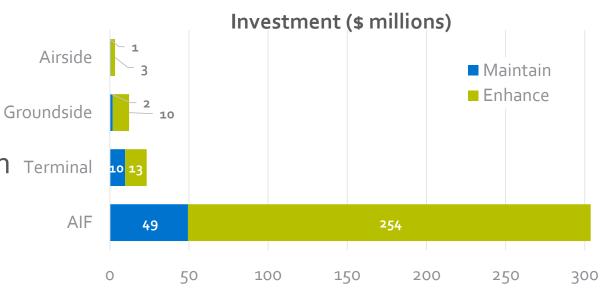


Kelowna International Airport



Continuing to be Your Link to the World.

- Investment
 - ▶ \$342 million
- Big Projects & Programs
 - Airport Terminal Building Expansion Terminal
 - Airside Pavement Rehabilitation
 & Expansion
 - Airport Airside Equipment
 - Airport Combined Operations Building
 - Airport Passenger Boarding Bridges

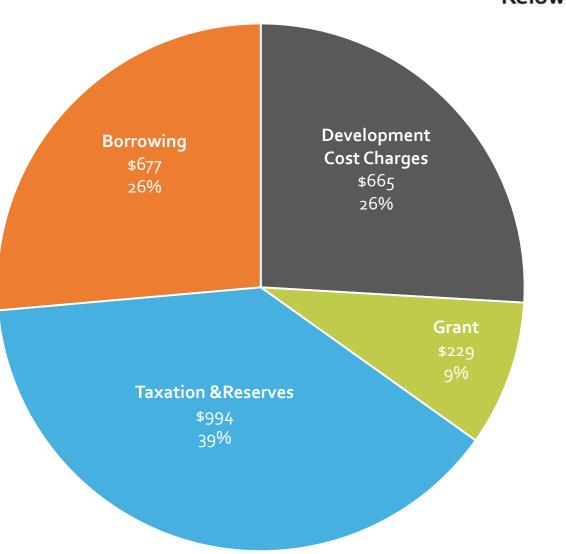


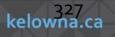




Funding the Capital Plan

- External funding: 35%
- ► General taxation & Reserves: 39%
- ► Borrowing: 26%







What we heard from Council

- Identify timing of the Transit Operation & Maintenance Facility
- Projects not in the Capital Plan should be clearly identified
- Project delivery needs to keep pace with revenue
- Maintain & Enhance Service Level definition

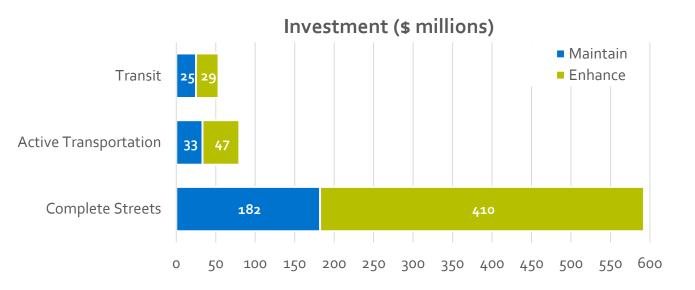


Transit

- Investment
 - ▶ \$54 million
- Projects & Programs
 - Expanded exchanges
 - Upgraded bus stop & amenities
 - Highways 97 & 33 routes
- Roads for Buses
 - Hollywood Rd
 - Richter St
 - Sutherland Rd
 - Highway 33/Clement Ext
- Update on Transit Operations & Maintenance Facility



kelowna.ca



Transit Operation & Maintenance Facility



► Timeline

- 2022: Planning & Preliminary Design started (\$3.65 million)
- 2024: Conceptual Site Layout & Functional Plan to be finalized
- 2027: Construction to start
- 2030-2032: Targeted completion date
- Partners & Financing
 - BC Transit, Infrastructure BC & City of Kelowna
 - BC Transit pursuing grant from new Canada Public Transit Fund (CPTF)
 - City's share to be funded through lease as part of Annual Operating Agreement or through one-time contribution or combination of two





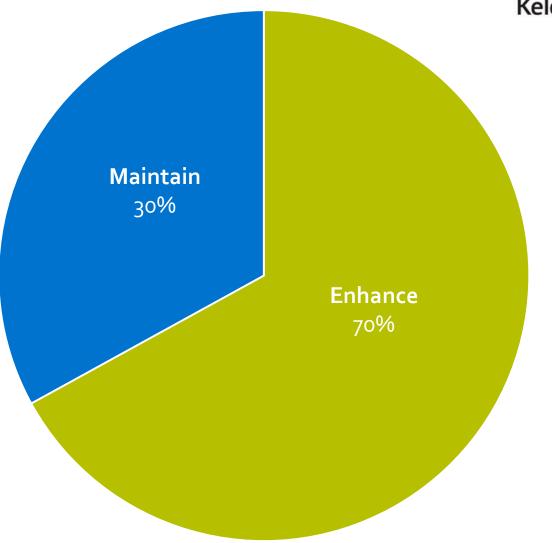
Service Levels

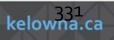
► Maintain

- Renewal of existing assets
- Sustain services

► Enhance

- Supports growth
- Improve services





Master Plans in the Works



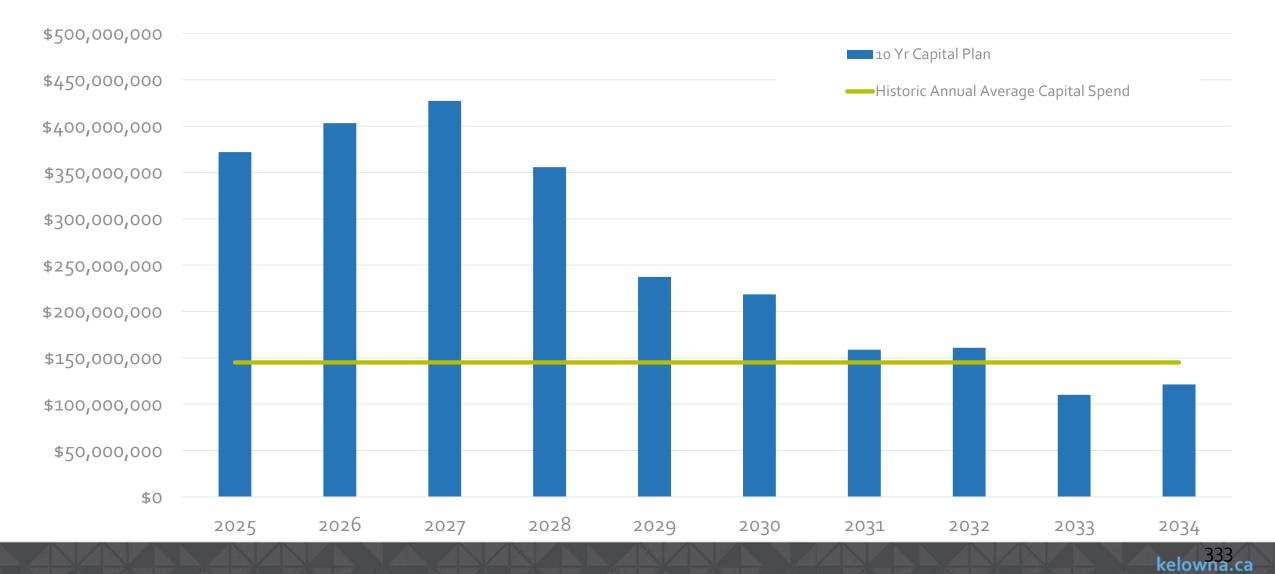


Master Plan	Expected Completion Date
Transit Operations & Maintenance Facility	Q4 2024
Community Task Force on Performing Arts	Q4 2024
Third Party Leased Facilities	Q4 2024
Fire Services	Q4 2024
Police Services	Q1 2025
Operational Facilities	Q2 2025
Utility Facilities	TBD





Capital Investment





Questions?

For more information, visit kelowna.ca.



Report to (Council
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Date:	September 9, 2024
То:	Council
From:	City Manager
Subject:	Amendment to Kelowna-Vernon Biosolids Management Agreement
Department:	Utility Services

Recommendation:

THAT Council receives for information, the report from Utility Services dated September 9, 2024, with respect to the Regional Biosolids Composting Facility Joint Operating Agreement with the City of Vernon;

AND THAT the Mayor and City Clerk be authorized to execute the revised updated Regional Biosolids Composting Facility Joint Operating Agreement between the Cities of Vernon and Kelowna dated April 4, 2024.

Purpose:

To amend the existing Regional Biosolids Composting Facility Joint Operating Agreement between Kelowna and Vernon.

Background:

The Regional Biosolids Composting Facility (RBCF) is owned by both the City of Kelowna and the City of Vernon and is operated by the City of Kelowna. The RBCF manages the biosolids produced by the Cities of Vernon and Kelowna's wastewater treatment facilities, and using other feedstocks such as ground branches, hog fuel and white wood, creates a Class A compost marketed as OgoGrow[™]. The specifics of typical contractual details between the Municipalities are detailed in the current Joint Operating Agreement, dated November 1, 2011 (the Agreement). The Agreement outlines items such as funding allocation, commercial terms, mechanism for withdrawal from the agreement, insurance requirements and other obligations for the two cities.

Discussion:

At the request of the Joint Biosolids Advisory Committee (JBAC), staff reviewed the existing Agreement to ensure that it reflects current operations and processes, and to clarify Section 3, Withdrawal From Facility.

City Manager September 9, 2024 Page **2** of **2**

An initial review of the Agreement was performed by the JBAC, who requested that Vernon and Kelowna staff prepare an updated Agreement to reflect current site and operating conditions. These proposed amendments were reviewed at the April 2024 JBAC meeting, and the resulting comments from the JBAC members were incorporated into the final draft agreement found as Attachment 1 – Draft Regional Biosolids Composting Facility Joint Operating Agreement. The summary and rationale for each proposed change can be found in Attachment 2.

Conclusion:

Under the terms of the existing Agreement Kelowna and Vernon have been very successful in transforming biosolids into a valuable nutrient rich compost at a facility that acts as a model operation in the province. This successful partnership is expected to continue for the foreseeable future. Minor edits to our operating agreement clarify our collective commitment to the long-term operation of this facility.

Internal Circulation: City Clerks

Considerations applicable to this report: *Financial/Budgetary Considerations:* The agreement updates have no cost implications from the current agreement.

Considerations not applicable to this report: Legal/Statutory Authority: Legal/Statutory Procedural Requirements: Existing Policy: Consultation and Engagement: Communications Comments:

Approved for inclusion:	M. Logan, General Manager, Infrastructure
Reviewed by:	K. Van Vliet, Utility Services Department Manager
Submitted by:	Scott Hoekstra, Landfill & Compost Operations Manager

REGIONAL BIOSOLIDS COMPOSTING FACILITY JOINT OPERATING AGREEMENT

THIS AGREEMENT dated for reference April 4, 2024

BETWEEN:

CITY OF KELOWNA

City Hall 1435 Water Street Kelowna, BC V1Y1J4 ("Kelowna")

AND:

CITY OF VERNON City Hall 3400 - 30th Street Vernon, BC V1T5E6 ("Vernon")

WHEREAS:

A. Kelowna and Vernon are both local governments pursuant to the *Local Government Act, R.S.B.C.* 1996 c 323 (the "Local Government Act");

B. Both Kelowna and Vernon (referred to hereafter collectively as the "Municipalities" or individually as a "Municipality") are responsible for wastewater treatment and management within their respective corporate boundaries as well as limited areas outside of their corporate boundaries;

C. The parties have cooperated to establish a regional biosolids composting facility (hereinafter called the "Facility") which will serve the long-term needs of both Municipalities in dealing with biosolids from their respective wastewater treatment facilities; the Vernon Water Reclamation Centre ("VWRC") and the Kelowna Wastewater Treatment Plant ("KWWTP");

D. The Facility is generally described as an aerated static pile biosolids composting facility designed to produce a Class A biosolids compost suitable for unrestricted distribution;

E. The Facility, as constructed, has processing capacity until and including the 2018 year for dewatered biosolids production from the KWWTP and VWRC;

F. The Facility has been designed to accommodate projected dewatered biosolids production in the 10-year horizon from the KWWTP and VWRC and incremental expansion of the aeration capacity at the Facility will be required;

G. Kelowna and Vernon have entered into a Regional Biosolids Composing Facility Joint Operating Agreement made the 1st day of June 2007, which outlines the obligations and commitments of each of them with respect to the Facility (the "Original Operating Agreement"), which was amended in 2011 (the "2011 Agreement") and now wish to enter into this agreement to replace the 2011 Agreement.

INCONSIDERATION of the mutual premises and assurances set out herein, the Municipalities AGREE AS FOLLOWS:

1. NATURE OF AGREEMENT AND SCHEDULES

a. Vernon and Kelowna agree that this agreement sets out the mutual understanding of the two Municipalities with respect to the operation and future expansion of the Facility, and the future acquisition of the property on which a portion of the Facility has been constructed and other property to enable such expansion.

b. Each Municipality acknowledges and agrees that future expansion of the Facility or the future acquisition of the property on which a portion of the Facility has been constructed and certain other property for further Facility expansion may necessitate further approvals or consents of each Municipality and that this agreement does not in any way fetter or limit the discretion of the City Council of each Municipality to approve the need for further expenditures, borrowing or the need for third party consents with respect to such future expansion and acquisitions.

c. The following schedules shall form part of, and be incorporated into, the terms of this agreement:

Schedule A: Commonage Compost Site Equipment Allocation

Schedule B: Fire Protection Terms of Service

2. TERMS

- a. Both Kelowna and Vernon agree to participate in the operation of the Facility unless either Municipality withdraws in accordance with section 3, or this agreement is terminated in accordance with section 2.c. or section 21 below.
- b. The effective date of this agreement is November 1, 2011.
- c. This agreement will remain in effect until terminated by mutual agreement or until either Kelowna or Vernon wish to withdraw from the Facility as detailed in section 3 below.
- d. Vernon agrees and acknowledges that Kelowna is the day to day "Operator" of the Facility.

3. WITHDRAWAL FROM FACILITY

a. A Municipality may elect to withdraw from this agreement (hereinafter referred to as the "Withdrawing Municipality") after December 31, 2018 provided that the Withdrawing Municipality provides at least one year's written notice to the other Municipality (hereinafter referred to as the "Remaining Municipality") and upon doing so, the Withdrawing Municipality's obligations under this agreement will cease at the conclusion of the one year's notice, save as expressly provided herein.

b. The Withdrawing Municipality will have no claim for compensation of any kind from the Remaining Municipality for any capital contributions, unless otherwise agreed to in writing by the Municipalities. With respect to any parcels of land upon which the Facility is located at the time of withdrawal that are jointly owned by the Municipalities, the Withdrawing Municipality will continue to have whatever ownership interest it has in such land pursuant to the Land Acquisition Agreement between the Municipalities dated for reference July 31, 2012 (the "Land Acquisition Agreement"), however, the Remaining Municipality will be permitted to continue to use such parcels of land for the purposes of the Facility.

c. The Remaining Municipality shall retain the Lease, the Option/RFR and the RFR (as per terms defined in section 5 below) to the extent they are still in force. The withdrawal by the Withdrawing Municipality shall operate as an assignment of all of its rights under those agreements to the Remaining Municipality. The Withdrawing Municipality shall execute and deliver to the Remaining Municipality any documents, deeds, instruments and do and perform such acts as may be reasonably necessary to permit the Remaining Municipality to exercise the rights given to it under those agreements. The Withdrawing Municipality shall have no claim for compensation of any kind from the Remaining Municipality with regards to these rights.

d. If, at any time, both Municipalities elect to no longer participate in the Facility, all costs associated with the demobilization of the Facility and restoration of the site will be shared as if they were a capital cost under section 14.d below and any revenue generated from the disposition of the assets of the Facility will be divided between the Municipalities in the same manner, except with respect to any parcels of land upon which the Facility is located, if such parcels are sold, the revenue generated from such sale will be shared in accordance with each Municipality's ownership interest as determined under the Land Acquisition Agreement.

4. FACILITY LOCATION

- a. The Facility is located within the Regional District of North Okanagan ("RDNO"), Electoral Area
 B, approximately 3.4 km southwest of the intersection of Bench Row Road and Commonage
 Road.
- b. The Facility is located on two parcels legally described as follows:

i. Parcel Identifier: 005-037-506, Lot A, Section 7, Township 9, Osoyoos Division Yale District,

Plan 26702, except Plan KAP 64450 ("Lot A-1"); and ii. Parcel Identifier: 026-463-971, Lot A, Section 7 and 8, Township 9 Osoyoos Division Yale District, Plan KAP 79361 ("Lot A-2").

5. LEASE AND LAND OWNERSHIP

a. Kelowna and Vernon are the registered owners in fee simple of Lot A-1.

b. Kelowna and Vernon acknowledge and agree that they are both party to a right of first refusal agreement dated for reference September 23, 2005 for lands legally described as: Parcel Identifier: 006-518-656, Lot 1, Sections 7, 8 and 17, Township 9, Osoyoos Division, Yale District, Plan 23286 except plans 26702, KAP63396 and KAP79361 ("Lot 1") which is registered against title to Lot I as charge no. KX149499 (the "RFR").

c. Vernon and Kelowna acknowledge and agree that they are both party to a lease agreement for Lot A-2 dated for reference September 23, 2005 and registered against title to Lot A-2 as charge no. KX149502 (the "Lease")

6. OPERATION OF THE FACILITY

a. The Facility will be managed and operated by Kelowna. Where this agreement provides that "the Facility" may do something, Kelowna shall have authority to do such thing on behalf of the Facility.

b. Kelowna will establish account numbers to track Facility operating costs including, but not limited to, wages, utilities, equipment, materials, laboratory analysis, etc.

c. Kelowna will be responsible for ensuring that all bills associated with the operation of the Facility are paid in a timely fashion.

d. Kelowna will be responsible for the preparation of the annual operating budget for the Facility.

e. A common services allocation to cover costs borne by Kelowna's administration and finance divisions associated with operating the Facility will be included as part of the annual operating budget for the Facility.

f. An appropriate amount will be included in the Facility annual operating budget allocation for equipment replacement, maintenance and overhead for those pieces of equipment that were acquired as part of the capital component of the Facility as set out in Schedule A attached to this agreement. Vernon will be informed of the amount of the equipment allocation through the annual operating budget. Kelowna will provide on an annual basis, a summary of the amount of funds in reserve to replace the Schedule A equipment.

g. Other equipment required in the future either as a change in operations, as a required component due to "contracting in" or as a result of expansion will be deemed Facility operational requirements and be purchased and maintained by Kelowna. The Facility will pay an equipment fee to Kelowna for equipment reserve and maintenance on an ongoing basis or actual operating costs depending on the mutual agreement of both parties. A copy of the annual operating budget for the Facility will be provided for review and approval by Vernon at least 30 days prior to submission to Kelowna City Council. Should Vernon have questions regarding the annual operating budget for the Facility, Vernon may request that the Kelowna Utilities Services Manager or designate, present the annual operating

budget for the Facility to Vernon and be available to answer questions.

h. A list of the heavy equipment currently included in use at the Facility will be included in Schedule A. Schedule A may be amended from time to time based on agreed operating and capital budgets between the two municipalities.

i. The annual operating budget for the Facility will be subject to Kelowna and Vernon Council approvals.

j. If either Council fails to approve the annual Facility operating budget for a given year by January 31st of that year, the parties agree to resolve the matter via dispute resolution as described in section 25.

k. Vernon will provide reclaimed water from the VWRC to the Facility for the term of this agreement. The annual fee for the supply of reclaimed water to the Facility will be as per the Vernon Fees and Charges Bylaw No. 3909 (<u>https://www.vernon.ca/government-services/bylaws/fees-and-charges-bylaw-3909-consolidated</u>). For billing purposes, the Facility will be classified as a commercial operation with an equivalent irrigated area of 2.0 Ha.

1. Kelowna may use contractors or Kelowna staff to operate the Facility.

m. Kelowna will be responsible for the procurement, management and administration of all contract services. Vernon will not be a party to such contracts.

n. Kelowna will inform Vernon at least 30 days prior to the issuance of any tender, request for proposals, request for quotations or request for statement of qualifications related to the operation of the Facility.

o. Vernon and Kelowna management staff will meet at least every three months to review Facility operations and finances and each Municipality shall provide full disclosure and unfettered access to the other Municipality of all financial, operational and other records for the Facility.

7. DECISION MAKING

a. Unless otherwise indicated in this agreement, and without fettering the discretion of either Municipality's councils, the parties shall co-operate and agree on all major decisions and significant matters for the Facility including any matters relating to the lease, the RFR, the Option/RFR, land acquisition, any contracts or expenditures exceeding \$100,000 and any borrowing or any agreements where a liability is incurred for more than 5 years.

8. TERMS AND CONDITIONS UNDER WHICH DEWATERED BIOSOILDS WILL BE ACCEPTED AT THEFACILITY

a. Kelowna and Vernon acknowledge that the Facility operates independently of both the KWWTP and the VWRC and that the KWWTP and the VWRC are customers of the facility.

b. The Facility will set the terms and conditions upon which the Facility will accept dewatered biosolids from the KWWTP and the VWRC. The Facility may specify the following terms and conditions;

i. The days and times during which dewatered biosolids may be discharged at the Facility;

ii. The location at the Facility where dewatered biosolids must be discharged;

iii. The minimum and maximum moisture content of dewatered biosolids that may be discharged at the Facility;

iv. Requirements for analysis of dewatered biosolids including the frequency of analysis and analysis parameters; and

v. Maximum metals content that may be present in the dewatered biosolids discharged at the Facility to ensure that Class A biosolids compost criteria are met in the end product.

c. The Facility will direct that Kelowna and Vernon are to weigh loads of dewatered biosolids from the KWWTP or the VWRC, using a Certified Scale and that copies of the scale tape be provided to the Facility.

d. The Criteria for material acceptance and processing is set out in the Facility's ENV Permit 108537 and BC's *Organic Matter Recycling Regulation* under the Environmental Management Act.

e. Kelowna and Vernon acknowledge that the Facility may impose surcharges for the discharge of dewatered biosolids or for criteria exceptions which do not meet the terms and conditions set by the Criteria Agreement. Any surcharges will reflect the additional cost of handling and processing such material in order to produce Class A Biosolids Compost.

9. ALLOCATION OF NET OPERATING COSTS

a. The operating costs for the Facility will be allocated between Vernon and Kelowna as follows:

i. Vernon's operating cost allocation shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the VWRC discharged at the Facility/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility.

ii. Kelowna's operating cost allocation shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the KWWTP discharged at the Facility/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility.

b. The Parties acknowledge and agree that since entering into the Original Operating Agreement, the share of net operating costs allocated to Kelowna and Vernon have been amended every six months with the share of net operating costs for the 1st and 2nd quarters of each calendar year based on the actual mass of dewatered biosolids discharged at the Facility for processing during the 3rd and 4th quarters of the preceding year and the share of net operating costs for 3rd and 4th quarters of each year based on the actual mass of dewatered biosolids discharged at the Facility for processing during the 1st and 2nd quarters of the same year. The Parties agree that they will continue this arrangement for the duration of this agreement.

c. Kelowna will provide Vernon with details of the calculation of the allocation of Facility operating costs within 45 days of the end of the 2^{nd} quarter and the 4^{th} quarter of each year during the term of this agreement.

10. ALLOCATION OF REVENUE FROM PRODUCT SALES

a. The Kelowna Finance Department will establish account numbers to track revenue generated from the sale of Class A biosolids compost produced at the Facility (the "Compost").

b. All revenue generated from the sale of the Compost will be applied to cover Facility operating costs during the quarter in which the revenue was received.

c. Kelowna will provide Vernon with details of the revenues generated from the sale of the Compost within 45 days at the end of the 2^{nd} and 4^{th} quarter each year during the term of this agreement.

d. All costs related to the marketing of the Compost will be included as an operating cost of the Facility.

e. If at the end of the calendar year, revenue for the year exceeds Facility operating costs for the year (including any amounts required to be set aside under this agreement for future expenditures), such excess revenue shall be allocated to each Party as follows:

i. Vernon's allocation of net revenues shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the VWRC discharged at the Facility for the

calendar year/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility for the calendar year; and

ii. Kelowna's allocation of net revenues shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the KWWTP discharged at the Facility for the calendar year/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility for the calendar year.

11. DETERMINATION AND PAYMENT OF NET OPERATING COSTS

a. Vernon will pay to Kelowna, on a quarterly basis, its share of the annual net Facility operating costs allocated to it in accordance with section 9 above.

b. Kelowna will invoice Vernon prior to the end of each quarter during the term of this agreement for Vernon's quarterly share of the budgeted annual net operating costs of the Facility and Vernon shall pay the invoiced amount to Kelowna within 30 days of receipt of the invoice.

c. Within 45 days of each year during the term of this agreement or, if applicable, within 45 days of the termination of this agreement, Kelowna shall determine the actual net operating costs for the Facility during the previous year, or portion thereof in the event of termination, by subtracting all revenues generated from the sale of Compost and sales of service from total actual Facility operating costs expended during the same time period and shall provide written documentation to Vernon confirming the calculation of the actual operating costs during that time period.

d. Within 45 days of determining the actual net operating costs of the Facility in accordance with section 11.c. Kelowna and Vernon shall ensure that all necessary adjustments have been made to ensure that Vernon has paid the correct amounts for its allocation of actual annual net Facility operating costs. If it is determined that Vernon has paid an amount that is greater than required, any such overpayment will be applied to the first quarterly payment by Vernon during the following year. Or, if the agreement is terminated, Kelowna shall pay to Vernon the amount of the overpayment within 45 days of determining the amount of the adjustment. If it is determined that Vernon has paid an amount that is less than required, Kelowna will invoice Vernon for the amount owing, with payment to Kelowna by Vernon to be made within 45 days of receipt of the invoice.

12. OTHER CUSTOMERS

a. Local governments agencies located within the Regional District of North Okanagan ("RDNO") or the Central Okanagan Regional District ("CORD") may be permitted to discharge dewatered biosolids from municipal wastewater treatment facilities at the Facility with the mutual agreement of the Municipalities.

b. Acceptance of dewatered biosolids from other local government agencies located within the RDNO or the CORD at the Facility will be considered on a case by case basis. The Facility is under no obligation to accept dewatered biosolids from any other local government agencies but may accept biosolids from other jurisdictions with the mutual agreement of the

Municipalities if it benefits the Facility.

c. Should the Municipalities agree that the Facility accept dewatered biosolids from other local government agencies located within the RDNO or the CORD, a per tonne fee will be levied for all dewatered biosolids discharged at the Facility and those fees shall be considered as revenues in the same manner as those detailed in section 10 above. The per tonne fee will be determined by Kelowna and Vernon and may be reviewed and/or amended from time to time.

13. OTHER FACILITY PARTNERS

a. Kelowna and Vernon acknowledge that in the future, other local government agencies located within the RDNO or the CORD may have an interest in becoming partners in the Facility.

b. Kelowna and Vernon agree to consider allowing other local government agencies to become partners in the Facility on a case by case basis.

c. Specific terms and conditions under which other local government agencies would be allowed to become partners in the Facility will be compiled and subject to approval by the Councils of both Kelowna and Vernon.

d. Should other local government agencies become partners in the Facility, this agreement will be amended to include the new partners(s).

14. FACILITY EXPANSION. CONSULTING SERVICES AND LAND ACQUISITION

a. Kelowna and Vernon acknowledge that incremental expansion(s) of the Facility will be required in the future in order to accommodate increases in dewatered biosolids production at the KWWTP and the VWRC and that it is the desire of both Vernon and Kelowna to exercise the Option/RFR to purchase Lot A-2 once the Option/RFR can be exercised.

b. Vernon will be notified, in writing, by Kelowna of any requirements to undertake capital works to increase Facility capacity in advance of the additional works being required. The notification shall include justification for the works, a description of the required works and an order of magnitude cost estimate for the works. Unless otherwise agreed by the Municipalities, approval for the proposed capital works and any commitment of funds or expenditure for the capital works shall be subject to the approval of each of the Councils of Kelowna and Vernon in accordance with the provisions of the *Community Charter, S.B.C. 2003, c. 26* as amended from time to time (the "*Community Charter*") and the *Local Government Act*.

c. Kelowna and Vernon agree that from time to time, engineering consulting services will be required to review Facility operations and to assess needs for capital works. Costs for consulting services will be allocated between the Municipalities in the same manner as detailed in section 14.d. below.

d. Costs for capital works required under section 14.b. shall be allocated between Kelowna and Vernon using the same ratio determined under section 9 above provided that the calculation of the ratios will be based on the period from the date of this agreement until the end of the most recent quarter ending before the capital works are approved by both parties. For greater certainty, these ratios shall be as follows:

i. Vernon's capital cost allocation shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the VWRC discharged at the Facility for the period from the date of this agreement to the date that the capital works are agreed to/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility from the date of this agreement until the end of the most recent quarter ending before the capital works are approved by both parties; and

ii. Kelowna's capital cost allocation shall be the fraction determined by the following: Total mass (in tonnes) of dewatered biosolids from the KWWTP discharged at the Facility for the period from the date of this agreement to the date that the capital works are agreed to/ Total mass (in tonnes) of dewatered biosolids from the KWWTP and the VWRC discharged at the Facility for the period from the date of this agreement until the end of the most recent quarter ending before the capital works are approved by both parties.

e. Kelowna and Vernon will each be responsible for their portion of future capital works and property acquisition costs and will make their own arrangements for funding, independent of the other regarding borrowing or other financing obligations necessary to fund future capital works and property acquisition.

f. Any further capital commitments in relation to the Facility will also be subject to approval by the Municipal councils of Kelowna and Vernon.

15. COMMUNICATIONSPROTOCOL

a. Kelowna staff will be responsible for dealing with inquiries/complaints received from the general public regarding the operation of the Facility.

b. Kelowna will coordinate public announcements or media releases in connection with the Facility and Vernon will be notified and reasonably consulted at least 7 days in advance of any such public announcement or media release.

16. COMPLIANCE WITH REGULATORY REQUIREMENTS

a. Kelowna and Vernon agree that the Facility will be operated so as to comply with all regulatory requirements and that both Municipalities will exercise all reasonable due diligence to comply with all regulatory requirements.

b. Kelowna and Vernon will work cooperatively to ensure that all necessary regulatory approvals are obtained and that both Kelowna and Vernon will be named in any regulatory approvals.

17. CONFIDENTIALITY

a. Kelowna and Vernon will at all times treat as confidential, all information or material supplied or obtained by either Municipality or its subcontractors as a result of this agreement and will not permit

the publication, release or disclosure of the same without the prior written consent of the other Municipality, subject always to the *Freedom of Information and Protection of Privacy Act, R.S.B.C.*, 1996, c. 165.

18. CONFLICT OF INTEREST

a. Neither Kelowna nor Vernon will, during the term of this agreement, perform a service for or provide advice to any person, firm or corporation where the performance of the service or provision of the advice may, in the reasonable opinion of the other Municipality, give rise to a conflict of interest.

19. INDEMNIFICATION

a. Kelowna and Vernon will indemnify and save harmless the other Municipality and officials, employees and agents, from and against any and all losses, claims, damages, actions, causes of action, costs and expenses that such Municipality may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this agreement, where the same or any of them are based upon, arise out of or occur, directly or indirectly, by reason of any act or omission of the other Municipality or of any agent, employee, officer, director or subcontractor of the other Municipality pursuant to this agreement.

20. INSURANCE

a. Both parties will obtain, maintain and pay for during the term of this agreement the following insurance:

i. Comprehensive Public Liability and Property Damage in the amount of \$5,000,000;

- ii. Automobile Insurance (owned and non-owned) in the amount of \$5,000,000;
- iii. Professional Liability in the amount of \$5,000,000; and
- iv. Environmental Liability in the amount of \$5,000,000 minimum.

b. In order to minimize costs, the parties shall co-operate with each other to seek mutual or joint insurance in respect of the Facility, including construction and operation of same.

21. TERMINATION

a. Notwithstanding any other provision of this agreement, either Municipality may terminate the agreement at any time upon one years' written notice delivered to the parties at the addresses shown in Section 25 of this agreement, or at such shorter time and in such a manner as may be mutually agreed upon by the parties provided that the parties shall act reasonably in negotiating any termination provision, including capital repayments.

22. NON-WAIVER

a. A waiver of any provision or breach by the parties of this agreement will be effective only if it is in writing and signed by the other Municipality and will not be deemed to be a waiver of any subsequent breach of the same or any other provision of this agreement.

23. FIRE PROTECTION

a. Vernon's Fire Rescue Services will provide emergency response services to the Facility site. The level of service will be consistent with the Vernon Fire Rescue Services Emergency response policy. The cost of this service will be based on the cost of service and included in the operating budget. For the Service, Kelowna agrees to pay to Vernon the fees and charges as contained in Schedule B attached hereto and forming part of this Agreement.

24. NOTICES

a. Any notice that either Municipality may be required or may desire to provide to the other Municipality will be deemed to have been delivered and received, if delivered personally on the date of such personal delivery or if mailed, on the third business day after mailing in British Columbia by prepaid post addressed to either Municipality at its City Hall address, and to the attention of the following or their designates:

Utilities Services Manager City of Kelowna

Director of Operations City of Vernon

25. DISPUTE RESOLUTION / ARBITRATION

a. Disputes arising out of or in connection with this agreement, or in respect of any defined legal relationship associated therewith or derived there from, may be referred to and finally resolved by arbitration under the rules of the British Columbia International Commercial Arbitration Centre ("BCICAC"). If either Kelowna or Vernon desires to have the dispute resolved by arbitration, they may submit the dispute to the BCICAC to appoint an arbitrator and the case will be administered by the BCICAC in accordance with its procedures and rules. Notwithstanding the foregoing, the parties may choose to submit to mediation prior to any arbitration proceedings as an initial step to resolving any such dispute. {00188168; 2}13

26. GENERAL TERMS

a. Nothing contained or implied herein shall derogate from the obligations of the Municipalities or prejudice or affect the Municipalities' rights, powers, duties or obligations in the exercise of their functions pursuant to the *Community Charter* and the *Local Government Act* and the rights, powers, duties and obligations of the Municipalities under all public and private statutes, by-laws, orders and regulations.

b. No amendment, supplement, restatement or termination of any provision of this Agreement is binding unless it is in writing and signed by the Municipalities to this Agreement at the time of the amendment, supplement, restatement or termination.

c. In the event of any strike, walkout or other labour dispute directly or indirectly involving the Municipalities that adversely affects the operation of the Facility, the Municipalities will seek such orders or relief as may be required to prevent the continuance of the strike, walkout or other labour dispute from adversely affecting the operation of the Facility.

d. Notwithstanding anything to the contrary contained in this agreement, if either Municipality is delayed or hindered in or prevented from the performance of any term, covenant or act required under this agreement, by reason of an act of God or public enemy, wars (declared or undeclared), revolution, riots, insurrections, civil commotions, fires, floods, slides, epidemics, quarantine restrictions, strikes or lockouts, including illegal work stoppages or slowdowns, or stop work orders issued by a court or statutory authorities, power failures, or any event or circumstance which is beyond the reasonable control of a Municipality, which does not arise from the neglect or default of a Municipality, and which results in material delay, interruption or failure by a Municipality in carrying out its duties, covenants or obligation under this agreement, the said Municipality will be relieved from the fulfillment of such term, covenant or act during the period of such interruption and the period for the performance of any such term, covenant or act will be extended for a period equivalent to the period of such delay.

e. The Municipalities will promptly execute and deliver all further documents and take all other action reasonably necessary or appropriate to give effect to the provisions and intent of this Agreement.

f. The rights and remedies under this agreement are cumulative and are in addition to and not in substitution for any other rights and remedies available at law or in equity or otherwise. No single or partial exercise by a Municipality of any right or remedy precludes or otherwise affects the exercise of any other right or remedy to which that Municipality may be entitled.

g. The Municipalities acknowledge and agree that they are entering into a long-term relationship and, from time to time, opportunities and issues will arise that are not contemplated in this agreement. The Municipalities covenant and agree to discuss and consider these matters in the spirit of cooperation and good faith.

h. This agreement shall be interpreted by the laws of British Columbia and Canada applicable therein.

i. This agreement shall be binding upon and enure to the benefit of the Municipalities and their agents, assigns, and successors.

IN WITNESS WHEREOF, each of the Municipalities hereto has hereunto affixed its corporate seals on the presence of its duly authorized officers as of the day and year first written above. The Corporate Seal of the City of Vernon was hereunto affixed in the presence of:

CITY OF KELOWNA by its authorized signatories:

Mayor:

Corporate Officer:

CITY OF VERNON by its authorized signatories:

Mayor:

Corporate Officer:

Vehicle #	Description	Category	Original Cost (\$)
V6384	2007 McCloskey Trommel Screen	Trommel	418,170
V6481	2009 Supreme 900ST Feed Mixer	Mixer	236,000
V6511	2009 Supreme 900 ST Feed Mixer	Mixer	209,000
V6831	2016 Volvo L110H Front End Loader	Loader	403,100
V6881	2018 CAT 950M Front End Loader	Loader	463,390
V6963	2020 Volvo L110H Front End Loader	Loader	453,030

Schedule B – Fire Protection Terms of Service

The Facility (Customer) shall pay to the City of Vernon (Service Provider) an annual fee for each year of the Term (the "Annual Fee"). The Customer shall pay the Annual Fee for the first year of the Term upon execution of this Agreement in the amount of \$20,000.00. On each anniversary of the date of this Agreement during the Term, the Annual Fee shall be invoiced to the Customer and the rate per Service Site shall increase by three percent (3.0%) compounded.

2023	2024	2025	2026	2027	2028	2029
\$20,000.00	\$20,600.00	\$21,218.00	\$21,854.54	\$22,510.18	\$23,185.48	\$23,881.05
2030	2031	2032	2033	2034	2035	2036
\$24,597.48	\$25,335.40	\$26,095.46	\$26,878.33	\$27,684.68	\$28,515.22	\$29,370.67
2037	2038	2039	2040	2041	2042	2043
\$30,251.79	\$31,159.35	\$32,094.13	\$33,056.95	\$34,048.66	\$35,070.12	\$36,122.22

Proposed Amendments to the Regional Biosolids Compost Facility's Joint Operating Agreement

July 2024

Section	Current Wording	Proposing	Reason for Change	Amended
1 - c. Nature of Agreement and Schedules	c. The following schedules shall form part of, and be incorporated into, the terms of this agreement: Schedule A: Commonage Compost Site Equipment Allocation Schedule B: Vernon Fees and Charges Bylaw No. 3909 Schedule C: Criteria Agreement	c. The following schedules shall form part of, and be incorporated into, the terms of this agreement: Schedule A: Commonage Compost Site Equipment Allocation Schedule B: Fire Protection Terms of Service	Schedules B and C were not included in our original PDF copy of the agreement. We propose removing Schedule B: Vernon Fees and Charges Bylaw (See Section 6 below) and replacing it with Schedule B: Fire Protection Terms of Service. Schedule C is effectively replaced by regulatory requirements in Permit and Regulation.	yes
2. Terms	a. Both Kelowna and Vernon agree to participate in the operation of the Facility and be bound by this agreement until at least December 31, 2018 and continuing after that date unless either Municipality withdraws in accordance with	a. Both Kelowna and Vernon agree to participate in the operation of the Facility unless either Municipality withdraws in accordance with section 3 or this agreement is terminated in accordance with section 2.c. or	Addresses the passing of the initial review date. Clarifies that agreement remains in place in perpetuity unless either party	yes

	 section 3 or this agreement is terminated in accordance with section 2.c. or section 21 below. b. The effective date of this agreement is November 1, 2011. c. This agreement will remain in effect until terminated by mutual agreement or until either Kelowna or Vernon wish to withdraw from the Facility as detailed in section 3 below. d. Kelowna and Vernon agree to enter into negotiations to renew or extend this agreement at least one year in advance of December 31, 2018. e. Vernon agrees and acknowledges that Kelowna is the day to day "Operator" of the Facility. 	 section 21 below. b. The effective date of this agreement is November 1, 2011. c. This agreement will remain in effect until terminated by mutual agreement or until either Kelowna or Vernon wish to withdraw from the Facility as detailed in section 3 below. d. Vernon agrees and acknowledges that Kelowna is the day to day "Operator" of the Facility. 	withdraws in accordance with Section 3	
4-a	a. The Facility is located within the Regional District of North Okanagan ("RDNO") approximately 3.4 km southwest of the intersection of Bench Row Road and Commonage Road.	a. The Facility is located within the Regional District of North Okanagan ("RDNO"), Electoral Area B, approximately 3.4 km southwest of the intersection of Bench Row Road and Commonage Road.	Specified electoral area	yes

5 - d. Lease and Ownership	d. Vernon and Kelowna acknowledge and agree that they are also both parties to an option to purchase and right of first refusal agreement dated for reference September 23, 2005 and registered against title to Lot A-2 as charge no. KX149500 (the"Option/RFR").	Delete sub-section d.	Remove d. as charge is no longer on title	yes
6 - g. Operation of the Facility	 g. Other equipment required in the future either as a change in operations, as a required component due to "contracting in" or as a result of expansion will be deemed Facility operational requirements and be purchased and maintained by Kelowna. The Facility will pay either an annual equipment fee for equipment reserve and maintenance to Kelowna or actual operating costs depending on the mutual agreement of both parties prior to the purchase. <i>The three loaders currently used at the Facility will continue to be charged out at actual cost and their debt repayment will be provided for in the operating budget of the facility.</i> A copy of the annual operating budget for the Facility will be provided for review and approval by Vernon at least 30 days prior to submission to Kelowna 	 g. Other equipment required in the future either as a change in operations, as a required component due to "contracting in" or as a result of expansion will be deemed Facility operational requirements and be purchased and maintained by Kelowna. The Facility will pay an equipment fee to Kelowna for equipment reserve and maintenance on an ongoing basis or actual operating costs depending on the mutual agreement of both parties. A copy of the annual operating budget for the Facility will be provided for review and approval by Vernon at least 30 days prior to submission to Kelowna City Council. Should Vernon have questions regarding the annual operating, Vernon may request that the Kelowna Utilities Services Manager or designate, present the annual operating budget for the Facility to 	Reserve contributions are now made quarterly. The contribution amount and schedule are subject to change based on current best practices in Fleet Services and Financial Services, and we propose amending the language to allow for this. We also propose including the front-end loaders in Schedule A, which includes the list of equipment eligible for the equipment reserve. The reserve contribution would be reconciled through	yes

	City Council. Should Vernon have questions regarding the annual operating budget for the Facility, Vernon may request that the Kelowna Utilities Services Manager or designate, present the annual operating budget for the Facility to Vernon and be available to answer questions.	Vernon and be available to answer questions.	quarterly operating invoices.	
6 – h. Operation of the Facility	[sub-section not included in original contract]	h. The three loaders currently used at the Facility will be included in Schedule A.	h. A list of the heavy equipment currently included in use at the Facility will be included in Schedule A. Schedule A may be amended from time to time based on agreed operating and capital budgets between the two municipalities.	yes
6 – k. Operation of the Facility	 k. Vernon will provide reclaimed water from the VWRC to the Facility for the term of this agreement. The annual fee for the supply of reclaimed water to the Facility will be as per the Vernon Fees and Charges Bylaw No. 3909, a copy of which is attached to this agreement as Schedule B. For billing purposes, the Facility will be classified as a commercial operation with an equivalent irrigated area of 2.0 Ha. 	 k. Vernon will provide reclaimed water from the VWRC to the Facility for the term of this agreement. The annual fee for the supply of reclaimed water to the Facility will be as per the Vernon Fees and Charges Bylaw No. 3909. For billing purposes, the Facility will be classified as a commercial operation with an equivalent irrigated area of 2.0 Ha. 	Schedule B was not included in our copy of the original agreement. We propose the agreement include a hyperlink to the bylaw, which may change over time.	yes

7. Decision Making	a. Unless otherwise indicated in this agreement, and without fettering the discretion of either Municipality's councils, the parties shall co-operate and agree on all major decisions and significant matters for the Facility including any matters relating to the lease, the RFR, the Option/RFR, land acquisition, any contracts or expenditures exceeding \$10,000 , and any borrowing or any agreements where a liability is incurred for more than 5years.	a. Unless otherwise indicated in this agreement, and without fettering the discretion of either Municipality's councils, the parties shall co-operate and agree on all major decisions and significant matters for the Facility including any matters relating to the lease, the RFR, the Option/RFR, land acquisition, any contracts or expenditures exceeding \$100,000 , and any borrowing or any agreements where a liability is incurred for more than 5 years.	Increase the amount from \$10,000 to \$100,000 to be more in- line with current practices.	yes
8-d	d. The Criteria for material acceptance and processing is set out in a separate "Criteria Agreement" between the Facility and the VWRC and WWTP attached to this agreement as Schedule C.	d. The Criteria for material acceptance and processing is set out in the Facility's ENV Permit 108537 and BC's <i>Organic Matter Recycling</i> <i>Regulation</i> under the Environmental Management Act.	Schedule C was not included in the agreement on file and was effectively replaced by the ENV Permit in 2017, which outlines the criteria for material acceptance and processing at the Facility.	yes
20 - a. Insurance	 a. Both parties will obtain, maintain and pay for during the term of this agreement the following insurance: Comprehensive Public Liability and Property Damage in the amount of \$5,000,000; Automobile Insurance (owned and 	 a. Both parties will obtain, maintain and pay for during the term of this agreement the following insurance: Comprehensive Public Liability and Property Damage in the amount of \$5,000,000; Automobile Insurance (owned 	Kelowna's Risk Management group recommend keeping coverage of i, ii and iii at \$5,000,000, and adding Environmental Liability Insurance in an amount that is to be determined.	yes

	non-owned) in the amount of \$5,000,000; iii. Professional Liability of \$5,000,000.	and non-owned) in the amount of \$5,000,000; iii. Professional Liability of \$5,000,000. iv. Environmental Liability in the amount of \$5,000,000, minimum.		
23. Fire Protection	a. Vernon's Fire Rescue Services will provide emergency response services to the Facility site. The level of service will be consistent with the Vernon Fire Rescue Services Emergency response policy. The cost of this service will be based on the assessed value of the site and invoiced annually to the Facility.	a. Vernon's Fire Rescue Services will provide emergency response services to the Facility site. The level of service will be consistent with the Vernon Fire Rescue Services Emergency response policy. The cost of this service will be based on the cost of service and included in the operating budget. For the Service, Kelowna agrees to pay to Vernon the fees and charges as contained in Schedule B attached hereto and forming part of this Agreement.	Revise wording to match current practice and refer to a new Schedule B – Fire Protection Terms of Service.	yes
24. Notices	 a. Any notice that either Municipality may be required or may desire to provide to the other Municipality will be deemed to have been delivered and received, if delivered personally on the date of such personal delivery or if mailed, on the third business day after mailing in British Columbia by pre-paid post addressed to either Municipality at its City Hall 	a. Any notice that either Municipality may be required or may desire to provide to the other Municipality will be deemed to have been delivered and received, if delivered personally on the date of such personal delivery or if mailed, on the third business day after mailing in British Columbia by pre-paid post addressed to either Municipality at its	Remove names and update titles	yes

	address, and to the attention of the	City Hall address, and to the attention		
	following persons or their successors:	of the following or their designates:		
	Don Degen	Utilities Services Manager		
	Utilities Services Manager Kelowna	City of Kelowna		
		Director of Operations		
	Shirley Koenig	City of Vernon		
	Operation Services Manager			
	Vernon			
Schedule A			Replace Table SA-1	yes
			with Table SA-2 to	
			include the 3 Front-End	
			Loaders in asset	
			renewal program.	
Schedule B			Replace Schedule B	yes
			with a new Schedule B	
			– Fire Protection Terms	
			of Service	

Table SA-1 (current)

Schedule A Equipment

Vehicle #	Description		Original Cost
V6384	2007 McCloskey Trommel Screen	(Trommel)	418,170
V6481	2009 Supreme 900ST Enviroprocessor	(Mixer)	236,000
V6511	Supreme EnvirorProcessor 900 ST Compost Mixer	(Mixer)	209,000

Table SA-2 (proposed)

Schedule A Equipment

Vehicle #	Description	Category	Original Cost (\$)
V6384	2007 McCloskey Trommel Screen	Trommel	418,170
V6481	2009 Supreme 900ST Feed Mixer	Mixer	236,000
V6511	2009 Supreme 900 ST Feed Mixer	Mixer	209,000
V6831	2016 Volvo L110H Front End Loader	Loader	403,100
V6881	2018 CAT 950M Front End Loader	Loader	463,390
V6963	2020 Volvo L110H Front End Loader	Loader	453,030

Schedule B – Fire Protection Terms of Service

The Facility (Customer) shall pay to the City of Vernon (Service Provider) an annual fee for each year of the Term (the "Annual Fee"). The Customer shall pay the Annual Fee for the first year of the Term upon execution of this Agreement in the amount of \$20,000.00. On each anniversary of the date of this Agreement during the Term, the Annual Fee shall be invoiced to the Customer and the rate per Service Site shall increase by three percent (3.0%) compounded.

2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
\$ 20,000.00	\$ 20,600.00	\$ 21,218.00	\$ 21,854.54	\$ 22,510.18	\$ 23,185.48	\$ 23,881.05	\$ 24,597.48	\$ 25,335.40	\$ 26,095.46
2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
\$ 26,878.33	\$ 27,684.68	\$ 28,515.22	\$ 29,370.67	\$ 30,251.79	\$ 31,159.35	\$ 32,094.13	\$ 33,056.95	\$ 34,048.66	\$ 35,070.12

2043 \$36,122.22



Biosolids Joint Operating Agreement Update

Utility Services | September 9, 2024



Agenda

Overview

Historical Agreement

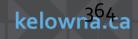
Proposed Amendment





Overview

- Regional Biosolids Composting Facility (RBCF) is jointly owned by Cities of Vernon and Kelowna
- Facility manages biosolids from both municipal wastewater treatment plants
- More than 30,000 tonnes of biosolids are composted to a Class A compost marketed as OgoGrow[™]
- RBCF is overseen by Joint Biosolids Advisory Committee (JBAC)





Historical Agreement

- Joint Operations
 Agreement signed
 November 1, 2011
- The Agreement specifies the obligations of each City
- Includes items such as:
 - Funding allocation
 - Withdrawal from the Facility Agreement
 - Insurance coverage
 - Water and Fire service
 - Land acquisition

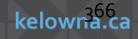






Proposed Amendment

- Staff from Vernon and Kelowna reviewed with recommended edits:
 - Align contract for expenditure limits
 - Operationalize equipment funding for replacement costs
 - Clarify the withdrawal clause
 - Delete sections that are no longer relevant
 - Update insurance and fire protection to current values
 - Minor format updates





Proposed Amendment

- JBAC reviewed edits and suggested revisions
- These revisions have been included in the latest draft contract
- Now ready for Council review and execution







Questions?

For more information, visit kelowna.ca.





Date:	September 9, 2024
То:	Council
From:	City Manager
Subject:	City Signature Sign – Milestone Check-In
Department:	Parks and Buildings Planning

Recommendation:

THAT Council receives, for information, the report from the Parks & Buildings Planning Department, dated September 9, 2024, regarding the signature sign projects;

AND THAT Council endorses the recommended signature sign location at Stuart Park as well as the project objectives, as outlined in this report, and directs staff to proceed expressions of interest (EOI) for design and fabrication teams.

Purpose:

To provide a milestone check-in and update City signature sign project.

Background:

As a follow up to the Council Report "North Entry Monument and City Signature Sign – Project Updates, June 17, 2024", staff are bringing forward information relating to the contextual location of the new City Signature Sign, as well as elements of the programming and design criteria for consideration.

In the June 17th, 2024, report, staff noted several examples of signature signs in communities such as: Toronto, Montreal and Amsterdam and elements of each that created a successful implementation. Staff outlined a two-stage, selection approach to the development of the future sign which will provide a wide variety of design and fabrication teams the opportunity to submit qualifications ahead of the development of a full proposal.

Discussion:

As part of the overall planning process for the development of the "City Signature Sign," staff have held three meetings with external and internal collaborators along with First Nation representatives.

From those meetings, two strategic elements guiding the development of the new sign are being brought forward for information and discussion. These elements relate to the unique context and

design brief guiding the development of the (EOI) which will be circulated to the design and fabrication teams in September 2024.

Objectives:

The overarching project objectives relating to the signature sign form the first strategic element guiding the development of the project design criteria. These objectives align with several core values from the City of Kelowna as an organization and include several strategic elements from a divisional standpoint relevant to the project.

The following objectives are being proposed to form part of the expression of interest (EOI) to design and fabrication teams when providing creative solutions to a unique Kelowna built sign.

Objectives		
Welcoming - tourists and visitors	Providing unique photographic opportunities	
Creating an iconic gathering space	Showcasing innovation and technology	
Relationship building - First Nation representation	Promoting activity on the waterfront	
Promoting - City of Kelowna values (vision, mindset, growth, skills)	An artful approach – dynamic and artistic	
Interacting - creative and playful	Including curatorial framework – storytelling, environment, contextual relevance.	

Context:

The second strategic element explored is context; meaning the siting and location of a Kelowna built signature sign is key for placemaking and providing residents and visitors memorable opportunities in which to remember their visit to Kelowna and the Okanagan. The signature sign is a place for gathering, sharing and creating memories either in the moment, or afterwards through photos, videos and other forms of media.

In locating such landmark in Kelowna, several factors are at play to provide the meaningful, contextual experience. Kelowna's waterfront provides such an opportunity for this experience in its alignment with several elements of the selected rating criteria below. While the opportunities for a strategic signature sign along Kelowna's waterfront are boundless, a thoughtful and quantitative approach for measuring and weighing locations in an open and transparent way is important due to the high-profile nature of the project.

Sites considered to score particularly highly in the rating criteria were City Park, Kerry Park, Tugboat Beach, Stuart Park, and Waterfront Park. While each site provided its own unique opportunities and constraints, it was during the internal and external discussions that Stuart Park ultimately stood out as a preferred location due to its high scoring value in each of the listed rating criteria below.

Rating Criteria		
Lake view / scenic value (land and lake)	Proximity to the waterfront	
Public profile (visibility)	Maintenance Impacts	
Gathering space (required space)	Vandalism (deterrence)	
Accessibility	Impact / existing uses (not displacing uses)	

Next Steps:

- September 2024 Drafting Expression of Interest (EOI) for design and fabrication teams
- November 2024 Review submissions /Invite selected proponents to submit proposal
- January 2025 Selection of preferred proponent and concept

Conclusion:

With Council direction and approval, staff will move to quickly generate the expression of interest (EOI) document and move forward with a call for qualified design and fabrication teams.

Internal Circulation:

Parks Operations Active Living & Culture Community Communications Infrastructure Long Range Policy Planning Real Estate Partnerships Office Active Transportation Financial Services

Considerations applicable to this report:

Existing Policy:

Imagine Kelowna - identified several visions for the City. Relevant to this report are its principles and goals working together as a system to help the community achieve its vision.

2040 Official Community Plan (OCP) and Amendments – topics covered by the OCP are fundamental to understanding the complex trends and changes that affect long-term planning for Kelowna.

Financial/Budgetary Considerations:

The City signature sign will be funded through a Council resolution providing funding approval from the Growing Communities Fund and Council Strategic Initiatives dated October 16, 2023.

Communications Comments:

The public will be informed about the signature sign project through traditional City of Kelowna communication means and methods as each project advances. Staff propose the following key milestones as occasions for Council to check-in:

- Pre-design and process including confirmation of preferred site location.
- Concept including recommended submission and confirmation of all materiality and built forms, plus identified site, utility, and infrastructure costs.

Considerations not applicable to this report: Legal/Statutory Authority: Legal/Statutory Procedural Requirements: Consultation and Engagement: Submitted by:

K Pinkoski, Parks and Buildings Planning

Approved for inclusion: D. Edstrom, Divisional Director, Partnerships & Investments

City of Kelowna Signature Sign Project





City Council priority project – Funded from Council Strategic Funds \$500K (October 2023)

Council process update – June 17th

Internal staff PM team – Parks, Building Services, Infrastructure and Operations

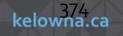
External advisors PM team – Tourism, DKA, Tech. and First Nation

Council project context / Location update – September 9, 2024

Stage 1 – EOI out to market – September 2024

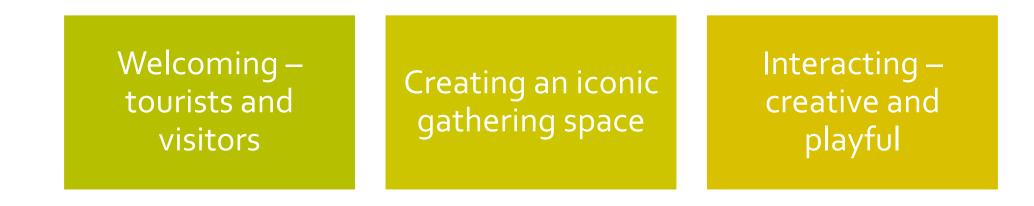
Stage 2 – November 2024 | Review submissions /Invite selected proponents to submit proposal

January 2025 – Selection of preferred proponent and concept





Objectives 1



Providing unique photographic opportunities An artful approach – dynamic and artistic





Objectives 2

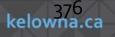
Relationship building – First Nation representation

Promoting – City of Kelowna values (vision, mindset, growth, skills)

Showcasing innovation and technology

Promoting activity on the waterfront

Including curatorial framework – storytelling, environment, contextual relevance





Site Rating Criteria 1

Lake view / scenic value (land and lake)

Public profile (visibility)

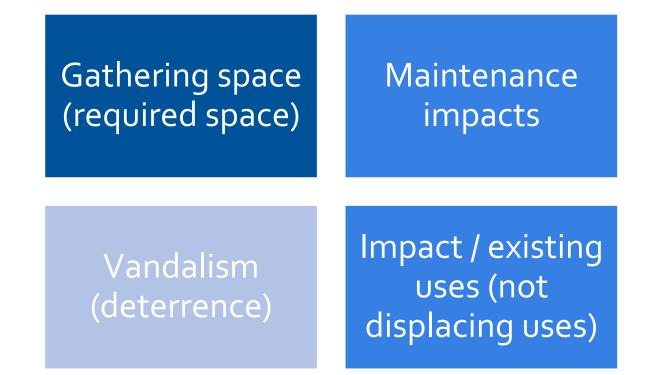
Accessibility

Proximity to the waterfront





Site Rating Criteria 2





Sign context opportunities





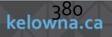
Tugboat Beach







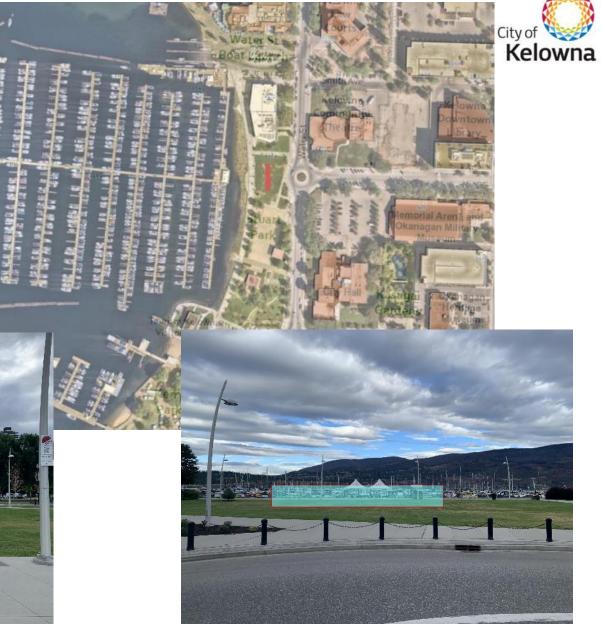


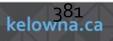


Stuart Park











Next Steps

2025

January 2025

Preferred Concept

(preliminary concept

design)

Detailed design & fabrication

November 2024

Review submissions / create shortlist

September 2024

Drafting Expression of Interest (EOI) for design & fabrication teams





Questions?

For more information, visit kelowna.ca.

Report to (Council
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Date:	September 9, 2024
То:	Council
From:	City Manager
Subject:	North Entry Monument – Recommended Concept
Department:	Parks and Buildings Planning

Recommendation:

THAT Council receives for information the report from Parks & Buildings Planning Department, dated September 9, 2024 regarding the north entry monument project;

AND THAT Council endorses the recommended vision and concept from the Parks and Buildings Department, dated September 9, 2024.

Purpose:

To approve the recommended north entry monument concept and advance to detail design and implementation.

Previous Council Direction:

The City of Kelowna's former city sign was removed to accommodate improvements for a larger intersection. An agreement was secured with BC Ministry of Transportation and Infrastructure for another site located further north along Highway 97 between Ellison Lake and Old Vernon Road. The new site was situated at the start of the 2040 Official Community Plan's (OCP) Gateway District as the symbolic northern entry into the City of Kelowna.

City staff have previously presented the North Entry Monument project procurement and conceptual design process at its pre-design milestone as an occasion for Council check-in.

Discussion:

North Entry Monument video presentation: https://youtu.be/xHqCRWCj8yQ

An *entry monument* is a freestanding architectural structure, including a city sign component, intended to welcome travelers into a community and characteristically sited along principal travel routes. For the City of Kelowna, the north entry is a figurative civic monument intended to serve as a key landmark to

identify one's sense of arrival into our city. Entry monuments provide numerous social benefits that extend beyond their historical and cultural significance, such as: community identity; social cohesion; public reflection and dialogue; educational opportunities; civic engagement; inclusivity and representation; inspiration and replication; plus, legacy and continuity.

The public benefits which entry monuments offer, fall under the process of 'placemaking' which aims to create memorable civic spaces that are more than just utilitarian, but rather are socially significant solutions to improve urban vitality by connecting people to special places, inspire social interaction through inclusion, as well as, promote conversation and cultural exchange.

Through a design competition, a shortlist of the three-top scoring submissions was first selected by an assembled jury of private and public design professionals during January and February of 2024. Through a series of design critiques and group discussions, ultimately one entry monument submission was recommended and received ninety percent consensus from jury members through secreted vote. The recommended concept submission was prepared by CTQ Consultants Ltd. in partnership with two local artists, Crystal Przybille and Sheldon Pierre Louis.

Vision for the Monument:

The abstract form of the entry monument is inspired by the overarching vision of "weaving together". The monument is comprised of multiple layers of individual elements, or 'bands,' which intertwine to form a whole. As with the construction of a basket, when elements are woven together, something strong, purposeful, and united is formed. This is also true of a 'community' where different cultures, neighbourhoods, beliefs, and landscapes are interconnected.

The collaboration between Indigenous and non-Indigenous project team members in the creation of the monument's vision is an outstanding example of an endeavor made stronger, and more meaningful, through the weaving together of different cultural perspectives. Immediate parallels were made by the design team to the meaning of *Syilx* (see-ee-ul–ks), the nsyilxcen word for local Indigenous peoples. Whereby, 'weaving' or 'intertwining' commands us all to come together to shape what our community means to us (refer to *Syilx Okanagan Nation – Okanagan Nation Alliance*).

Five themes helped shape the monument's vision and are intended as an interwoven depiction of Kelowna's pre- and post-contact history, plus all future inspirations for the city. Those themes consist of:

- 1. LAND is the basis for all flora and fauna in our local environments.
- 2. **WATER** surface water has shaped our many creeks and string of beautiful lakes.
- 3. **HERITAGE** First Nations peoples as the original stewards of our local environments.
- 4. **COMMUNITY** celebrates our city's pioneers, industries and divergent cultures that shaped present-day Kelowna.
- 5. **KELOWNA** embodies all our collective hopes and aspirations for future generations.

Conceptual Design of the Monument:

The constructed form of the fabricated entry monument will be aspirational in its design, rising upward, as the viewer approaches north along Highway 97 and moves along the project site. The ascension culminates with the letters of KELOWNA set against the backdrop of an open skyline that is purposefully positioned between visible mountain peaks.

The visual stacking of bands, one above the other, is intended to provide greater prominence to the entry monument when viewed from a distance. As the viewer approaches closer, the monument begins to reveal itself in more detail through a series of five linear elements individually appearing to emerge from the land. Each linear element, representing a basket band, will be a unique interpretation of one of the five principal themes. Iconographic images will be laser-cut into the band surfaces to tell its own thematic story. The use of iconography inspired from the local area is symbolically inclusive to its unique sense of place within the city and only heightens its importance for Kelowna (see *Appendix A* for iconography selected).

Next Steps:

The north entry monument will be a metaphoric representation of the City of Kelowna and envisaged as a highly memorable landmark and characteristic welcoming agent. Pending Council's approval, permitting and detail design is expected throughout the remainder of 2024 with construction anticipated in 2025.

With reference to future entry monument projects, City staff will present an overall entry monument strategy to Council, when ready. The strategy will seek public input for prioritization of other prospective monuments locations in the city (e.g., Kelowna Airport, near W.R. Bennett Bridge, etc.) or iconography to be depicted. All iconographies will reinforce the five established themes and may include folklore or history (e.g., legend of the Ogopogo or fruit growing and wine making industries). In this manner, the materiality and form of the monuments will remain the same but allow viewers to experience multiple stories and iconography representative of that part of the city.

Internal Circulation:

Parks Operations Active Living & Culture Community Communications Infrastructure Long Range Planning Real Estate Partnerships Office Active Transportation Financial Services

Considerations applicable to this report:

Existing Policy:

Imagine Kelowna - identified several visions for the City.

Council Priorities: 2022-2026- identified areas with measures to transform municipal vision into action.

2040 Official Community Plan (OCP) and Amendments – topics are fundamental to understanding the complex trends and changes that affect long-term planning for Kelowna.

"*Weaving our Collective Threads"* document in the Kelowna Arts & Culture Plan 2020-2025 - a report that forms guiding principles of Syilx inclusion within the City of Kelowna.

Financial/Budgetary Considerations:

The project will be wholly funded, constructed, and maintained by the City of Kelowna through a Council resolution providing funding approval from the Growing Communities Fund and Council Strategic Initiatives dated October 16, 2023.

Communications Comments:

As the project advances the public will continue to be informed about the north entry monument using conventional City of Kelowna communication means.

Legal/Statutory Authority:

Legal/Statutory Procedural Requirements:

Consultation and Engagement:

Considerations not applicable to this report:

Submitted by: Stefan Johansson, Parks and Open space Planner / Sr. Landscape Architect, Parks and Buildings Planning

Approved for inclusion: D. Edstrom, Divisional Director, Partnerships and Investments

Schedule A – Themes and Iconography



Date: September 9, 2024

To: Council

Subject: North Entry Monument – Design Iconography

Five principal themes helped shape the monument's vision and are intended as an interwoven depiction of Kelowna's pre and post-contact history, plus all future inspirations for the city.

Those principal themes consist of:

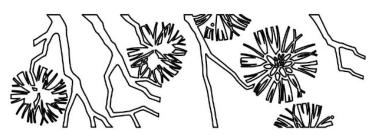
1.	LAND	basis for all flora and fauna in our local environments.
----	------	--

- 2. **WATER** surface water has shaped our many creeks and string of beautiful lakes.
- 3. **HERITAGE** First Nations peoples as the original stewards of our local environments.
- 4. **COMMUNITY** celebrates our city's pioneers, industries and divergent cultures that shaped present-day Kelowna.
- 5. **KELOWNA** embodies all our collective hopes and aspirations for future generations.
- Note: Thematic descriptions with precedent photographs and prospective iconography are illustrated on the following pages.

LAND

Ponderosa Pine (s?atqwłp):

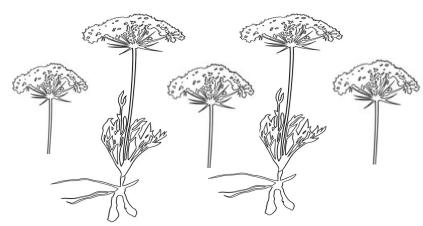
This resilient, and distinctively weighty coniferous tree is indigenous to the area. Its features a conical crown and long branches with deeply fissured bark. Ponderosa Pine have deep taproots that help to stabile hillsides and provides shelter and habitat.





Wild Caraway or Indian Carrot (stukwm):

This wild carrot was an abundant food source in the local area. The sweet, starchy roots were an important staple food for the Syilx. Wild carrot is also an important spice and medicinal herb all at once.

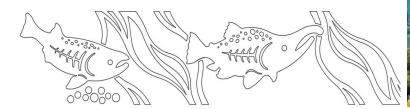




WATER

Kokanee Salmon (kəkni):

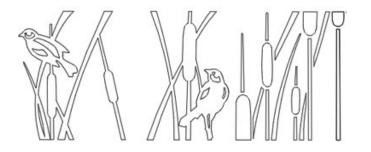
These indigenous fish live and travel through Okanagan Lake and adjoining waterways. They are a traditional food source for the Syilx people, who have been instrumental in the salmon's repopulation and conservation.





Red-winged Blackbirds (ÅkÅaskək) and Tule (tukwtan):

This indigenous bird is a common sight and sound in wetlands and fields across Kelowna. Tule is a plant that is utilized by the Sylix people for a variety of applications, including the building of traditional dwellings.

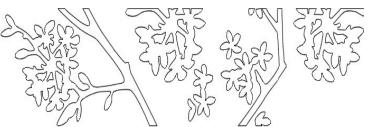




HERITAGE

Fruit Trees:

Fruit trees represent the critical role of orchards and agriculture in the history, growth and identity of Kelowna. Different stages of fruit tree growth throughout various seasons will be represented.





Pictographs:

These timeless impressions represent the long-standing presence of Syilx people around Kelowna, and help to preserve their cultural traditions and convey early local environments to viewers.

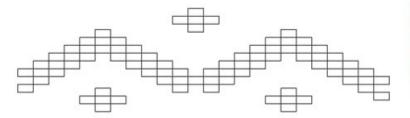




COMMUNITY

Cedar Bark Basket (yámžwa?) :

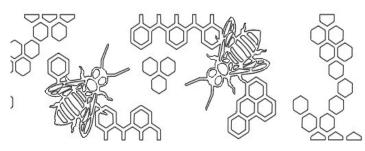
For Syilx peoples, cedar baskets are a traditional craft that has been passed down through generations. It is a beautiful and intricate weaving technique that utilizes the inner bark of cedar trees. Basketry has always been an essential part of their culture. It is not just a way of creating functional objects; it is a symbol of their deep connection to nature and the land, as well as to communal mindedness, sharing and teaching.





Western Honeybees:

This insect is closely associated with agriculture and settlement growth which have heavily influenced Kelowna's development patterns. The Western Honeybee is a recognized symbol for communal effort.





KELOWNA

Grizzly Bear (kiláwna?) :

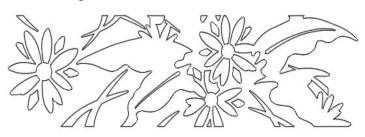
The Okanagan Valley is home to many animal species, including grizzly bears. The fact that grizzlies are found near Kelowna, shouldn't come as much of a surprise to many, considering the city's namesake is derived from the n'syilxcen language.





Arrowleaf Balsamroot:

The blossom of this plant has been recognized as the City of Kelowna's official flower. It's indigenous to the Southern Interior of British Columbia and covers the hillsides of the Okanagan Valley every spring. The name of the Arrowleaf Balsamroot comes from a combination of the shape of its leaves and the fragrant balsam, or resin, found in its roots.







City Of Kelowna

North Entry Monument - Letters of Support

Page 1 - UBCO | Dean of the Faculty of Creative and Critical Studies

Page 2-3 - Kelowna Art Gallery | Executive Director



Office of the Dean Faculty of Creative and Critical Studies The University of British Columbia Okanagan Campus Kelowna, BC Canada V1V 1V7

Bryce.traister@ubc.ca 250-807-8481

September 5, 2024

"City of Kelowna Parks Planning Department 1435 Water Street Kelowna, BC, V1Y 1J4"

To whom it may concern,

It is a pleasure to write in support of Crystal Przybille and her team's proposal for creating a "City Entry Monument" for the City of Kelowna.

As I understand it, this design for this monument embodies the concept of "weaving together" the histories and cultures of both Indigenous and non-Indigenous communities. The design emphasizes the land as the common ground on which all life and activity in Kelowna occur, reflecting a deep respect for the interconnectedness of our shared environment, past, present, and future.

The team's approach to this project is aligned with the Truth and Reconciliation Commission's Calls to Action, particularly in its effort to integrate Indigenous perspectives into civic spaces. By bringing Indigenous and non-Indigenous histories together in this collaboration and design, they aim to foster a deeper understanding and respect within the community, creating a monument that honors the cultural heritage of this region, and a future vision of inclusivity and collaboration.

As the Dean of Creative and Critical Studies at UBC's Okanagan campus, I am delighted to see the energy of creative power partnering with both industry and the city to beautiful our town and welcome our visitors and residents alike in such a manner. I hope you agree with me.

With best wishes for your deliberation,

Sincerely,

Sompe 1 var

Bryce Traister Dean



August 27, 2024

Stefan Johansson

Senior Landscape Architect Parks and Buildings Planning | City of Kelowna

Dear Stefan, Stefan,

I am writing to express my enthusiastic support for the proposal to create a Civic Entry monument in Kelowna submitted by CTQ Consultants Ltd, with artists Sheldon Pierre Louis and Crystal Przybille.

This initiative is a visionary project that promises to enrich the cultural and educational landscape of our city, fostering greater awareness and understanding among all who travel through Kelowna and its surrounding communities.

The Approach outlined in the proposal, submitted to the City of Kelowna, is both timely and necessary. By focusing on enhancing the learning experience of residents and visitors alike, this monument will serve as a powerful tool to grow and foster awareness of the cultural diversity within Kelowna. It will play a crucial role in educating the public about the history and heritage of the Syilx peoples, who have called this land home for generations. By inspiring a more inclusive and positive understanding of Indigenous peoples in the interior, the monument will help connect individuals to the land and its history in a meaningful way.

The vision to create an *iconic design* that evokes Kelowna's unique character and relationship with the land and its people is compelling. Such a design has the potential to become a symbol of our city's identity, reflecting the deep connections between our diverse communities and the natural environment that sustains us. This monument will be more than just a physical structure; it will be a representation of Kelowna's commitment to unity, inclusivity, and respect for all cultures.

BOARD OF DIRECTORS

Brent Coyne Richard James Deacon Jillian Garrett Steve Huculiak Kara James Kassie Nadler June Nicolay Camille Saltman Lori Samuels

1315 Water Street, Kelowna, BC V1Y 9R3 | 250-762-2226 kelownaartgallery.com

We acknowledge that the Kelowna Art Gallery operates on the unceded traditional territory of the syilx/Okanagan people.

107561730RT0001

The Vision of weaving together the different strands of our community into a cohesive and strong identity is particularly inspiring. This approach reflects the essence of what it means to live in Kelowna—a city where cultures and people come together to create a vibrant, diverse, and supportive community. The monument will serve as a reminder of the strength that comes from unity and the beauty that arises from diversity.

The Themes of Land, Water, Heritage, Community, and Kelowna are deeply interconnected and central to our collective identity. By incorporating these themes into the design of the monument, the proposal ensures that the structure will resonate with all who see it, reminding them of the rich heritage and natural beauty of our city and its surroundings.

In conclusion, I believe that the Civic Entry monument will be a valuable addition to Kelowna, serving as a lasting testament to our city's cultural richness and commitment to inclusivity.

I fully support this proposal and look forward to seeing this vision come to life.

Thank you for your consideration.

may best, Sincerely. Natalev Nagy **Executive Director**

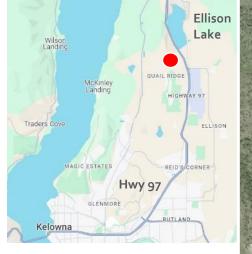


City of Kelowna North Entry Monument Project

Council Presentation Monday, September 9, 2024

What is an Entry Monument?





Project site: North Entry Monument





Entry Monument:

freestanding architectural structure, including city sign element, intended to welcome travelers into a community and sited along principal travel routes.

North Entry Monument:

envisaged as a community welcoming agent, one that is figurative in nature and serves as a key landmark to:

- identify one's sense of arrival into City of Kelowna
- and strengthen the relationship between viewer and what makes Kelowna distinctive and memorable.

Location factors







City of Kelowna

Highway 97 location

- Movement & distance
- Instant readability
- Changing perspectives

https://youtu.be/8JYnoDDxHGo



Three Top Short-listed Entry Submissions



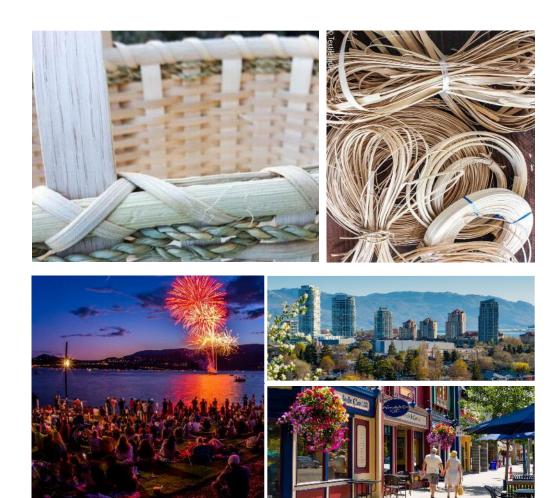




- January and February 2024:
 - jury of private and public design professionals assembled to select 3 top finalists.
- Ultimately, one submission recommended:
 - through a series of design critiques and group discussions.
 - received 90% consensus through secret vote.
- Recommended entry monument concept submission was prepared by:
 - CTQ Consultants Ltd.
 - in collaboration with two local artists,
 - Crystal Przybille
 - Sheldon Pierre Louis.

Recommended Entry Submission –Vision





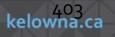
- Monument's overarching vision and form:
 - ▶ is inspired by the idea of "creating together".
- Multiple layers of bands/ `reeds':
 - represent individual elements that are intertwined together to form a greater whole.
- Comparable to basket weaving:
 - when elements are woven together, something strong, purposeful, and united is formed.
- Symbolic of a 'Community':
 - different cultures, districts, and landscapes are interconnected forming strong bonds.

Recommended Entry Submission –Vision:





- Design collaboration between Indigenous and non-Indigenous team members
 - example of an endeavor made stronger, and more meaningful, through the merging together of different cultural perspectives.
- Similarities made with the meaning of 'Syilx'
 n'syilxcen word for the region's First Nations peoples.
- Command for 'weaving' or 'intertwining'
 - requires us all to come together ...
 - to shape what our community means to us.



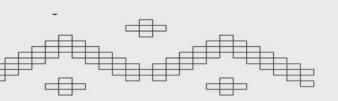
Recommended Entry Submission – Vision:





- ► Five themes were also generated:
 - interlaced depiction of Kelowna's pre/post-contact history, closing w/ all our hopes and aspirations for our future city.

COMMUNITY





KELOWNA





Connects viewer with the land, with each other, and with Kelowna's past, present, and future.





- physical 'weaving' of thematic elements.
- monument's form is aspirational.

KELOWN

• visual stacking of bands/'basket reeds'.



A A A A A A A A

movement and transformation

FRANKE F

 each linear element represents the 'b or reeds of a basket.



Symbolic 'weaving' together of cultures people used to strengthen Kelowna's ide

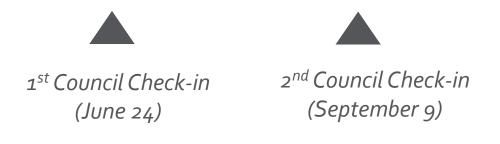
- continuous and dramatic visual journey.
- all five bands display iconography.
- images inspired from local area.

Connects viewer with the land, with each other, and with Kelowna's past, present, and future.

 visual journey culminates with the letters of 'KELOWNA'

Next Steps – North Entry Monument:

November 2023	February to March	April to August	September 2024	2025
to January 2024	2024	2024		



Questions:

KELOWN



CITY OF KELOWNA

Bylaw No. 12694

Amendment No. 28 to Subdivision, Development and Servicing Bylaw No. 7900

The Municipal Council of the City of Kelowna, in open meeting assembled, enacts that the Subdivision, Development and Servicing Bylaw No. 7900 be amended as follows:

1. THAT Index, Schedules, Section 5 be amended by deleting the following wording:

"City of Kelowna Construction Standards (Supplemental Standards to MMCD "PLATINUM" Edition Volume II, 2009)"

and replacing with the following wording:

"City of Kelowna Supplemental Construction Standards to MMCD 2019 Edition – Volume II"

2. THAT Index, Schedules, Section 6 be amended by deleting the following wording:

"Master Municipal Construction Documents (MMCD) – 2009 Platinum Edition Volume II – Published and Available from "The Master Municipal Construction Documents Association""

and replacing with the following wording:

"City of Kelowna Construction Standards – MMCD 2019 Edition – Volume II"

- 3. THAT Schedule '5' City of Kelowna Construction Standards (Supplemental Standards to MMCD "PLATINUM" Edition Volume II, 2009 be deleted in its entirety.
- 4. THAT Schedule '5' City of Kelowna Supplemental Construction Standards to MMCD 2019 Edition Volume II, as attached to and forming part of this bylaw, be added.
- 5. THAT Schedule '6' be deleted in its entirety.
- 6. THAT Schedule '6' City of Kelowna Construction Standards MMCD 2019 Edition Volume II, as attached to and forming part of this bylaw, be added.
- 7. This bylaw may be cited as "Bylaw No. 12694, being Amendment No. 28 to Subdivision, Development and Servicing Bylaw No. 7900."
- 8. This bylaw shall come into full force and effect and is binding on all persons as and from the date of adoption.

Read a first, second and third time by the Municipal Council this 26th day of August, 2024.

Adopted by the Municipal Council of the City of Kelowna this

Mayor

City Clerk

SCHEDULE 5 OF BYLAW 7900

CITY OF KELOWNA

SUPPLEMENTAL CONSTRUCTION STANDARDS TO MMCD 2019 EDITION – VOLUME II

SUPPLEMENTAL CONSTRUCTION SPECIFICATIONS
 SUPPLEMENTAL STANDARD DETAIL DRAWINGS

Schedule 5 is the supplemental construction standards to the Master Municipal Construction Documents (MMCD) and includes:

1. Supplemental Construction Specifications, and

2. Supplemental Standard Detailed Drawing.

These supplemental construction standards are to be applied in conjunction with the MMCD (Schedule 6) including MMCD Supplementary Updates for Works and Services constructed within the City of Kelowna.

The provisions of the **Supplemental Construction Specifications**, along with the City's **Approved Products List** (APL), **Supplemental Standard Detail Drawings** and related bylaws, augment and supersede the provisions of the MMCD. The Supplemental Construction Specifications and the Supplemental Standard Detailed Drawings take precedence over the MMCD.

1. SUPPLEMENTAL CONSTRUCTION SPECIFICATION TO THE MMCD

Section and article numbers in the Supplemental Construction Specification coincide with those of the MMCD. Reference numbers that include * do not have an accompanying MMCD specification and have been added as an additional supplemental specification.

			INDEX
Divi	sion	Reference	Section Title
01	GENERAL REQUIREMENTS	01 55 00S 01 57 01S	Traffic Control, Vehicle Access and Parking Environmental Protection
03	CONCRETE	03 30 205	Concrete Walks, Curbs and Gutters
26	ELECTRICAL	26 56 01S	Roadway Lighting
31	EARTHWORKS	31 05 17S 31 11 41S 31 23 01S 31 24 13S	Aggregates and Granular Materials Shrub and Tree Preservation Excavating, Trenching and Backfilling Roadway Excavation, Embankment and Compaction
32	ROADS AND SITE IMPROVEMENTS	32 11 16.1S 33 11 23S 32 12 16S 32 92 21S 32 92 23S * 32 93 01S 32 94 01S *	Granular Subbase Granular Base Hot Mix Asphalt Concrete Paving Topsoil and Finish Grading Soil Cells Planting of Trees, Shrubs & Ground Covers Irrigation System
33	UTILITIES	33 11 01S 33 30 01S 33 34 01S 33 40 01S 33 44 01S	Waterworks Sanitary Sewers Sewage Forcemains Storm Sewers Manholes and Catch Basins
34	TRANSPORTATION	34 41 13S	Traffic Signals

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Т	TRAFFIC CONTROL, VEHICLE ACCESS AND PARKING SECTION 01 55 00S PAGE 1 OF 1		
1.0	General		(replace 1.0.6)		
		1.0.6	The City of Kelowna is responsible for issu and conditions set forth, in accordance with The Contractor will be required to obtain a to work within City Right-of-Way. For pur roads, Traffic Control Plans shall be pre approved by a Professional Engineer with Professional Traffic Operations Engineer reference can be found in the "City Management Guide" at the City's website	n Traffic Bylaw No. 8120 Road Usage Permit prior rojects involving arteria pared or reviewed and n traffic experience or a r (PTOE). Step by step y of Kelowna Traffic	
		1.0.7	In addition to the Public Notice required Contractor shall provide additional writter businesses one day prior to access close content and form of the written notificatio approved by the Contract Administra Emergency, vehicle and pedestrian access residences shall be maintained at all the approved by the Contract Administrator. So a minimum lane width of 3.0m and be of comfortable driving surface, free of impediments, sufficient to accommodate drive passenger vehicles at a speed of 20 km	notice to residents and ures or restrictions. The ns shall be reviewed and tor prior to delivery to all businesses and times unless otherwise uitable access shall have lefined as a bladed and potholes and othe e a standard two-whee	
		1.0.8	Working hours are outlined in Good Neig Requests to vary working hours must be accordance with the provisions of Bylaw N	approved in advance, ir	
		1.0.9	All regulatory signs that are affected by the and replaced by the City of Kelowna in Bylaw No. 8120. Requests for sign change in advance of proposed work.	accordance with Traffic	

SUPPI	DF KELOWNA LEMENTAL TO D SPECIFICATIONS		SECTION SECTION PA	
1.2	Temporary Erosion and Sediment Controls	1.2.2	Work Adjacent to Watercourses (replace (1.2.2)	
	Controis		(1) Work around watercourses shall be of terms and conditions of the Federal, permits and approvals included in the and the most recent version of the Guidelines" published by the F Environment.	Provincial and Municipal ne Contract Documents, ne "Land Development
1.4	Environmental Protection		(replace 1.4.2)	
		1.4.2	Site Clearing and Plant Protection:	
			(1) Construct Tree Protection Zones ir Protection Bylaw No. 8041 and Mu Bylaw No. 8042. Any tree dama immediately to the City Engineer.	unicipal Properties Tree
			(2) Protect roots of retained trees dur grading by ensuring a Tree Protection any fallen fencing is repaired imr material, soil, and equipment stora Tree Protection Zones.	a Zone is maintained and nediately. Construction
			(3) Temporary access within Tree Pro- monitored by an arborist or equivalen- to ensure appropriate protection me wood chip mulch laid over geotextile or other as dictated by intensity of a the root zone prior to temporary a oversee root pruning if excavation in is necessary.	nt Qualified Professional easures (such as 300mm e fabric, 25mm plywood, access) are in place over ccess. An arborist must
			(4) Minimize the spread of invasive pla machinery prior to accessing site.	ant species by cleaning
			(5) Minimize stripping of topsoil and veg	etation.
		1.4.3	Pollution Control: (add)	
			(5) Ensure proper containment and dis water.	posal of concrete wash

	F	SECTION 01 57 01S
SUPPLEMENTAL TO	ENVIRONMENTAL PROTECTION	PAGE 2 OF 5
MMCD SPECIFICATIONS		

(add)

1.4.4 Spill Contingency Plan:

Prepare and provide a written Spill Contingency Plan prior to commencement of construction activities.

Spill Contingency Plan shall include the following as applicable:

- Provisions for secondary containment for all stationary bulk fuelling tanks, equipment washing and maintenance areas. Secondary containment for fuelling tanks must be a minimum 110% of the volume of the tank or 40% of the volume of all the containers stored, whichever is the greater volume.
- (2) Spill Kits and protective equipment that include adsorbent pads, booms, etc. for containing and mopping up small spills, and gloves, coveralls, shovels, containers, etc. to use to mop up spilled substances.
- (3) Segregation and disposal procedure (or contingency plan) for contaminated soils and/or contaminated groundwater.
- (4) Reporting procedure that includes "reportable volumes" and numbers to call in the event of a spill. For example, spills of oil or diesel fuel equal to or in excess of 100 L must be reported to the Provincial Emergency Program (PEP) at 1.800.663.3456.

When calling PEP be prepared to answer the following:

- your name and contact phone number;
- name and phone number of the person who caused the spill;
- location and time of the spill;
- type and quantity of the substances spilled;
- cause and effect of the spill, and details of action taken or proposed;
- description of the spill location and surrounding area;
- names of agencies on scene and name of other persons or agencies advised of the spill.
- (5) Small spills less than 10 L may be dealt with by the Contractor (or sub-contractor) provided equipment is available to contain and clean-up the spilled substances and all soils affected by the soil. Any spill to a surface water or City of Kelowna utility must be reported to the Fire Hall Dispatch at 250-860-8801, or use 911 in any emergency situations where response times are critical.

SUPPLE	KELOWNA MENTAL TO SPECIFICATIONS		ENVIRONMENTAL PROTECTION	SECTION 01 57 01S PAGE 3 OF 5
			(add)	
	1	1.4.5	Work Near Fish Bearing Streams and/or Ser	nsitive Habitats:
			(1) Mitigation measures and best manager employed for work in or near fish b sensitive habitats in accordance with Provincial and Federal regulations.	earing streams and/or
			(2) The Contractor is responsible to ensure Provincial, and Federal approvals have undertaking Work within an Environme defined in the Kelowna 2040 – Official No. 12300.	been attained prior to ntally Sensitive Area, as
			(5) The Contractor shall be responsible for copies of the City of Kelowna Development Permit and the P authorization at the work site and requirements.	Natural Environment rovincial Water Act
1.5	Temporary Storm		(add)	

 Water Pollution
 I.5.1
 No person shall discharge or allow or cause to be discharged into a storm drain, any substance except storm water, in accordance with Sanitary Sewer/Storm Drain Regulation Bylaw No. 6618-90. For temporary construction dewatering discharge, a Temporary Discharge Permit must be obtained from the City in accordance

with Bylaw No. 6618-90.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Concr	Section 03 30 CONCRETE WALKS, CURBS AND GUTTERS PAGE 1	
1.0	GENERAL			
1.5	Inspection and Testing		(add)	
		1.5.2	One (1) compressive strength test (3 ASTM C31M) shall be made for each concrete work. Minimum one test per Contractor is to protect cylinders of temperature of 16-27°C, for minimum maximum of 48 hours, after which the laboratory. One cylinder shall be tested days. If tests do not meet specified Administrator may require additional replacement in accordance with CSA 2	a 150 square metres of r batch or per day. The on site, maintaining a um of 16 hours and a hey can be sent to the d at 7 days and two at 28 strength, the Contract testing or removal and
3.0	EXECUTION			
3.9	Expansion Joints		(delete 3.9.3 and replace with the foll	owing:)
		3.9.3	Expansion joint material is not re sidewalks; use bond break compound. I is required in plaza areas as shown on t walks are placed against fixed objects walk, such as structures, kiosks or p stamped concrete truck aprons.	Expansion joint material the Drawings and where that extend above the
				END OF SECTION

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	ROADWAY LIGHTING	SECTION 26 56 01S PAGE 1 OF 1

3.0 EXECUTION

3.10	3.10 Luminaires and Photocells		(replace 3.10.2)
		3.10.2	Install post top and pendant fixtures level. Cobra style fixtures
			to be installed parallel with the longitudinal grade of the road

surface, to reduce glare on the downhill side.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	AGGREGATES AND GRANULAR MATERIALS	SECTION 31 05 17S Page 1 of 5

1.0 GENERAL

1.3 Approvals

(add)

1.3.5 Crushing and/or screening of granular aggregates shall only be permitted within the project area or on any City of Kelowna road right-of-way when specifically approved by the City of Kelowna. Any applications for gravel processing would need to adequately address dust, noise and location/proximity of production in accordance with Zoning and/or Temporary Use Permits.

2.0 PRODUCTS

2.1 Materials - General

(add)

2.1.3 The physical properties of the materials for Select Granular Subbase and Granular Base course shall meet the following specifications:

Physical Property	Test Designation	Granular Sub-base	Granular Base
MgSO4 Loss % Course Ag (Max) Fine Ag (Max)	ASTM C88/C88M	20 25	20 25
Sand Equivalent % (Min)	ASTM D2419	25	35
Micro-Deval Loss % (Max)			
Course Agg. (Max)	ASTM D6982	30	25
Fine Agg. (Max)	ASTM D6982	35	30
Plasticity Index % (Max)	ASTM D4318	0	0
Crushed Particles (one face) % (Min)	MoTI-202 (A)	-	60
Flat & Elongated Particles (4:1 Ratio) % (Max)	ASTM D4791	-	10
Asphalt Coated Particles % (Max)	MTO LS-621	30	30
Clay and Friable Particles % (Max)	ASTM C142	1	1
California Bearing Ratio (Soaked) % (Min)	ASTM D1883	40	80

Note: MTO = Ontario Ministry of Transportation

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Aggr	REGATES AND GRANULAR MATERIALS	SECTION 31 05 17S PAGE 2 OF 5
2.7	Granular Pipe Bedding and		(replace 2.7.2)	
	Surround Material	2.7.2	Recycled concrete shall not be used as pipe	e bedding material.
			(replace 2.7.3)	
		2.7.3	Other permissible materials: only wher Drawings or directed by the Contract Ac rock, pit run sand, or approved native mate and pipe surround. If native material is app required.	lministrator shall drain rial be used for bedding
			(add)	
		2.7.4	A maximum percentage by weight of 3 Pavement (RAP) may be uniformly blended and used for Type 1 Granular Pipe Bedding a The maximum size of the RAP material sh concrete shall not be used as pipe bedding.	d with virgin aggregates and Surround Materials.
2.8	Select Granular Sub-		(replace 2.8.1)	
	base	2.8.1	Granular subbase aggregate shall be con granular material capable of withstanding of water, freeze/thaw, handling, spreadin	the deleterious effects

Sieve Designation	Percent Passing
150 mm	100
100 mm	85 - 100
50 mm	65 - 100
19 mm	40 - 100
4.75 mm	20 - 70
0.150 mm	0 - 20
0.075 mm	0 - 8

design traffic loading. The aggregate particles shall be uniform in

quality and conform to the following gradation:

2 - 8

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Aggr	AGGREGATES AND GRANULAR MATERIALS			SECTION 31 05 17S PAGE 3 OF 5	
			(add))			
		2.8.2		mum aggregate particle size ness of sub-base layer.	to be no more than 509	% of total	
2.10	Granular Base		(repla	ace 2.10.1)			
		2.10.1	granu of ex comp	ular base aggregate shall ular material capable of with posure to water, freeze/t pacting and design traffic lo be uniform in quality and com	nstanding the deleteriou thaw, handling, spread bading. The aggregate	us effects ding and particles	
				Sieve Designation	Percent Passing		
				25 mm	100		
				19 mm	80 - 100		
				9.5 mm	60 - 90		
				4.75mm	35 - 70		
				2.36 mm	25 - 50		
				1.18 mm	15 - 35	1	
				0.300 mm	5 - 20		

2.11 Recycled Aggregate Material

(replace 2.11.1)

0.075 mm

2.11.1 Aggregates containing recycled material may be use if approved and certified by the Contract Administrator in consultation with the geotechnical consultant. In addition to meeting all other conditions of this specification, recycled material should not reduce the quality of construction achievable with quarried materials. Recycled material shall consist only of aggregates, crushed Portland cement concrete, or asphalt that is free of impurities.

(replace 2.11.2)

- 2.11.2 Recycled Concrete and Asphalt (RCA) may be used as subbase or base within the pavement structure and can be used as random fill in the subgrade with the following restrictions:
 - (1) Recycled Asphalt Pavement (RAP) content in the RCA shall be limited to a maximum of 30% by weight of the final blended product as determined by test method MTO LS-621 (see Section 2.1.1).
 - (2) RCA shall only be placed below areas that will be capped with asphalt concrete, concrete, chip seal or other impermeable surfacing.
 - (3) RCA shall not be used for bridge end fill or backfill for retaining walls.
 - (4) RCA shall not be stockpiled or doubled handled on the project site without Contract Administrator approval in consultation with the geotechnical consultant.
 - (5) RCA shall not be placed within 30 m of drinking water wells/intakes, as measured in a straight line along the ground surface from the edge of the RCA to the water well/intake.
 - (6) RCA shall not be placed within 30 m of a designated stream (as defined by the B.C. Water Sustainability Act), as measured in a straight line along the ground surface from the edge of the RCA to the seasonal high-water mark of the stream.
 - (7) RCA shall not be placed below the 1 in 200-year flood elevation or the seasonal high-water table elevation.

(replace 2.11.3)

2.11.3 All recycled concrete aggregate shall be at least 28 days or older prior to processing and blending into RCA. The RCA blend shall contain an aggregated weight of less than 1 percent of construction waste and deleterious materials. Construction waste and deleterious materials include reinforcing steel, other metals, expansion material, plastics, rubber, glass, organic materials, brick, mica, schist glass, gypsum, clay and friable materials. Construction waste and deleterious materials

AGGREGATES AND GRANULAR MATERIALS

SECTION 31 05 17S PAGE 5 OF 5

excluding clay and friable materials should be visually identified, separated, and removed from the sample for weighing. Testing for the clay and friable material component shall be according to ASTM C142 (see Section 2.1.1) and shall be combined with the weight of the separated and removed materials for final weighing.

(replace 2.11.4)

2.11.4 Prior to the placement of RCA materials, each source of RCA must provide laboratory test results meeting the requirements for physical properties outlined in Clause 2.1.3. On-going, quality control requirements for RCA are as shown in the following table:

Physical Property	Test Designation	Test Frequency
Aggregate Gradation	ASTM C136	Every 2,500 m ³
Standard Test Methods for Laboratory Compaction Characteristics of Soil using Standard Effort	ASTM D698	Every 2,500 m ³
Standard Test Methods for In- Place Density and Water Content of Soil and Soil- Aggregate by Nuclear Methods (Shallow Depth)	ASTM D6938	Five random tests per lift for every 2,500 m ²
Micro-Deval Loss (%, Max) Course Agg. (Max) Fine Agg. (Max)	ASTM D6928	Every 5,000 m ³ Every 5,000 m ³
Asphalt Coated Particles (%, Max)	MTO LS-621	Every 2,500 m ³
Construction Waste, Deleterious Particles, Clay and Friable Materials (%, Max)	ASTM C142	Every 2,500 m ³
Soaked California Bearing Ratio (%, Min)	ASTM D1883	Every 5,000 m ³

All samples for testing shall be taken from the stockpile at the location where the RCA is being produced.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		S	SHRUB AND TREE PRESERVATION	SECTION 31 11 41S PAGE 1 OF 4
1.0	GENERAL			
1.5	Definitions		(add)	
		1.5.1	<i>Tree Protection Zone</i> , as identified as a Kelowna Tree Protection Bylaw No. 8041 Tree Bylaw No. 8042, is the area of the protection of trees, shrubs and understood the Contract Drawings and includes the protection zone.	and Municipal Properties he site required for the rey vegetation shown on
		1.5.2	<i>Drip Line</i> is the area of ground beneath th of a tree or shrub.	ne outermost branch tips
2.1	Materials		(add)	
		2.1.10	For material and specifications for constr <i>Zones</i> refer to Tree Protection Bylaw I Properties Tree Bylaw No. 8042.	
3.1	Existing Trees		(replace 3.1.1)	
		3.1.1	Inspect with Contract Administrator and existing shrubs and trees shown on Co preserved. Establish <i>Tree Protection Zone</i> trees and maintain the <i>Tree Protection Zo</i> markings until directed by the Contract A	ontract Drawings to be s around such shrubs and ne barricades, fencing or
			(replace 3.1.6)	
		3.1.6	Water preserved, retained, and city tree Zones every week during the growing sea drought periods, following the advice of irrigation scheduler or certified arborist. around shrubs and below tree crowns so feeder roots, at minimum to a depth of 30	ason or as needed during ^F a qualified professional Soak area immediately ufficiently deep to reach
			(add)	
		317	Root pruning should only be undertaken	under the supervision of

3.1.7 Root pruning should only be undertaken under the supervision of a certified arborist. For accidentally severed tree roots greater

SUPP	DF KELOWNA LEMENTAL TO D SPECIFICATIONS	S	SHRUB AND TREE PRESERVATION	SECTION 31 11 41S PAGE 2 OF 4
			than 25mm diameter, cut cleanly using a s minimize exposed face of cut surface.	sharp cutting tool to
		3.1.8	Any damage to a protected, retained, or city t to the Contract Administrator and City Engir the tree must be assessed by a certified arbor repair/protection measures are needed.	neer immediately and
3.3	Lowering Grade Around Existing		(replace 3.3.2)	
	Trees	3.3.2	Excavations within a <i>Tree Protection Zone</i> mu Certified Arborist.	ust be supervised by a
3.4	Pruning		(add)	
		3.4.1	Pruning of retained tree, protected tree, or o Bylaw 8041 and 8042 requires a Tree Cutting City of Kelowna. If hazardous limb removal i work must be supervised by a certified arbo imminent threat to safety.	Permit issued by the s deemed necessary,
3.5	Clean Up		(replace 3.5.2)	
		3.5.2	Replace or provide compensation for any Administrator assesses as irreparably damag an Arborist and according to the requirement Society of Arboriculture Guide for Establish Other Plants, 1983.	ged as determined by ts of the International
3.6	Tree Protection Zone		(add Sub-Section)	
		3.6.1	Install barrier prior to clearing, tree removal, or alteration of the grade of the site. <i>Tree</i> required for any trees to be protected or accordance with Bylaw 8041, or within 10m Trees are present, in accordance with Bylaw	<i>Protection Zones</i> are retained on site, in of the site where City
		3.6.2	Submit request for changes to the limits or reprotection zone to the Contract Administration approval prior to alteration of or encroad protection zone. The approval shall approtection zone around each specific trees	rator for review and chment into a tree bly only to the tree

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		S	SHRUB AND TREE PRESERVATION	SECTION 31 11 41S PAGE 3 OF 4
			Contractor's request, and not to any or all tr the site.	ee protection zones on
3.7 Trenching Near Existing Trees			(add Sub-Section)	
		3.7.1	Work within a Tree Protection Zone is disco any work must be approved by a certifie details for approved methods of excavation provided to the Contract Administrator for commencing.	d arborist and include . This proposal must be

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Section 31 23 01SExcavating, Trenching and BackfillingPage 1 of 2		
1.0	GENERAL			
1.7	Disposal		(add)	
		1.7.2	The deposit or removal of soil on any lar regulated under the Soil Removal and Depo No. 9612. The Contractor is responsible to en deposit or removal pursuant to the provisions been obtained prior to commencing construct	osit Regulation Bylaw sure a permit for such of Bylaw No. 9612 has
1.11	Inspection and		(add)	
Testing		1.11.2	As a minimum, the frequency of quality compaction densities for trench backfill and r at least one test per 50 linear metres of trenc or lane width, and the number of tests shall v as follows:	oad subgrade shall be ch (including services)
			(1) Trench backfill and subgrade fill 0.6 m dep 1 vertical test per 50 m;	oth or less shall include
			(2) Trench backfill and subgrade fill between shall include 2 vertical tests per 50 m, with being equally spaced;	-
			(3) Trench backfill and subgrade fill greater t include 3 vertical tests per 50 m, with being equally spaced.	•
3.0	EXECUTION			
3.5	Backfill and		(add)	
	Compaction	3.5.5	Trench backfill and road subgrade material sl compacted in maximum 300 mm vertical lifts approved by the Contract Administrator.	•
3.6	Surface Restoration	3.6.7	Permanent pavement restoration: (replace (5))	
		(5)	Restore pavement as detailed on City of Ke Standard Detail Drawing SS-G5 and the follow	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Exca	SECTION 31 23 01S VATING, TRENCHING AND BACKFILLING PAGE 2 OF 2
			.1 Final asphalt cutting and milling of edges shall be conducted after trench excavation and backfill processes are completed, just prior to paving so that edges are undamaged.
			.2 Where the edge of the saw cut or milled asphalt, whichever is wider, extends into the travel lane, it shall be extended to the mid-point of that lane. Where the edge extends past the mid-point of the travel lane, it shall be extended to the far edge of that travel lane.
			.3 Where the edge of the saw cut or milled asphalt, whichever is wider, is less than 1.5 m from the lip of gutter or edge of paved shoulder, it shall be extended to the lip of gutter or edge of paved shoulder.
			.4 When an area of existing asphalt between two parallel or transverse trenches is less than one third (1/3) of the total area of the proposed paving of the two trenches, plus the area between them (based on the shortest trench), the existing asphalt shall be removed, and the full area paved in conjunction with the paving of the two trenches.
			.5 Regardless of the above, if the longitudinal distance between two trenches is less than three (3) metres it shall be removed, and the area paved in conjunction with the paving of the two trenches. The minimum restoration width shall be sufficient for machine paving unless permitted by the City Engineer.
3.6	Surface Restoration		(add)
		3.6.8	Concrete curb and sidewalk restoration:
			Existing curbs, sidewalks, and driveways shall be reconstructed and reinstated to ensure proper drainage and appearance, to match existing finish. Concrete curb and gutter to be reinstated between control joints. Concrete sidewalk and driveways to be reinstated to nearest panel joint.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		ROADWAY EXCAVATION, EMBANKMENT AND COMPACTION		SECTION 31 24 13S PAGE 1 OF 1	
1.0	GENERAL				
1.9	Inspection and		(add)		
	Testing	1.9.2	The frequency of density tests for embank shall be one test per 250 m ² for each 300 mm	J	
3.4	Placing		(add)		
		3.4.8	Materials shall be placed and compacted vertical lifts unless otherwise approv Administrator.		

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		GRANULAR SUBBASE	SECTION 32 11 16.1S PAGE 1 OF 1
1.0	GENERAL		
1.5	Inspection and	(add)	

Testing

1.5.2 The frequency of density tests for subbase shall be at least one test per 150 m² placed, minimum one per day, and the test interval shall be consistent and evenly spaced along length and width of the Work. For Work that involves roadway, curb and sidewalk, test locations shall be staggered amongst the travelled lanes, curbs, and sidewalks.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 32 11 23S GRANULAR BASE PAGE 1 OF 1
1.0	GENERAL		
1.5	Inspection and Testing		(add)
		1.5.2	The frequency of density tests for base shall be at least one test per

The frequency of density tests for base shall be at least one test per 150 m2 placed, minimum one per day, and the test interval shall be consistent and evenly spaced along length and width of the Work. For Work that involves roadway, curb and sidewalk, test locations shall be staggered amongst the travelled lanes, curbs, and sidewalks.

2.0 PRODUCTS

2.1 Materials

(replace 2.1.1)

- 2.1.1 Asphalt cement: to CGSB-16.3-M90, Grade 80-100, Class A or PG 64-22.
- 2.1.3 (replace (2))
 - (2) Gradations to be within limits specified when tested to ASTM D5444.

Table 2.1.3.2Hot Mix Asphalt Aggregate Gradation Specification

Sieve Designation	Percent Passing
	Lower and Surface Course
19 mm	100
12.5 mm	84 - 95
9.5 mm	73 - 90
4.75 mm	50 - 75
2.36 mm	35 - 57
1.18 mm	25 - 45
0.600 mm	18 - 34
0.300 mm	10 - 26
0.150 mm	6 - 17
0.075 mm	3 - 7

2.1.3 (replace (8))

(8) Micro Deval % Loss: ASTM D6928, Coarse Aggregate: 18 max.

2.1.3 (replace (12))

(12) Crushed fragments (fraction retained on 4.75mm sieve): at least <u>85%</u> of particles by mass, to have at least 2 freshly fractured faces. Determination of amount fractured material will be in accordance with MoTI Specification I-11, Fracture Count for Coarse Aggregate, Method "B", which determines

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS				SECTION 32 12 16S PAGE 2 OF 14	
				fractured faces by mass.	
2.2	Mix Design		(rep	place full section)	
		2.2.1	Inde con forr with blov of a	e Contractor, at their cost, must retain ependent Laboratories (CCIL) certified sultant to perform trial mix designs and mula. The trial mix design must be pe h the current Asphalt Institute MS-2 ws per face) and must include five (5 asphalt content. The Contractor mu igns and submissions.	d, independent testing d to submit the job mix erformed in accordance and ASTM D6926 (75 5) separate trial values
		2.2.2	(RA pro Sub utili	tes may contain up to 20% of Reclair AP) without changing binder grade perties of RAP material are considered pmissions for RAP mixes must contain a ized in the mix design. Use of Recycled not be permitted.	e, provided that the I in the trial mix design. all data relevant to RAP
			The	e amount of total AC in the RAP will be c	calculated as follows:
				% AC Replacement = <u>(a x b)</u> c	
				a = AC content of RAP b = RAP percent in mixture by total c = Total Percent AC content in mixt	3
		2.2.3		esign of mix: Include the following data the bollowing data the bollowing data the bollowing data the bollowing	with the trial mix design
			(1)	Aggregate bulk specific gravity and wa	ater absorption.
			(2)	Sand equivalent, Micro Deval, Flat a Aggregate Fracture, Fine Aggreg Manufactured Fine Content values.	J .
			(3)	Asphalt cement properties including i temperatures, based on temperature asphalt cement.	
			(4)	A graph of the temperature-viscosit asphalt cement.	ty relationship for the

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	HOT MIX ASPHALT CONCRETE PAVING	SECTION 32 12 16S PAGE 3 OF 14

- (5) Aggregate gradations and blending proportions.
- (6) Maximum theoretical density of trial mixes.
- (7) Asphalt absorption values.
- (8) Information on additives, including source, type, percent by mass of asphalt cement and test results when anti-stripping tests are required.
- (9) Percent Air Voids, Marshall flow, voids in the mineral aggregate, and Marshall stability of the mixture selected.
- (10) Graphs of the air voids, Marshall flow, voids in the mineral aggregate and Marshall stability plotted against asphalt cement content.
- (11) Mix physical requirements to meet Table 2.2.3 below.
- (12) Do not change job-mix without prior approval from the Contract Administrator. Should change in material source be proposed, new job-mix formula to be submitted to the Contract Administrator for review and approval.

	Mix Type
Property	Lower and Surface Course
Stability @ 60°C, kN (min)	9.0
Flow Index, 0.25 mm units	8 - 14
Voids in Mineral Aggregate % (min)	14.0
Air Voids, % ⁽²⁾	3.0 - 5.0
Tensile Strength Ratio, % (min) ⁽³⁾	80

Table 2.2.3 Specified Physical Requirements of Hot Mix Asphalt

Notes:

(1) Percent air voids in compacted trial mixes must be determined in accordance with ASTM D3203, with asphalt cement absorbed into the aggregate compensated for in the calculation.

(2) In accordance with AASHTO T 283

SECTION 32 12 16S PAGE 4 OF 14

3.0 EXECUTION

- 3.1 Plant and Mixing Requirements
- 3.1.1 Batch and continuous mixing plants: (replace (3))
 - (3) Before mixing, dry aggregates to a moisture content not greater than <u>1.0%</u> by mass or to a lesser moisture content if required to meet mix design requirements.
 - (9) Where RAP is to be incorporated into the mix: (add)
 - (5) RAP shall be introduced such that the RAP is not directly exposed to the flame.
- 3.1.4 Mix tolerances including variations resulting from adding RAP: *(replace (1))*
 - (1) Permissible variation in aggregate gradation from job mix (percent of total mass):

(1)	4.75 mm sieve and larger	± 5
(2)	2.36 and 1.18 mm sieves	± 4.0
(3)	0.600 mm sieve	± 3.0
(4)	0.300 mm sieve	± 2.0
(5)	0.150 mm sieve	± 1.5
(6)	0.075 mm sieve	± 1.0

3.2 Equipment

3.2.1 (add)

- Pavers must be capable of placing a standard mat width not less than 3 m and must be capable of paving wider widths in 150 mm and 300 mm increments by means of equipment supplied by the manufacturer of the equipment. The screed must include a tamping bar or strike-off device.
- (2) Control of the screed must be by automatic sensing devices. Longitudinal control must be by a sensor that follows a stringline, ski or other reference. The grade sensor must be movable, and mounts provided so that grade control can be established on either side of the paver. A slope control sensor must be provided to maintain the proper transverse

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Н	SECTION HOT MIX ASPHALT CONCRETE PAVING PA	
			slope of the screed.	
3.6	Compaction	3.6.1	(add)	
			Re-rolling of the asphalt will not be ac increase test that do not meet specificatio	
		3.6.2	General: (replace (1))	
			(1) Provide sufficient compaction equipn compaction rate meets or exceeds to to ensure that specified density temperature of the mat falls below 100	he placement rate and is achieved before the
3.7	Joints	3.7.1	General: (add)	
			(4) When placing final pavement layer a gutter, compacted pavement must same elevation or a maximum of 10 mentire lip of the gutter. For reverse g pavement must meet the gutter at prevent ponding.	meet the gutter at the mm above and along the rade gutter, compacted
Add t	he following Sub-Secti	ons:		
4.0	COMPLIANCE WIT		CATIONS AND R NON-COMPLIANCE	
4.1	General	4.1.1	The Contractor Shall provide a finished pro quality and tolerance requirements of this tolerances are specified, the standard of w	Specification. Where no

tolerances.

- accordance with accepted industry standards.
 4.1.2 Acceptance of any unit of work area at full payment will occur if there are no obvious defects and the results of asphalt content, pavement density, air voids and thickness meet or exceed specified
 - 4.1.3 Unit price reductions will only be applied based on full quality assurance testing in accordance with Table 5.3.4.
 - 4.1.4 The Engineer of Record who provides a letter of professional assurance for asphalt paving must satisfy the requirements of this specification. Quality control and quality assurance documentation must be available upon request. Companion samples taken as part

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Н	SECTION 32 12 16S HOT MIX ASPHALT CONCRETE PAVING PAGE 6 OF 14		
			of quality assurance testing must be availab City Engineer.	ble upon request by the	
		4.1.5	Any material or workmanship deficiencies of payment adjustment to be paid to the City of and replacement. Payment adjustments wil guidelines in this specification. Removal ar at the discretion of the City Engineer.	of Kelowna or removal I be determined by the	
4.2	Aggregate Gradation	4.2.1	When the aggregate fails to comply with t Section 3.1.4.1 of this specification, the City the following action:		
			(1) When two consecutive gradation ar compliance with the specified tolerance be notified in writing and a third test wil	es, the contractor shall	
			(2) If the third test indicates aggre compliance, the Contractor must suspe and placement until corrective action additional testing shows compliance w limits.	end asphalt production has been taken and	
4.3	Asphalt Cement	4.3.1	Payment adjustment for non-compliance	with the tolerance	

.3.1 Payment adjustment for non-compliance with the tolerance specified:

Asphalt Content Deviation from Design %	Payment Adjustment Factor
0.30 OR LESS	0.00
0.31 TO 0.40	0.30
0.41 TO 0.50	0.75
0.50 OR GREATER	Remove and replace (at the discretion of the City Engineer)

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		SECTION 32 12 16S HOT MIX ASPHALT CONCRETE PAVING PAGE 7 OF 14		
		4.3.2	Adjustment for asphalt cement (AC) context the amount payable for Hot Mix Asphalt P bid price times the payment adjustment factor to which the factor is to be applied, i.e.: $A_c = P(F_c)(Q_n)$ Where: $A_c = Adjustment for AC content non-compP = Unit bid priceFc = Adjustment Factor for AC Content nQn = Asphalt measured for payment whichthe production period to which a test$	aving equals the unit tor times the quantity pliance on-compliance
4.4	Pavement Thickness	4.4.1	Pavement of any type found to be deficient in t 10 mm must be removed and replaced by p thickness, at the contractor's expense.	hickness by more than
		4.4.2	Pavement of any type found to be deficient b of its specified compacted thickness will not adjustment for thickness non-compliance.	
		4.4.3	Pavement of any type found to be deficient than 10 percent of its specified thickness but shall give rise to an adjustment in the amou Contractor. The adjustment shall be subtract otherwise payable to the Contractor, and adjustment will be paid to the City. The calculated as follows:	not more than 10 mm unt to be paid to the ted from the amount I the amount of the
			$A_t = 1.3 \left(\frac{T_d}{T_s}\right) (P) (Q_t$.) -
			Where:	
			A _t = Adjustment for thickness deficiency	
			 T_d = Deficiency in thickness measured in greater than 10% of specified thicknes 10 mm. 	5
			T_s = Specified thickness in mm.	
			P = Unit Bid Price	

Qt = Asphalt measured for payment lying within a unit of work area defined in 5.2.2, where the thickness deficiency has been identified.

NOTE: No allowance will be made for the tolerance provided for in Section 4.4.2. No payment will be made for additional thickness.

CITY OF KELOWNA SUPPLEMENTAL TO HOT MIX ASPHALT CONCRETE PAVING MMCD SPECIFICATIONS	SECTION 32 12 16S PAGE 8 OF 14
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4.5 Density 4.5.1 The minimum specified density for acceptance, without payment adjustment, must be 97% of the 75 blow Marshall bulk relative density as most recently determined by the appointed testing

agency.

4.5.2 Payment adjustment for density non-compliance will be as follows:

DENSITY (% OF 75 BLOW MARSHALL BULK RELATIVE DENSITY)	PAYMENT ADJUSTMENT FACTOR	
97 and greater	0.0	
96.5 to 96.9	7.5 %	
96.0 to 96.4	15.0 %	
95.5 to 95.9	22.5 %	
95.0 to 95.4	30.0 %	
Less than 95.0	No Payment (Note 1)	

Note 1: Subject to removal and replacement at the discretion of the City Engineer.

Adjustment for density specification non-compliance shall be determined as follows:

$$A_D = P(F_D)(Q_{nD})$$

Where:

 A_D = Adjustment for density non-compliance

P = Unit Bid Price for Hot Mix Asphalt Cement paving (m²)

F_D = Payment Adjustment Factor for density non-compliance (%)

Q_{nD} = Asphalt measured for payment within a unit of test area as defined in 5.1.3 (m²).

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		PLEMENTAL TO HOT MIX ASPHALT CONCRETE PAVING PAGE S		
4.6	Adjusted Payments	4.6.1	The total adjustment arising from pavement in the foregoing shall be determined as follow $A_r = A_c + A_t + A_D$	
			Where:Ar=Total AdjustmentAc=Adjustment for asphalt cement conAt=Adjustment for thickness deficiency	•
			A _D = Adjustment for density non-compli	ance
			The total adjustment (A _r) shall be applied to quantity of work being accessed.	the unit price for the
4.7 Segregation		4.7.1	The finished surface shall have a uniform t segregated areas. A segregated area is def pavement where the texture differs visually f surrounding pavement.	ined as an area of the
		4.7.2	All segregation will be assessed using A Engineer to determine repair requirements.	-
			The severity of segregation will be rated as f	follows:
			Slight - The matrix of asphalt cement and fin between the coarse aggregate particles, h stone in comparison to the surrounding acce	owever there is more
			Moderate - Significantly more stone than th exhibit a lack of surrounding matrix.	e surrounding mix and
			Severe - Appears as an area of very stony mix with very little or no matrix.	x, stone against stone,
		4.7.3	Areas of moderate segregation may be le courses, subject to approval of the Cit considered defective areas for surface con segregation are considered defective areas courses. Defective areas shall be remove acceptable hot mix asphalt of the same type satisfaction of the City Engineer.	y Engineer, but are urse. Areas of severe for lower and surface and replaced with
		4.7.4	Any other methods of repair proposed by subject to the approval of the City Engineer.	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Н	Section 32 12 ⁴ Hot Mix Asphalt Concrete Paving Page 10 of	
		4.7.5	Repairs will be carried out by the Contractor	at their expense.
4.8	Smoothness	4.8.1	The completed asphalt concrete surface sha to the established crown and grade. The su free from deviations exceeding 5 mm as mea with a 3 m straight edge.	urface course shall be
		4.8.2	When deviations more than the above tole pavement surface shall be corrected by me the City Engineer. Correction of defects sha there are no deviations anywhere greate tolerances.	ethods satisfactory to all be carried out until
5.0	TESTING FREQUEN	ICY AND P	ROCEDURES	
5.1	General	5.1.1	The City Engineer shall have access to all pro materials used for the work to monitor mate deemed necessary. Such inspection and te way relieve the Contractor of the responsi requirements of this specification.	rial quality as often as esting shall not in any
		5.1.2	At least three weeks prior to commenci Contract Administrator of the proposed s provide access for sampling, provide e representative samples from stockpiles, an asphalt cement in accordance with Section 2	ource of aggregates, quipment to obtain d provide samples of
		5.1.3	The unit of work area considered for accept of continuous paving production. When produced in a construction period the actu period may, at the discretion of the Contr added to the previously completed pavemen	less than 1,500 m ² is al production for that act Administrator, be
		5.1.4	Minimum testing outlined in Table 5.3.4 mus payment and acceptance of work.	t be completed for full
5.2	Quality Control	5.2.1	Quality control is the responsibility of the every stage of the project, to ensure that conform to the requirements as speci Documents.	all materials and work
		5.2.2	Reclaimed asphalt pavement (RAP) shall aggregate for the purposes of quality contro	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS 5.2.3	H	OT MIX ASPHALT CONCRETE PAVING	SECTION 32 12 16S PAGE 11 OF 14
	All quality control shall be conducted by Contractor shall bear the cost of all q consulting services.		
	5.2.4	Quality Control testing, sampling and described in Table 5.2.4, Quality Control	•
	5.2.5	Pre-Production Quality Control test data	as specified in Table 5.2.4

5.2.5 Pre-Production Quality Control test data as specified in Table 5.2.4 shall be reported to the City Engineer one week prior to commencing the project, or as requested.

Quality Control Requirements	Test Standards	Minimum Frequency
Pre-Production		
Asphalt Cement Certification	-	Once per year or for change in supplier.
Aggregate Physical Properties Sec. 2.1.3	Section 2.1.3	Once per year, or for change in source.
Coarse Aggregate, Manufactured Sand, Natural Fines, Blend Sand Aggregates Gradation	ASTM C117 ASTM C136	One for every 1,000 tonnes of each class of material processed into stockpile, or one analysis for each material every production day when production rate is less than 1000 tonnes.
RAP Asphalt Content and Gradation	ASTM D6307 ASTM D2172 ASTM D5444	One sample per 500 tonnes or a minimum of ten samples per stockpile, whichever amount is greater.
Trial Mix Design by Marshall Method	Section 2.2 Asphalt Institute MS-2	One per mix type every production year, or as required for a change in asphalt cement supply, aggregate gradation or aggregate source.
Post- Production		
Hot Mix Asphalt Analysis (including Asphalt Content, Aggregate Gradation, Marshall Bulk Relative Density and Void Properties)	ASTM D6307 ASTM D2172 ASTM D5444 ASTM D3203	For each mix type one hot mix analysis for every 500 tonnes or one sample per day of paving, whichever is greater. Samples must be taken at the paving location. See Note 1.
Compaction Monitoring (Core Density)	ASTM D2726 ASTM D2950	Minimum Frequency not specified. See Note 2.

Table 5.2.4: Quality Control Requirements

Note 1:

Where an individual test indicates non-compliance, the Contractor must immediately initiate remedial measures, and submit, at its expense, evidence that compliance exists with the approved mix design. Note 2:

Coring is subject to the approval of the Contract Administrator.

CITY OF KELOWNA SUPPLEMENTAL TO HO MMCD SPECIFICATIONS		Н	OT MIX ASPHALT CONCRETE PAVING	SECTION 32 12 16S PAGE 12 OF 14
5.3	Quality Assurance	5.3.1	Acceptance of all hot mix asphalt material on the results of Quality Assurance (QA) t Canadian Council of Independent Laborate	esting from a lab that is
		5.3.2	Quality assurance testing is the respon Administrator for acceptance of work com	•
		5.3.3	Quality Assurance sampling and testing is Quality Assurance Minimum Testing Requ	
		5.3.4	Quality Assurance Sampling Procedures:	
			(1) Loose mix samples shall be acquired accordance with ASTM D979. Samplir substituted for this standard prov segregation is probable. Companion sa use as 3rd Party appeal test samples.	ng from the auger can be vided that no sample
			(2) The timing of mix sampling shall be stra representing a similar production quar	•
			(3) Core locations will be selected using sampling procedures. The unit of work segments meeting or exceeding the Table 5.3.4 and of approximately equa coordinates will have similar space transverse coordinates will be located Coring locations will be determined sampling, approved by the Contract sampling requires written approval by	c area will be divided into minimum frequency in al area. The longitudinal cing on roadway and using random numbers. I in the office prior to ct Administrator. Core
			(4) Areas within 5.0 m of transverse joints are excluded from compaction acc testing.	
			(5) The Contract Administrator for a priva to provide the opportunity for the C paving materials when the City of Kelo	City Engineer to sample

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS

HOT MIX ASPHALT CONCRETE PAVING

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Table 5.3.4: Quality Assurance Minimum Requirements

Quality Assurance Requirements	Test Standards	Minimum Frequency
Hot Mix Asphalt Analysis (including Binder Content, Aggregate Gradation, Marshall Bulk Relative Density, Maximum Relative Density, Marshall Stability and Flow and Void Properties)	ASTM D6307 ASTM D2172 ASTM D5444 ASTM D3203 ASTM D6927 ASTM D2041	For each mix type one hot mix analysis per 1500 m ² or one test per 4.0 hrs of continuous paving, whichever is greater. Companion samples must be taken for use as 3rd Party appeal test samples.
Compaction Testing (Core Density) and Thickness Determination	ASTM D2726 ASTM D3549	Three cores per 1,500 m ² . Three cores for areas between 500m ² and 1,500m ² . Number of tests required for areas less than 500m ² will be at the discretion of the Contract Administrator.
Hot Mix Asphalt Temperature	-	No minimum frequency.

- 5.4 Appeal of Quality Assurance Testing Results
 5.4.1 The Contractor may appeal the results of acceptance testing for Compaction Standard or Asphalt Content for any area subject to rejection or unit price reduction. The notice of appeal shall be in writing and submitted to the City Engineer within 7 days of receipt of the acceptance testing results.
 - 5.4.2 Appeals will only be considered if a cause can be proven, and the requirements of Table 5.2.4 have been satisfied.
 - 5.4.3 Quality Control tests initiated after the Contractor's receipt of the Quality Assurance test results will not be considered when evaluating cause for appeal. Heating and remolding pavement cores for the purpose of determining asphalt content, gradation or Marshall volumetric properties is not acceptable.
 - 5.4.4 Only Quality Control testing during production for the subject project will be considered when evaluating cause for appeal provided test results are submitted to the City Engineer prior to the receipt of the acceptance testing results.
 - 5.4.5 Laboratories conducting acceptance testing for appeals must be CCIL certified for the subject test procedures.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	HOT MIX ASPHALT CONCRETE PAVING	SECTION 32 12 16S PAGE 14 OF 14

- 5.5 Asphalt Content, Compaction
 Standard or Air Void Appeals
 5.5.1 The testing laboratory conducting the project acceptance sampling and testing will routinely retain companion samples sufficient for the determination of asphalt content, maximum relative density and/or Marshall relative density. Minimum companion sample size should be 10 kg for this purpose.
 - 5.5.2 For asphalt content, compaction standard or air void (Marshall relative density) appeal testing, the Contractor will have the option for the testing to be done by the testing laboratory undertaking the Quality Assurance testing, or an independent testing laboratory selected by the City Engineer. If the independent testing laboratory does not have a valid asphalt correction factor as per <u>ASTM D6307</u> <u>Asphalt Content of Hot Mix Asphalt by Ignition Oven</u> the lab should have the capability to perform <u>ASTM D2172</u> <u>Quantitative Extraction of Bitumen from Bituminous Paving Mixtures.</u>
 - 5.5.3 The appeal test results will be used for acceptance and unit price adjustment and shall be binding on both the City of Kelowna and the Contractor.
 - 5.5.4 If the new asphalt content, new compaction and/or new air voids content verifies that any unit price reduction or rejection applies for that area of work, the costs of the appeal sampling and testing will be borne by the Contractor. If the results show that a penalty or rejection no longer applies, the sampling and appeal costs will be the responsibility of the City of Kelowna.
- 5.6 Core Density and 5.6.1 Core density and thickness appeals will only be considered if a case can be made that the stratified random sampling plan was biased, or sampling and testing was in error.

1.0 GENERAL

1.3 Source Quality (add) Control

1.3.3 Submit soil analysis results to Contract Administrator minimum 5 Days prior to deliver or placement of growing medium (topsoil). Contractor not to supply or place growing medium and amendments that will not or do not meet the physical and chemical properties described in this Section without the prior written approval of the Contract Administrator.

1.5 Inspection and Testing

- 1.5.2 Submit 1.0kg sample of each proposed material and amendment to the Contract Administrator and soil testing laboratory. Independent soil testing laboratory to be approved by the Contract Administrator.
- 1.5.3 Have testing laboratory analyse samples for chemical, physical and biological properties specified in this Section, to include pH, lime requirements, soluble salts or electrical conductivity (E.C.), % Sands + % Fines (Silt and Clay) + % Organic Matter = 100%, % Total Nitrogen, and available levels of phosphorous, potassium, calcium and magnesium.
- 1.5.4 Have testing laboratory advise on suitability of material for intended use and make recommendations for manufacture and amendment of growing medium to meet requirements of the Contract Documents. Note that the Contract Administrator may accept the soil if it closely meets the requirements, based upon the recommendations of the laboratory.
- 1.5.5 Results of laboratory testing to be made available to the City Engineer upon request.

2.0 PRODUCTS

2.9 Fertilizers

(add)

(add)

- 2.9.2 Chemical fertilizer use must be approved by City Engineer prior to use and should be limited to areas where compost is not available/suitable.
- 2.9.3 Fertilizer should not be used in restoration.

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TOPSOIL AND FINISH GRADING

SECTION 32 91 21S PAGE 2 OF 3

Table 2: F	Properties of Gr	owing Mediun	n for Differe	nt Application	S
	Tree Pits &	High	Planting		
	Low Traffic	Traffic	Beds &	Naturalized	Naturalized
	<u>Lawn Areas</u>	<u>Lawn Areas</u>	<u>Planters</u>	<u>Grass</u>	<u>Beds</u>
Particle Size (% of dry weight mineral fraction per Canadian System of Soil Classification)					
Gravel >2mm	0-5	0-5	0-5	0-10	0-10
Sand 0.05mm-2mm	50-70	80-90	50-70	30-70	30-70
Silt 0.002mm-0.05mm	10-25	5-15	10-25	15-50	15-50
Clay <0.002mm	0-20	0-5	0-20	15-30	15-30
Silt + Clay	25 max	15 max	25 max	60 max	60 max
Acidity (pH)	6.0-7.0	6.0-7.0	5.5-7.0	6.0-7.0	6.0-7.0
Organic Content	3-5	3-5	15-20	5-10	10-15
(% of dry weight)					

2.11 Compost

(add sub-section)

- 2.11.1 Compost to be uniform blend of natural source-separated organic materials, composted such that it is brown-black in colour and has carbon to nitrogen ratio of 25 to 1 or lower and pH 6 to 7. Compost to be substantially free from subsoil, pests, roots, wood, construction debris, undesirable grasses or weeds, and seeds or parts thereof. Compost to be substantially free from toxic materials, crabgrass, couch grass, equisetum, other weeds, and seeds or parts thereof.
- 2.11.2 Use of compost to be approved in writing by the Contract Administrator prior to mixing or placement.

3.0 EXECUTION

Placing

Growing Medium

3.4

(replace 3.4.5)

3.4.5 Place growing medium to minimum depth after settlement specified on Contract Drawings. Where no depth is specified on Contract Drawings place growing medium to minimum depth after settlement specified in Table 3 for Coarse Textured Subsoil to increase water retention.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	TOPSOIL AND FINISH GRADING	SECTION 32 91 21S PAGE 3 OF 3
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3.7	Acceptance		(add)
		3.7.2	If analysis of placed growing medium indicates that the physical or chemical properties of the material varies from the limits and ranges specified in this Section, the Contract Administrator may do one or a combination of the following:
			 Require removal and replacement of growing medium that does not meet the limits and ranges specified in this Section. Require the application and incorporation of soil amendments to enable the soil to meet the physical and chemical requirements specified in this Section. Accept the work at a reduced price determined by G.C. 9 Valuation of Changes and Extra Work.
3.10	Drainage Control		(add sub-section
		3.10.1	Provide proper water management and drainage of site during construction. Include silt traps, erosion control measures, temporary water collection ditches, as well as maintenance during construction period.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SOIL CELLS	SECTION 32 91 23S PAGE 1 OF 10
1.0	GENERAL	1.0.1	Section 32 91 23S refers to those portions of the to the use of soil cells for the planting of tre pedestrian and vehicular areas. This section must interpreted simultaneously with all other sect works described herein.	es and landscaping in st be referenced to and
1.1	Related Work	1.1.1	Concrete Walks, Curbs and Gutters	Section 03 30 20
		1.1.2	Cast-in-Place Concrete	Section 03 30 53
		1.1.3	Aggregates and Granular Materials	Section 31 05 17
		1.1.4	Excavation, Trenching and Backfilling	Section 31 23 01
		1.1.5	Roadway Excavation, Embankment and Compaction	Section 31 24 13
		1.1.6	Geosynthetics	Section 31 32 19
		1.1.7	Granular Base	Section 32 11 23
		1.1.8	Topsoil and Finish Grading	Section 32 91 21
		1.1.9	Irrigation System	Section 32 94 015
		1.1.10	Planting of Trees, Shrubs and Ground Covers	Section 32 93 01
1.2	Mock Up	1.2.1	Prior to the installation of soil cell system, co complete installation at the discretion of the Co	•
		1.2.2	Mock up to be a minimum 10m ² in area and t soil cell system, including soil cell frames, geog soil cell deck and geotextile, all installed in ex and approved granular base, geotextile, and su	rid, growing medium, cavation on prepared
		1.2.3	Mock up may, upon approval of the Contract A as part of the installed work at end of project condition and meets requirements of C Otherwise, mock-up to be removed at Contrac	t if it remains in good Contract Documents.
1.3	Site Conditions	1.3.1	Inspect all areas to receive soil cells prior t proceeding with work check and verify dimens elevations, drainage, compaction, and contam	ions, quantities, grade

SUPPL	DF KELOWNA LEMENTAL TO D SPECIFICATIONS		SOIL CELLS	SECTION 32 91 23S Page 2 of 10
		1.3.2	Report defects in dimensions, quantities, grad compaction and contamination to the C immediately and make good to satisfac Administrator prior to construction of soil cel	Contract Administrator tion of the Contract
1.4	Delivery, Storage and Handling	1.4.1	Deliver packaged materials in original, unoper weight, certified analysis and name and addr	
		1.4.2	Do not handle, deliver or place bulk materials conditions. Deliver materials to site at or nea moisture content.	
		1.4.3	Protect excavation from freezing conditions, and contamination until placement of soil of geotextile and root barrier. Maintain protect placed material until installation of hard pedestrian surface above.	ells, growing medium, tion of excavation and
		1.4.4	Growing medium, granular base and backfill segregated or contaminated will be reject material from site and replace with a Contractor's expense.	ed. Remove rejected
1.5	Layout and Elevation Control	1.5.1	Provide layout and elevation control during i Utilize grade stakes, benchmarks, surveying means and methods to ensure that layout and layout and elevations shown on Contract Dra	g equipment and other delevations conform to
1.6	Scheduling	1.6.1	Schedule installation of soil cells after all footings and utility work in the area have been schedule with scheduling of other trades on site	en installed. Coordinate
1.7	Measurement and Payment	1.7.1	Payment for soil cells will be made separ column of soil cell assembly, and includes a growing medium, site preparation, plac geotextile, protection of work and inciden made separately for assemblies comprised layers of soil cell frames.	Il soil cell components, cement, geogrid and tals. Payment will be
		1.7.2	Payment for excavation, backfilling and emba be made under Section 31 23 01 - Exca Backfilling or Section 31 24 13 - Roadway Exc and Compaction, as provided in the Schedule Prices	vating, Trenching and cavation, Embankment

Prices.

SUPPL	OF KELOWNA EMENTAL TO O SPECIFICATIONS		SOIL CELLS	SECTION 32 91 23S PAGE 3 OF 10
		1.7.3	Payment for placement and compaction or made under Section 32 11 23 - Granular Backedule of Quantities and Unit Prices.	5
		1.7.4	Payment for pedestrian or vehicle surfaces made under separate sections as appropriate	
		1.7.5	Payment for tree planting, associated non-so root barrier, tree grates and concrete surrou separate sections as appropriate.	u
1.8	Inspection and Testing	1.8.1	Refer to General Conditions, Clause 4.12, Ins	pections and Testing.
	resting	1.8.2	Refer to Section 32 91 21 - Topsoil and Finish	Grading - 1.3 and 1.5.
2.0	PRODUCTS			
2.1	Soil Cell	2.1.1	Soil cell to be fiberglass-reinforced polypropy materials, designed to support sidewalk load with growing medium for the purpose of gro rainwater filtration, detention and retention.	ls, designed to be filled wing tree roots, and for
			Acceptable soil cell systems include the follow	wing:
			(1) Silva Cell by DeepRoot Partners, inclu	ding:
			 Silva Cell frame: 400 x 600 x 1200 mm, i Silva Cell deck: 50 x 600 x 1200 mm, i installed galvanized steel tubes Silva Cell modified: 400 x 600 x 150 frame designed to stiffen and alig medium and backfill is placed Silva Cell deck screws: manufacturer screws to attach decks to frames 	ncluding manufactured mm modified Silva Cell gn frames as growing
			(2) Approved Equal.	
2.2	Anchor Spike	2.2.1	Galvanized steel spike with spiral twist, 8mn length.	n diameter and 250mm
2.3	Drainage Pipe	2.3.1	Drainage pipe to be perforated drainpipe Storm Sewers - 2.7, as specified on Drawings	
		2.3.2	Fittings to be compatible with specified manufacturer.	d pipe and by same

SUPPL	OF KELOWNA EMENTAL TO D SPECIFICATIONS			SECTION 32 91 23S PAGE 4 OF 10
		2.3.3	PVC pipe solvent and primer combination by manufacturer and suitable for use wi application.	
2.4	Inspection Riser Assembly	2.4.1	Inspection riser to be 100mm diameter So PVC pipe per Section 32 94 01S– Irrigation wide slots in bottom of pipe that extend water access for inspection.	System. Cut four (4) 3mm
		2.4.2	Fittings and caps to be compatible with s manufacturer. Cap to be solid threaded c grate designed to fit inspection riser pedestrian traffic and operational practice	leanout or removable inlet and be compatible with
2.5	Geogrid	2.5.1	Geogrid to be high molecular weight multifilament yarns woven in tension and following ASTM D 6637 mechanical prope	l polymer-coated, with the
			(1) Tensile strength:	29.2 kN/m
			(2) Creep reduced strength:	18.5 kN/m
			(3) Long term allowable design load:	18.5 kN/m
			(4) Grid aperture size (machine directio	
			(5) Grid aperture size:	25.4mm
			(6) Mass /unit area (ASTM D 5261):	254.3 g/m ²
2.6	Geotextile	2.6.1	Geotextile to be non-woven polypropylen properties:	e fabric, with the following
			(1) Grab tensile strength: 16	67.8 kg
			(2) Grab tensile elongation: 50	0%
			(3) Mullen burst strength: 2,	.620 kPa
			(4) Puncture strength: 58	8.97 kg
			(5) Apparent opening size: U	S sieve 80 (0.180 mm)
			(6) Water flow rate: 3,	870.8 l/min/m ²
			(7) Minimum roll width: 36	500 mm
2.7	Granular Base	2.7.1	Granular base and subbase to be as shown to conform to Section 32 11 23 - Granular	
2.8	Backfill	2.8.1	Backfill material adjacent to soil cells to Drawings.	be as shown on Contract
2.9	Growing Medium	2.9.1	Growing medium to be as shown on C conform to Section 32 91 21– Topsoil and	5

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SOIL CELLS SECTION 32 91 23 PAGE 5 OF 1		
2.10	Root Barrier	2.10.1	Root barrier to be per Section 32 93 01 - Plantin Ground Covers - 2.15.	ng of Trees, Shrubs and	
3.0	EXECUTION				
3.1	Soil Cell Frame	3.1.1	Confirm that granular base meets compactio of maximum dry density in accordance with Proctor method prior to placement of soil co sub-base surface on a plane parallel to the above.	ASTM D698 Standard ell frame units. Grade	
		3.1.2	Identify tree openings, utility routes and e above soil cells on granular base using spik paint.	5	
		3.1.3	Confirm that width and length of excavation 150mm beyond the edges of the Soil Cells. drain lines. Do not locate drain lines within 1 post. Provide field engineering when drain line assure that the slope on all drains is 1 intended outfalls. Place frame units by hand.	Layout location of all 50mm of any Soil Cell nes are being installed	
		3.1.4	Place first layer of frame units on prepared a base and geotextile. Work away from tree and frame units no less than 25mm apart and no r	l utility openings. Place	
		3.1.5	Verify that horizontal and vertical positio consistent with required locations and dimen openings, paving edges, surfaces and ot constructed above soil cells. Report conf Administrator and make adjustments as nece	sions of tree and utility her structures to be licts to the Contract	
		3.1.6	Ensure that each frame unit sits firmly on g frames do not rock or bend over any stone or do not bend into dips in base.		
		3.1.7	Check each frame unit for damage prior to pla not use frame units that are cracked or chippe	3	
		3.1.8	Secure soil cell to granular base with four through molded holes in base of frame unit.	anchor spikes driven	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS	SOIL CELLS	SECTION 32 91 23S PAGE 6 OF 10
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		3.1.9	For applications where soil cells are installed over waterproofed structures, develop a spacing system consistent with requirements of waterproofing system and do not use anchor spikes that will come within 150mm of any waterproofing material. Submit shop drawing of spacing and anchoring system for approval by the Contract Administrator.
		3.1.10	Install next layer of frame units on top of previous layer. Build layers as stacks of frame units set one directly over the other. Do not set frame unit half on one unit below and half on another unit.
		3.1.11	Register each upper frame unit on top of lower frame unit post. Ensure contact points are free of dirt, mud and debris prior to placement. Ensure each upper unit is solidly seated on unit below. Rotate each frame registration arrow in the opposite direction from frame unit below to ensure connector tabs firmly connect.
		3.1.12	Install no more than two layers of frame units before installation of growing medium and backfill.
3.2	Modified Soil Cell Frame	3.2.1	Install modified frame unit on top of frame unit prior to installation of growing medium and backfill. Modified frame unit is required only during installation and compaction of growing medium and backfill.
		3.2.2	Remove modified frame unit prior to installation of deck unit and as installation of growing medium and backfill progresses across soil cell framework. Place and remove modified frame units by hand.
3.3	Geogrid	3.3.1	Install geogrid curtain prior to installation of growing medium and backfill.
		3.3.2	Geogrid curtain is required between edge of soil cell and any backfill or granular base beyond extent of soil cell framework that will support pedestrian or vehicular paving.
		3.3.3	Install geogrid curtain where required. Do not install geogrid curtain between edge of soil cell and any planting area or tree opening adjacent to soil cell.
		3.3.4	Pre-cut geogrid to allow for 150mm minimum underlap below backfill, and 300mm minimum overlap above soil cell deck.
		3.3.5	Where soil cell layout causes a change of direction in plane of geogrid, slice top and bottom flaps of geogrid and fold so it lies flat on top of soil cell deck and granular base course along both planes.

SUPPL	F KELOWNA EMENTAL TO D SPECIFICATIONS		Soil Cells Page 7 of 10
		3.3.6	Provide 300mm minimum overlap between different sheets of geogrid.
		3.3.7	Secure geogrid to frame units and deck units with 4.5mm x 300mm plastic zip ties in locations recommended by manufacturer. After deck unit is secured in place fold 300mm overlap of geogrid over top of unit.
3.4	Growing Medium and Backfill	3.4.1	Install root barrier as shown on Contract Drawings. Protect root barrier from damage and displacement during installation of growing medium and backfill.
		3.4.2	Install growing medium and backfill as indicated on Contract Drawings. The process of installation requires that these two materials be installed and compacted together in alternating lifts to achieve correct compaction relationships between the materials.
		3.4.3	Place growing medium in soil cell framework and spread by hand or hand tool through each soil cell in a maximum 200mm lift. Work soil under horizontal beams of soil cell frame and utility conduit to eliminate air pockets there. Ensure equipment bucket does not contact soil cell framework. Hold plywood sheet against geogrid during placement and compaction of growing medium to protect geogrid and maintain consistent separation of materials.
		3.4.4	Finalize installation of utility conduit, drainage pipes and irrigation where shown on Contract Drawings.
		3.4.5	Compact growing medium lift by stepping on entire exposed surface of growing medium. Do not step on frame units. Ensure there is a minimum of 250mm of growing medium over horizontal beams of frame units before beginning compaction. Leave top 50mm of frame unit exposed above growing medium to allow placement of next layer of frame units.
		3.4.6	Compact growing medium to 85% of standard proctor density. Remove growing medium that is over compacted and reinstall.
		3.4.7	Place backfill to 95% of maximum dry density in space between geogrid and sides of excavation and spread by hand adjacent to soil cell framework to provide maximum 200nn lift. Ensure geogrid under lap lays flat under backfill. Ensure equipment bucket does not contact soil cell framework. Hold plywood sheet against geogrid during placement and compaction of backfill to protect geogrid and maintain consistent separation of materials. Do not place backfill material in tree or planting bed opening.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SOIL CELLS	SECTION 32 91 23S PAGE 8 OF 10
		3.4.8	Compact backfill per Contract Document equipment does not contact soil cell frame c	•
		3.4.9	Repeat placement and compaction of grow in lifts to top of topmost frame unit. Finish g to be 25mm below bottom of deck un otherwise on Contract Drawings.	rade of growing medium
		3.4.10	Do not place final lift of backfill until adjacer place. Then install and compact backfill f Ensure compaction equipment does not cor modified frame unit in place until installation	lush with soil cell deck. ntact deck unit. Maintain
3.5	Soil Cell Deck	3.5.1	Obtain the Contract Administrator's appr compaction of growing medium and backfi soil cell deck.	•
		3.5.2	Process for installation of deck units requinstalled immediately after removal of modi	
		3.5.3	Ensure contact points are free of dirt, m placement. Register deck unit on top of fran deck unit half on one frame unit below and unit. Ensure deck unit is solidly seated on fra	me unit post. Do not set d half on another frame
		3.5.4	Snap deck unit onto frame unit using sr corners of deck unit. A rubber mallet may b into place.	
		3.5.5	Secure deck unit corners to frame unit post by manufacturer.	s using screws provided
3.6	Geotextile	3.6.1	Place geotextile over top of soil cell deck Drawings. Extend geotextile minimum 450n of excavation. Overlap geotextile joints of geotextile to provide minimum 200mm over utility openings.	nm beyond outside edge minimum 450mm. Cut
3.7	Inspection Riser Assembly	3.7.1	Install inspection riser assembly on top o shown on Contract Drawings immediately granular base. Maintain assembly in fixed po of granular base and final hard surface treat	 prior to placement of position during placement
3.8	Geotextile	3.8.1	Supply and install geotextile under soil ce Contract Drawings and per Section – <u>31 32 19</u>	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		SOIL CELLS	SECTION 32 91 23S PAGE 9 OF 10
	3.8.2	Supply and install geotextile on soil cell dec Drawings and per Section <u>31 32 19 - Geosyn</u>	
	3.8.3	Place geotextile over top of soil cell deck of Drawings.	and where indicated on
	3.8.4	Extend geotextile minimum 450mm ber excavation. Overlap geotextile joints m geotextile to provide minimum 200mm over utility openings.	ninimum 450mm. Cut
	3.8.5	Repair cut or damaged geotextile with a sec prior to placement of granular base. Or damaged area with second piece by a minim	verlap edges of cut or
3.9 Granular Base	3.9.1	Supply and install granular sub-base course shown on Contract Drawings and as specifi Granular Base.	•
	3.9.2	Supply and install aggregate base course a shown on Contract Drawings and as specifi Granular Base.	•
	3.9.3	Maximum tolerance for deviations in finis base for soil cell system is 6mm over a 120 granular base under each frame unit to pro base of support to required grade elevation.	00mm distance. Adjust ovide a continuous solid
	3.9.4	Install granular base course on geotex installation of geotextile.	tile immediately after
	3.9.5	Place granular base on soil cell system from to other, to ensure geotextile and granular ba contours.	
	3.9.6	Do not place or spread granular base in se time.	everal positions at same
	3.9.7	Load granular base onto soil cell system f outside limits of soil cell excavated area. I operate equipment directly on top of soil granular base. Do not drive vehicles or ope than 450kg directly on granular base over so	Do not drive vehicles or cell deck, geotextile or erate equipment greater

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		SOIL CELLS	SECTION 32 91 23S PAGE 10 OF 10
	3.9.8	Spread granular base on soil cell system usin use of equipment bucket.	g hand tools or by light
	3.9.9	Compact granular base in lifts not to exce maximum dry density. Compact granular l system using walk behind type vibratory p roller or jumping compacter having a maximu	base on top of soil cell blate tamper, vibratory
	3.9.10	For alternate method of placing and compa top of soil cell system (e.g. for large area, sm access) submit shop drawing of proposed eq to Contract Administration for approval.	all area, area of difficult
3.10 Protection of Work	3.10.1	Protect soil cell system, geotextile and grant equipment, other materials and excessive mo	
	3.10.2	Use temporary fencing or hoarding to keep away off soil cell area until final surface mate	
3.11 Clean Up	3.11.1	Dispose of surplus materials and all construct	tion debris off site.

SUPPI	CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		PLANTING OF TREES, SHRUBS AND GROUND SECTION 32 93 01 COVERS PAGE 1 OF		
2.0	PRODUCTS				
2.1	Plant Material	2.1.2	(replace (12))		
			(12) All trees and plants to be inspected Administrator and the City Engineer delivery to site.	•	
			(add)		
			 (13) Container stock #3 and less is to be container stock #5 and up is to be specified on Table 3 in Section 32 92 2 Grading. (add) 	considered large as	
		2.1.3	Submit written requests for plant material Contractor Administrator for review within 2 Notice to Proceed. Provide explanation f evidence the plant material is not available with	20 Days of receiving or substitution and	
2.4	Mulch		(replace 2.4.1)		
		2.4.1	Mulch to be 'Glenmore Grow' or 'Ogogrow' a Contract Administrator, obtained from City Operations (location to be confirmed), and sh stones, sticks, roots or other extraneous a settlement as specified.	of Kelowna Landfill all be free of all soil,	
2.5	Stakes		(replace 2.5.1)		
		2.5.1	Stakes to be as shown on Contract Documents. shown on Contract Documents, stakes to be p 50-70mm diameter approximately 2.0m long.		
2.6	Guying Collar		(replace 2.6.1)		
		2.6.1	Acceptable products for guying collars and following: .1 Deep Root ArborTie series .2 Approved Equal	tree ties include the	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		Pla	NTING OF TREES, SHRUBS AND GROUND COVERS	SECTION 32 93 01S PAGE 2 OF 2
2.13	Tree Rings, Grate, Frames, Guards		(add)	
	and Boxes	2.13.1	Tree rings, grates, frames, guards and box Contract Documents. Where not otherwis Documents tree rings, grates, frames, guard Shop Drawing approved by the Contract Adm	e shown on Contract Is and boxes to be per
2.14	Root Barrier		(add)	
		2.14.1	Depth and length of root barrier product to b Drawings. Acceptable root barrier products i .1 Deep Root UB series .2 Approved Equal	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYSTEM		SECTION 32 94 01S PAGE 1 OF 32	
1.0	GENERAL	1.0.1	Section 32 94 01S refers to those portions of the work that are unique to the complete or partial installation or repair of an automatic underground irrigation system, including all necessary preparatory work and all electrical, wiring and plumbing connections, and maintenance work during the guarantee period.		
		1.0.2	This section applies to General Contract for all services and sites that will be main staff. This section must be refe simultaneously with all other MM Construction Document) sections pertine herein. Where standards in this document these standards shall take precedence.	tained by City of Kelowna renced and interpreted ICD (Master Municipal ent to the works described	
1.1	Related Work	1.1.1	Project Record Documents	Section 01 33 01	
		1.1.2	Cast-in-Place Concrete	Section 03 30 53	
		1.1.3	Precast Concrete	Section 03 40 01	
		1.1.4	Aggregates and Granular Materials	Section 31 05 17	
		1.1.5	Site Grading	Section 31 22 01	
		1.1.6	Excavating, Trenching and Backfilling	Section 31 23 01	
		1.1.7	Topsoil and Finish Grading	Section 32 91 21	
		1.1.8	Hydraulic Seeding	Section 32 92 19	
		1.1.9	Seeding	Section 32 92 20	
		1.1.10	Sodding	Section 32 92 23	
		1.1.11	Planting of Trees, Shrubs and Ground Covers	Section 32 93 01	
		1.1.12	Waterworks	Section 33 11 01	
1.2	References	1.2.1	Abbreviations referenced within this document with respect to testing, materials, fabrication and supply are fully described in References – Section 01 42 00.		

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYSTEM		SECTION 32 94 01S PAGE 2 OF 32
		1.2.2	Installation of irrigation components near to Kelowna tree protection Bylaws 8041 and 8	
1.3	Codes and Permits	1.3.1	Perform all work of this section in strict municipal, provincial, or federal guidelines, r Requirements of these specifications not exceeding code requirements govern.	egulations, and codes.
		1.3.2	Contractor is responsible for obtaining all r approvals required to undertake and comple	
1.4	Quality Assurance	1.4.1	Provide documentation in writing of mir industry experience and a member in good s of the following organizations:	,
			 Irrigation Industry Association of Brit The Irrigation Association (IA) 	ish Columbia (IIABC)
		1.4.2	If the irrigation design involves High Density pipe, all welds required during project cons by an HDPE installer who holds a current tr a recognized HDPE training organization to pipe. Provide documentation to the Contrac	truction must be done aining certificate from weld and install HDPE
		1.4.3	All electrical components or products of construction of the proposed irrigation of approved and installed in accordance w versions of the Safety Standards Act a Regulation.	system must be CSA with the most recent
		1.4.4	Install all irrigation components per manu and specifications.	facturer's instructions
		1.4.5	All materials to be new and without flaws.	
		1.4.6	Attend a mandatory pre-construction m Kelowna Parks Department Representative	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYSTEM		SECTION 32 94 01S PAGE 3 OF 32
1.5	Definitions	1.5.1	<i>Journeyman Plumber</i> is an individual who: (i) holds a Cert Qualifications; (ii) follows the BC Plumbing Code; (iii) is g by the local plumbing authority; (iv) and is responsibl required permits and inspections.	
		1.5.2	<i>Certified Electrician</i> is an individual who: (i) Qualifications; (ii) follows the BC and Canadi is governed by Technical Safety BC; (iv) and required permits and inspections.	an Electrical Code; (iii)
		1.5.3	<i>Contract Administrator</i> is a person or comp City of Kelowna and identified in writing to the City of Kelowna's representative for the herein.	the Contractor to be
		1.5.4	<i>City of Kelowna Parks Department Repres</i> designated by the City of Kelowna Parks De the City of Kelowna Parks Department at p and inspections.	partment to represent
		1.5.5	<i>Owner</i> means the City of Kelowna. Whe involvement are required, the Owner's repr City of Kelowna Parks Department Represer	esentative will be the
1.6	Scheduling	1.6.1	Ensure that sequencing of irrigation we coordination with the work of other trad- conduit, wire, pipes, valves and other equip minimize disruptions.	es and that sleeving,
		1.6.2	Plan, schedule and execute work to ensure landscape establishment and maintenand appropriate time, volume, and operating irrigation is delivered in accordance with pla	ce purposes at the pressures to ensure
1.7	Substitutions	1.7.1	Where materials are specified by brand n and/or size, such specifications facilitate materials and material quality and esta performance and quality against which pro be evaluated.	a description of the blish a standard for

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYSTEM	SECTION 32 94 01S PAGE 4 OF 32	
	1.7.2	Proposed substitutes will match specified materials in quality, performance, flow parameters and pressure loss so as to not compromise the intent of the design or overall performance of the irrigation system.		
	1.7.3	Proposed substitutes and Shop Drawi requirements set out below; will be s Administrator and the Contract Admini from the City of Kelowna Parks Depart	submitted to the Contract strator will obtain approva	
	1.7.4	Proposed substitutions must be su Administrator at least 10 days before t consideration as an approved equal dur	he Tender Closing Date for	
	1.7.5	Substitution requests by Contractor w Milestone Dates.	vill have no impact on the	
	1.7.6	Purchase or installation of materials the be paid for unless:	at are not specified will not	
		(1) The materials have been reviewed Administrator and the City of Kelo as an Approved Equal as per So Tenderers, or	owna Parks Representative	
		(2) The materials have been reviewed Administrator and the City of Kelo as a Change Order, per Section 7.3	owna Parks Representative	
	1.7.7	Installation of materials that are not specified or are not Approved Equal will be removed and replaced with the specif material at Contractor's expense.		
	1.7.8	Where a revision is required to the irri will markedly alter the original design, s submitted to the Contract Administrate	Shop Drawing(s) must be	
	1.7.9	After contract award, proposed substite to the Contract Administrator within 5		

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYSTEM		SECTION 32 94 01S PAGE 5 OF 32	
1.8	Irrigation Record Drawings	1.8.1	Further to Schedule 3, maintain accurate scaled records of installed irrigation system and its components on a marked-up set of Contract Drawings on a daily basis during construction. Show all deviations from Contract Drawings. Make marked-up Contract Drawings available to the Contract Administrator and/or designated site inspector upon request.		
		1.8.2	irrigat sprink contro lateral	re Record Drawings showing the as- ion system components including lers, valves, grounding point(s), Ilers, wire splice boxes, valve bo lines, irrigation sleeves. Identify o ete with precipitation rate and US gr	y but not limited to, points of connection, xes, vaults, mainlines, each zone numerically,
		1.8.3	Adobe	e Record Drawings in digital AutoCA e pdf hard copy sized Per project ated drawing in Arch B or Ansi B.	
1.9	Operating Manual	1.9.1	Provide one digital copy of the Operating Manual for irrig system. Content of Operating Manual to include:		
			(1)	Copies of plumbing permit, ele certification.	ectrical permit, HDPE
			(2)	Electrical Inspection Request Form	and final approval.
			(3)	Copies of irrigation inspection re signed by the individual who presi or test.	•
			(4)	Product warranty statement for backflow prevention assemblies, electronic components, and components. Date warranty with Certificate of Substantial Performa	valves, filters, sensors, related irrigation date of issuance of the
			(5)	Written guarantee for work compl 1 year to commence from the issu of Substantial Performance.	-
1.10	Submittals	1.10.1	Admir	t complete set of Record D istrator prior to issuance of Cer	

Performance.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IR	SECTION 32 94 01S IRRIGATION SYSTEM PAGE 6 OF 32				
		1.10.2	Submit complete digital copy of Operating Manual to the Contrac Administrator and City of Kelowna Parks Representative prior to issuance of Certificate of Substantial Performance.				
1.11	Measurement for Payment	1.11.1	Point of Connection: Unless otherwise specified in the Schedule of Quantities and Prices, payment for supply and installation of irrigation point of connection will be measured as a lump sum. The work includes:				
			(1)	Permits & fees.			
			(2)	Supply, installation and testing c water service line and booster pu			
			(3)	Water meter.			
			(4)	Backflow prevention assembly.			
			(5)	Hydrometer.			
			(6)	Blowout assemblies.			
			(7)	Pressure regulating valve.			
			(8)	Filters.			
			(9)	Fittings.			
			(10)	Vaults, valve boxes & lids.			
			(11)	Excavation, trenching, conduits, b	backfill and restoration.		
			(12)	Inspections and testing.			
			(13)	All incidentals necessary for the operation of a complete irrigati including water supply to the connection and irrigation system.	on point of connection ne irrigation point of		
		1.11.2	Quant	cal Service: Unless otherwise spec ities and Unit Prices, payment for s cal service will be measured as a es:	upply and installation of		
			(1)	Permits & fees.			
			(2)	Supply, installation and testing of	^f the connection to the		

- electrical source.
- (3) Electrical meter.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IR	RIGATION SYSTEM	SECTION 32 94 01S PAGE 7 OF 32
		(4)	Excavation, trenching, conduits, ba	ackfill and restoration.
		(5)	Inspections and testing.	
		(6)	All incidentals necessary for the pro operation of a complete electrical s system.	•
	1.11.3	Quanti	I System: Unless otherwise specified ities and Unit Prices, payment for su I system will be as a lump sum. The	pply and installation of
		(1)	Permits & fees.	
		(2)	Supply, installation, testing, progra adjustment of irrigation system co	
		(3)	Transmitters, decoders & commun	ication cartridges
		(4)	Electrical conduits.	
		(5)	Controller kiosk(s).	
		(6)	Vaults, splice boxes & lids.	
		(7)	Fittings.	
		(8)	Excavation, trenching, backfill, and	restoration.
		(9)	Inspections and testing.	
		(10)	All incidentals necessary for the pro operation of a complete irrigation	•
	1.11.4	specifi for sup irrigati	valves, sprinklers and micro irrigated in the Schedule of Quantities an ply and installation of pipes, valves a on components will be measured as es but is not limited to:	d Unit Prices, payment nd sprinklers and micrc
		(1)	Supply, installation, testing and ad pipe.	justment of irrigation
		(2)	Supply, installation, testing and ad dripline.	justment of irrigation
		(3)	Sleeves and conduit.	

(4) Zone control valves.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			IRRIGATION	ISYSTEM	SECTION 32 94 01S PAGE 8 OF 32
			(5) Control wires.	wire, common wire, flow s	ensor wire and spare
			(6) Drain va	alves.	
			(7) Isolatio	n valves.	
			(8) Air/vacu	uum relief valves.	
			(9) Pressur	e regulators.	
			(10) Swing jo	pint assemblies.	
			(11) Sprinkle	ers.	
			(12) Root wa	atering systems.	
			(13) Emitter	s and bubblers.	
			(14) Fittings		
			(15) Valve b	oxes & lids.	
			(16) Excavat	ion, trenching, backfill and	restoration.
			(17) Inspecti	ons and testing.	
				entals necessary for the pr on of a complete irrigation	•
		1.11.5	Schedule of Q	on Submittals: Unless oth uantities and Unit Prices, perating Manual will be me	, payment for Record
1.12	Tests and Inspections	1.12.1	Refer to Genera	l Conditions, Clause 4.12, T	ests and Inspections.
		1.12.2		tion, inspection and testing sure performance of irri ards.	
		1.12.3	Provide equipm inspections and	ent and personnel necess tests.	ary for performance of
		1.12.4	Performance co Department Re for Substantial	n of issuance of Certi onfirm in writing to the o presentative, at least one w Performance, that the foll successfully completed:	City of Kelowna Parks eek prior to application

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		IRRIGATION SYST	EM	SECTION 32 94 01S PAGE 9 OF 32
		(1) Layout Inspec	tion	
		(2) Vault drainage	e test	
		(3) Irrigation Poir	nt of Connection Insp	ection
			vention Assembly Te ter Works Associatio	st per BCWWA (British n)
		(5) Mainline press	sure test	
		(6) Open trench i	nspection	
		(7) HDPE pipe str	ap test	
		(8) Two-wire Syst	tem Grounding Inspe	ection
		(9) System cover	age test	
		(10) System opera	tion test	
		(11) Dripline/emitt	er test	
		(12) Substantial Pe	erformance inspectio	on
	1.12.5	Total Performance ins Performance inspection	•	pleted after Substantial
	1.12.6	Administrator. Provid Contract Administrat Contract Administrat	e minimum 3 days (tor to attend all i tor must invite Ci entative to all test	e presence of Contract 72 hours) notice to the inspections and tests. ty of Kelowna Parks s within 24 hours of or.
	1.12.7		vided to the City	at results of that test or y of Kelowna Parks ion.
1.13 Layout Inspection	1.13.1	Conduct Layout Inspe system installation. pr	•	nencement of irrigation
	1.13.2	Coordinate location of building and physical f		ents with landscaping,
	1.13.3	Layout and stake irrig	ation system per Dra	awings to confirm:

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			İF	RIGATION SYSTEM	SECTION 32 94 01S PAGE 10 OF 32
			(1)	Layout is within project boundary	and property lines.
			(2)	Minimum horizontal and vertical electrical and other utilities are m	
			(3)	Location of all sleeving, supply pi valve boxes, sprinkler heads and s irrigation components match Cor	splice boxes and other
1.14	Vault Drainage Test	1.14.1		rain hole, fill point of connection va mm and leave water to drain.	ult with water to a depth
		1.14.2	Test is	passed if water drains in 1 hour or	less.
		1.14.3		is failed, Contractor to rectify drair dary inspection.	nage issues and organize
		1.14.4	Supply	y photo of drain pit installation to C	ontract Administrator.
1.15	Point of Connection	1.15.1		installed components are per Appro lance with Drawings.	oved Products List and in
1.16	Inspection Backflow Prevention Device	1.16.1	Backfl comm	ow Prevention Test will be encement of irrigation system ope	conducted prior to ration
1.17	Test Mainline Pressure	1.17.1	Mainli	ne Pressure Test to be conducted a	s follows:
	Test		(1)	Allow minimum 48 hours from th weld for sections that will be test	
			(2)	Install pressure gauge on the seco the Point of Connection vault.	ond blowout assembly in
			(3)	Fill mainline with water until all ai mainline and system has been ch pressure.	•
			(4)	Maintain water in pipe for 4 hours	5.
			(5)	Record initial pressure reading. R variance greater than 5% from be	• •
		1.17.2	beginı	esults are based on the difference ning and end of test. Passed test is 5 beginning pressure reading to endin	% or less drop in pressure

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		D IRRIGATION SYSTEM		SECTION 32 94 01S PAGE 11 OF 32
		1.17.3	If test is failed, identify source of leak a defective materials and workmanship as leak.	• •
		1.17.4	Repeat mainline pressure test and r necessary until a passed result is achieved	•
1.18	Open Trench Inspections	1.18.1	Open Trench Inspection(s) will be construction schedule.	conducted throughout
		1.18.2	Contractor to ensure that a minimum of 5 lateral pipelines inspected prior to burial.	0% of mainline and 50%
		1.18.3	Inspections are to determine if pipe lay procedures, wiring, bedding material and are in accordance with Drawings.	
		1.18.4	Contractor to rectify any issues which lim of inspection and organize secondary insp	•
1.19	HDPE Weld Inspections and Testing	1.19.1	HDPE Weld Inspections are to be conductimes during project installation. HE requirements per ASTM F2620.	
		1.19.2	Conduct minimum of one HPDE weld stra pipe within trench.	ap test prior to installing
		1.19.3	Ensure HDPE welding equipment meets Pipe Institute Technical Report TR-33 and ASTM F2620.	requirements per Plastic
		1.19.4	If a visual or tactile inspection indicates a s test of said weld will be required.	ubstandard weld, a strap
		1.19.5	Pipe strap test protocol is as follows:	
			(1) Conduct visual or tactile inspec Where bead does not roll back consistent in height or width, the the strap test.	correctly and/or is not

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			(2)	At the welded join selected, Contr from pipe, allowing 8" (200mm) or to work with.	
			(3)	Cut pipe lengthways through fusic 1″ (25mm) wide.	on weld to create a strap
			(4)	Bend strap back on itself. If weld another fusion weld, chosen by Co second weld fails the Contract request that all welds be investig the Contractor.	ontract Administrator. If cor Administrator may
			(5)	If fusion weld does not break then no further pipe strap testing is req	•
1.20	Two-Wire System Grounding Inspection	1.20.1		vire System Grounding inspection t ed two-wire system manufacturer's	
1.21	System Coverage Test	1.21.1	Perfoi comp	m Coverage Test will be conducted a rmance Inspection, after installat lete irrigation system and prior to is antial Performance.	ion and operation of
		1.21.2	Condu	uct visual inspection to confirm that:	
			(1)	Head spacing does not exceed tha	nt shown on Drawings.
			(2)	Heads, valve boxes, vaults and tre finished grade.	nches are flush with
			(3)	Heads and valves have been instal Drawings.	lled as per the
		1.21.3	Condu	uct operational tests to verify that:	
			(1)	Performance provides head-to-he approved design parameters.	ad coverage or meets
			(2)	Minimal overspray occurs onto dif surfaces or other improvements a patterns meet approved design pa	nd/or the spray

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1.22	System Operation Test	1.22.1	Perfo comp	m Operation Test will be conducted as rmance inspection, after installation lete irrigation system and prior to iss antial Performance.	on and operation of
		1.22.2	Condu	uct operational tests to verify that:	
			(1)	Controller can be programmed ma remotely via Owner's central irriga	
			(2)	Each zone can be operated automa succession via programmed contro	
			(3)	Operating pressure is within desigr	n parameters.
			(4) (5)	Hydrometer readings at controller accuracy of design flows for all zon Controller flow readings are within hydrometer flow readings for all zo	es. +/-5% of the
1.23	Dripline/Emitter Test	1.23.1	Dripline/emitter Test will be conducted while all dripli emitter zones are exposed.		
		1.23.2	lines t emitte inspec	rm inspection and testing of dripline to identify potential leaks and confirm ers are able to operate at design ction and testing prior to backfilling o er supply lines.	manifold, driplines and n pressure. Conduct
		1.23.3	Verify Drawi	v that dripline / emitter layouts ar ings.	e in accordance with
		1.23.4	press. fitting	ge and maintain manifold and lines w ure. While charged, visually inspect i gs for leaks and replace any and all d manship as necessary to eliminate lea	manifold, driplines and lefective materials and
		1.23.5	•	at inspection and testing and m sary until further leaks are identified.	•
1.24	Substantial Performance inspection	1.24.1	instal Subst	antial Performance inspection is lation has reached a point when antial Performance can be awarded, a net the requirements of these specifica	re the Certificate of and that the installation

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		1.24.2	Substantial Performance Inspection will inc Coverage Test and 1.22 System Operation	-
		1.24.3	Inspection of all plant material to ensure t plant material and new material are healt growing condition.	
1.25	Total Performance Inspection	1.25.1	Total Performance inspection is to verify deficiencies identified during the testing an set out within these specifications, have bee	d inspection processes
2.0	PRODUCTS			
2.1	Water Service and Meter	2.1.1	Unless already installed or otherwise requir having jurisdiction over the site provide a r including but not limited to:	, ,
			(1) Plumbing permit.	
			(2) Establishment and verification of appropriate utility provider.	water account with
			(3) Supply and installation of water prevention assembly; installed requirements of the water utility.	meter and backflow in accordance with
		2.1.2	Type and size of water meter to be as specif having jurisdiction over the site.	ied by the water utility
2.2	Electrical Service and Meter	2.2.1	Unless already installed or otherwise requ utility having jurisdiction over the site provid service, including but not limited to:	•
			.1 Electrical permit.	
			.2 Electric meter.	
			.3 Establishment and verification of e appropriate utility provider.	electrical account with
		2.2.2	Type and size of electrical service to be as Drawings.	specified on Contract

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		2.2.3	Electric meter to be supplied and installed specifications of electrical utility.	d per standards and
2.3	Isolation Valve	2.3.1	Per Approved Products List.	
2.4	Air Relief Valve	2.4.1	Per Approved Products List.	
2.5	Hydrometer	2.5.1	Per Approved Products List.	
2.6	Hydrometer Air Relief Vent	2.6.1	Per Approved Products List.	
2.7	Hydrometer Communication Cable	2.7.1	Per Approved Products List.	
2.8	Pressure Reducing	2.8.1	Per Approved Products List.	
2.9	Backflow Prevention Device	2.9.1	Per Approved Products List.	
		2.9.2	Reduced Pressure Backflow Assembly (RPE design.	3A) as per approved
2.10	Vault and Lid	2.10.1	Vault and matching lid as per Approved Prod	ucts List.
		2.10.2	Lid must have recessed hinges and locking ha	ardware.
2.11	Ground Assembly	2.11.1	Ground assembly to consist of CSA and endorsed products per irrigation contro recommendations for grounding.	
2.12	Irrigation Controller	2.12.1	As specified on Contract Drawings.	
2.13	Decoder	2.13.1	As specified on Contract Drawings.	
2.14	Controller Kiosk	2.14.1	Per Approved Products List.	
2.15	and Base Electric Control Value	2.15.1	Per Approved Products List.	
2.16	Valve Electric Control Valves Low Elew	2.16.1	Per Approved Products List.	
2.17	Valve; Low Flow Filter	2.17.1	Per Approved Products List.	
2.18	Quick Coupler Valve	2.18.1	Per Approved Products List.	

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2.19	Swing Joint Assembly	2.19.1	Fabricated with three threaded Schedule and one threaded Schedule 80 PVC nipple.	40 PVC street elbows	
		2.19.2	Length of nipple to be sufficient to permit to be set as per Drawings.	installed head or valve	
		2.19.3	Diameter of nipple to match inlet for va Drawings.	lve or head shown on	
2.20	Lateral Flush	2.20.1	Per City of Kelowna Detail Drawing.		
2.21	Assembly Valve Box	2.21.1	Per Approved Products List.		
		2.21.2	Valve box and overlapping matching lid a commercial grade and green in colour.	and extensions will be	
2.22	Control Wire	2.22.1	Conventional system: Control wire from electric control valve to be minimum #14 ga TWU-40 wire. Control wire to be any colour or red.	auge, direct burial, type	
		2.22.2	Conventional system: Common wire from electric control valve to be minimum #12 ga TWU-40 wire. Common wire to be white in	auge direct burial, type	
		2.22.3	Conventional system: Hydrometer wire fro hydrometer solenoid to be minimum #14 g TWU-40 wire. Wire to be red in colour.		
		2.22.4	Conventional system: Spare control wire to	be blue in colour.	
		2.22.5	Conventional system: Spare common wire	to be white in colour.	
		2.22.6	Decoder system: Two-wire (dual conduc match controller brand.	tor) control wiring to	
		2.22.7	Wire connectors to be new, two-step watertight applications and assembled manufacturer's recommendations.		
2.23	Wire Spice Box	2.23.1	Wire splice box as per Approved Products L	ist.	
2.24	Irrigation Sleeve	2.24.1	Schedule 40 PVC pipe for irrigation sleeves	under hard surfaces.	

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		2.24.2	Irrigation sleeve diameter to be minimum 4" (diameter of the pipe running through it; whic	
		2.24.3	System wire conduit to be a minimum 2 electrical conduit.	." (50mm) diameter
2.25	Polyvinyl Chloride (PVC) Pipe	2.25.1	Must conform to CSA B137.3-93.	
		2.25.2	Must be new and without flaws, extruded fro materials, solvent weldable with belled er permanently marked showing manufacture size, pressure rating, and CSA approval.	nds, continually and
		2.25.3	Pipe series and size as specified on Contract I	Drawings.
2.26	Polyethylene (PE) Pipe	2.26.1	Must be new and without flaws, CSA Series Density Polyethylene), extruded from virgin r and permanently marked showing manufactu size, and pressure rating.	materials, continually
		2.26.2	Pipe series and size as specified on Contract I	Drawings.
2.27	High Density Polyethylene (HDPE) Pipe	2.27.1	Must be new and without flaws, CSA appropermanently marked showing manufactur size, and pressure rating.	
		2.27.2	Acceptable HDPE pipe is dependent on opera have minimum Standard Dimension Ratios (S	5.
			 Maximum pressure 160 psi: DR11 Maximum pressure 200 psi: DR9 	
2.28	PVC and PE Fittings	2.28.1	Must be new and without flaws.	
		2.28.2	Fittings for PVC pipe systems must be PVC intended for use with PVC pipe for eith applications or threaded connections.	
		2.28.3	Threaded nipples are to be Schedule 80 PVC.	

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		2.28.4	Where pipe changes from metal to PVC pipe, the metal end of the pipe must be a female adapter and the PVC fitting must be a Schedule 80 nipple.
		2.28.5	Fittings for PE pipe must meet ASTM D2609 standards, complete with stainless steel gear clamps.
2.29	HDPE Fittings	2.29.1	Must be new and without flaws.
		2.29.2	Must be UL or ULC approved.
		2.29.3	Butt fusion fittings for use on HDPE must meet ASTM F2206 Standard Specification and be designed for butt fusion welding to HDPE pipe.
		2.29.4	Electrofusion type fittings for use on HDPE must meet ASTN F1055 Standard Specification and be designed for electrofusior welding to HDPE pipe.
		2.29.5	SDR rating of HDPE fittings must match the SDR rating of the HDPE pipe specified.
		2.29.6	HDPE pipe fittings to be moulded or fabricated by a pipe manufacturer. HDPE pipe fittings and flange adapters made by contractors, sub-contractors or distributors are prohibited.
		2.29.7	Use of mechanical fittings on HDPE is prohibited unless approved in writing by City of Kelowna Parks Representative.
2.30	Pipe Solvent Cement and	2.30.1	Per Approved Products List.
2.31	Primer Vault Pipe and	2.31.1	Vault pipe and fittings shall be brass, stainless steel or HDPE.
	Fittings	2.31.2	Brass piping must be in new condition and conform to NSF/ANS 372.
		2.31.3	Stainless steel piping must be in new condition, must be Type 304L or 316L and must conform to ASTM A312.
		2.31.4	Selected material for pipe and fittings must be consistent throughout vault.

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		2.31.5	All pipe and fittings must meet BC Plumbin for use with potable water.	ng Code requirements
2.32	Thrust Block	2.32.1	Thrust blocks shall adhere to MMCD Sectior MMCD Standard Detail Drawing W1.	n 33 11 01 Item 3.13 and
2.33	Sprayhead Sprinkler	2.33.1	Per Approved Products List.	
2.34	Sprinkler Rotary Sprinkler	2.34.1	Per Approved Products List.	
2.35	Dripline	2.35.1	Per Approved Products List.	
2.36	Drip Emitter /Bubbler	2.36.1	As specified on Contract Drawings.	
2.37	Root Watering Systems	2.37.1	Per Approved Product List.	
2.38	Bedding and Backfill Sand	2.38.1	Pit run sand, 2mm or less, per MMCD Sectio	on 31 05 17 <u>.</u>
2.39	Drain Rock	2.39.1	Drain rock per MMCD <u>Section 31 05 17</u> .	
2.40	Bolts	2.40.1	All bolts used in system construction to be 316.	e stainless steel 304 or
3.0	EXECUTION			
3.1	Existing Conditions	3.1.1	Report existing conditions at variance with Contract Administrator. Contract Adm information to City of Kelowna Parks Repre	inistrator to report
		3.1.2	Verify locations of underground utilities excavation and conduct work so to pre- damage to services and utilities. Make goo at Contractor's cost.	vent interruption and
		3.1.3	Verify location of all services in building v drilling holes. Make good all damages to cost.	
		3.1.4	Protect existing conditions and completed during Work. Make good all damages to cost.	

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		3.1.5	Proposed adjustments to installation of irr existing conditions, completed work and u subject to prior approval by the Contract A	tilities will be permitted
3.2	Excavation	3.2.1	Excavate to ensure depth and bedding req	uirements are met.
		3.2.2	All excavation is unclassified. Report any m that cannot be excavated by normal mech or that may affect excavation to required Administrator.	anical or manual means
		3.2.3	Identify and recycle all suitable mater construction.	rials recovered during
		3.2.4	Remove and dispose of buried debris expo including decommissioned irrigation mate utility components.	J .
3.3	Water Service	3.3.1	Verify that the provided wate service n requirements as indicated on the irrigation	5
		3.3.2	Notify Contract Administrator if the wate not meet design requirements as indicated and await notice to proceed or other instru	on the irrigation design
		3.3.3	Ensure connection to supplied water s Kelowna Subdivision Bylaw, MCCD Platir American Water Works Association stanc Code.	um Edition, applicable
3.4	Electrical Service and Account	3.4.1	Within 5 Days of receipt of Notice to Pro Administrator with information necessar application to electrical utility for service c	ry for Owner to make
		3.4.2	Certified electrician or FSR to obtain p necessary to install and operate irrigation	· · ·
		3.4.3	Coordinate with electrical utility to co suitability, and location of an acceptable se	
		3.4.4	Install all electrical connections in accordar and national electrical codes.	nce with local, provincial

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		3.4.5	Ensure grounding is included on electrical permit.
3.5	Water Meter	3.5.1	Install water meter per approved Drawings and requirements of water utility.
		3.5.2	Where a water meter is not being installed at the time of construction, install spacers and unions sufficient to allow for the future installation of a correctly sized water meter.
3.6	Isolation Valve	3.6.1	Install isolation valve per Contract Drawings.
3.7	Hydrometer	3.7.1	Install Hydrometer in location specified on Contract Drawings.
		3.7.2	Follow manufacturer's instructions for installation.
			Air relief valve is to be installed on the first blowout, threaded into the ball valve or gate valve depending on size of the vault. It is to be used during start-up, once system is charged ball or gate valve can be closed with air relief vent attached. Remove during winterization process.
		3.7.3	Install hydrometer drain valve prior to installation. Hydrometer drain valve to be supplied by City of Kelowna Parks Department.
		3.7.4	Where system utilizes a conventional wiring layout, communication wire to be PE39 cable; no substitutions permitted. No splices are permitted on the wire path from controller to hydrometer.
		3.7.5	Where system utilizes two-wire technology, communication from controller to hydrometer to be as per manufacturer's specifications.
3.8	Pressure Reducing Valve	3.8.1	Prior to installation, confirm in writing from the City of Kelowna, if a Pressure Reducing Valve (PRV) is required to be installed in the Point of Connection to stabilize pressure/flow.
		3.8.2	Install PRV per manufacturer's instructions in location shown on Drawings and as required to maintain operating pressure within manufacturer's recommended range.
		3.8.3	Adjust PRV to provide water at design pressure.

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3.9	Backflow Prevention Device	3.9.1	All backflow prevention assemblies must be installed by Journeyman Plumber carrying required cross connection certification and in accordance with BC Plumbing Code.
		3.9.2	Double Check Valve Assembly (DCVA) to be installed within
		3.9.3	lockable vault. Reduced Pressure Backflow Assembly installation will require drawing approval by the Building and Permitting Department of the water purveyor in the jurisdiction of installation.
		3.9.4	Install backflow prevention assemblies with positive drainage and room for maintenance and servicing.
3.10	Irrigation Vault and Lid	3.10.1	Install vault(s) in location shown on Contract Drawings.
		3.10 2	Support and brace point of connection components, piping and valves within vaults using adjustable aluminium pipe stands complete as per Approved Products List in the quantities indicated below:
			(1) 1" to 4" (25-100mm) 3 supports
			(2) Larger than 4" (100mm) as per Drawings
		3.10.3	Install irrigation vault drain and connect to drain pit, dry well, manhole or catch basin.
		3.10.4	Drainage pit dimensions will match the depth, width and length of the vault installed.
		3.10.5	Extend selected piping for POC outside the vault a minimum of 300mm.
		3.10.6	Ensure no vault is installed within 200mm of any hardscape.
3.11	Ground Assembly	3.11.1	To meet BC Electrical Code requirements.
3.12	Irrigation	3.12.1	Install approved irrigation controller in approved irrigation kiosk.
	Controller	3.12.2	Install approved irrigation controller to allow controller door to open sufficiently for full access to control components.

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		3.12.3	Install approved irrigation controller wirir local, provincial and national electrical code	5
		3.12.4	Where applicable, install and test the gro "Megger" to ensure earth resistance to gr controller manufacturer's recommendatior	ound does not exceed
		3.12.5	Install communication components instructions. Establish communication be Owner's central irrigation control systen specified by designer.	
		3.12.6	Operate Controller through 1 year warr establishment. Include 1 year warranty per in Operating Manual.	, , , ,
3.13	Antenna and	3.13.1	Install Irrigation Kiosk (Kiosk), Antenna Contract Drawings.	and Kiosk Base per
	Kiosk Base	3.13.2	Provide electrical service to Kiosk as shown	on Contract Drawings.
		3.13.3	Where dedicated electrical meter is require in the Kiosk per electrical utility's requireme	-
		3.13.4	Install one duplex 120v GFI receptacle, on Kiosk.	dedicated breaker, in
3.14	Electric Control	3.14.1	Install in valve box per Contract Drawings.	
	Valve	3.14.2	Identify Electric Control Valve with per indicating zone number of valve.	rmanent label or tag
3.15	Filters	3.15.1	Install as per Contract Drawings.	
3.16	Quick Coupler	3.16.1	Install as shown on Contract Drawings.	
	Valve	3.16.2	Do not install Quick Coupler Valves in sam control valve.	ne valve box as electric
3.17	Swing Joint Assembly	3.17.1	Fabricate assembly of triple swing joint Schedule 40 PVC elbows and one thread nipple.	

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		3.17.2	Install swing joint assembly to rotate clockwise w	hen depressed.
		3.17.3	Tape threads of PVC fittings with Teflon tape and tight.	make hard hand
3.18	Lateral Flush Assembly	3.18.1	Install Lateral Flush Assembly on swing joint asse per Contract Drawings.	mbly in valve box
		3.18.2	Coil hose in valve box.	
3.19	Valve Box	3.19.1	Install all manual and electric control valves, cont quick coupler valves in valve boxes or concrete v Contract Drawings.	
		3.19.2	Do not install valve boxes in hardscapes.	
		3.19.3	Install valve box flush with finish grade and arrar orderly manner.	ige in a neat and
		3.19.4	Valve box must not contact irrigation pipe. Use box extensions as required.	e matching valve
		3.19.5	Up to three 1" (25mm) control valves or two $1\frac{1}{2}$ valves may be contained within a single valve bo is 4" (100mm) of clearance between valves. Instal and larger in their own valve box.	x provided there
3.20	Control Wire	3.20.1	Install control wire per code and by qualified pers by the company holding the electrical permit.	sonnel employed
		3.20.2	Bury control wire per applicable code.	
		3.20.3	Bed control wire in sand with minimum 3" (75m control wire. Where control wire is in same tren wire beside pipe (not directly above) with horizon minimum of 3" (75mm) and in accordance with Br depth.	ch as pipe, place tal clearance of a
		3.20.4	Bundle multiple lengths of wire in same trench or at maximum 10' (3m) intervals.	conduit with ties

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	3.20.	5 Install wire with minimum 24" (600mm) le changes of direction, in wire splice boxes controlled components.	5
	3.20.	5 Identify all control wires entering controlle label or tag indicating zone number of control wire.	•
	3.20.	7 Maintain consistent wire colour through w	vire splice box.
	3.20.	8 Minimize wire splices. Where wire splice splice only in wire splice box using specifie	
	3.20.	Identify spliced wire with permanent labe number of spliced control wire.	el or tag indicating zone
	3.20.	Provide one spare control wire to for even shown on Contract Drawings. Location of per Contract Drawings.	
	3.20.	Provide 24" (600mm) length of coiled slack splice box. Identify spare control wire permanent label or tag.	
	3.20.	Provide minimum two spare common w common wires as per Contract Drawings.	ires. Location of spare
	3.20.	13 Where the system is a two-wire system, a be as specified by the manufacturer of th installed as per Contract Drawings.	
3.21 Wire Spli	ce Box 3.21.	Locate wire splice box in planting bed wh for ease of access, maintenance, and testi	
	3.21.	2 Install wire splice box per Contract Drawin	igs.
	3.21.	Do not install valves in wire splice box.	
3.22 Irrigation	Sleeve 3.22.	Install irrigation sleeves in locations shown	n on Contract Drawings.
	3.22.	2 Install irrigation sleeve to depth as follows	5:

(1) Mainline Piping

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			 .1 24" (600mm) below walkways .2 36" (915mm) below driveways, roads and plazas
			 (2) Lateral Piping .1 18" (450mm) below walkways .2 36" (900mm) below driveways, roads and plazas
		3.22.3	Install sleeve to extend 20" (0.5m) past edge of hard surface into soft landscape surface.
		3.22.4	Cap sleeve with removable plug or cover. Maintain plug in sleeve until such time as pipe or wire is ready to be installed.
		3.22.5	Bed sleeve as follows:
			(1) Under walkways, 4" (100mm) of sand placed all around.
			(2) Under driveways, roads and plazas, compacted base aggregate all around per materials shown on Contract Drawings.
		3.22.6	Bury $\frac{1}{2}$ " (12mm) width rebar piece beside each end of sleeve to enable location of sleeve end by metal detector after burial. Rebar piece to be positioned so that the top of the regard is 6" (150mm) below finished grade.
		3.22.7	Record location of sleeve ends and label size of sleeve on Record Drawings.
3.23	Pipe and Fittings	3.23.1	Verify that all pipe, fittings, and connecting materials or equipment are compatible for proper installation.
		3.23.2	Minimum and maximum burial depth and clearances for pipe and wire are as per Drawings and in keeping with applicable codes.
		3.23.3	Nearest side of trench is not to be closer than 12" (300mm) from hard surface or feature.
		3.23.4	Keep inside of pipe and outside of pipe ends clean at all times. Cap or plug open pipe ends to keep out dirt and debris.
		3.23.5	Follow manufacturer's instructions and standards for installation of all pipe and fittings.

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	3.23.6	Follow manufacturer's instructions and sta of pipe and fittings; minimize excess runoff	
	3.23.7	Allow sufficient space between fittings to f There shall a be minimum of two times pipe distance between fittings, whichever is gre	diameter or 2" (50mm)
	3.23.8	Adhere to HDPE Certification standards installation of HDPE pipe and fittings.	and requirements for
	3.23.9	Flush irrigation pipe fully to remove acc debris prior to installation of heads, driplir Flush lateral lines to prevent clogging of emitters.	e, emitters and filters.
	3.23.10	Follow manufacturer's recommendations and contraction of pipe in trench.	to allow for expansion
	3.23.11	Set mainlines and laterals with 3" (75m) bottom and 3" (75mm) sand above.	m) sand on sides and
	3.23.12	Ensure lateral lines are not installed directly	y above mainline.
	3.23.13	For pipe in landscaped areas backfill trench Drawings and tamp in lifts to achieve co adjacent growing medium.	
	3.23.14	For pipe in native soil, sub-surface fill, roc base or sub-base material backfill rema suitable non-sand material under 1" (25mr of materials that could result in settling surface improvements.	ainder of trench with n) in diameter and free
	3.23.15	Install thrust blocks at all changes in dir (75mm) in diameter or greater, and for any gasketed pipe.	
	3.23.16	Cut pipe ends at right angle to pipe lengt joining pipe and fittings.	h. Clean burrs prior to
	3.23.17	Do not join pipe or fittings under wet or mu	uddy conditions.

SUPPL	F KELOWNA EMENTAL TO O SPECIFICATIONS		SECTION 32 94 0 IRRIGATION SYSTEM PAGE 29 OF	
3.24	Thrust Block	3.24.1	Thrust block installation to adhere to MMCD Section 33 11 01 lt 3.13 and Standard Detail Drawing W1.	em
3.25	Sprinklers	3.25.1	Install per manufacturer's recommendations and in locat shown on Contract Drawings.	ion
		3.25.2	Location of heads as illustrated on Contract Drawings is intend as a guide to layout of heads. Establish actual head locations in field to ensure complete and adequate coverage of all areas to irrigated and minimal overspray onto adjacent surfaces a improvements. Do not exceed head spacing shown on Contr Drawings.	the be and
		3.25.3	Where obstructions or site improvements hinder or block head head coverage advise the Contract Administrator and determ best method to maximize coverage.	
		3.25.4	For head adjacent to hard surface or improvement set head (50mm) from hardscape as shown on Contract Drawings.	2″
		3.25.5	For flat surfaces install head plumb to finished grade. For slop surfaces install head perpendicular to half the grade of the slop	
		3.25.6	Mount pop-up heads on triple swing-joint assembly. Conn bottom inlet of sprinkler to swing joint assembly. Side ir connection not permitted. Adjust swing joint assembly to set he flush with finish grade.	nlet
		3.25.7	Adjust sprinklers to achieve head to head coverage of area to irrigated, with minimum or no overspray onto other surfaces.	be
3.26	Dripline	3.26.1	Install per manufacturer's recommendations in location shown Contract Drawings.	on
		3.26.2	Ensure approved filtration is installed.	
		3.26.3	Do not install driplines of different flow rates on the same zone	2.
		3.26.4	Place dripline on prepared surface. Surface to free of sharp ro or other objects that may damage dripline. Surface to be at gra necessary for dripline to be at specified depth after placement remainder of topsoil or growing medium.	ade

SUPPL	F KELOWNA EMENTAL TO) SPECIFICATIONS		IRRIGATION SYSTEM	SECTION 32 94 01S PAGE 30 OF 32
		3.26.5	Placement of dripline by trenching using methods permitted only if specified as such o or upon written approval of the Contract Adn	n Contract Drawings
		3.26.6	Do not drive or operate equipment over expo	sed dripline.
		3.26.7	Thoroughly flush each zone after installation a regular operation of drip zone.	and before beginning
3.27	Drip Irrigation for Planting Beds	3.27.1	For dripline in planting bed stake dripline u recommended stakes at 18" (450mm) on cen	5
3.28	Drip Irrigation for Turf Areas	3.28.1	Install per manufacturer's instructions and as Drawings.	s shown on Contract
3.29	Emitter/Bubbler	3.29.1	Install per manufacturer's recommendation Contract Drawings.	s and as shown on
		3.29.2	Install approved filtration per manufacturer's shown on Contract Drawings.	s instructions and as
3.30	Root Watering	3.30.1	Install as shown on Contract Drawings.	
	System	3.30.2	Root watering system to be installed equidis sock and pea gravel.	stant, complete with
3.31	Hose Bib	3.31.1	Install as shown on Contract Drawings	
		3.31.2	Do not install Hose Bibs in same valve box as e	electric control valve.
3.32	Clean-up and Restoration	3.32.1	Remove and properly dispose of all waste from irrigation installation from site.	and debris resulting
		3.32.2	Restore all disturbed surfaces to original cor trench settlement.	ndition and repair all
3.33	Instructions to Owner	3.33.1	Schedule on-site meeting to instruct City Representative in complete operating procedures for irrigation system, including sta and programming.	and maintenance

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 32 94 01S IRRIGATION SYSTEM PAGE 31 OF 32
		3.33.2	Review Record Drawings and Operating Manual with City of Kelowna Parks Representative on site.
3.34	Maintenance – General	3.34.1	Inspect, operate, maintain and adjust irrigation system through the one-year guarantee period for construction until issuance of Certificate of Acceptance to ensure it operates as intended, including but limited to:
			(1) Adjust irrigation program to ensure health and growth of the plant material and respond to changes in soil conditions and seasons for site.
			(2) Clean sprinkler heads and adjust coverage to eliminate over watering, under watering and overspray onto adjacent surfaces.
			(3) Monitor and clean filtration equipment.
			(4) Restore grass areas, planting beds, hard surfaces and improvements affected by trench settlement and erosion.
			(5) Respond to requests from the Contract Administrator for program adjustments, servicing, adjustments and repairs.
			(6) Provide digital documentation to the Contract Administrator of any repairs related to vandalism.
3.35	Maintenance – Winterization	3.35.1	During one-year guarantee period for construction, be responsible for winterization of irrigation system at end of growing season and prior to onset of air temperatures below 0° Celsius. Be liable for any damage resulting from late or improper winterization.
		3.35.2	Conduct winterization in the presence of the Contract Administrator. Provide minimum 3 days (72 hours) notice to the Contract Administrator to attend. Contract Administrator must invite City of Kelowna Parks Department Representative to winterization within 24 hours of receiving the invitation from the Contractor.
		3.35.3	Winterization includes but is not limited to:
			(1) Saturation of soil with water to a depth of 300mm to provide deep watering of all lawn areas, planting beds and tree pits.
			(2) Deactivation of water supply.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			I	RRIGATION SYSTEM	SECTION 32 94 01S PAGE 32 OF 32
			(3)	Deactivation of controller.	
			(4)	Contact City of Kelowna Parks D any components within the poir removed prior to winterization guidelines to be followed for wi connection.	nt of connection are to be and if there are specific
3.36	.36 Maintenance – Spring Start-up	3.36.1	for s sease	ng one-year guarantee period for co pring start-up of irrigation system on or within 5 Days of request for for any damage resulting from lat	n at beginning of growing start-up from Owner. Be
		3.36.2	Adm Cont invite start	uct spring start-up in the pro inistrator. Provide minimum 3 day ract Administrator to attend. Cor city of Kelowna Parks Departmen up within 24 hours of receiving ractor.	ys (72 hours) notice to the ntract Administrator must t Representative to Spring
		3.36.3	Sprin	g start-up includes but is not limite	ed to:
			(1)	Activate water supply slowly and escape prior to charging lines.	l provide location for air to
			(2)	Checking and testing for leaks.	
			(3)	Cycling irrigation control progr ensure proper function and perfo	3
			(4)	Checking and adjusting heads an coverage with minimum over spr	
			(5)	Testing of backflow prevention results to Contract Administrato on the backflow prevention ass firmly attached to the tested a following information in waterp Test Date, Tester initials, Tester	r and place test results tag sembly. Test tag must be assembly and include the roof ink: Name of Owner,
			(6)	Saturation of the soil with water to provide deep watering of all and tree pits.	

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTI IRRIGATION SYSTEM PA	
3.37	Guarantee	3.37.1	Submit written guarantee, in approved for showing defects in materials, workmans repaired or replaced at no cost to Owner from date of Substantial Performance.	ship or operation will be
		3.37.2	Guarantee includes the supply of labour, r necessary for the repair and replacement materials and workmanship. Guarantee winterization, maintenance, necessa corrections or adjustments and restorat valve boxes, and sprinkler heads. Guarant verification.	of damaged or defective includes Spring start-up, ary testing, program tion of settled trenches,
		3.37.3	Guarantee will not apply to materials or after Substantial Performance by causes control, such as vandalism or abuse.	
				END OF SECTION

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 33 11 01S WATERWORKS PAGE 1 OF 6
2.0	PRODUCTS		
2.2	Mainline Pipe, Joints and Fittings	2.2.1	Ductile iron pipe:
	j.		(add)
			(3) Wrap: Ductile iron pipe and fittings to be installed with a polyethylene encasement conforming to AWWA C104, unless suitable testing of the soil conditions indicate that there is no risk of accelerated corrosion, as approved by the City Engineer.
		2.2.4	Fittings:
			(replace (8) Bolts and nuts:)
			 Bolts to be UNC rolled threaded, high-strength low-alloy stainless steel to AWWA C111/A21.11 / ASTM F593, type 304, heavy hex style. Bolt sizes to AWWA C110. Nuts and washers: nuts to be high-strength low-alloy stainless steel to AWWA C111/A21.11 / ASTM F594, type 304, heavy hex style. Washers to be flat hardened stainless steel, type 304, equivalent to ASTM F436/F436M.
			(replace (9) Tie Rods and Nuts:)
			 Tie rods to be continuous threaded, quenched and tempered high-strength low-alloy stainless steel, equivalent to ASTM A354, Grade BC. Tie rod sizes to be minimum 19 mm diameter or greater as shown on Contract Drawings. Nuts and internally threaded couplings to be high-strength low-alloy stainless steel to AWWA C111/A21.11 / ASTM F594, type 304, heavy hex style.
2.5	Service		(replace 2.5.1)
	Connections, Pipe, Joints and Fittings	2.5.1	Pipe diameter 25 mm and 50 mm to be Pressure Class 160 polyethylene tubing certified to CSA B137.1, or crosslinked polyethylene pipe certified to AWWA C904.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 33 11 01S PAGE 2 OF 6
			(replace 2.5.5)
		2.5.5	Copper tubing joints to be compression type suitable for 1100 KPa working pressure.
2.6	Hydrants		(replace 2.6.2)
		2.6.2	Colour: All hydrants are to be painted in accordance with the City Standard Drawing SS-W4 and the Approved Products List.
2.7	Underground		(add)
	Service Line Valves and Fittings	2.7.5	Curb stops for 50mm services to be accessed by a valve box similar to mainline valves.
2.10	Joint Wrapping		(add section)
		2.10.1	As listed in the Approved Products List.
3.0	EXECUTION		
3.6	Pipe Installation	3.6.1	(add)
			All pipe to be delivered from manufacturer with weatherproof plugs/bagging to prevent contamination while being delivered and during storage. Pipe to remain this way until placed into trench and installed.
			(replace 3.6.6)
		3.6.6	Do not exceed <u>50%</u> of the maximum joint deflection recommended by the pipe manufacturer. Refer to AWWA C600 for ductile iron pipe and AWWA C605 for PVC pipe. PVC pipe deflections achieved by bending the barrel are not permitted. For PVC pipe deflections exceeding 50% of manufacturer's recommendation, use:
			(1) PVC High Deflection coupling rated at 1380kPa (100mm-300mm)

(2) PVC long radius 5 degree bend rated at 1620kPa (100mm-750mm).

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			WATERWORKS	SECTION 33 11 01S PAGE 3 OF 6
			(add)	
		3.6.15	Marking tape labelled WATERWORKS a placed above all pipes at a depth of 0.45m statutory rights-of-way and any other alignment is irregular, as required by the 0	below finished grade in locations where pipe
3.10	Service		(add)	
Connection Installation	3.10.13	Decommissioning of existing services that shall be completed as indicated on the C stops and valve boxes are to be removed on the age, size, and material of the main the ability to shut down the main. The op at the main are as follows:	ontract Drawings. Curb . Requirements depend n and service, as well as	
			(1) Removal of the corporation stop completed a repair clamp is to be in location. The watermain will need to decommissioning.	nstalled over the service
			(2) If the saddle is in good condition, consistent of the solid plug behind the formula of the solid cap. After installation must be opened and closed to Abandonment saddle may need to corporation stop where it has been of the solution.	lare/compression nut or on, the corporation stop confirm no leakage. o be installed over the
			(3) If the water service was connected t flange, then a blind plate is required must be removed. The watermain w during decommissioning.	on the tee, service valve
			Contractor to coordinate with City of Kelo Contract Administrator for witnessing of c	-
3.12	Hydrants		(replace 3.12.6)	
		3.12.6	For hydrants not in service, place an orai hydrant, secured at the bottom with tap "Not In Service." Isolation valve to remain	e and labelled in black

SUPPLE	KELOWNA MENTAL TO SPECIFICATIONS		SECTION 33 11 01S WATERWORKS PAGE 4 OF 6
			is put into service. Remove bag and open valve once the water main has been accepted by the Contract Administrator. If the hydrant valve is connected to a live water main, the valve to be operated only by Water Utility staff.
			(add)
		3.12.7	Prior to putting hydrant into service, Contractor to complete flow testing and submit hydrant data in the form required by the City of Kelowna.
3.14	Corrosion		(add)
Prote	Protection	3.14.2	All bolts, tie rods and nuts to have petrolatum paste and tape applied.
3.19	Testing Procedure		(add)
		3.19.8	Hydrant flow testing to be completed in accordance with the AWWA Manual of Water Supply Practices, Installation, Field Testing & Maintenance of Fire Hydrants (M17).
3.20	Disinfection,		(add)
	General	3.20.3	Disinfect and flush water reservoirs and appurtenances in accordance with AWWA C652.
3.21	Disinfection and		(add)
	Flushing Procedures	3.21.10	Flush water main and dispose to a suitable location as approved by the Contract Administrator. If disposing to the storm system or any other environmental sensitive area, dispose to a tanker truck or holding facility and dechlorinate the disinfection solution using Ascorbic Acid (Vita-D-Chlor). Confirm that the solution has been neutralized prior to disposing to the approved disposal location.
		3.21.11	Results from the disinfection procedure must be documented by the Contract Administrator and include actual concentration levels at 0 & 16 hours from both ends of the pipe, in accordance with AWWA C651.

SUPPLE	KELOWNA MENTAL TO SPECIFICATIONS		WATERWORKS	SECTION 33 11 01S PAGE 5 OF 6
		3.21.12	Test water main in accordance with AWW no bacteria exist. Testing to include to samples at least 16 hours apart, taken at including all branches and at intervals in AWWA C651. Tests required for the sam Fecal Coliform, Background Bacteria, and	wo consecutive sets of t both ends of the pipe, between as specified in ples are Total Coliform,
		3.21.13	The Contract Administrator to provide the Kelowna Water Utility with "Form 6, Rec the City Water System". Contact waterti	quest for Connection to
			 Copies of all test results including thos that performed any of the tests. 	e from other companies
			2. A sketch or copy of a drawing showing the location of the tie-in(s).	the sections tested and
		3.21.14	If the pipe is left idle for a period of more t to be re-flushed. Zero hour and 16 hour be taken. Repeat flushing and testing satisfactory.	bacteria samples are to
		3.21.15	Contractors must keep minimum chlorine until the pipe is connected to an active sys	
3.23	Connections to		(add)	
	Existing Mains	3.23.2	Make connection (or disconnection) in Engineer and Contract Administrator. Pr days notice to schedule inspection. Obta Third Party Work order prior to connect Contractor is responsible to pay for tie-in	rovide two full working ain and authorize a City tion (or disconnection).

SUPPLE	KELOWNA MENTAL TO SPECIFICATIONS		SECTION 33 30 01S SANITARY SEWERS PAGE 1 OF 1
3.0	EXECUTION		
3.6	Pipe Installation		(add)
		3.6.14	Marking tape labeled SANITARY SEWER and tracer wire is to be placed above all pipes at a depth of 0.45m below finished grade in statutory rights-of-way and any other locations where pipe alignment is irregular, as required by the City Engineer.
3.12	Leakage Testing General	3.12.1	(remove (5))
3.18	Video Inspection		(replace 3.18.1)
		3.18.1	The Contractor shall video inspect completed sanitary sewers and service connections (main to IC) following completion of installation per Section 33 01 30.1 – CCTV Inspection of Pipelines. Copies of the digital video files and written report shall be forwarded to the Contract Administrator as soon as they are available.
3.20	Connection to Existing Mains		(add)
	WIGHTS	3.20.3	Make connection (or disconnection) in presence of City Engineer and Contract Administrator. Provide two full working days notice to schedule inspection. Obtain and authorize a City Third Party Work order prior to connection (or disconnection). Contractor is responsible to pay for tie-in inspections.

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECT SEWAGE FORCEMAINS	SECTION 33 34 01S PAGE 1 OF 1
2.0	PRODUCTS			
2.2	Pipe, Joints and Fittings	2.2.1	Ductile iron pipe:	
	-		(delete 2.2.1 -ductile iron pipe not permitted for for	rcemains)
		2.2.2	Polyvinyl Chloride (PVC) pressure Pipe: (add)	
			(4) Forcemain pipe color is to be white.	
2.3	Valves and Valve Boxes	2.3.2	Gate Valves:	
-			(delete 2.3.2 – gate vales not permitted for forcem	ains)
3.0	EXECUTION			
3.6	Pipe Installation		(add)	
		3.6.11	Marking tape labeled SANITARY FORCEMAIN and to be placed above all pipes at a depth of 0.45m b grade in roads and statutory rights-of-way and any o where pipe alignment is irregular, as required Engineer.	elow finished ther locations
3.16	Connection to		(add)	
	Existing Mains	3.16.3	Make connection (or disconnection) to mains and presence of City Engineer and Contract Administr two full working days notice to schedule inspection authorize a City Third Party Work order prior to c disconnection). Contractor is responsible to pa inspections.	rator. Provide n. Obtain and onnection (or

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 33 40 01S STORM SEWERS PAGE 1 OF 1
3.0	EXECUTION		
3.6	Pipe Installation		(add)
		3.6.14	Marking tape labeled STORM SEWER and tracer wire is to be placed above all pipes at a depth of 0.45m below finished grade in statutory rights-of-way and any other locations where pipe alignment is irregular, as required by the City Engineer.
3.12	Inspection and Testing		(replace 3.12.1)
	resting	3.12.1	The Contractor shall video inspect completed storm sewers, catchbasin leads and service connections (main to IC) following completion of installation per Section 33 01 30.1 – CCTV Inspection of Pipelines. Copies of the digital video files and written report shall be forwarded to the Contract Administrator as soon as they are available.
3.14	Connection to		(add)
	Existing Mains	3.14.3	Make connection (or disconnection) in presence of City Engineer and Contract Administrator. Provide two full working days notice to schedule inspection. Obtain and authorize a City Third Party Work Order prior to connection (or disconnection). Contractor is responsible to pay for tie-in inspections.

SUPPL	F KELOWNA EMENTAL TO 9 SPECIFICATIONS		MANHOLES AND CATCHBASINS PAGE 1 OF 2				
2.0	PRODUCTS						
2.1	Materials		(replace 2.1.7)				
		2.1.7	Cast iron frame and cover: as indicated in the City of Kelown Approved Products List and Supplemental Detail Drawings.				
			(1) The manhole frame must conform to ASTM A48/A48M ar be designed to withstand H20 loading.				
			(2) Frame and cover assembly must not create a point load of the concrete riser rings and must keep the frame centere and stable over the manhole chimney.				
			(3) Frame must be able to achieve adjustment to within 6m of finished surface elevation. Rim to be set uniform wir contour of road surface and not higher.				
			(4) Where surface inflow is likely, Sanitary Sewer manhol shall be installed with an approved watertight frame ar cover.				
			(replace 2.1.11)				
		2.1.11	Catchbasin leads to be minimum 200 mm diameter PVC DR35.				
		2.1.15	Mortar: (add)				
			 (3) Support concrete to be non-shrink type, minimum 20 MF (a) 28 days, maximum 10mm diameter aggregate. 				
			(add)				
		2.1.23	Sulphate resistant concrete required where soil condition warrant it, as specified on Contract Drawings or as recommended by Geotechnical Engineer.				
			(add)				
		2.1.24	Grade Rings:				
			(5) Grade rings are to be reinforced dry cast concrete to H2 load.				

- (8) For roads with steep grades 4% and 8% sloped concrete grade rings are to be used in conjunction with the adjustable manhole frame assembly. Only one sloped grade ring required for each adjustment.
- (9) In addition to adjustable manhole frame assembly for roads with grades between 4% and 8%, use 4% sloped concrete grade ring. For roads between 8% and 12% use 8% sloped concrete grade ring.
- (10 Grade rings must be smooth and fit tight. Manhole frame assembly to fit flush and centered on concrete grade ring. Remove any dry cast slag from grade ring edges.

(add)

3.3.19 Where manholes are to be installed in new or re-constructed roadways that require two lifts of asphalt, final adjustment of manhole frames and covers is to occur after first lift of asphalt is in place.

3.9 Adjusting Tops of Existing Units

(add)

3.9.6 Remove and replace existing non-conforming manhole frames and covers within work zone with new frames and covers in conformance with City Standards.

END OF SECTION

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			SECTION 34 41 135 TRAFFIC SIGNALS PAGE 1 OF 4				
2.0	PRODUCTS						
			(replace 2.6.4)				
		2.6.4	Steel Pedestrian/Cyclist Pushbutton F conform to Standard Detail Drawing E6 that the pushbutton be mounted at 750 m	.3, with the exception			
2.7	Conductors and		(add)				
	Cables	2.7.5	IMSA cable: Type 19-1, stranded. Number as per Contract Drawings.	r and size of conductor			
2.11	Service Panels		(replace 2.11.1)				
		2.11.1	Service panels shall be as shown on the Co	ontract Drawings.			
2.15	Traffic and		(replace 2.15.1 and delete 2.15.2)				
	Pedestrian Signals	2.15.1	Traffic signal heads to be 300mm yello tunnel visors, number and type as per C backboard is specified it shall be yellow a border of yellow prismatic, retro-reflectiv heads to be green polycarbonate, num Contract Drawings.	ontract Drawings. If a aluminium with 75mm e sheeting. Pedestrian			
2.16	LED Signal Modules		(add)				
		2.16.2	All ball indication traffic signal heads warranty.	shall have a 15-year			
2.17	Signal Mounting		(replace 2.17.1)				
	Hardware	2.17.1	Side mount brackets as per Standard De Supplemental Drawing SS-E5.3	tail Drawings E5.2 and			
			(replace 2.17.2 and delete 2.17.3 - 2.17.7)				
		2.17.2	Overhead signal head mounting as per St E5.9.	andard Detail Drawing			

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS		SECTION 34 41 13S TRAFFIC SIGNALS PAGE 2 OF 4				
2.18	Audible Signals		(replace 2.18.1)			
		2.18.1	For head mounted APS speakers, mound Drawing SS-E5.12. For integral pushbore replace the standard bulldog pushbuttore above surface.	utton, APS systems to		
2.24	NEMA Traffic Control		(replace 2.24.1 and delete 2.24.2 - 2.24	.4)		
	Cabinets	2.24.1	Traffic Control Cabinets to be supplied b	y the City.		
2.25			(replace 2.25.1 and delete 2.24.2 - 2.24.	3)		
	System	2.24.1	Video detection system to be supplied b	y the City.		
2.26	I		(replace 2.26.1)			
	Power Supply	2.26.1	Uninterruptable Power System to be sup	oplied by the City.		
3.0	EXECUTION					
3.4	Junction Boxes and		(replace 3.4.1)			
	Vaults	3.4.1	Install junction boxes and vaults as sh Drawings SS-E2.1 – 2.5 and Standard De	• •		
3.6	Poles and Related		(replace 3.6.7)			
	Equipment	3.6.7	Field drilling of holes larger than 33 mm Type 1, 3, 6, 7, L, <u>& S</u> shafts, and all arms larger holes are required, reinforce hole prior to galvanizing.	and extensions. Where		
3.7	Traffic Signal and		(replace 3.7.1)			
	Pedestrian Head Mounting	3.7.1	Install traffic and pedestrian heads as sh Drawings E5.2, E5.9 and Supplemental E			

CITY OF KELOWNA SUPPLEMENTAL TO MMCD SPECIFICATIONS			TRAFFIC SIGNALS	SECTION 34 41 13S PAGE 3 OF 4
3.8	Audible Signals		(replace 3.8.1)	
		3.8.1	For head mounted APS speakers, mounted APS speakers, mounted Drawing SS-E5.12. For integral pushbutt replace the standard bulldog pushbutt above surface.	outton, APS systems to
3.9	Pedestrian Pushbuttons		(replace 3.9.1)	
		3.9.1	Install pedestrian pushbuttons and pos Detail Drawings E6.1 to E6.3. Pedestria to be mounted at 750 mm above surfac	in activated pushbuttons
3.10	Luminaires and Photocells		(replace 3.10.2)	
	i notocciis	3.10.2	Luminaires to be installed parallel with the road surface, to reduce glare on the	5
3.11	Electrical Service		(replace 3.11.1)	
		3.11.1	Install services as per FortisBC standard	ds.
3.12	Electrical Service Panels		(replace 3.12.1)	
		3.12.1	Mount electrical service and mete Supplementary Drawing SS-E1.4.	r panels as shown in
3.14	Wiring		(replace 3.14.1)	
		3.14.1	Streetlight light wiring to be spliced Supplemental Drawing SS-E7.11. Wirin spliced in the nearest junction box.	
			(replace 3.14.3)	
		3.14.3	Video detection and Pre-emption wirir device with no splice.	ng to run from cabinet to
			(replace 3.14.4)	
		3.14.4	19 conductor IMSA cable to be run fror nearest pole and spliced as per Standa	-

CITY OF KELOWNA SUPPLEMENTAL TO TRAFFIC SIGNALS MMCD SPECIFICATIONS	SECTION 34 41 13S PAGE 4 OF 4
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Single conductors to be run from junction box to signal heads and spliced as per Supplemental Drawing SS-E7.19.

(replace 3.14.13)

3.14.13 Bond all steel junction box lids with #8 RW90 conductor.

END OF SECTION

2. SUPPLEMENTAL STANDARD DETAILED DRAWINGS TO MMCD

Standard Detail Drawings for all Works and Services constructed within the City of Kelowna are contained in the Master Municipal Construction Documents (MMCD) 2019 Edition - Volume II, except as specified in the following Index and Cross Reference to MMCD (the Index).

The Supplemental Standard Detail Drawings augment and supersede the MMCD Standard Detail Drawing" as set out herein.

The Index lists only the Supplemental Standard Detailed Drawing. The order of drawings listed in the updated Index mirrors the order of drawings in MMCD (alphabetical), with the City of Kelowna specific sections listed at the end (Linear Park Trails, Landscaping and Irrigation).

CITY OF KELOWNA STANDARD DRAWINGS INDEX AND CROSS-REFERENCE TO MMCD

	MMCD Standard Drawings	City of Kelowna Standard Drawings		
Dwg.	Title	Comment	Dwg.	Title
	CONCRETE AND			
	MISCELLANEOUS DETAILS			
С7	Driveway Crossing for Barrier Curbs	Replaced	SS-C7a	Driveway Crossing for Barrier Curbs - Separate Sidewalk and Letdown
		Added	SS-C7b	Driveway Crossing for Barrier Curbs - Combined Sidewalk and Letdown
C8	Wheelchair Ramp for Sidewalk, Infill and Barrier Curbs	Replaced	SS-C8	Sidewalk Ramp Details
С9	Wheelchair Ramp for Sidewalk and Barrier Curbs	Replaced	SS-C9	Sidewalk Ramp Layouts
C10	Concrete Walkway	Deleted		(See SS-R28)
C11	Bicycle Baffle	Deleted		
C12	Removable Barrier Post	Deleted	SS-C12b	Permanent Bollard (Barrier Post)
	ELECTRICAL			
E1.1	Type M (NEMA Cabinet) Concrete Controller Base	Replaced	SS-E1.1	Type M (NEMA Cabinet) Concrete Controller Base
E1.2	Type P (NEMA Cabinet) Concrete Controller Base	Replaced	SS-E1.2	Type P (NEMA Cabinet) Concrete Controller Base
E1.4	Controller Installation (For Type P and M Cabinets)	Replaced	SS-E1.4	Controller Service Panel Installation
		Added	SS-E1.8	Typical Installation for Traffic Controller
E2.1	Round Plastic Junction Boxes	Replaced	SS-E2.1	Large Round Plastic Junction Box Details
E2.3	Large Concrete Junction Boxes	Replaced	SS-E2.3	Traffic Signal Main Vault Details
E2.4	Large Concrete Junction Boxes	Added	SS-E2.4	Traffic Signal Junction Box Details
E2.5	Concrete Vault	Replaced	SS-E2.5	Concrete Traffic Communication Pull Box Details
E2.6	Concrete Vault	Replaced	SS-E2.6	Plastic Communication Pull Box Details
E5.12	Audible Signals	Replaced	SS-E5.12	Pedestrian and Audible Signal Installation Details
E5.3	Side of Pole Signal Head Mounting (Method 2)	Replaced	SS-E.5.3	Signal/Pedestrian Head Mounting on traffic Signal Poles
		Added	SS-E5.16	Roadside Pedestrian Activated Flashers (No Median Option)
		Added	SS-E5.16a	Solar Roadside Pedestrian Activated Flashers (No Median Option)

	MMCD Standard Drawings		City of	f Kelowna Standard Drawings
Dwg.	Title	Comment	Dwg.	Title
		Added	SS-E5.17	Roadside Pedestrian Activated Flashers (Median Option)
		Added	SS-E5.17a	Solar Roadside Pedestrian Activated Flashers (Median Option)
		Added	SS-E5.18	Roadside Pedestrian Activated Flashers (Overhead Sign Option)
		Added	SS-E5.19	Roadside Pedestrian Activated Flashers (Overhead Sign Median Option)
		Added	SS-E5.20	Signal Head Quick Change Kit
E7.10	Service Ground Plate Installation Detail	Replaced	SS-E7.10	Grounding of Electrical Service Installation Details
E7.11	Luminaire Wining in Pole Handhole	Replaced	SS-E7.11	Luminaire Wining on Pole Handhole Detail
		Added	SS-E7.19	Signal Wiring Colour Code Chart (From JB to Pole)
E8.2	Detector Loops	Replaced	SS-E8.2	Detector Loops
E8.8	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.8	Pre-Formed Diamond Detector Loops
E8.9	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.9	Pre-Formed Diamond Detector Loops
E8.10	Pre-Formed Diamond Detector Loop Installation Details	Replaced	SS-E8.10	Pre-Formed Diamond Detector Loops
	GENERAL DETAILS			
G1	General Legend for Contract Drawings	Deleted		(Legend as per City Drawing Standards)
G2	Legend for Materials	Deleted		(Legend as per City Drawing Standards)
G3	Legend for Street Light and Traffic Signal Drawings	Deleted		(Legend as per City Drawing Standards)
G4	Utility Trench	Replaced	SS-G4	Utility Trench
G5	Pavement Restoration	Replaced	SS-G5	Pavement Restoration
	ROADWORKS			
R1	Paved Shoulders	Deleted		
R2	Driveway Letdowns, Cross-Section	Deleted		(See SS-C7a and SS-C7b)
R3	Sidewalks, Interim Asphalt	Deleted		
R4	Single Ramp Letdown with Parallel Scoring	Deleted		(See SS-C8 and SS-C9)
R5	Traffic Calming, Speed Hump and Table	Deleted		(See ITE TAC standards)
R6	Traffic Calming, Raised Intersection Details	Deleted		(Guideline only, subject to detailed approval)
R7	Traffic Calming, Typical Raised Median	Deleted		

	MMCD Standard Drawings		City of	f Kelowna Standard Drawings
Dwg.	Title Comment Dwg. Title			Title
R8	Traffic Calming, Curb Extensions and On-Street Parking Bay	Deleted		(See SS-R51 and SS-R52)
		Added	SS-R20	Left Turn Lane (Raised Median)
		Added	SS-R21	Left Turn Lane (Painted) and Two-Way Left Turn Lane
		Added	SS-R23	Concrete Drainage Swale Across Asphalt
		Added	SS-R28	Walkway Gate
		Added	SS-R50	Smart Channel Right Turn
		Added	SS-R51	Intersection Curb Extension - Higher Class Road No Parking
		Added	SS-R52	Intersection Curb Extension - Higher Class Road With Parking
		Added	SS-R53	Cul-De-Sac Turnaround
		Added	SS-R54	Hammerhead Turnaround
		Added	SS-R55	Standard Ditch Section
		Added	SS-R56	Utility Access and Location at Ditch
		Added	SS-R57	Rock Cut Cross Section
		Added	SS-R58	Driveway Grades
		Added	SS-R59	Urban Transit Stop Layout
		Added	SS-R60	Urban Transit Stop Shelter Pad Details
		Added	SS-R61	Post Mounted Sign
		Added	SS-R62	Street Name Blade Details
	CROSS SECTION STANDARDS			
		Added	XS-R01	Hillside Laneway
		Added	XS-R02	Suburban / Core Area / Urban Centre Laneways
		Added	XS-R20	Rural Local
		Added	XS-R21	Hillside Village Local Residential
		Added	XS-R22	Hillside Local Condition A (Development Both Sides)
		Added	XS-R23	Hillside Local Condition B (Development One Side)
		Added	XS-R24	Hillside Local Condition C (No Development Either Side)
		Added	SX-R25	Suburban Local
		Added	XS-R26	Industrial Local
		Added	XS-R27	Core Area Local
		Added	XS-R28	Urban Centre Local
		Added	XS-R40	Rural Collector

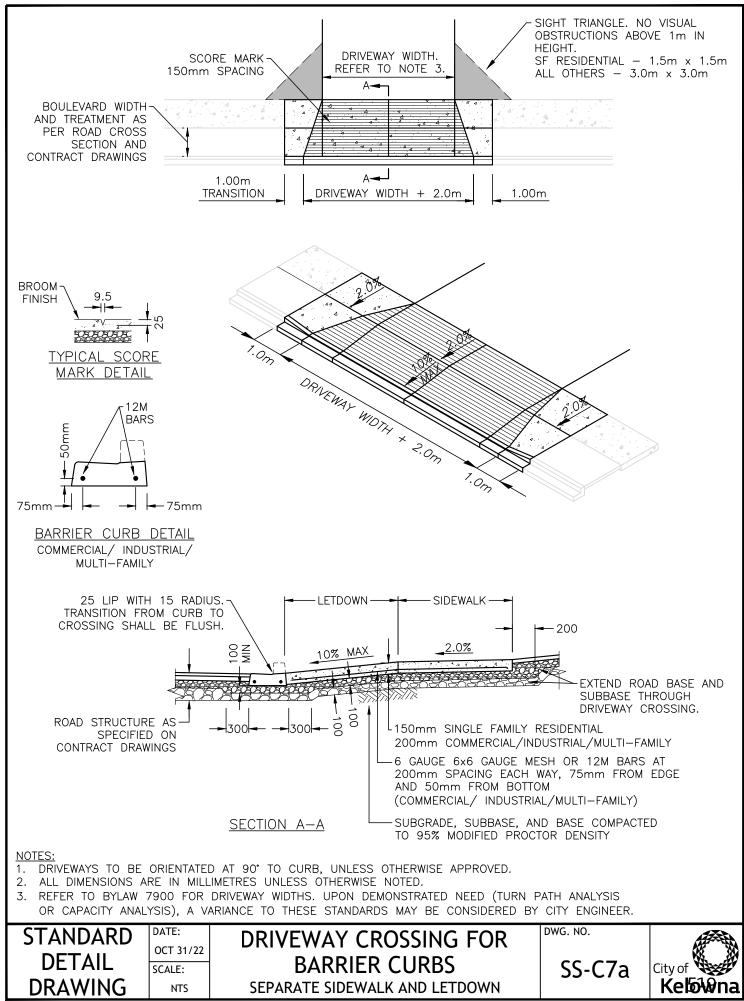
	MMCD Standard Drawings		City of	f Kelowna Standard Drawings
Dwg.	Dwg. Title		Dwg.	Title
		Added	XS-R41	Hillside Village Collector Condition A (Retail/M.F. Fronting)
		Added	XS-R42	Hillside Village Collector Condition B (No Retail Fronting)
		Added	XS-R43	Hillside - Collector Condition A (Development Both Sides)
		Added	XS-R44	Hillside Collector Condition B (Development One Side)
		Added	XS-R45	Hillside Collector Condition C (No Development Either Side)
		Added	XS-R46	Hillside Minor Collector Condition A
		Added	XS-R47	Hillside Minor Collector Condition B
		Added	XS-R48	Suburban Collector
		Added	XS-R49	Suburban Collector (With Bike Lanes)
		Added	XS-R50	Industrial Collector
		Added	XS-R51	Core Area Collector
		Added	XS-R52	Core Area Collector (With Bike Lanes)
		Added	XS-R53	Urban Centre Collector
		Added	XS-R54	Urban Centre Collector (With Bike Lanes)
		Added	XS-R60	Rural Minor Arterial
		Added	XS-R61	Rural Minor Arterial (With Multi-Use Path)
		Added	XS-R62	Hillside Arterial Condition A (Village Parkway)
		Added	XS-R63	Hillside Arterial Condition B (Within 0.8km Walking Distance of Village)
		Added	XS-R64	Hillside Arterial Condition C (Greater Than 0.8km Walking Distance of Village)
		Added	XS-R65	Suburban Minor Arterial
		Added	XS-R66	Core Area Minor Arterial
		Added	XS-R67	Urban Centre Minor Arterial
		Added	XS-R80	Rural Major Arterial (3 Lane)
		Added	XS-R81	Rural Major Arterial (3 Lane with Multi-Use Path)
		Added	XS-R82	Rural Major Arterial (5 Lane)
		Added	XS-R83	Rural Major Arterial (5 Lane with Multi-Use Path)
		Added	XS-R84	Suburban Major Arterial (3 Lane)
		Added	XS-R85	Suburban Major Arterial (5 Lane)
		Added	XS-R86	Core Area Major Arterial (3 Lane)
		Added	XS-R87	Core Area Major Arterial (5 Lane)
		Added	XS-R88	Urban Centre Major Arterial (3 Lane)
		Added	XS-R89	Urban Centre Major Arterial (5 Lane)

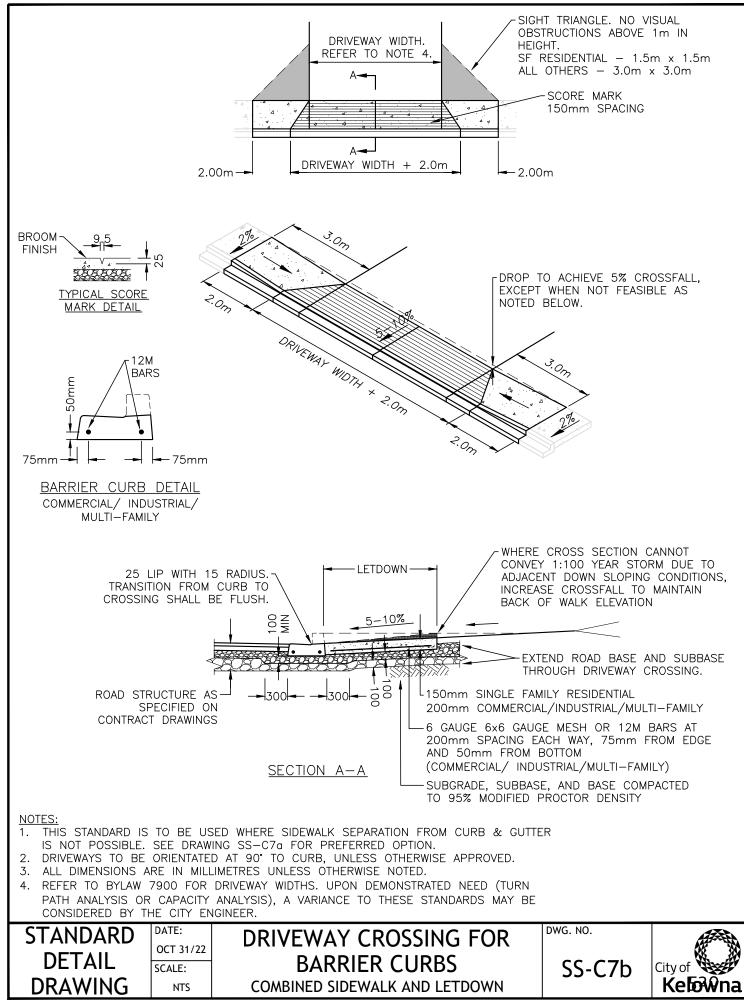
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Dwg.	Title	Comment	Dwg.	Title
	STORM AND SANITARY SEWERS			
S1	Standard and Sump Manholes	Replaced	SS-S1a	Manholes
		Added	SS-S1b	Manhole Frame and Cover
		Added	SS-S1C	Adjustable Manhole Frame and Cover
S4	Inside Drop Manhole	Replaced	SS-S4	Inside Drop Manhole
S6	Sewer Clean-Out	Replaced	SS-S6	Clean-Out Detail (Temporary)
S7	Sanitary Sewer Service Connection	Replaced	SS-S7	Sanitary Sewer Service Connection
S9	Inspection Chamber for 100 to 200 Sanitary Sewer Connection	Replaced	SS-S9	Inspection Chamber for 100 to 200 Sanitary Sewer Connection
S11	Top Inlet Catch Basin	Replaced	SS-S11a	Catch Basin 900 mm diameter
		Added	SS-S11b	Catch Basin Castings Combined Side and Gutter Inlet
		Added	SS-S11c	Catch Basin - Top Slabs
		Added	SS-S13b	Storm Drain Outlet with Safety Grillage
		Added	SS-S50	Manhole Requirement for Services
		Added	SS-S51	Drainage Drywell
		Added	SS-S52	Drainage Drywell Installation
		Added	SS-S52a	Drywell Installation with Perforated Pipe System
		Added	SS-S53	Pipe Perforation and Bedding Detail for Ground Water Recharge
		Added	SS-S54	Catch Basin Trapping Hood
		Added	SS-S55a	Flow Control Chamber - City Facility
		Added	SS-S55b	Flow Control Chamber - Private Facility
		Added	SS-S56	IDF Curves
		Added	SS-S57	Riprap Design Chart
		Added	SS-S58	Groundwater Recharge Suitability Map
		Added	SS-S59	Typical Lift Station Site Layout
		Added	SS-S60	Sanitary Lift Station
		Added	SS-S61	Above Ground Valve Kiosk
		Added	SS-S62	Pigging Port
		Added	SS-S63	Radio Antenna Mast and Base

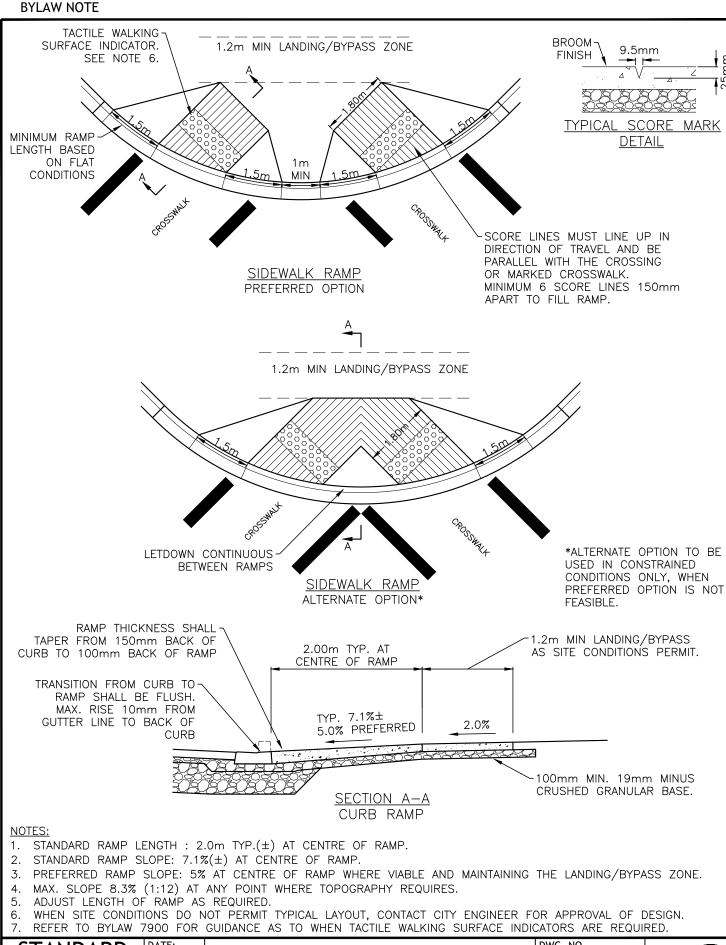
	MMCD Standard Drawings		City of Kelowna Standard Drawings			
Dwg.	Title	Comment	Dwg.	Title		
	WATERWORKS					
W2a	Water Service Connection	Replaced	SS-W2	Water Service Connection		
W2b	Water Service Connection	Deleted				
W2c	Meter Installation for 19mm & 25mm Service Connections	Deleted				
W2d	Meter Installation for 38mm & 50mm Service Connections	Deleted				
W4	Fire Hydrant Installation	Replaced	SS-W4	Hydrant		
W6	Air Valve Assemblies - 25 and 50 mm Valves	Replaced	SS-W6a	25mm Underground Air Valve (50mm Air Valves as directed by City Engineer)		
W7	Air Valve Assembly - 100 mm Valve	Deleted				
W8	Blow-Off for Water Main	Replaced	SS-W8a	Blow-Off (for mains 100mm & smaller)		
		Added	SS-W8b	100mm Blow-Off (for mains 150mm & larger)		
		Added	SS-W50	Irrigation Service		
		Added	SS-W51	U-Bend Detail (Pipe Crossing Conflict)		
		Added	SS-W52	AC Watermain Crossings		
		Added	SS-W53a	Pressure Reducing Station		
		Added	SS-W53b	Pressure Reducing Station		
	LINEAR PARK TRAILS					
		Added	SS-T01	Class 1 - Major Urban Promenade		
		Added	SS-T02	Class 2 - Major Multi-Use Urban		
		Added	SS-T03	Class 3 - Major Multi-Use Rural		
		Added	SS-T04	Class 4 - Standard Multi-Use Rural		
		Added	SS-T05	Class 5 - Narrow Multi-Use Rural		
		Added	SS-T06	Class 6 - Nature Trail Rural		
	LANDSCAPING					
		Added	SS-L01	Growing Medium - Boulevard Groundcover		
		Added	SS-L02	Growing Medium - Boulevard Planting Bed		
		Added	SS-L03	Tree - in Open Green Space		
		Added	SS-L04	Tree - in Planting Bed		
		Added	SS-L05a	Tree - in Boulevard - Section		
		Added	SS-L05b	Tree - in Boulevard - Plan		
		Added	SS-L06a	Boulevard Tree - in Soil Cell (Plan)		
		Added	SS-L06b	Boulevard Tree - in Soil Cell (Section A-A')		

MMCD Standard Drawings			City of	f Kelowna Standard Drawings
Dwg.	Dwg. Title		Dwg.	Title
	IRRIGATION			
		Added	SS-IR.01a	Standard Kiosk - Non-Metered
		Added	SS-IR.01b	Double-Sided Metered Kiosk - External
		Added	SS-IR.01c	Double-Sided Metered Kiosk - Internal
		Added	SS-IR.02a	Irrigation Vault - Kon Kast 1102
		Added	SS-IR.02b	Irrigation Vault - Kon Kast 1132
		Added	SS-IR.03a	Point of Connection - 25mm to 50mm
		Added	SS-IR.03b	Point of Connection - 100mm
		Added	SS-IR.03c	Irrigation Service
		Added	SS-IR.04a	Trench Section
		Added	SS-IR.04b	Wire Splice Box
		Added	SS-IR.05a	Gate Valve - 25mm to 75mm
		Added	SS-IR.05b	Resilient Wedge Gate Valve - 75mm to 150mm
		Added	SS-IR.05c	Quick Coupler
		Added	SS-IR.05d	Electric Control Valve - 25mm to 50mm
		Added	SS-IR.05e	Drip Zone Kit - 25mm
		Added	SS-IR.05f	Drip Zone Kit - 38mm
		Added	SS-IR.06a	Sprayhead Sprinkler
		Added	SS-IR.06b	Rotor Sprinkler
		Added	SS-IR.06c	Root Watering System
		Added	SS-IR.07a	Dripline Layout - Inline Drip
		Added	SS-IR.07b	Dripline Layout - Point Source Drip
		Added	SS-IR.07c	Flush Valve Assembly
		Added	SS-IR.07d	Air Relief Valve

BYLAW NOTE

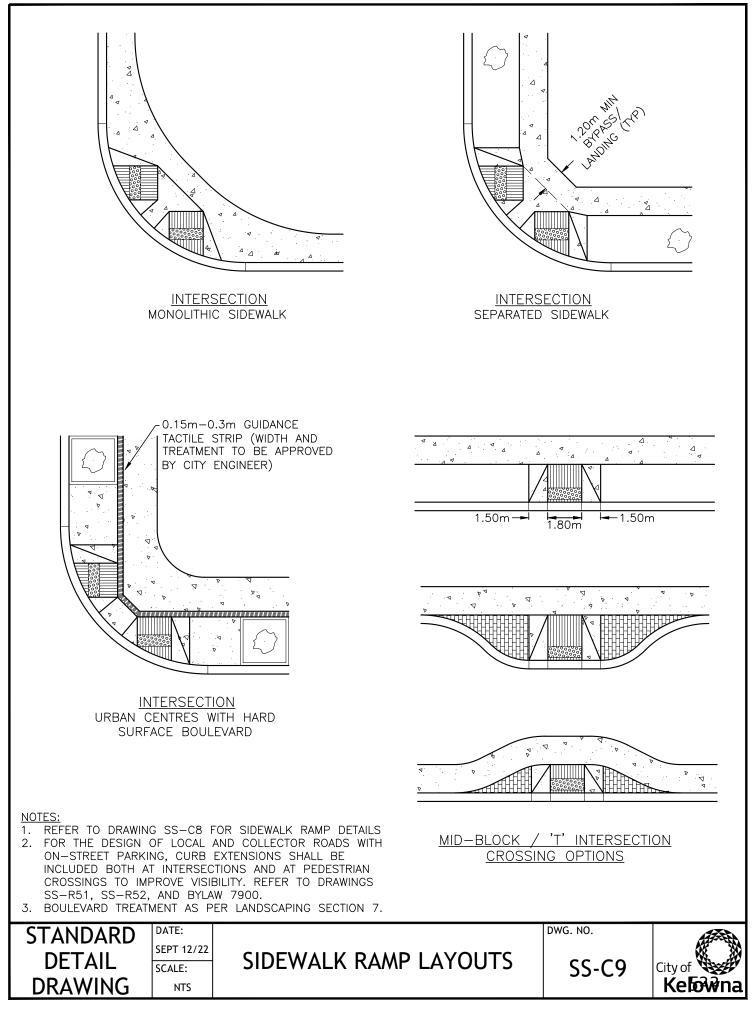


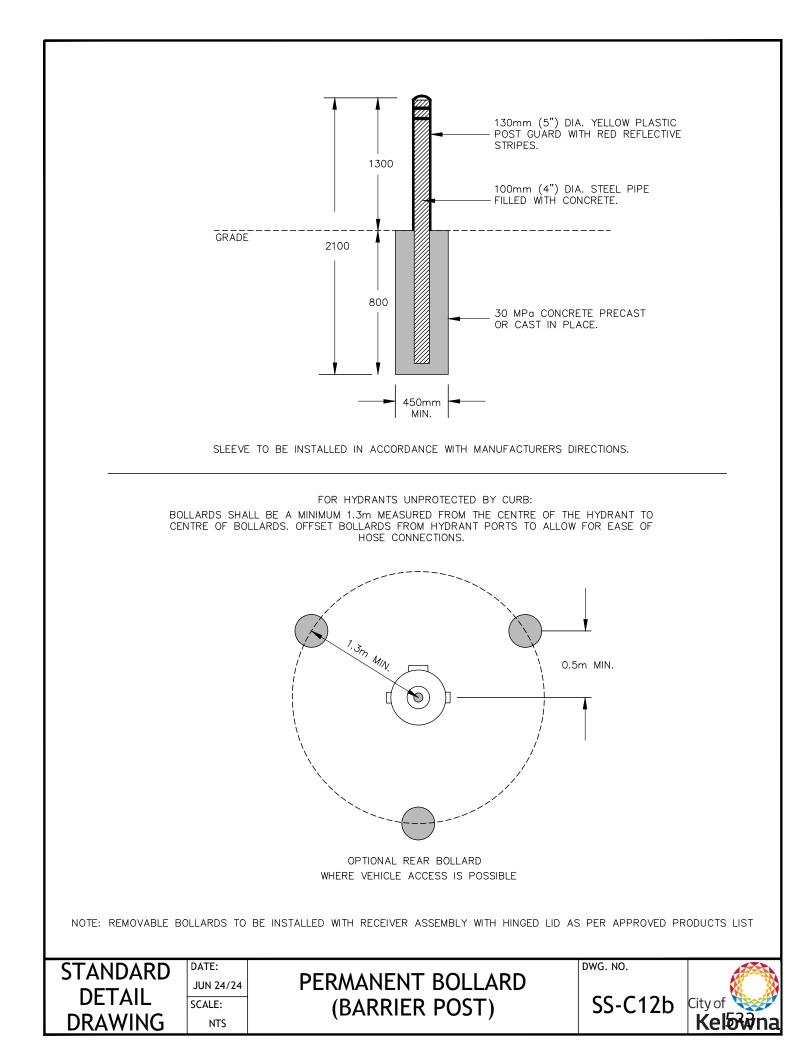


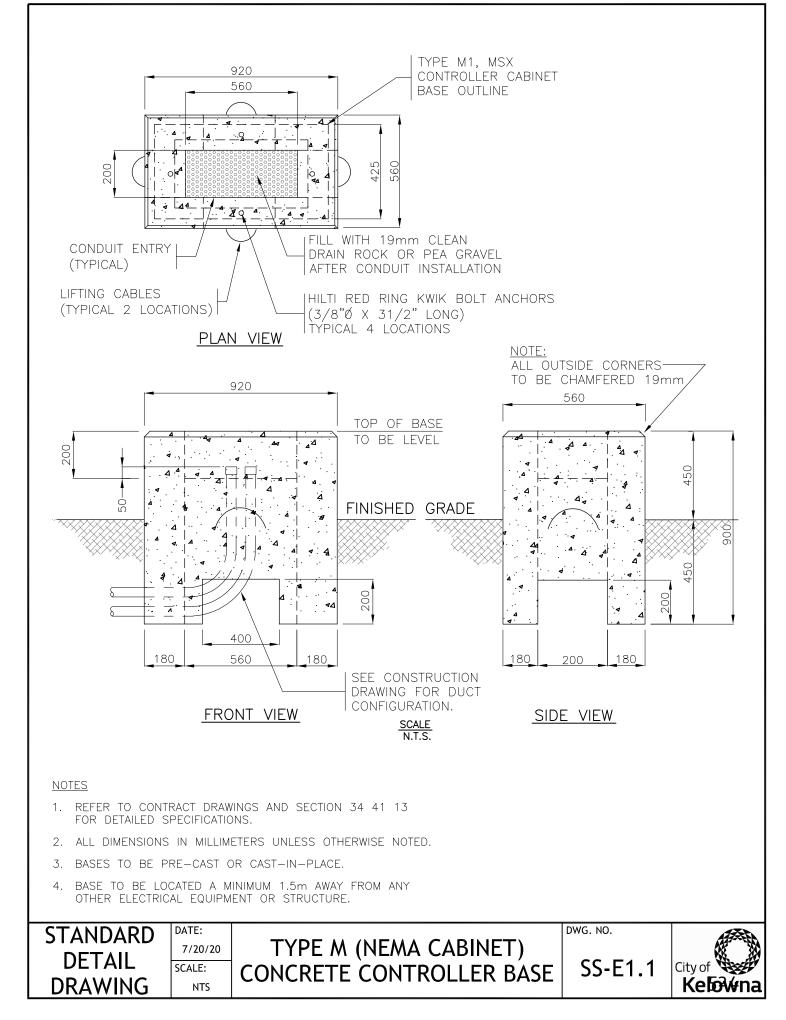


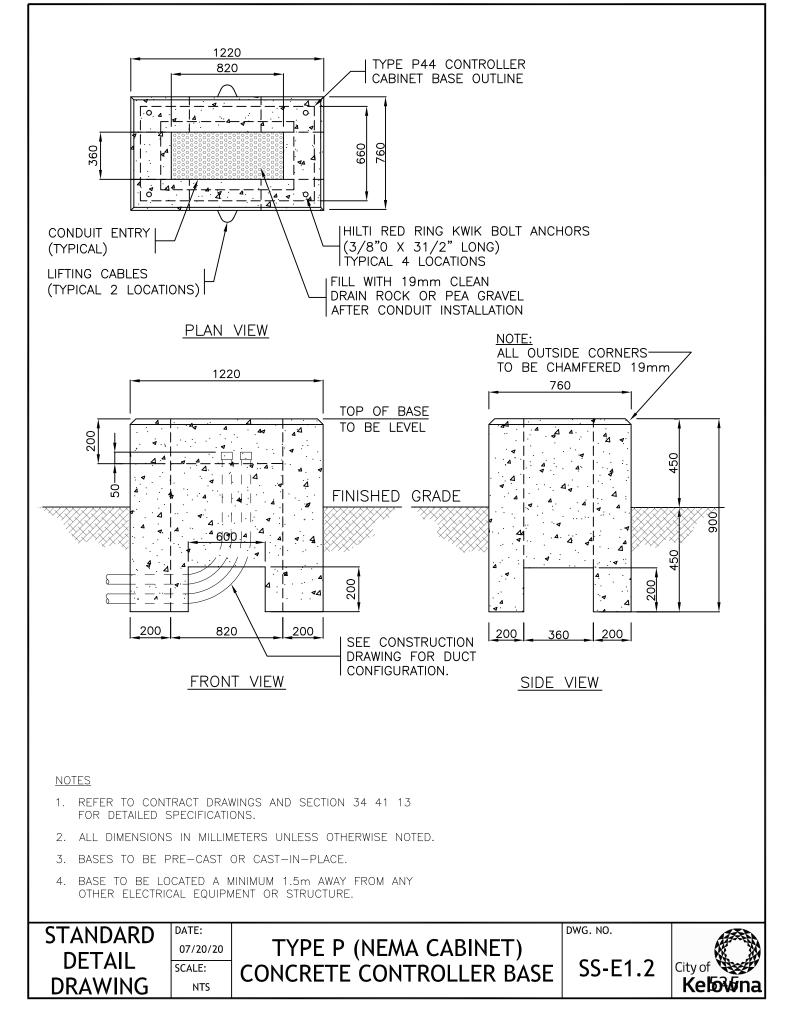
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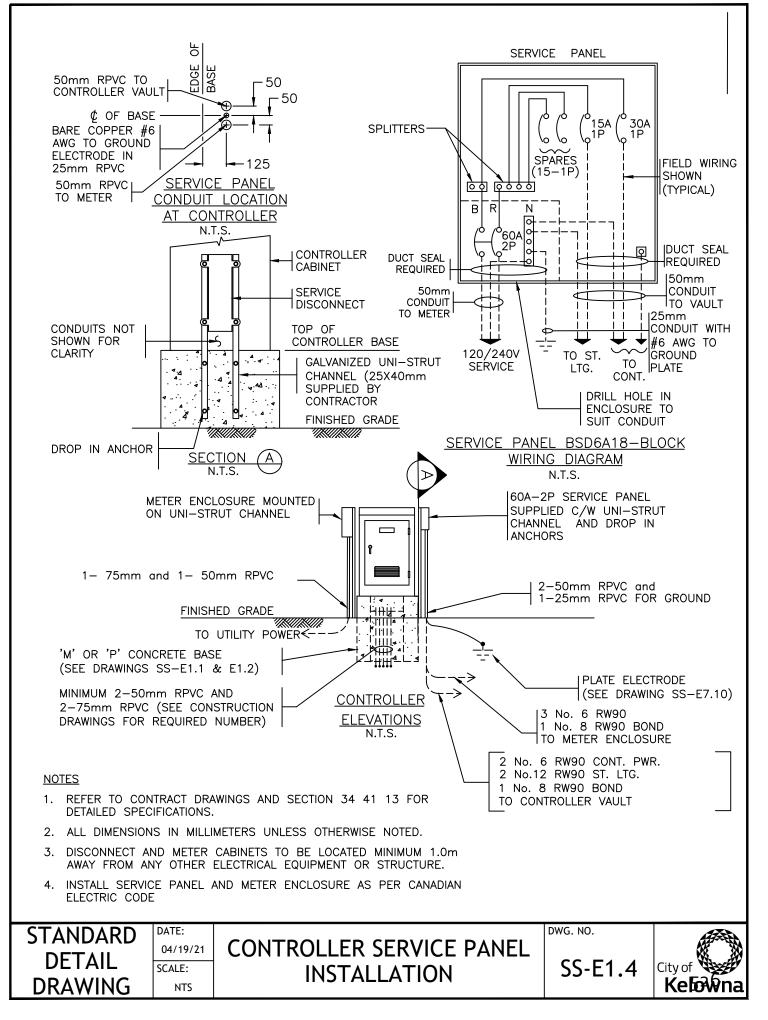




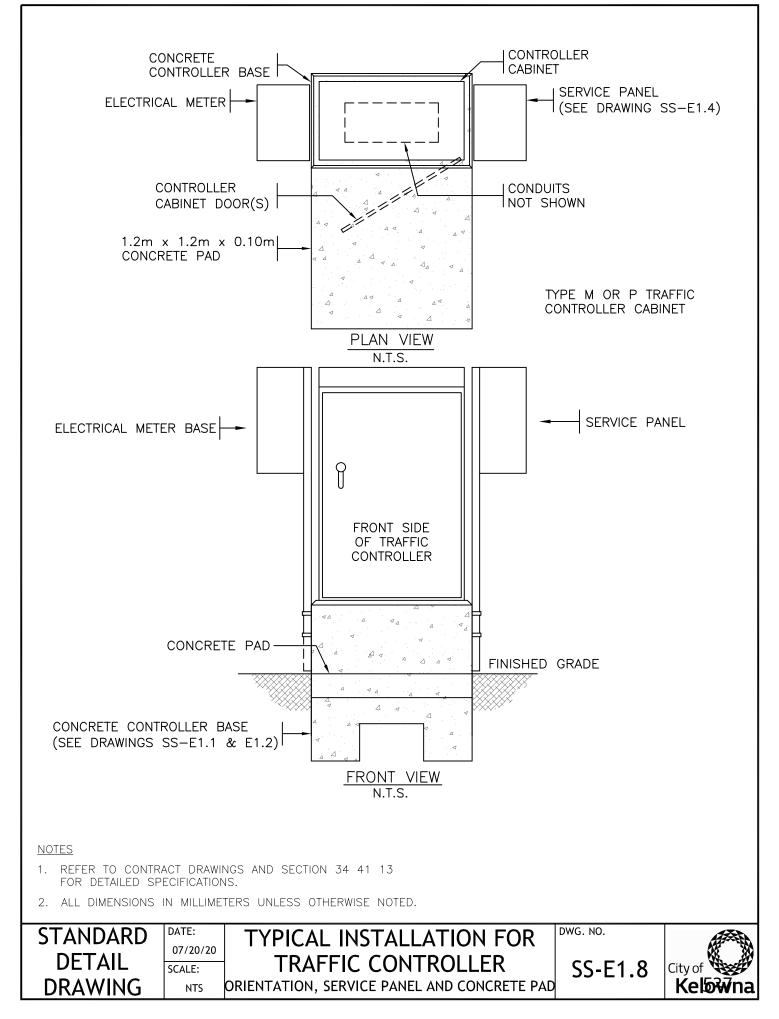




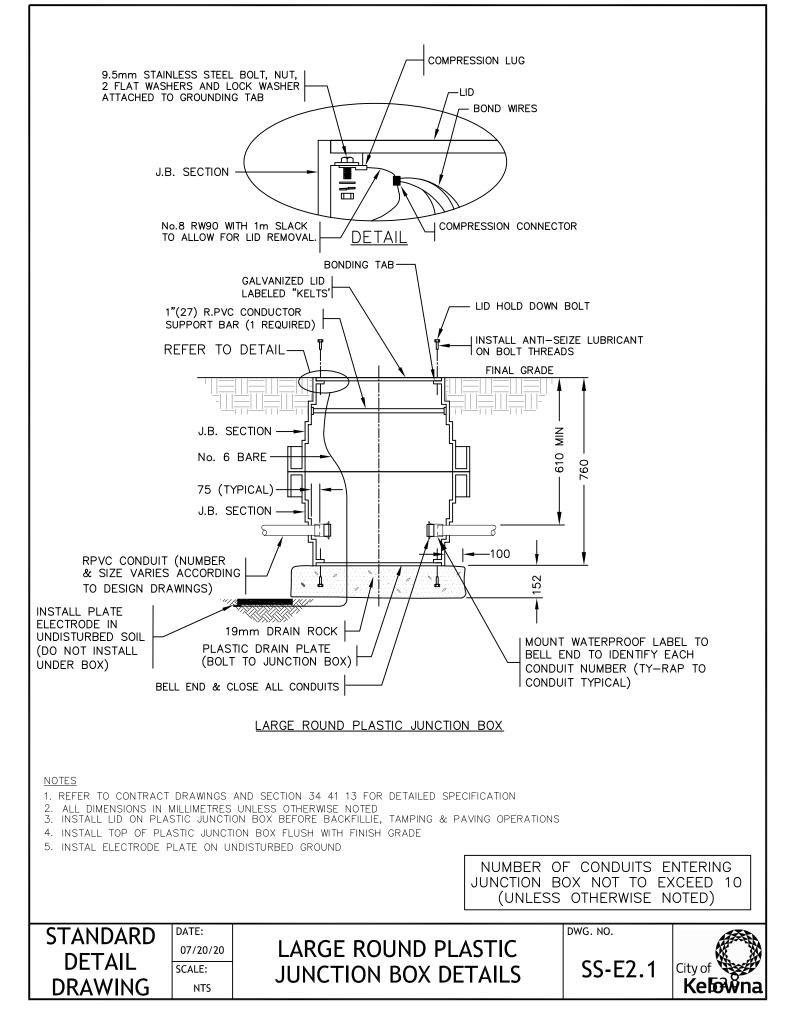


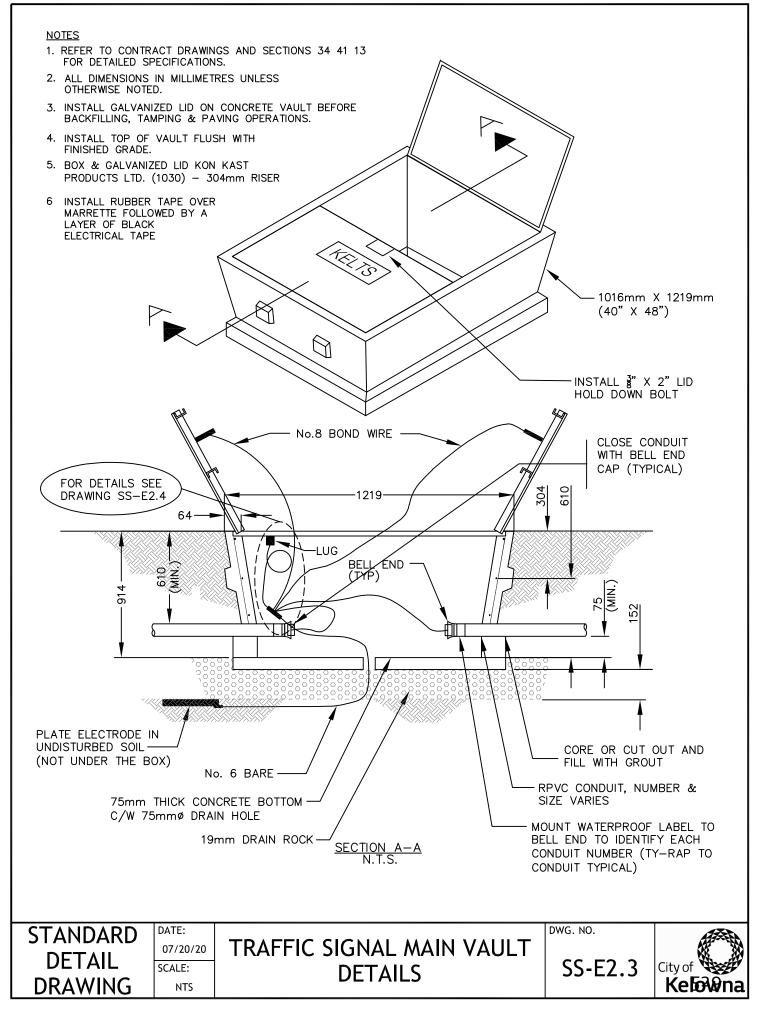


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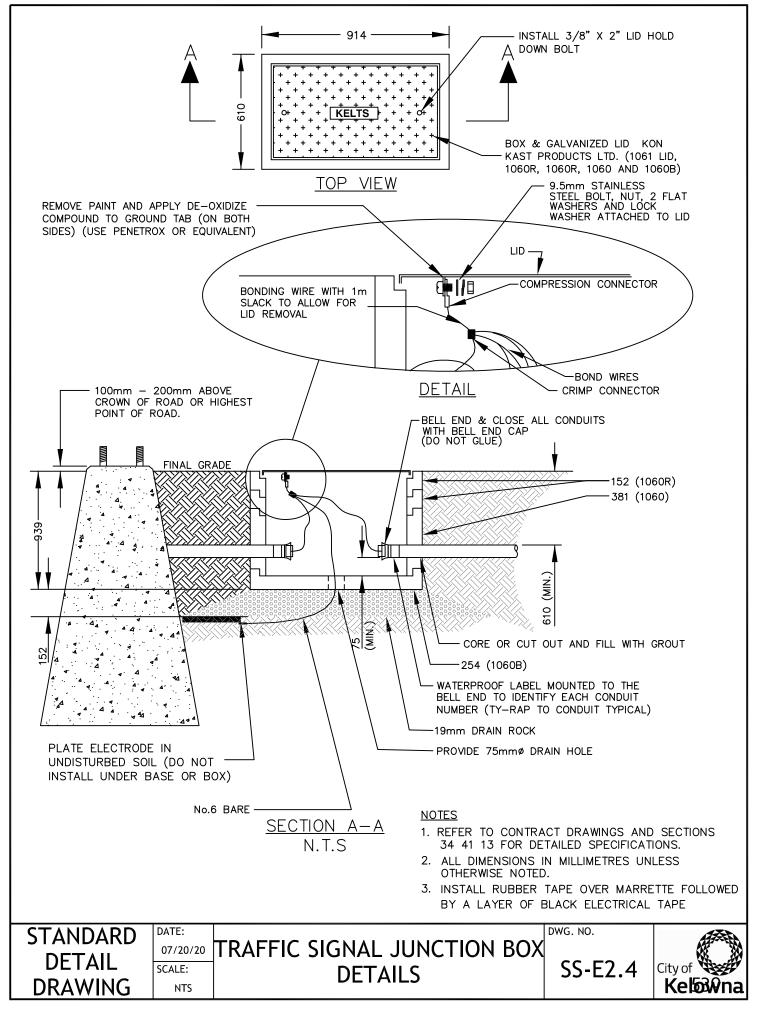


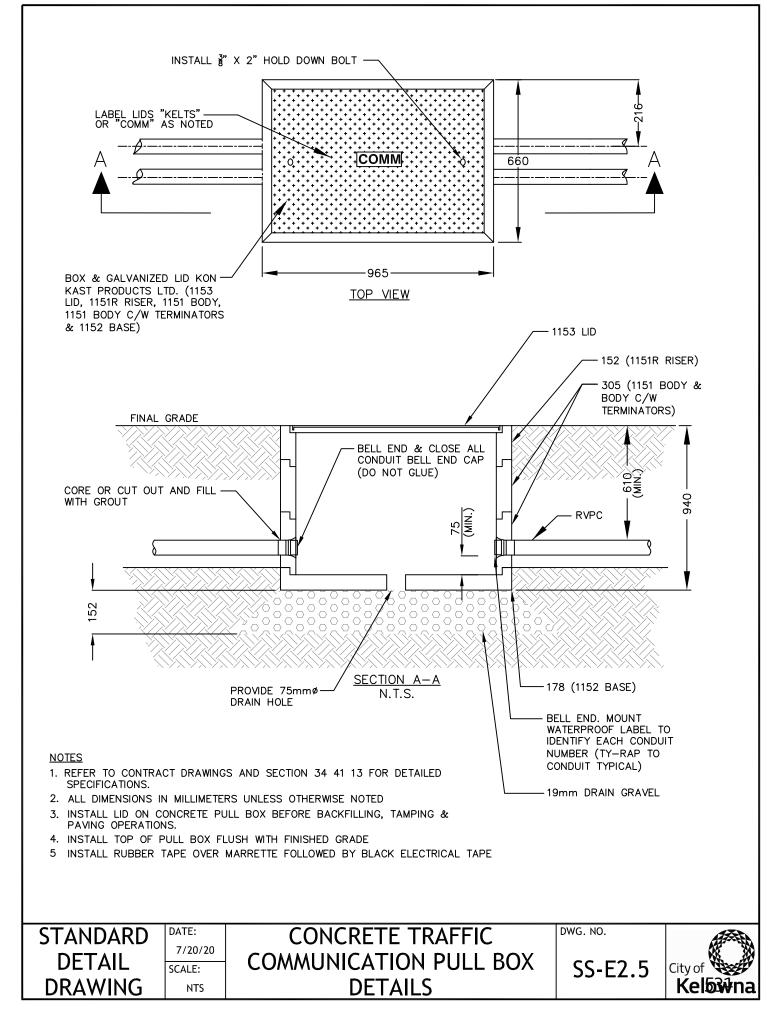
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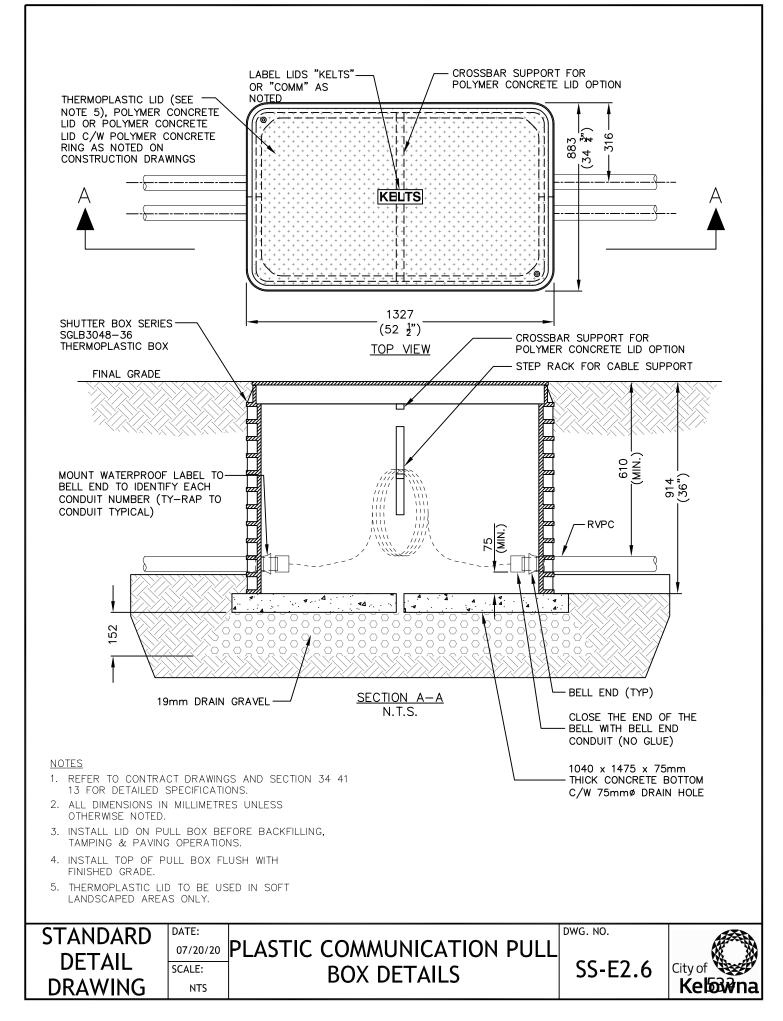


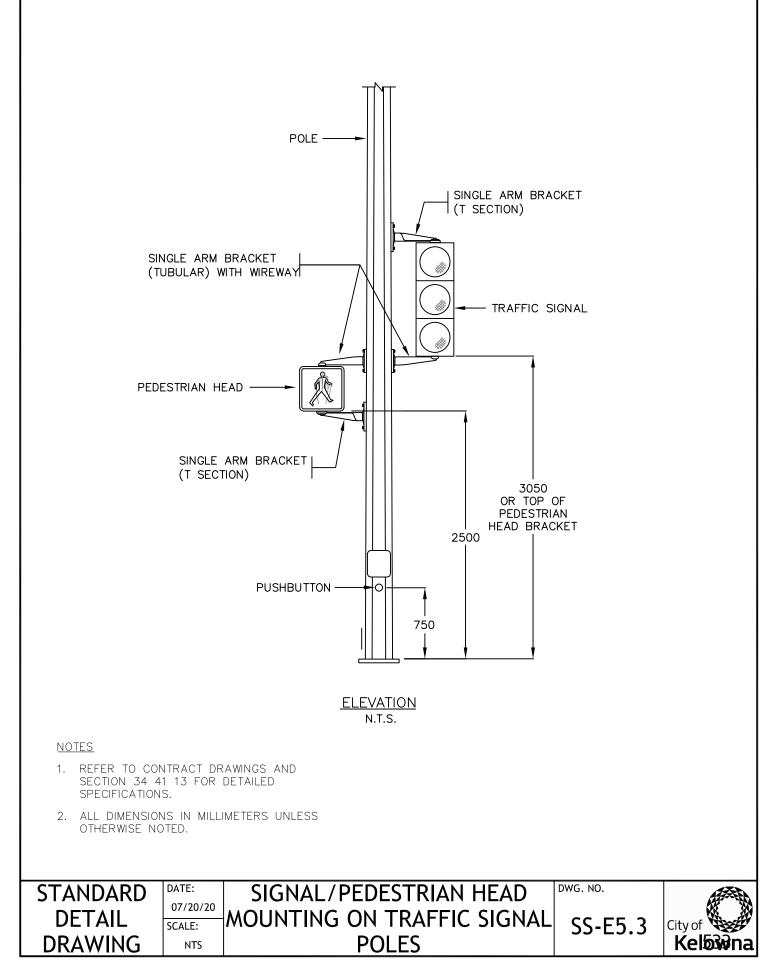


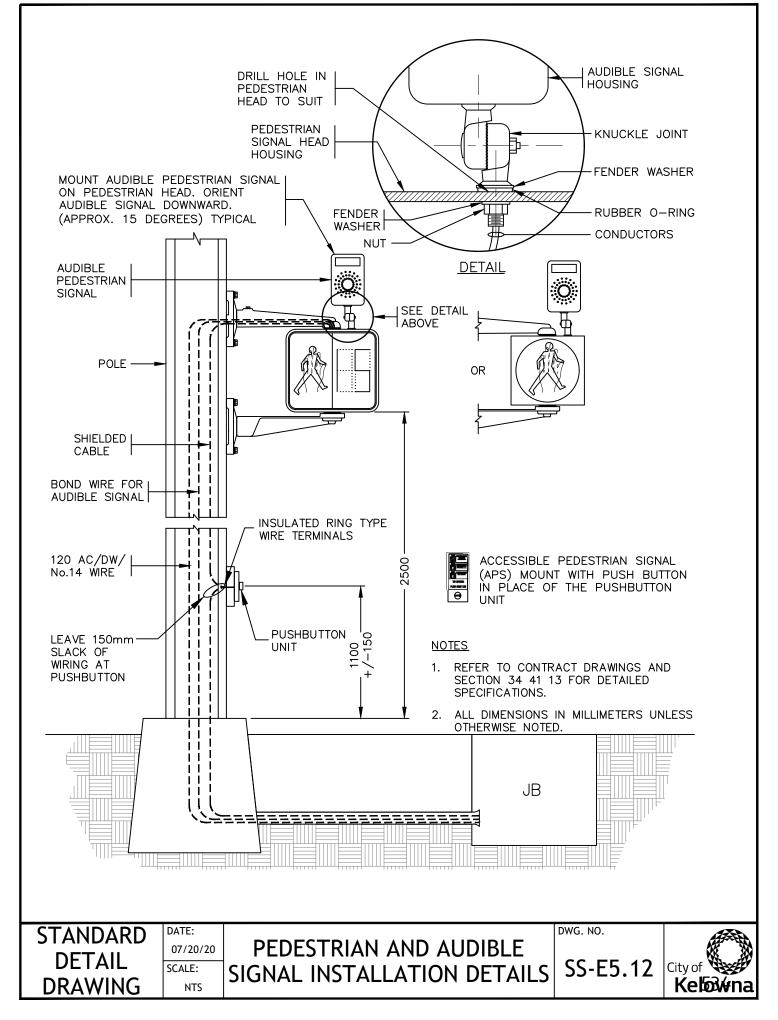
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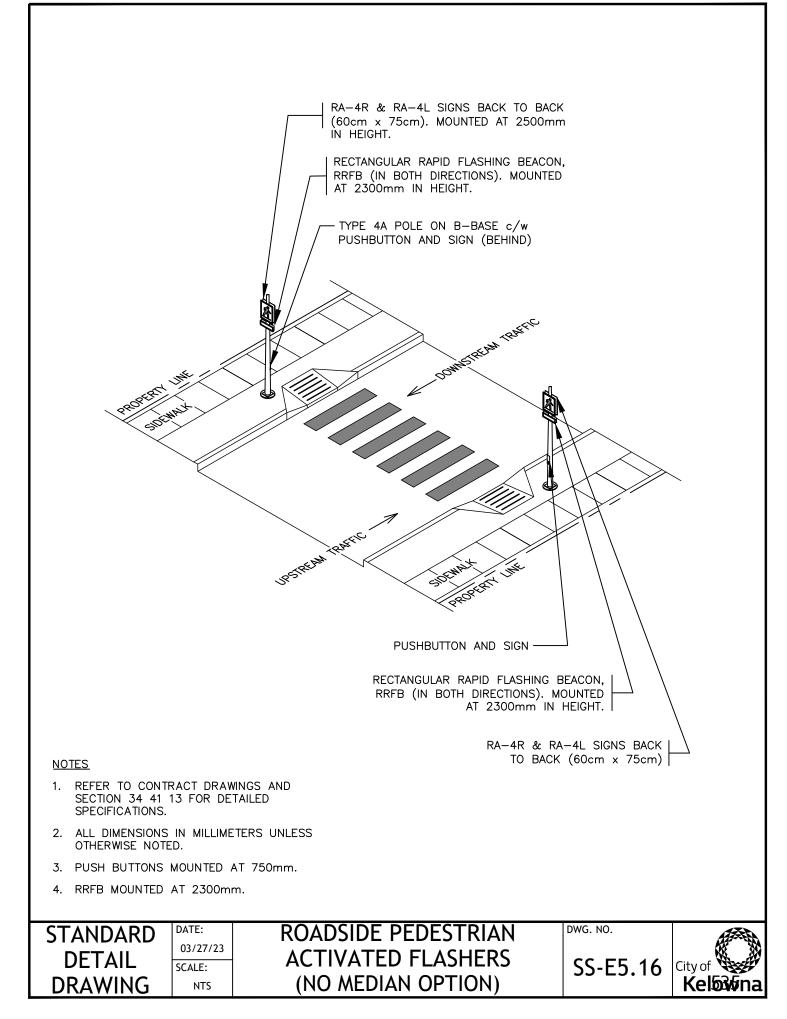


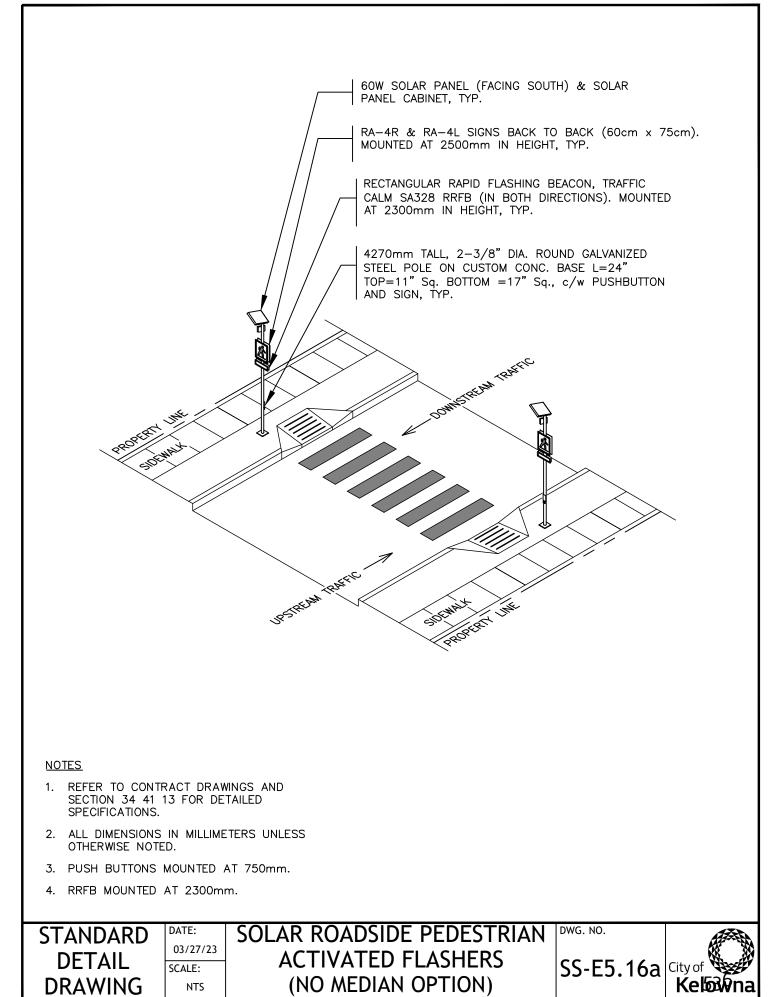


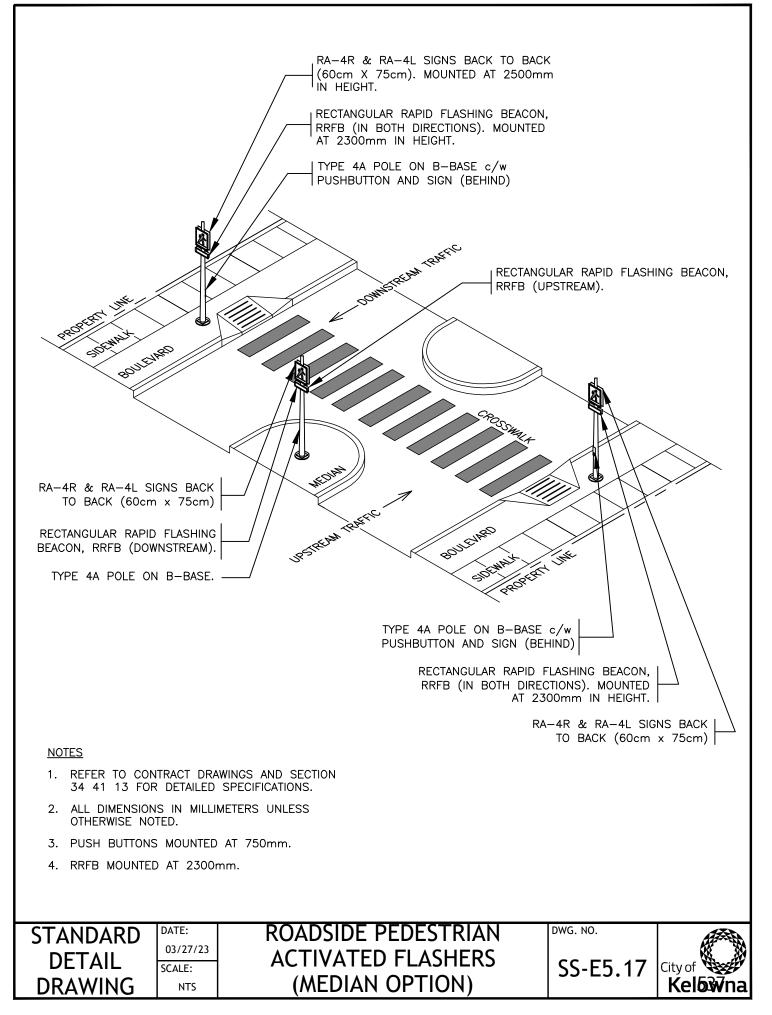


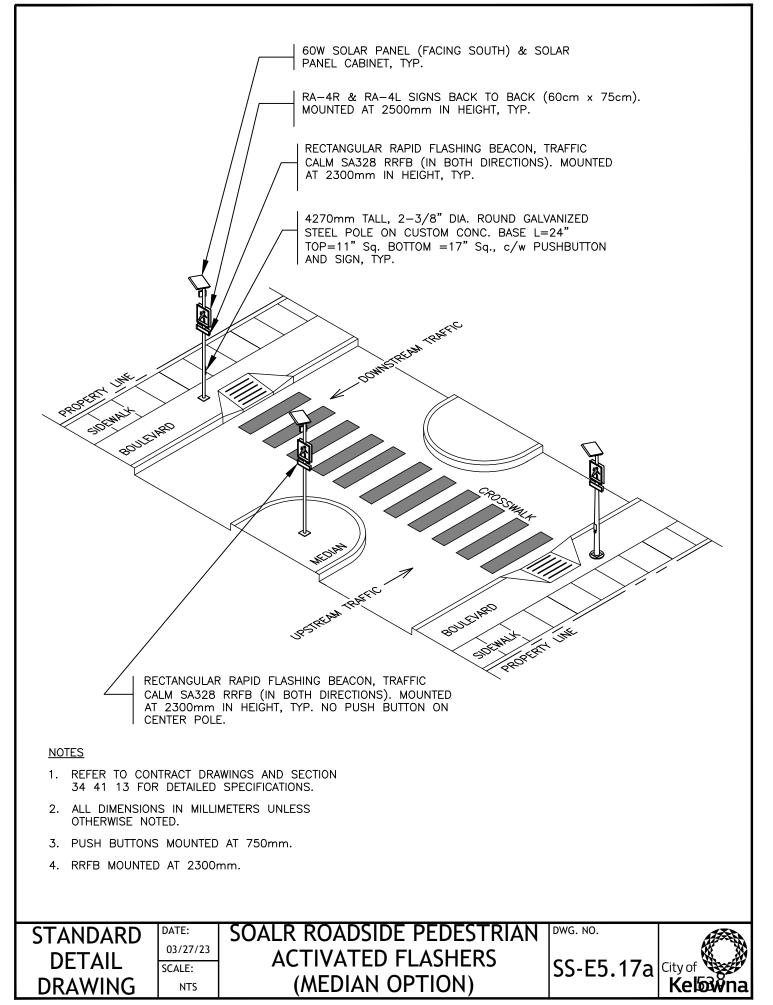


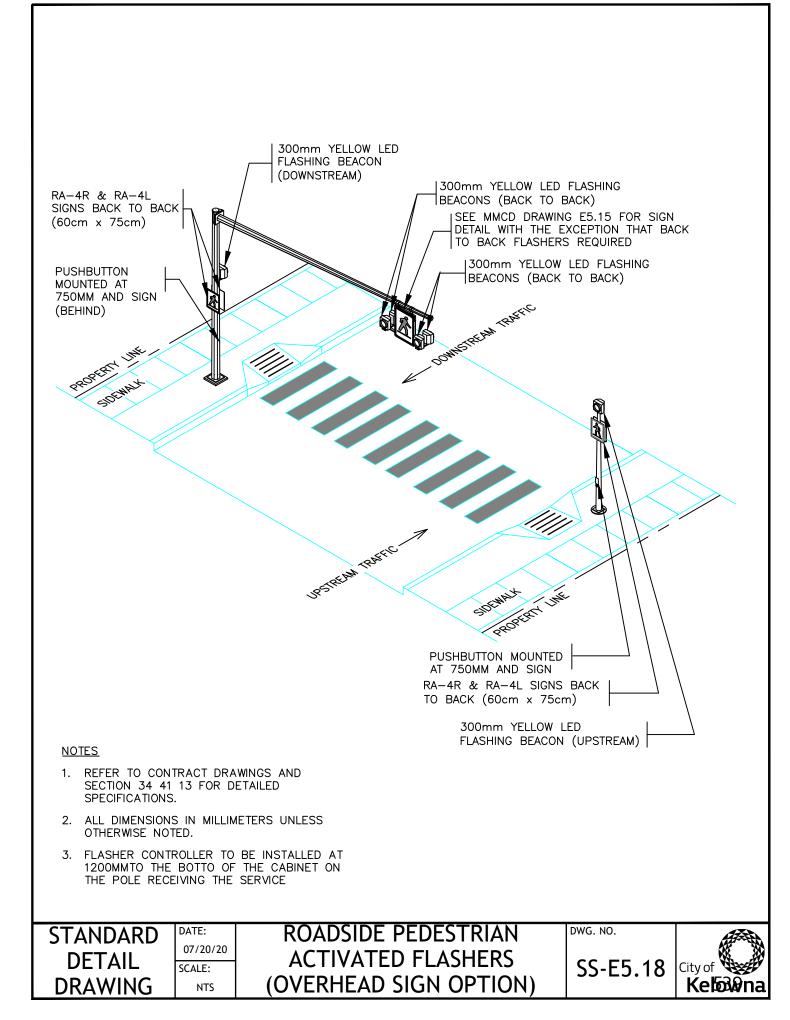


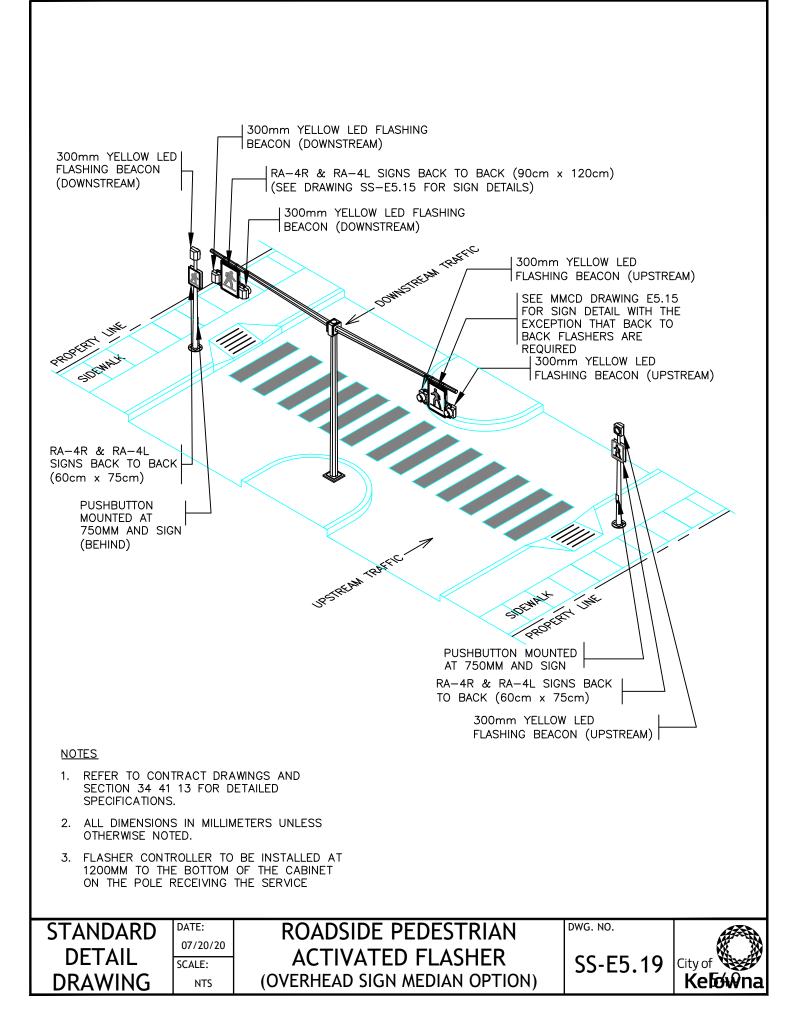




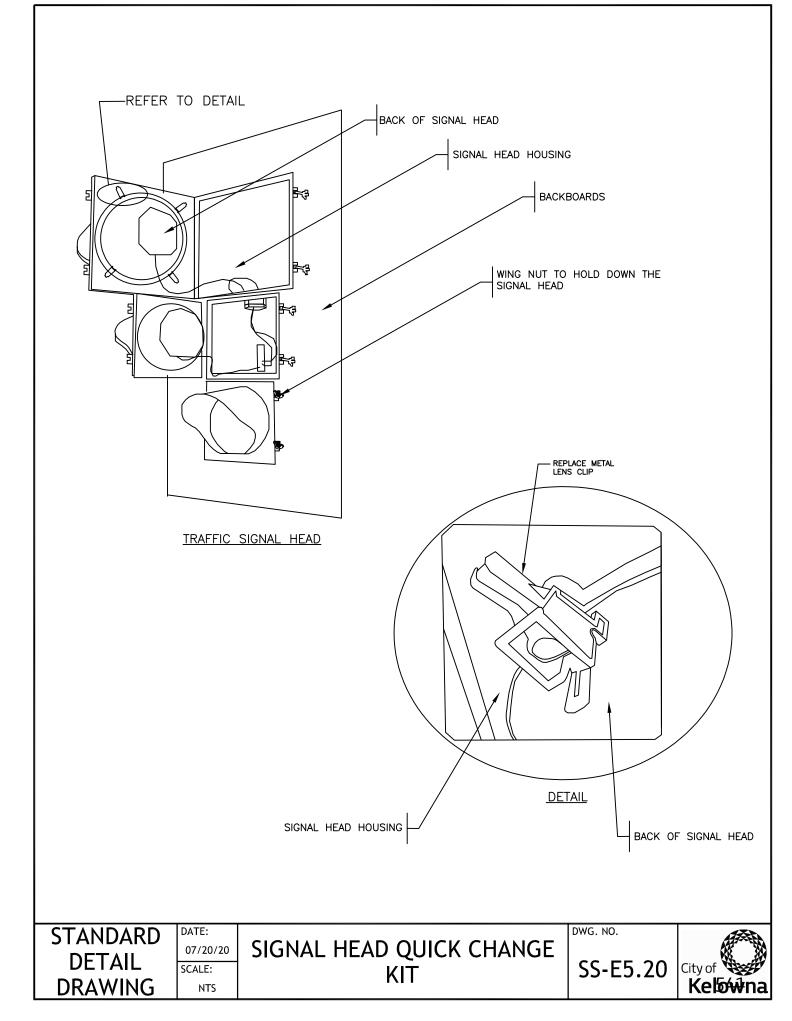


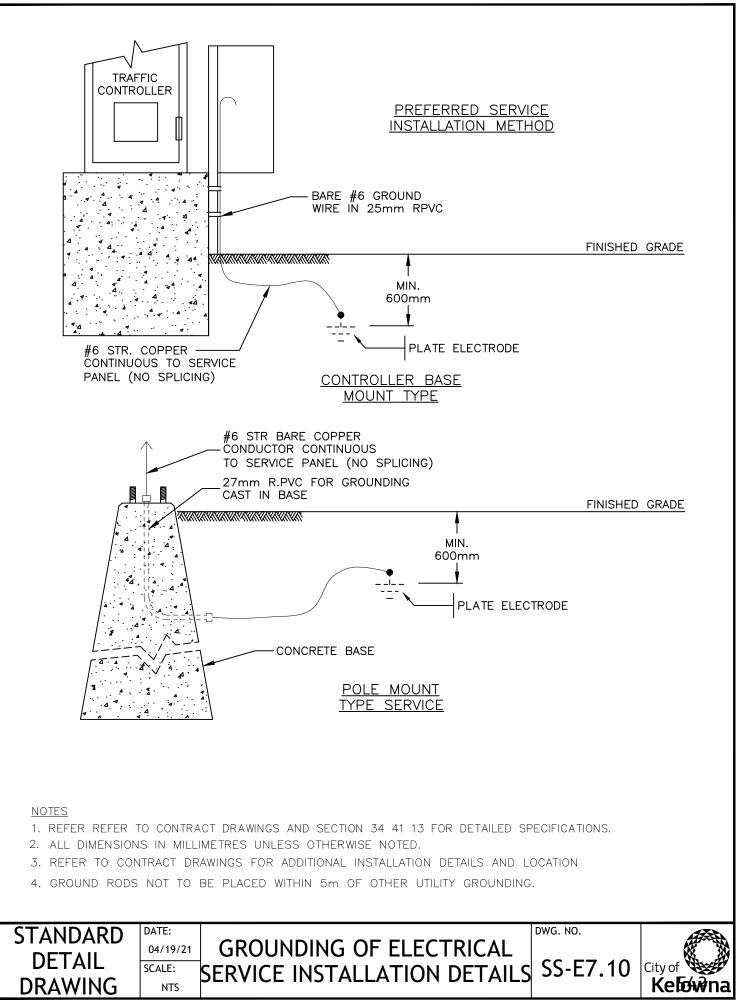


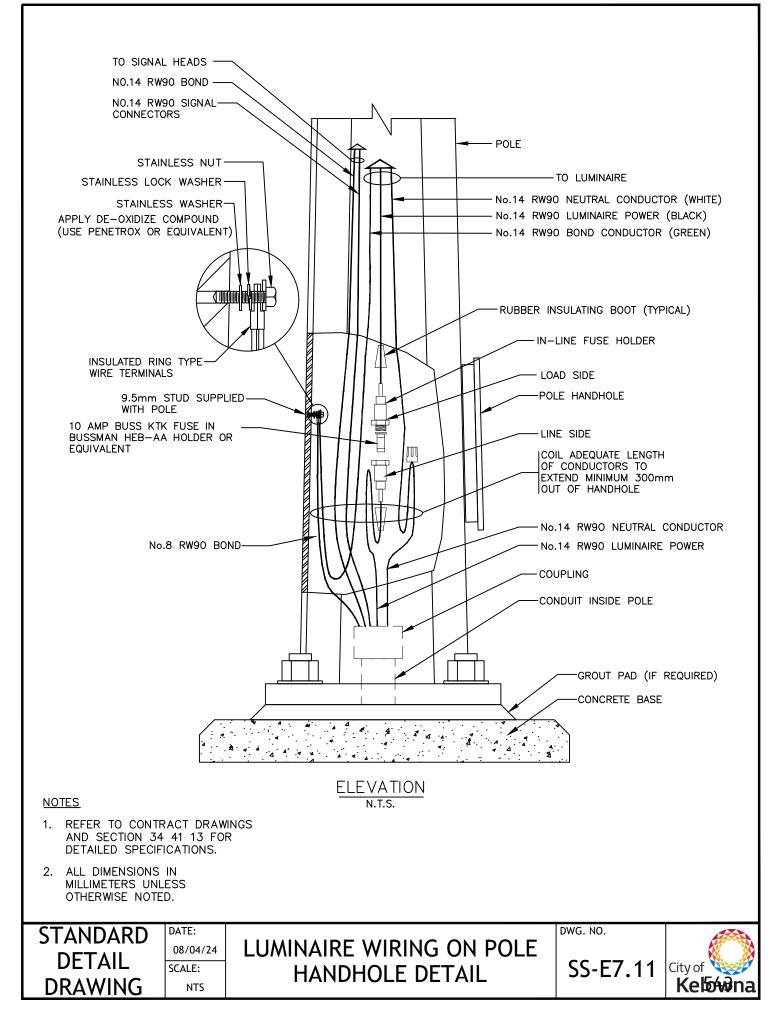




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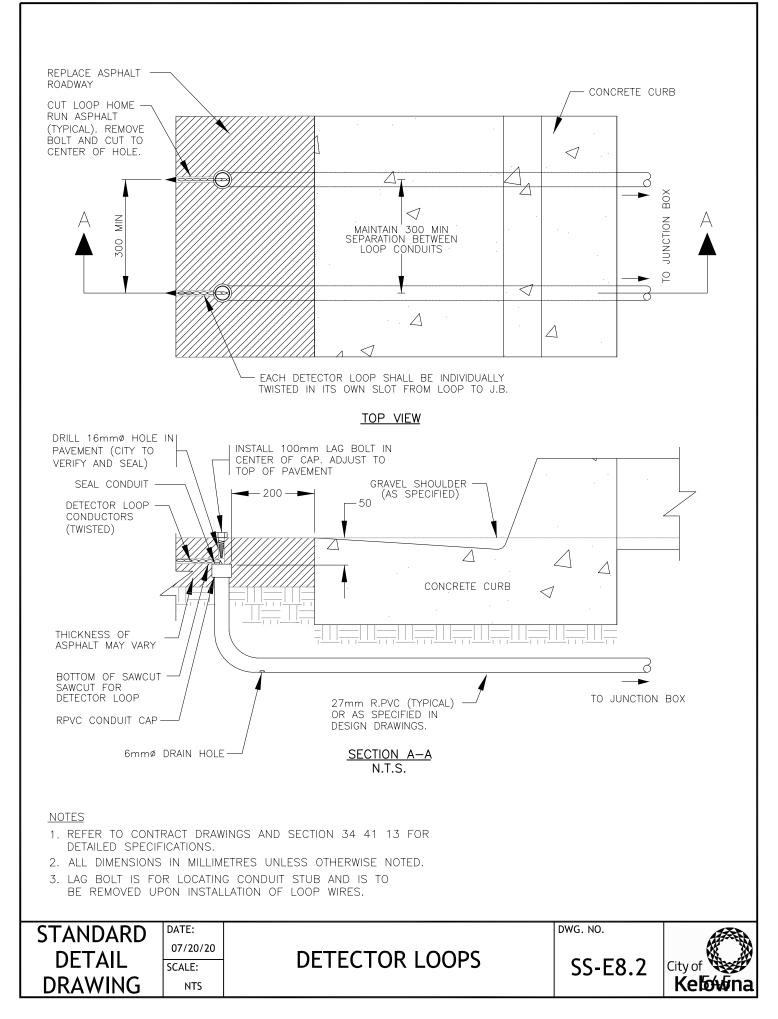
COLOUR CODE CHART			
ITEM	DISPLAY	CONDUCTOR COLOUR	ID TAPE
Phase 2 (NB)	RED	RED	RED
	YELLOW	ORANGE	RED
	GREEN	BLUE	RED
	WALK	BLUE	RED/BLACK
	DON'T WALK	BROWN	RED/BLACK
	P. BUTTON	YELLOW	RED/BK & RED/BK/BK
Phase 5 (NB-LT)	Green Ar	BROWN	RED
	Yellow Ar	YELLOW	RED
Phase 4 (EB)	RED YELLOW GREEN WALK DON'T WALK P. BUTTON	RED ORANGE BLUE BLUE YELLOW BROWN	YELLOW YELLOW YELLOW/BLACK YELLOW/BLACK Y/BK & Y/BK/BK
Phase 7 (EB-LT)	Green Ar	BROWN	YELLOW
	Yellow Ar	YELLOW	YELLOW
Phase 6 (SB)	RED	RED	BLUE
	YELLOW	ORANGE	BLUE
	GREEN	BLUE	BLUE
	WALK	BLUE	BLUE/BLACK
	DON'T WALK	BROWN	BLUE/BLACK
	P. BUTTON	YELLOW	BL/BK & BL/BK/BK
Phase 1 (SB-LT)	Green Ar	BROWN	BLUE
	Yellow Ar	YELLOW	BLUE
Phase 8 (WB)	RED	RED	GREEN
	YELLOW	ORANGE	GREEN
	GREEN	BLUE	GREEN
	WALK	BLUE	GREEN/BLACK
	DON'T WALK	YELLOW	GREEN/BLACK
	P. BUTTON	BROWN	G/BK & G/BK/BK
Phase 3 (WB-LT)	Green Ar	BROWN	GREEN
	Yellow Ar	YELLOW	GREEN
Street Lighting	-	BLACK	WHITE
Controller Power	-	BLACK	-
Neutral	-	WHITE	-
Bond	-	GREEN	-

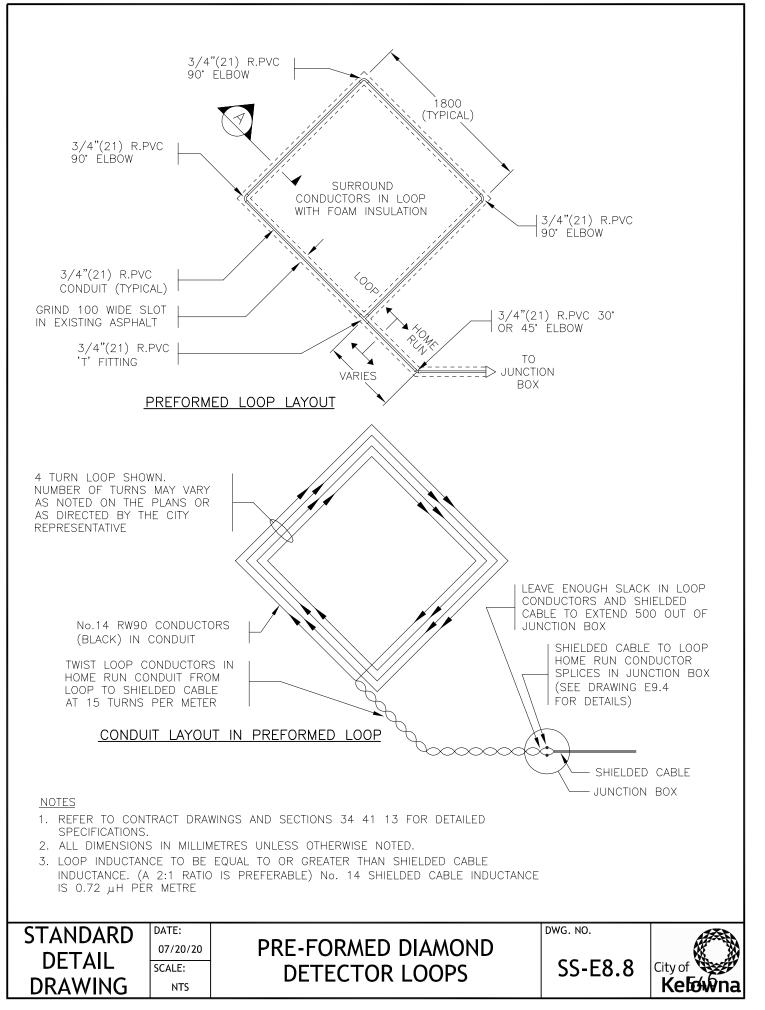
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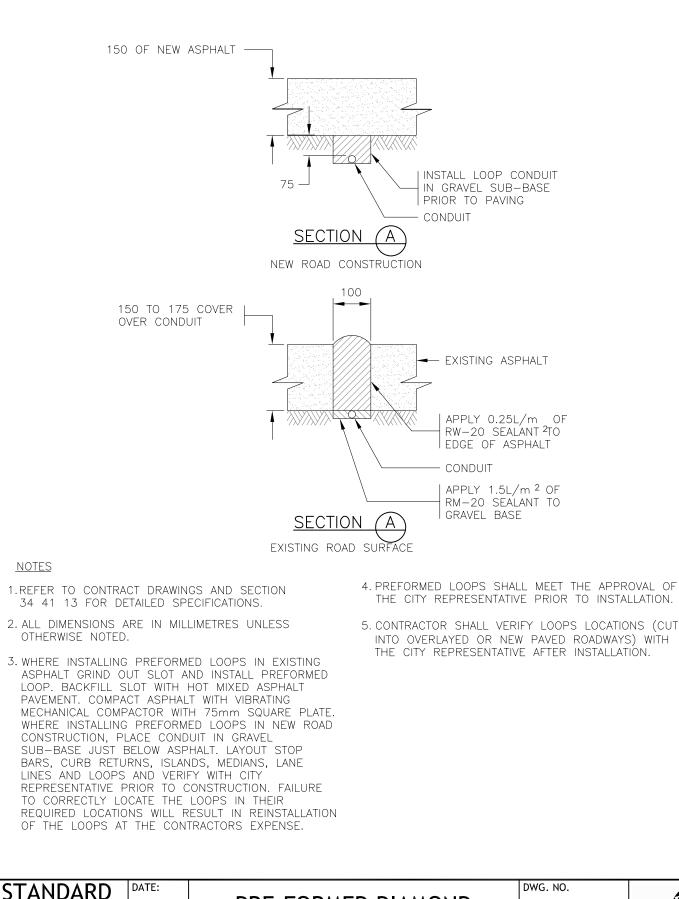
1. REFER TO CONTRACT DRAWINGS AND SECTION 34 41 13 FOR DETAILED SPECIFICATIONS.

STANDARD	DATE:	SIGNAL WIRING COLOUR CODE	DWG. NO.	
DETAIL	07/20/20 SCALE:	CHART	SS-F7 19	City of
DRAWING	NTS	(FROM JB TO POLE)	JJ L/.1/	Kelowna









TANDARD	DATE:
	07/20
DETAIL	SCALE:
)RAWING	NTS

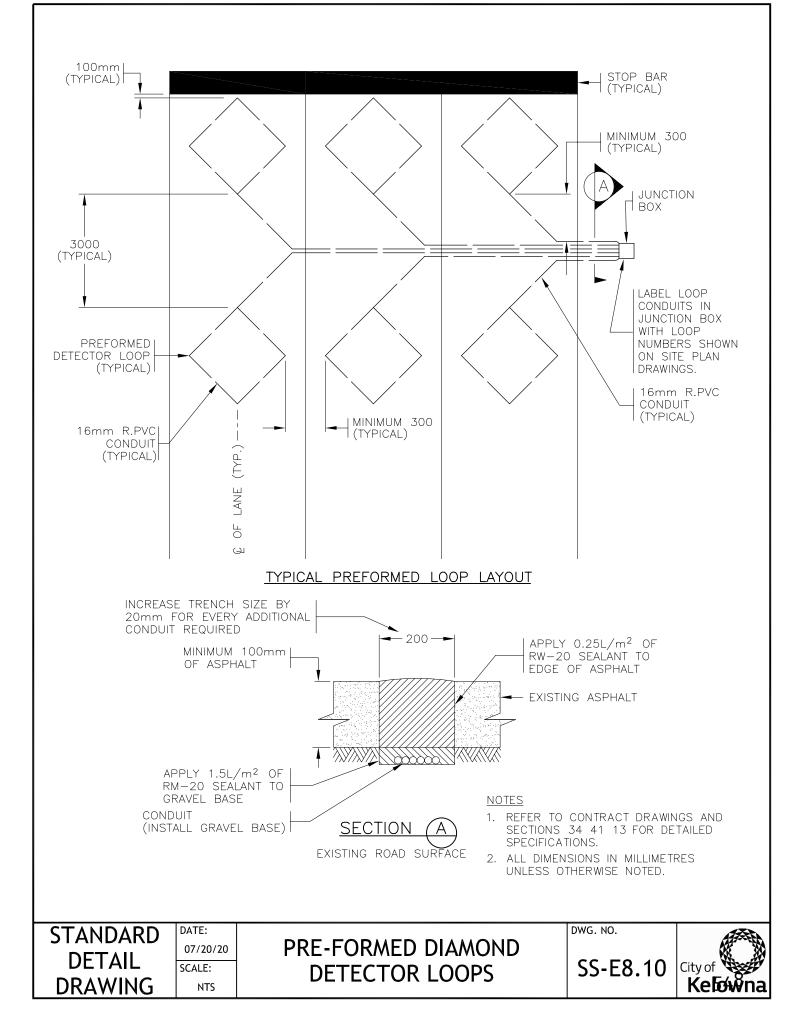
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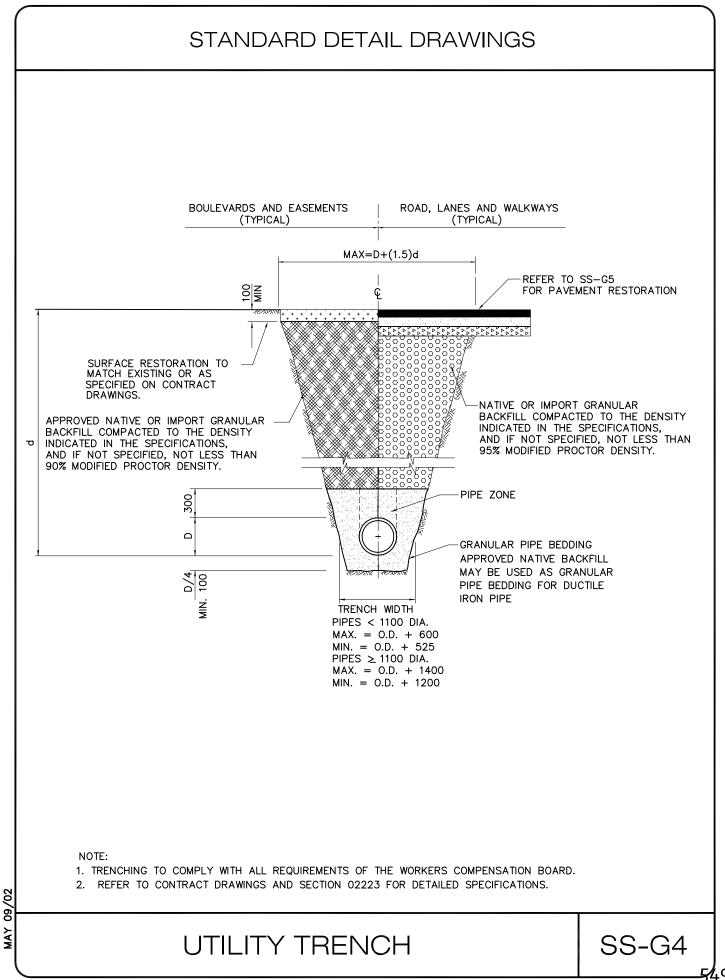
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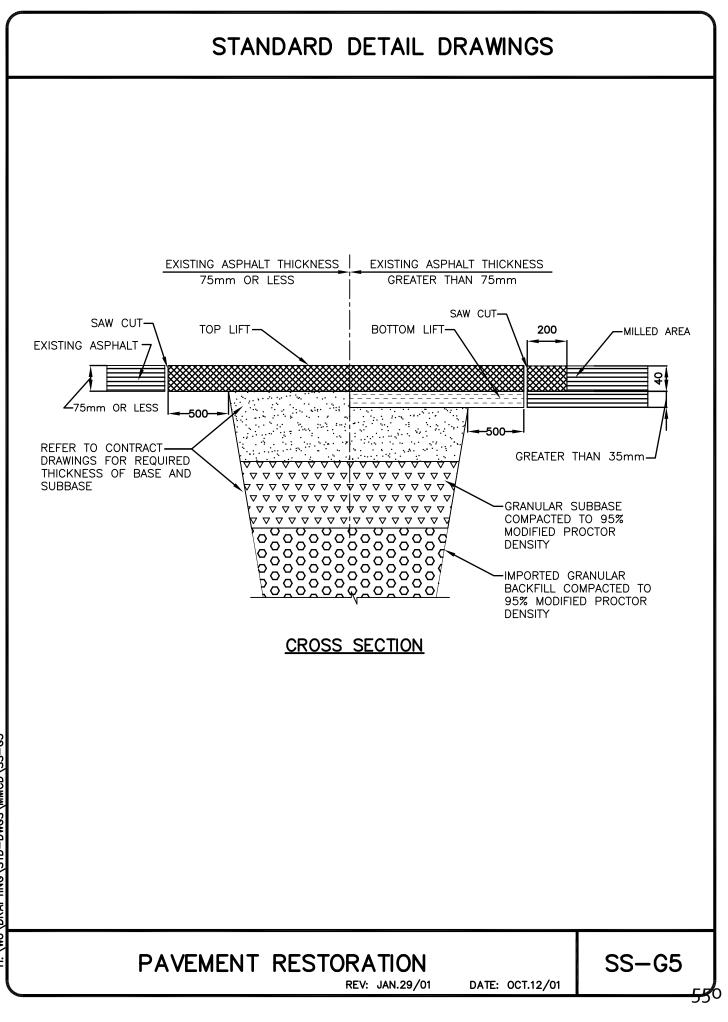
PRE-FORMED DIAMOND DETECTOR LOOPS

SS-E8.9

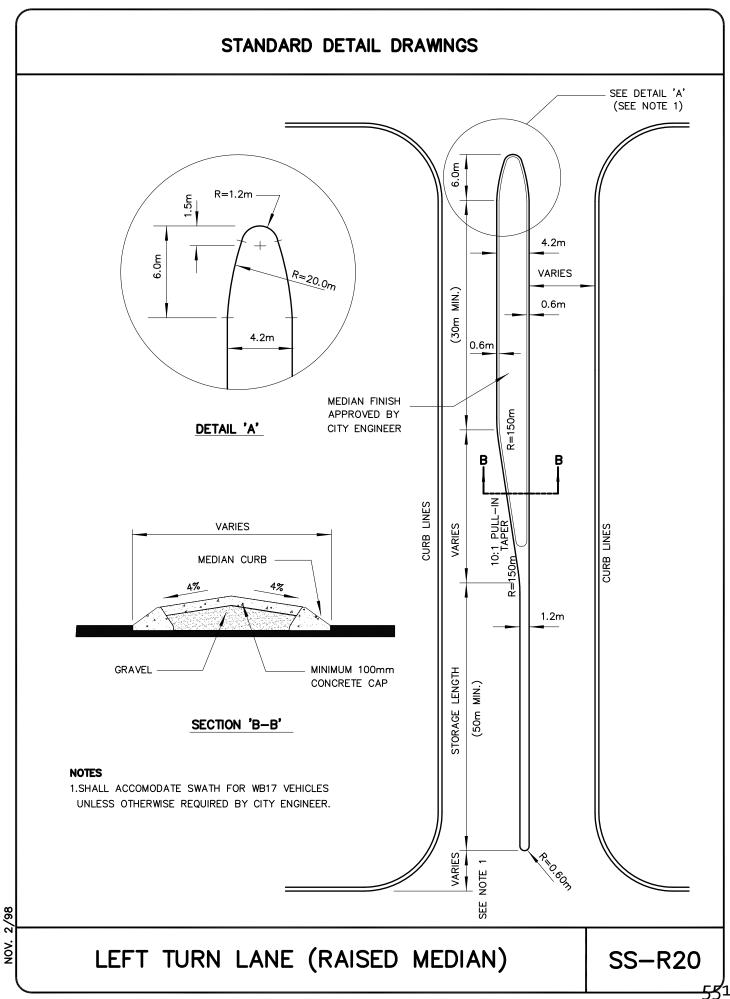


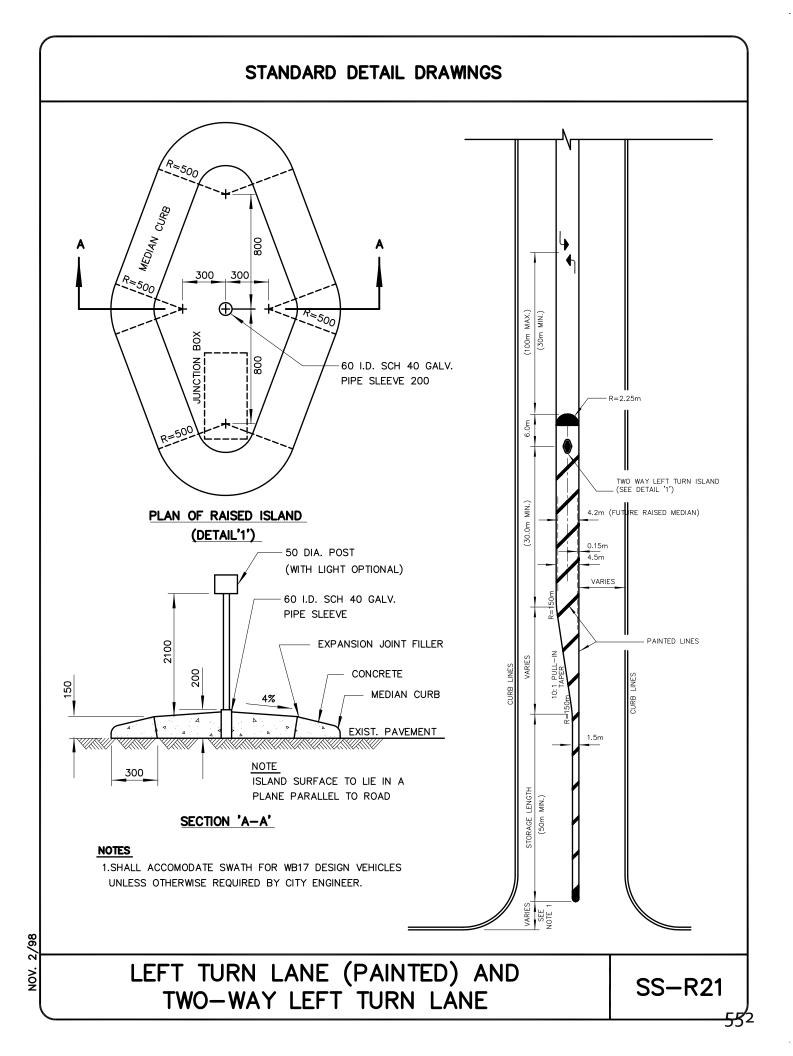


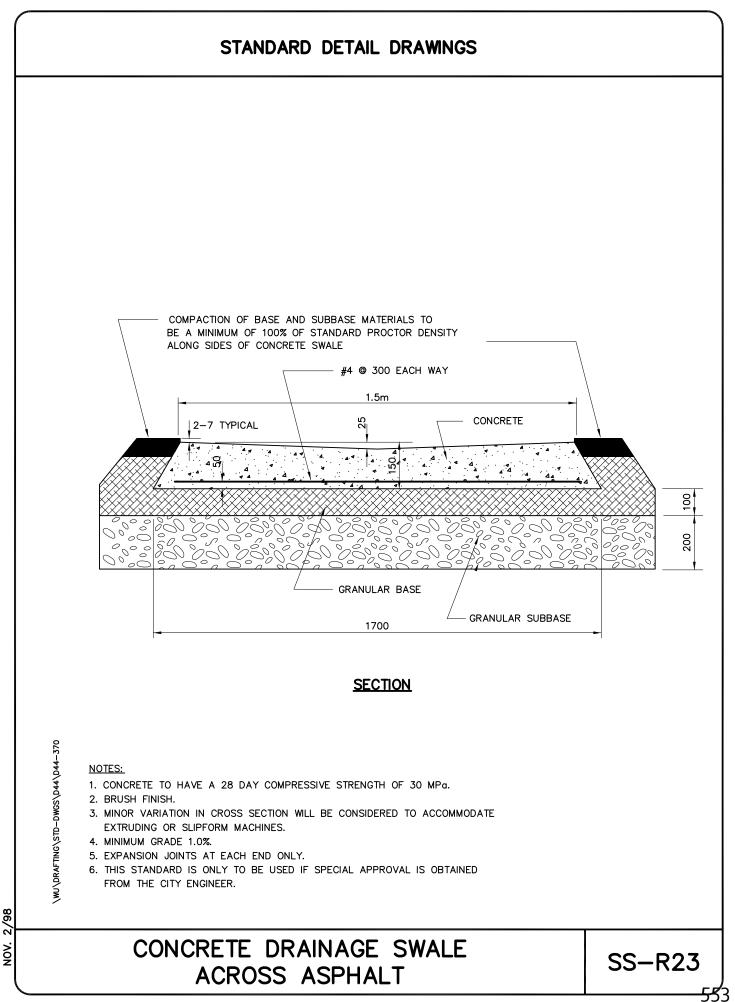


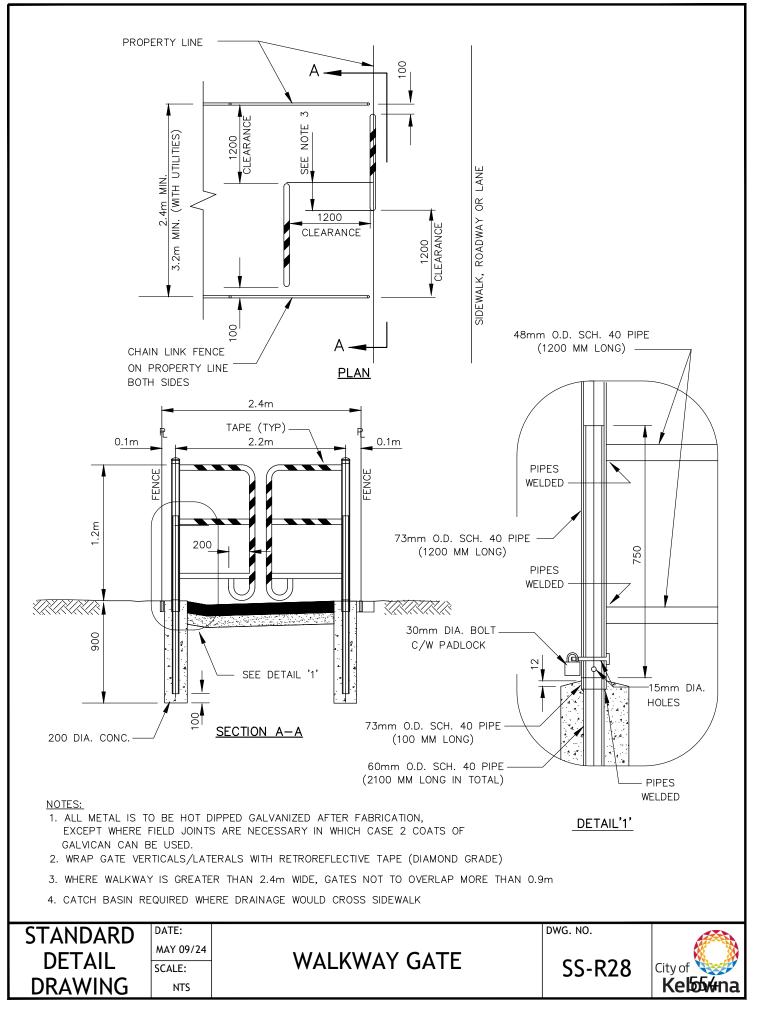


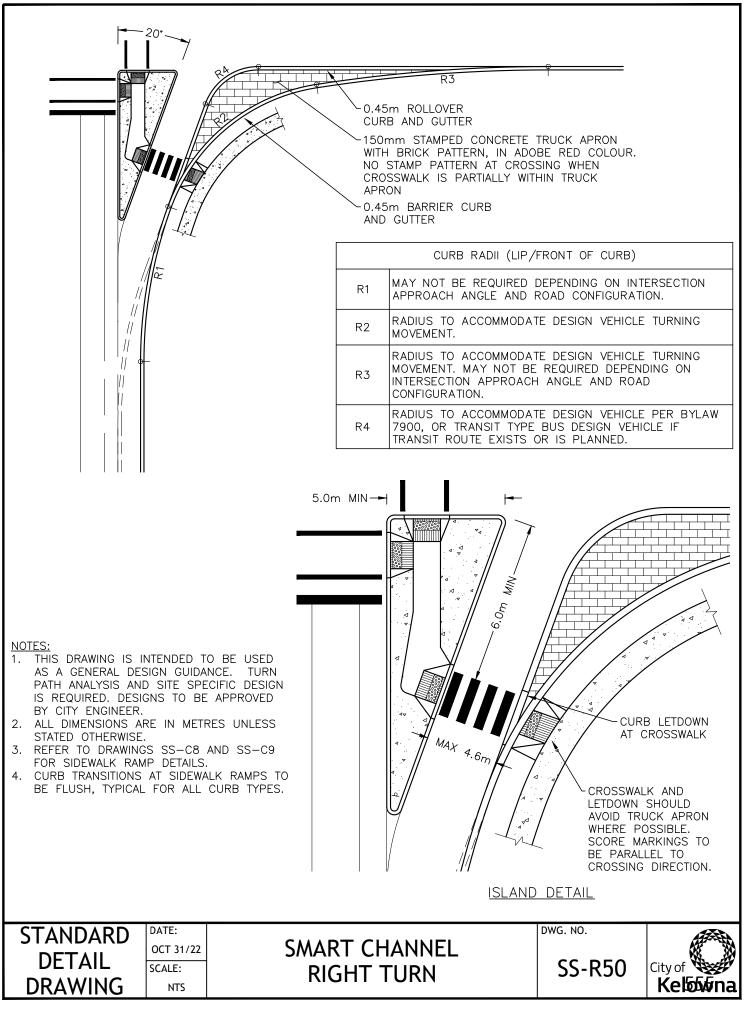
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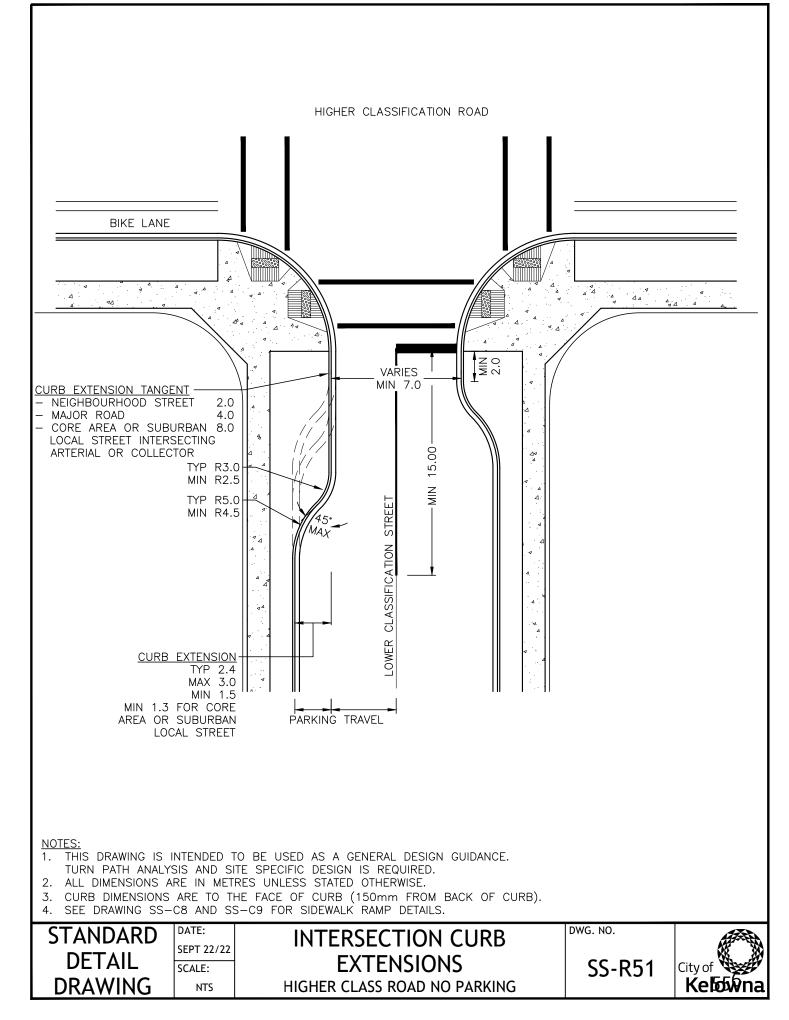


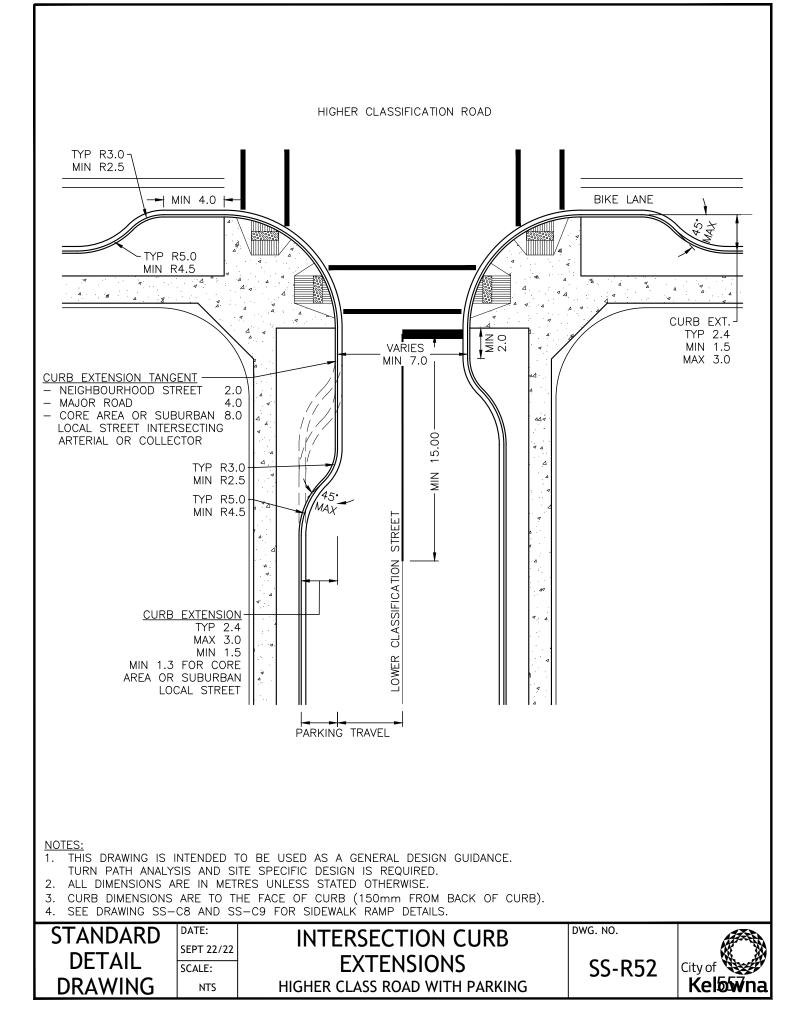


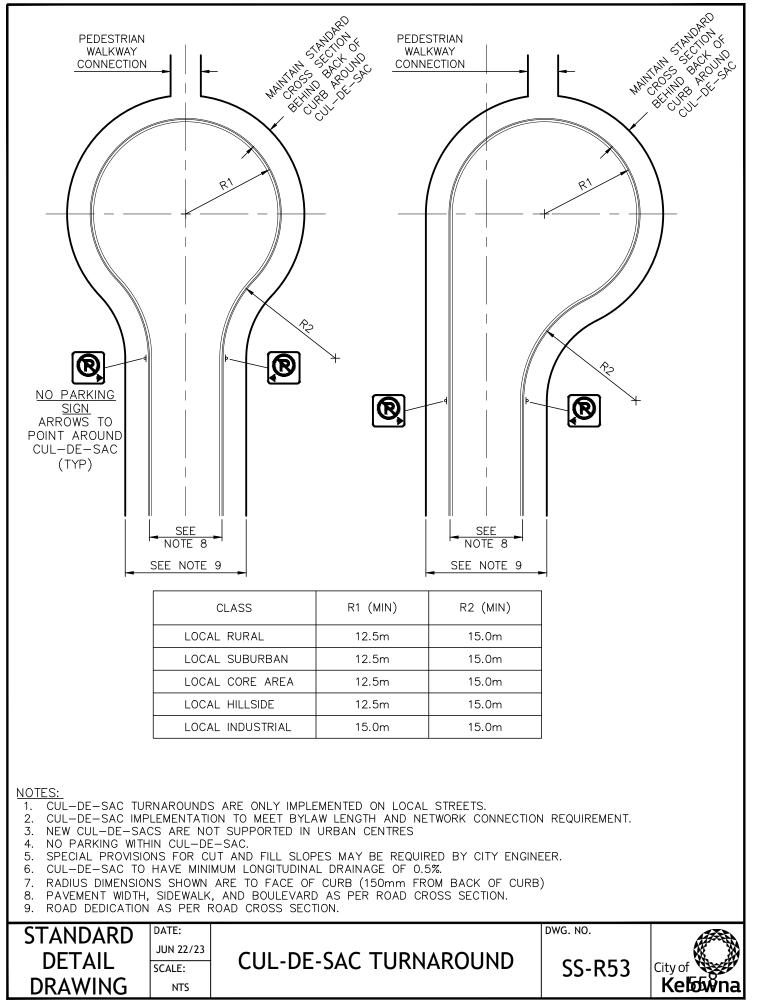


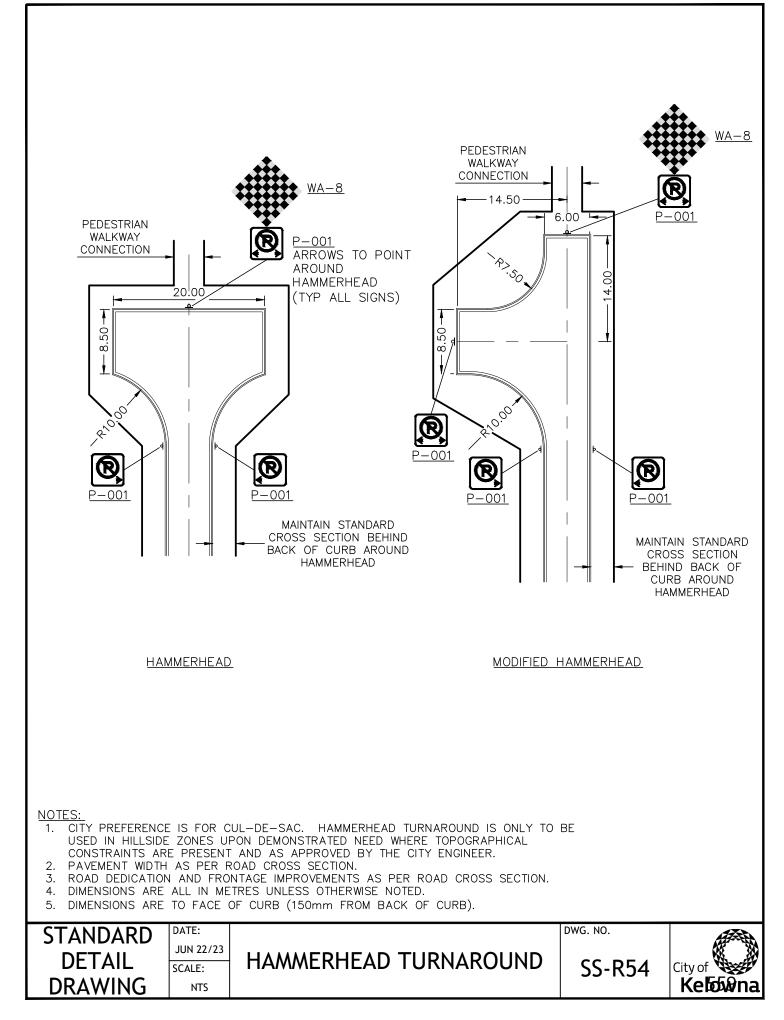




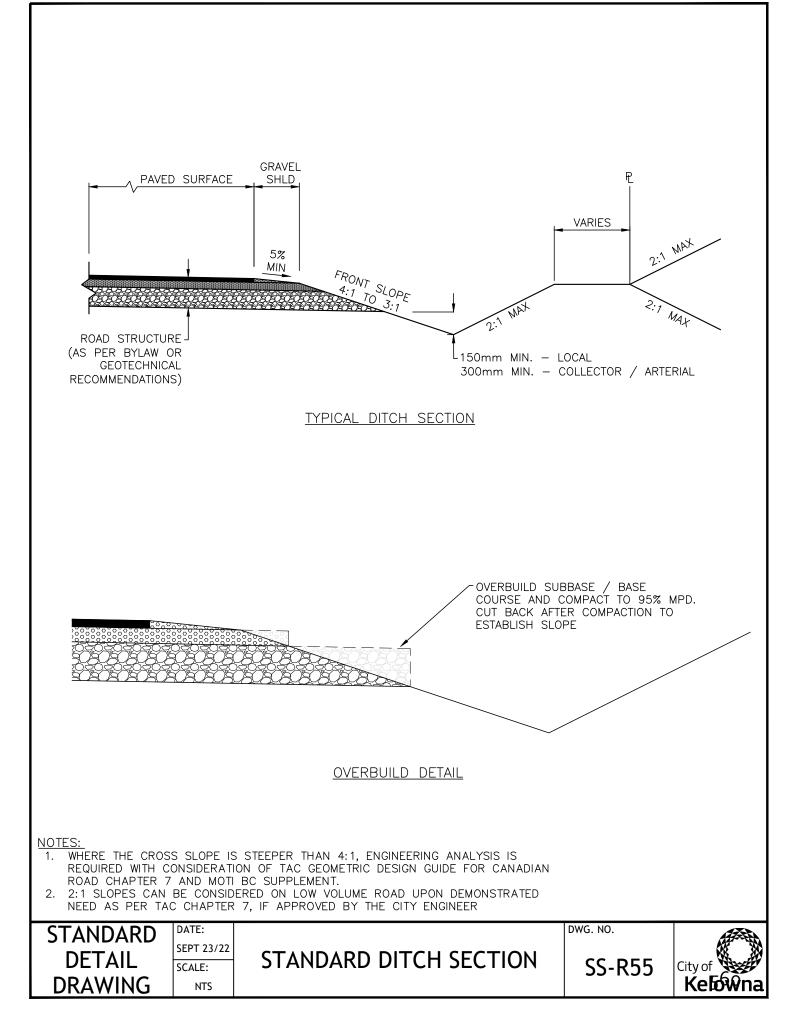


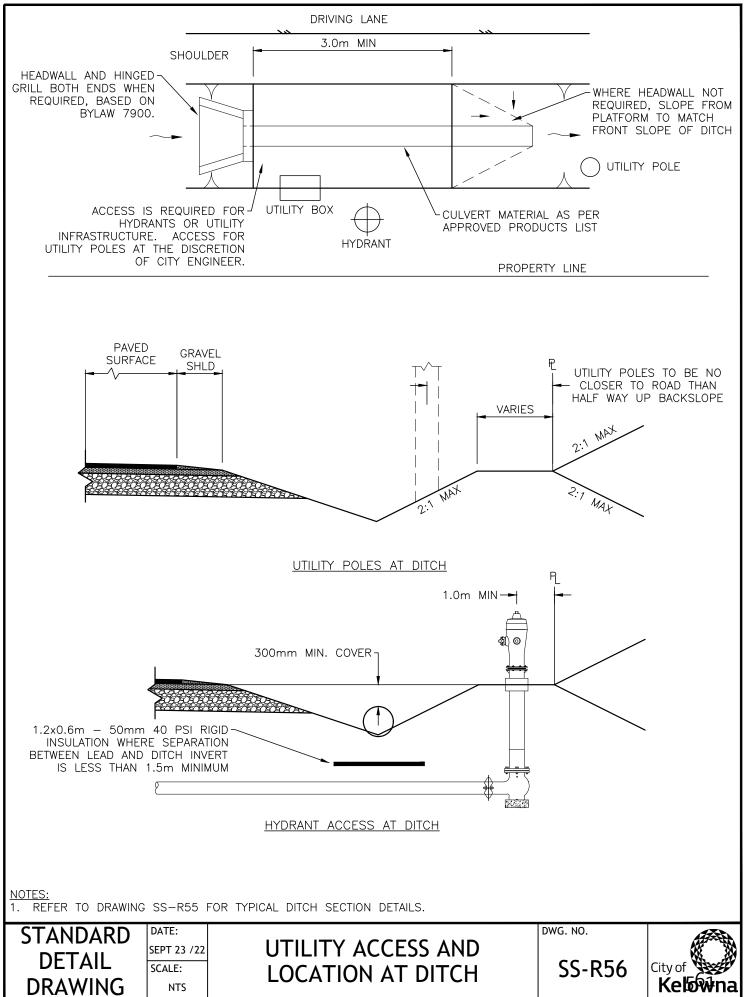








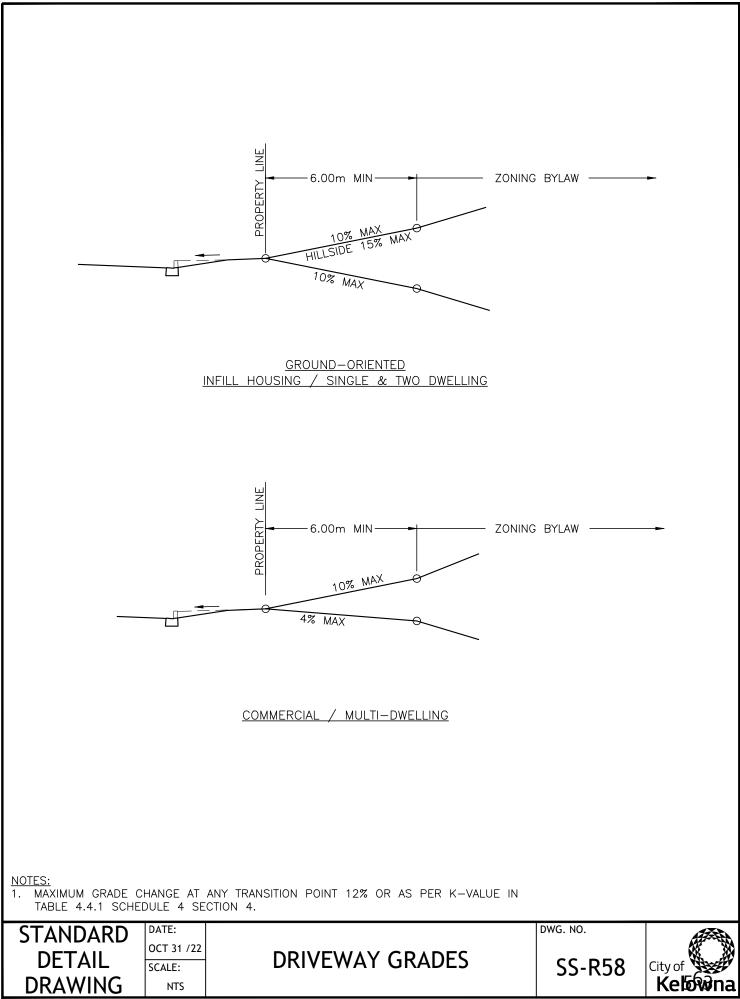


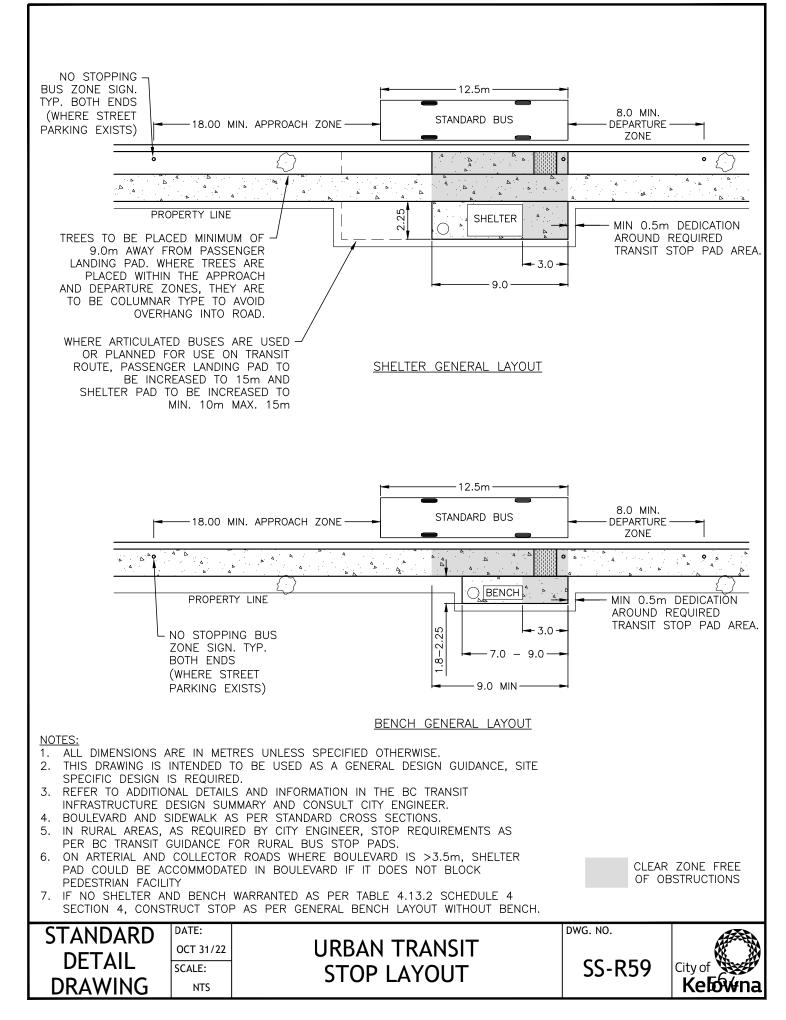


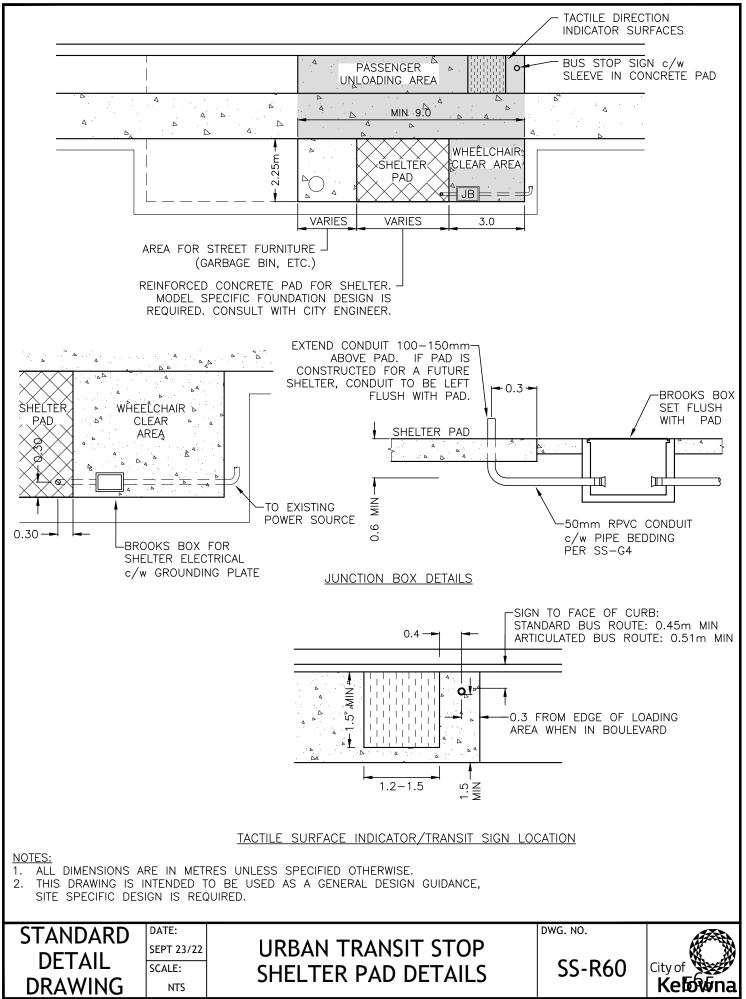
	PL ROAD DEDICATION OR STATUTORY RIGHT OF WAY FOR SAFETY PROVISIONS AND DRAINAGE I.Om MINIMUM 3.0m CATCHMENT WIDTH USLOW SUBGRADE	OVERBU	SLOPE TO ROSION N
NOTES:			
NOTES:	_ DESIGN REQUIRED FOR ALL ROCK CUT HEIGHTS GREATE		WHERE
GEOHAZARDS EXIST. 2. A VERTICAL BACKSLOPE MAY WOULD THEN BE INCREASED OR AS DIRECTED BY GEOTEG 3. DRAINAGE COLLECTION PROV	BE USED IF APPROVED BY THE GEOTECHNICAL DESIGN. BASED ON THE ROCK CUT HEIGHT (I.E. 3.0m + 25% C	MINIMUM CATCHM F ROCK CUT HEIGI	ENT WIDTH HT (H)),
STANDARD DATE:		DWG. NO.	
	ROCK CUT CROSS SECTION		City of
DRAWING NTS		SS-R57	City of Kelowna

L

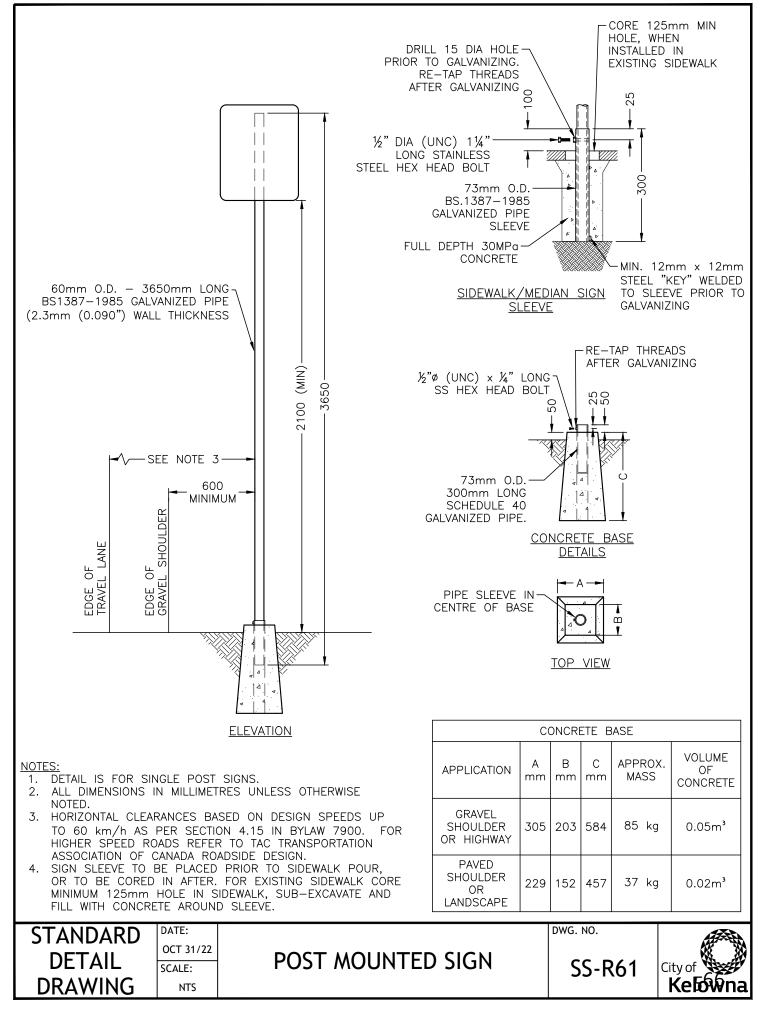


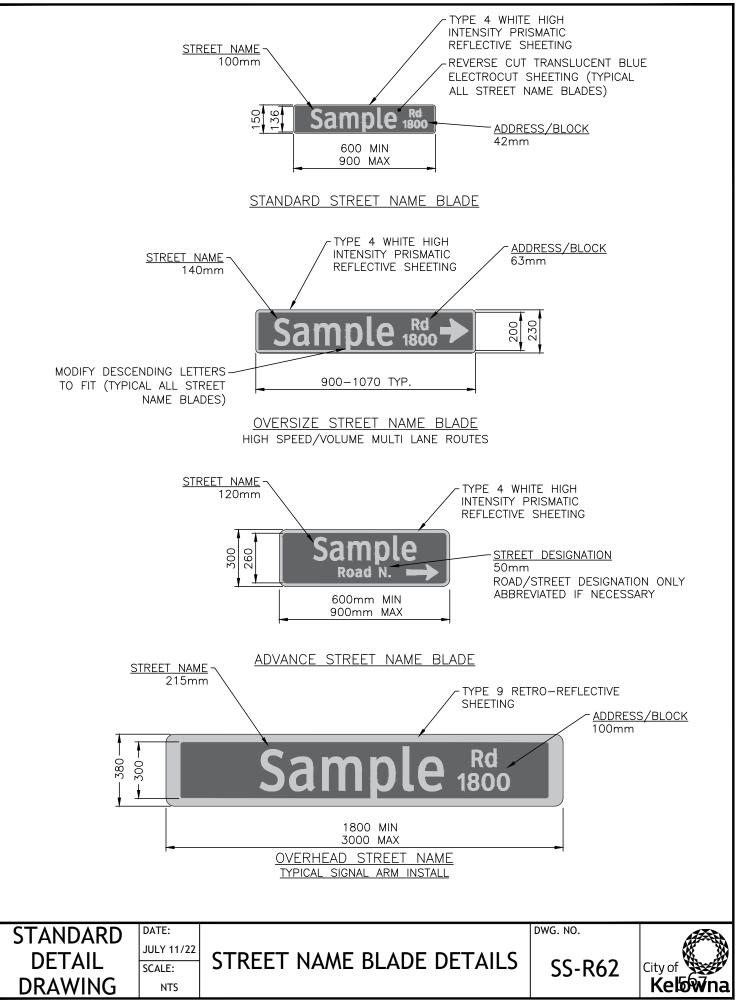


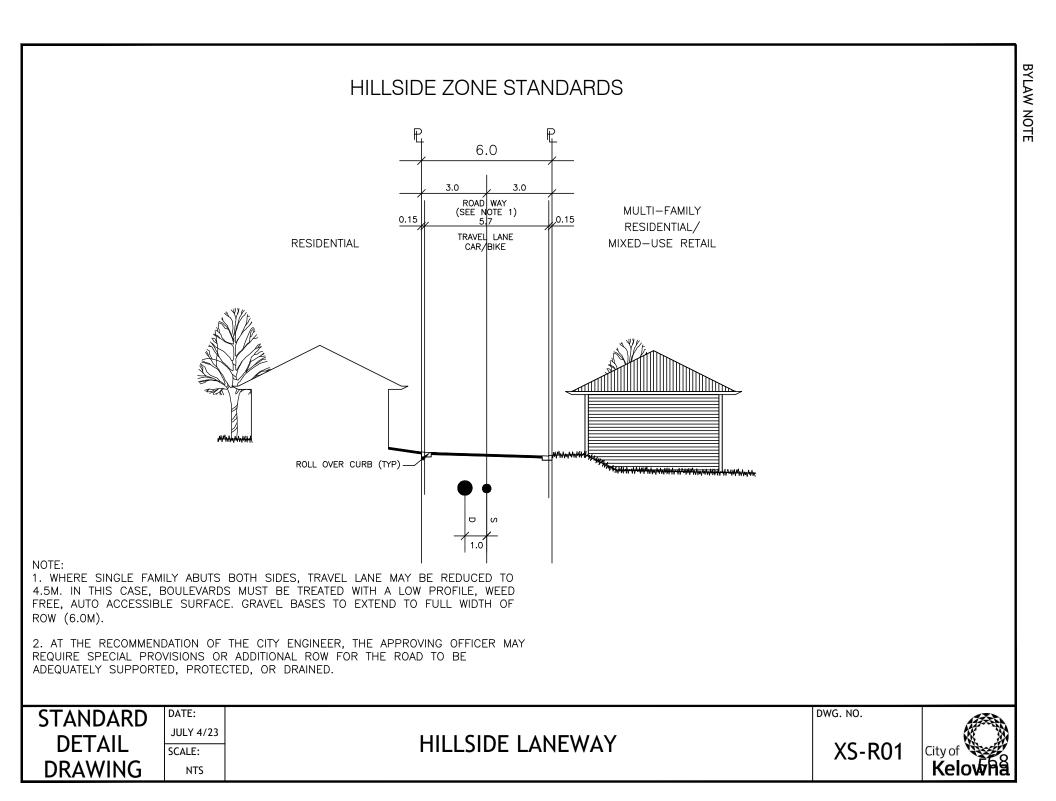


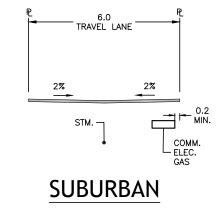


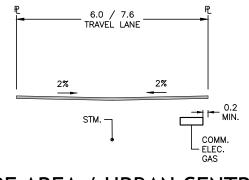
BYLAW NOTE











CORE AREA / URBAN CENTRE

NOTES:

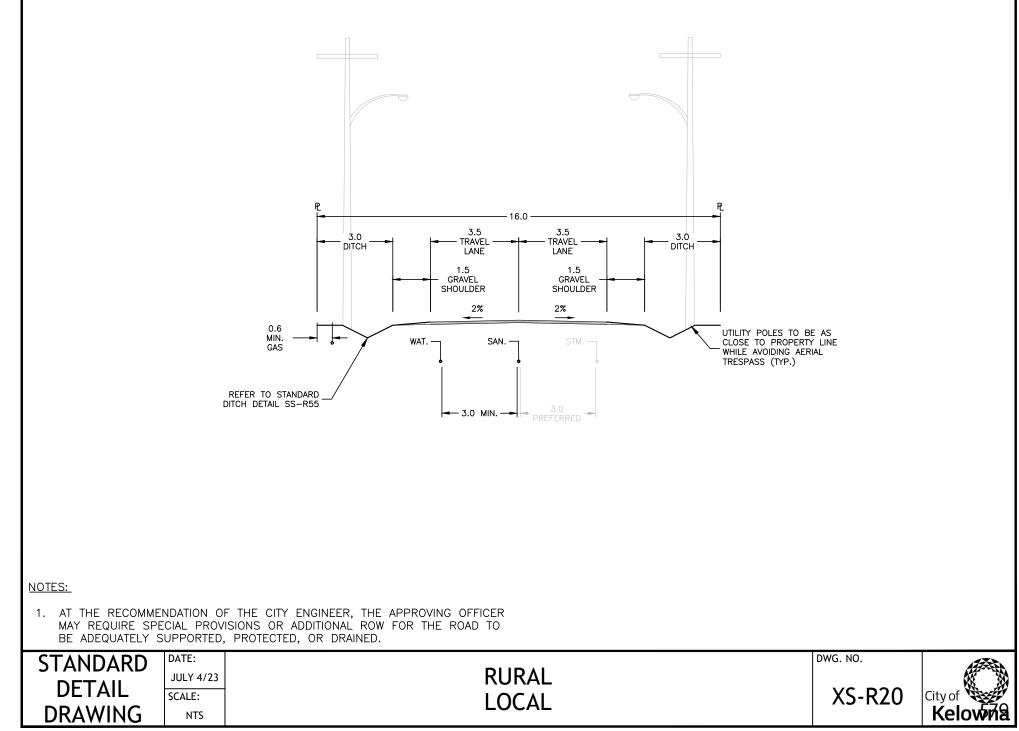
- 1. NO NEW INFRASTRUCTURE SHALL BE INSTALLED SUCH THAT IN ENCROACHES INTO THE LANEWAY, THEREBY REDUCING THE EFFECTIVE WIDTH OR FUNCTION OF THE LANEWAY
- 2. IF AN INDUSTRIAL LANEWAY IS REQUIRED IT MUST BE DESIGNED TO ACCOMMODATE THE ANTICIPATED DESIGN VEHICLE.
- 3. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 4. REFER TO SCHEDULE 4, TABLE 4.3.1, NOTE 12 TO DETERMINE THE APPROPRIATE CORE AREA LANE WIDTH.

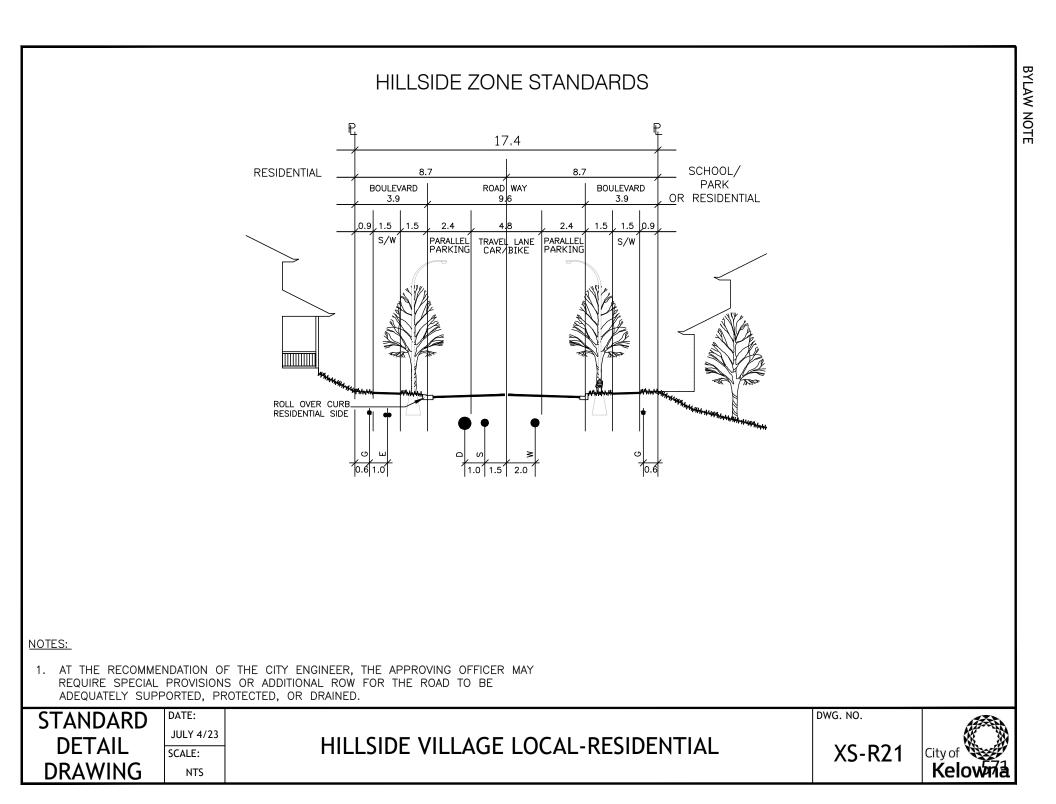
STANDARD	DATE:	
	JULY 4/23	
DETAIL	SCALE:	
DRAWING	NTS	

SUBURBAN / CORE AREA / URBAN CENTRE LANEWAYS DWG. NO.

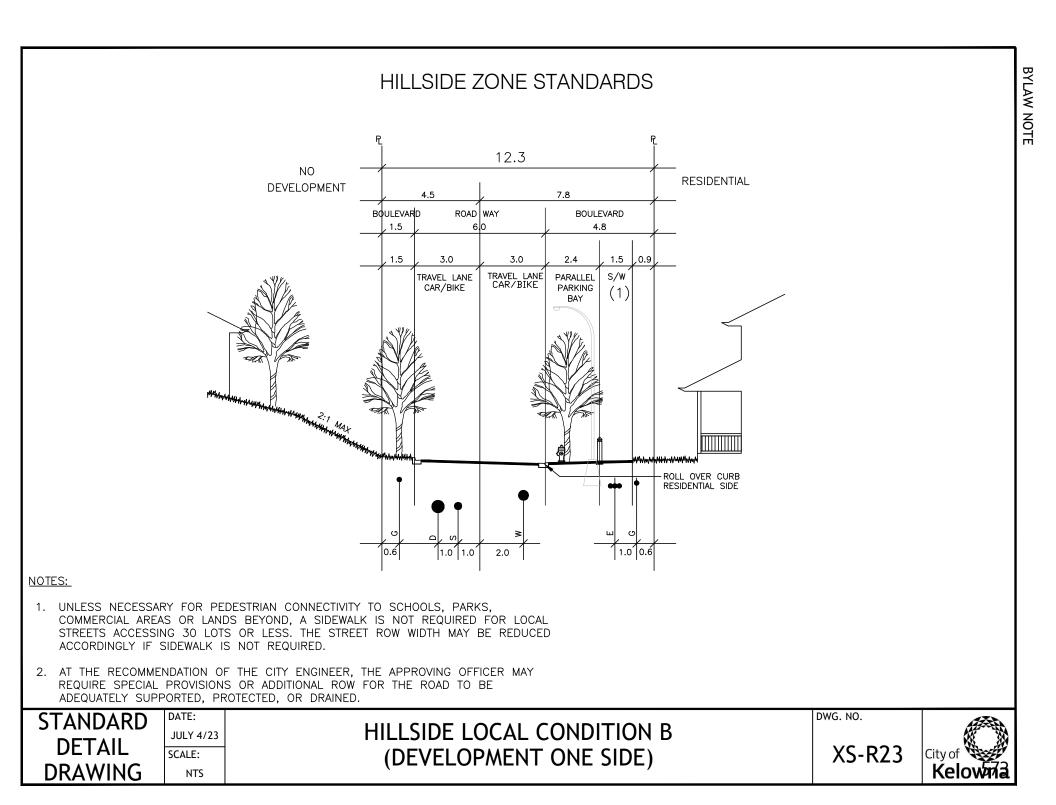
XS-R02



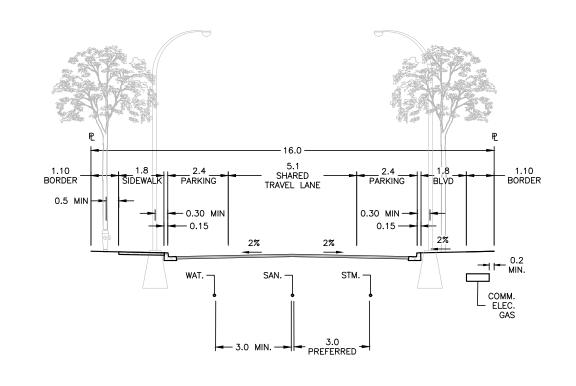




BYLAW NOTE HILLSIDE ZONE STANDARDS 14.1 RESIDENTIAL RESIDENTIAL 6.3 7.8 BOULEVARD ROAD WAY BOULEVARD 3.3 6.0 4.8 3.0 3.0 1.5 ,0.9 2.4 2.4 ,0.9 TRAVEL LANE CAR/BIKE PARALLEL TRAVEL LANE PARALLEL S/W CAR/BIKE PARKING PARKING (1)BAY BAY ROLL OVER CURB (TYP) (1) ≥ 0.ć 1.0 2.0 1.0 0.6 1.0 NOTES: 1. UNLESS NECESSARY FOR PEDESTRIAN CONNECTIVITY TO SCHOOLS, PARKS, COMMERCIAL AREAS OR LANDS BEYOND, A SIDEWALK IS NOT REQUIRED FOR LOCAL STREETS ACCESSING 30 LOTS OR LESS. THE STREET ROW WIDTH MAY BE REDUCED ACCORDINGLY IF SIDEWALK IS NOT REQUIRED. 2. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED. DWG. NO. DATE: **STANDARD** HILLSIDE LOCAL-CONDITION A JULY 4/23 DETAIL **XS-R22** (DEVELOPMENT BOTH SIDES) SCALE: City of DRAWING Kelov NTS



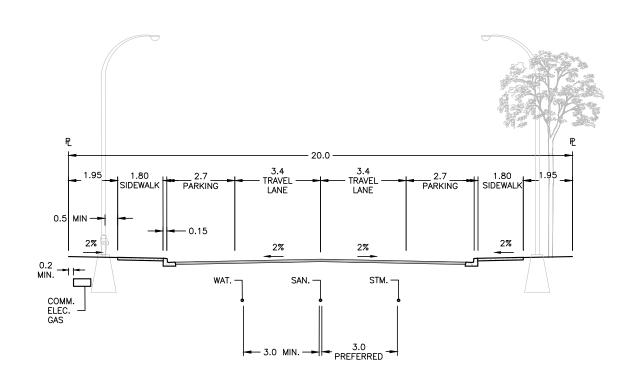
BYLAW NOTE HILLSIDE ZONE STANDARDS 10.5 NO NO DEVELOPMENT DEVELOPMENT 6.0 4.5 ROAD WAY BOULEVARD BOULEVARD 3.0 6.0 1.5 1.5 3.0 3.0 1.65 ,1.35 TRAVEL LANE CAR/BIKE TRAVEL LANE s/w CAR/BIKE (1)ā BARRIER CURB (TYP.) 1.0 1.0 2.0 1.0 0.6 0.6 NOTES: 1. UNLESS NECESSARY FOR PEDESTRIAN CONNECTIVITY TO SCHOOLS, PARKS, COMMERCIAL AREAS OR LANDS BEYOND, A SIDEWALK IS NOT REQUIRED FOR LOCAL STREETS ACCESSING 30 LOTS OR LESS. 2. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED. DWG. NO. DATE: **STANDARD** HILLSIDE LOCAL CONDITION C JULY 4/23 DETAIL **XS-R24** (NO DEVELOPMENT EITHER SIDE) SCALE: City of DRAWING Kelow NTS



NOTES:

1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.

STANDARD	DATE:		DWG. NO.	
	JULY 4/23	SUBURBAN		
DETAIL	SCALE:		XS-R25	Cityo
DRAWING	NTS	LOCAL		Ke



NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. SEPARATED SIDEWALK PLACED 0.3M OFF PL IS REQUIRED DEPENDING ON SURROUNDING LAND USE AND PEDESTRIAN CONNECTIONS AT THE CITY ENGINEER'S DISCRETION.

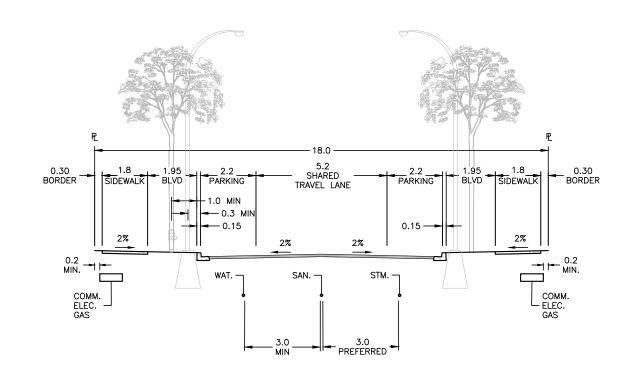
STANDARD	DATE:
	JULY 4/23
DETAIL	SCALE:
DRAWING	NTS



DWG. NO.

XS-R26

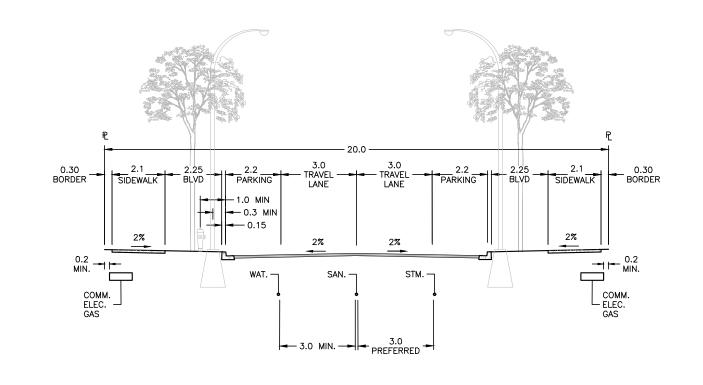




NOTES:

1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.





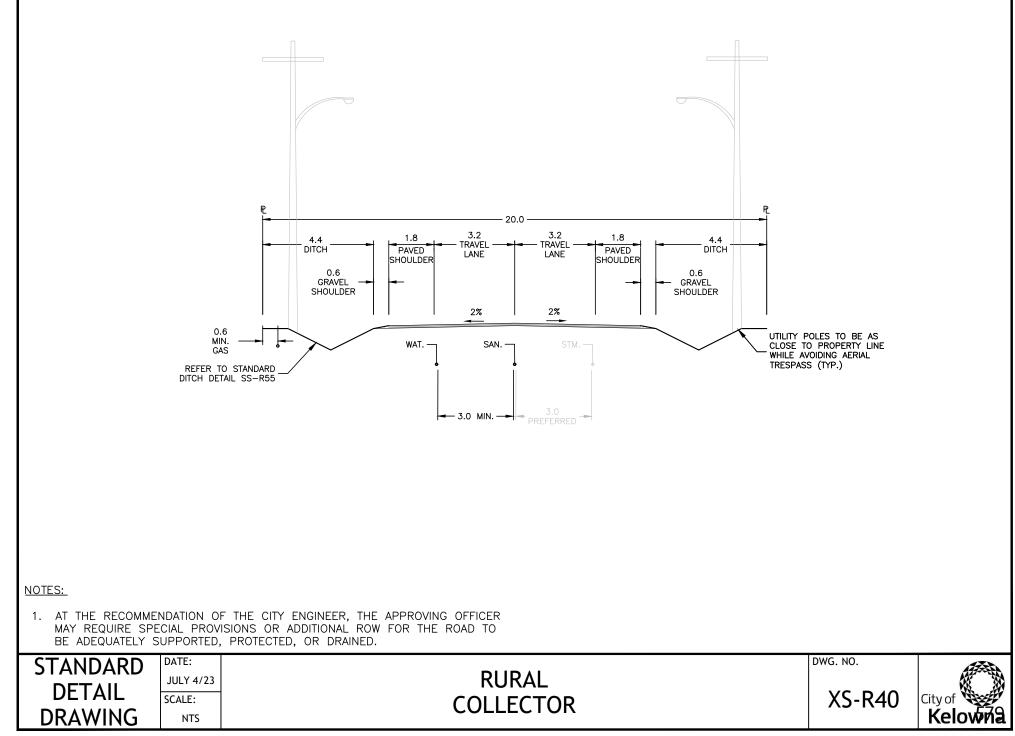
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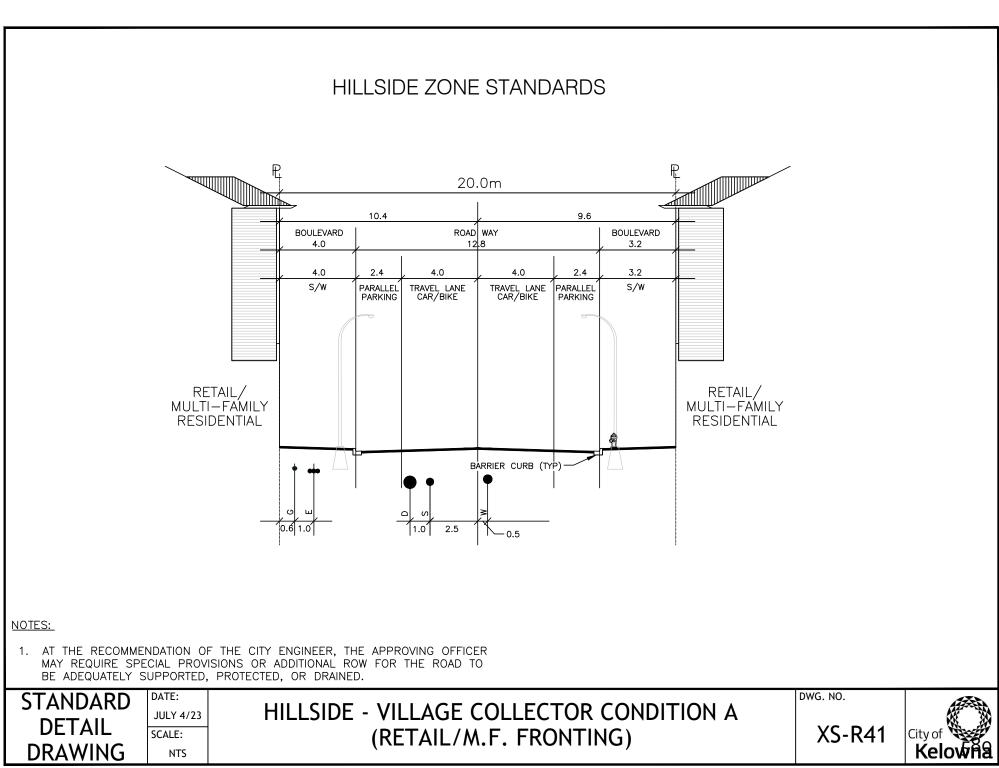
1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.



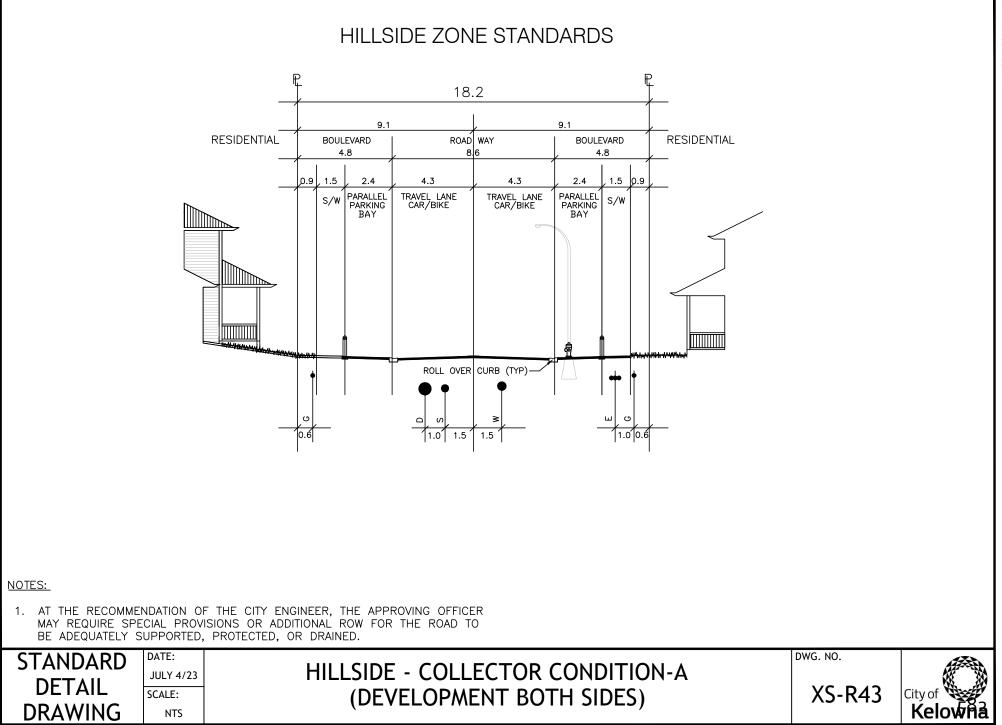
URBAN CENTRE LOCAL DWG. NO.

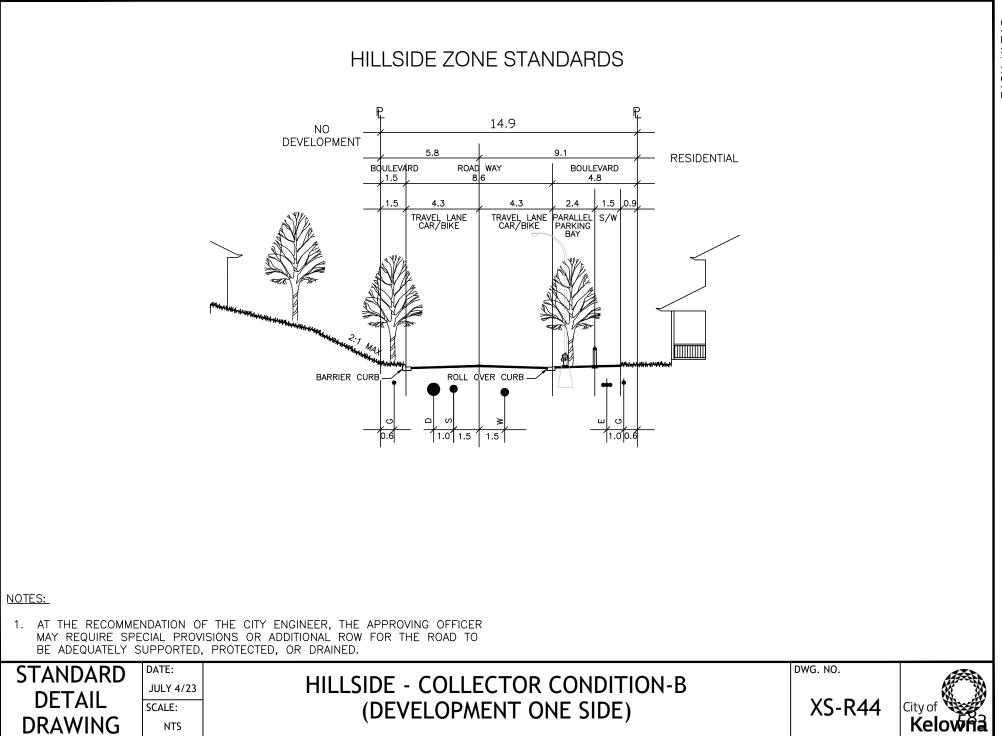


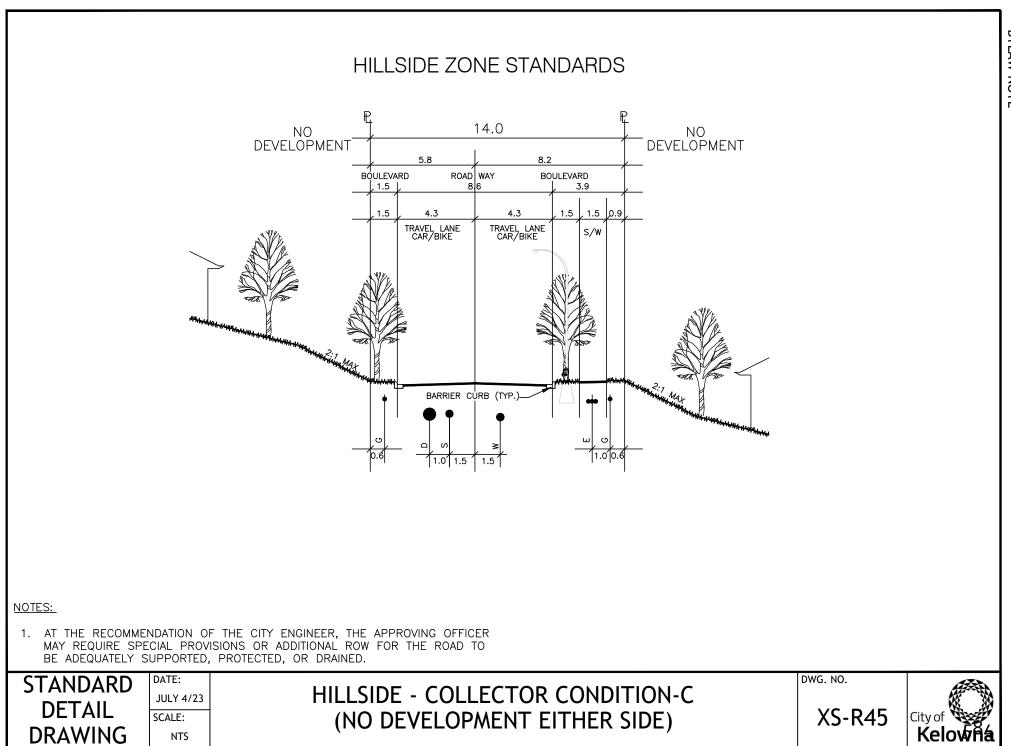


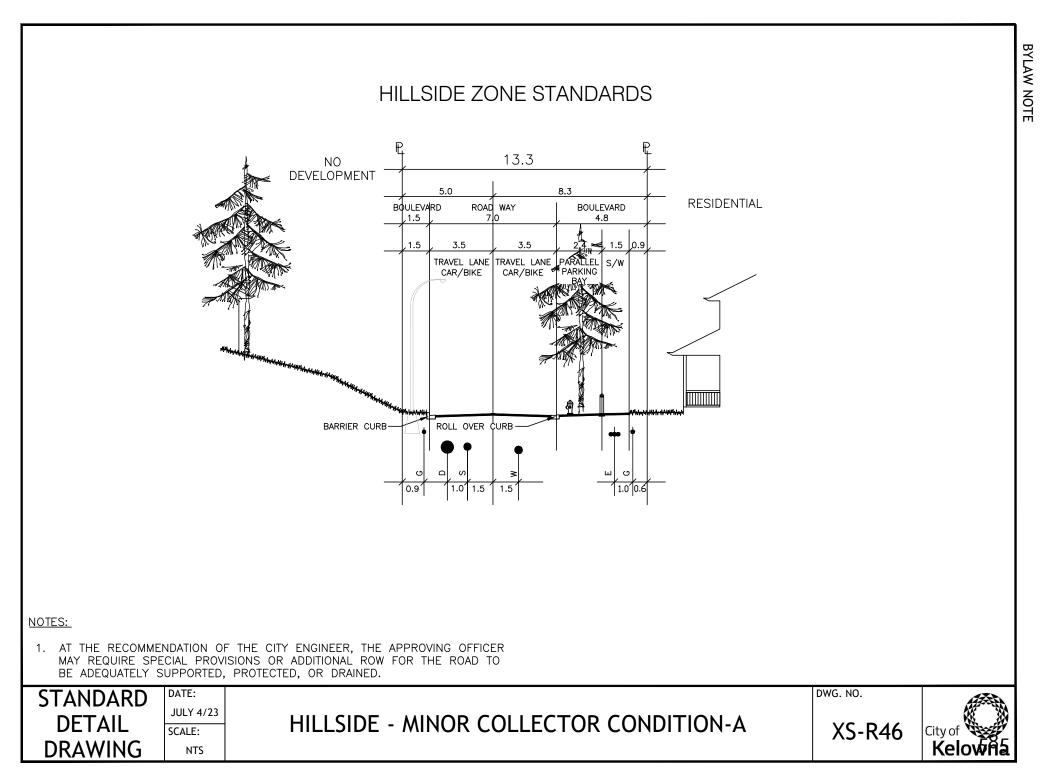


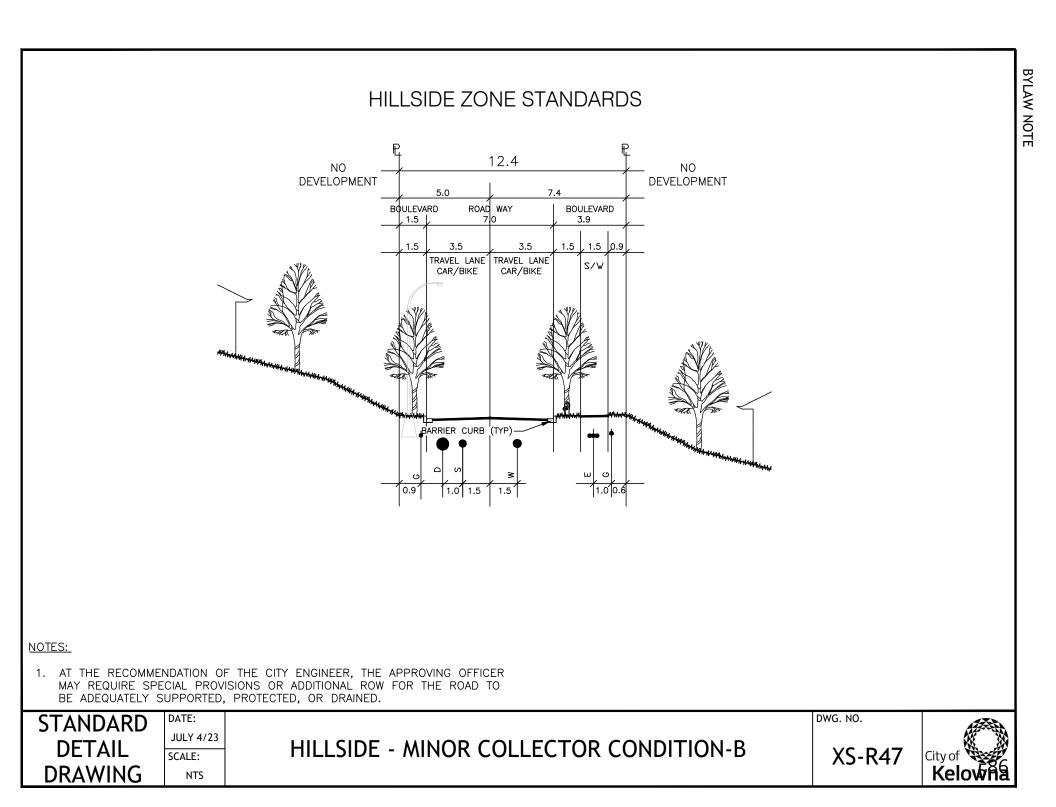
HILLSIDE ZONE STANDARDS 20.0m 10.4 9.6 SCHOOL/ PARK RESIDENTIAL ROAD WAY 12.8 BOULEVARD BOULEVARD 4.0 3.2 1.0 ,1.5 1.5 , 1.5 1.5 2.4 4.0 4.0 2.4 TRAVEL LANE PARALLEL CAR/BIKE PARKING S/W PARALLEL TRAVEL LANE PARKING CAR/BIKE S/W ROLL OVER CURB BARRIER CURB 11.01 2.5 N__0.5 NOTES: 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED. DWG. NO. DATE: **STANDARD** HILLSIDE - VILLAGE COLLECTOR CONDITION B JULY 4/23 DETAIL **XS-R42** SCALE: (NO RETAIL FRONTING) City of DRAWING Kelow NTS

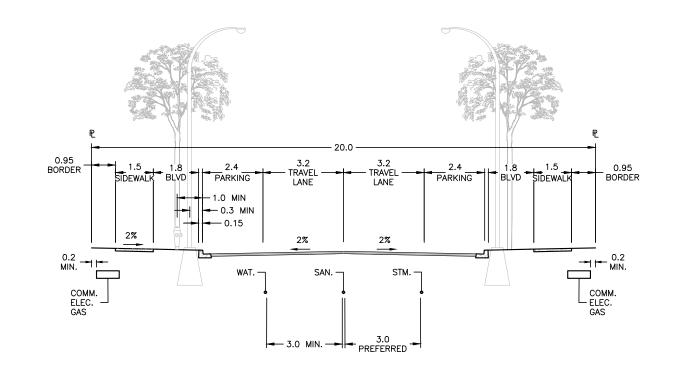








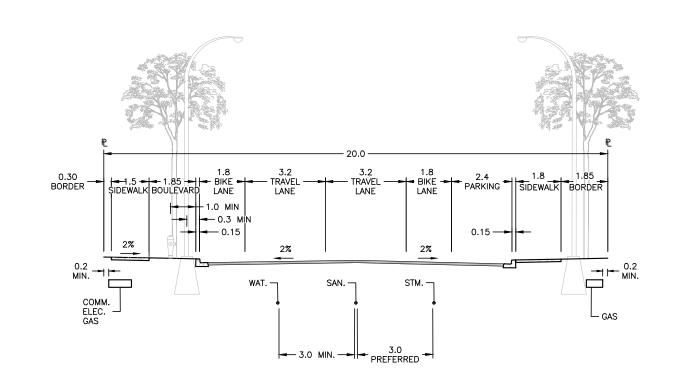




NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. HYDRANT TO BE CLEAR OF SIDEWALK, AND 1.0m ZONE SURROUNDING IT.

STANDARD	DATE:		DWG. NO.	
	JULY 4/23	SUBURBAN		
DETAIL	SCALE:	COLLECTOR	XS-R48	City of
DRAWING	NTS	COLLECTOR		City of Kelowna



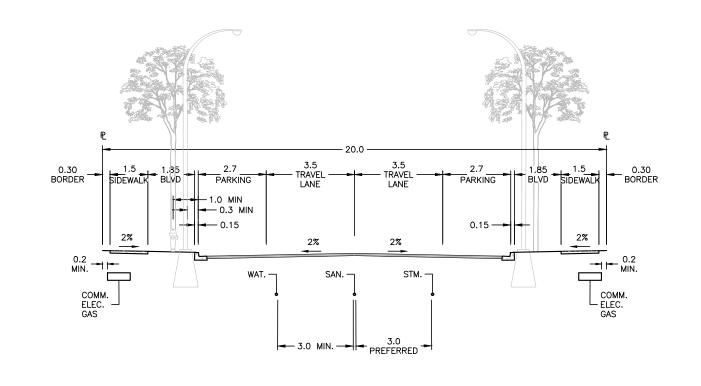
NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. SIDEWALK MAY BE MONOLITHIC OR SEPARATED TO ACCOMMODATE SIDEWALK, SHALLOW UTILITIES, AND STREET TREES.



SUBURBAN COLLECTOR (WITH BIKE LANES) DWG. NO.







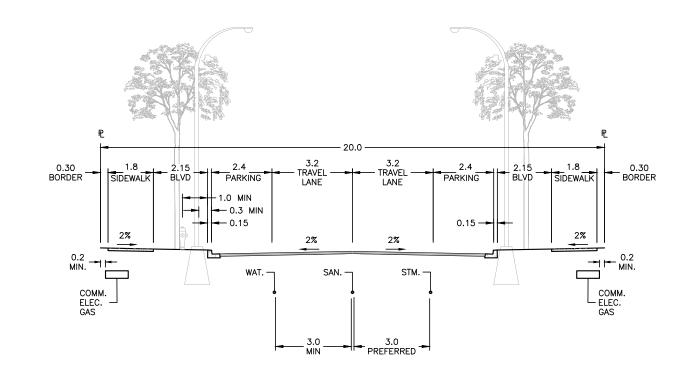
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.





DWG. NO.





NOTES:

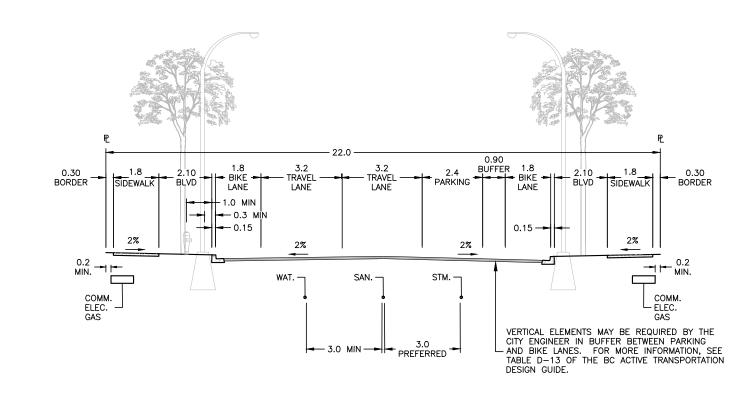
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.





DWG. NO.





NOTES:

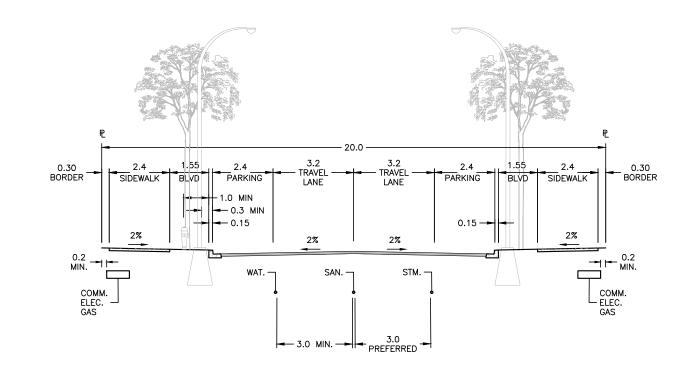
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.



CORE AREA COLLECTOR (WITH BIKE LANES)

DWG. NO.





NOTES:

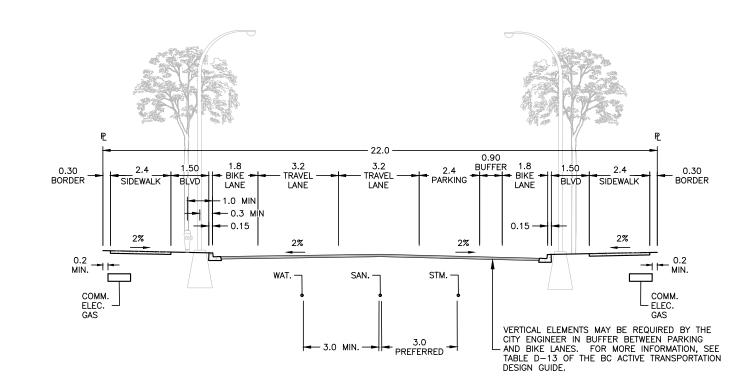
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.





DWG. NO.





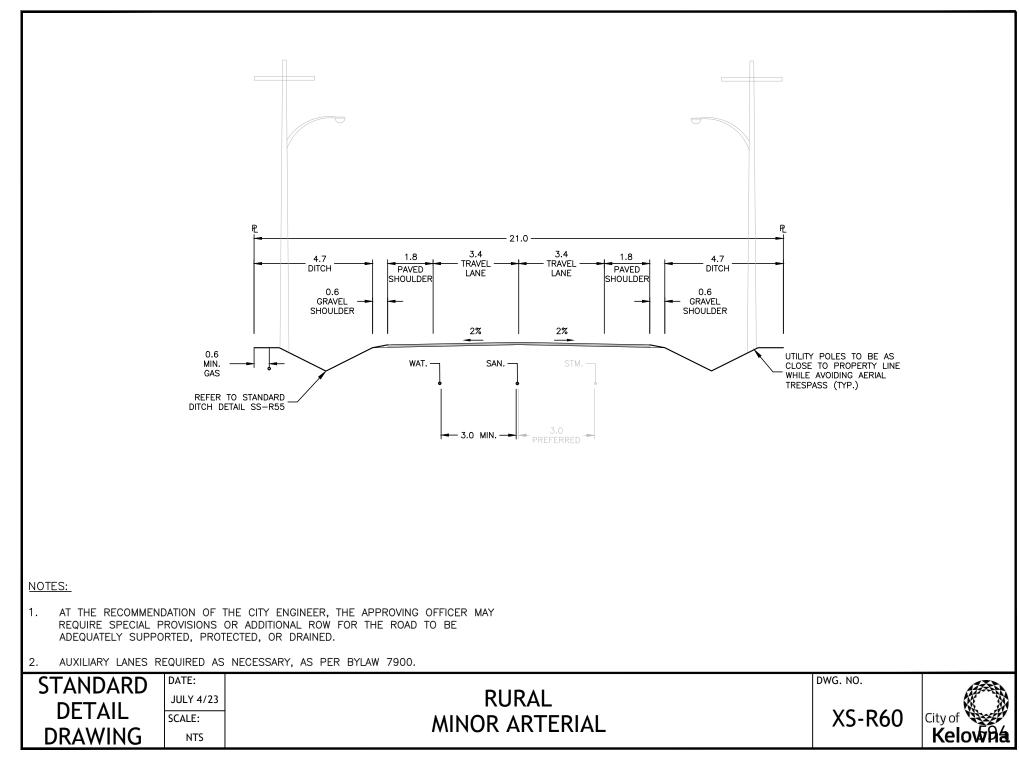
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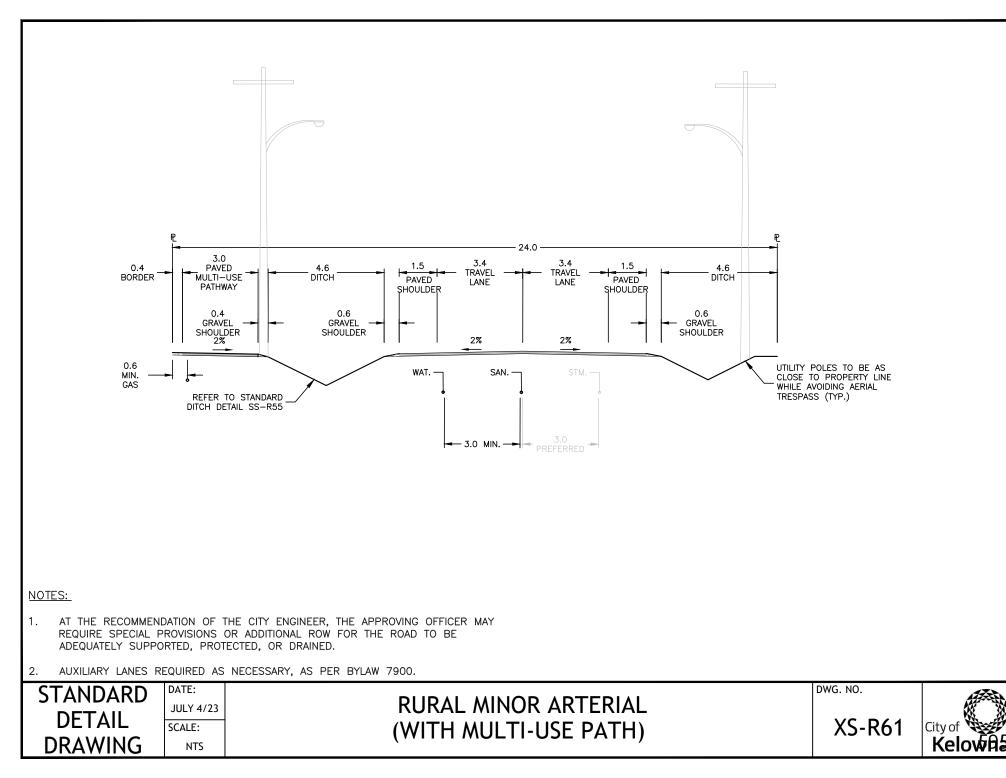
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.



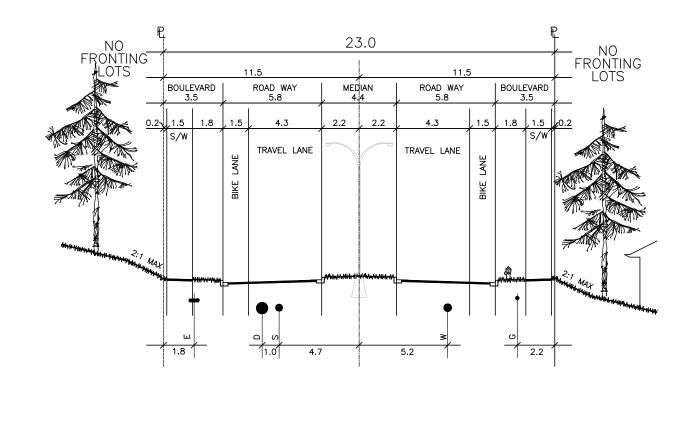
URBAN CENTRE COLLECTOR (WITH BIKE LANES) DWG. NO.







HILLSIDE ZONE STANDARDS



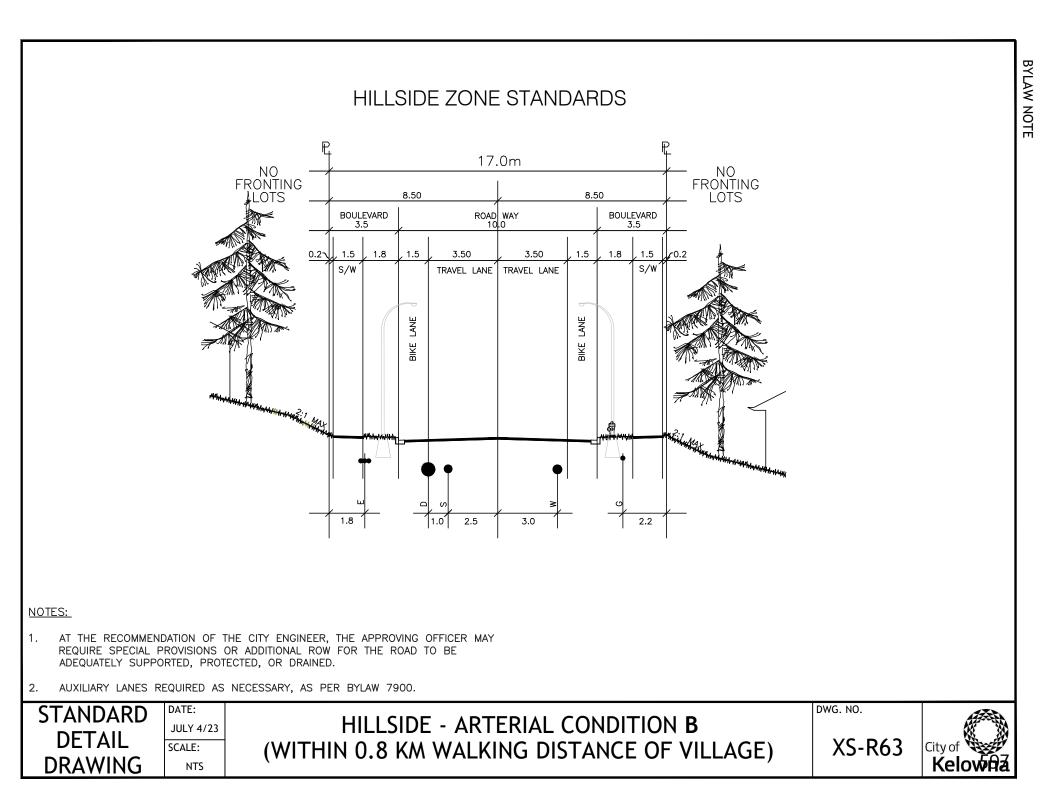
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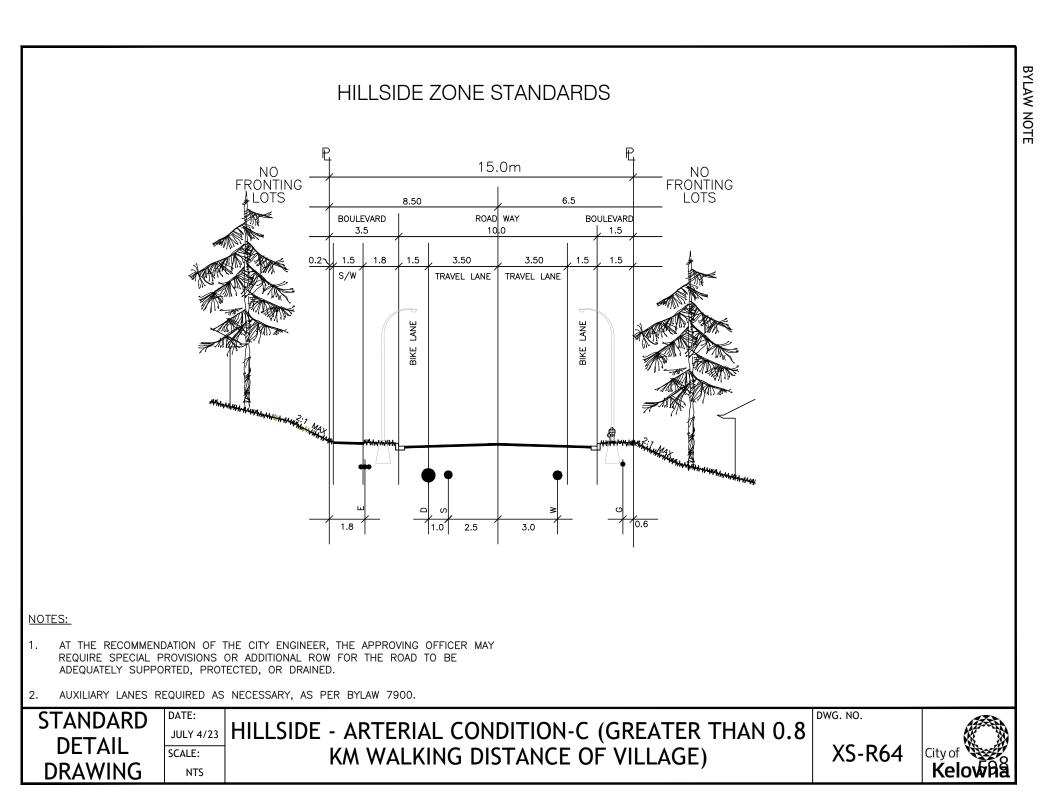
- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.

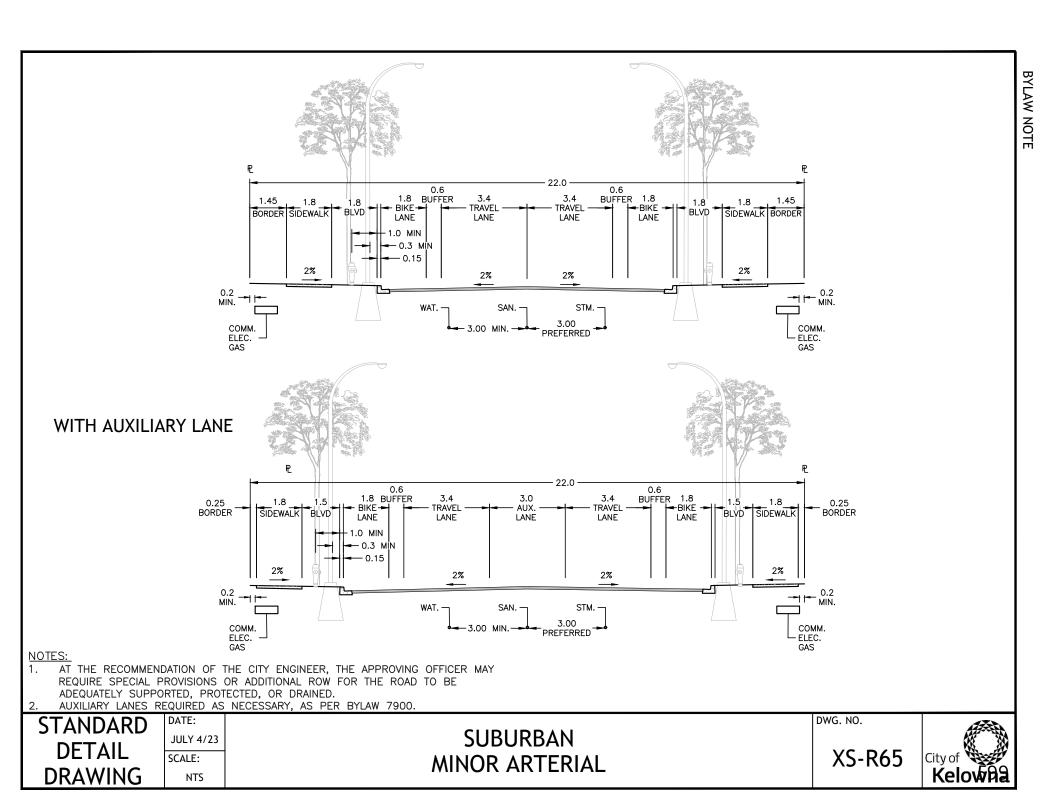
STANDARD	DATE:
DETAIL	JULY 4/23
DETAIL	SCALE:
DRAWING	NTS

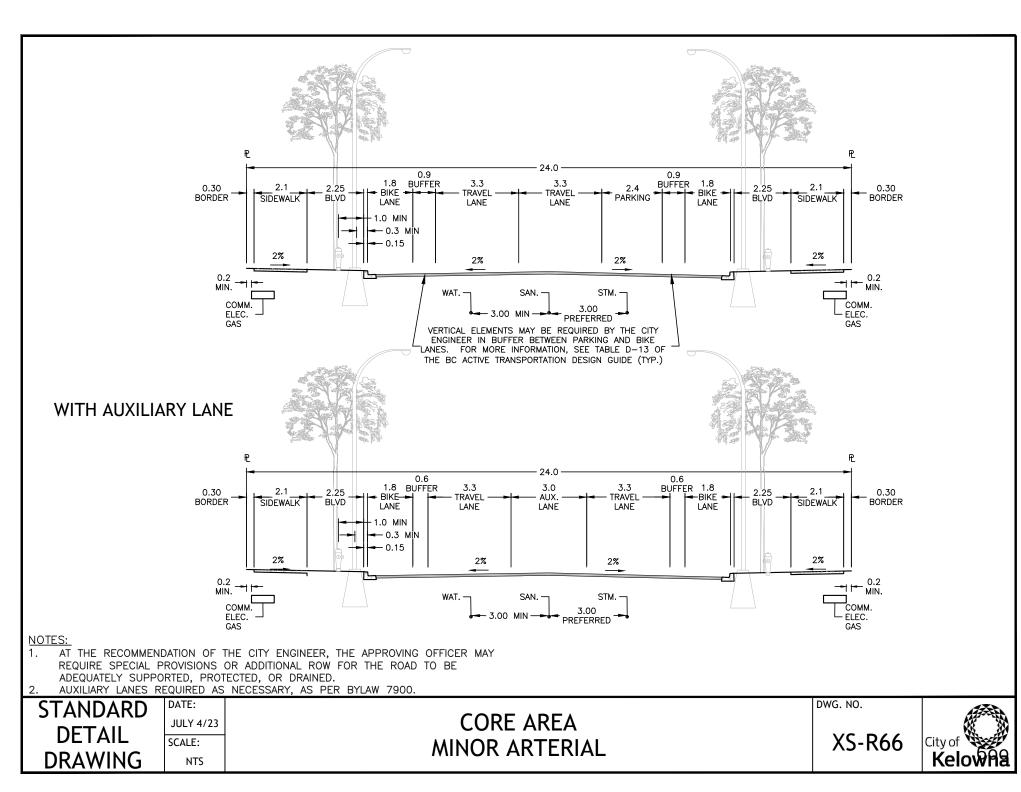
HILLSIDE - ARTERIAL CONDITION A (VILLAGE PARKWAY) DWG. NO.

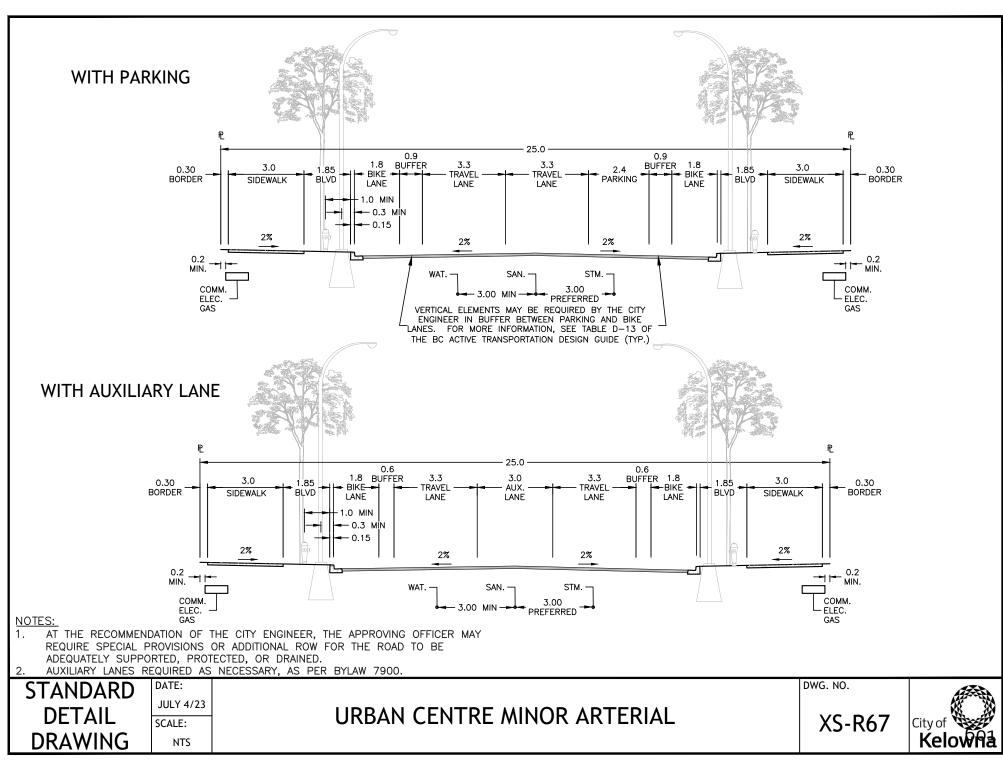


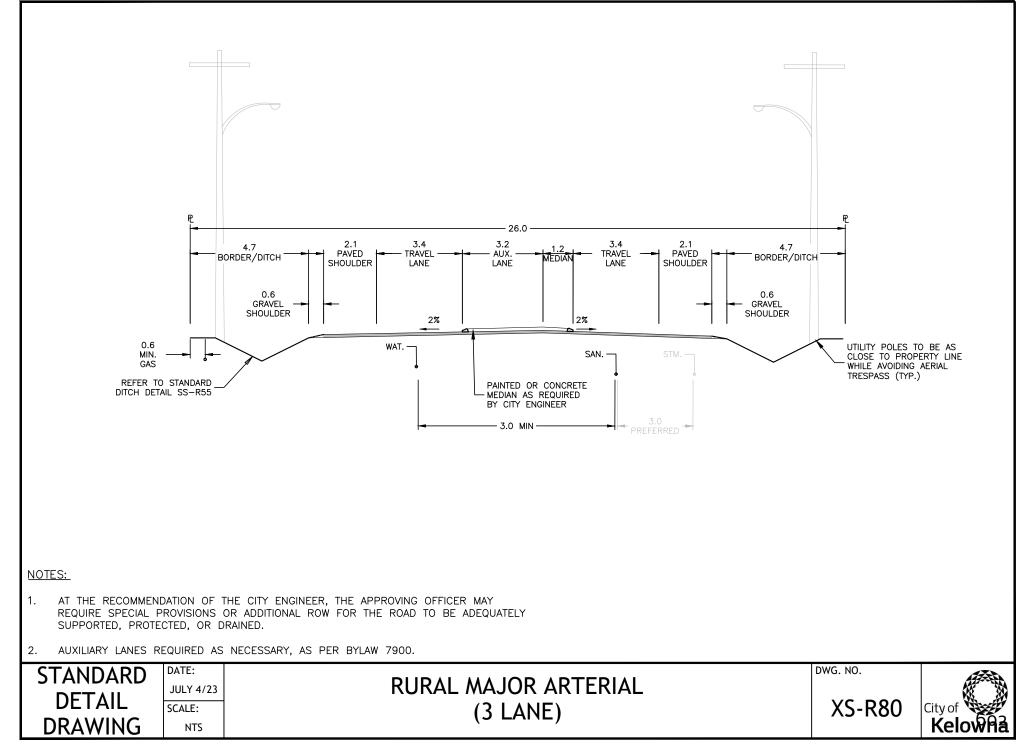


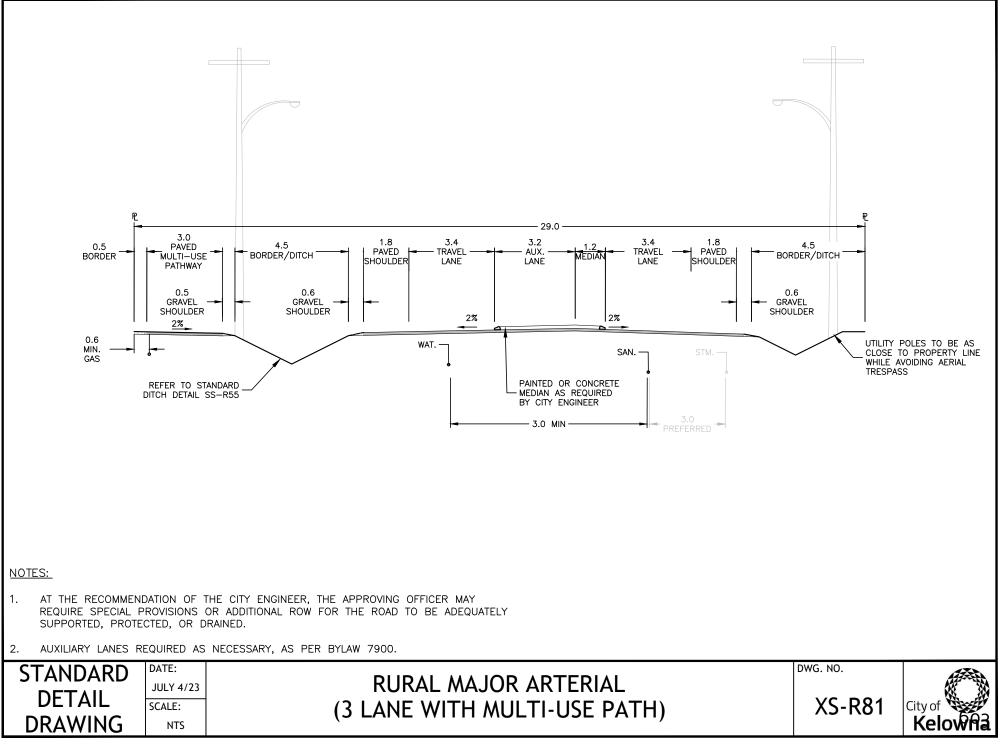


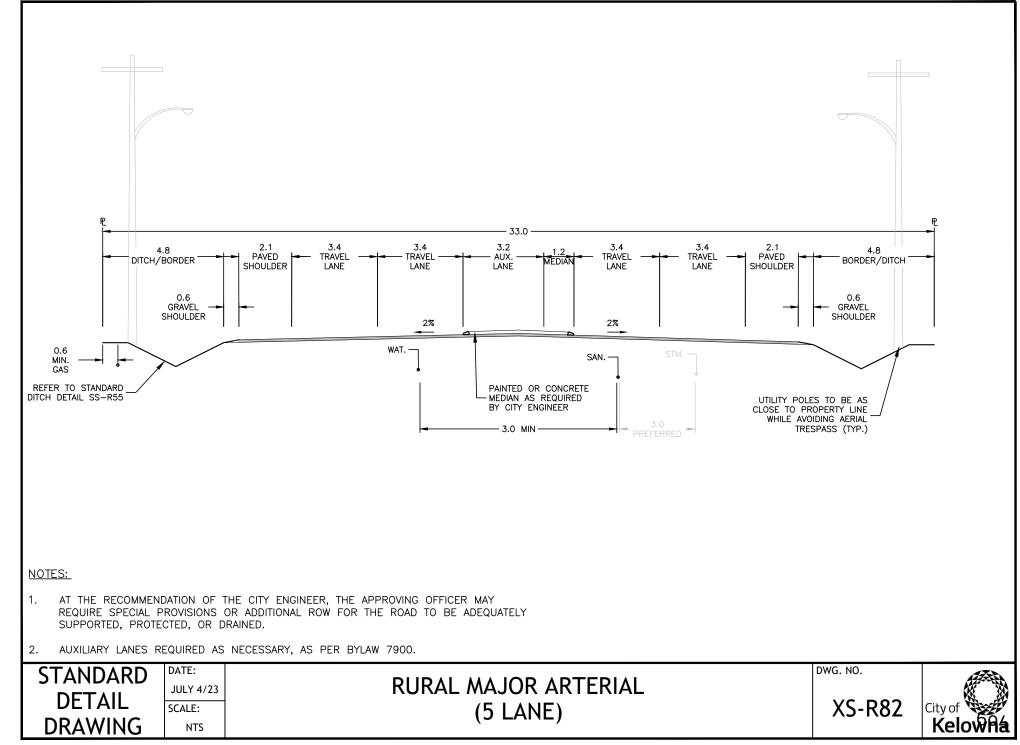


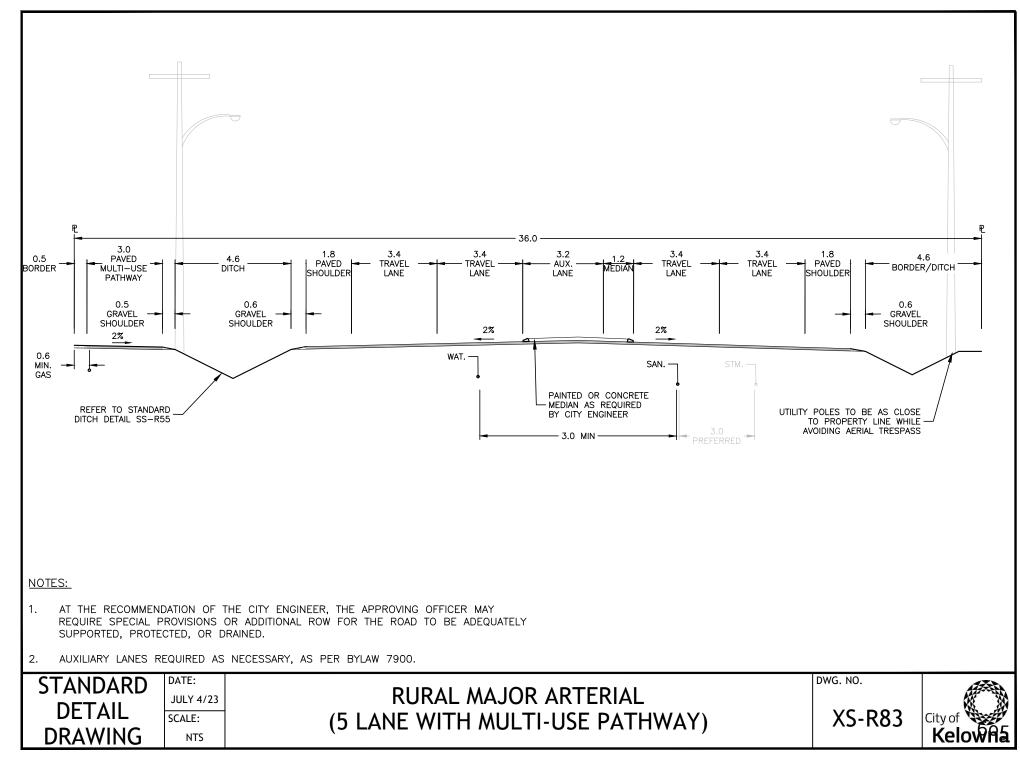


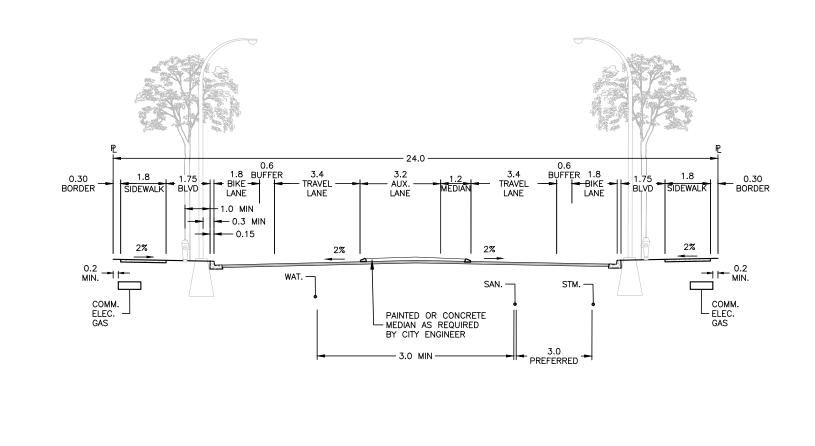








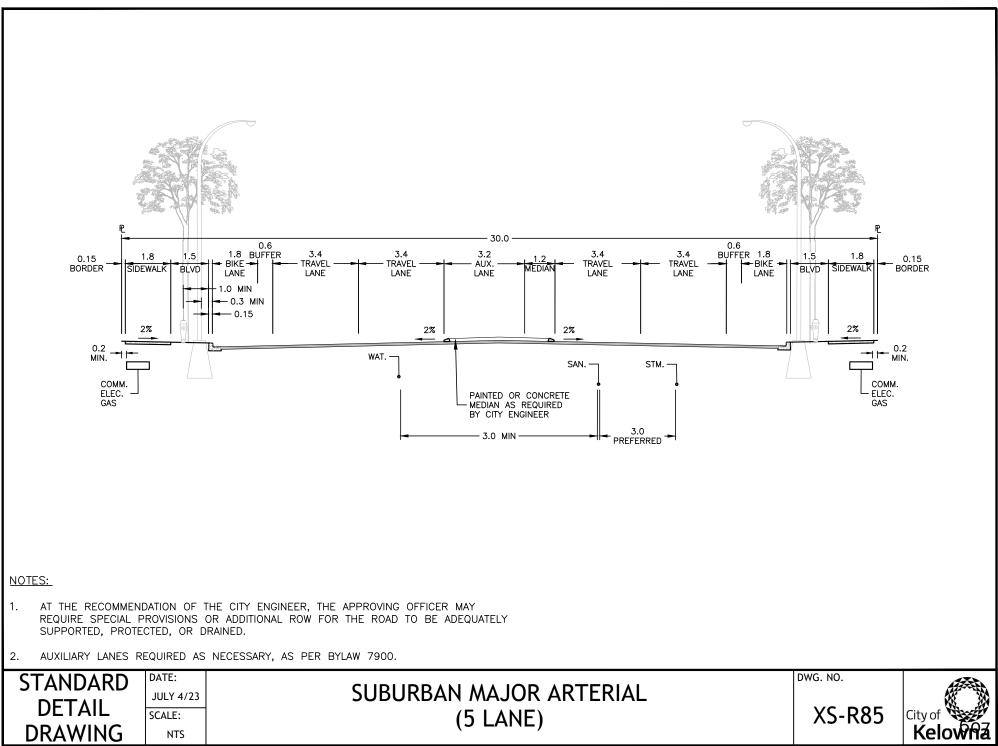


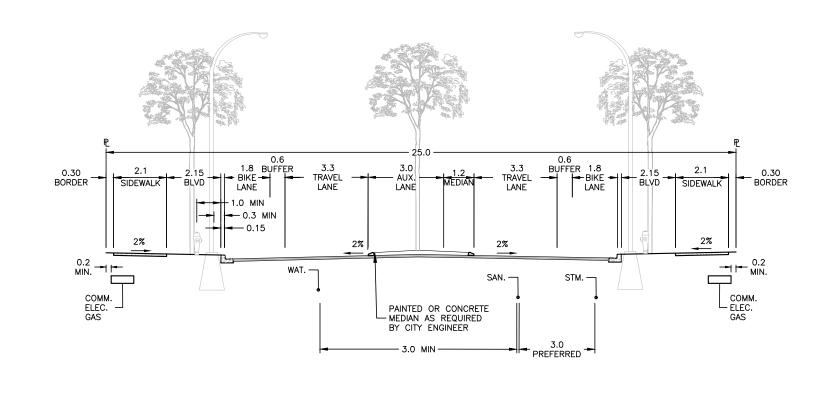


NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.

STANDARDDATE: JULY 4DETAILSCALE:DRAWINGNTS



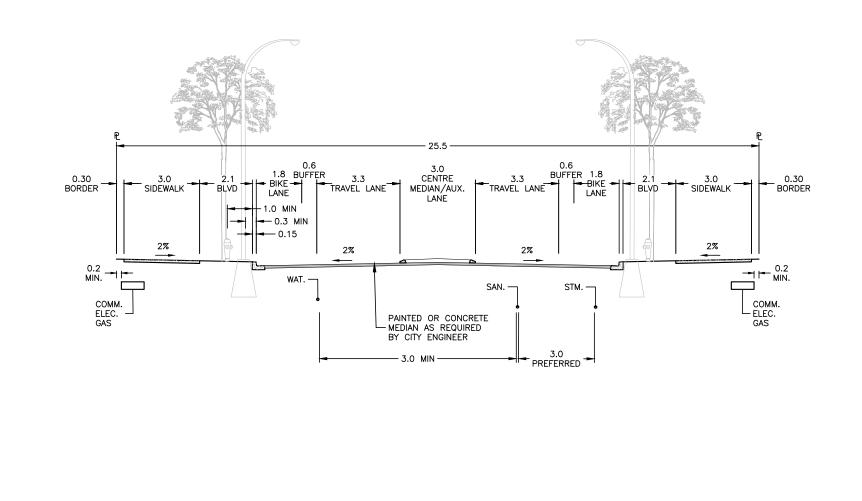


NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.

STANDARD DETAIL DRAWING	DATE: JULY 4/23 SCALE: NTS	CORE AREA MAJOR ARTERIAL (3 LANE)	dwg. no. XS-R86	City of Kelowha
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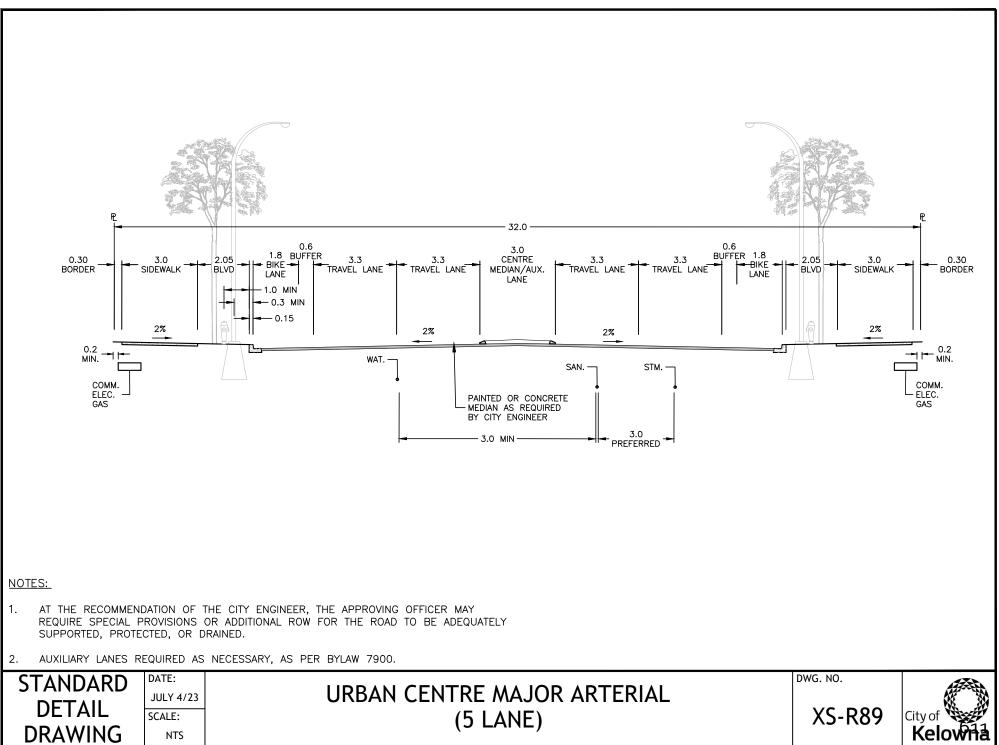
₽ 0.6 BUFFER 1.8 BIKE -LANE 0.6 1.8 BUFFER 3.3 TRAVEL LANE 3.3 TRAVEL LANE 3.0 3.3 TRAVEL LANE 3.3 TRAVEL LANE 2.1 0.30 BORDER 2.1 2.10 1.2 MEDIAN 2.10 0.30 BORDER BIKE - AUX. LANE SIDEWALK BLVD BLVD SIDEWALK LANE .0 MIN 0.3 MIN 0.15 2% 2% 2% 2% 0.2 MIN. WAT. -SAN. STM. COMM. ELEC. GAS COMM. ELEC. GAS PAINTED OR CONCRETE - MEDIAN AS REQUIRED BY CITY ENGINEER 3.0 PREFERRED - 3.0 MIN NOTES: AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY 1. REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED. 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900. DWG. NO. **STANDARD** DATE: CORE AREA MAJOR ARTERIAL JULY 4/23 DETAIL XS-R87 SCALE: (5 LANE) City of **Kelow** <u>DRAWING</u> NTS

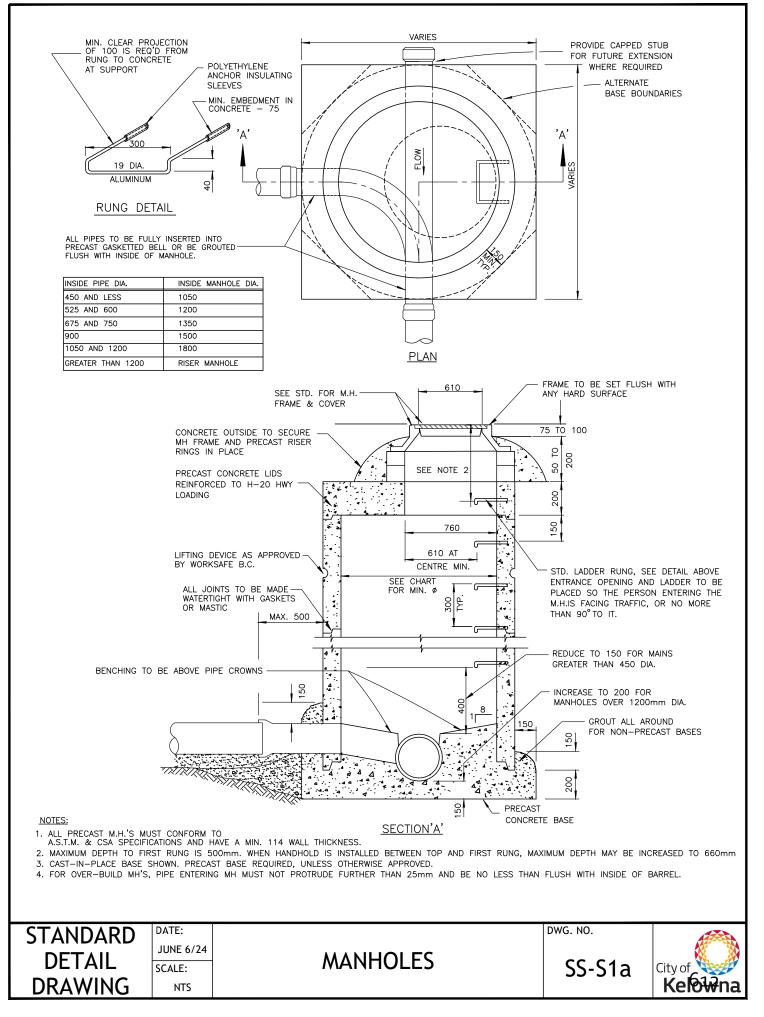


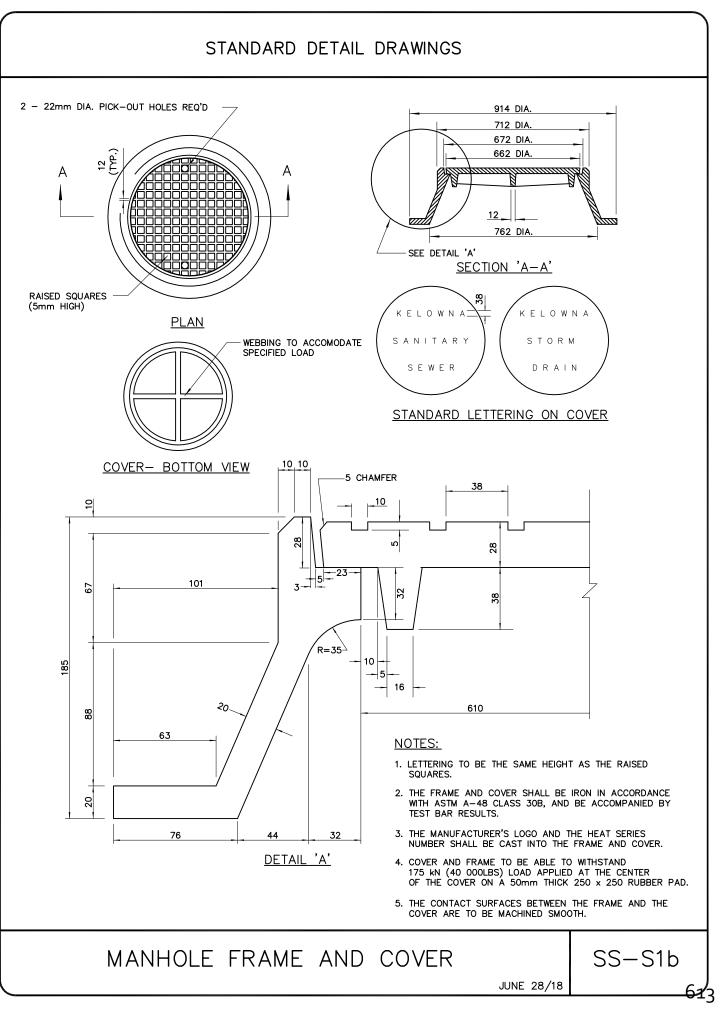
NOTES:

- 1. AT THE RECOMMENDATION OF THE CITY ENGINEER, THE APPROVING OFFICER MAY REQUIRE SPECIAL PROVISIONS OR ADDITIONAL ROW FOR THE ROAD TO BE ADEQUATELY SUPPORTED, PROTECTED, OR DRAINED.
- 2. AUXILIARY LANES REQUIRED AS NECESSARY, AS PER BYLAW 7900.

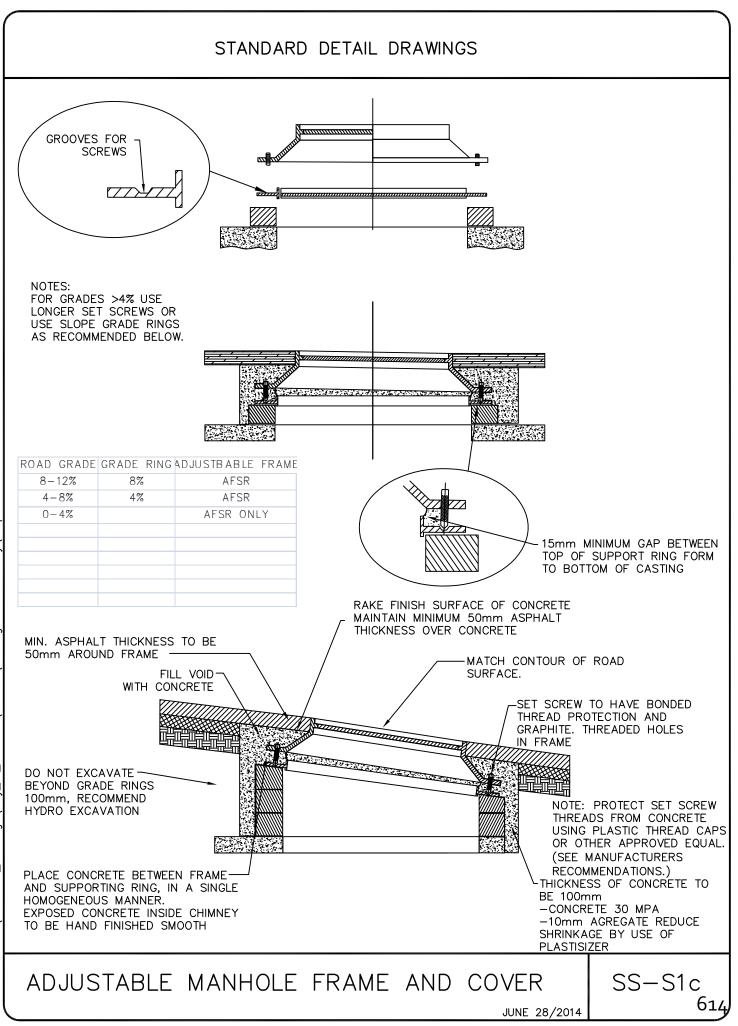
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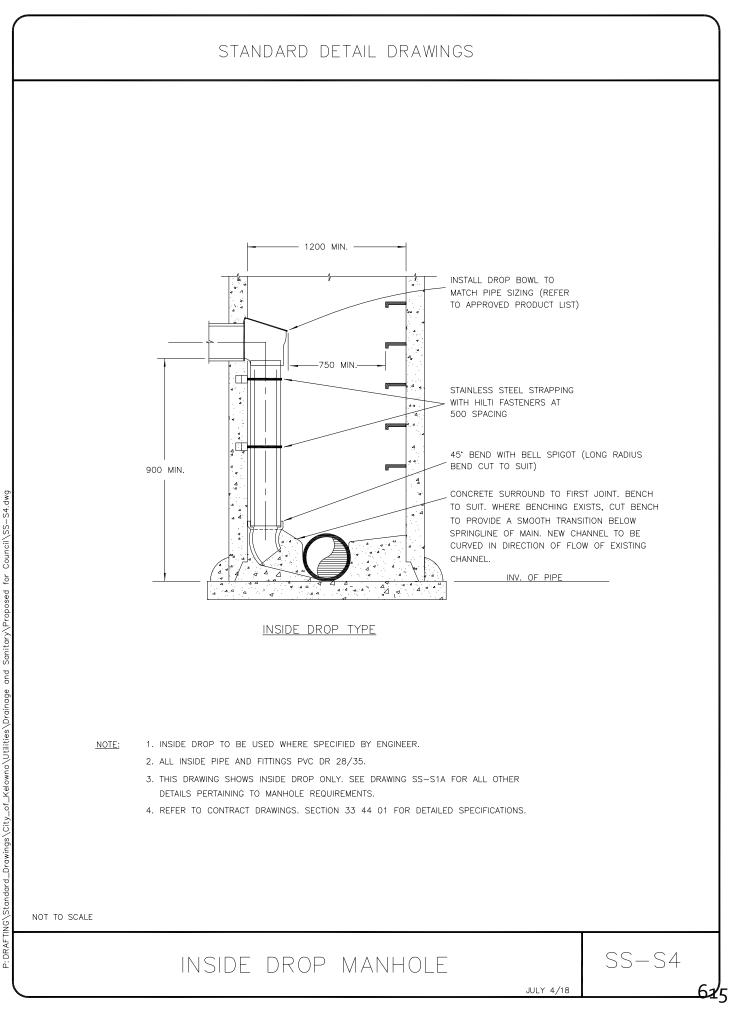


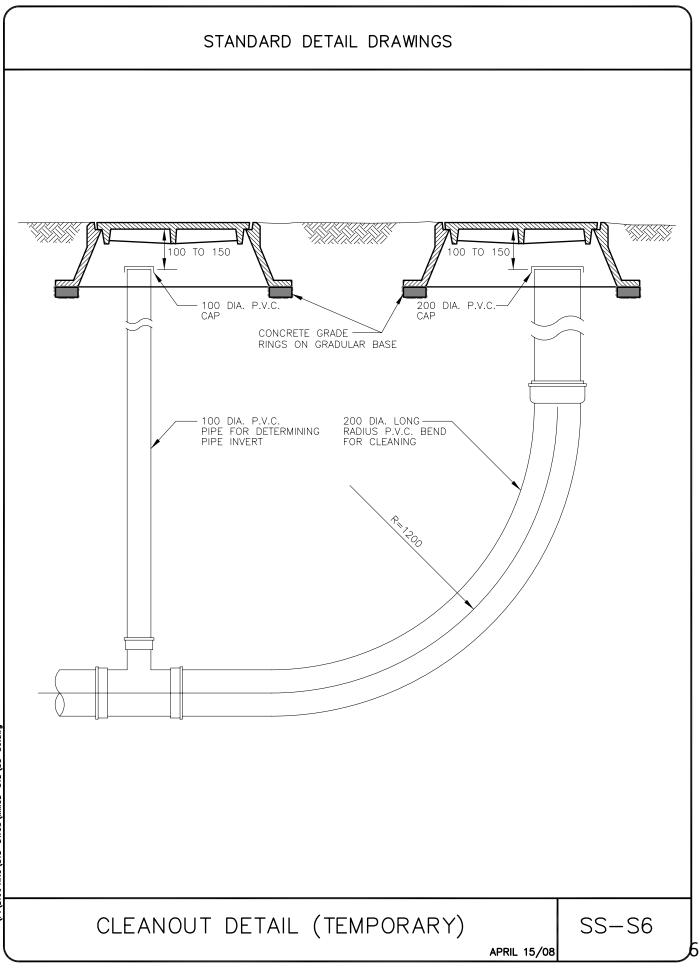




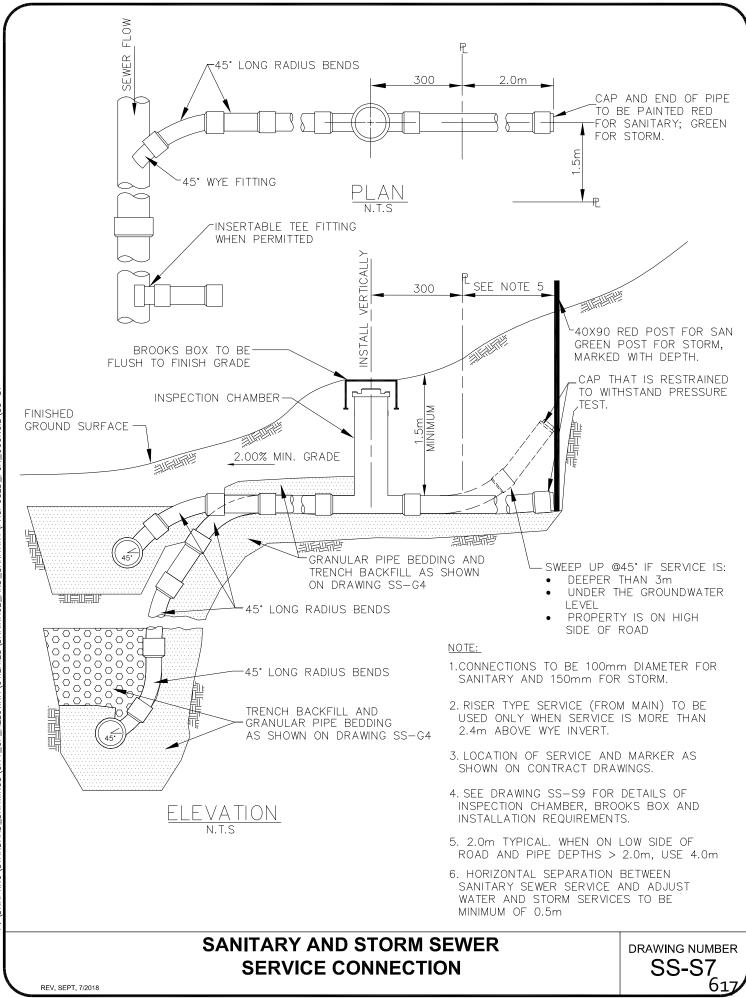
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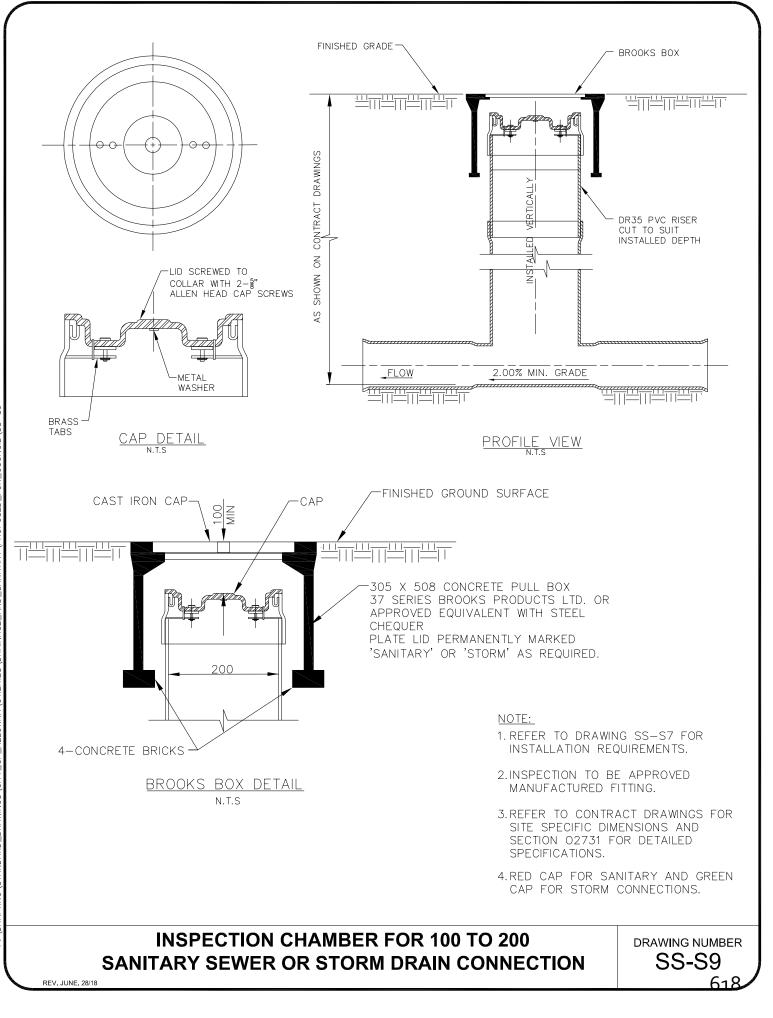


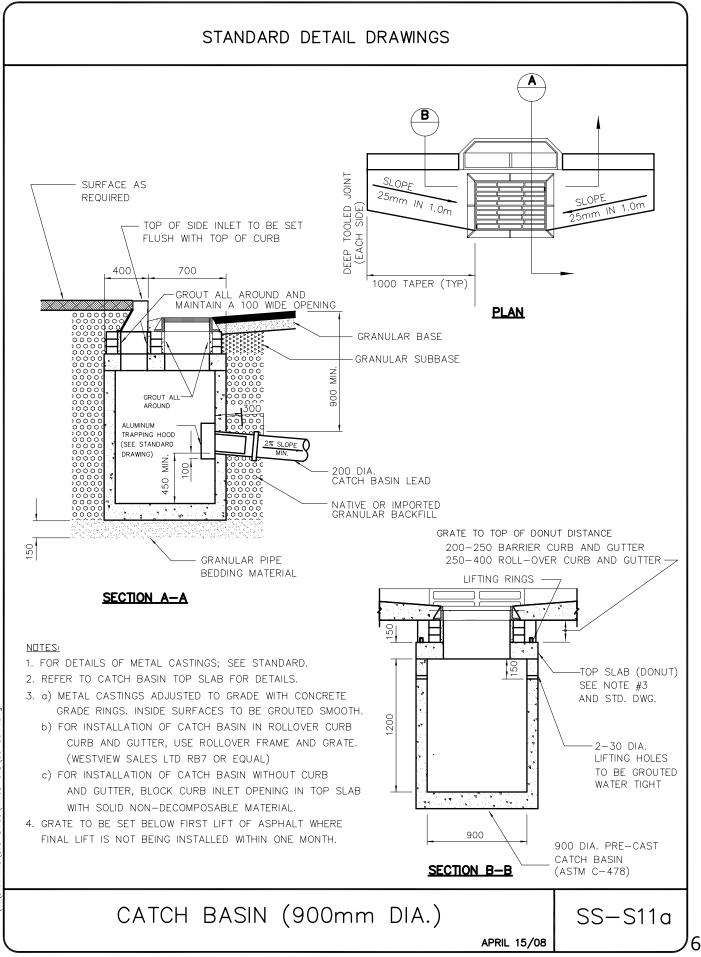




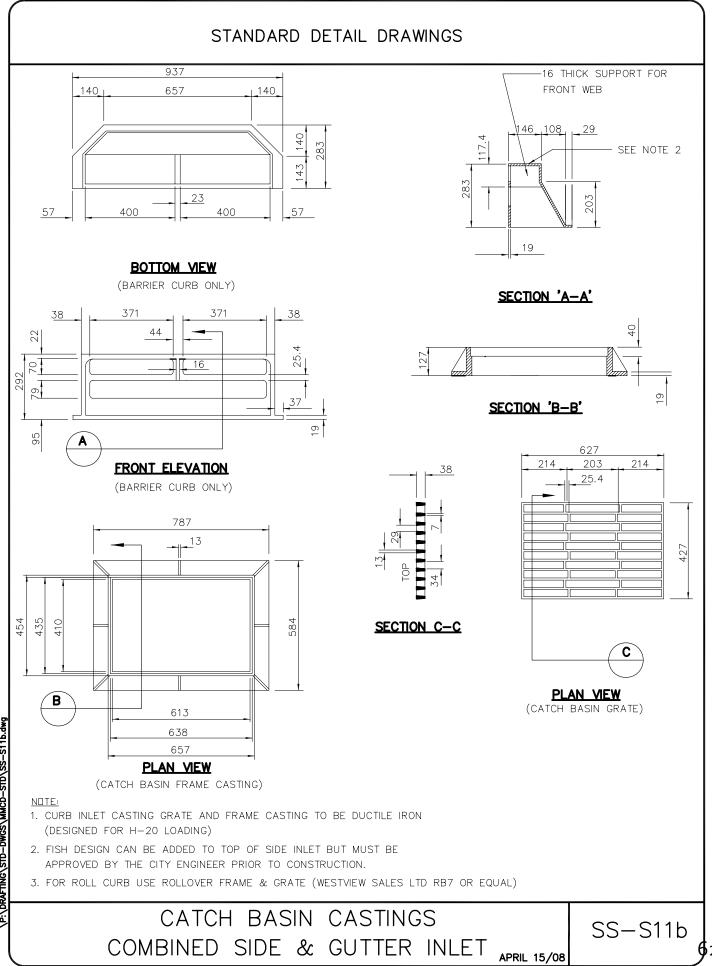
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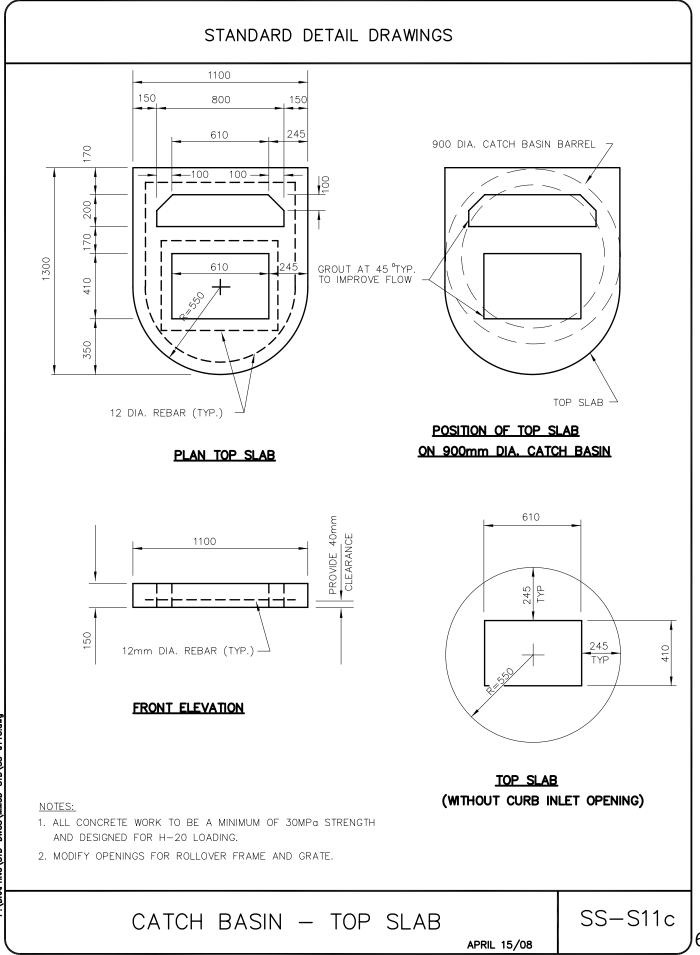


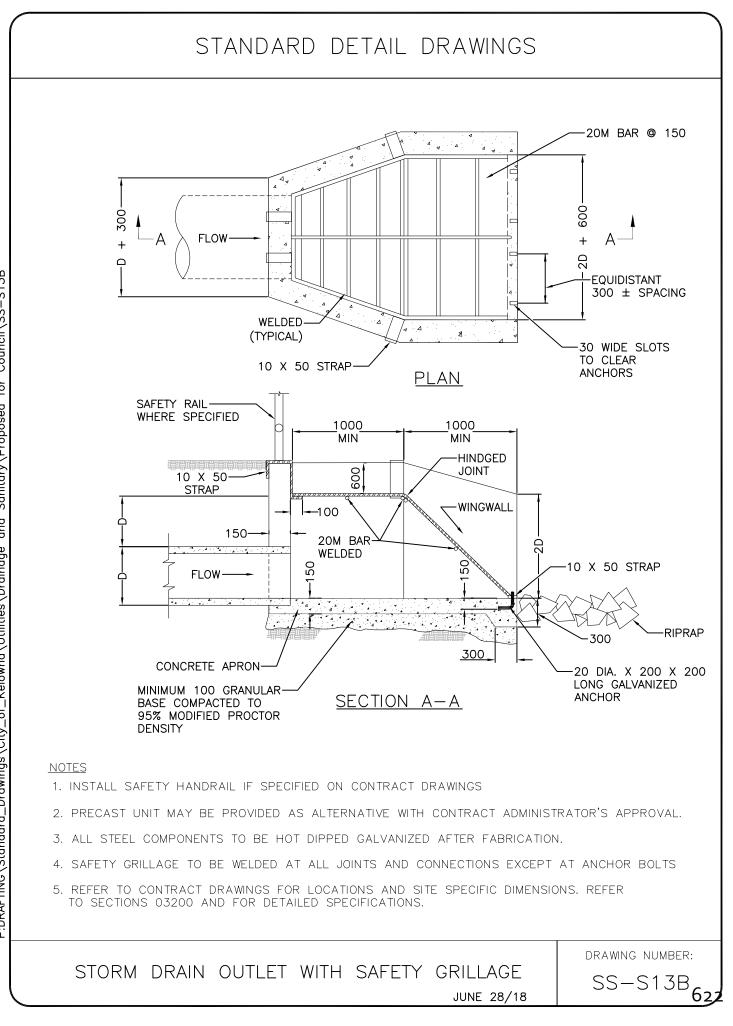


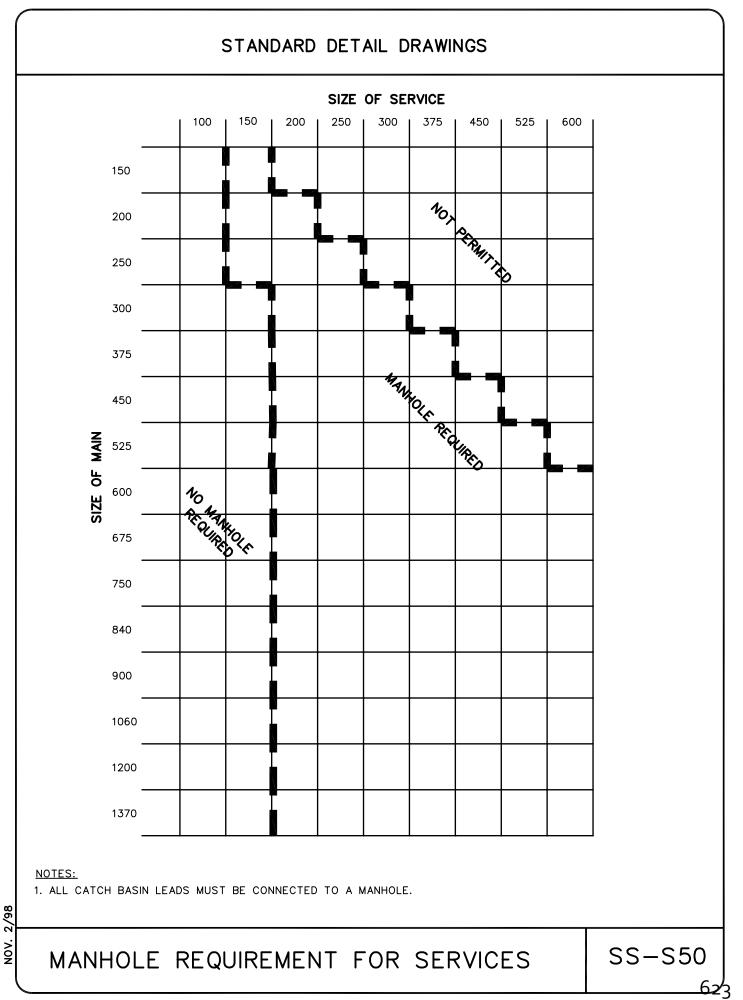
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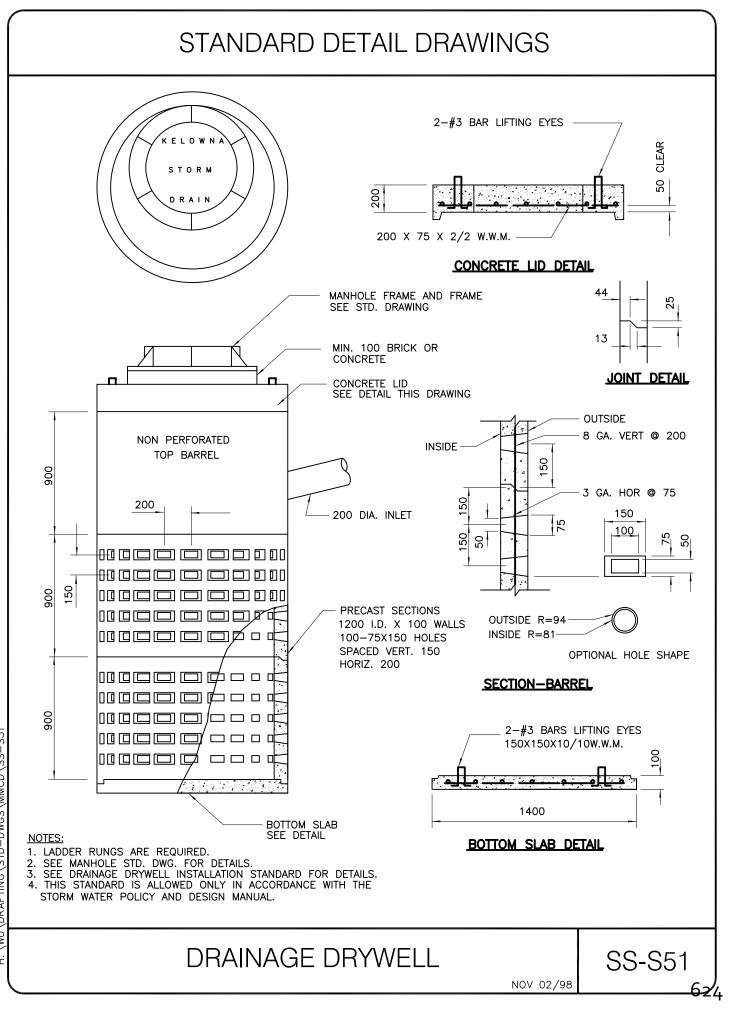


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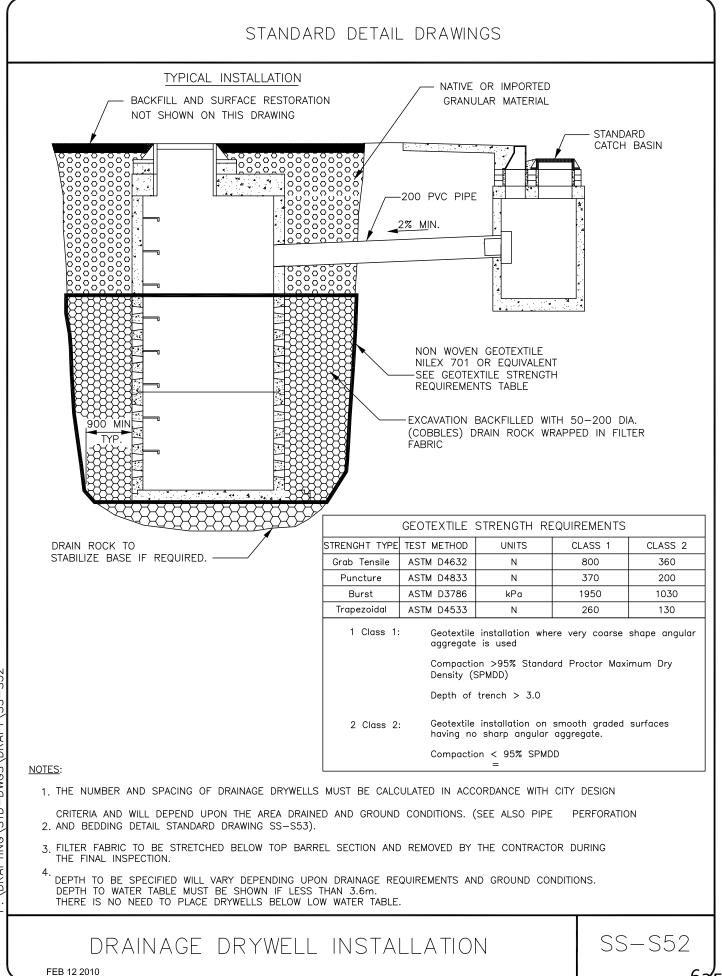




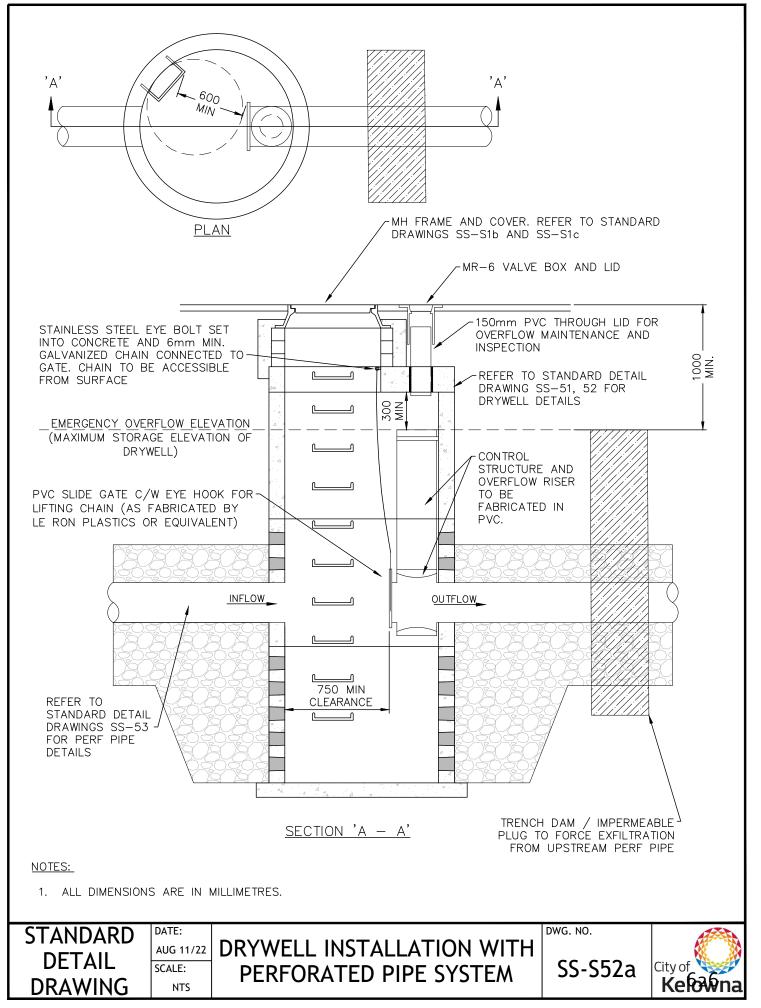


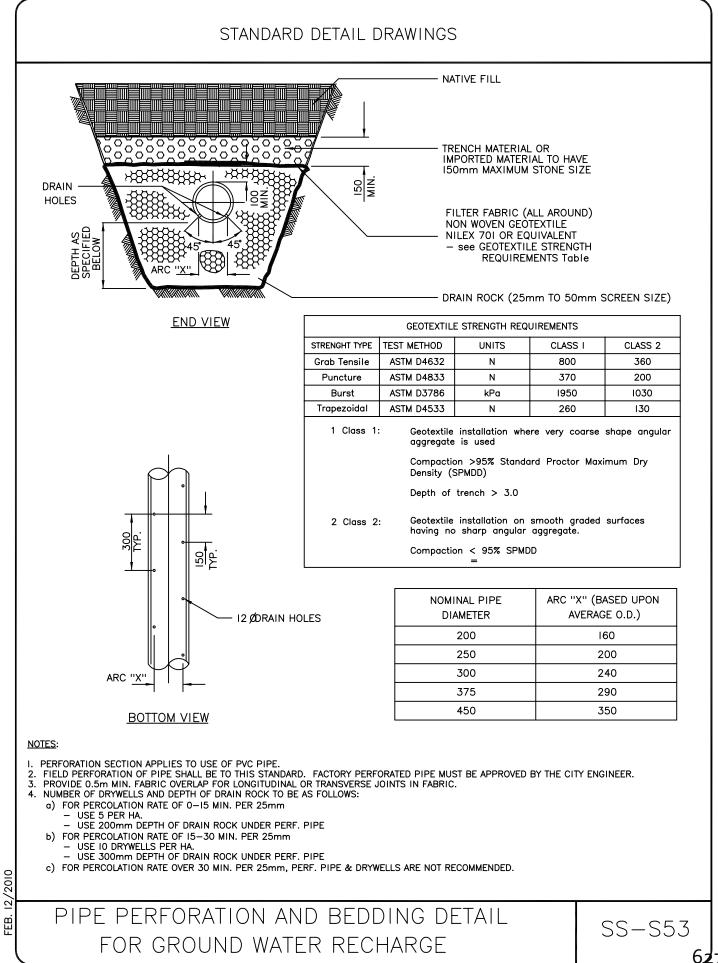


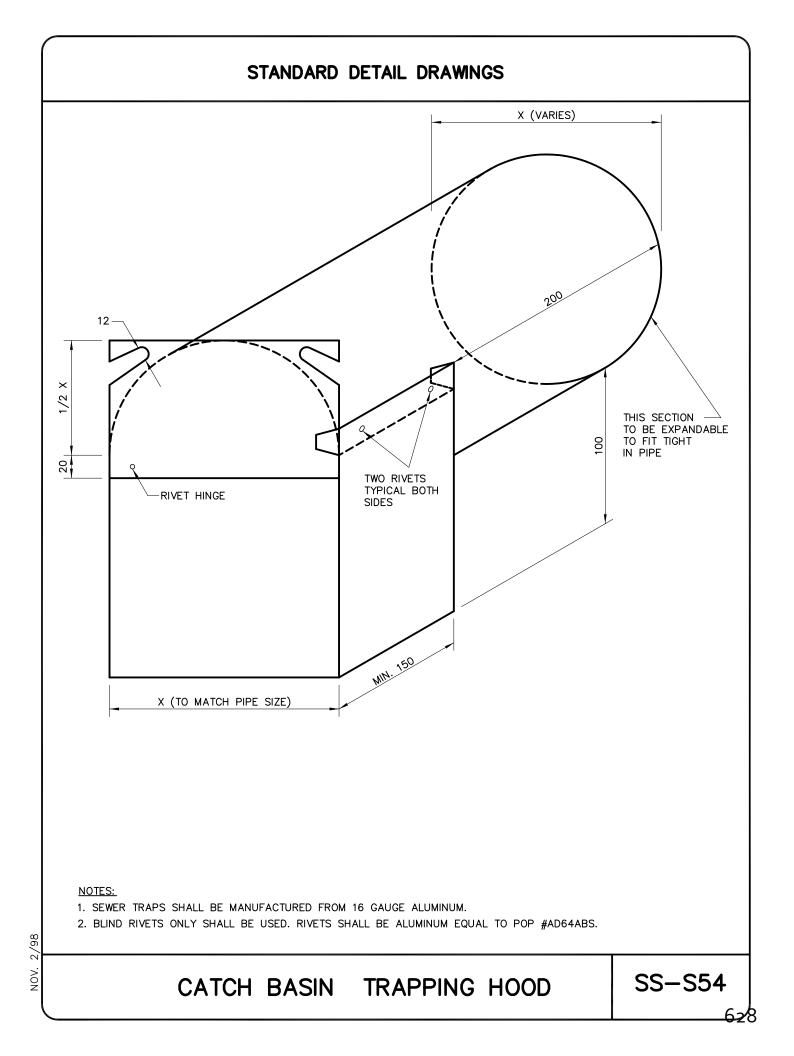
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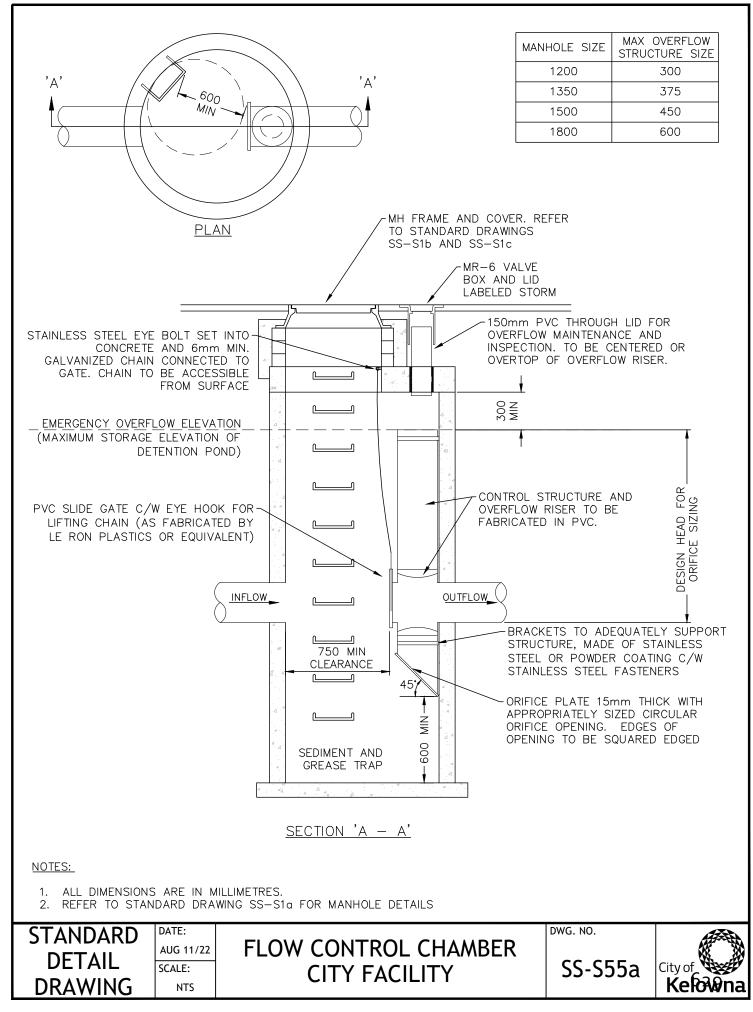


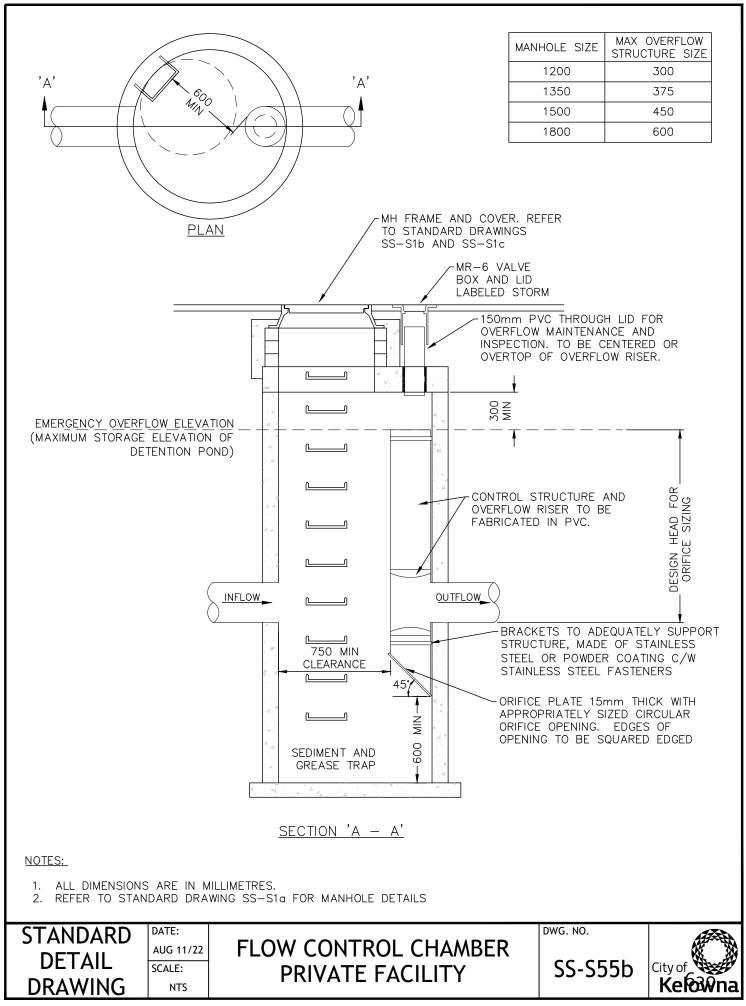
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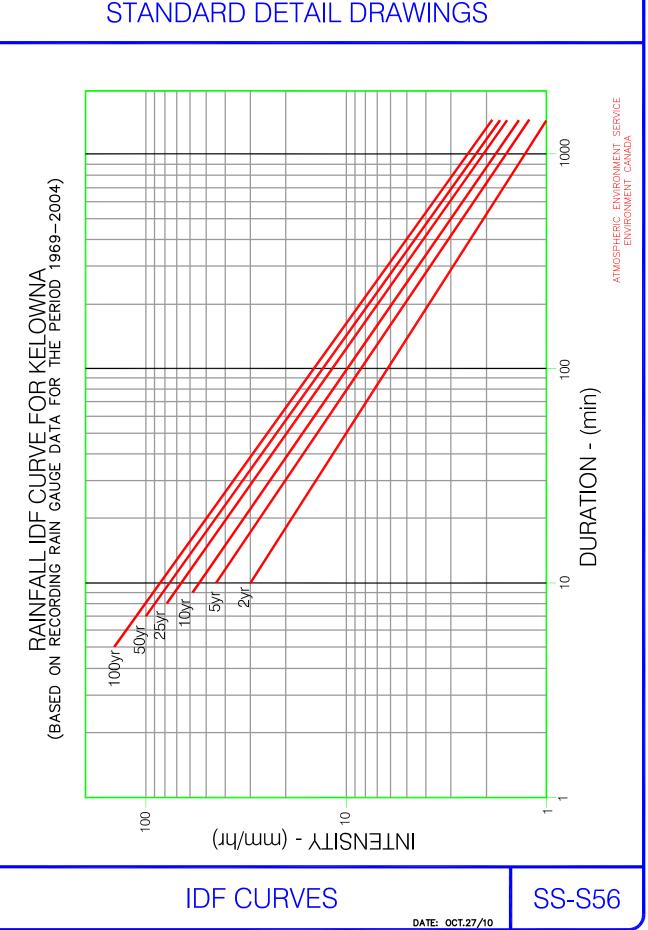




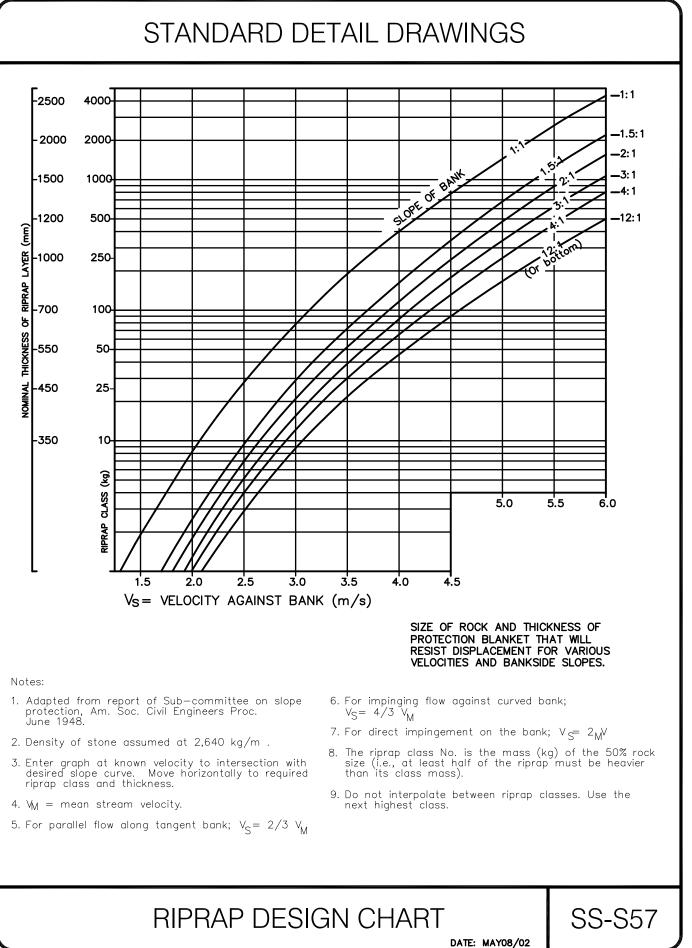




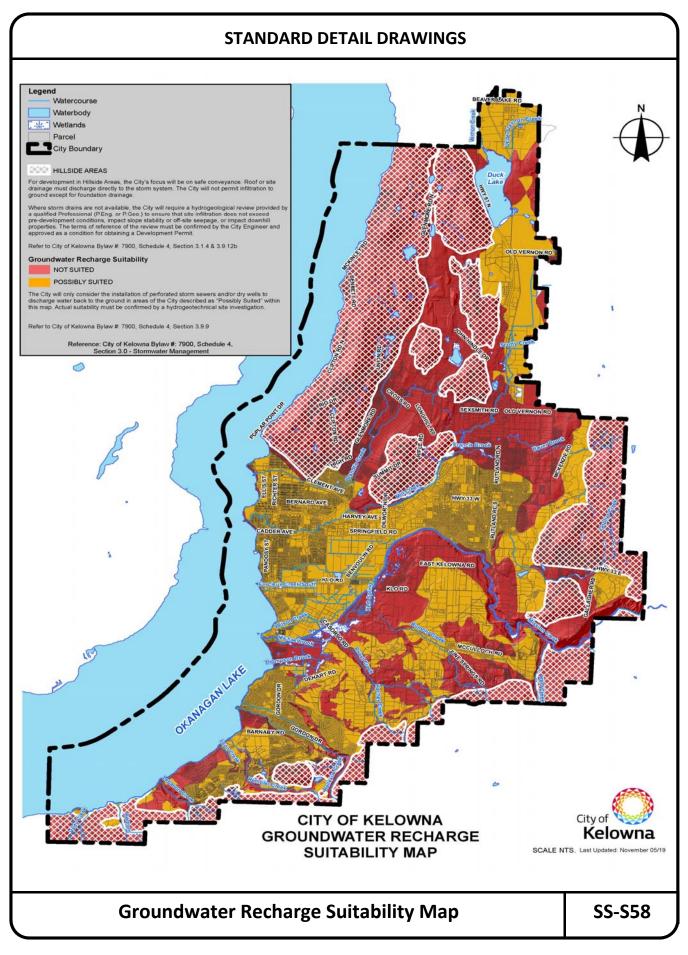


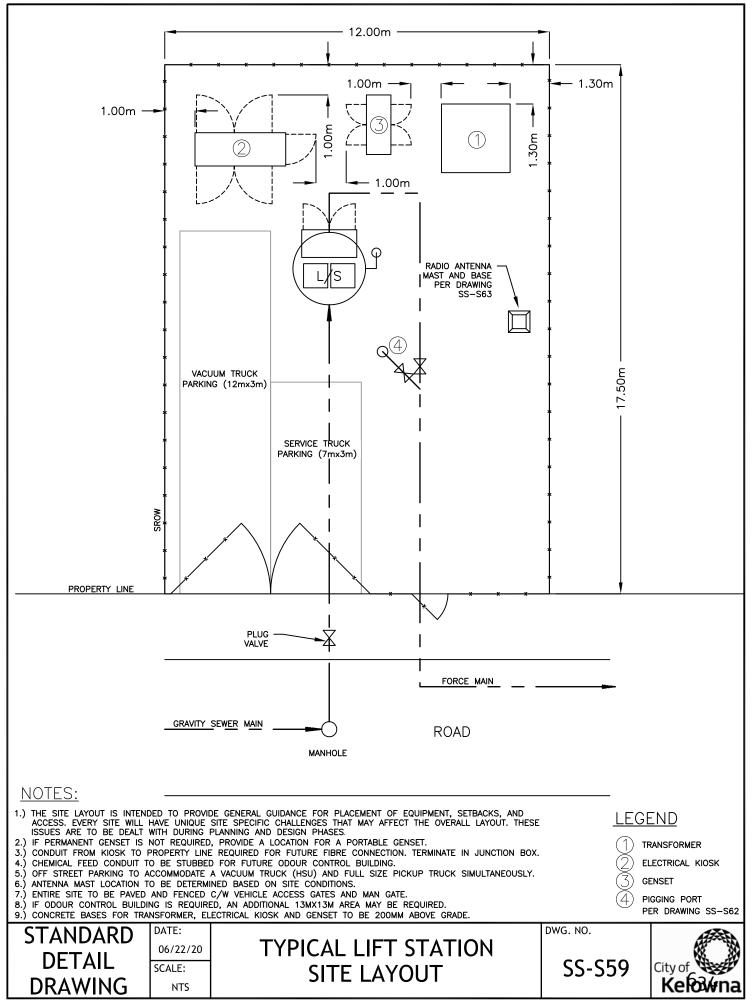


STANDARD DETAIL DRAWINGS

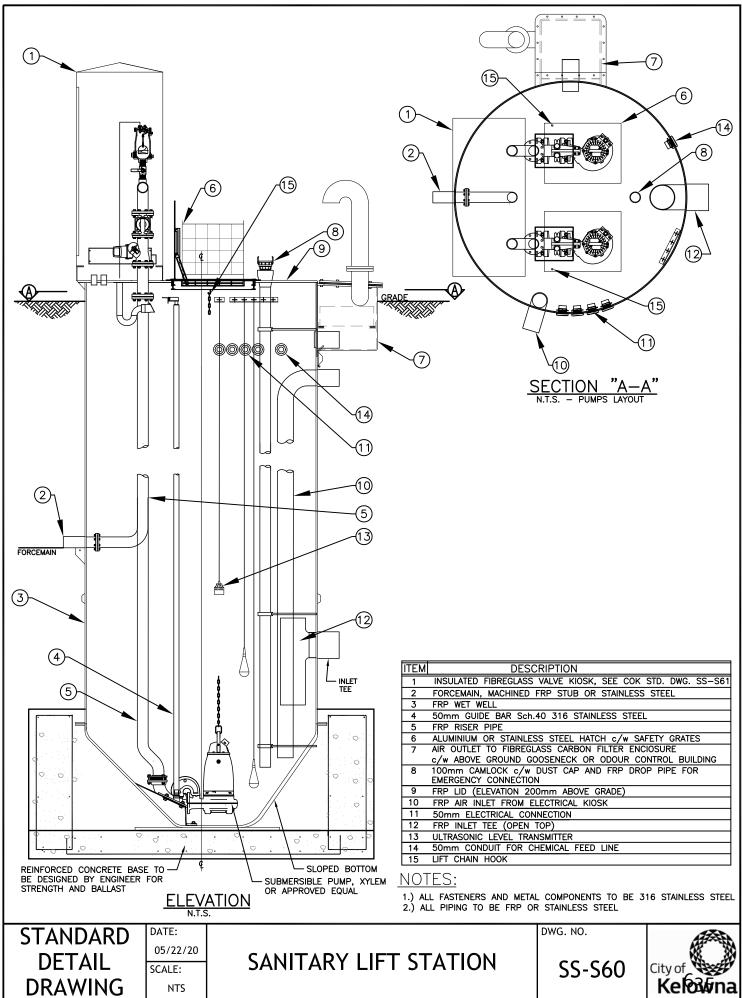


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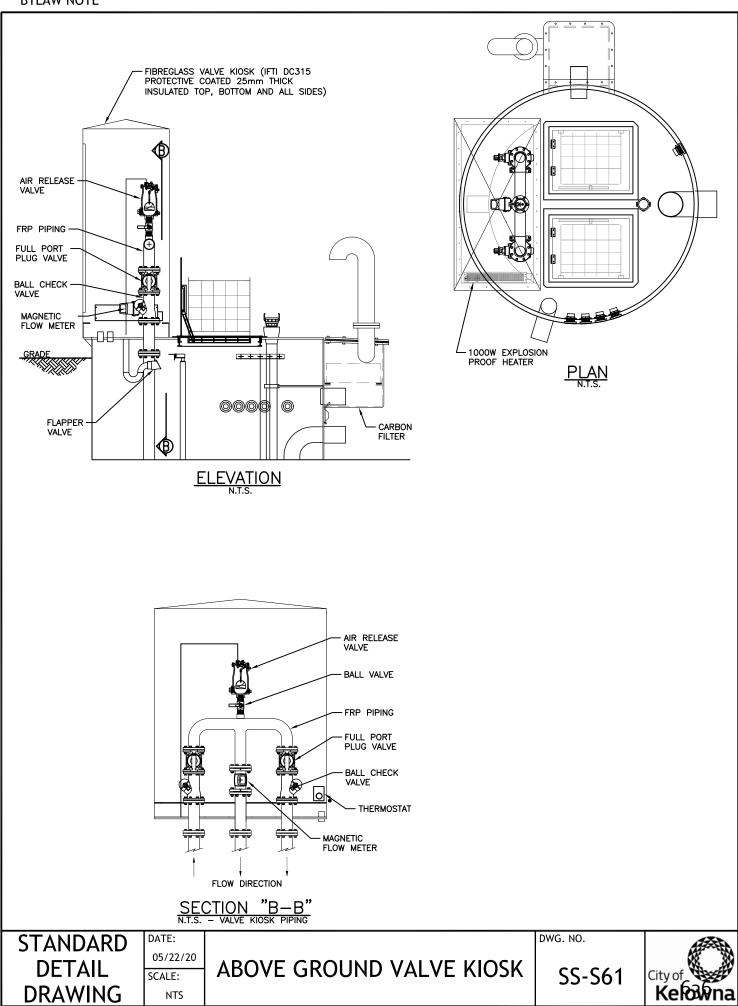


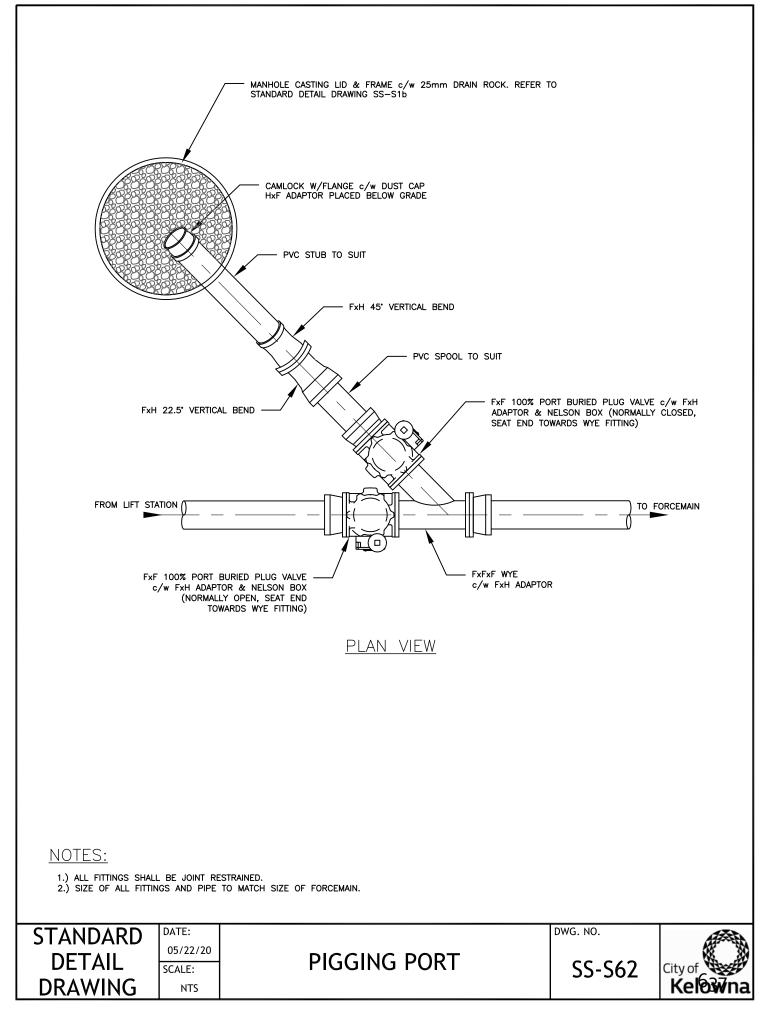


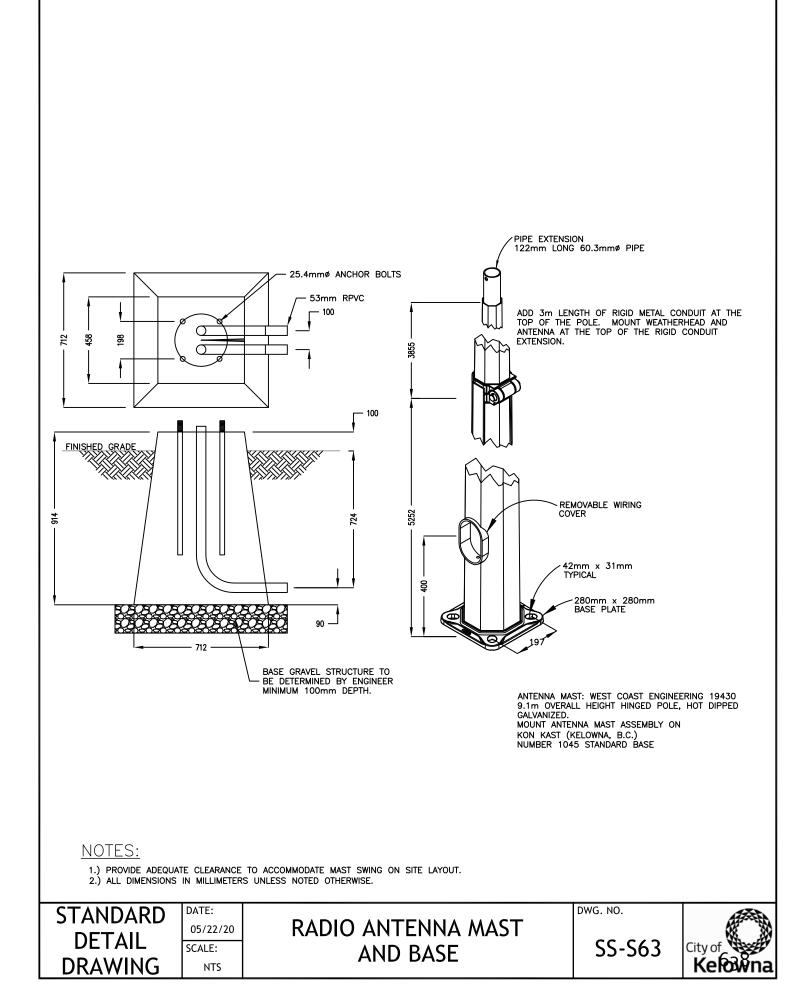




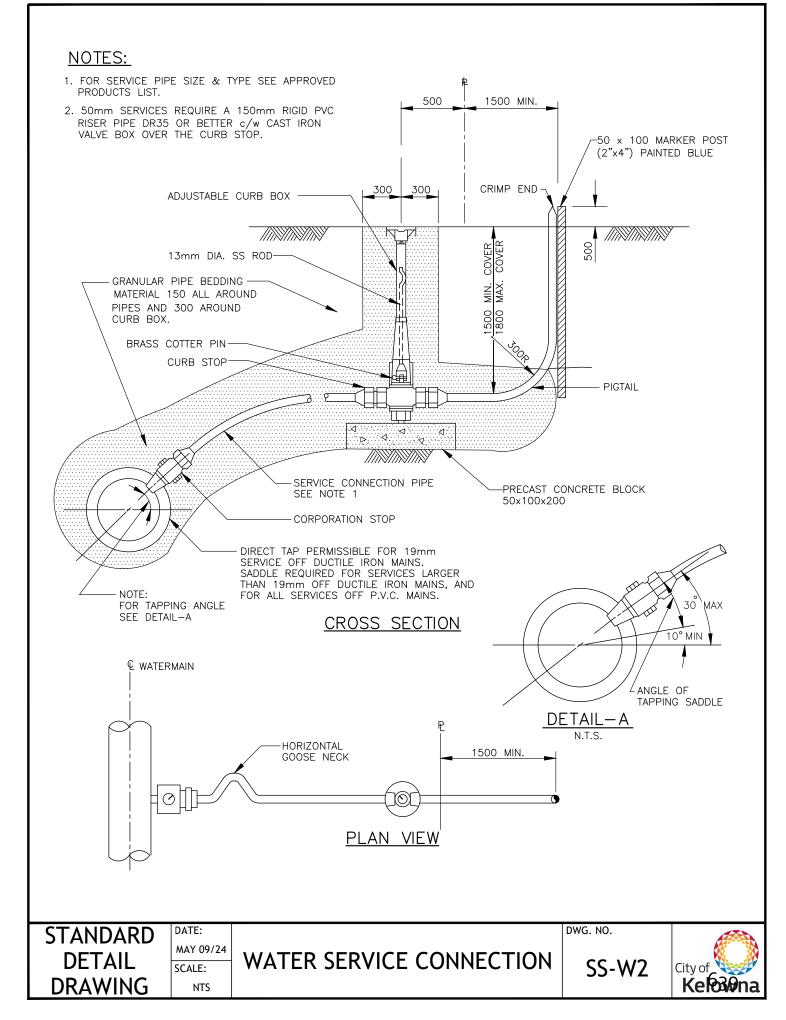


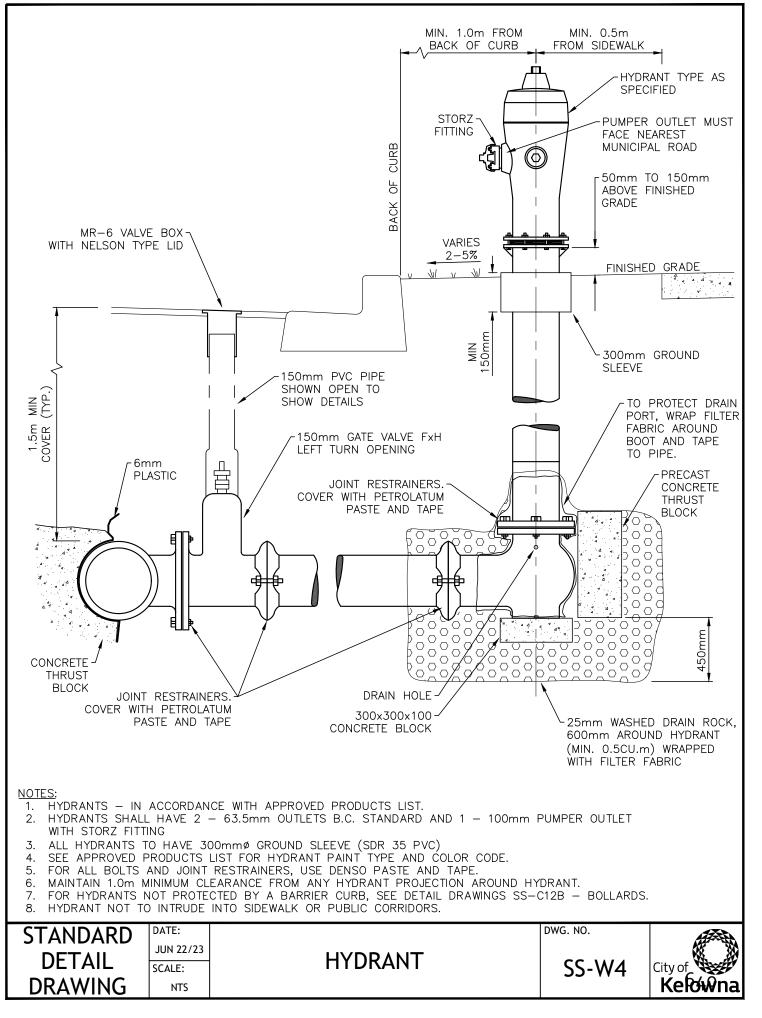


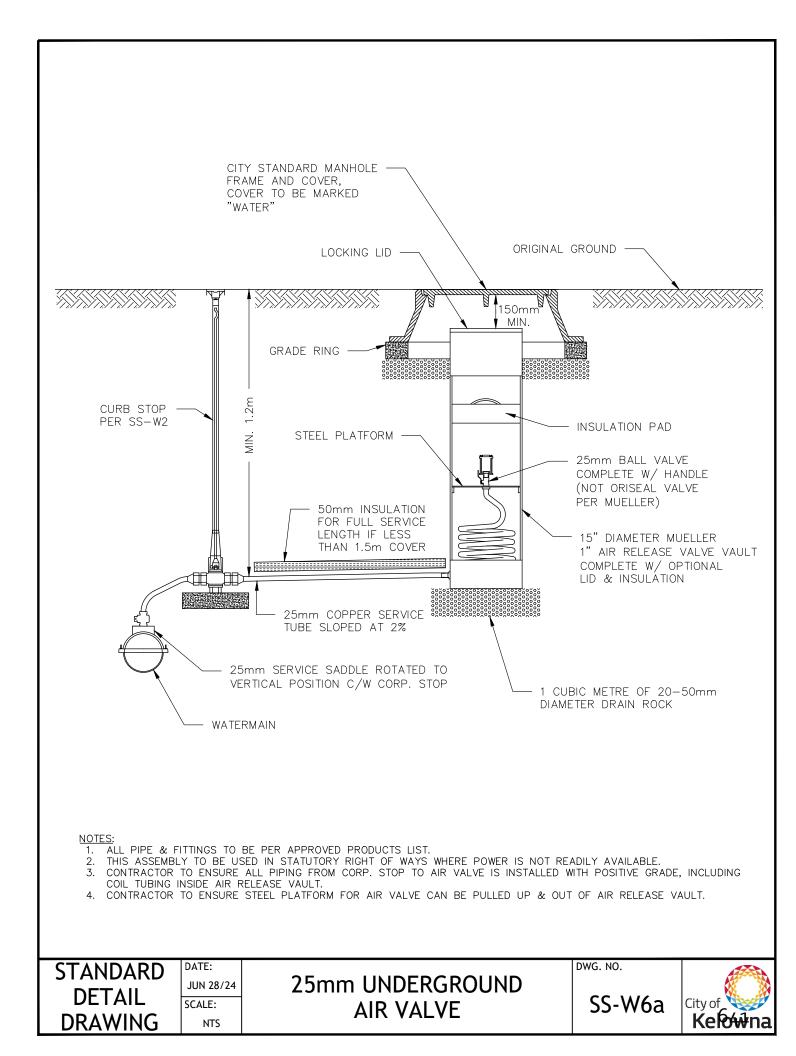


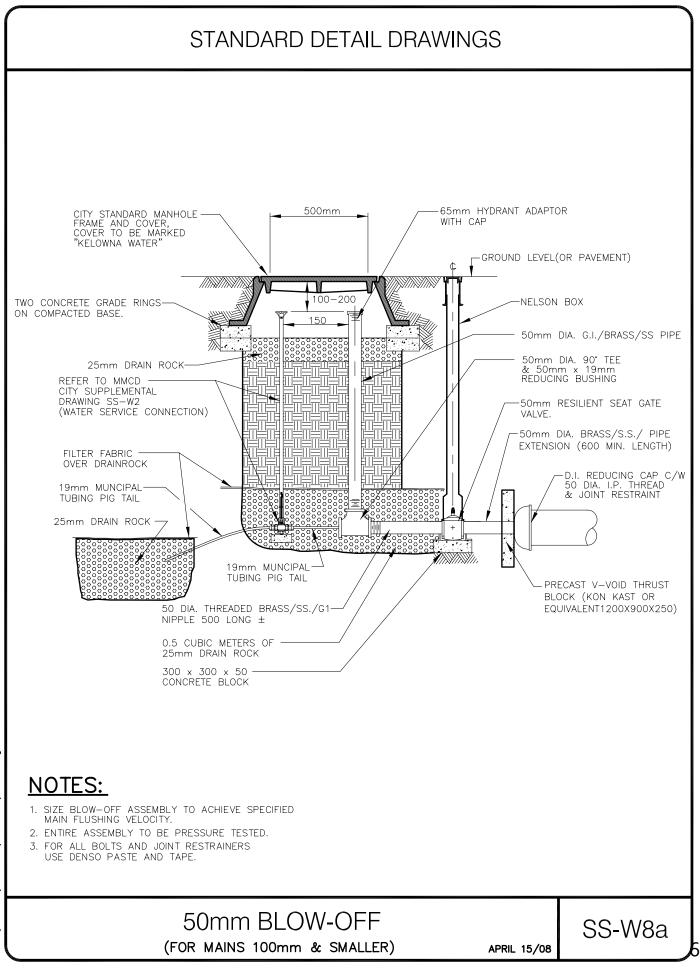


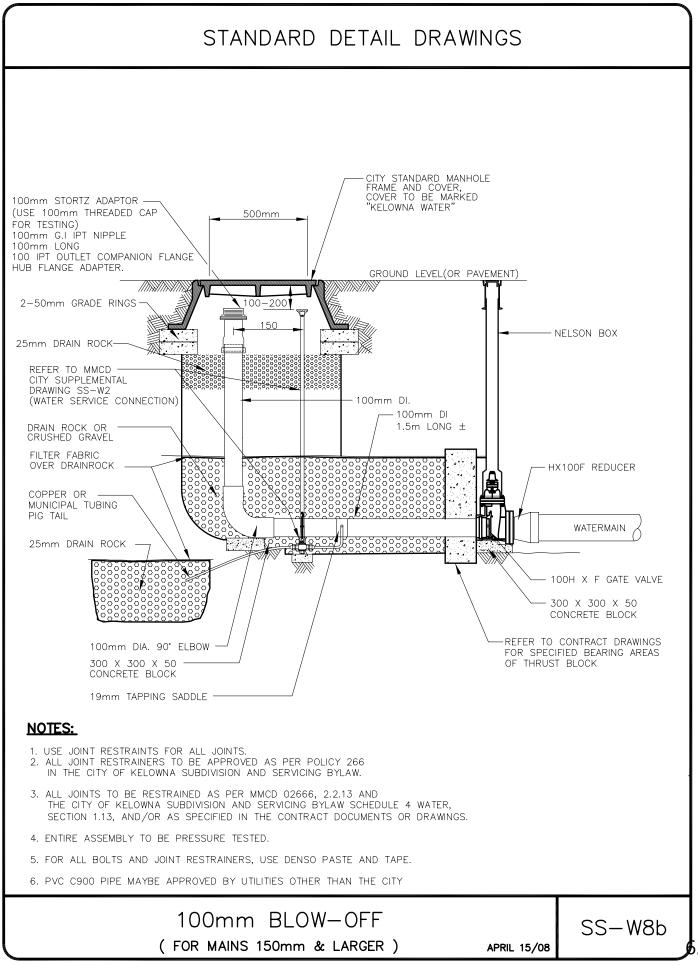
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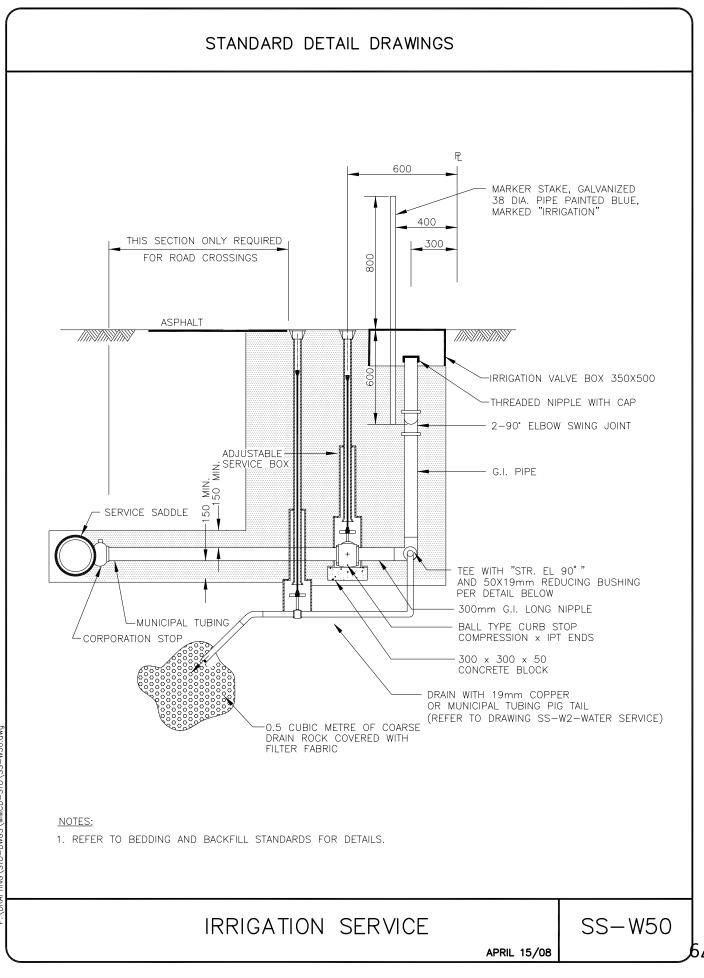




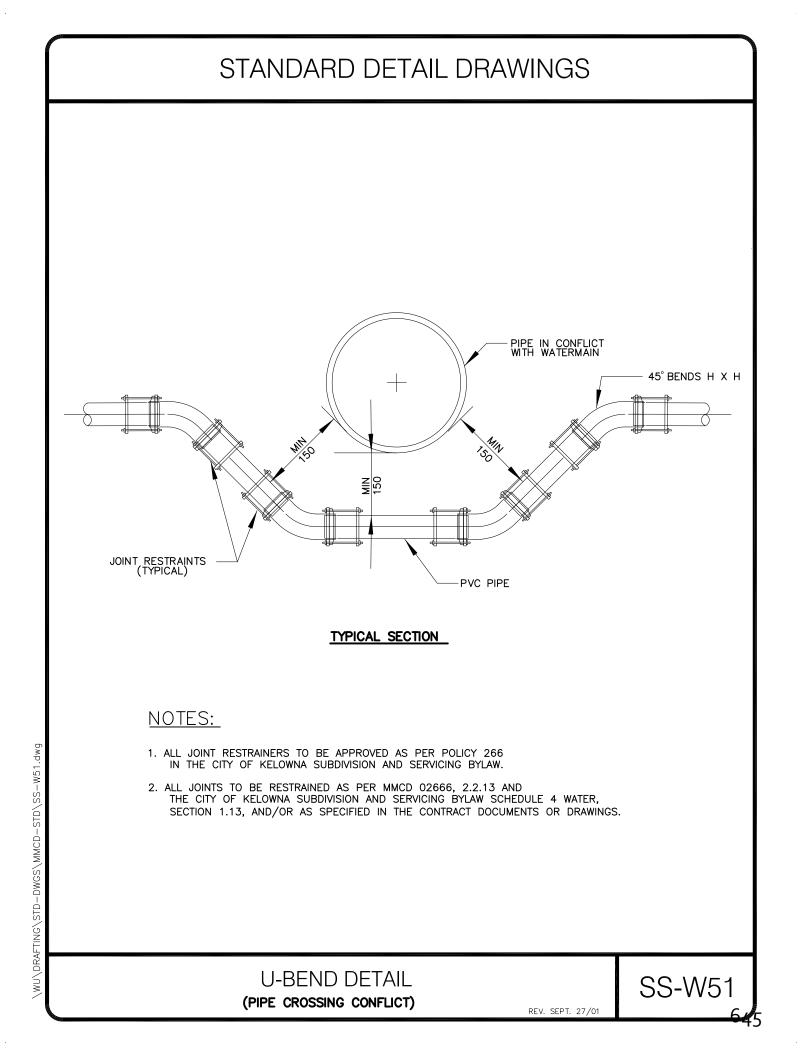


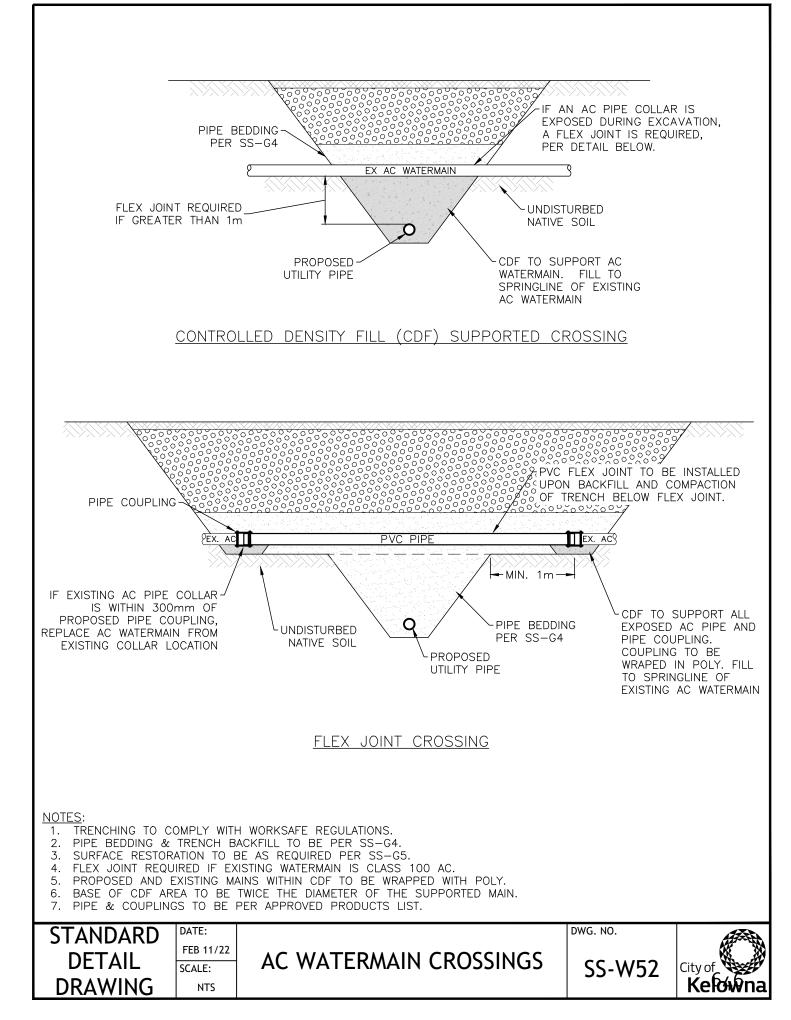


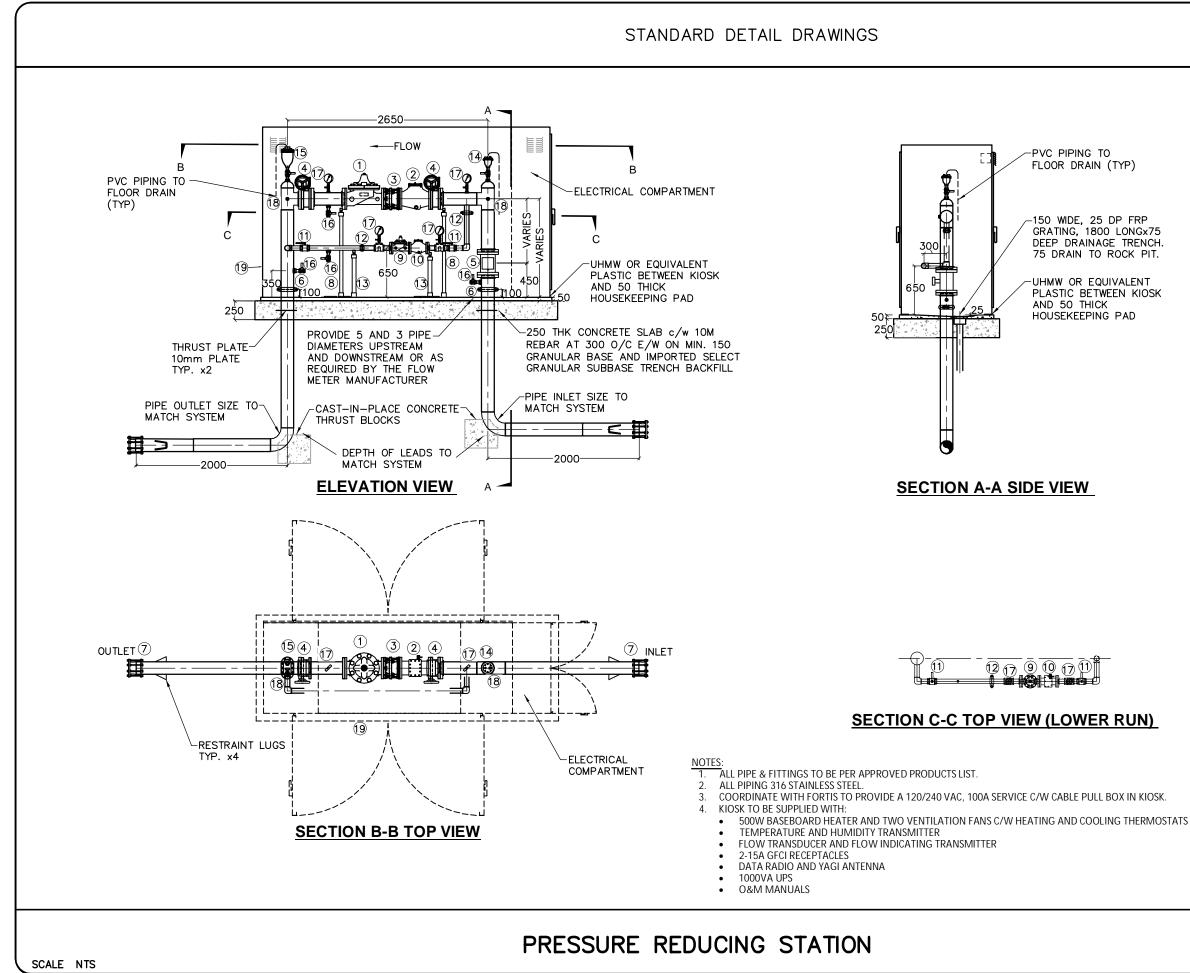




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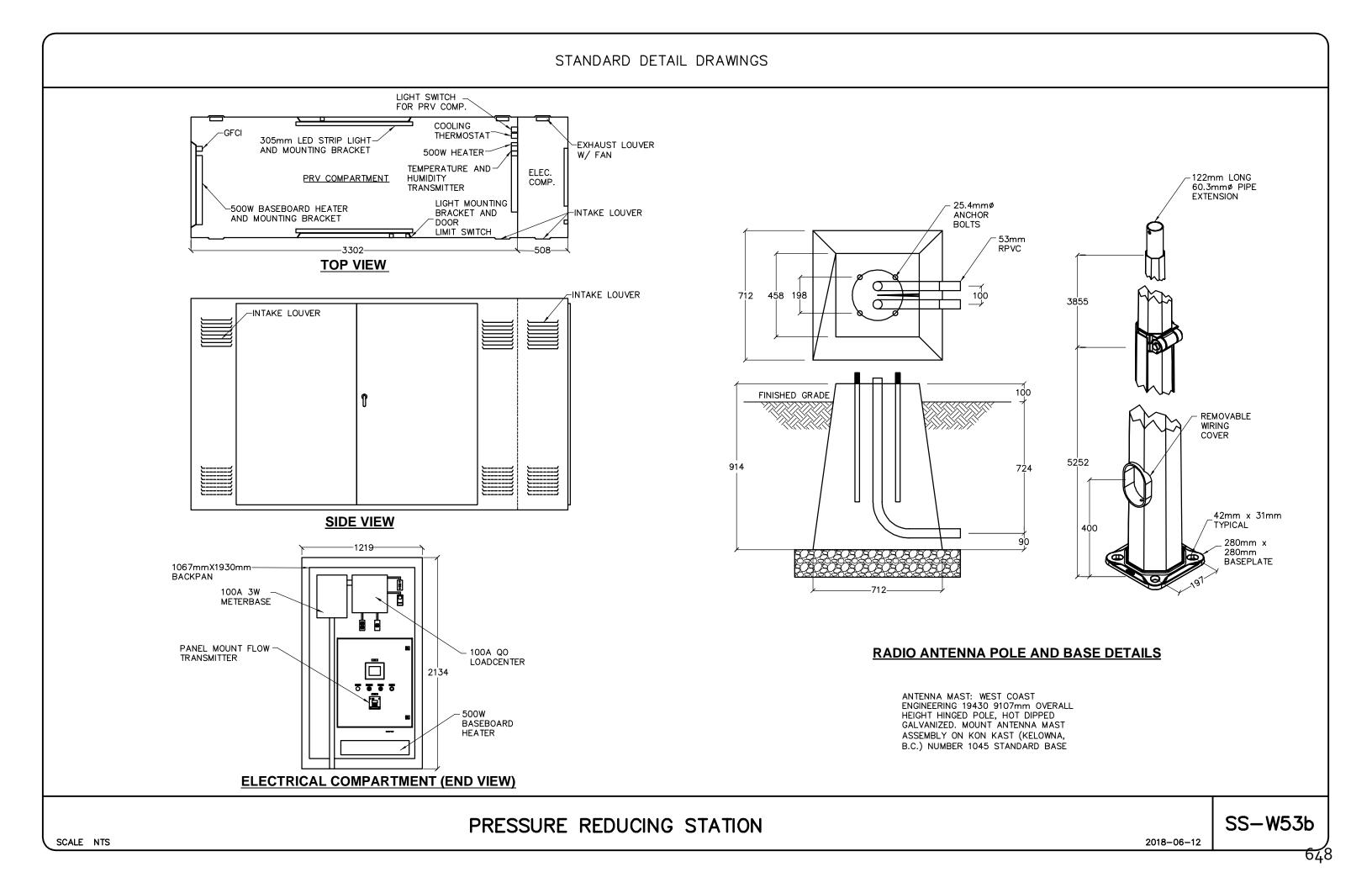




1701	0.7.1	MATERIALS LIST
ITEM 1	QTY 1	DESCRIPTION PRESSURE REDUCING VALVE W/ POSITION INDICATOR, AWWA EPOXY COATING AND S.S. TRIM – APPROVED SUPPLIERS: CLA-VAL OR SINGER
2	1	"H" STRAINER W/ EPOXY COATING, S.S. HARDWARE AND S.S. BLOWDOWN VALVES - APPROVED SUPPLIERS: CLA-VAL OR SINGER
3	1	DISMANTLING JOINT W/ S.S. FASTENERS – APPROVED SUPPLIERS: ROBAR OR OTHER APPROVED SUPPLIER
4	2	BUTTERFLY VALVE W/ S.S. DISC AND HANDWHEEL – APPROVED SUPPLIERS: MUELLER, DEZURIK OR VICTAULIC
5	1	MAG METER W/ REMOTE DISPLAY IN ELECTRICAL CABINET-APPROVED SUPPLIERS: SIEMENS OR ROSEMOUNT
6	2	RIGID COUPLING FOR S.S. – APPROVED SUPPLIERS: VICTAULIC OR SHURJOINT
7	2	EXTERNAL TRANSITION COUPLING – APPROVED SUPPLIERS: ROBAR OR OTHER APPROVED SUPPLIER
8	2	CWS ADJ. GALV. STEEL PIPE SUPPORT
9	1	PRESSURE REDUCING VALVE W/ POSITION INDICATOR, AWWA EPOXY COATING AND S.S. TRIM – APPROVED SUPPLIERS: CLA–VAL OR SINGER (BYPASS)
10	1	"H" STRAINER W/ EPOXY COATING, S.S. HARDWARE AND S.S. BLOWDOWN VALVES – APPROVED SUPPLIERS: CLA-VAL OR SINGER (BYPASS)
11	2	S.S. BALL VALVE (BYPASS)
12	2	RIGID COUPLING FOR S.S. – APPROVED SUPPLIERS: VICTAULIC OR SHURJOINT (BYPASS)
13	2	CWS ADJ. GALV. STEEL PIPE SUPPORT (BYPASS)
14	1	AIR RELEASE VALVE W/ S.S. ISOLATION VALVE AND VENT PIPE – APPROVED SUPPLIERS: VALMATIC OR VENT-O-MAT
15	1	COMBINATION AIR RELEASE VALVE W/ S.S. ISOLATION VALVE AND VENT PIPE – APPROVED SUPPLIERS: VAL-MATIC OR VENT-O-MAT
16	4	THREADOLET W/ S.S. BALL VALVE AND PLUG
17	4	(100mm) LIQUID FILLED PRESSURE GAUGE (6MM NPT) W/ S.S. ISOLATION BALL VALVES AND TEE OR WELDOLET AS REQUIRED – APPROVED SUPPLIERS: SIEMENS OR ABB
18	2	(19mm) THREADOLET FOR WALL MOUNTED PRESSURE TRANSMITTER W/ S.S. BALL VALVE – APPROVED SUPPLIERS: SIEMENS OR ABB
19	1	ALUMINUM QUAD DOOR KIOSK WITH END CABINET PER APPROVED PRODUCTS LIST

2018-06-12

SS-W53a

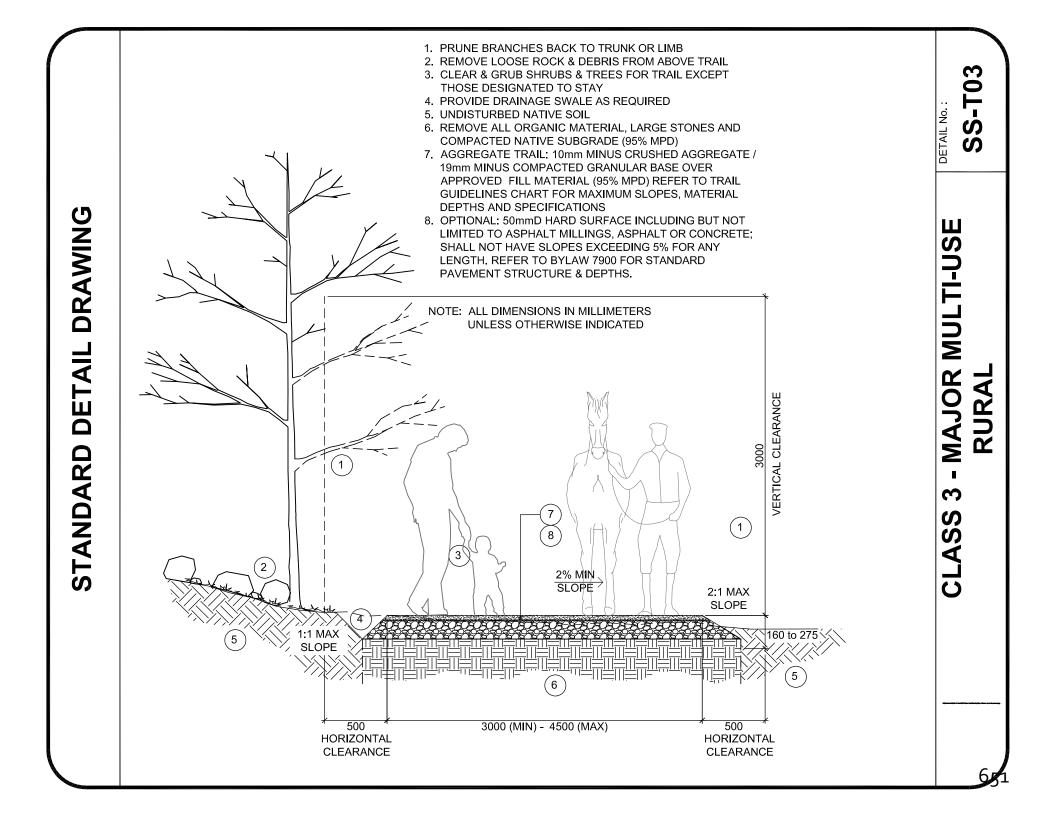


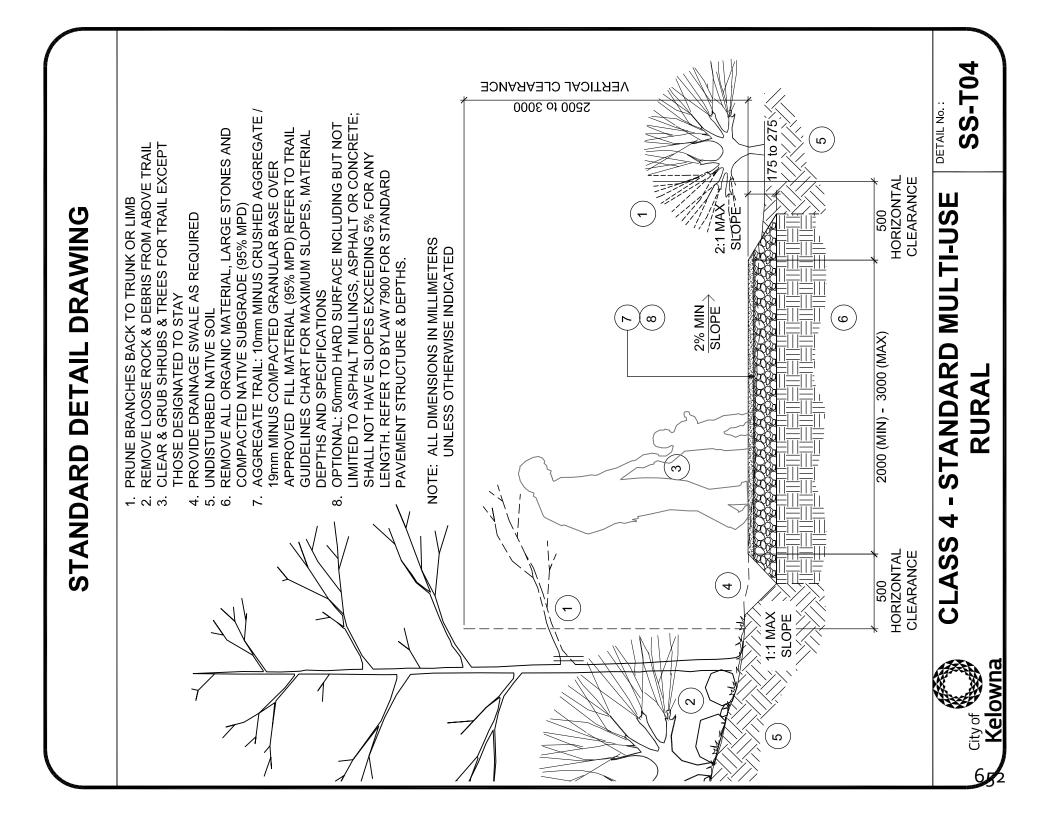
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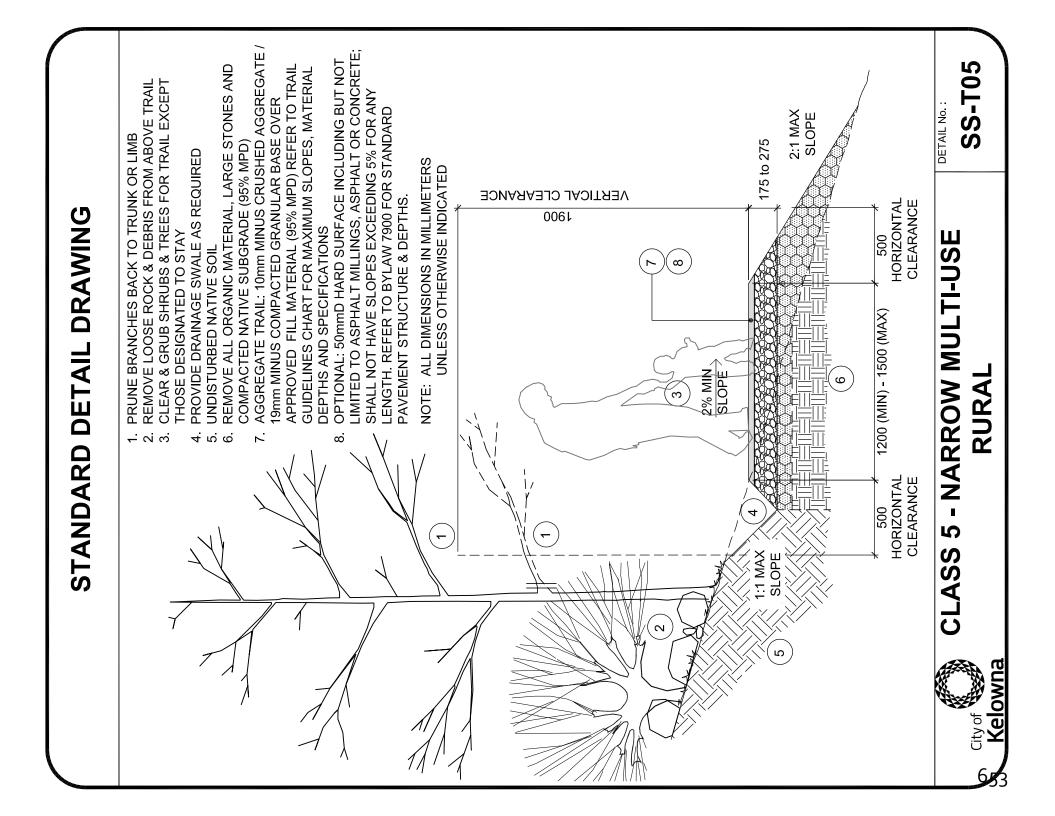
WIN. 2500 VERTICAL CLEARANCE	Image: Second	1200 FURNITURE ZONE
 BROOM-OVER FINISHED CON ACCENT PAVING EDGE, URB COMFORT AMENITY ZONE (E KIOSKS, ETC.) PEDESTRIAN LIGHTING c/w OPPORTUNITY TREE PLANTING SPACED EQ VOLUME PER CITY STANDAR SHARED PATHWAY TO BE B 19mm MINUS COMPACTED C OPTIONAL: SAND LEVELING CHART FOR MAXIMUM SLOP 	N BRAILLE OPPORTUNITY NCH, BIKE RACK, WASTE RECEPTACLES, WAYFINDING SIG HARP-ANGLE CUT-OFF FIXTURE & PAGEANTRY / BANNE ALLY BETWEEN LIGHTING c/w APPROVED GROWING MEDIL OS RRIER FREE & UNIVERSAL ACCESSIBILITY STANDARDS. RANULAR BASE (95% MPD) ED FOR UNIT PAVER SURFACING - REFER TO TRAIL GUI S, MATERIAL DEPTHS AND SPECIFICATIONS RIAL, LARGE STONES AND COMPACT NATIVE SUBGRADE (GNAGE, IER IUM AND JIDELINES

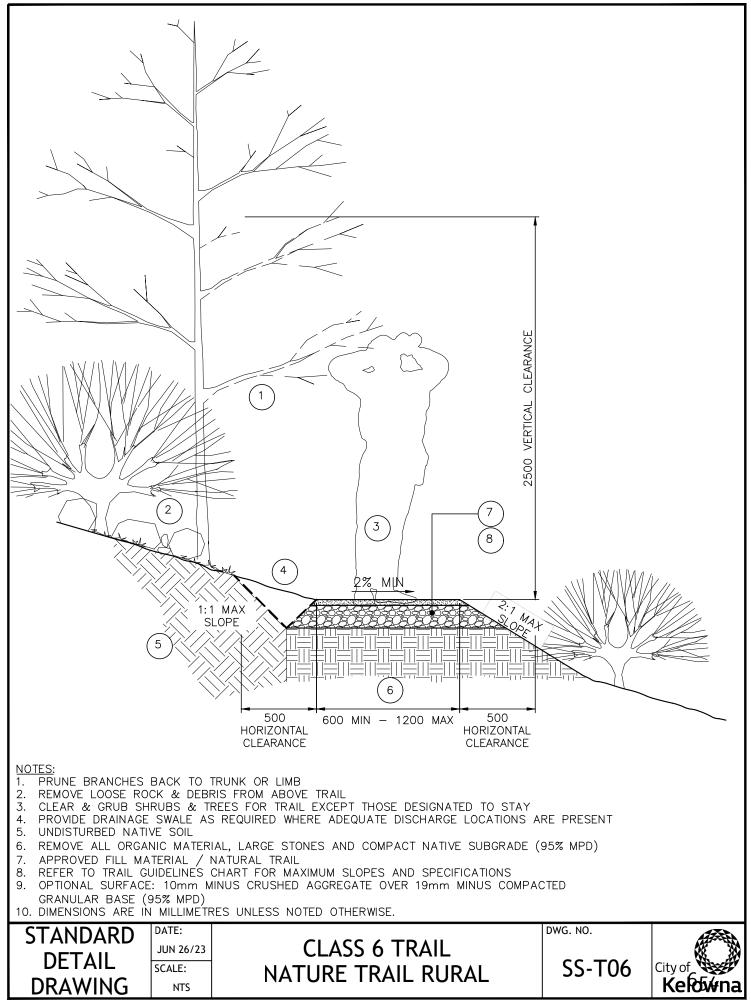


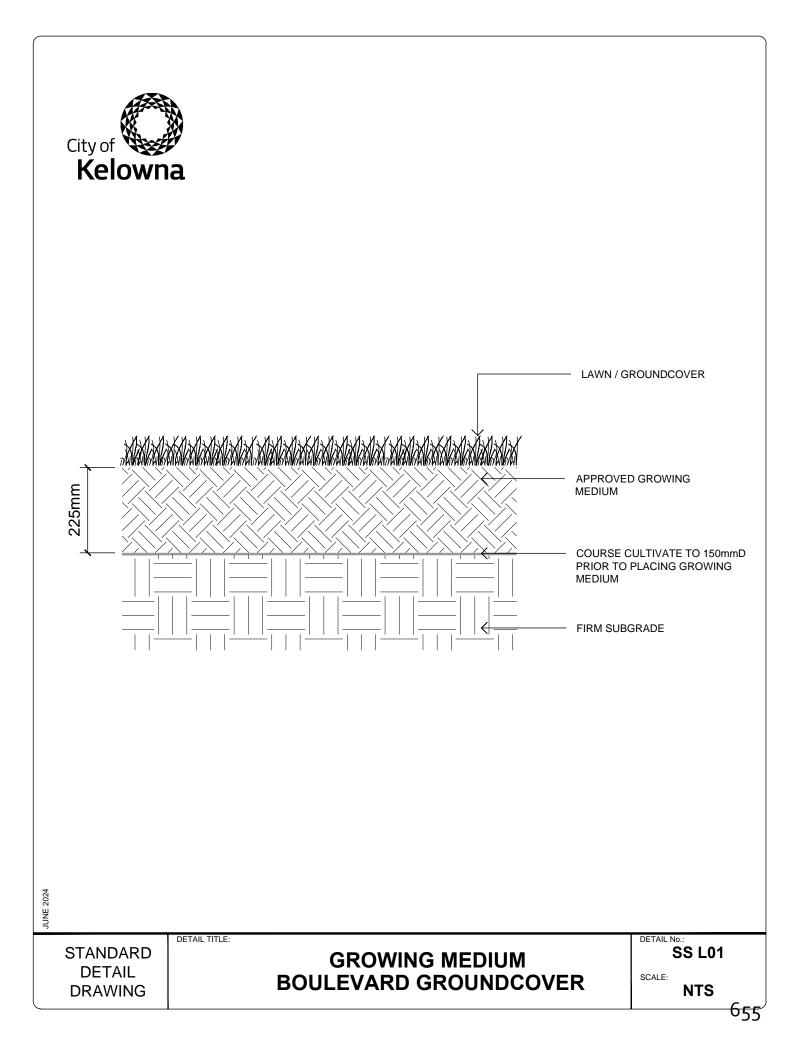
	3			
MIN 2500 VERTICAL CLEARANCE		4 		
1200 HORIZONTAL				ZONTAL
CLEARANCE NOTES: 1. ASPHALT OR ASPHALT MILLING 2. ACCENT PAVING / EDGE RES 3. TREE PLANTING SPACED EQUA VOLUME PER CITY STANDARDS 4. SHARED PATHWAY TO BE BAR 5. 50mm ASPHALT SURFACE. RE DEPTHS. 6. 19mm MINUS COMPACTED GR/ FOR MAXIMUM SLOPES, MATER 7. 75mm MINUS COMPACTED SUI MAXIMUM SLOPES, MATERIAL I 8. REMOVE ALL ORGANIC MATERI 9. ALL DIMENSIONS IN MILLIMETRI	GS PAVING TRAINT SLLY BETWEEN LIGHTING of STRIER FREE & UNIVERSAL FER TO BYLAW 7900 FOR ANULAR BASE (95% MPD) RIAL DEPTHS AND SPECIFICATIO DEPTHS AND SPECIFICATIO AL, LARGE STONES AND	W APPROVED GROWING MEDIUM ACCESSIBILITY STANDARDS STANDARD PAVEMENT STRUCT R REFER TO TRAIL GUIDELINES CATIONS EFER TO TRAIL GUIDELINES CHA DNS COMPACT NATIVE SUBGRADE (9	CLEARAN M AND FURE S CHART RT FOR 5% MPD)	
STANDARD DETAIL DRAWING NTS	-	S 2 TRAIL LTI-USE URBAN	dwg. no.	City of Kelowna

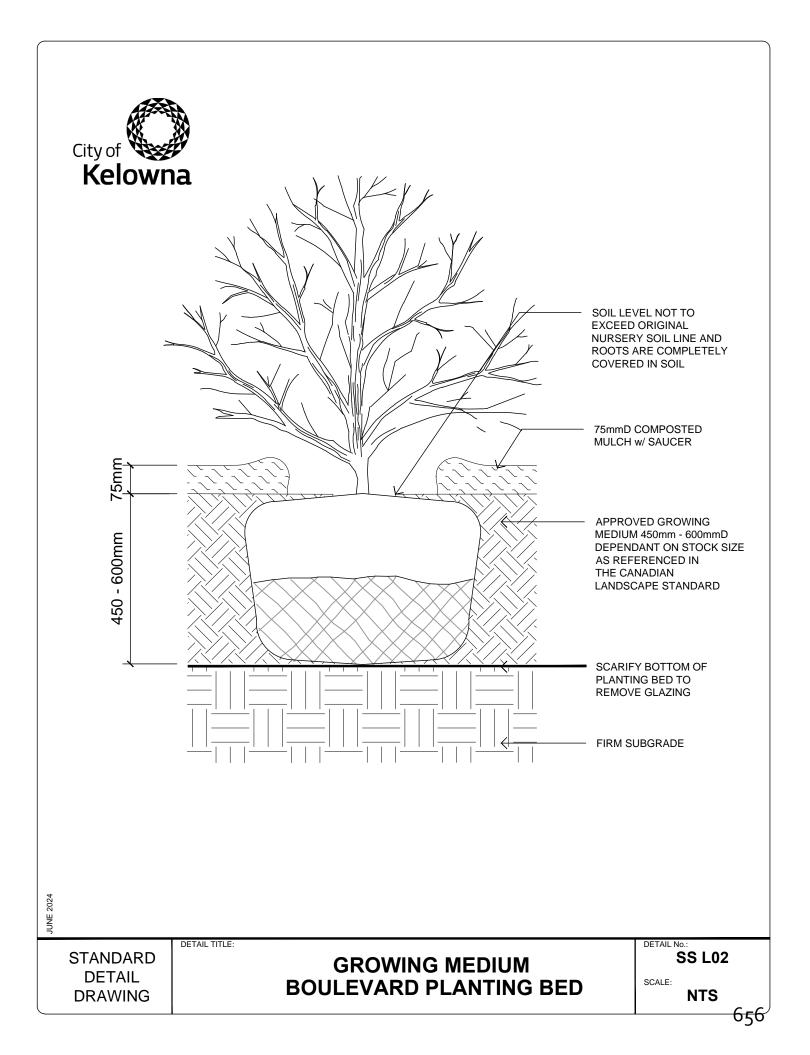


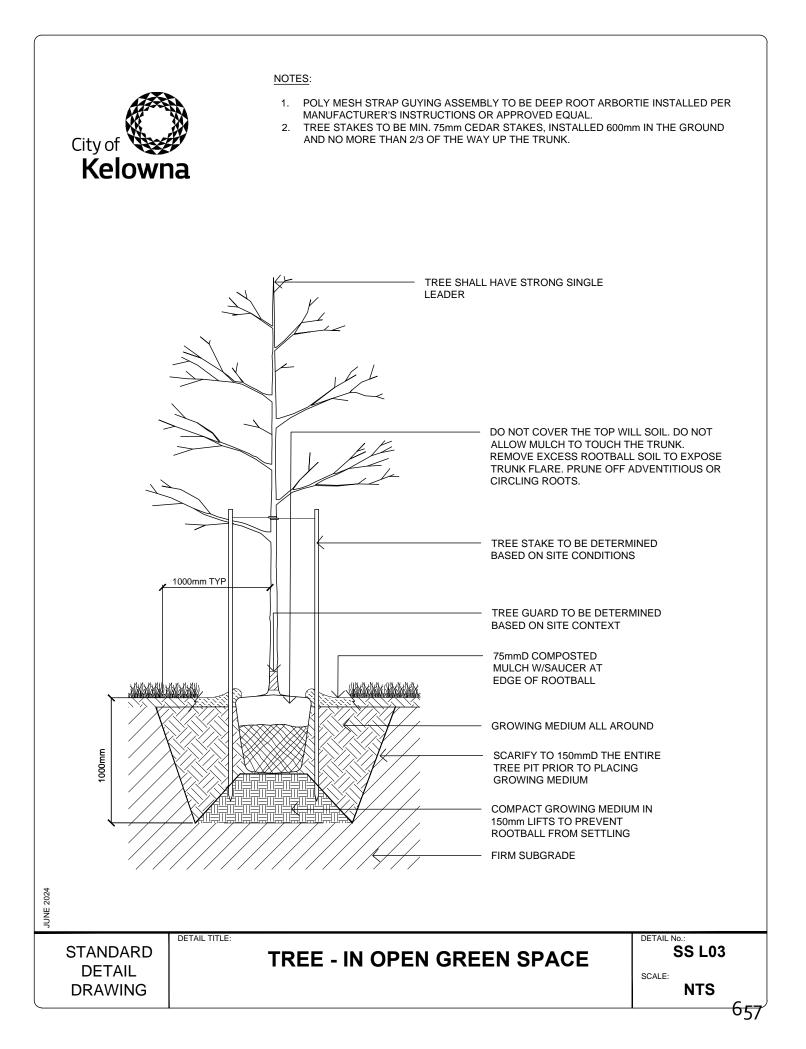


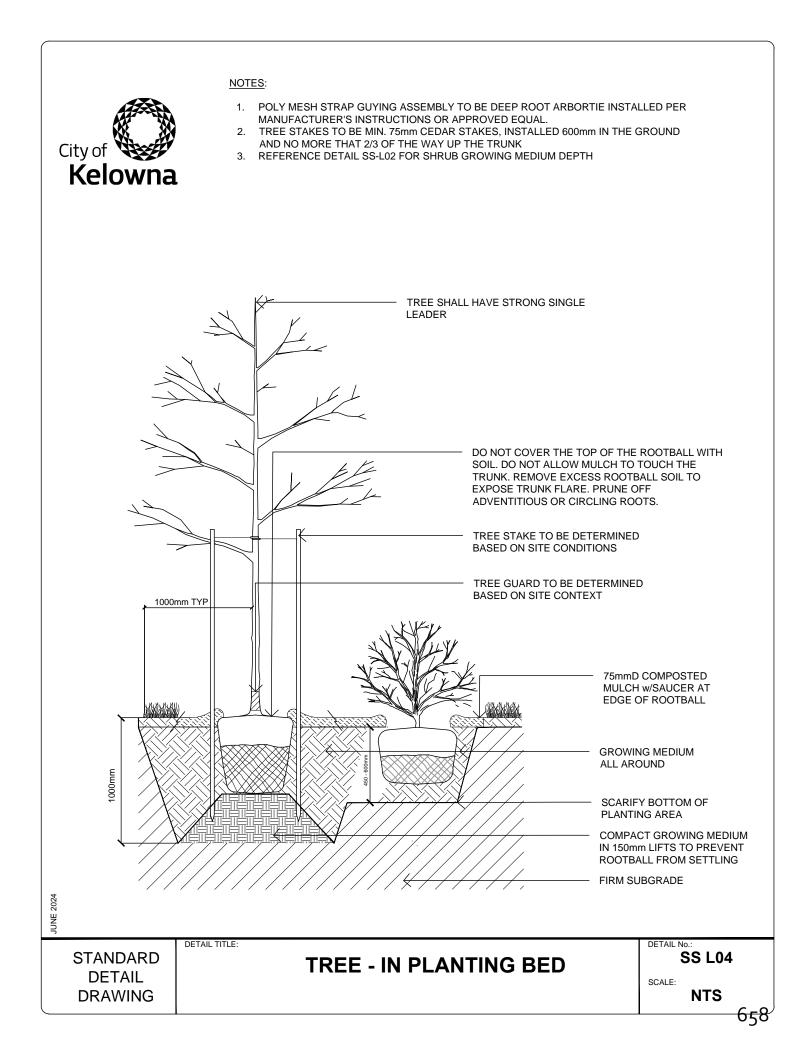


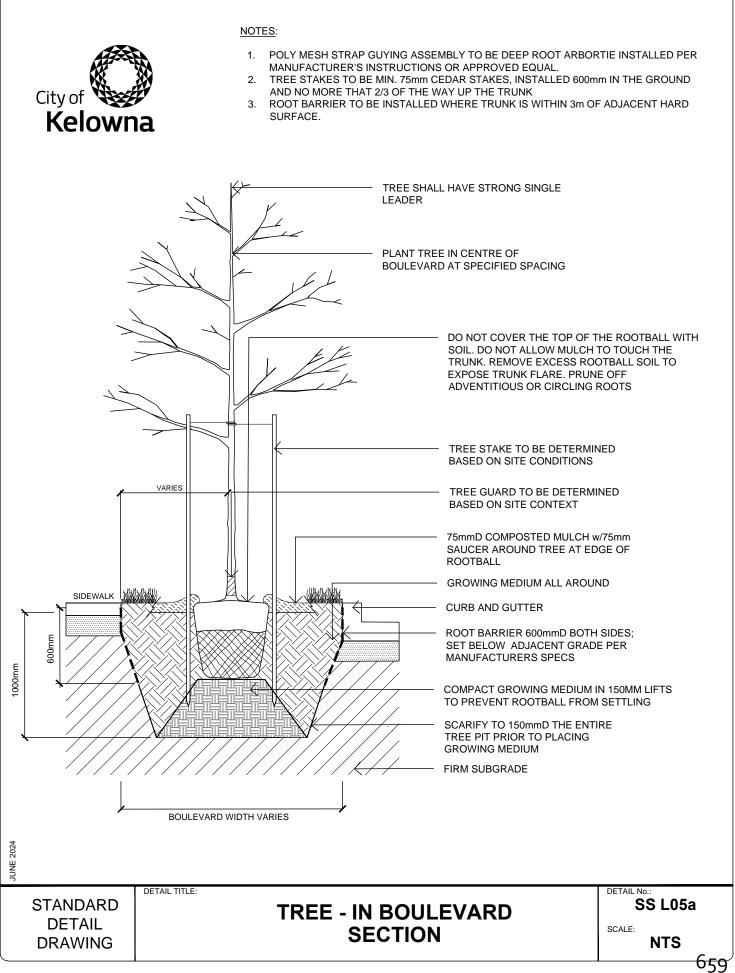


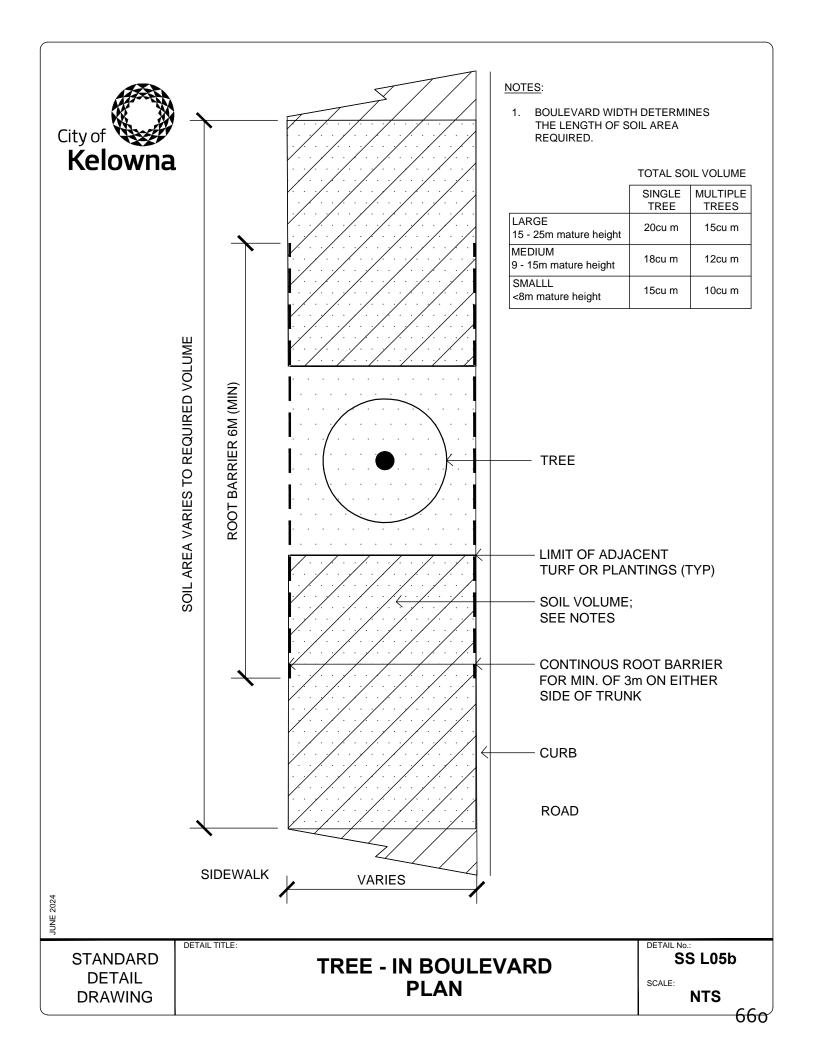


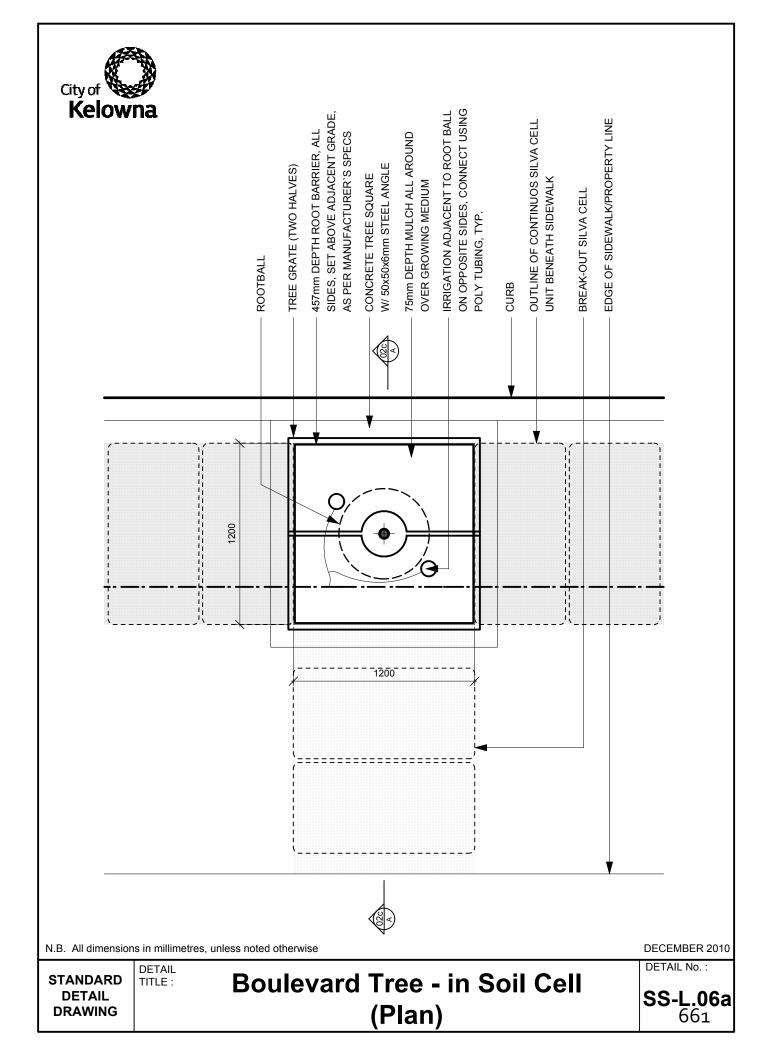


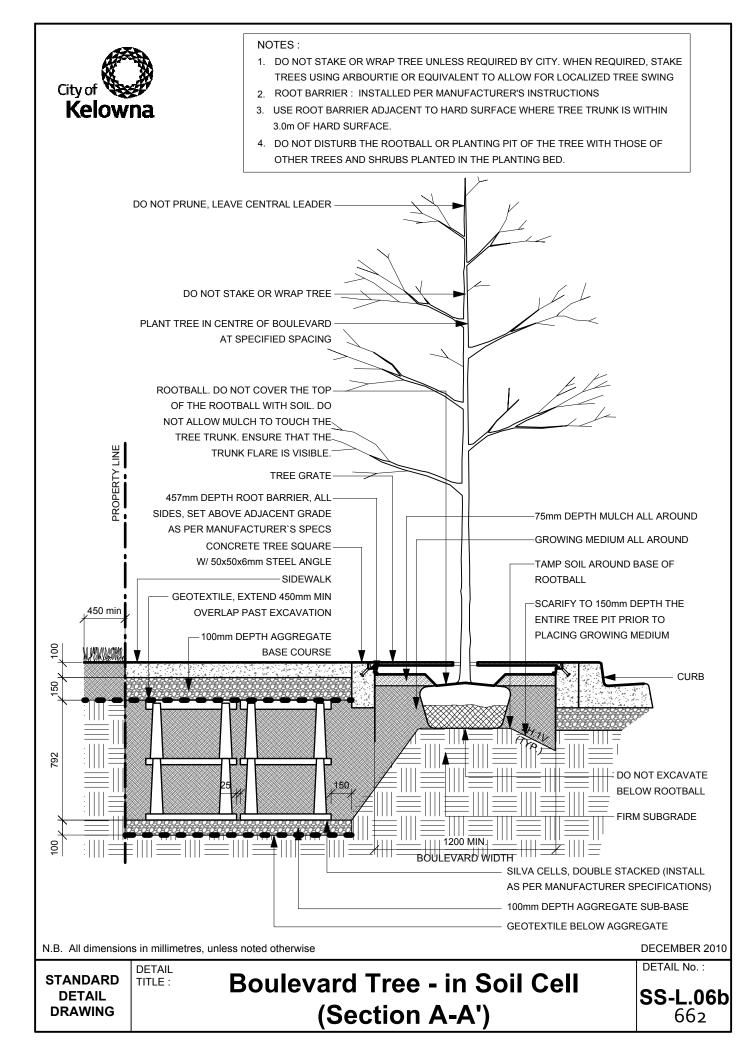


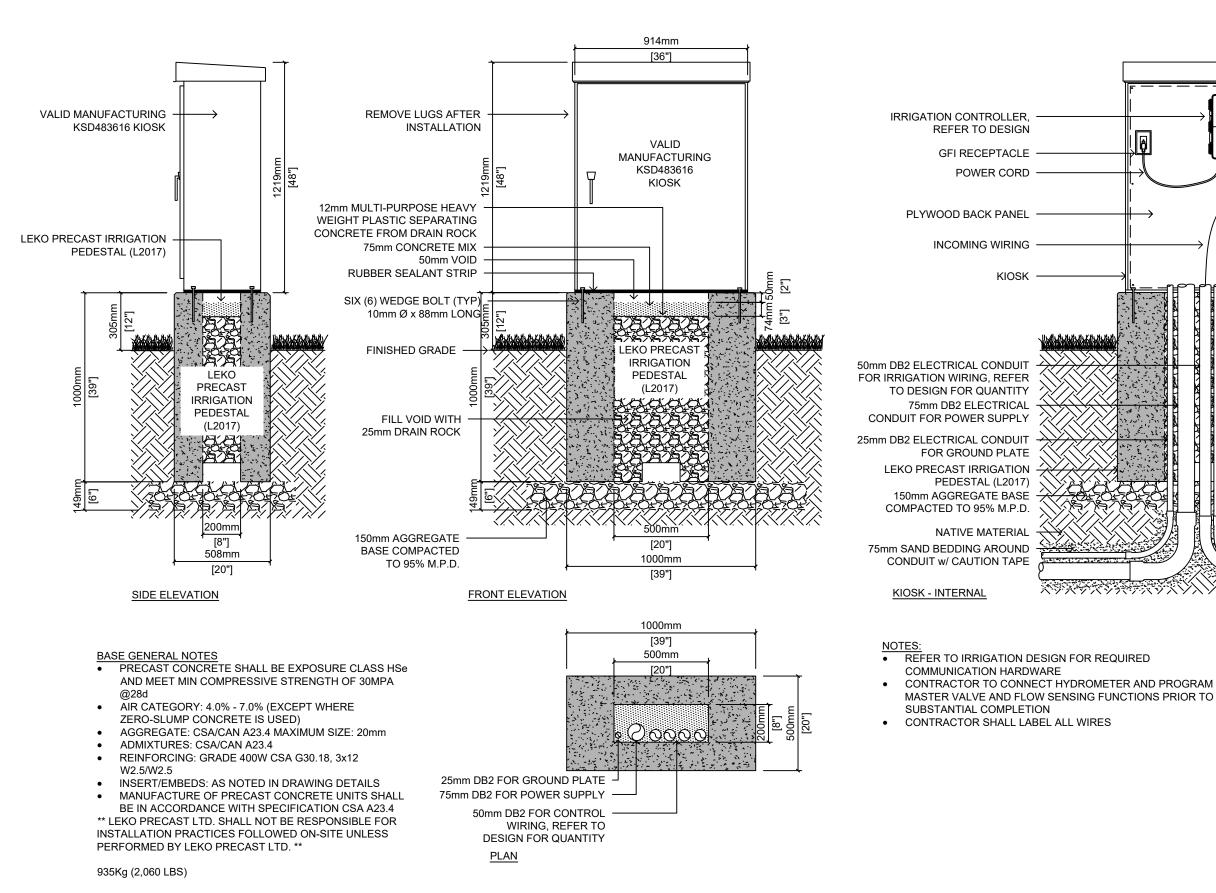


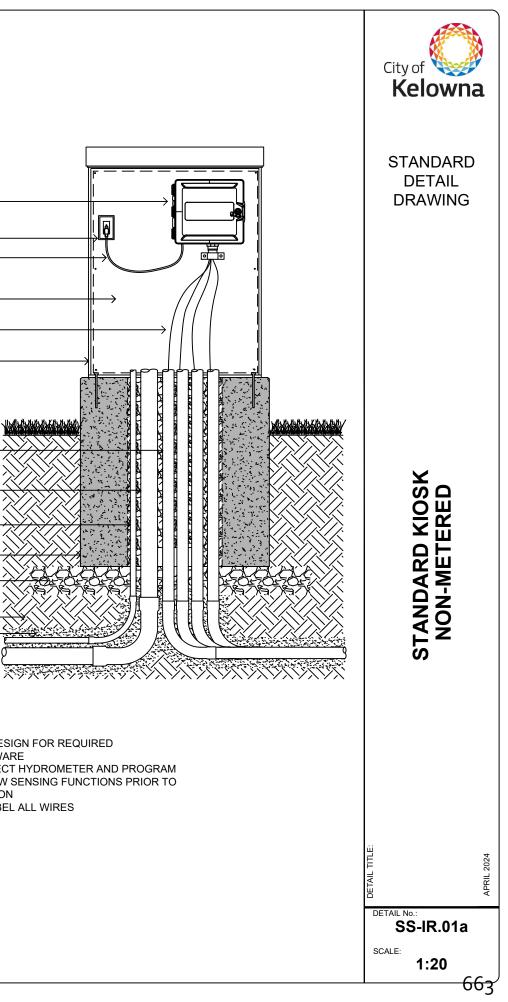


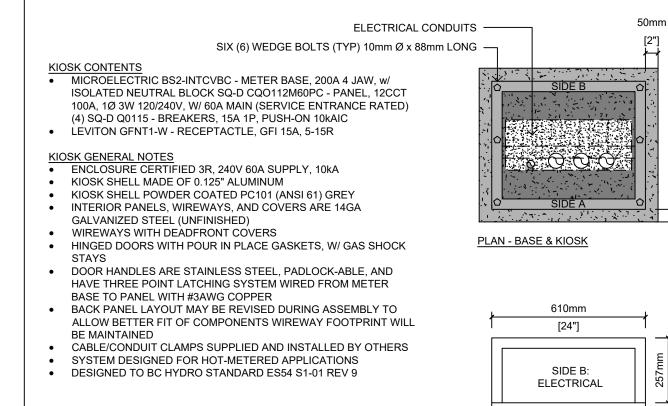






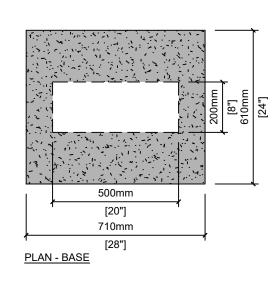






CONTROLLER NOTES:

- CONTRACTOR TO INSTALL RAIN BIRD IQ NCC 4G CELLULAR CARTRIDGE
- CONTRACTOR TO CONNECT HYDROMETER AND . PROGRAM MASTER VALVE AND FLOW SENSING FUNCTIONS PRIOR TO SUBSTANTIAL COMPLETION
- CONTRACTOR SHALL TO LABEL ALL WIRES ٠



SIDE A:

CONTROLLER

PLAN - KIOSK

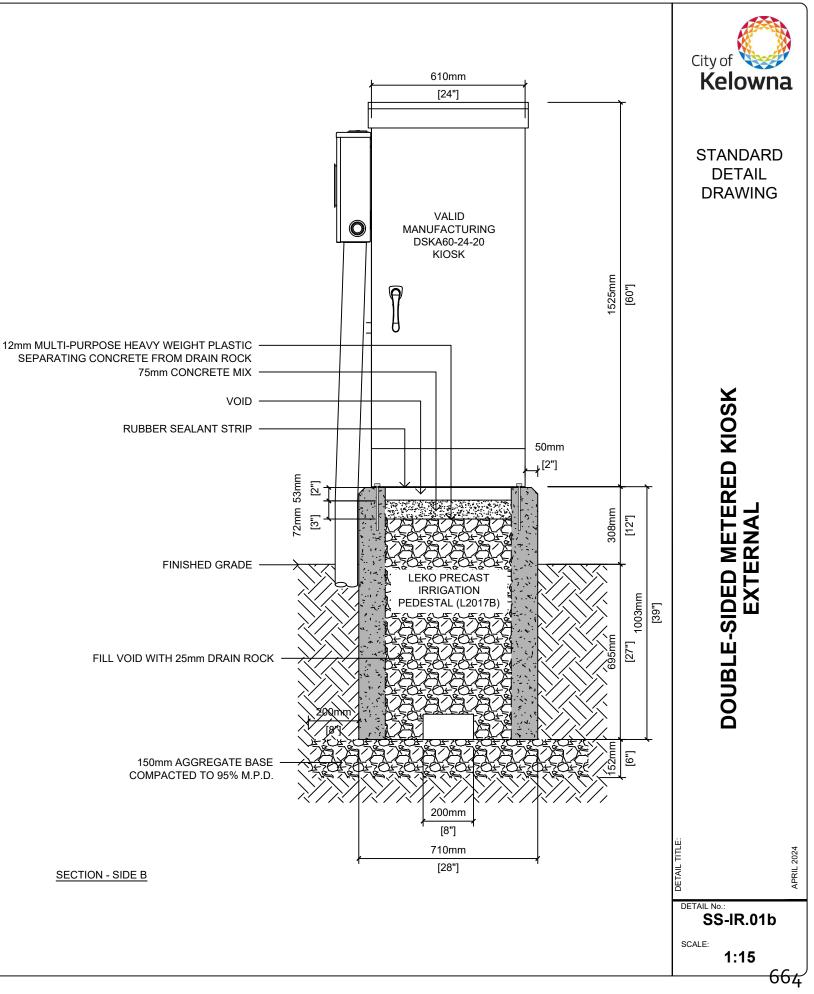
[2]

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203m [8"]

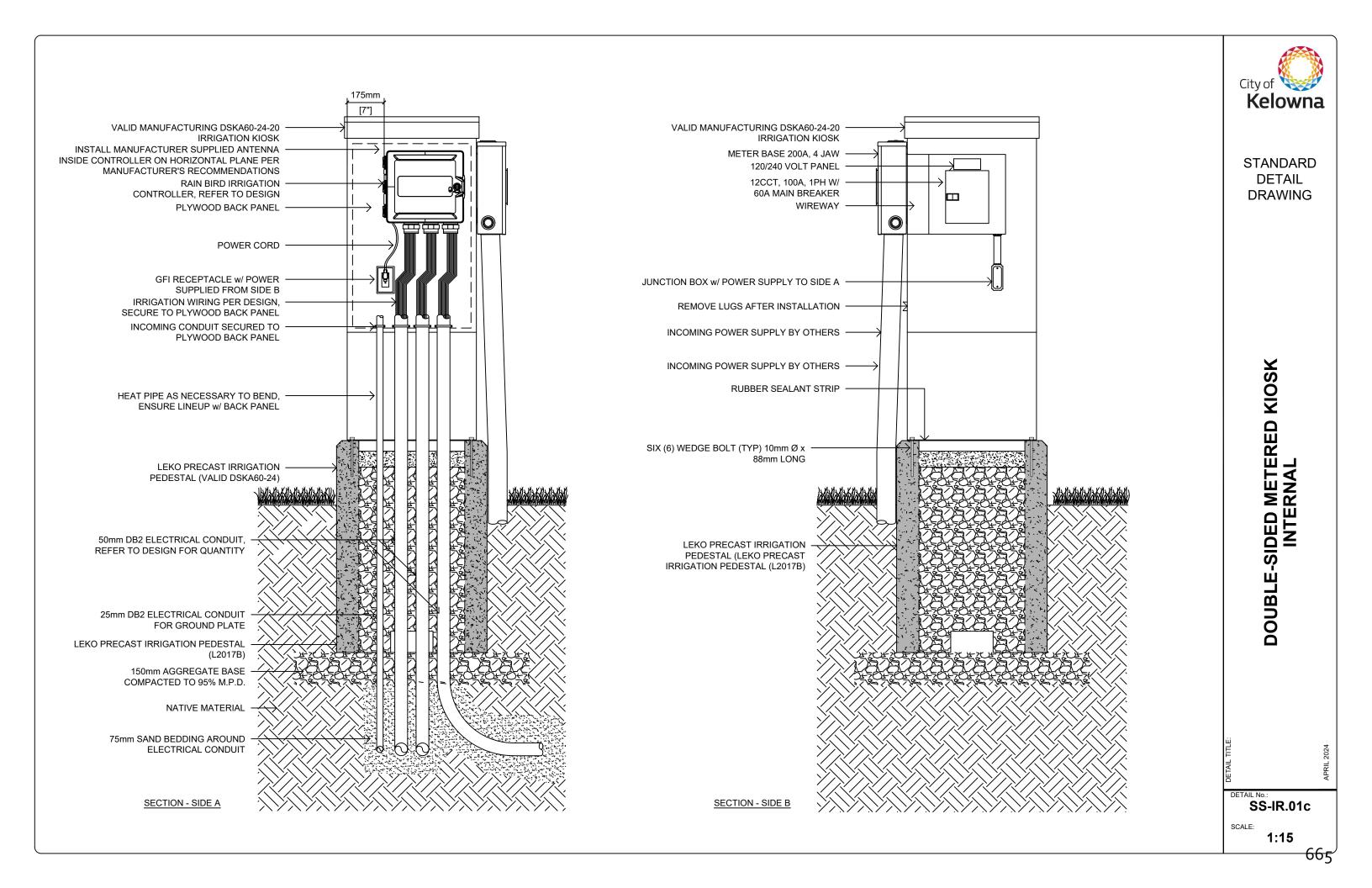


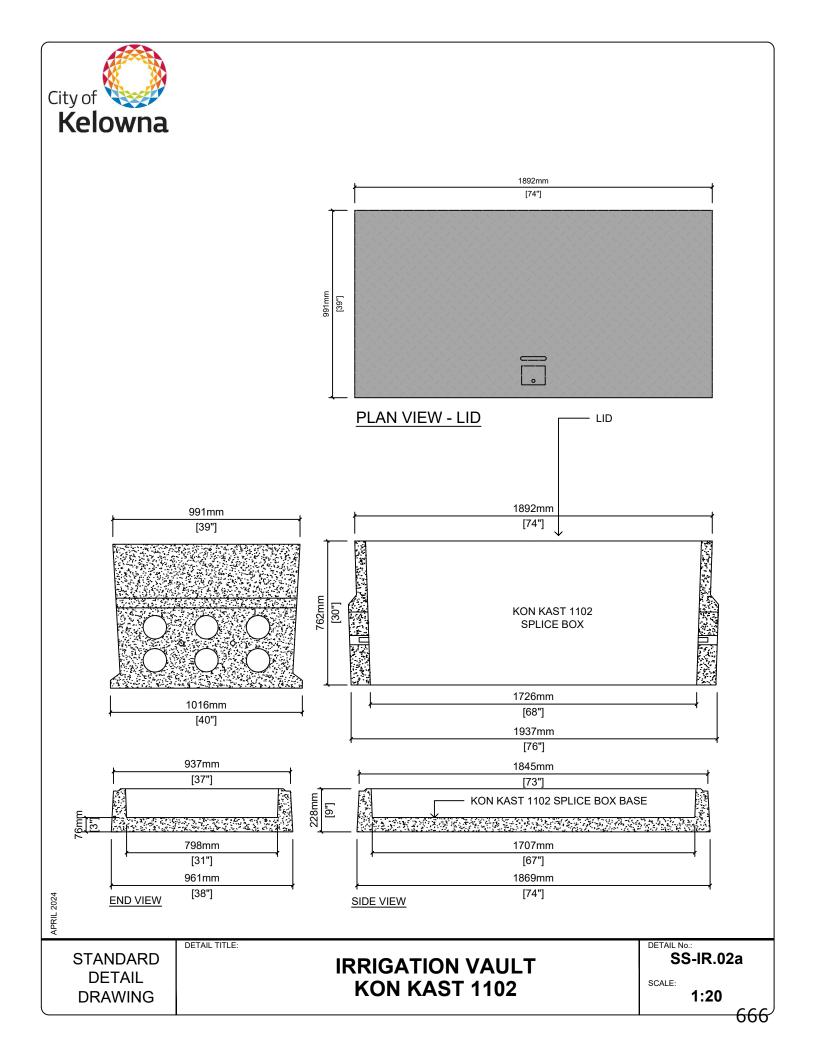
BASE GENERAL NOTES PRECAST CONCRETE SHALL BE EXPOSURE CLASS HSe AND MEET MIN COMPRESSIVE STRENGTH OF 30MPA @28d

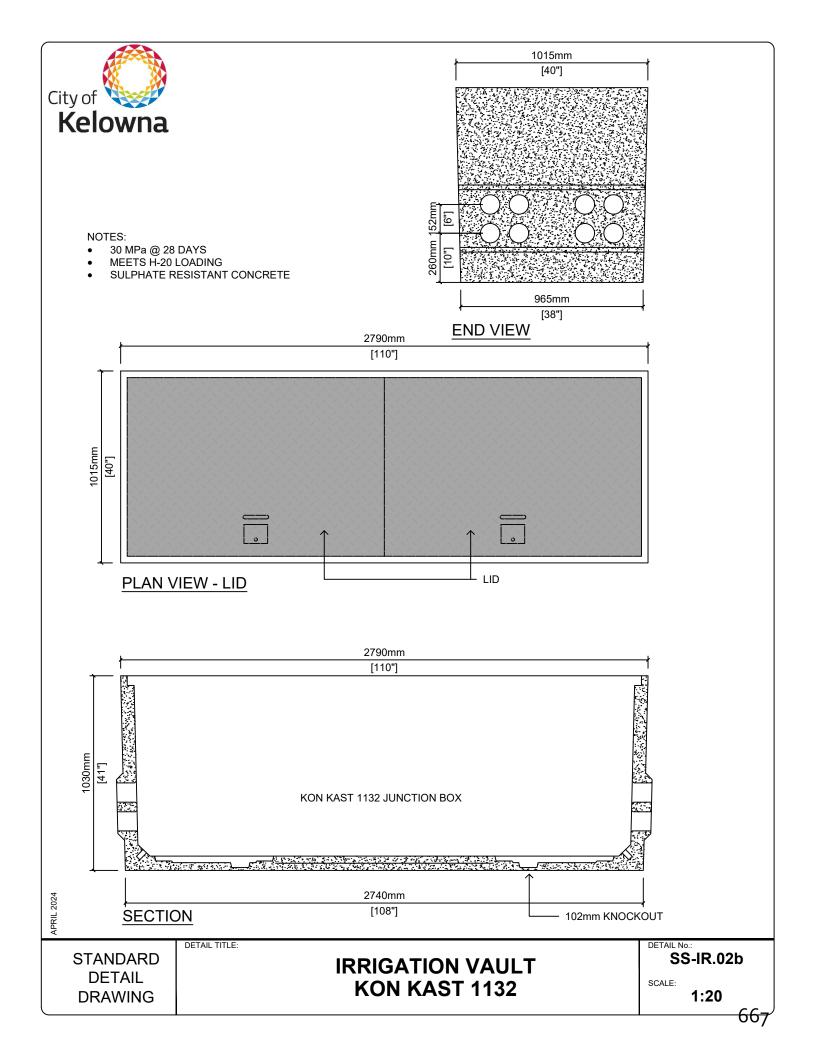
- AIR CATEGORY: 4.0% 7.0% (EXCEPT WHERE ZERO-SLUMP . CONCRETE IS USED)
- AGGREGATE: CSA/CAN A23.4 MAXIMUM SIZE: 20mm
- ADMIXTURES: CSA/CAN A23.4
- REINFORCING: GRADE 400W CSA G30.18, 3x12 W2.5/W2.5 ٠
- INSERT/EMBEDS: AS NOTED IN DRAWING DETAILS ٠
- MANUFACTURE OF PRECAST CONCRETE UNITS SHALL BE IN ٠ ACCORDANCE WITH SPECIFICATION CSA A23.4 ** LEKO PRECAST LTD. SHALL NOT BE RESPONSIBLE FOR

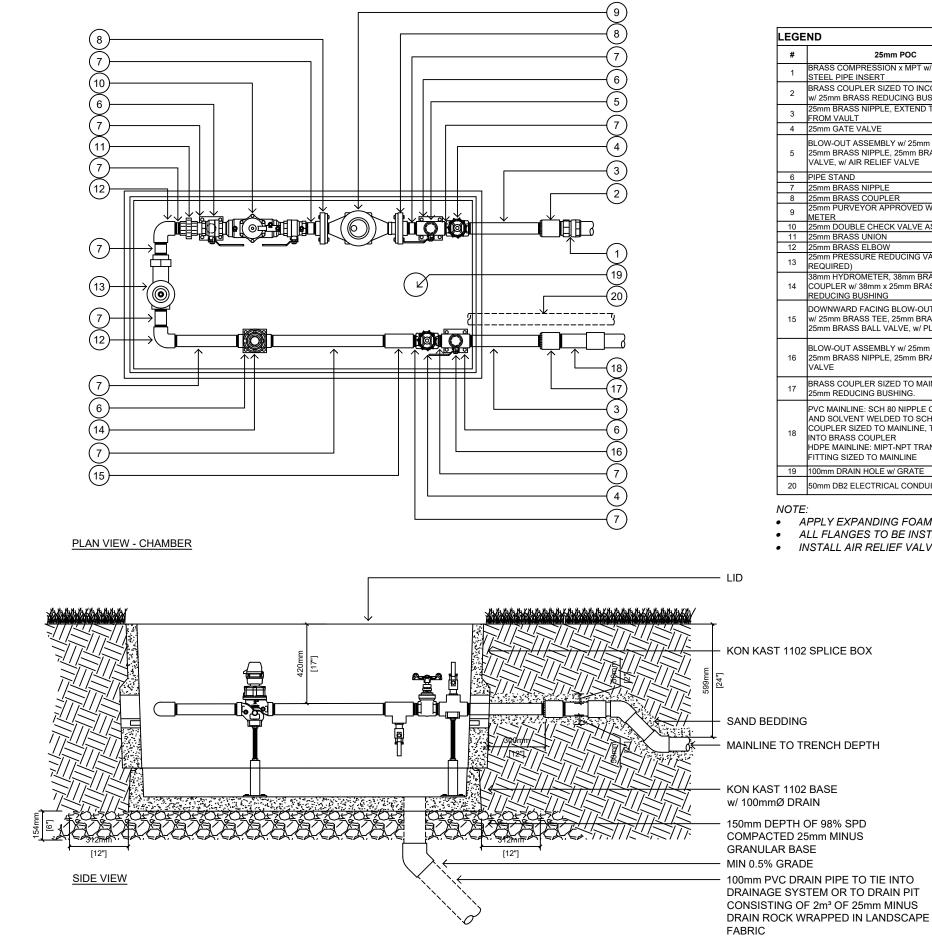
INSTALLATION PRACTICES FOLLOWED ON-SITE UNLESS PERFORMED BY LEKO PRECAST LTD. **

600Kg (1300 LBS)









EGE	ND		
#	25mm POC	38mm POC	50mm POC
1	BRASS COMPRESSION x MPT w/ STAINLESS STEEL PIPE INSERT	BRASS COMPRESSION x MPT w/ STAINLESS STEEL PIPE INSERT	BRASS COMPRESSION x MPT w/ STAINLESS STEEL PIPE INSERT
2	w/ 25mm BRASS REDUCING BUSHING	BRASS COUPLER SIZED TO INCOMING PIPE w/ 38mm BRASS REDUCING BUSHING	BRASS COUPLER SIZED TO INCOMING PIPE w/ 50mm BRASS REDUCING BUSHING
3	25mm BRASS NIPPLE, EXTEND TO 300mm FROM VAULT	38mm BRASS NIPPLE, EXTEND TO 300mm FROM VAULT	50mm BRASS NIPPLE, EXTEND TO 300mm FROM VAULT
4	25mm GATE VALVE	38mm GATE VALVE	50mm GATE VALVE
5	BLOW-OUT ASSEMBLY w/ 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ AIR RELIEF VALVE	BLOW-OUT ASSEMBLY w/ 38mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ AIR RELIEF VALVE	BLOW-OUT ASSEMBLY w/ 50mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ AIR RELIEF VALVE
6	PIPE STAND	PIPE STAND	PIPE STAND
7	25mm BRASS NIPPLE	38mm BRASS NIPPLE	50mm BRASS NIPPLE
8	25mm BRASS COUPLER	38mm BRASS FLANGED ADAPTER	50mm BRASS FLANGED ADAPTER
9	25mm PURVEYOR APPROVED WATER METER	38mm PURVEYOR APPROVED WATER METER	50mm PURVEYOR APPROVED WATER METER
10	25mm DOUBLE CHECK VALVE ASSEMBLY	38mm DOUBLE CHECK VALVE ASSEMBLY	50mm DOUBLE CHECK VALVE ASSEMBLY
11	25mm BRASS UNION	38mm BRASS UNION	50mm BRASS UNION
12	25mm BRASS ELBOW	38mm BRASS ELBOW	50mm BRASS ELBOW
13	25mm PRESSURE REDUCING VALVE (IF REQUIRED)	38mm PRESSURE REDUCING VALVE (IF REQUIRED)	50mm PRESSURE REDUCING VALVE (IF REQUIRED)
14	38mm HYDROMETER, 38mm BRASS COUPLER w/ 38mm x 25mm BRASS REDUCING BUSHING	38mm HYDROMETER w/ 38mm BRASS COUPLERS	50mm HYDROMETER
15	DOWNWARD FACING BLOW-OUT ASSEMBLY w/ 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ PLUG	DOWNWARD FACING BLOW-OUT ASSEMBLY w/ 38mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ PLUG	DOWNWARD FACING BLOW-OUT ASSEMBLY w/ 50mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE, w/ PLUG
16	BLOW-OUT ASSEMBLY w/ 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE	BLOW-OUT ASSEMBLY w/ 38mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE	BLOW-OUT ASSEMBLY w/ 50mm x 25mm BRASS TEE, 25mm BRASS NIPPLE, 25mm BRASS BALL VALVE
17	BRASS COUPLER SIZED TO MAINLINE w/ 25mm REDUCING BUSHING.	BRASS COUPLER SIZED TO MAINLINE w/ 38mm REDUCING BUSHING.	BRASS COUPLER SIZED TO MAINLINE w/ 50mm REDUCING BUSHING.
18	PVC MAINLINE: SCH 80 NIPPLE CUT IN HALF AND SOLVENT WELDED TO SCH 80 COUPLER SIZED TO MAINLINE, THREADED INTO BRASS COUPLER HDPE MAINLINE: MIPT-NPT TRANSITION FITTING SIZED TO MAINLINE	PVC MAINLINE: SCH 80 NIPPLE CUT IN HALF AND SOLVENT WELDED TO SCH 80 COUPLER SIZED TO MAINLINE, THREADED INTO BRASS COUPLER HDPE MAINLINE: MIPT-NPT TRANSITION FITTING SIZED TO MAINLINE	PVC MAINLINE: SCH 80 NIPPLE CUT IN HALF AND SOLVENT WELDED TO SCH 80 COUPLER SIZED TO MAINLINE, THREADED INTO BRASS COUPLER HDPE MAINLINE: MIPT-NPT TRANSITION FITTING SIZED TO MAINLINE
19	100mm DRAIN HOLE w/ GRATE	100mm DRAIN HOLE w/ GRATE	100mm DRAIN HOLE w/ GRATE
20	50mm DB2 ELECTRICAL CONDUIT TO KIOSK	50mm DB2 ELECTRICAL CONDUIT TO KIOSK	50mm DB2 ELECTRICAL CONDUIT TO KIOSK

NOTE:

• APPLY EXPANDING FOAM TO SEAL ALL PIPE PENETRATIONS MADE IN VAULT

• ALL FLANGES TO BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS W/ STAINLESS STEEL BOLTS

INSTALL AIR RELIEF VALVE ON BLOW-OUT ASSEMBLY UPSTREAM OF THE BACKFLOW



STANDARD DETAIL DRAWING

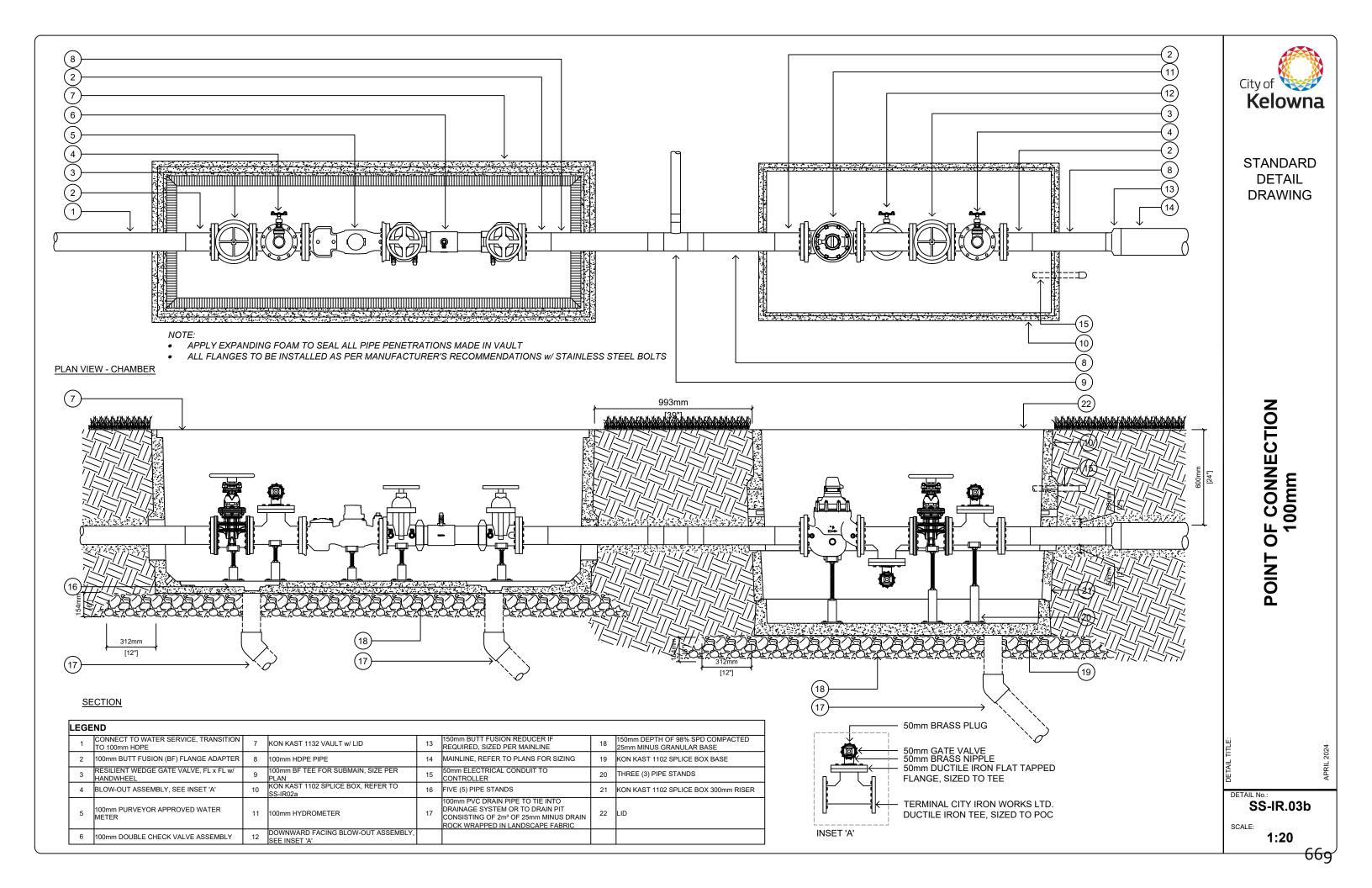
POINT OF CONNECTION 25mm TO 50mm

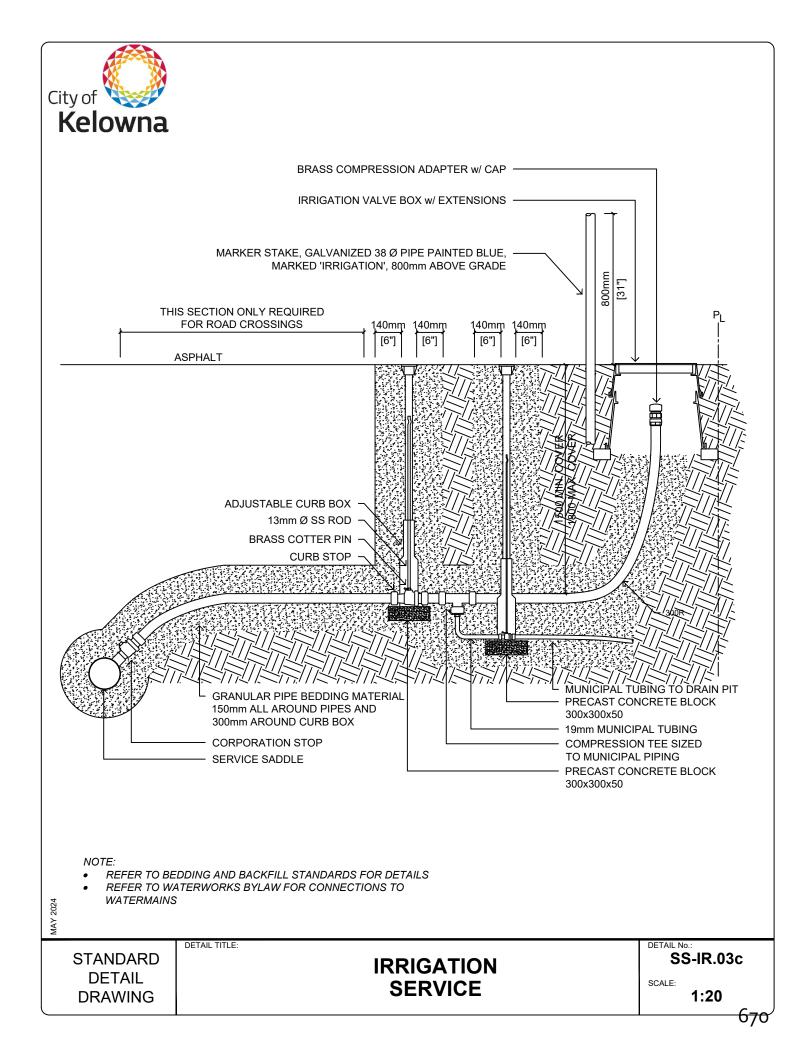
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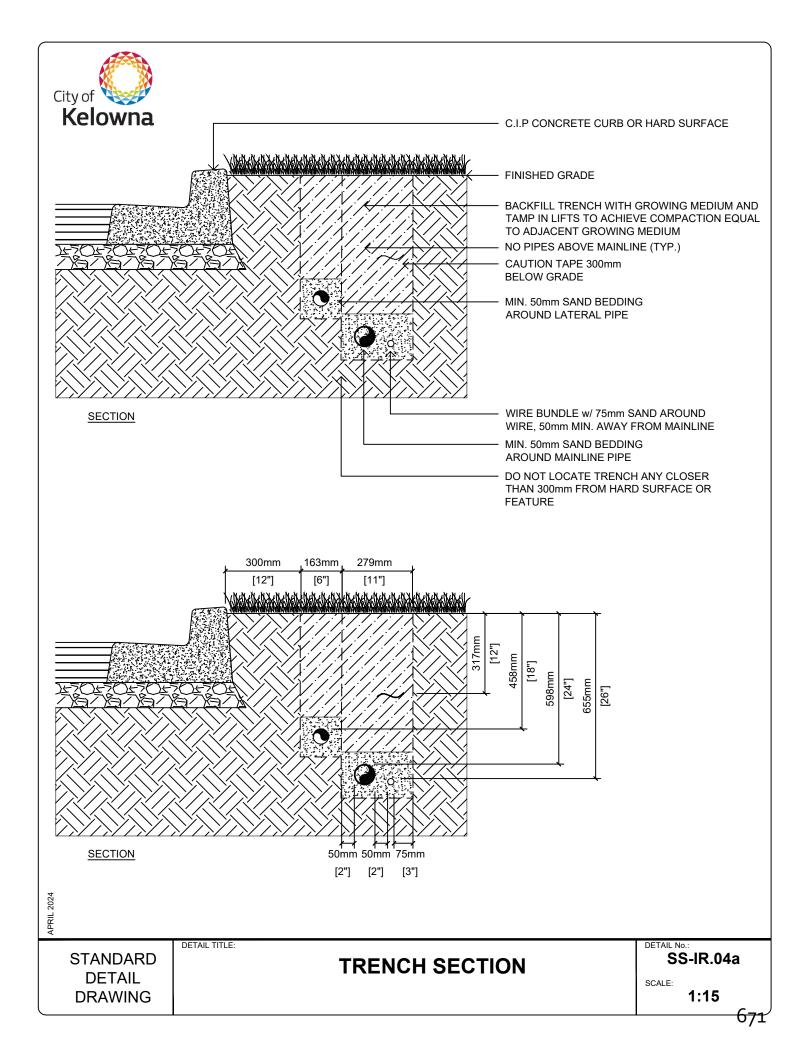
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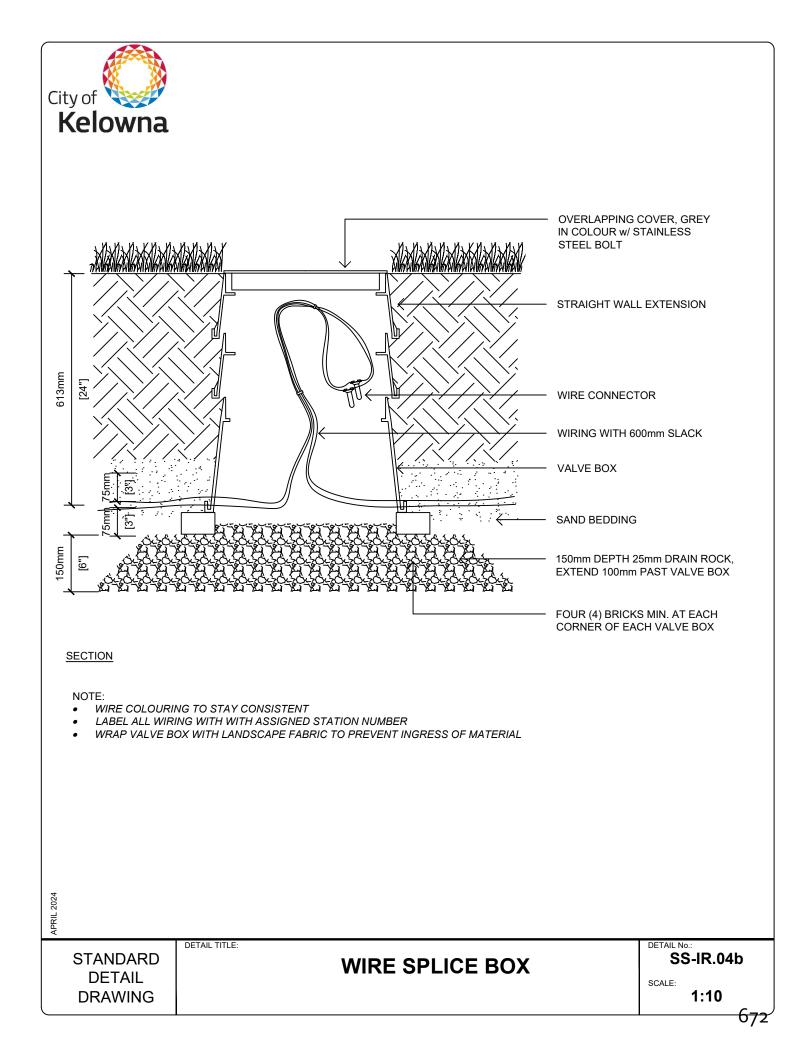
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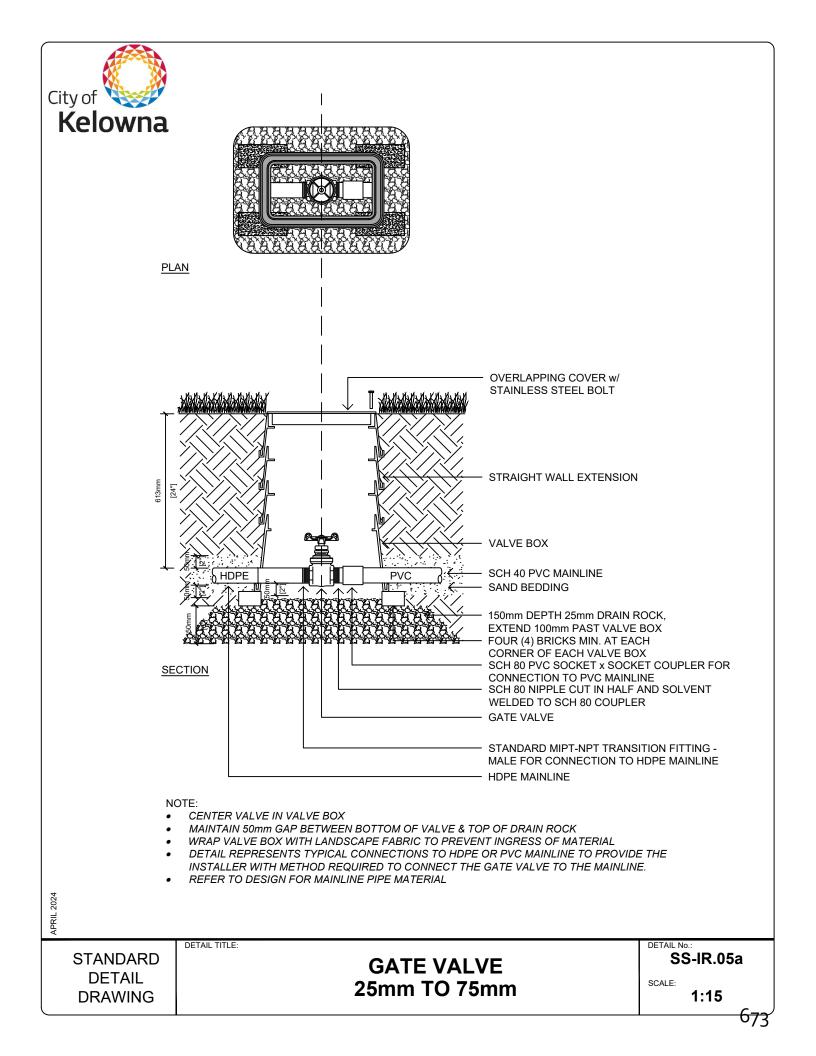
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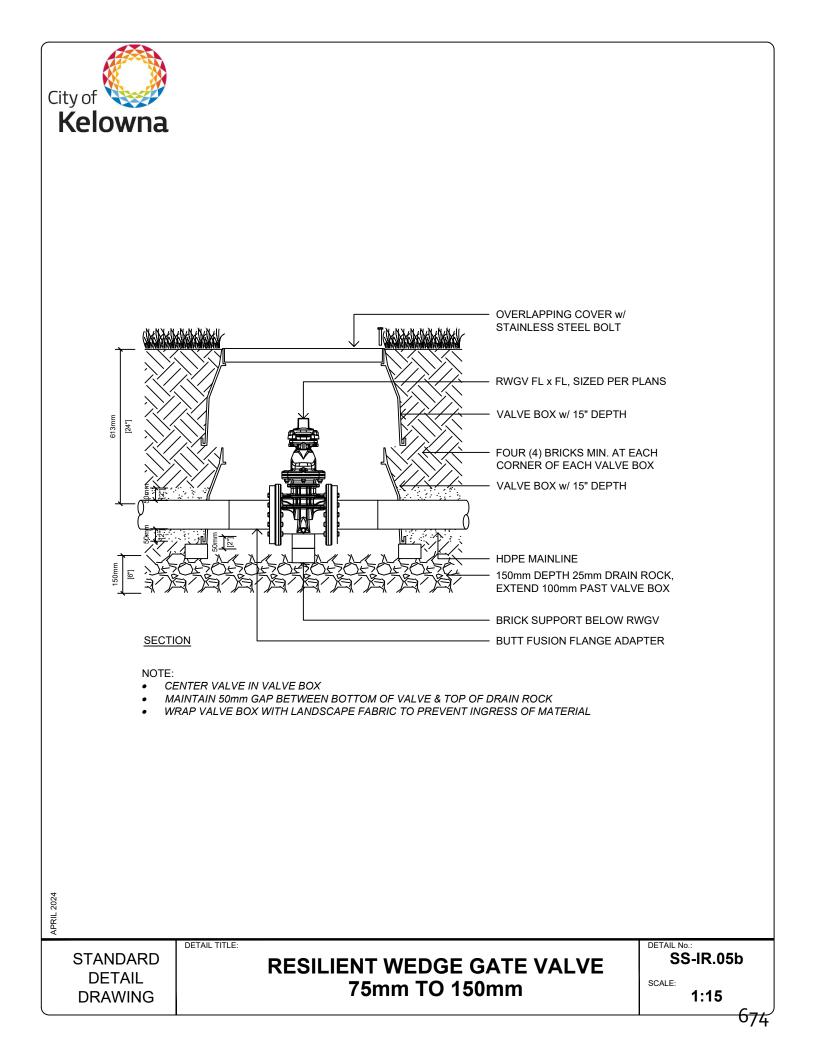


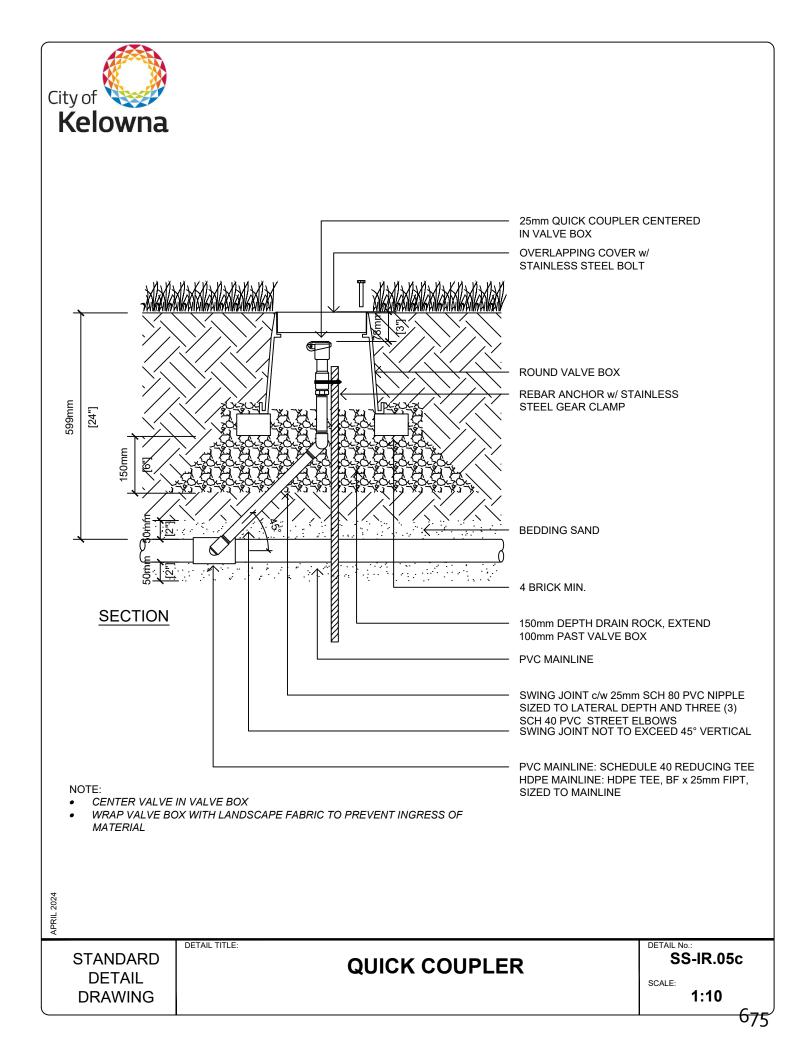


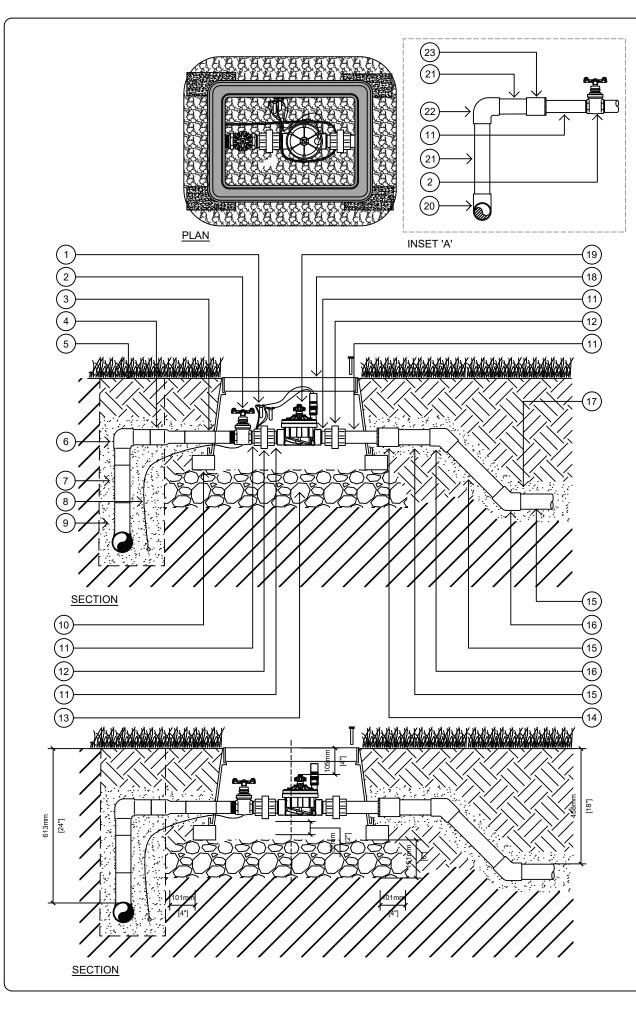










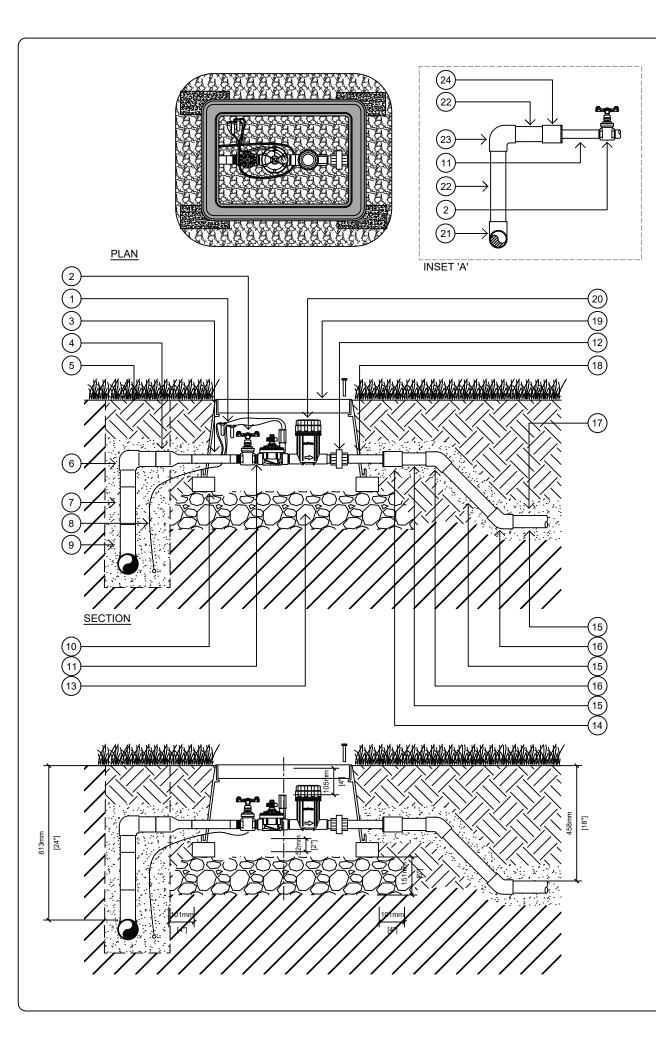


1	25mm ECV	38mm ECV	50mm ECV	City o
1	600mm SLACK WIRE w/ WIRE CONNECTOR	600mm SLACK WIRE w/ WIRE CONNECTOR	600mm SLACK WIRE w/ WIRE CONNECTOR	Ke
2	25mm GATE VALVE	38mm GATE VALVE	50mm GATE VALVE	
3	25mm STANDARD MIPT-NPT TRANSITION FITTING - MALE	38mm STANDARD MIPT-NPT TRANSITION FITTING - MALE	50mm STANDARD MIPT-NPT TRANSITION FITTING - MALE	STA
4	50mm x 25mm MOLDED BUTT FUSION REDUCER	50mm x 38mm MOLDED BUTT FUSION REDUCER	50mm HDPE MAINLINE	
5	FINISHED GRADE	FINISHED GRADE	FINISHED GRADE	DRA
6	50mm MOLDED BUTT FUSION 90° ELBOW	50mm MOLDED BUTT FUSION 90° ELBOW	50mm MOLDED BUTT FUSION 90° ELBOW	
7	50mm HDPE PIPE, LENGTH TO VALVE HEIGHT	50mm HDPE PIPE, LENGTH TO VALVE HEIGHT	50mm HDPE PIPE, LENGTH TO VALVE HEIGHT	
8	WIRING, REFER TO IRRIGATION DESIGN	WIRING, REFER TO IRRIGATION DESIGN	WIRING, REFER TO IRRIGATION DESIGN	
9	MOLDED BUTT FUSION REDUCING TEE, REFER TO INSET 'A' IF USING A PVC MAINLINE	MOLDED BUTT FUSION REDUCING TEE, REFER TO INSET 'A' IF USING A PVC MAINLINE	MOLDED BUTT FUSION REDUCING TEE, REFER TO INSET 'A' IF USING A PVC MAINLINE	
10		FOUR (4) BRICKS MIN., INSTALLED AT EACH CORNER	FOUR (4) BRICKS MIN., INSTALLED AT EACH CORNER	
11	THREADED INTO GATE VALVE AND SOLVENT	38mm SCH 80 NIPPLE CUT IN HALF, THREADED INTO GATE VALVE AND SOLVENT WELDED TO UNION	50mm SCH 80 NIPPLE CUT IN HALF, THREADED INTO GATE VALVE AND SOLVENT WELDED TO UNION	
12	25mm SCH 80 SOCKET x SOCKET UNION	38mm SCH 80 SOCKET x SOCKET UNION	50mm SCH 80 SOCKET x SOCKET UNION	
13	150mm DEPTH 25mm DRAIN ROCK, EXTEND 100mm PAST VALVE BOX	150mm DEPTH 25mm DRAIN ROCK, EXTEND 100mm PAST VALVE BOX	150mm DEPTH 25mm DRAIN ROCK, EXTEND 100mm PAST VALVE BOX	
14		SCH 80 COUPLER w/ 38mm REDUCING BUSHING, REFER TO IRRIGATION DESIGN FOR LATERAL PIPE SIZING	SCH 80 COUPLER w/ 50mm REDUCING BUSHING, REFER TO IRRIGATION DESIGN FOR LATERAL PIPE SIZING	
15	CSA APPROVED CLASS 200 PVC LATERAL, REFER TO DESIGN FOR LATERAL PIPE SIZING	CSA APPROVED CLASS 200 PVC LATERAL, REFER TO DESIGN FOR LATERAL PIPE SIZING	CSA APPROVED CLASS 200 PVC LATERAL, REFER TO DESIGN FOR LATERAL PIPE SIZING	
16	SCHEDULE 40 PVC 45° ELBOW TO TRENCH DEPTH	SCHEDULE 40 PVC 45° ELBOW TO TRENCH DEPTH	SCHEDULE 40 PVC 45° ELBOW TO TRENCH DEPTH	
17	SAND BEDDING, REFER TO TRENCH SECTION	SAND BEDDING, REFER TO TRENCH SECTION	SAND BEDDING, REFER TO TRENCH SECTION	
18	VALVE BOX	VALVE BOX	VALVE BOX	
19	25mm ELECTRIC CONTROL VALVE	38mm ELECTRIC CONTROL VALVE	50mm ELECTRIC CONTROL VALVE	
20	SCHEDULE 40 PVC TEE	SCHEDULE 40 PVC TEE	SCHEDULE 40 PVC TEE	
21	SCHEDULE 40 PVC MAINLINE	SCHEDULE 40 PVC MAINLINE	SCHEDULE 40 PVC MAINLINE	
22	SCHEDULE 40 90° ELBOW	SCHEDULE 40 90° ELBOW	SCHEDULE 40 90° ELBOW	
23	SCHEDULE 80 COUPLING w/ REDUCING BUSHING, IF REQUIRED	SCHEDULE 80 COUPLING w/ REDUCING BUSHING, IF REQUIRED	SCHEDULE 80 COUPLING w/ REDUCING BUSHING, IF REQUIRED	



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#	25mm ECV
1	600mm SLACK WIRE w/ WIRE CONNECTOR
2	25mm GATE VALVE
3	25mm STANDARD MIPT-NPT TRANSITION FITTING - MALE
4	50mm x 25mm MOLDED BUTT FUSION REDUCER
5	FINISHED GRADE
6	50mm MOLDED BUTT FUSION 90° ELBOW
7	50mm HDPE PIPE, LENGTH TO VALVE HEIGHT
8	WIRING, REFER TO IRRIGATION DESIGN
9	MOLDED BUTT FUSION REDUCING TEE, REFER TO INSET 'A' IF USING A PVC MAINLINE
10	FOUR (4) BRICKS MIN., INSTALLED AT EACH CORNER
11	25mm SCH 80 NIPPLE
12	25mm SCH 80 THREADED UNION
13	150mm DEPTH 25mm DRAIN ROCK, EXTEND 100mm PAST VALVE BOX
14	SCH 80 COUPLER w/ 25mm REDUCING BUSHING, REFER TO IRRIGATION DESIGN FOR LATERAL PIPE SIZING
15	CSA APPROVED CLASS 200 PVC LATERAL, REFER TO DESIGN FOR LATERAL PIPE SIZING
16	SCHEDULE 40 PVC 45° ELBOW TO TRENCH DEPTH
17	SAND BEDDING, REFER TO TRENCH SECTION
18	25mm SCH 80 NIPPLE CUT IN HALF, SOLVENT WELDED TO SCH 80 COUPLER w/ BUSHING
19	VALVE BOX
20	25mm DRIP ZONE KIT
21	SCHEDULE 40 PVC TEE
22	SCHEDULE 40 PVC MAINLINE
23	SCHEDULE 40 90° ELBOW
24	SCHEDULE 80 COUPLING w/ 25mm

NOTE:

- CENTER VALVE IN VALVE BOX •
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- INSTALL PLASTIC TAG ENGRAVED w/ ZONE NUMBER MAINTAIN 50mm GAP BETWEEN BOTTOM OF VALVE & TOP OF DRAIN ROCK WRAP VALVE BOX WITH LANDSCAPE FABRIC TO PREVENT INGRESS OF MATERIAL .
- DO NOT INSTALL VALVE OVER MAINLINE, INSTALL VALVE PERPENDICULAR TO MAINLINE .
- MAINTAIN 600mm OF SLACK TWO-WIRE CONDUCTOR IN VALVE BOX. TAPE WIRING TOGETHER .



STANDARD DETAIL DRAWING

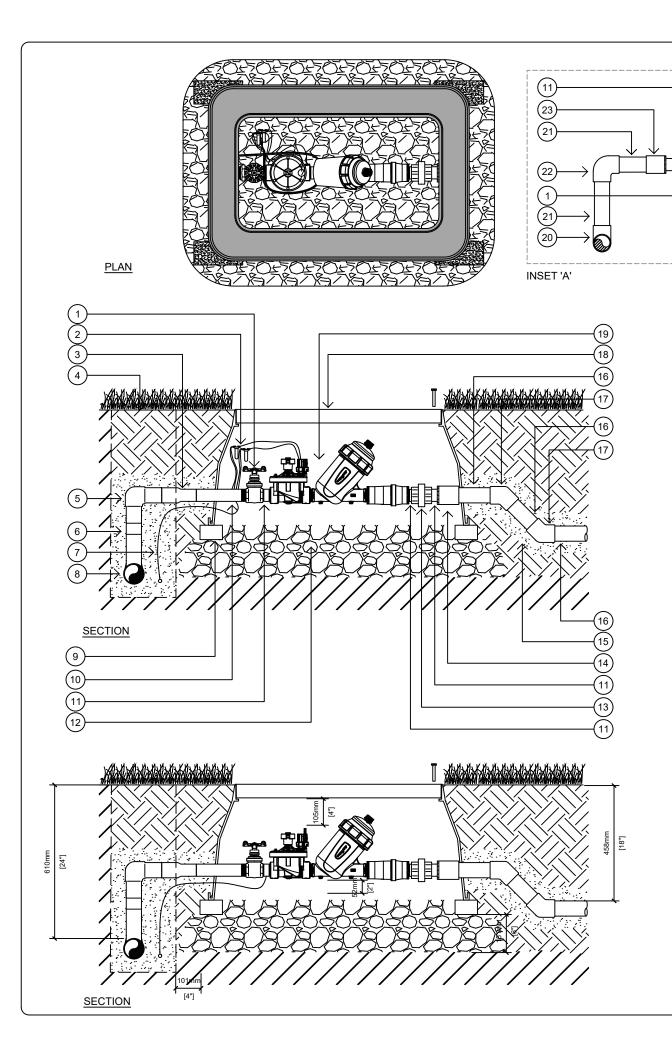


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DETAIL No.: SS-IR.05e SCALE:

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#	38mm ECV
1	38mm GATE VALVE
2	600mm SLACK WIRE w/ WIRE CONNECTOR
3	50mm x 38mm MOLDED BUTT FUSION REDUCER
4	FINISHED GRADE
5	50mm MOLDED BUTT FUSION 90° ELBOW
6	50mm HDPE PIPE, LENGTH TO VALVE HEIGHT
7	WIRING, REFER TO IRRIGATION DESIGN
8	MOLDED BUTT FUSION REDUCING TEE, REFER TO INSET 'A' IF USING A PVC MAINLINE
9	FOUR (4) BRICKS MIN., INSTALLED AT EACH CORNER
10	50mm x 38mm STANDARD MIPT-NPT TRANSITION FITTING - MALE
11	38mm SCHEDULE 80 NIPPLE
12	150mm DEPTH 25mm DRAIN ROCK, EXTEND 100mm PAST VALVE BOX
13	38mm SCHEDULE 80 THREADED UNION
14	SCH 80 COUPLER w/ REDUCING BUSHING II REQUIRED, REFER TO IRRIGATION DESIGN FOR LATERAL PIPE SIZING
15	SAND BEDDING, REFER TO TRENCH
16	CSA APPROVED CLASS 200 PVC LATERAL, REFER TO DESIGN FOR LATERAL PIPE SIZING
17	SCHEDULE 40 PVC 45° ELBOW TO TRENCH DEPTH
18	VALVE BOX
19	38mm DRIP ZONE KIT
20	SCHEDULE 40 PVC TEE
21	SCHEDULE 40 PVC MAINLINE
22	SCHEDULE 40 90° ELBOW
23	SCHEDULE 80 COUPLING w/ 38mm REDUCING BUSHING IF REQUIRED

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- MAINTAIN 600mm OF SLACK TWO-WIRE CONDUCTOR IN VALVE BOX. TAPE WIRING TOGETHER .



STANDARD DETAIL DRAWING



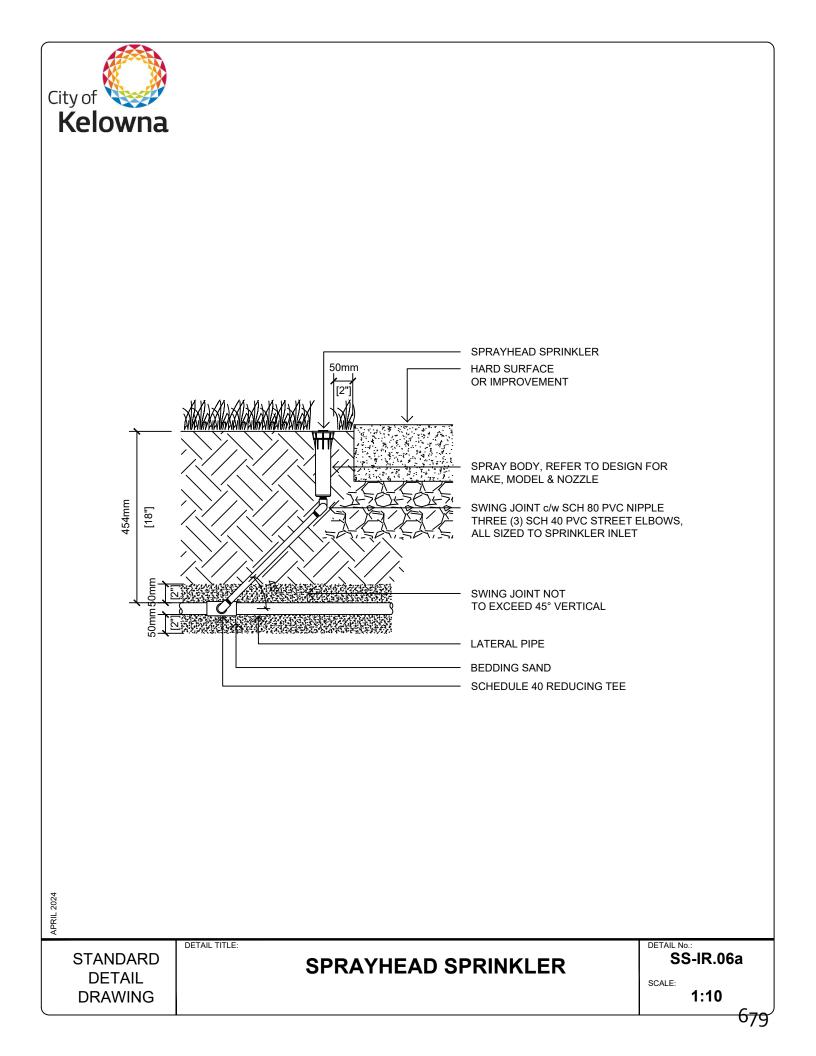
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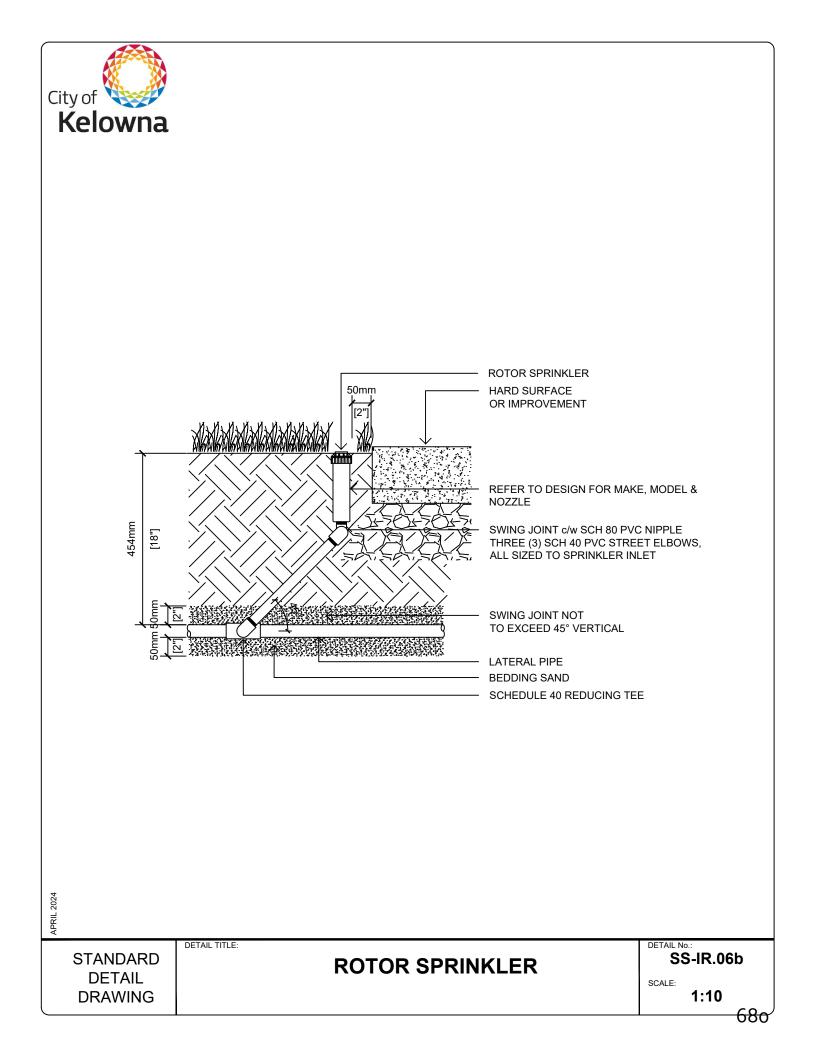
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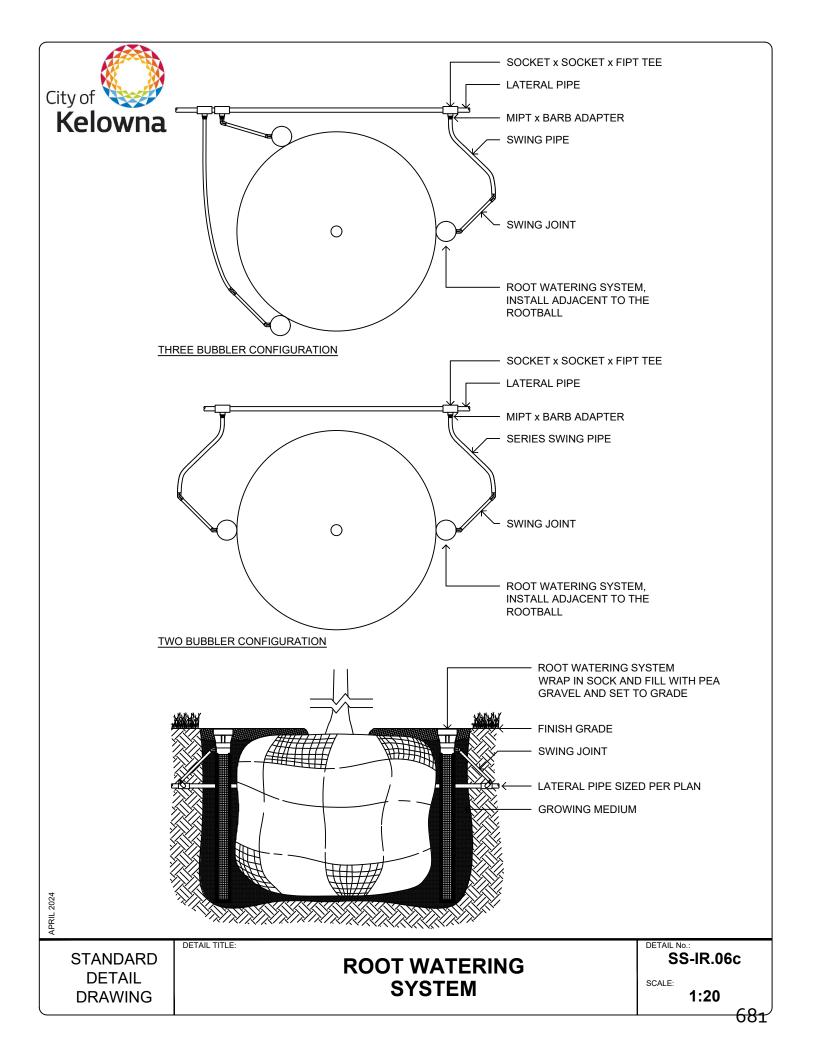
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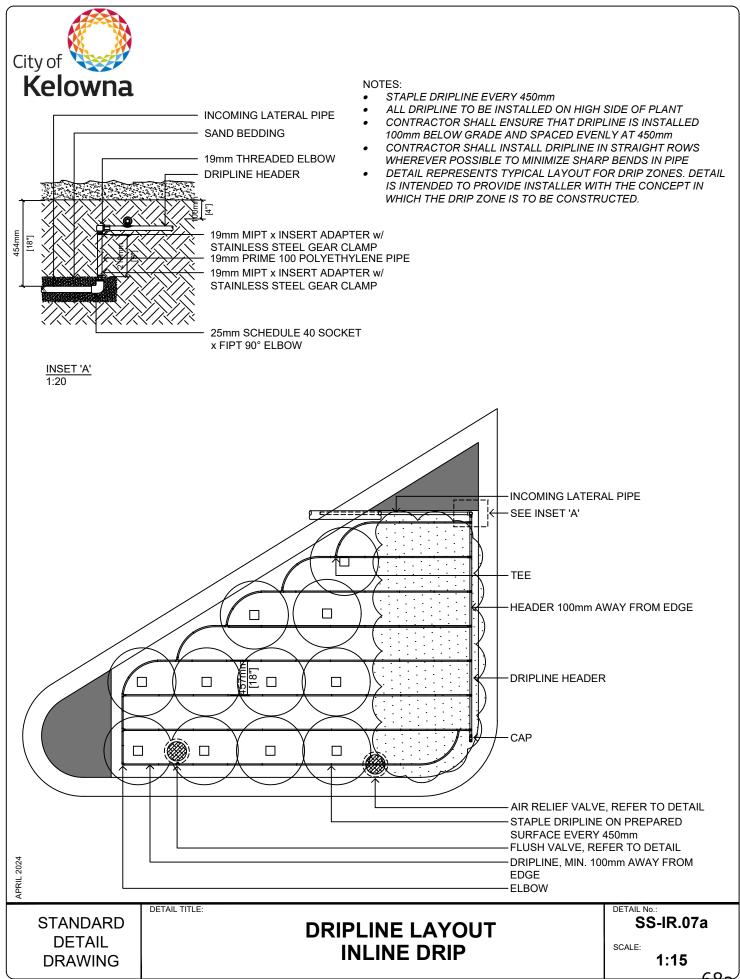
SCALE: 1:15

NOTE:
CENTER VALVE IN VALVE BOX
INSTALL PLASTIC TAG ENGRAVED w/ ZONE NUMBER
MAINTAIN 50mm GAP BETWEEN BOTTOM OF VALVE & TOP OF DRAIN ROCK
WRAP VALVE BOX WITH LANDSCAPE FABRIC TO PREVENT INGRESS OF MATERIAL
DO NOT INSTALL VALVE OVER MAINLINE, INSTALL VALVE PERPENDICULAR TO MAINLINE

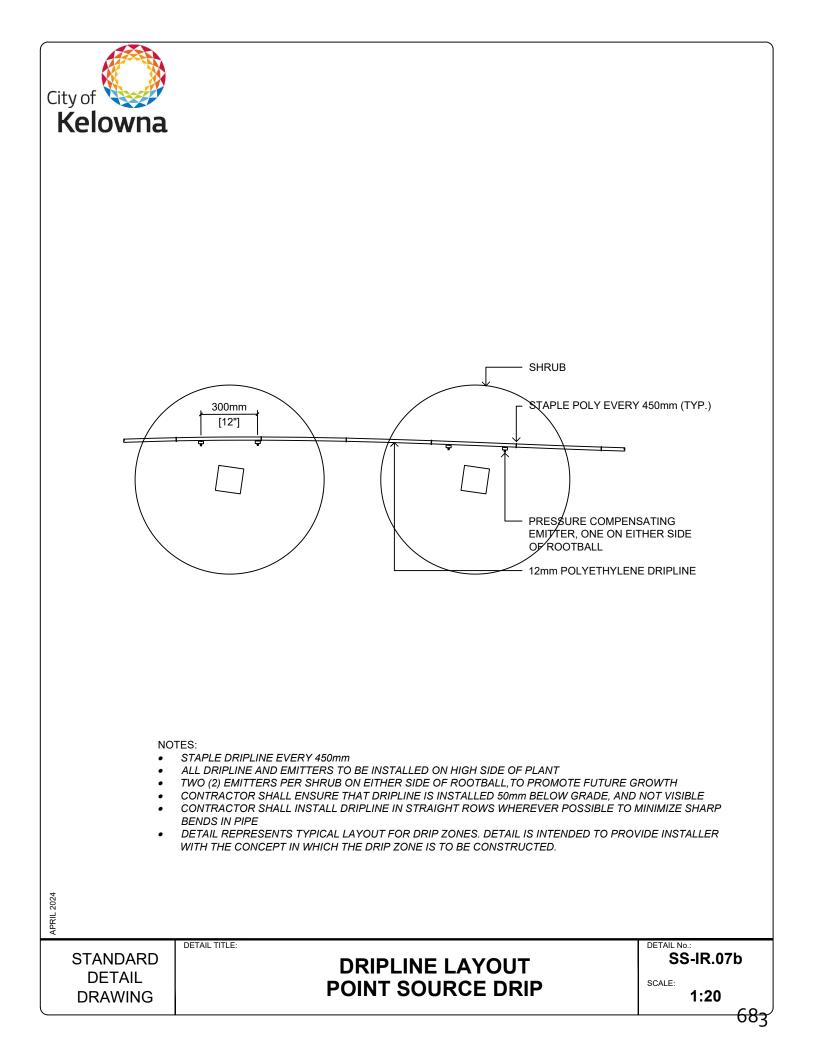


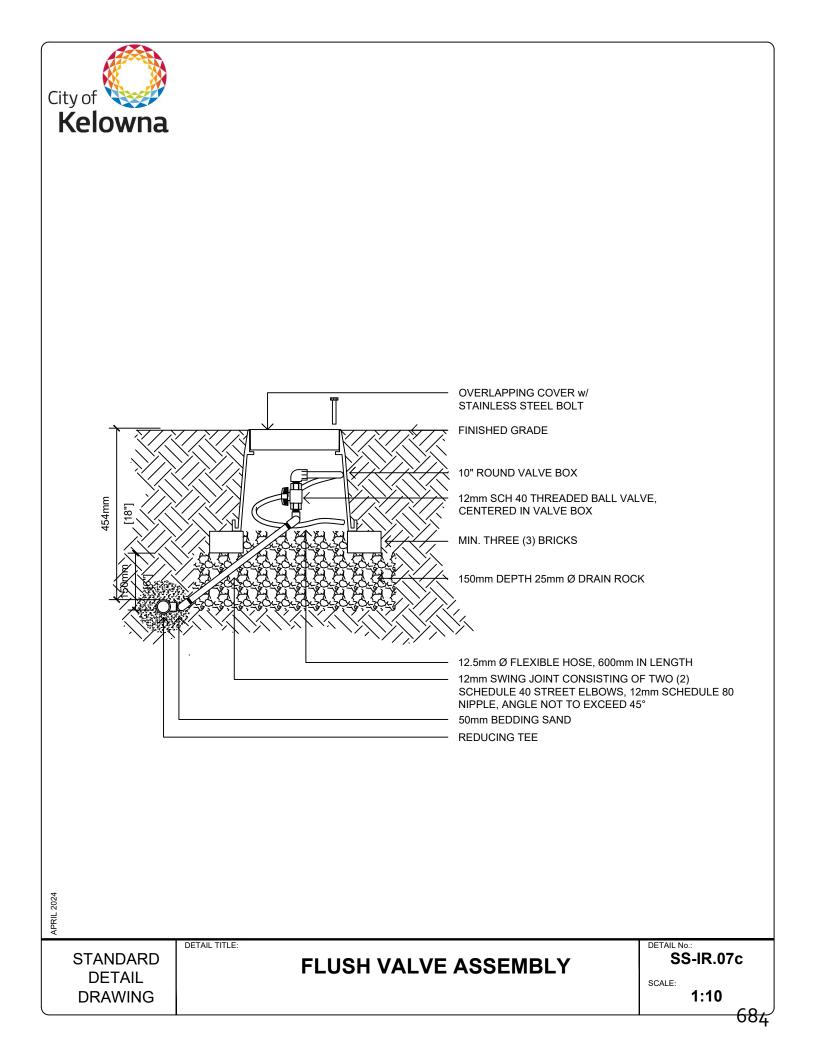


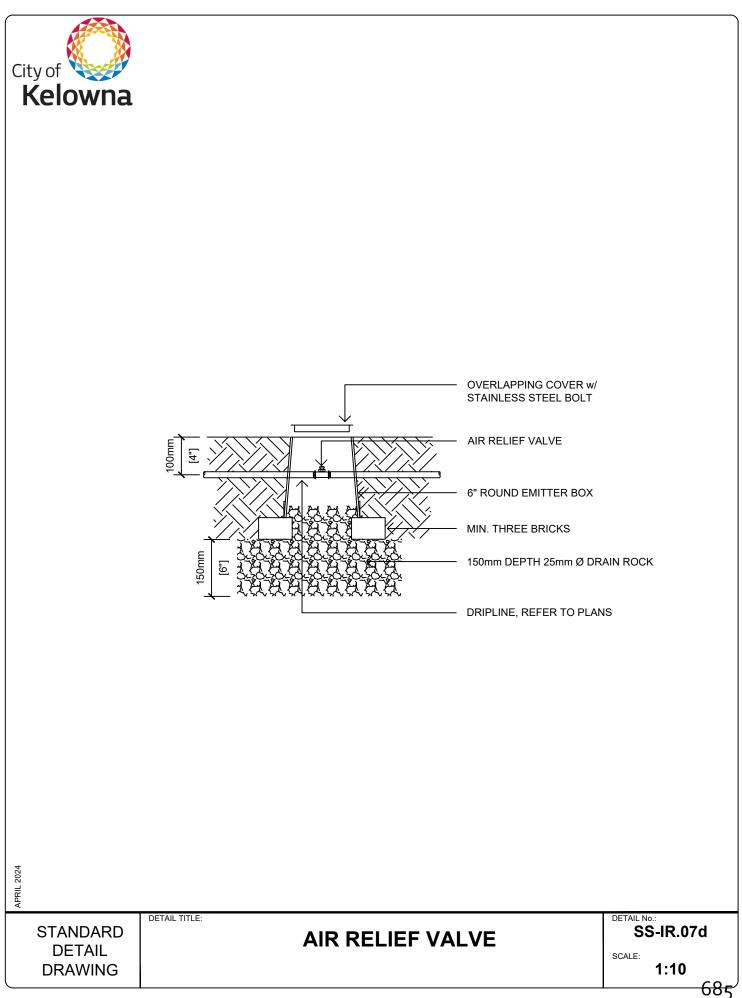




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SCHEDULE 6 OF BYLAW 7900

CITY OF KELOWNA

CONSTRUCTION STANDARDS

MASTER MUNICIPAL CONSTRUCTION DOCUMENTS

(MMCD 2019 EDITION - VOLUME II)

MASTER MUNICIPAL CONSTRUCTION DOCUMENTS

This Schedule references the Master Municipal Construction Documents (MMCD) 2019 Edition to be applied in conjunction with the City's Supplemental Construction Standards (Schedule 5) for Works and Services constructed within the City of Kelowna.

The MMCD applies to all Works and Services constructed within the City of Kelowna except where a supplemental to the MMCD is provided in Schedule 5. The supplemental specifications provided in Schedule 5 supersede the provisions of Schedule 6.

The version of MMCD to be applied for Works and Services is as follows:

- 1. Master Municipal Construction Documents (MMCD) 2019 Edition Volume II Published and Available from https://www.mmcd.net/documents/document-overview/.
- 2. Supplementary Updates to the MMCD 2019 Edition Volume II Published and Available from https://www.mmcd.net/resources/supplementary-updates/