

# UBC BCR Lot 7 - Civil Engineering Drawings

Issued for Development Permit



Location Map (NTS)

## Sheet List Table

| Sheet Number | Sheet Title    |
|--------------|----------------|
| CV-00        | COVER SHEET    |
| CV-01        | KEY PLAN       |
| CV-03        | SERVICING PLAN |
| CN-01        | CIVIL NOTES    |

### Contact Information

VDZ+A

Project Civil Engineering

Fort Langley Studio  
102 - 9181 Church Street  
Fort Langley, British Columbia, V1M 2R8

Mount Pleasant Studio  
102-355 Kingsway  
Vancouver, British Columbia, V5T 3J7

Primary project contact:  
Taylor Webber  
twebber@vdz.ca  
o. 604 546 0930

Alternate contacts (incase away):  
Aaron Berghoffer  
aaron@vdz.ca  
o. 604 416 5073

### Contact Information

Dys Architecture  
Project Architect

Name  
260-1770 Burrard Street  
Vancouver, BC  
o. 604 669 7710  
email@email.com

UBC Properties Trust  
Project Owner

3313 Shrum Lane  
Suite #200  
Vancouver, BC  
o. 604 731 3103  
info@ubcproperties.com

### Legal Address and Description:

Lot 7, District Lot 6494, Group 1, N,W,D,  
Plan EPP86350

NOT FOR CONSTRUCTION

|     |     |               |            |
|-----|-----|---------------|------------|
| 1   | SH  | Issued for DP | 2024-06-04 |
| No. | By: | Description   | Date       |

REVISIONS TABLE FOR DRAWINGS  
Copyright reserved. This drawing and design is the property of VDZ+A and may not be reproduced or used for other projects without permission.

|     |     |             |      |
|-----|-----|-------------|------|
| No. | By: | Description | Date |
|-----|-----|-------------|------|

REVISIONS TABLE FOR SHEET

Project:  
UBC BCR LOT 7  
  
Location:  
3568, 3578, 3588 Wesbrook Mall  
Vancouver, B.C.

|                    |  |
|--------------------|--|
| Drawn:<br>AB       | Stamp:<br>   |
| Checked:<br>TW     | PP No.: 1001970  |
| Approved:<br>TW    | Original Sheet Size:<br>24"x36"  |
| Scale:<br>AS SHOWN | CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS TO THE DRAWINGS MUST NOT BE PRICED FOR CONSTRUCTION UNLESS LABELED ISSUED FOR TENDER/CONSTRUCTION. |

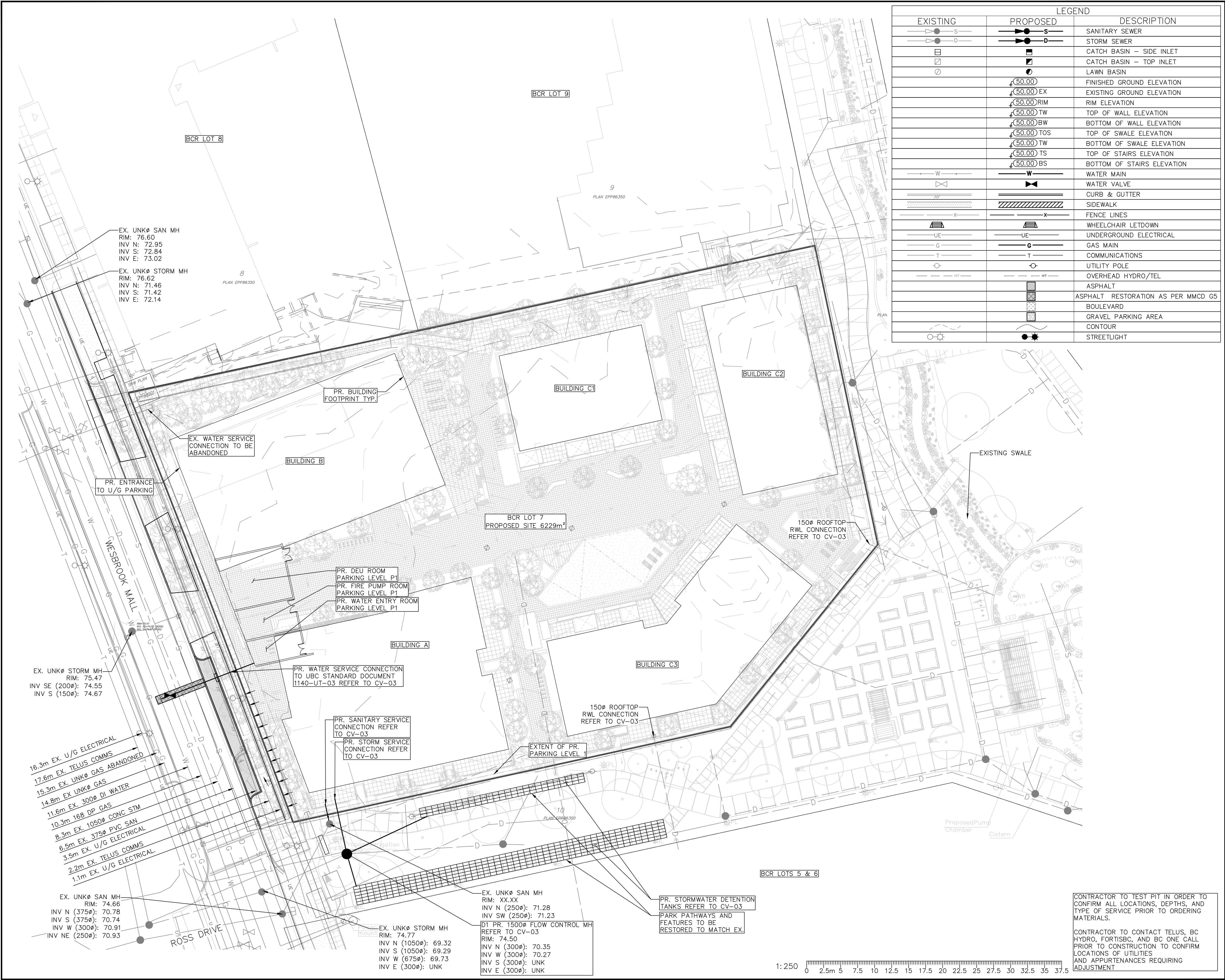
Drawing Title:  
COVER SHEET



VDZ Project #:  
CV-2023-08

Drawing #:  
CV-00

Z:\PROJECTS\CV\ALCV2023-08 UBC BCR LOT 75 DWG\SHEETS\CV-01 KEY PLAN.DWG



VDZ+A

LANDSCAPE ARCHITECTURE | CIVIL ENGINEERING | URBAN FORESTRY

FORT LANGLEY STUDIO | MOUNT PLEASANT STUDIO

100-9181 Church St | 102-355 Kingsway  
Fort Langley, BC | Vancouver, BC  
V1M 2B8 | VST 317  
www.vdz.ca | 604-882-0024

NOT FOR CONSTRUCTION

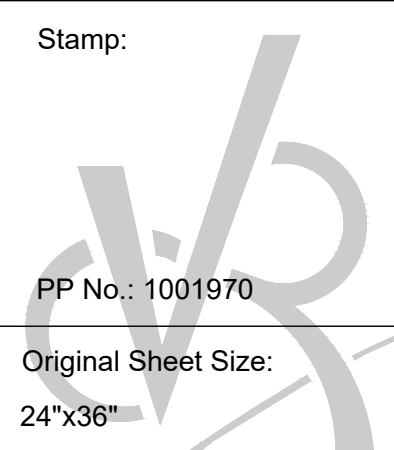
|     |     |               |            |
|-----|-----|---------------|------------|
| 1   | SH  | Issued for DP | 2024-06-04 |
| No. | By: | Description   | Date       |

REVISIONS TABLE FOR DRAWINGS  
© Copyright reserved. This drawing and design is the property of Vdz+A and may not be reproduced or used for other projects without permission.

|     |     |             |      |
|-----|-----|-------------|------|
| No. | By: | Description | Date |
|-----|-----|-------------|------|

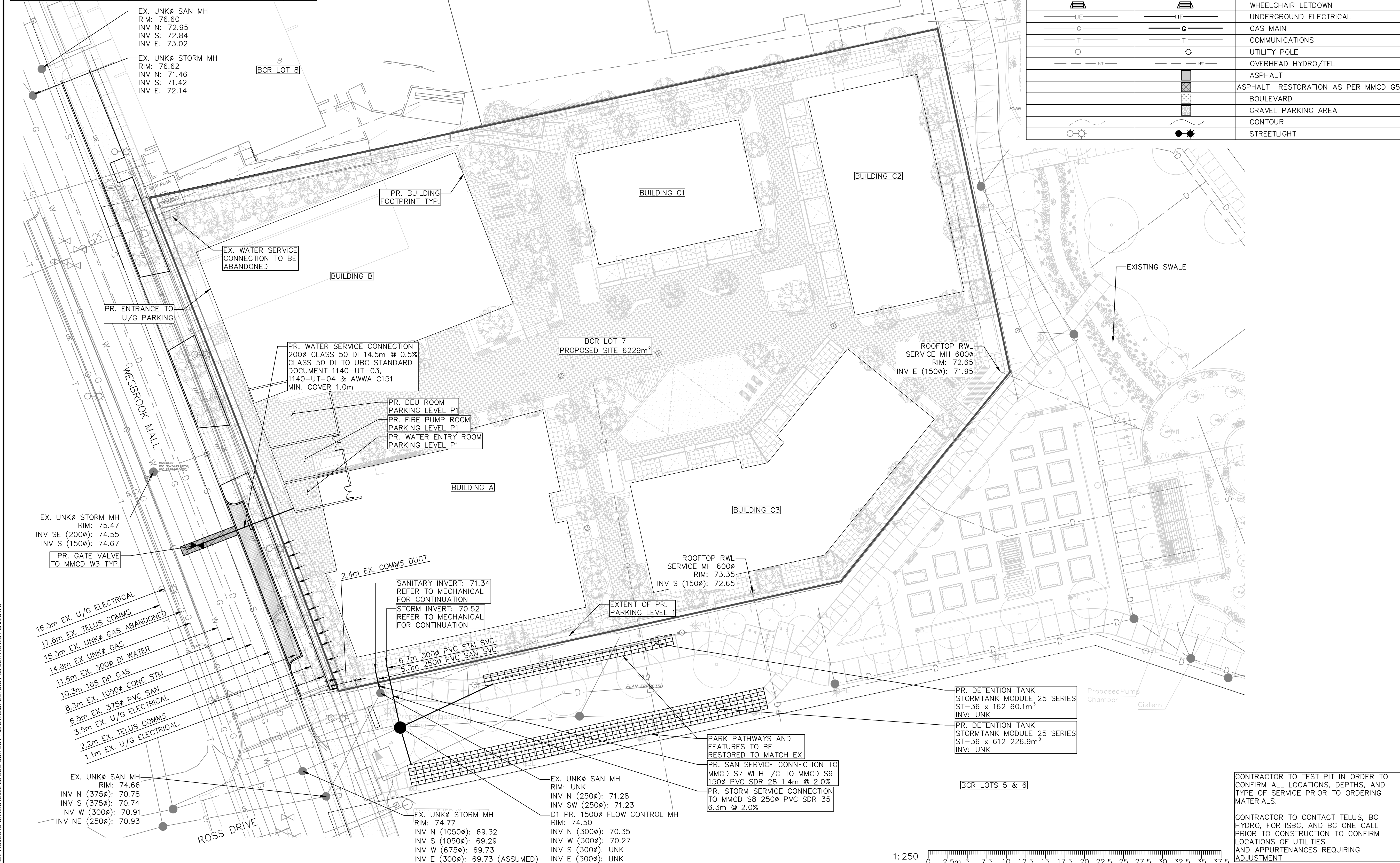
Project:  
UBC BCR LOT 7

Location:  
3568, 3578, 3588 Wesbrook Mall  
Vancouver, B.C.

|                 |   |
|-----------------|---|
| Drawn:<br>AB    | Stamp:<br>   |
| Checked:<br>TW  | PP No.: 1001970   |
| Approved:<br>TW | Original Sheet Size:<br>24"x36"   |
| Scale:<br>1:250 | CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS TO THE DRAWINGS MUST BE APPROVED BY THE CONSULTANT. DRAWINGS MUST NOT BE REPRODUCED OR USED FOR CONSTRUCTION UNLESS LABELED ISSUED FOR TENDER/CONSTRUCTION. |

Z:\PROJECTS\CV\CV-2023-08 UBC BCR LOT 7-5 DWG\SHEETS\CV-03 SERVING PLAN.DWG

| Hyd No. | Rainfall Duration<br>Tr (min) | Rainfall<br>Intensity<br>I 10yr<br>(mm/hr) | Peak Flow<br>Qp10 (m³/s) | Inflow<br>Runoff<br>Volume<br>(m³) | Max<br>Release<br>Qrel<br>(m³/s) | Required<br>Storage<br>Volume<br>(m³) | 10Yr Post-development Flow:             |        | 2Yr Pre-development Flows: |                   |         |       |
|---------|-------------------------------|--|--------------------------|------------------------------------|----------------------------------|---------------------------------------|---|--------|----------------------------|-------------------|---------|-------|
|         |                               |  |                          |                                    |                                  |                                       | Q rel =                                 | 0.0003 | m³/s                       | R                 | 0.10    |       |
|         |                               |  |                          |                                    |                                  |                                       | R =                                     | 0.75   |                            | A                 | 0.623   | ha    |
|         |                               |  |                          |                                    |                                  |                                       | SAF =                                   | 1.0    |                            | N                 | 0.00278 |       |
|         |                               |  |                          |                                    |                                  |                                       | A =                                     | 0.623  | ha                         | Duration          | 2,400   | min   |
|         |                               |  |                          |                                    |                                  |                                       | Tc =                                    | 10.00  | min                        | I                 | 1.67    | mm/hr |
| 1       | 5                             | 67.17                                      | 0.087                    | 26                                 | 0.0003                           | 26                                    | I 10 yr =                               | 46.23  | mm/hr                      | Release Rate m³/s | 0.0003  |       |
| 2       | 10                            | 46.23                                      | 0.060                    | 36                                 | 0.0003                           | 36                                    | Qp1 =                                   | 0.0600 | m³/s                       |                   |         |       |
| 3       | 15                            | 37.16                                      | 0.048                    | 43                                 | 0.0003                           | 43                                    | VOLUME OF WATER RETAINED IN LANDSCAPING |        |                            |                   |         |       |
| 4       | 30                            | 25.57                                      | 0.033                    | 60                                 | 0.0003                           | 59                                    | LANDSCAPED AREA (m2)                    |        |                            |                   |         | 931.5 |
| 5       | 45                            | 20.55                                      | 0.027                    | 72                                 | 0.0003                           | 71                                    | ASSUMED SOIL DEPTH (m)                  |        |                            |                   |         | 0.6   |
| 6       | 60                            | 17.60                                      | 0.023                    | 82                                 | 0.0003                           | 81                                    | SOIL VOLUME (m3)                        |        |                            |                   |         | 558.9 |
| 7       | 120                           | 12.11                                      | 0.016                    | 113                                | 0.0003                           | 111                                   | ASSUMED POROSITY                        |        |                            |                   |         | 0.2   |
| 8       | 180                           | 9.74                                       | 0.013                    | 137                                | 0.0003                           | 133                                   | VOLUME OF WATER RETAINED IN SOIL (m3)   |        |                            |                   |         | 111.8 |
| 9       | 240                           | 8.34                                       | 0.011                    | 156                                | 0.0003                           | 152                                   | REQUIRED DETENTION TANK VOLUME          |        |                            |                   |         |       |
| 10      | 300                           | 7.39                                       | 0.010                    | 173                                | 0.0003                           | 168                                   | TOTAL REQUIRED STORAGE (m3)             |        |                            |                   |         | 331.1 |
| 11      | 360                           | 6.70                                       | 0.009                    | 188                                | 0.0003                           | 182                                   | VOLUME RETAINED IN LANDSCAPING (m3)     |        |                            |                   |         | 111.8 |
| 12      | 480                           | 5.74                                       | 0.007                    | 215                                | 0.0003                           | 206                                   | DETENTION TANK VOLUME (m3)              |        |                            |                   |         | 219.4 |
| 13      | 600                           | 5.09                                       | 0.007                    | 238                                | 0.0003                           | 227                                   |   |        |                            |                   |         |       |
| 14      | 720                           | 4.61                                       | 0.006                    | 259                                | 0.0003                           | 246                                   |   |        |                            |                   |         |       |
| 15      | 840                           | 4.24                                       | 0.006                    | 278                                | 0.0003                           | 263                                   |   |        |                            |                   |         |       |
| 16      | 960                           | 3.95                                       | 0.005                    | 295                                | 0.0003                           | 279                                   |   |        |                            |                   |         |       |
| 17      | 1080                          | 3.71                                       | 0.005                    | 312                                | 0.0003                           | 293                                   |   |        |                            |                   |         |       |
| 18      | 1200                          | 3.50                                       | 0.005                    | 327                                | 0.0003                           | 307                                   |   |        |                            |                   |         |       |
| 18      | 1440                          | 3.17                                       | 0.004                    | 356                                | 0.0003                           | 331                                   |   |        |                            |                   |         |       |



| LEGEND   |          |                                    |
|----------|----------|------------------------------------|
| EXISTING | PROPOSED | DESCRIPTION                        |
|          |          | SANITARY SEWER                     |
|          |          | STORM SEWER                        |
|          |          | CATCH BASIN - SIDE INLET           |
|          |          | CATCH BASIN - TOP INLET            |
|          |          | LAWN BASIN                         |
|          |          | FINISHED GROUND ELEVATION          |
|          |          | EXISTING GROUND ELEVATION          |
|          |          | RIM ELEVATION                      |
|          |          | TOP OF WALL ELEVATION              |
|          |          | BOTTOM OF WALL ELEVATION           |
|          |          | TOP OF SWALE ELEVATION             |
|          |          | BOTTOM OF SWALE ELEVATION          |
|          |          | TOP OF STAIRS ELEVATION            |
|          |          | BOTTOM OF STAIRS ELEVATION         |
|          |          | WATER MAIN                         |
|          |          | WATER VALVE                        |
|          |          | CURB & GUTTER                      |
|          |          | SIDEWALK                           |
|          |          | FENCE LINES                        |
|          |          | WHEELCHAIR LETDOWN                 |
|          |          | UNDERGROUND ELECTRICAL             |
|          |          | GAS MAIN                           |
|          |          | COMMUNICATIONS                     |
|          |          | UTILITY POLE                       |
|          |          | OVERHEAD HYDRO/TEL                 |
|          |          | ASPHALT                            |
|          |          | ASPHALT RESTORATION AS PER MMCD GS |
|          |          | BOULEVARD                          |
|          |          | GRAVEL PARKING AREA                |
|          |          | CONTOUR                            |
|          |          | STREETLIGHT                        |

VDZ+A

LANDSCAPE ARCHITECTURE | CIVIL ENGINEERING | URBAN FORESTRY

FORT LANGLEY STUDIO | MOUNT PLEASANT STUDIO

100-9181 Church St | 102-355 Kingsway

Fort Langley, BC | Vancouver, BC

VLM 288 | VST 317

www.vdz.ca

604-882-0024

NOT FOR CONSTRUCTION

| No. | By: | Description   | Date       |
|-----|-----|---------------|------------|
| 1   | SH  | Issued for DP | 2024-06-04 |

| REVISIONS TABLE FOR DRAWINGS  |  |  |  |
|---|--|--|--|
| © Copyright reserved. This drawing and design is the property of Vdz+A and may not be reproduced or used for other projects without permission. |  |  |  |

| No. | By: | Description | Date |
|-----|-----|-------------|------|
|     |     |             |      |

REVISIONS TABLE FOR SHEET

Project:  
UBC BCR LOT 7

Location:  
3568, 3578, 3588 Wesbrook Mall  
Vancouver, B.C.

|                 |   |
|-----------------|---|
| Drawn:<br>AB    | Stamp:<br>  |
| Checked:<br>TW  | PP No.: 1001970   |
| Approved:<br>GB | Original Sheet Size:<br>24"x36"   |
| Scale:<br>1:250 | CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS TO THE DRAWINGS MUST NOT BE PERMITTED FOR CONSTRUCTION UNLESS LABELED ISSUED FOR TENDER/CONSTRUCTION. |

Drawing Title:  
SERVICING PLAN

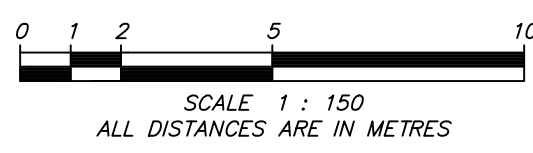


VDZ Project #:  
CV-2023-08

Drawing #:  
CV-03



SKETCH SHOWING TOPOGRAPHIC SURVEY OF  
LOT 7 AND PORTIONS OF LOTS 8 AND 9  
ALL OF DISTRICT LOT 6494 GROUP 1  
NEW WESTMINSTER DISTRICT PLAN EPP86350



PICTURE #1



PICTURE #7



PICTURE #2



PICTURE #3



PICTURE #4



PICTURE #5



PICTURE #6

NOTE:

ALL ELEVATIONS AND DISTANCES SHOWN ARE IN METRES.

THIS PLAN SHOWS HORIZONTAL GROUND LEVEL DISTANCES  
UNLESS OTHERWISE SPECIFIED, TO COMPUTE GRID DISTANCES,  
MULTIPLY GROUND LEVEL DISTANCES BY THE COMBINED  
FACTOR OF 0.9995923.

LEGAL BOUNDARIES ARE BASED ON LAND TITLE OFFICE RECORDS  
AND FIELD SURVEY, AND SUBJECT TO CHANGE.  
ELEVATIONS ARE DERIVED FROM UBC MONUMENT W-W, LOCATED ON EAST MALL IN FRONT  
OF THE CEME BUILDING (BETWEEN AGRONOMY ROAD AND UNIVERSITY BOULEVARD)  
GEODETIC ELEVATION = 93.631

CONTOUR INTERVAL = 0.25 METRES

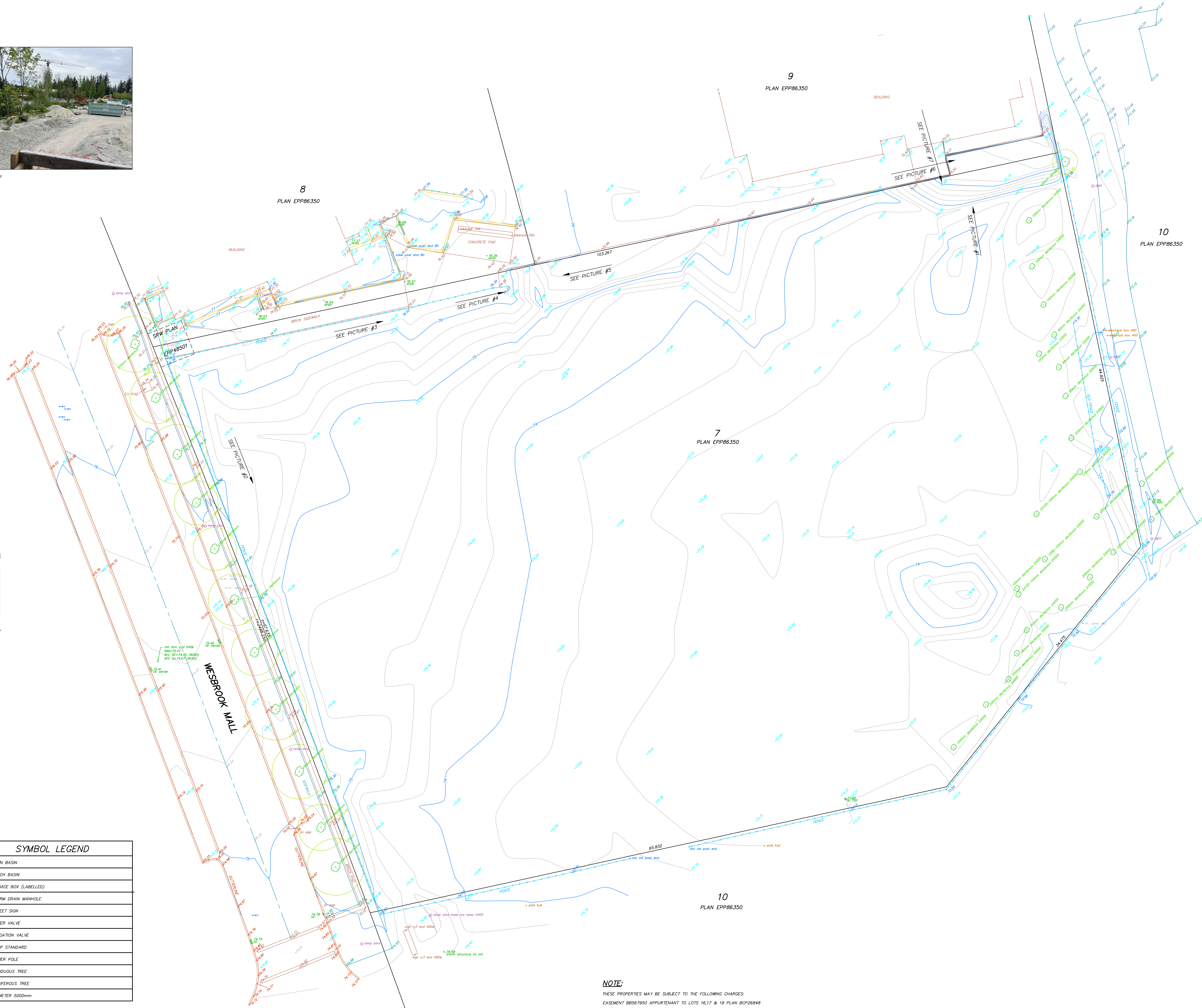
THIS PLAN SHOWS THE LOCATION OF VISIBLE FEATURES ONLY, AND DOES  
NOT INDICATE BURIED SERVICES THAT MAY EXIST ON OR AROUND THE  
SUBJECT SITE.

TREE SPECIES AND DIMENSIONS TO BE CONFIRMED BY A QUALIFIED  
ARBORIST. TREE SYMBOLS ARE NOT AN INDICATION OF DRIP LINE LOCATION  
UNLESS SPECIFICALLY LABELLED.

| SYMBOL LEGEND |                        |
|---------------|------------------------|
|               | LAWN BASIN             |
|               | CATCH BASIN            |
|               | SERVICE BOX (LABELLED) |
|               | STORM DRAIN MANHOLE    |
|               | STREET SIGN            |
|               | WATER VALVE            |
|               | IRRIGATION VALVE       |
|               | LAMP STANDARD          |
|               | POWER POLE             |
|               | DECIDUOUS TREE         |
|               | CONIFEROUS TREE        |
|               | D5000                  |
|               | DIAMETER 5000mm        |

© 2023 COPYRIGHT RESTRICTION  
THIS PLAN IS THE EXCLUSIVE PROPERTY OF APLIN & MARTIN AND MAY NOT BE  
ALTERED OR REPRODUCED WITHOUT WRITTEN CONSENT OF SAME.

THIS PLAN IS PREPARED SOLELY FOR A LIMITED CONTRACTUAL USE BETWEEN  
APLIN & MARTIN AND OUR CLIENT. IT IS NOT TO BE USED FOR THE LOCATION OF  
PROPERTY LINES. WE ACCEPT NO RESPONSIBILITY FOR ANY UNAUTHORIZED USE.



NOTE:

THESE PROPERTIES MAY BE SUBJECT TO THE FOLLOWING CHARGES:

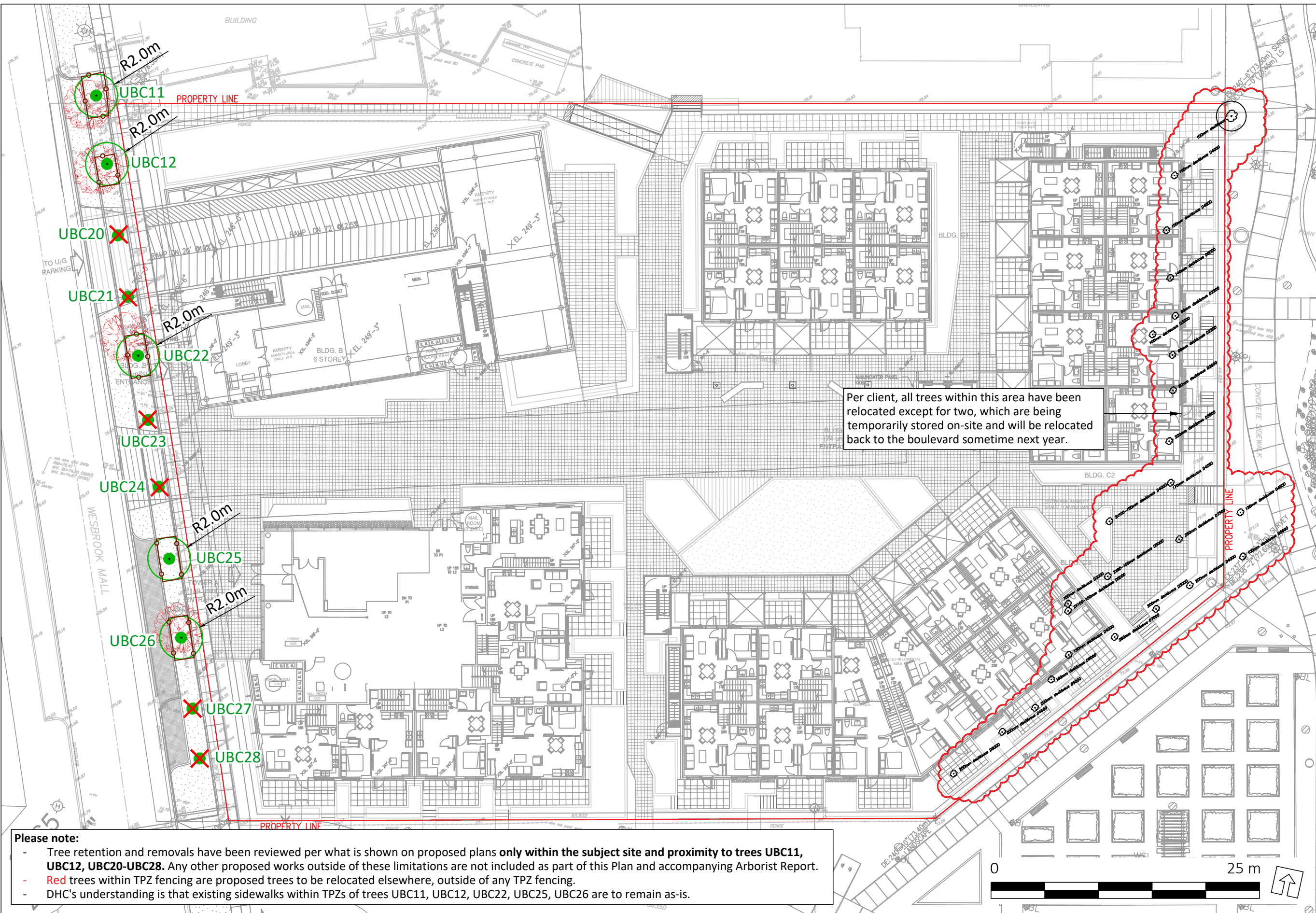
EASEMENT 88567950 APPURTENANT TO LOTS 16,17 & 19 PLAN BCP26848

STATUTORY RIGHT OF WAY CAS039546 SHAW CARLESYSTEMS LTD.

LEASE C48671919 UBC PROPERTIES INVESTMENTS LTD.

EASEMENT 88567951 APPURTENANT TO LOTS 16,17, 18 & 20 PLAN BCP26848

LEASE C49609040 UBC PROPERTIES INVESTMENTS LTD.



**LEGEND**

- CRITICAL ROOT ZONE
- TREE PROTECTION FENCING
- SURVEYED TREE TO BE RETAINED
- UN-SURVEYED TREE TO BE RETAINED
- SURVEYED TREE TO BE REMOVED
- UN-SURVEYED TREE TO BE REMOVED

**NOTES**

- The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
- All tree protection fencing must be built to the relevant municipal bylaw specifications.
- The tree protection zone shown is a graphical representation of the critical root zone, measured from the center of the tree.
- Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
- This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and design drawings provided to Diamond Head Consulting.
- This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and design drawings.

**REFERENCE DRAWINGS**

- Base Survey by Apln & Martin Geomatics Land Surveying Ltd. dated May 23, 2023.
- Proposed Architectural CAD provided by dys architecture.

**Please note:**

- Tree retention and removals have been reviewed per what is shown on proposed plans **only within the subject site and proximity to trees UBC11, UBC12, UBC20-UBC28**. Any other proposed works outside of these limitations are not included as part of this Plan and accompanying Arborist Report.
- **Red** trees within TPZ fencing are proposed trees to be relocated elsewhere, outside of any TPZ fencing.
- DHC's understanding is that existing sidewalks within TPZs of trees UBC11, UBC12, UBC22, UBC25, UBC26 are to remain as-is.