



**City of  
Richmond**

**Report to Development Permit Panel**

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**To:** Development Permit Panel

**Date:** October 23, 2018

**From:** Wayne Craig  
Director, Development

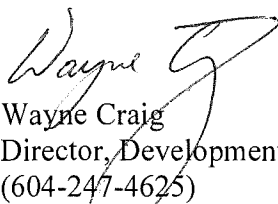
**File:** DP 17-785944

**Re:** Application by Zhao XD Architect Ltd. for a Development Permit at  
9880 Granville Avenue and 7031 No. 4 Road

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**Staff Recommendation**

That a Development Permit be issued which would permit the construction of seven three-storey townhouse units at 9880 Granville Avenue and 7031 No. 4 Road on a site zoned "Medium Density Townhouses (RTM2)".

  
Wayne Craig  
Director, Development  
(604-247-4625)

WC:el  
Att. 2

## Staff Report

### Origin

Zhao XD Architect Ltd. has applied to the City of Richmond for permission to develop seven three-storey townhouse units at 9880 Granville Avenue and 7031 No. 4 Road. The site is being rezoned from “Single Detached (RS1/F)” zone to “Medium Density Townhouses (RTM2)” under Bylaw 9686 (RZ 15-708960), which received third reading following the Public Hearing on April 18, 2017. The site currently contains two single-family dwellings, which will be demolished. A Servicing Agreement for road widening, frontage beautification, storm upgrades, and service connections is required prior to issuance of a Building Permit for the site.

### Development Information

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

### Background

Development surrounding the subject site is as follows:

- To the north, across Granville Avenue, a seven-unit townhouse development on a site zoned “Town Housing (ZT60) – North McLennan (City Centre)” and a duplex on a site zoned “Two-Unit Dwellings (RD1)”.
- To the east, across No. 4 Road, a single-family home on a lot zoned “Agriculture (AG1)” located within the Agriculture Land Reserve (ALR).
- To the south, a 22-unit townhouse development on a site zoned “Low Density Townhouses (RTL1)”.
- To the west, an 18-unit townhouse development, under construction, on a site zoned “Medium Density Townhouses (RTM2)”.

### Rezoning and Public Hearing Results

The Public Hearing for the rezoning of this site was held on April 18, 2017. No concerns regarding the rezoning application were expressed at the Public Hearing.

### Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP) and is in compliance with the “Medium Density Townhouses (RTM2)” zone.

### Advisory Design Panel Comments

The subject application was not presented to the Advisory Design Panel on the basis that this relatively small project generally meets all the applicable Development Permit Guidelines, and the overall design and site plan have adequately addressed staff comments.

## **Analysis**

### ***Conditions of Adjacency***

- An agricultural landscape buffer is required within the subject site, along the eastern edge of the No. 4 Road frontage. The buffer is intended to mitigate land use conflicts between the residential uses on the subject site and any agricultural land uses east of No. 4 Road. The Agricultural Advisory Committee (AAC) has reviewed and supported the proposed agricultural landscape buffer design on January 19, 2017.
- Both the form and massing of the proposed development are consistent with the adjacent townhouse development to the west, which is comprised of three-storey townhouses.
- The proposed townhouse development is also compatible to the existing two-storey townhouse development to the south. Varied roof line, additional setback on the upper floors, reduced window sizes and restricted window orientations are included in the architectural design of the south building (Building 2) to provide an appropriate interface with the adjacent two-storey townhouse development to the south.
- Second floor living room windows are set back approximately 3.5 m to 4.3 m to the rear (south) property line; and there is only one south facing bedroom window on the third floor (set back approximately 5.3 m from the south property line) overlooking the neighbouring yards to the south.
- Three trees, hedges, and a 1.8 m tall wood fence are proposed along the rear property line for screening between the subject and the neighbouring property to the south.
- Perimeter drainage will be required as part of the Building Permit to ensure storm water is managed and addressed through the development and will not impact the neighbouring properties.

### ***Urban Design and Site Planning***

- The subject townhouse development will have vehicle access and garbage, recycling and organic waste collection facilities provided by the adjacent townhouse development to the west at 9800 Granville Avenue, which is under construction. A Statutory Right of Way (SRW) has been registered on Title of 9800 Granville Avenue to provide vehicle access to the subject site from Granville Avenue. A cross-access easement agreement has been registered on Title of 9800 Granville Avenue to allow for the shared use of the garbage, recycling and organic waste collection facilities located on 9800 Granville Avenue. These arrangements (including cost sharing for maintenance purposes) were agreed upon between the developers of 9800 Granville Avenue and the owners of the subject site at the time 9800 Granville Avenue was rezoned for townhouse uses.
- The proposal consists of seven units provided in two clusters. Five units will have direct pedestrian access from the street and two units will have access from the internal drive aisle.
- The proposal provides for a pedestrian-oriented streetscape fronting both Granville Avenue and No. 4 Road with a landscaped edge treatment, low metal fencing, and metal gates to the street-fronting units. A separate pedestrian entrance from No. 4 Road to the development site is proposed to provide a direct access to the internal drive aisle from No. 4 Road.

- Ten residential parking spaces are required for this seven unit townhouse development. The developer is providing four additional residential parking spaces in tandem arrangement; bringing the total number of residential parking spaces to be provided on site to 14 spaces. This parking arrangement has been presented at Rezoning stage and no concerns have been raised. A Restrictive Covenant, prohibiting the conversion of tandem parking area into habitable area has been secured at rezoning.
- Two visitor parking spaces are proposed, which meets the minimum bylaw requirement. No accessible visitor parking space is required for this seven-unit townhouse development.
- Both residential and visitor bicycle parking are provided in compliance with the Zoning Bylaw requirements.
- The provision of private outdoor spaces complies with the Development Permit Guidelines (minimum of 30 m<sup>2</sup> per unit) of the OCP. All units have private outdoor spaces consisting of front or rear yard and balconies on the second floors.
- Outdoor amenity space is proposed at the northwest corner of the site. The size and location of the outdoor amenity space are appropriate in providing open landscape and amenity space convenient to all units.
- A covered mailbox kiosk and short-term bicycle parking spaces are provided at the entrance of the outdoor amenity space.
- Additional outdoor amenity space (10% of the site area) as per the City Centre Amenity Space Provisions in the City Centre Area Plan is provided as a walkway and landscaped areas throughout the site.

### ***Architectural Form and Character***

- The architect advised that the proposed architectural design is based on traditional housing style with pitched roof and wood siding/cladding of similar character. It is however improved with a few modern forms and elements (such as metal siding and exterior partition walls between balconies on Building 1) to give a more contemporary look.
- The overall appearance of the proposal generally conforms to the design guidelines of the South McLennan area and is compatible with the character of the surrounding area.
- A pedestrian scale is generally achieved along the public streets and internal drive aisle through the inclusion of variation in building projections, recesses, entry porches, varying material/colour combinations, landscape features, and the use of individual unit entrances.
- The proposed building materials (asphalt roof shingles, hardie siding/panel, galvanized metal siding, and wood trim/bracket/column & post) are generally consistent with the Official Community Plan (OCP) Guidelines and compatible with the existing character of the neighbourhood.
- Strong contrasting colours are used on the accent walls to provide visual interest.

### ***Landscape Design and Open Space Design***

- Tree preservation was reviewed at the rezoning stage; all seven trees on site are identified for removal.
- Based on the 2:1 tree replacement ratio goal stated in the Official Community Plan (OCP), 14 replacement trees are required. The applicant is proposing to plant 14 replacement trees on-site, including one conifer and 13 deciduous trees.
- Parks Operations staff agreed to the removal of a Birch tree located at the northwest corner of the site. Compensation of \$1,300 for the street tree removal has been secured as a condition of rezoning approval.
- A pedestrian-oriented streetscape along Granville Avenue and No. 4 Road is proposed; with a landscaped edge treatment, low metal fencing with masonry columns, and gates and walkways to individual townhouse unit front doors.
- Each unit will have a private yard with landscaping, a shade tree, a lawn area and a patio. Various hedges, shrubs and ground covers, as well as perennials and grasses have been selected to ensure the landscape treatment remains interesting throughout the year.
- A children's play area is proposed for the outdoor amenity area; natural play elements and play equipment have been chosen to fit into outdoor amenity space and to provide different play opportunities (i.e., climbing, social, imagination, balance, motor skills) that can be used by different age groups and for multiple purposes. A bench is also provided for caregivers.
- The surface parking stalls and a portion of the internal drive aisle will be treated with permeable pavers for better water infiltration and variety in paving surfaces. Feature paving will be used to identify the visitor parking stalls and to enhance the pedestrian route from No. 4 Road to the unit entries along the internal drive aisle. Paver colours and patterns are designed to match the design of the internal drive aisle of the neighbouring townhouse development to the west.
- In order to ensure that the proposed landscaping works are completed, the applicant is required to provide a landscape security of \$52,878.11 in association with the Development Permit.
- Indoor amenity space is not proposed on-site. A \$7,000 cash-in-lieu contribution (\$1,000 per unit) has been secured as a condition of rezoning approval, consistent with the Official Community Plan (OCP).

### ***Crime Prevention Through Environmental Design***

- Site lighting and clear site lines provide unobstructed views of surrounding area; plantings near residential entries are low to maximize views and casual surveillance opportunities.
- Exterior lights will be provided along drive aisle, as well as in visitor parking, outdoor amenity, and private yard areas; wall mount illuminated lights will be installed on building faces.
- All entrances are visible and overlooked by pedestrians or by neighbour's windows.

***Sustainability***

- The applicant has committed to achieving an EnerGuide rating of 82 for the proposed townhouses and to pre-ducting all units for solar hot water heating.
- A Certified Energy Advisor has confirmed that the proposed townhouse units will be designed to achieve an EnerGuide rating of 82. The report prepared by the Energy Advisor is on file and will be utilized through the Building Permit review process to ensure these measures are incorporated in the Permit drawings.
- The architect advised that the following design/features will be incorporated into the development:
  - Double glazed vinyl framed windows with low-E glass.
  - Energy star appliances and low flow fixtures.
  - Low emitting sealants, paints, adhesives, carpet and composite wood.

***Accessible Housing***

- The proposed development includes two convertible units that are designed with the potential to be easily renovated to accommodate a future resident in a wheelchair. The potential conversion of these units will require installation of a vertical lift in the stacked storage space (which has been dimensioned to allow for this in Units F & G) in the future, if desired.
- All of the proposed units incorporate aging in place features to accommodate mobility constraints associated with aging. These features include:
  - Stairwell hand rails.
  - Lever-type handles for plumbing fixtures and door handles.
  - Solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.

**Conclusions**

As the proposed development generally satisfies applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.



Edwin Lee  
Planner 1  
(602-276-4121)

EL:blg

Attachment 1: Development Application Data Sheet  
Attachment 2: Development Permit Considerations



**DP 17-785944**

**Attachment 1**

Address: 9880 Granville Avenue and 7031 No. 4 Road

Applicant: Zhao XD Architect Ltd.

Owner: Shih Lu & Reng Fang Chang

Planning Area(s): South McLennan Sub-Area (City Centre)

Floor Area Gross: 1,260.65 m<sup>2</sup>

Floor Area Net: 812.22 m<sup>2</sup>

	Existing	Proposed
Site Area:	1,332.8 m <sup>2</sup>	1,250.0 m <sup>2</sup>
Land Uses:	Single-Family Residential	Multiple-Family Residential
OCP Designation:	OCP: Neighbourhood Residential CCAP: General Urban T4 South McLennan Sub-Area Plan: Residential, 2½ storey typical (3-storeys maximum) with 0.55 base FAR	No Change
Zoning:	Single Detached (RS1/F)	Medium Density Townhouses (RTM2)
Number of Units:	2	7

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.65	0.65	none permitted
Lot Coverage – Building:	Max. 40%	39.2%	none
Lot Coverage – Non-porous Surfaces:	Max. 65%	60.0%	none
Lot Coverage – Landscaping:	Min. 25%	31.1 %	none
Setback – Front Yard (m):	Min. 6.0 m	6.10 m	none
Setback – East Flanking Side Yard (m):	Min. 6.0 m	6.08 m	none
Setback – West Side Yard (m):	Min. 3.0 m	3.38 m	none
Setback – Rear Yard (m):	Min. 3.0 m	3.25 m	none
Height (m):	Max. 12.0 m (3 storeys)	11.9 m (3 storeys)	none
Lot Width (m):	Min. 30.0 m	30.1 m	none
Lot Depth (m):	Min. 35 m	41.8 m	none
Off-street Parking Spaces – Regular (R) / Visitor (V):	1.4 (R) and 0.2 (V) per unit	2 (R) and 0.28 (V) per unit	none

Off-street Parking Spaces – Total:	10 (R) and 2 (V)	14 (R) and 2 (V)	none
Tandem Parking Spaces:	Max. 50% of required residential spaces in enclosed garages (10 x Max. 50% = 5 spaces)	40% of required residential spaces (i.e., 4 spaces) + 4 surplus spaces = total 8 spaces	none
Small Car Parking Spaces	None when fewer than 31 spaces are provided on site	0	none
Handicap Parking Spaces:	None when fewer than 3 visitor parking spaces are required	0	none
Bicycle Parking Spaces – Class 1 / Class 2:	1.25 (Class 1) and 0.2 (Class 2) per unit	2 (Class 1) and 0.28 (Class 2) per unit	none
Off-street Bicycle Parking Spaces – Total:	9 (Class 1) and 2 (Class 2)	14 (Class 1) and 2 (Class 2)	none
Amenity Space – Indoor:	Min. 70 m <sup>2</sup> or Cash-in-lieu	Cash-in-lieu	none
Amenity Space – Outdoor:	Min. 6 m <sup>2</sup> x 7 units = 42 m <sup>2</sup>	51.5 m <sup>2</sup>	none





# City of Richmond

## Development Permit Considerations

Development Applications Department  
6911 No. 3 Road, Richmond, BC V6Y 2C1

**Address:** 9880 Granville Ave & 7031 No 4 Road

**File No.:** DP 17-785944

**Prior to approval of the Development Permit, the developer is required to complete the following:**

1. Final adoption of the Zoning Amendment Bylaw 9686.
2. Receipt of a Letter-of-Credit for landscaping security in the amount of \$52,878.11.

**Prior to Building Permit Issuance, the developer must complete the following requirements:**

1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
2. Incorporation of accessibility, CPTED and sustainability measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
3. Enter into a Servicing Agreement\* for the design and construction of engineering infrastructure improvements. Works include, but may not be limited to,

Water Works

- a. Using the OCP Model, 555 L/s of water available at 20 psi residual at the hydrant in front of 9860 Granville Avenue. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b. The Developer is required to:
  - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for on-site fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage and Building designs.
  - Install a fire hydrant at No. 4 Road frontage to service the proposed townhouse development.
- c. At the Developer's cost, the City will:
  - Cut and cap at main the existing water service connections at Granville Avenue and No. 4 Road frontages.
  - Install new water connection to service the proposed development off of the existing watermain along Granville Avenue.

Storm Sewer Works

- a. The Developer is required to:
  - Upgrade approximately 35 m of the existing 600 mm diameter storm sewer along Granville Avenue frontage to 750 mm diameter pipe from the site's west property line to the box culvert along No. 4 Road. Tie-in to existing system shall be via new manholes. Details of the upgrade will be finalized in the Servicing Agreement designs.
  - Install new storm sewer connection to service the proposed site off of the proposed storm sewer along Granville Avenue.
- b. At the Developer's cost, the City will cut and cap at main the existing storm sewer service connections at Granville Avenue and No. 4 Road frontages.

Initial: \_\_\_\_\_

### Sanitary Sewer Works

- a. The developer is required to remove the existing sanitary lead that services 9880 Granville Avenue and 7031 No. 4 Road and discharge the existing sanitary right of way along the west property lines of 9880 Granville Avenue and 7031 No 4 Road. The extent of the existing sanitary right-of-way to be discharged shall be finalized via the servicing agreement design.
- b. At the Developer's cost, the City will:
  - Provide sanitary service connection to the proposed site off of the east side of the existing sanitary manhole located near the southwest corner of the proposed site.
  - Plug at the north side of the manhole the existing sanitary lead that services 9880 Granville Avenue and 7031 No 4 Road.

### Frontage Improvements

- a. The Developer is required to:
  - Locate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be submitted prior to the rezoning staff report progressing to Planning Committee and shall be included in the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right-of-ways dimensions and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to Servicing Agreement design approval:
    - i. BC Hydro PMT – 4 m W X 5 m (deep)
    - ii. BC Hydro LPT – 3.5 m W X 3.5 m (deep)
    - iii. Street light kiosk – 1.5 m W X 1.5 m (deep)
    - iv. Traffic signal kiosk – 1 m W X 1 m (deep)
    - v. Traffic signal UPS – 2 m W X 1.5 m (deep)
    - vi. Shaw cable kiosk – 1 m W X 1 m (deep) – show possible location in functional plan
    - vii. Telus FDH cabinet - 1.1 m W X 1 m (deep) – show possible location in functional plan
  - Coordinate with BC Hydro regarding the removal of the existing BC Hydro pole lines along No. 4 Road and possible pole relocations along Granville Avenue frontage.
  - Provide frontage improvements on Granville Avenue; works include, but are not limited to the following:
    - i. Design and construct new curb and gutter along the development frontage to meet the curb and gutter west of the site. (Refer to the frontage improvements for 9800/9820/9840/9860 Granville Avenue – RZ 14-658085). The curb and gutter works may require minor widening of Granville Avenue and modification to the southwest corner of the No. 4 Road/Granville Avenue intersection (as determined by the completion of a functional road plan).
    - ii. Measuring from the new curb of Granville Avenue (south side) towards the property line of the subject development, design and construct a minimum 1.5 m wide grass boulevard (exclusive of the 0.15 m wide top of curb) and a 1.75 m wide concrete sidewalk. As the width between the curb and the property line varies along the frontage, the frontage works are to transition to meet the sidewalk and boulevard treatments west of the subject site. (Refer to the frontage improvements for 9800/9820/9840/9860 Granville Avenue - RZ 14-658085).

- iii. The existing driveway along the Granville Avenue development frontage is to be closed. The applicant/developer is responsible for the removal of the existing driveway letdown and the replacement with barrier curb and gutter, grass/treed boulevard and sidewalk per standards described above).
- iv. Consult Parks on the requirement for tree preservation/placement including tree species and spacing as part of the frontage works.
- v. Consult Engineering on lighting and other utility requirements as part of the frontage works.
- Provide frontage improvements on No. 4 Road; works include, but are not limited to the following:
  - i. Remove the existing sidewalk and construct a new 1.5 m wide concrete sidewalk next to the new property line (with the 2.0 m wide road dedication on No. 4 Road). Construct a new boulevard over the remaining width between the new sidewalk and the west curb of No. 4 Road. The 2.0 m wide road dedication is to be treated as a grass boulevard without any tree planting. The new sidewalk and boulevard are to transition to meet the existing frontage treatments south of the subject site.
  - ii. The existing driveway along the No. 4 Road development frontage is to be closed. The applicant is responsible for the removal of the existing driveway letdown and the replacement with barrier curb and gutter, grass/treed boulevard and sidewalk per standards described above.
  - iii. Construct a 3 m x 9 m concrete bus pad at the existing southbound bus stop on No. 4 Road south of Granville Avenue. The bus pad works is to include conduit pre-ducting for electrical connections. This bus pad is to be constructed in accordance with Tran slink's 'Universal Accessible Bus Stop Design Guidelines'.
  - iv. Consult Parks on the requirement for tree preservation/placement including tree species and spacing as part of the frontage works.
  - v. Consult Engineering on lighting and other utility requirements as part of the frontage works.
- Provide street lighting along Granville Avenue and No. 4 Road frontages.

General Items:

- a. The Developer is required to:
  - Provide if pre-load is required, prior to pre-load installation, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development site (e.g., existing sanitary mains), proposed utility installations, the existing houses along the south and west property lines, and provide mitigation recommendations. The mitigation recommendations shall be incorporated into the first Servicing Agreement design submission or if necessary to be implemented prior to pre-load.
  - Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- 4. If applicable, payment of latecomer agreement charges associated with eligible latecomer works.
- 5. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

**Note:**

- \* This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.  
All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.  
The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.
- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contains prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

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Signed

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Date



No. DP 17-785944

To the Holder: ZHAO XD ARCHITECT LTD.  
Property Address: 9880 GRANVILLE AVENUE AND 7031 NO. 4 ROAD  
Address: C/O ZUEDONG ZHAO  
#255 – 11181 VOYAGEUR WAY  
RICHMOND, BC V6X 3N9

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #4 attached hereto.
4. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$52,878.11 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 Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
6. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

**Development Permit**  
**No. DP 17-785944**

To the Holder: ZHAO XD ARCHITECT LTD.  
Property Address: 9880 GRANVILLE AVENUE AND 7031 NO. 4 ROAD  
Address: C/O ZUEDONG ZHAO  
#255 – 11181 VOYAGEUR WAY  
RICHMOND, BC V6X 3N9

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7. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.  
DAY OF

ISSUED BY THE COUNCIL THE

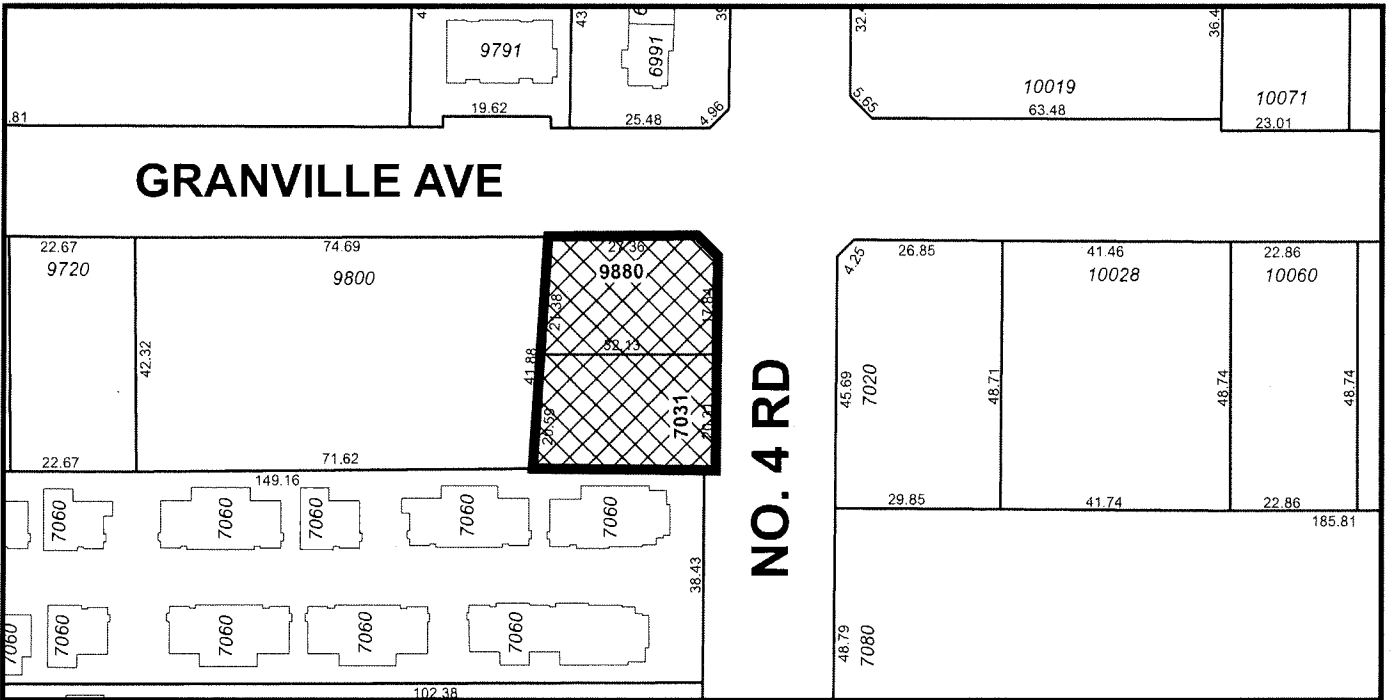
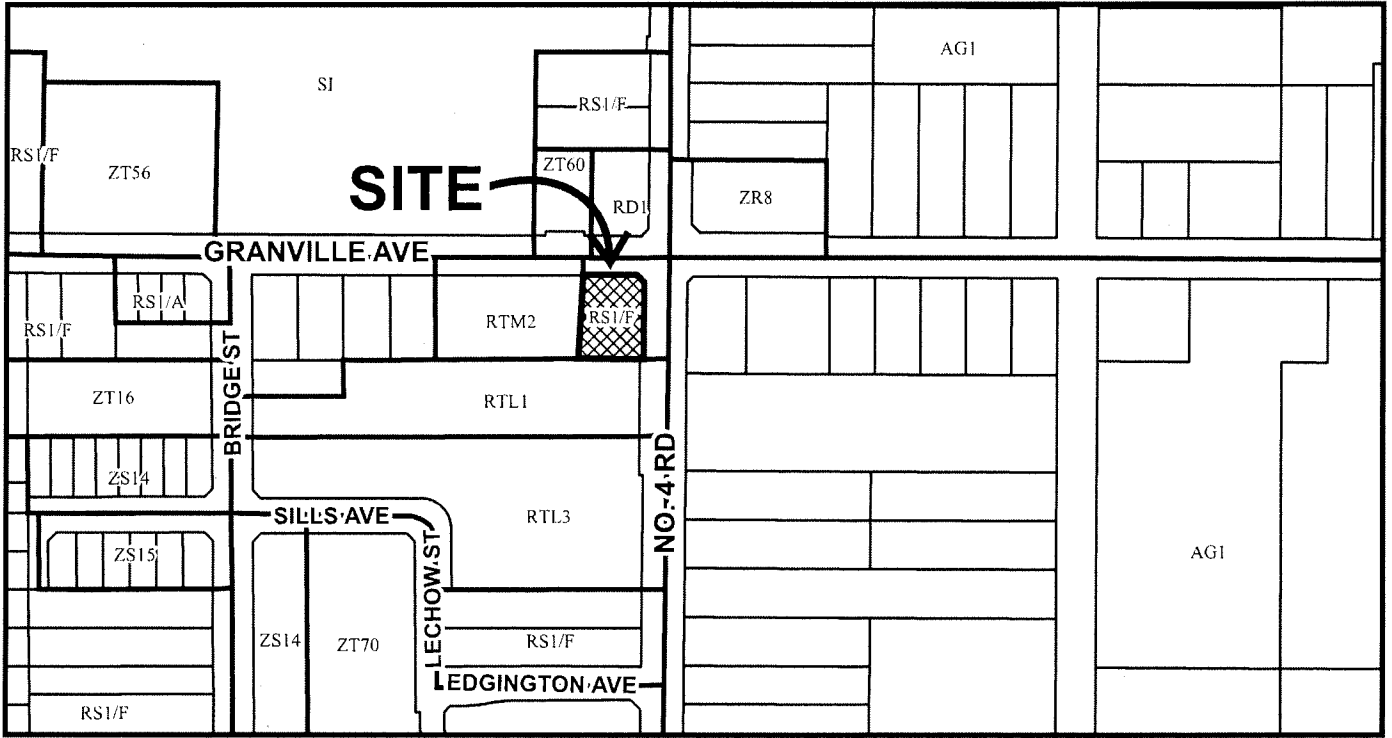
DELIVERED THIS DAY OF

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MAYOR



City of  
Richmond



DP 17-785944  
SCHEDULE "A"

Original Date: 09/29/17

Revision Date:

Note: Dimensions are in METRES

NO. 4 ROAD

**DP 17-785944**  
**OCT 23 2018**

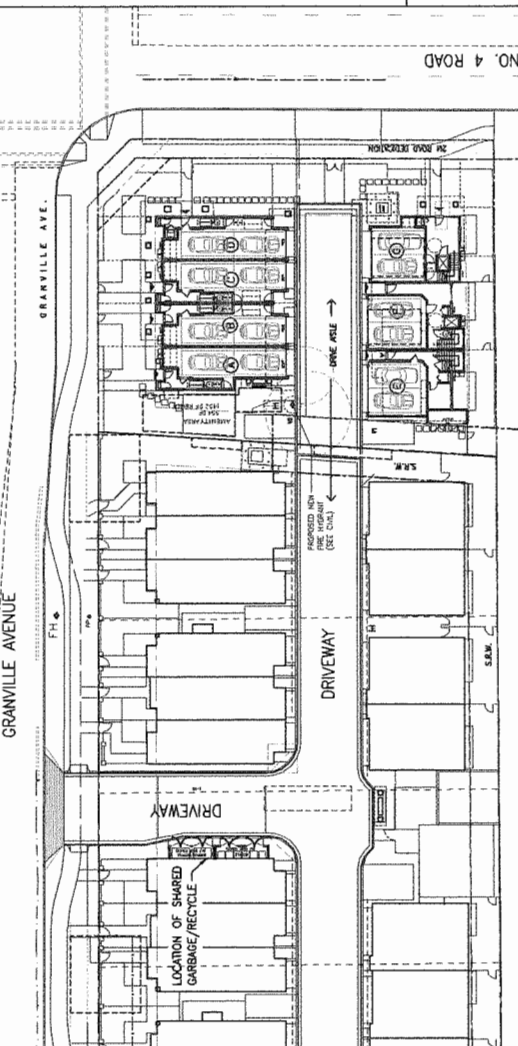
31 JUL/18 CITY COMMENTS ON PH  
 26 JUL/18 CITY COMMENTS ON PH  
 28 MAR/17 DP APPLICATION  
 NOV/16 CITY COMMENTS

Date: Issued For:  
 A A DETAIL NUMBER  
 B LOCATION SHEET  
 C DETAIL SHEET

Project:  
**TOWNHOUSE DEVELOPMENT GRANVILLE AVE**

9880 GRANVILLE AVE  
 RICHMOND, BC  
 Drawing Title:  
**SITE PLAN, DATA & CONTEXT PLAN**

Date: **OCT 23 2018**  
 Drawn By:  
 Checked By:  
 Project No.:  
 Drawing No.: **A1**



**SITE PLAN FOR DRIVEWAY ACCESS & GARBAGE/RECYCLING ENCLOSURE LOCATION**  
 SCALE: 1"=30'-0"

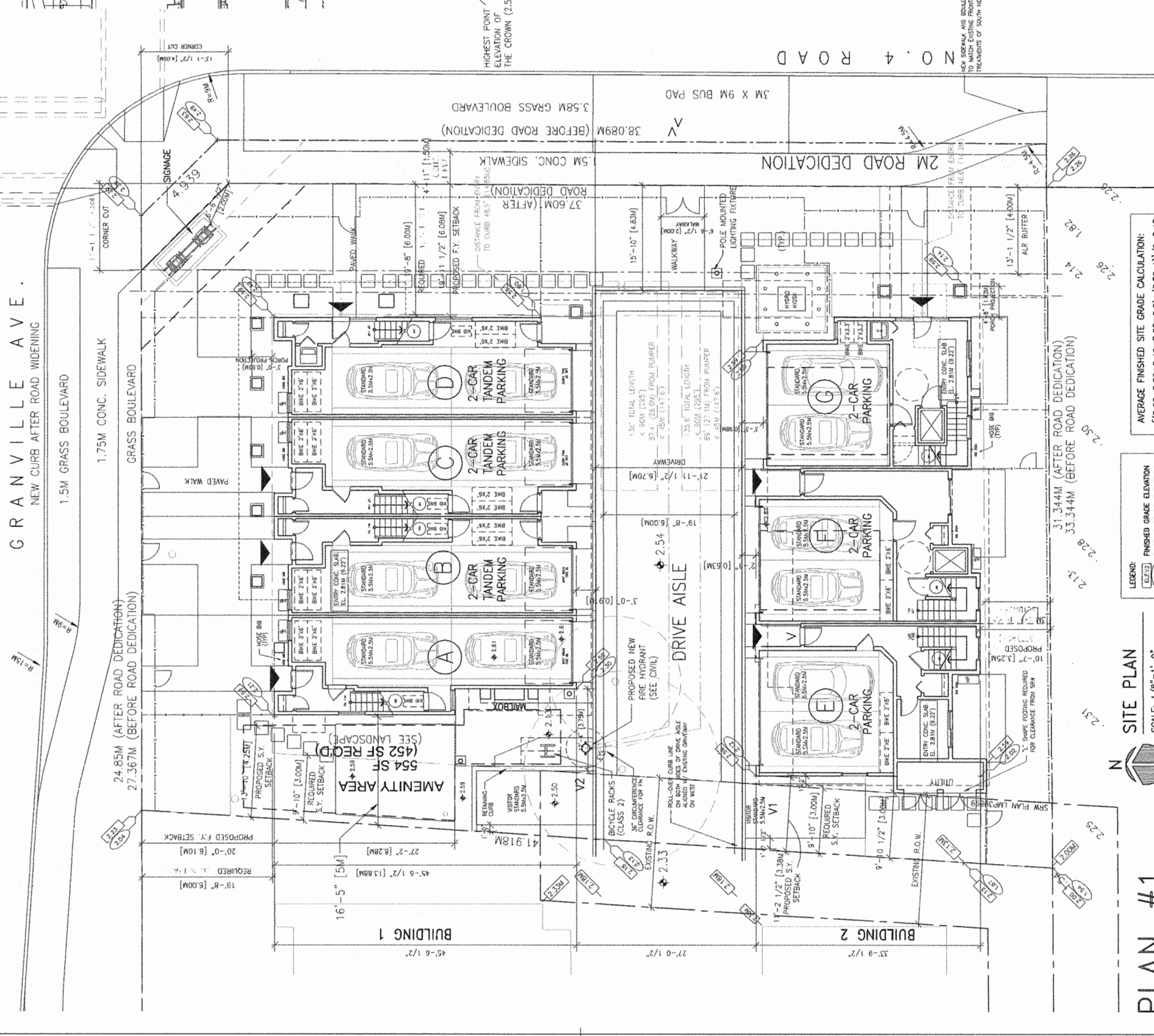
DEVELOPMENT DATA

ADDRESS: 9880 GRANVILLE AVENUE & 7031 NO. 4 ROAD  
 LEGAL DESCRIPTION: LOT 84 EXCEPT PARCEL "A" (BYLAW PLAN 64704), AND LOT 85, ALL IN SECTION 15 BLOCK 4 NORTH RANGE 6 WEST N.W.D. PLAN 47545  
 P.I.D. NUMBERS: PID: 004-193-52 (LOT 84) PID: 003-554-678 (LOT 85)  
 PLANNING AREA(S): 10 CITY CENTRE (OCP SCH: 2.100) MCLENNAN SOUTH SUB-AREA PLAN

EXISTING	PROPOSED
SITE SIZE (SM): 1332.8 SM (14346 SF.)	1750 SM (18452 SF.)
LAND USES: SINGLE-FAMILY RESIDENTIAL	TOWNHOUSE
OCP DESIGNATION: NEIGHBOURHOOD RESIDENTIAL	NEIGHBOURHOOD RESIDENTIAL
AREA PLAN DESIGNATION: 10 CITY CENTRE (OCP SCH: 2.100)	10 CITY CENTRE (OCP SCH: 2.100)
ZONING: SINGLE DETACHED (RS-1E)	MEDIUM-DENSITY TOWN-HOUSING (RTM2)
NUMBER OF UNITS: 2	7

BYLAW REQUIREMENT	PROPOSED	VARIANCE
FLOOR AREA RATIO: MAX. 0.65 (8743.8 SF)	0.65 (8743.0 SF)	NONE
LOT COVERAGE - BUILDING: MAX. 40% (5380.8 SF)	39% (5274.8 SF)	NONE
LOT COVERAGE - LANDSCAPING: MIN. 30% (4035.6 SF)	31.1% (4178.7 SF)	NONE
COVERED AREA (SF): MAX. 65% (8743.8 SF)	60.0% (8074.9 SF)	NONE
SETBACK - ROAD SETBACK (NORTH): MIN. 6.0M	5.3% 707.2	NONE
SETBACK - ROAD SETBACK (EAST): MIN. 6.0M	6.0M	NONE
SETBACK - WEST SIDE YARD: MIN. 3.0M	3.0M	NONE
SETBACK - REAR YARD (SOUTH): MIN. 3.0M	3.0M	NONE
HEIGHT: 12M (3 STOREYS)	12M (3 STOREYS)	NONE
LOT SIZE (MIN. DIMENSIONS): (MIN. 30M WIDE) (MIN. 30.2 M WIDE) (MIN. 35M DEEP)	(MIN. 30.2 M WIDE) (MIN. 41.8 M DEEP)	NONE
RESIDENTIAL PARKING SPACES: 10 SPACES (1.4/UNIT)	14 SPACES (2.0/UNIT)	NONE
VISITOR PARKING SPACES: 0.2 SPACES/UNIT = 1.4	2 SPACES	NONE
OFF-STREET PARKING SPACES-TOTAL: 12 SPACES	16 SPACES	NONE
SIDE-BY-SIDE PARKING SPACES: MIN. 5 SPACES	6 SPACES	NONE
TANDEM PARKING SPACES: MAX. 50% AMONG REQ'D.	4 SPACES	NONE
BICYCLE PARKING SPACE-CLASS-1: 1.25 SPACES PER UNIT	14 SPACES	NONE
BICYCLE PARKING SPACE-CLASS-2: 0.2 SPACES PER UNIT	2 SPACES	NONE
AMENITY SPACE - INDOOR: MIN. 50 SM OR CASH-IN-LIQUID	CASH-IN-LIQUID	NONE
AMENITY SPACE - OUTDOOR: MIN. 6 SM PER UNIT	554 SF (7.3 SM PER UNIT)	NONE
PRIVATE OPEN SPACE: MIN. 37 SM PER UNIT	45.8 SM PER UNIT (AVG.)	NONE

\* INCL. UTILITY CLOSETS



**PLAN #1**  
 SCALE: 1/8"=1'-0"

**SITE PLAN**

AVERAGE FINISHED SITE GRADE CALCULATION:  
 $[(2.23+2.29+2.49+2.26+2.0)+(2.59 \times 4)]/9=2.40$

LEGEND:  
 FINISHED GRADE ELEVATION  
 EXISTING GRADE ELEVATION

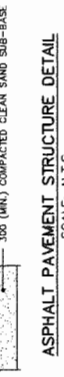
NOTE FOR LIFT:  
 2 STOREY LIFT  
 MIN. CLEAR HOISTWAY SIZE: 43760 (17P)  
 DEPRESSURE SLAB FOR LIFT

NOTE FOR LIFT:  
 LANS IN PLACE FOR ALL UNITS:  
 -GLASS BLOCKING IN WASHROOM WALLS FOR BUMPER GRAB BARS;  
 -LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES;  
 A CONVERTIBLE UNIT IS PROPOSED FOR THIS PROJECT.  
 FINISHED GRADE ELEVATION ABOVE IS TO BE ACHIEVED FOR THE DEVELOPMENT PROJECT.



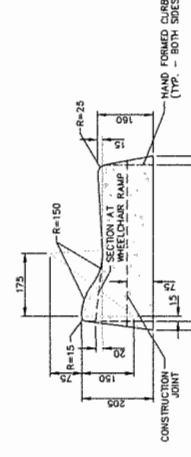
- SOUNDERS' NOTES:**
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY BUILDING DEPARTMENT STANDARDS AND SPECIFICATIONS, THE CURRENT S.C. BUILDING CODE AND ALL APPLICABLE SUPPLEMENTARY ORDINANCES AND REGULATIONS. MATERIALS SHALL BE THE SAME AS SHOWN ON THE ORIGINAL RECORD DRAWINGS UNLESS OTHERWISE NOTED.
  2. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  3. ALL ELEVATIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  4. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  5. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  6. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  7. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  8. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  9. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  10. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  11. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  12. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  13. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  14. ALL DIMENSIONS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

F.S.C. REFERS TO 'FLOOR SLAB ELEV.' AND G.E. REFERS TO 'GRADE ELEV.'  
 ALL DIMENSIONS TO BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.



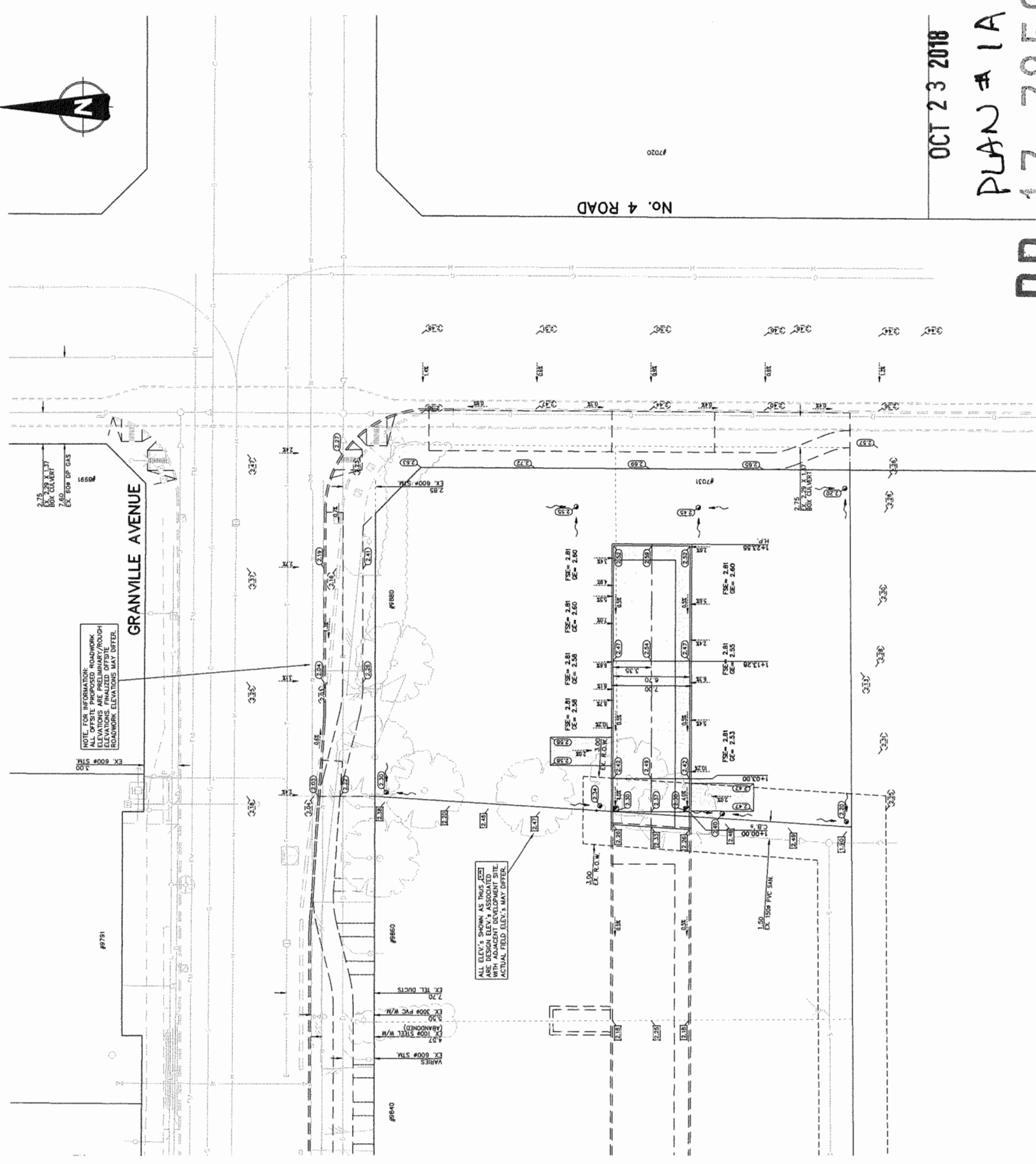
ASPHALT PAVEMENT STRUCTURE DETAIL  
SCALE: N.T.S.

ASPHALT PAVEMENT STRUCTURE DESIGN IS TO BE SUBMITTED TO THE GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.



CONC. ROLL-OVER CURB DETAIL  
(OUTSIDE CURB TYPE)  
SCALE: 1:10

- NOTES:**
1. ALL ELEVATIONS ARE TO GEODETIC DATUM AND REFER TO RICHMOND BENCHMARK NO. ----- ON HYDRANT, LOCATED AT ----- ELEV. = -----.
  2. CONTRACTOR TO CONFIRM BENCHMARK WITH MPT ENGINEERING, PRIOR TO CONSTRUCTION.
  3. CONTRACTOR TO CONFIRM LOCATIONS OF ALL EXISTING UTILITIES AND REPORT ANY DISCREPANCIES TO MPT ENGINEERING, PRIOR TO CONSTRUCTION.
  4. ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE CURRENT CITY BUILDING DEPARTMENT STANDARDS AND SPECIFICATIONS AND THE CURRENT B.C. BUILDING CODE.



NOTE: F.S.C. REFERS TO 'FLOOR SLAB ELEV.' AND G.E. REFERS TO 'GRADE ELEV.'  
 ALL DIMENSIONS TO BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

ALL ELEV'S SHOWN AS THIS DATE TO BE CONSIDERED AS PROPOSED WITH ADJACENT DEVELOPMENT SITE. ACTUAL FIELD ELEV'S MAY DIFFER.

**SITE GRADING INFORMATION**  
7 FEB/18

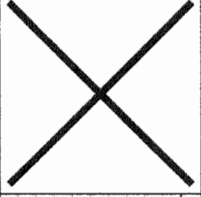
ALL DIMENSIONS AND ELEVATIONS ARE IN METRIC UNITS.

OCT 23 2018  
 PLAN # IA  
 DP 17-785944

REV'N	DATE	BY	ON	DESCRIPTION

**TITLE**  
 SURFACE WORKS

#9880 GRANVILLE AVE. & #7031 No. 4 ROAD  
 DESIGN: TN  
 DRAWN: TN  
 SHEET NO.: 3 OF 6  
 CHECKED: JMC  
 SCALE: 1:200



**PROJECT INFORMATION**  
 #9880 GRANVILLE AVE. & #7031 No. 4 ROAD  
 DRAWING NO.: R15936-B  
 SHEET NO.: 3 OF 6  
 SCALE: 1:200



**ZHAO XD  
ARCHITECT  
LTD.**

#255-11181 Voyageur Way,  
Richmond, BC V6X 3N9  
Tel. (604) 275-8862  
Fax (604) 909-1736  
Email: info@zhaoarch.com  
Web: zhaoarch.com

This drawing shall not be used for construction unless it is accompanied by the CONSULTANT'S stamp.

28/MAR/17	DP APPLICATION
NOV/16	CITY COMMENTS
31/AUG/16	
Date:	Issued For:

A A DETAIL NUMBER  
B LOCATION SHEET  
C DETAIL SHEET

Project:  
TOWNHOUSE  
DEVELOPMENT  
GRANVILLE AVE

9880 GRANVILLE AVE,  
RICHMOND, BC

Drawing Title:  
FLOOR PLANS

Date:  
Scale:  
Drawn By:  
2018  
By:  
Project No.:

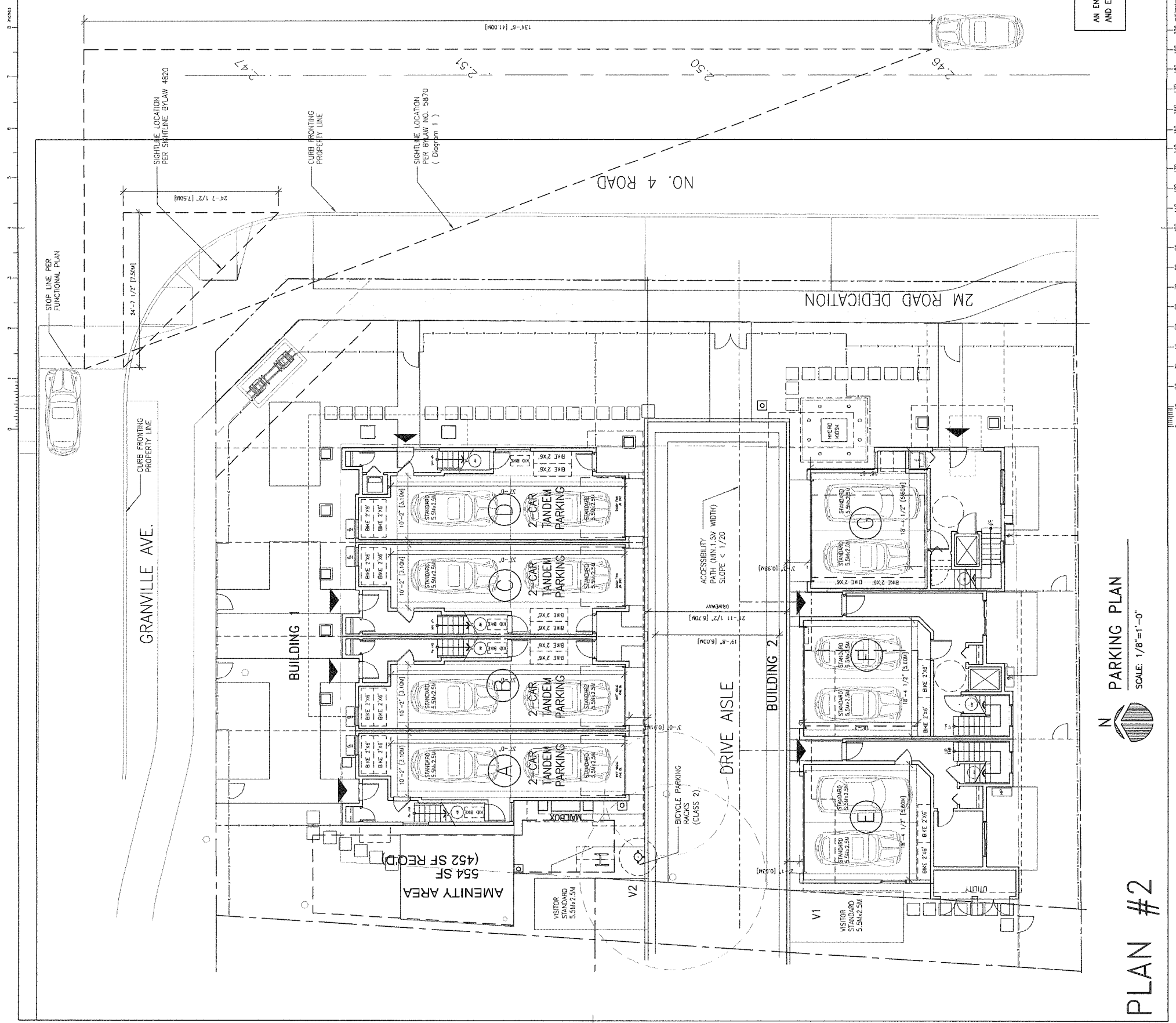
Sheet No.:  
A2

AGING IN PLACE FEATURES FOR ALL UNITS:  
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;  
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES  
A CONVERTIBLE UNIT IS PROPOSED FOR THIS PROJECT.  
ENERGYGUIDE RATING OF 82 OR ABOVE IS TO BE ACHIEVED FOR THE DEVELOPMENT PROJECT.

BYLAW REQUIREMENT	PROPOSED	VARIANCE
RESIDENTIAL PARKING SPACES: 1.4 SPACES/ UNIT	14 SPACES	
VISITOR PARKING SPACES: 0.2 SPACES/ UNIT	2 SPACES	
OFF-STREET PARKING SPACES-TOTAL:	16	
TANDEM PARKING SPACES: MAX 50% AMONG REQ'D.	8	VARIANCE REQ'D
BICYCLE PARKING SPACE-CLASS-1: 1.25 SPACES PER UNIT	14 SPACES (2 PER UNIT)	
BICYCLE PARKING SPACE-CLASS-2: 0.2 SPACES PER UNIT	2 SPACES	

OCT 23  
PLAN  
2  
DP 17-785944

AN ENERGIZED OUTLET CAPABLE OF PROVIDING LEVEL 2 CHARGING OR HIGHER SHALL BE PROVIDED TO ALL INDOOR PARKING SPACES. AND ENERGIZED OUTLETS SHALL BE LABELED FOR THEIR INTENDED USE FOR ELECTRIC VEHICLE CHARGING.



N  
PARKING PLAN  
SCALE: 1/8"=1'-0"

PLAN #2



**ZHAO XD  
ARCHITECT  
LTD.**

#255-11181 Voyager Way,  
Richmond, BC V6X 3J9  
Tel: (604) 275-8882  
Fax: (604) 909-1736  
Email: info@zhaoxd.com  
Web: zhaoxd.com

This drawing shall not be used for construction unless it is accompanied by the CONSULTANT'S stamp.

28/MAR/17	DP APPLICATION
NOV/16	CITY COMMENTS
31/AUG/16	
Date:	Issued For:

- A A DETAIL NUMBER
- B B LOCATION SHEET
- C C DETAIL SHEET

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Project:  
**TOWNHOUSE  
DEVELOPMENT  
GRANVILLE AVE**

9880 GRANVILLE AVE,  
RICHMOND, BC

Drawing Title:  
**ROOF PLAN &  
LIGHTING PLAN**

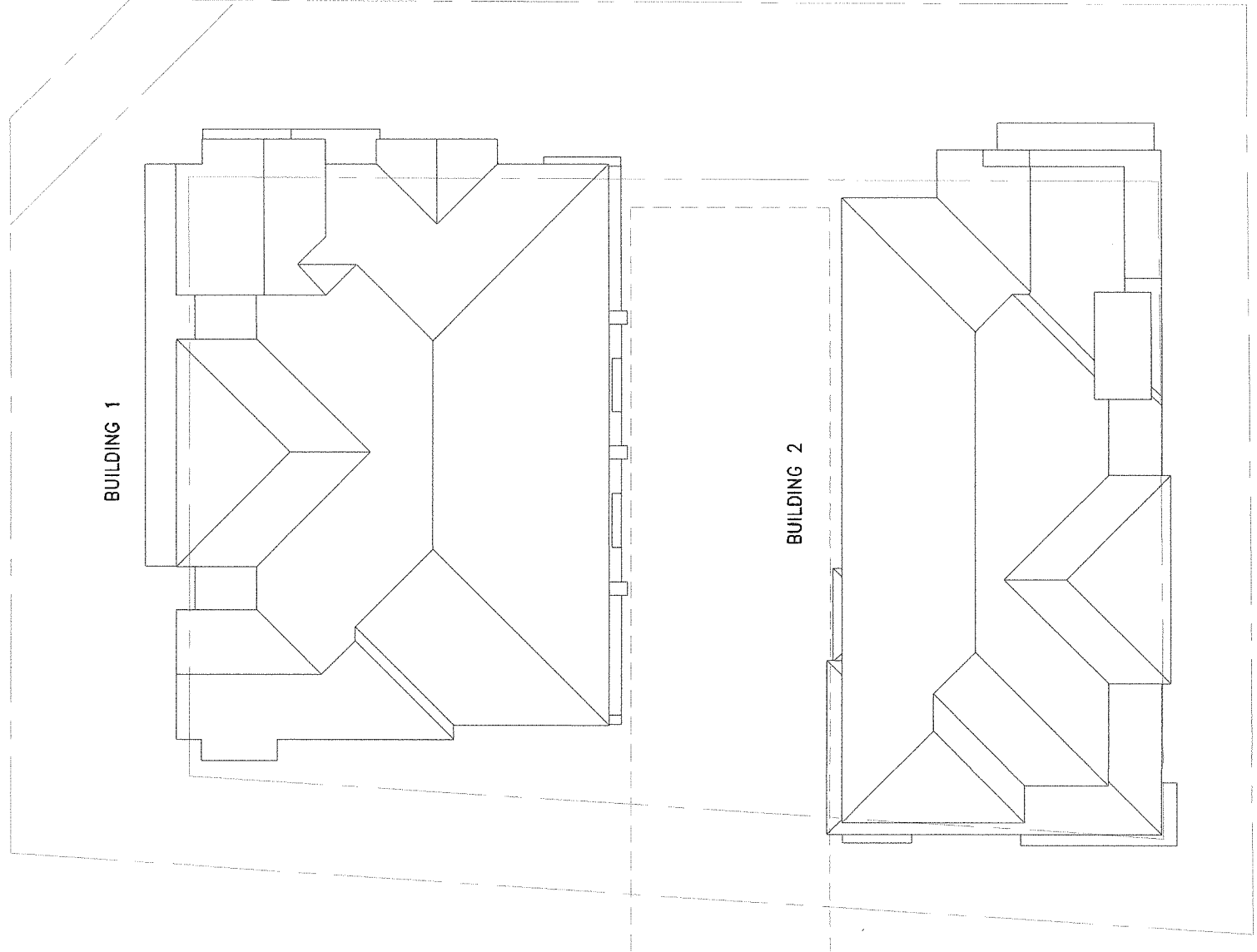
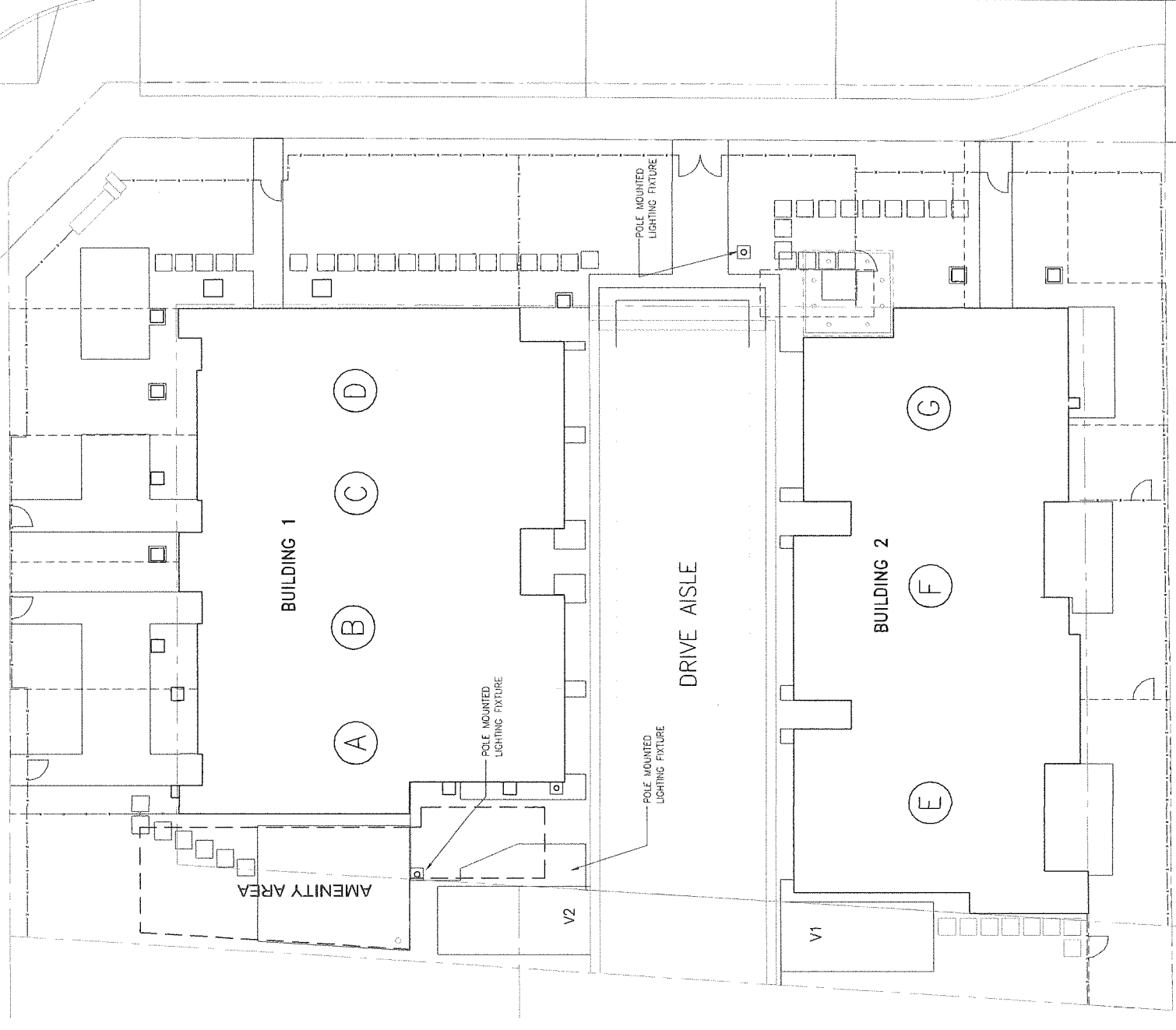
Date:	Scale:
Drawn By:	Checked By:

Project No.: **2018**  
Drawing No.: **PLAN 2A**

A2.1

GRANVILLE AVE.

NO. 4 ROAD



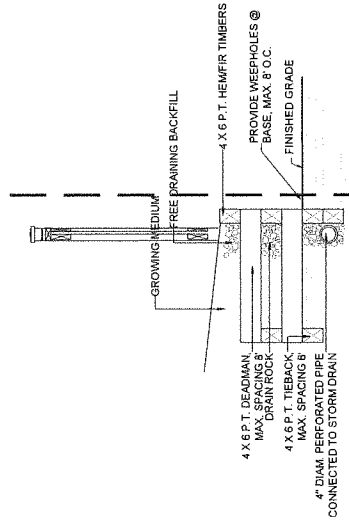
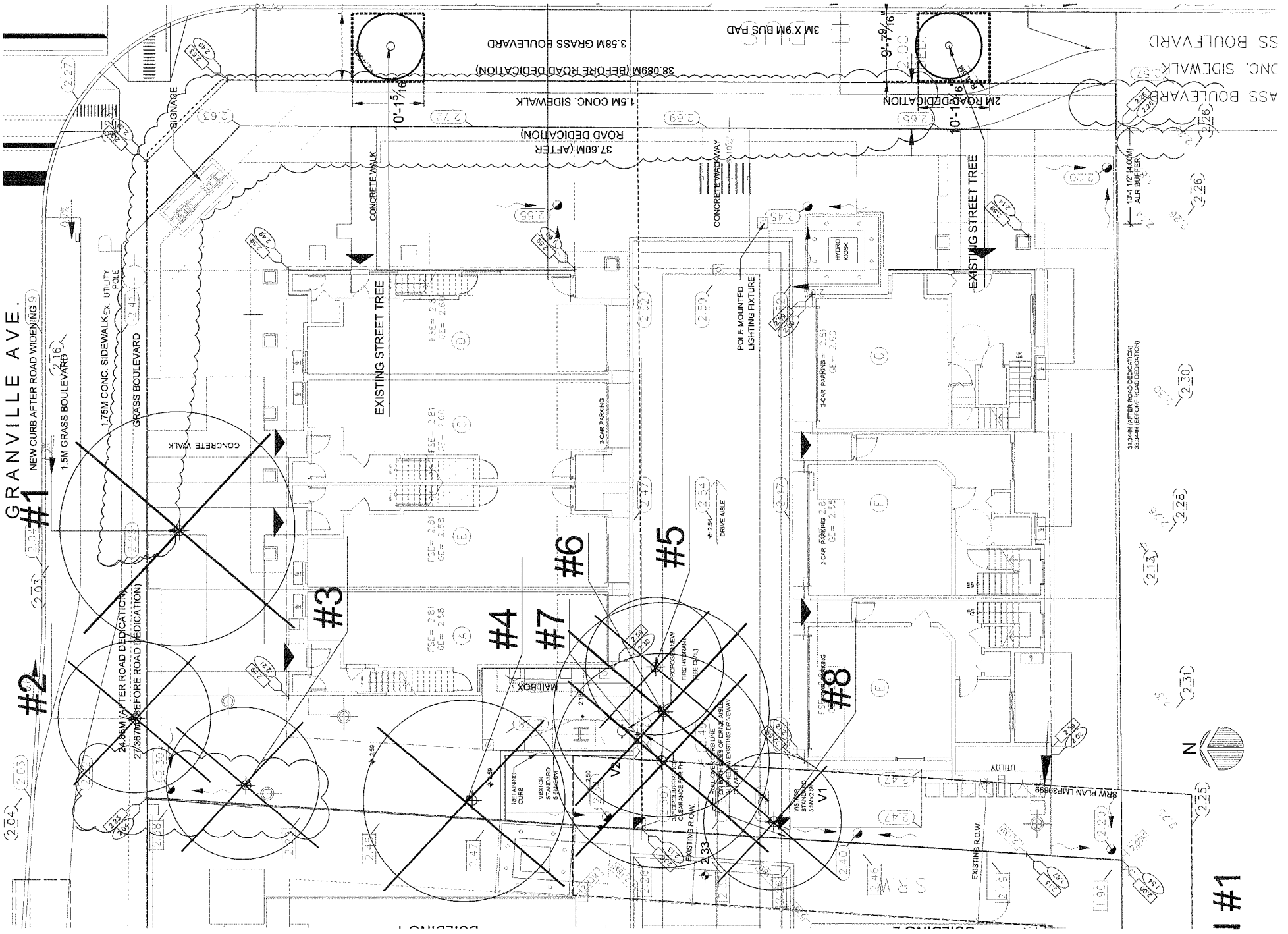
**LIGHTING PLAN**  
SCALE: 1/8"=1'-0"

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

PLAN 2A OCT 23 2018

**DP 17-785944**

SEAL



**NOTES:**  
ALL WOOD PRESURE TREATED TO CSA STANDARDS FOR SEVERE CONDITIONS.  
DRILL HOLES WITH A LIBERAL APPLICATION OF A SUITABLE MATCHING PRESERVATIVE.  
DRILL AND NAIL EACH TIMBER WITH GALVANIZED 10' SPIKES MAXIMUM 40' O.C., TWO EACH END.  
TIEBACKS AT 80' O.C. MAXIMUM BETWEEN CONTINUOUS REBAR PINS AS SHOWN.  
BACKFILL IN 12" LAYERS, COMPACT EACH LAYER TO 5% OF ORIGINAL DENSITY.  
FILL DIRECTLY BEHIND THE WALL WITH GRANULAR MATERIAL (FREE DRAINING).  
PROVIDE GAPS IN BOTTOM ROW OF WALLS AS WEEP HOLES.  
TOP OF WALL TO CONSISTENT ELEVATION AS SHOWN. FINISH GRADE AT BACK OF WALL TO INCLUDE 12" TOPSOIL. WALL MUST BE WITHIN THE PROPERTY LINE.

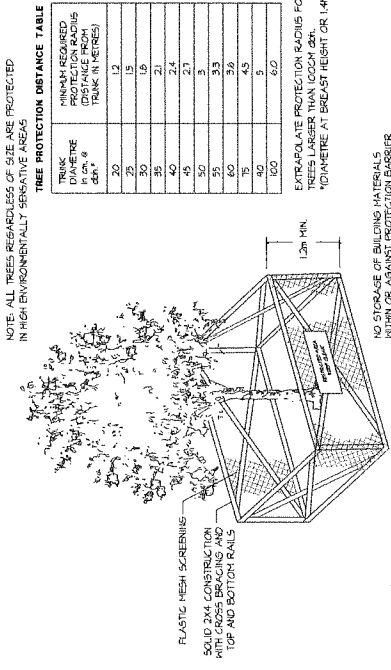
**8** TIMBER RETAINING WALL  
SCALE: 1/2"=1'-0"

**Table of Existing Trees**

Tree No.	Species		DBH(cm)
	Common Name	Botanical Name	
No.1	Cherry	Prunus sp.	20
No.2	Paper Birch	Betula papyrifera	20
No.3	Paper Birch	Betula papyrifera	30
No.4	Cherry	Prunus sp.	25
No.5	Western Red Cedar	Thuja plicata	28
No.6	Western Red Cedar	Thuja plicata	40
No.7	Western Hemlock	Tsuga heterophylla	35
No.8	Douglas Fir	Pseudotsuga menziesii	30

**Table of proposed Trees**

QTY	Species		PLANTED SIZE
	Common Name	Botanical Name	
5	CRATAEGUS DOUGLASII	BLACK HAWTHORN	6CM CAL; B&B
1	POPULUS TREMULOIDES	TREMBLING ASPEN	9CM CAL; 2M STD; B&B
1	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	4M HT; B&B
3	STEWARTIA PSEUDOCAMELLIA	JAPANESE STEWARTIA	6CM CAL; 2M STD; B&B
4	STRAX JAPONICUS	JAPANESE SNOWBELL	8CM CAL; B&B



**1-3** TREE PROTECTION BARRIER

PROJECT:  
**7 UNIT TOWNHOUSE DEVELOPMENT**  
9880 GRANVILLE AVENUE AND 7031 NO. 4 ROAD RICHMOND

DRAWING TITLE:  
**TREE MANAGEMENT PLAN**

DATE: August 21, 2015  
SCALE: 1/8" = 1'-0"  
DRAWN: DD  
DESIGN: DD  
CHKD: PCM

**L3**

OF 4

PMG PROJECT NUMBER:  
15-135

PLAN 3 OCT 23 2018  
DP 17-785944

15135-9 ZIP

SEAL:

**PLANT SCHEDULE - STREET TREES ONLY**

TREE	CITY	COMMON NAME	PMG PROJECT NUMBER
1	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
2	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
3	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135

**PLANT SCHEDULE**

TREE	CITY	COMMON NAME	PMG PROJECT NUMBER
1	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
2	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
3	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135

**PLANT SCHEDULE - AIR BUFFER ONLY**

TREE	CITY	COMMON NAME	PMG PROJECT NUMBER
1	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
2	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135
3	SMALL STREET TREE	SMALL STREET TREE AND LOCATION BY CITY OF RICHMOND	15-135

**LIGHTING LEGEND**

SYMBOL	STYLE
	BOLLARD 36" HT

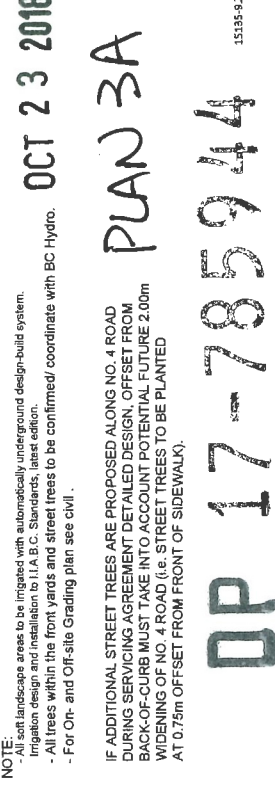
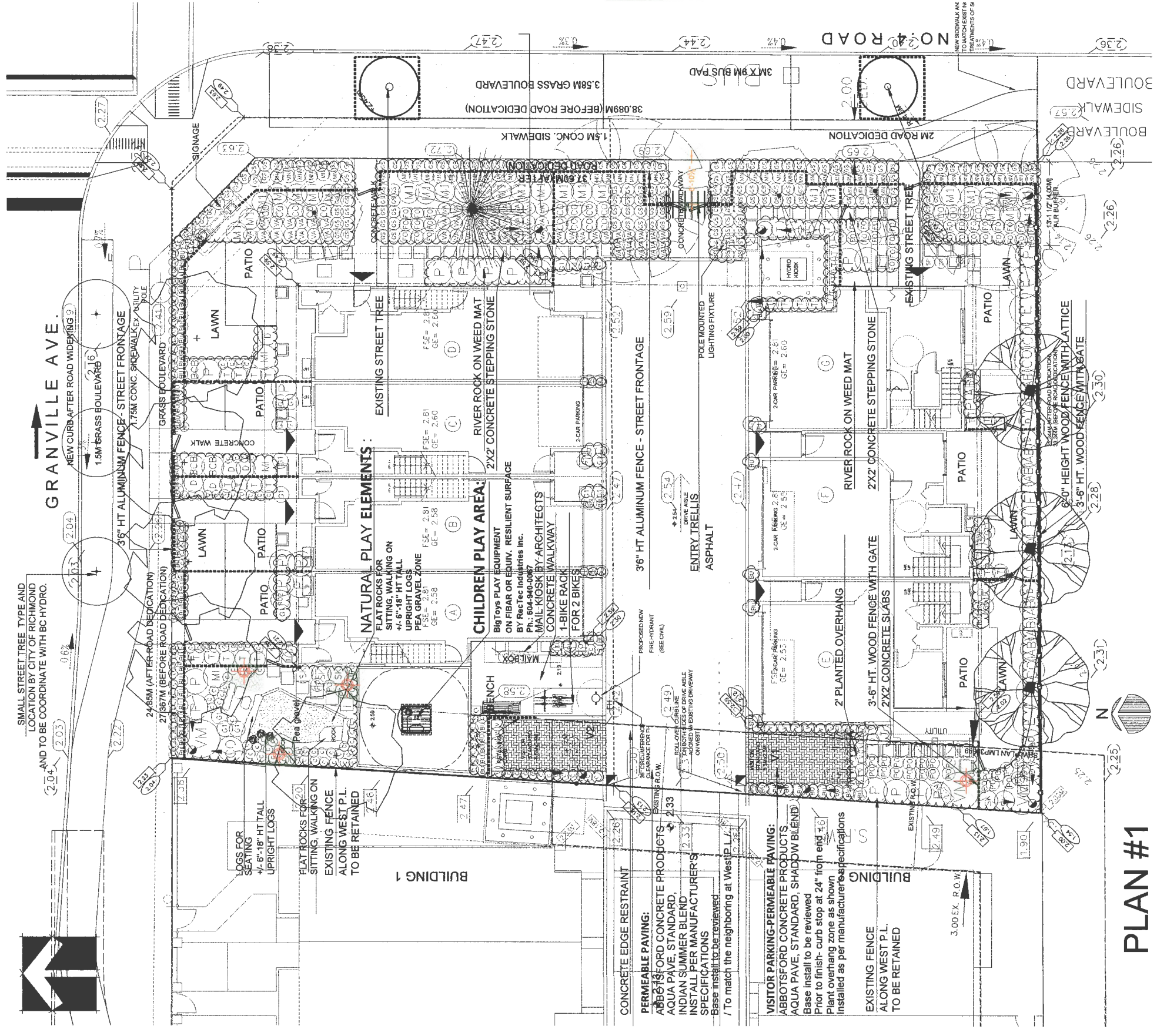
CLIENT:

NO.	DATE	REVISION DESCRIPTION	DR.
1	15.AUG.03	NEW SITE PLAN	DD
2	17.JAN.08	NEW SITE PLAN/UTILITY COMMENTS	DD
3	18.JAN.08	NEW SITE AND CIVIL PLANS	DD
4	18.APR.09	CITY COMMENTS	DD
5	18.APR.09	NEW SITE PLAN	DD
6	18.AUG.14	NEW SITE PLAN	DD
7	18.AUG.14	NEW SITE PLAN	DD
8	18.APR.17	ASPECT COMMENTS	DD

PROJECT:  
**7 UNIT TOWNHOUSE DEVELOPMENT**  
9880 GRANVILLE AVENUE AND 7031 NO. 4 ROAD  
RICHMOND

DRAWING TITLE:  
**LANDSCAPE PLAN**

DRAWING NUMBER:  
**L1**  
DATE: August 21, 2015  
SCALE: 1/8" = 1'-0"  
DESIGN: DD  
CHKD: PCM  
OF 4  
PMG PROJECT NUMBER:  
15135-9.2P



**NOTE:**  
All soft landscape areas to be irrigated with automatically underground design-build system. Irrigation design and installation to I.A.B.C. Standards, latest edition.  
- All trees within the front yards and street trees to be confirmed/ coordinate with BC Hydro.  
- For On- and Off-site Grading plan see civil.

IF ADDITIONAL STREET TREES ARE PROPOSED ALONG NO. 4 ROAD DURING SERVING AGREEMENT DETAILED DESIGN, OFFSET FROM BACK-OF-CURB MUST TAKE INTO ACCOUNT POTENTIAL FUTURE 2.00M WIDENING OF NO. 4 ROAD (i.e. STREET TREES TO BE PLANTED AT 0.75M OFFSET FROM FRONT OF SIDEWALK).

OCT 23 2018  
PLAN 3A

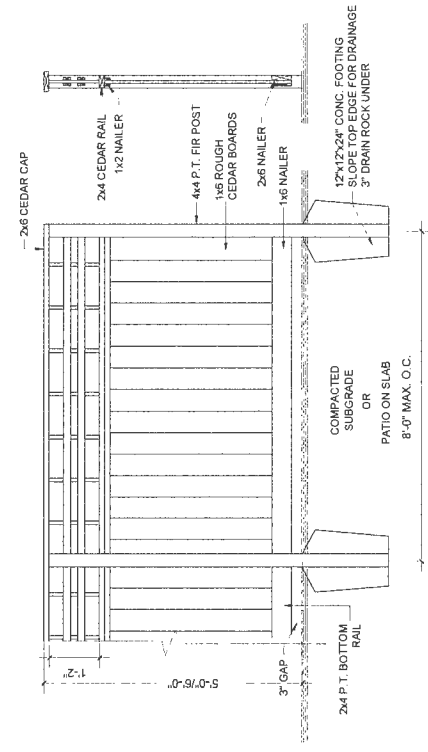
**PLAN #1**

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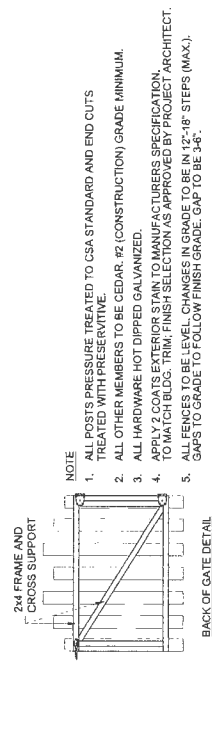


SEAL

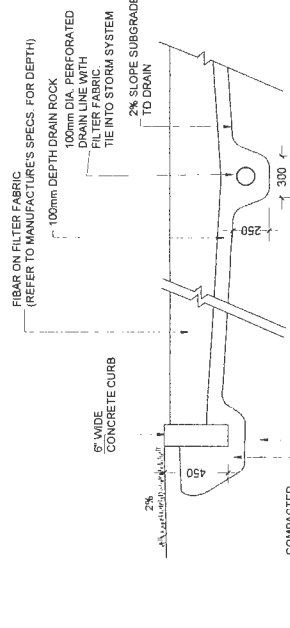
- NOTES:
1. ALL POSTS PRESSURE TREATED TO CSA STANDARD AND END CUTS TREATED WITH PRESERVATIVE.
  2. ALL OTHER MEMBERS TO BE CEDAR #2 (CONSTRUCTION) GRADE MINIMUM.
  3. ALL HARDWARE HOT DIPPED GALVANIZED.
  4. APPLY 2 COATS EXTERIOR STAIN TO MANUFACTURERS SPECIFICATION. FINISH SELECTION AS APPROVED BY PROJECT ARCHITECT.
  5. ALL FENCES TO BE LEVEL. CHANGES IN GRADE TO BE IN 12"-18" STEPS (MAX.). GAPS TO GRADE TO FOLLOW FINISH GRADE. GAP TO BE 3/4".



1 6'-0" HEIGHT WOOD FENCE WITH LATTICE 1/2" = 1'-0"

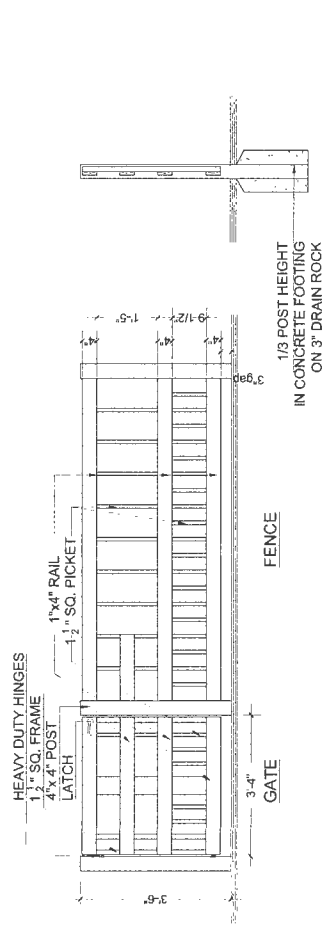


3 PICKET FENCE & GATE 1/2" = 1'-0"

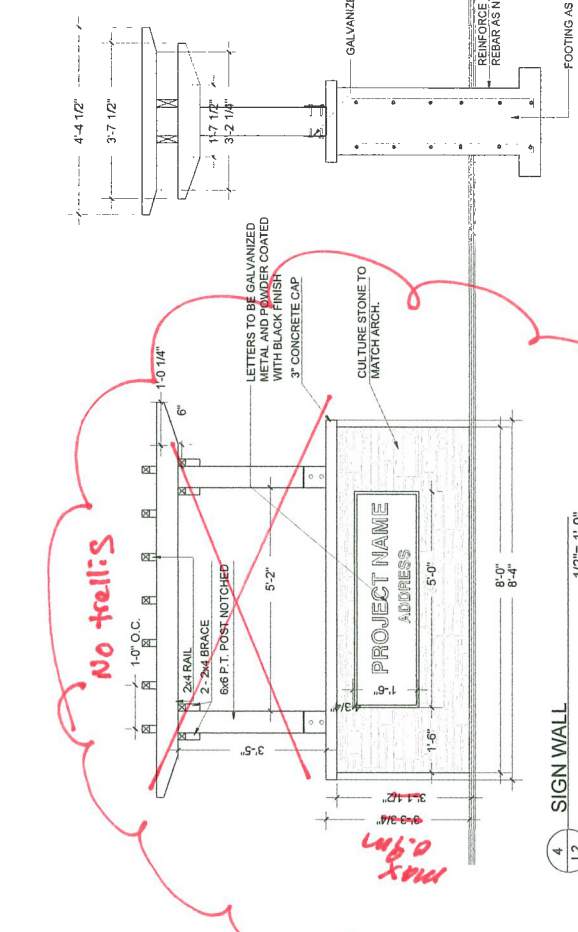


5 PLAYGROUND SAFETY SURFACE 1/2" = 1'-0"

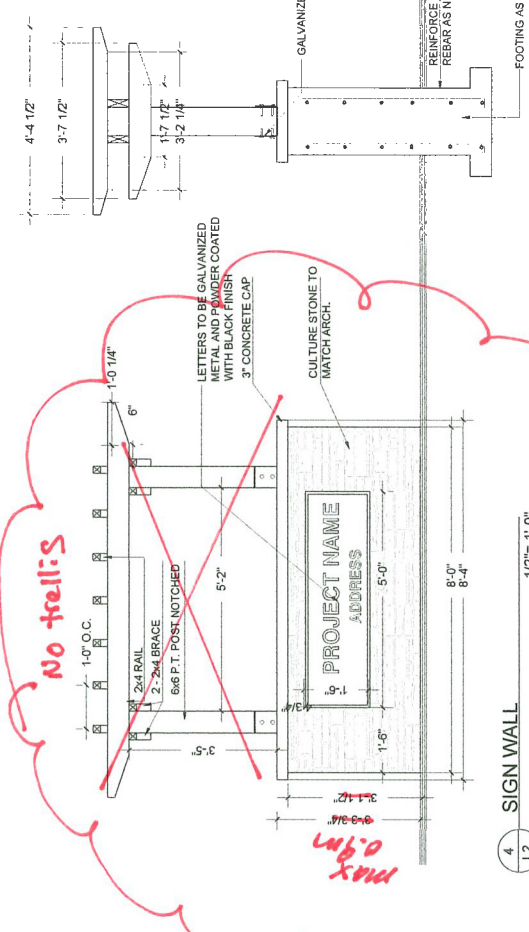
- NOTE:
1. METAL MATERIAL: ALUMINIUM TO BE POWDER COATED BLACK, TWO COATS.
  2. ALL HARDWARE TO BE HOT DIPPED GALVANIZED. MEDIUM GAUGE.
  3. GATE HARDWARE TO BE CHOSEN BY OWNER.



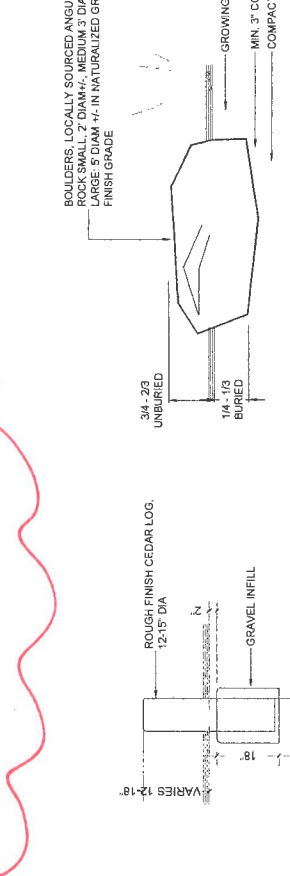
2 36" HT. ALUMINIUM FENCE - STREET FRONTAGE 1/2" = 1'-0"



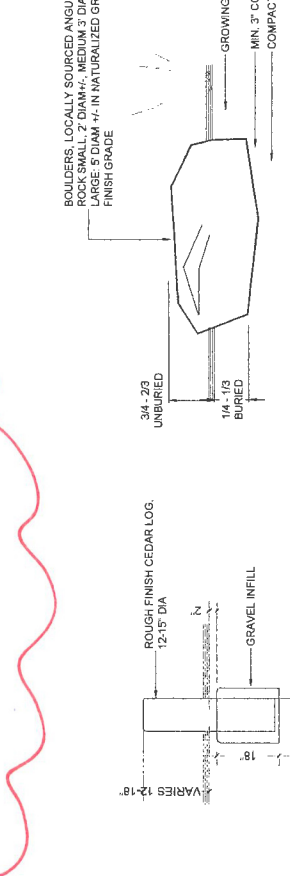
4 SIGN WALL 1/2" = 1'-0"



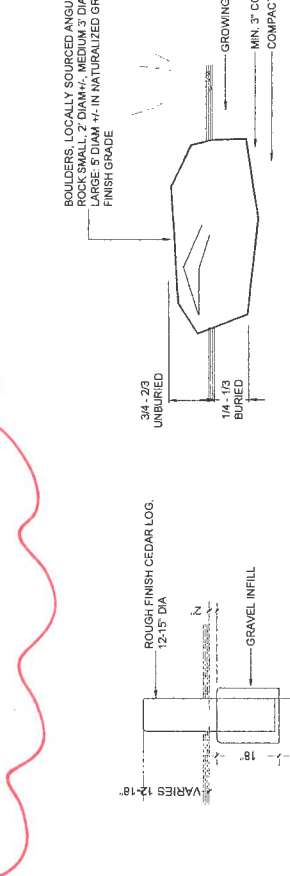
L2 TRELLIS STRUCTURE AT THE TERMINUS POINT OF THE INTERNAL DRIVE AISLE 1/2" = 1'-0"



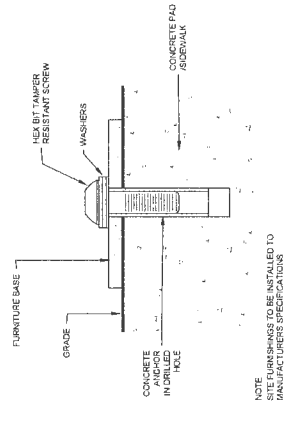
6 VERTICAL LOG 1/2" = 1'-0"



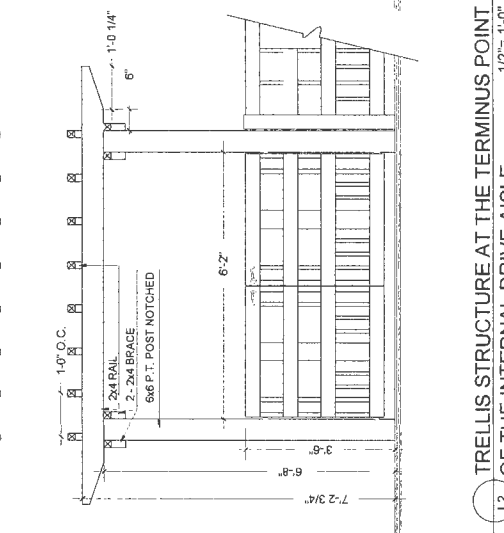
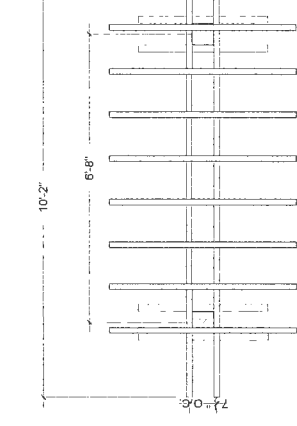
7 FLAT BOULDER 1/2" = 1'-0"



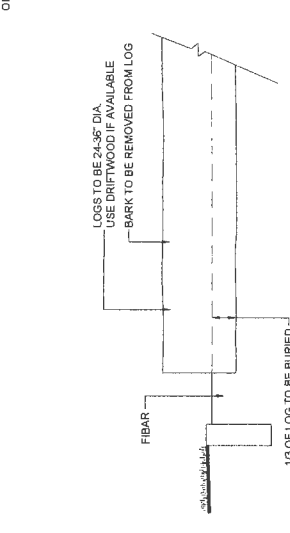
L2 6 PLAY AREA BALANCE /SEATING LOG 1/2" = 1'-0"



6 SITE FURNITURE MOUNTING 1/2" = 1'-0"



L2 TRELLIS STRUCTURE AT THE TERMINUS POINT OF THE INTERNAL DRIVE AISLE 1/2" = 1'-0"



L2 6 PLAY AREA BALANCE /SEATING LOG 1/2" = 1'-0"

NO.	DATE	REVISION DESCRIPTION	DR.
1	15-02-2018	NEW SITE PLAN	DR
2	17-JAN-08	NEW SITE PLAN/CITY COMMENTS	DR
3	18-MAR-08	NEW SITE PLAN/CITY COMMENTS	DR
4	18-MAR-08	NEW SITE PLAN/CITY COMMENTS	DR
5	18-MAR-08	NEW SITE PLAN	DR
6	18-MAR-08	NEW SITE PLAN	DR
7	18-MAR-08	NEW SITE PLAN	DR
8	18-MAR-08	NEW SITE PLAN	DR

CLIENT:

PROJECT:  
7 UNIT TONHOUSE  
DEVELOPMENT

9880 GRANVILLE AVENUE  
AND 7031 NO. 4 ROAD  
RICHMOND

DRAWING TITLE:  
LANDSCAPE  
DETAILS

DRAWING NUMBER:  
**L2**  
OF 4  
DATE: August 21, 2015  
SCALE:  
DRAWN: DD  
DESIGN: DD  
CHKD: PCM  
FMG PROJECT NUMBER:  
151359-2/P

PLAN 3B OCT 23 2018  
DP 17-785944





**7-UNIT TOWNHOUSE DEVELOPMENT**  
 9880 GRANVILLE AVENUE & 7031 NO. 4 ROAD  
 RICHMOND, BC



ZHAO XD ARCHITECT LTD. 61

**PLAN 4**      OCT 23 2018  
**ZHAO XD ARCHITECT LTD.**  
 www.zhaoarch.com    Tel: 604 275-8882  
**DP 17-785944**







**ZHAO XD ARCHITECT LTD.**

#255-11181 Voyageur Way,  
Richmond, BC V6X 3N8  
Tel. (604) 275-8802  
Fax (604) 909-1736  
Email: info@zhaoarch.com  
Web: zhaoarch.com

**DP 17-785944**  
**OCT 23 2018**

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ZB / MAR / 17	DP APPLICATION						
NOV / 16	CITY COMMENTS						
31 / AUG / 16							
Date:	Issued For:						
<table border="1"> <tr> <td>A</td> <td>A DETAIL NUMBER</td> </tr> <tr> <td>B</td> <td>B LOCATION SHEET</td> </tr> <tr> <td>C</td> <td>C DETAIL SHEET</td> </tr> </table>		A	A DETAIL NUMBER	B	B LOCATION SHEET	C	C DETAIL SHEET
A	A DETAIL NUMBER						
B	B LOCATION SHEET						
C	C DETAIL SHEET						

at all times, specifications and other related documents shall be read in conjunction with the CONSULTANT'S stamp and shall be returned upon request. The contractor shall check and verify all dimensions to the CONSULTANT'S drawings prior to construction. The CONSULTANT'S stamp shall be placed on all drawings prior to construction.

**TOWNHOUSE DEVELOPMENT GRANVILLE AVE**

9880 GRANVILLE AVE  
RICHMOND, BC

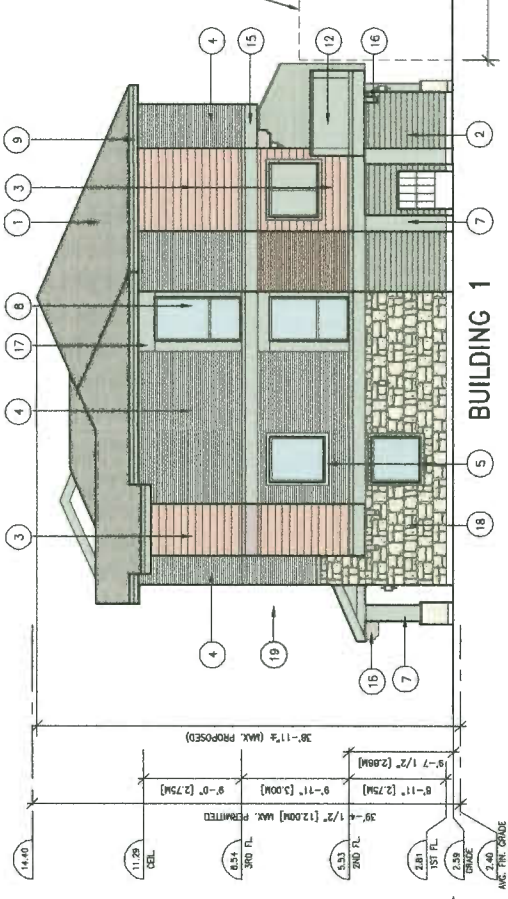
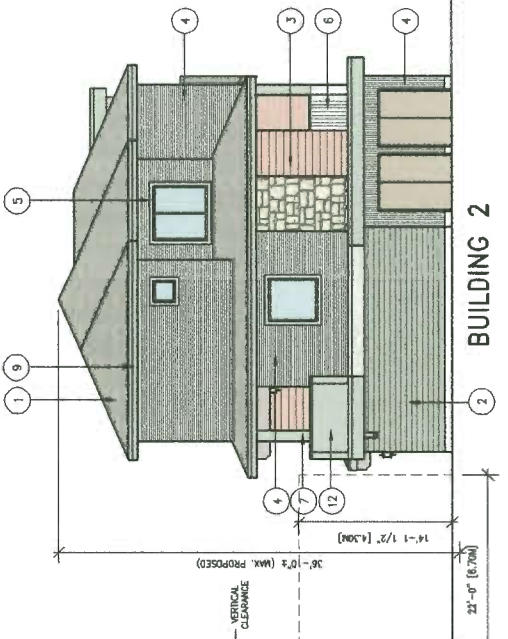
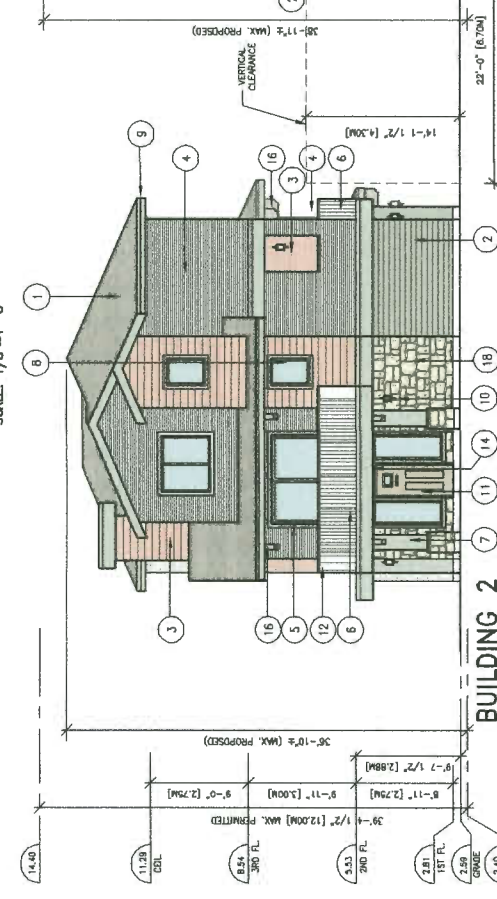
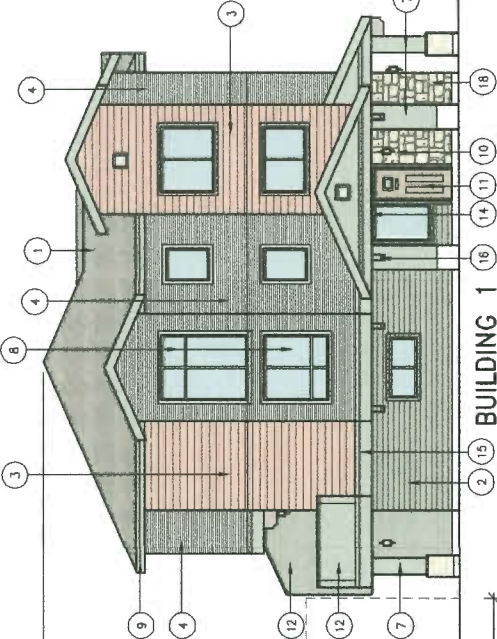
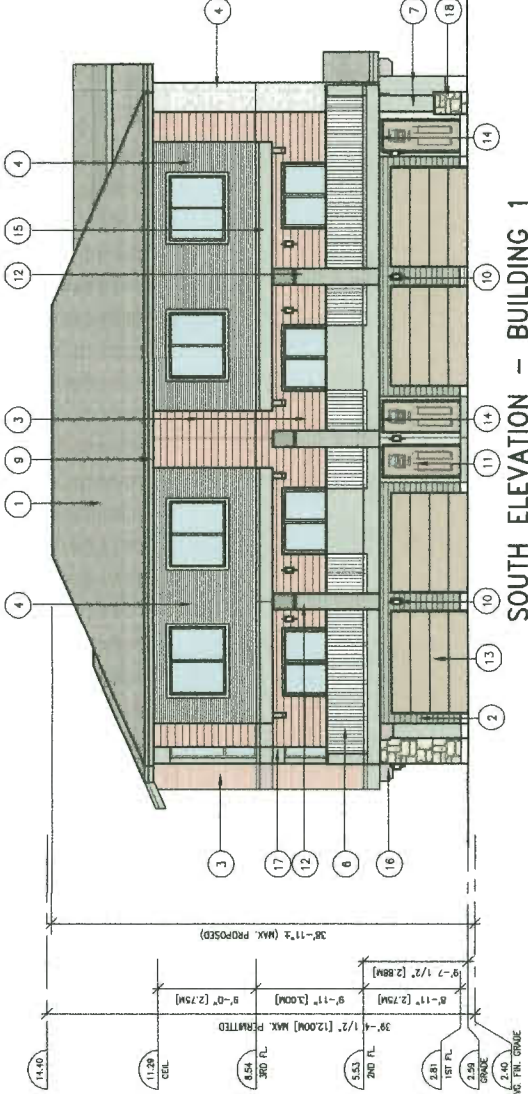
Drawing Title:  
**ELEVATIONS**

**PLAN 4A**  
**OCT 23 2018**

Date:	
Scale:	
Drawn By:	
Checked By:	
Project No.:	
Drawing No.:	<b>A8</b>

- 18 CULTURE STONE
- 17 HARD SIDING (7) - BOOTHBAY BLUE
- 16 HARD SIDING (7) - COURTLANE RED
- 15 GALVANIZED METAL SIDING

**DP 17-785944**



- EXTERIOR FINISH & COLOR**
- 1 ASPHALT SHINGLES - DUAL BLACK - RD
  - 2 HARD SIDING (7) - BOOTHBAY BLUE
  - 3 HARD SIDING (7) - COURTLANE RED
  - 4 GALVANIZED METAL SIDING
  - 5 ALUM. CUTTER ON 2x6 WOOD FASCIA BOARD - PAINTED (TP)
  - 6 LIGHT FINISH - 4x4-800 BRISTOLS
  - 7 1/2" x 1/2" x 1/2" (1.50M)
  - 8 2x4 WOOD TRIM - MATCH THE SIDING COLOR
  - 9 ALUM. COUNTER (BLACK)
  - 10 BUILT-UP WOOD COLUMN - 100
  - 11 WOOD BRACKET (BLACK)
  - 12 WOOD BRACKET (BLACK)
  - 13 1/2" x 1/2" x 1/2" (1.50M)
  - 14 1/2" x 1/2" x 1/2" (1.50M)
  - 15 1/2" x 1/2" x 1/2" (1.50M)
  - 16 1/2" x 1/2" x 1/2" (1.50M)
  - 17 1/2" x 1/2" x 1/2" (1.50M)
  - 18 1/2" x 1/2" x 1/2" (1.50M)
  - 19 1/2" x 1/2" x 1/2" (1.50M)

AGING IN PLACE FEATURES FOR ALL UNITS:  
-SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;  
-LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES  
ENERGY RATING OF B2 OR ABOVE IS TO BE ACHIEVED FOR THE DEVELOPMENT PROJECT.

**PLAN #4**

This drawing is NOT to be scaled. Use figured dimensions only.



**ZHAO XD  
ARCHITECT  
LTD.**

255-1181 Voyager Way,  
Richmond, BC V6X 3N9  
Tel: (604) 275-8882  
Fax: (604) 909-1736  
Email: info@zhaoarch.com  
Web: zhaoarch.com

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28/MAR/17	DP APPLICATION
NOV/16	CITY COMMENTS
31/AUG/16	
Date:	Issued For:

A	A DETAIL NUMBER
B	B LOCATION SHEET
C	C DETAIL SHEET

All drawings, specifications and other related documents shall be read in conjunction with the CONTRACT documents and shall be subject to the requirements of the CONSULTANT. The consultant shall check and verify the information to the CONTRACT documents before proceeding with the work.

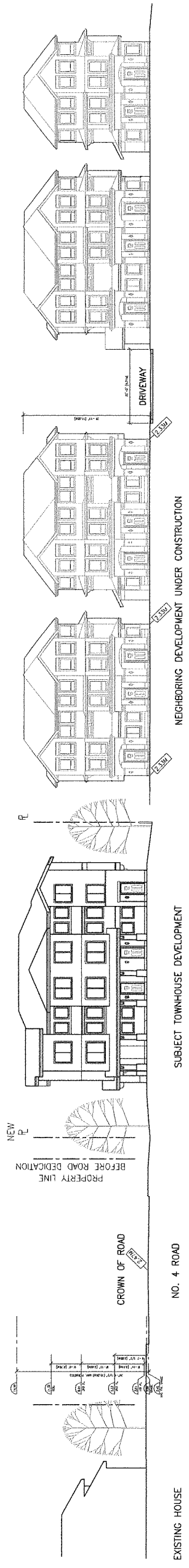
Project:  
**TOWNHOUSE DEVELOPMENT GRANVILLE AVE**

8880 GRANVILLE AVE.  
RICHMOND, BC

Drawing Title:  
**STREET ELEVATIONS**

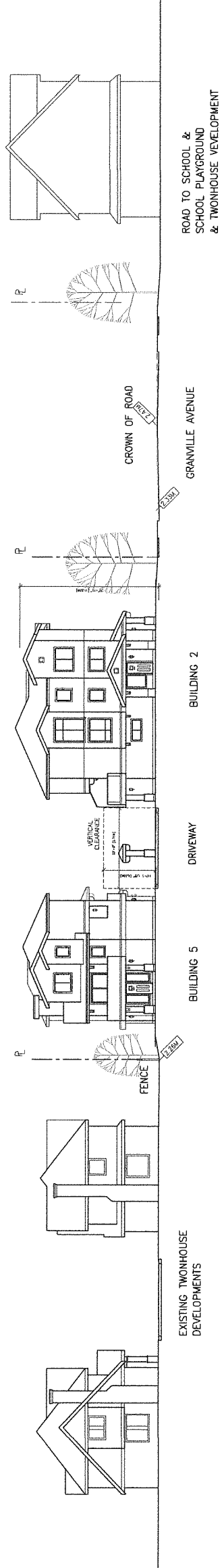
Date:	
Scale:	
Drawn By:	
Checked By:	
Project No.:	
Drawing No.:	

A9



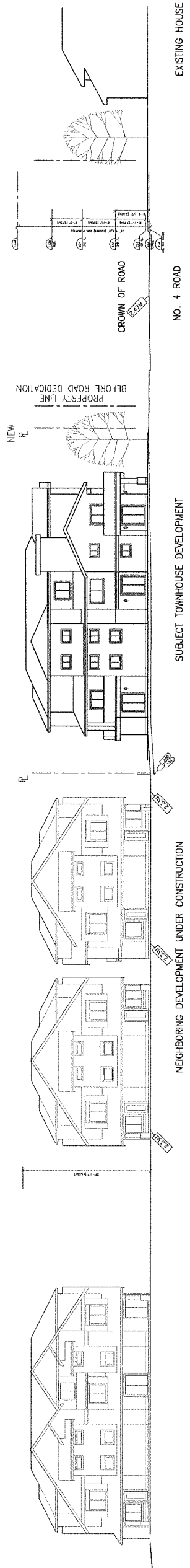
**NORTH SITE ELEVATION - (GRANVILLE AVE.)**

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



**EAST SITE ELEVATION - (NO. 4 ROAD)**

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



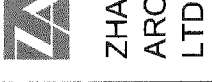
**SOUTH SITE ELEVATION**

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

OCT 23 2018

PLAN 4B

DP 17-785944



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**OCT 23 2018**

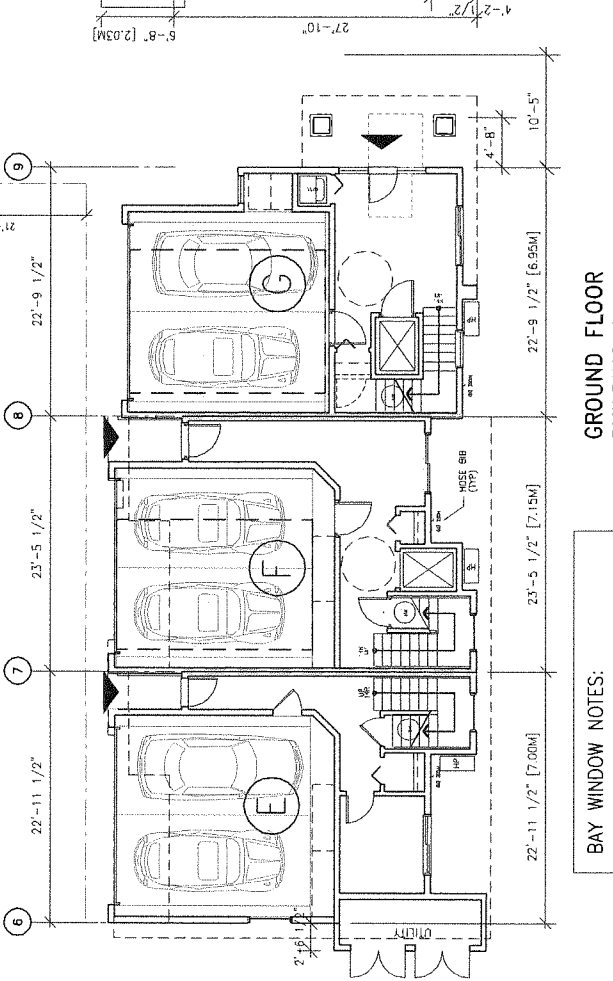
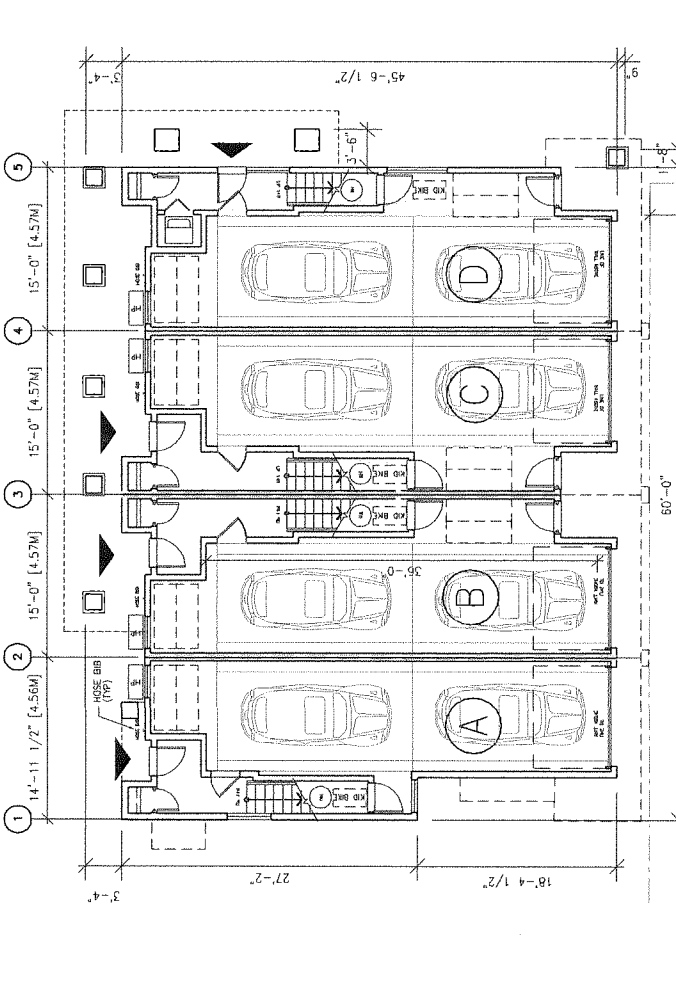
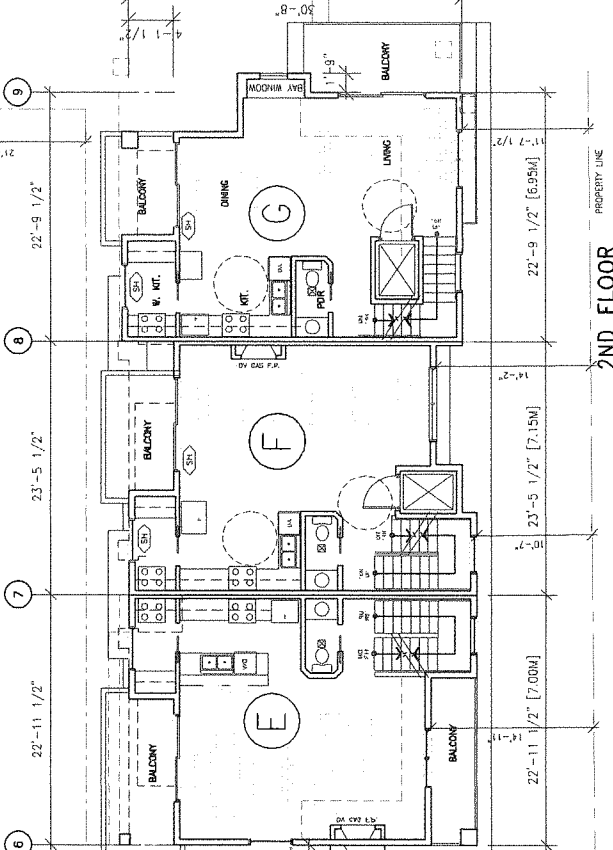
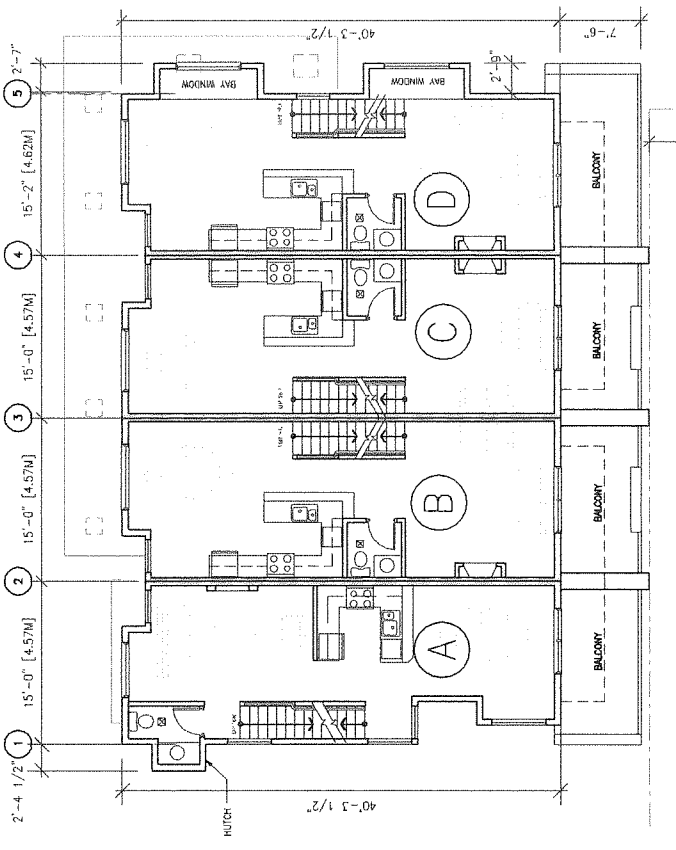
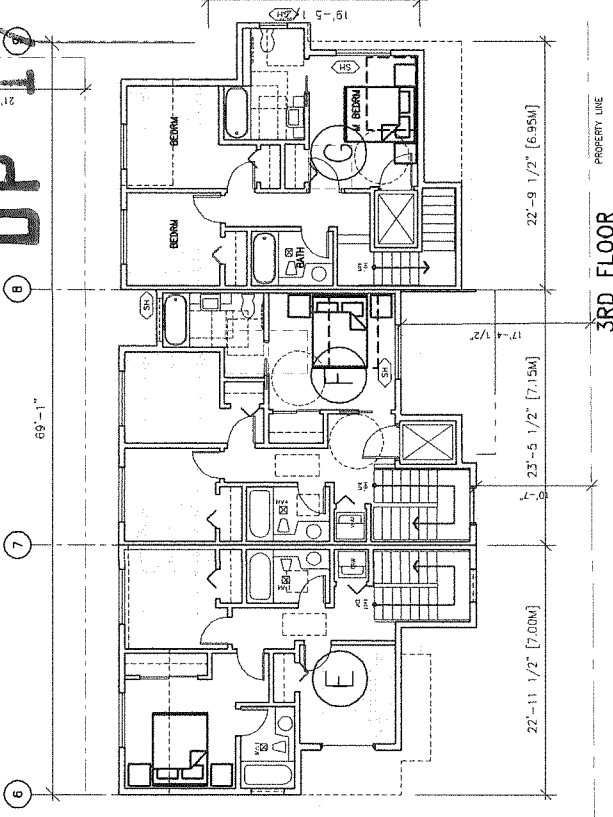
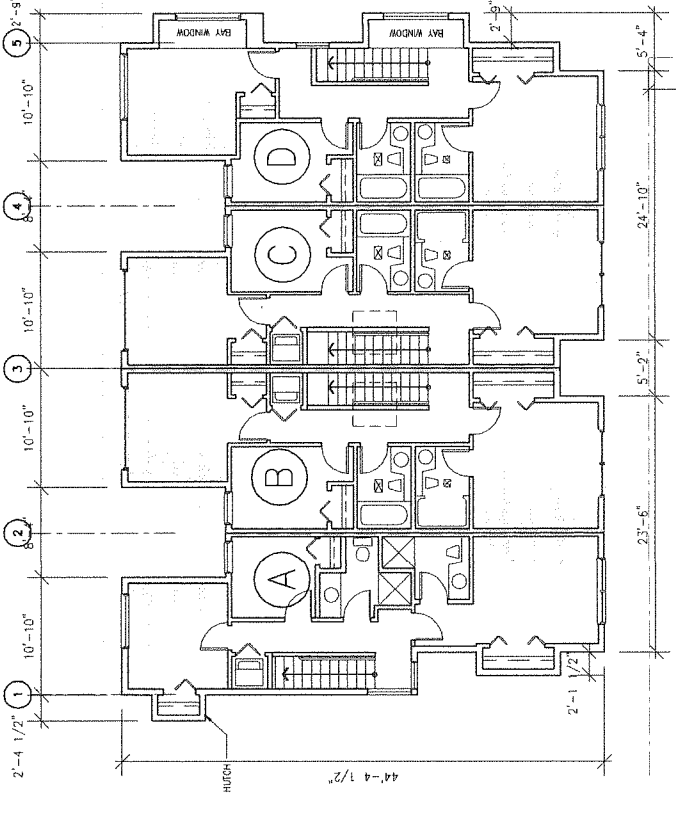
This drawing shall not be used for construction unless it is counterchecked by the CONSULTANT.

**REFERENCE PLAN**

785944

28/MAR/17	DP APPLICATION
10/1/16	CITY COMMENTS
31/AUG/16	
Date:	Issued For:
A	A DETAIL NUMBER
B/C	B LOCATION SHEET
C	C DETAIL SHEET

**Project:** TOWNHOUSE DEVELOPMENT GRANVILLE AVE  
**Drawing Title:** FLOOR PLAN & UNITS DATA  
**Address:** 9880 GRANVILLE AVE, RICHMOND, BC



F.A.R. CALCULATION: LOT AREA: 13452 SQ.FT.

F.A.R. PERMITTED:	0.65	FAR =	8747.2	SQ.FT.	NET	
UNIT 'A'	1757.0	GROSS	631.9	SQ.FT.	1125.1	SQ.FT.
UNIT 'B'	1883.3		720.5	SQ.FT.	1162.8	SQ.FT.
UNIT 'C'	1905.5		742.7	SQ.FT.	1162.8	SQ.FT.
UNIT 'D'	1995.3		828.2	SQ.FT.	1167.1	SQ.FT.
UNIT 'E'	1967.9		661.9	SQ.FT.	1306.0	SQ.FT.
UNIT 'F'	2062.5		621.7	SQ.FT.	1440.8	SQ.FT.
UNIT 'G'	1931.2		552.8	SQ.FT.	1440.8	SQ.FT.
UTILITY CLOSET	67.3			SQ.FT.	1378.4	SQ.FT.
<b>TOTAL PROPOSED:</b>	<b>13570.0</b>	<b>SQ.FT.</b>	<b>4759.7</b>	<b>SQ.FT.</b>	<b>8743.0</b>	<b>SQ.FT.</b>

**AREA CALCULATIONS (PER UNIT)**

	OUTDOOR SPACE (SF):	GROSS FLOOR AREA (SF):*	EXEMPTED FLOOR AREA (SF):	NET FLOOR AREA (SF):	LOT COVERAGE (SF):	COVERED AREA (SF):	GARAGE AREA (SF):
BUILDING 1	427.4	1757.0	631.9	1125.1	644.6	39.4	488.0
UNIT A	433.4	1883.3	720.5	1162.8	710.8	74.7	538.2
UNIT B	433.4	1905.5	742.7	1162.8	710.8	96.9	538.2
UNIT C	454.4	1995.3	828.2	1167.1	774.3	184.7	537.6
UNIT D	533.3	1967.9	661.9	1306.0	749.6	131.5	411.1
BUILDING 2	534.6	2062.5	621.7	1440.8	772.6	108.8	407.3
UNIT E	528.2	1931.2	552.8	1378.4	750.0	106.4	338.8
UNIT F		67.3			64.3		
UTILITY CL.					14.3		
MAILBOX							
<b>TOTAL:</b>	<b>3344.7</b>	<b>13570.0</b>	<b>4759.7</b>	<b>8743.0</b>	<b>5274.8</b>	<b>740.4</b>	<b>3253.2</b>

\* INCLUDING GARAGE AREA.

**BAY WINDOW NOTES:**  
 BAY WINDOW SEAT MIN. 2' ABOVE FINISHED FLOOR IS STRUCTURALLY PROTRUSING FROM THE WALL. NO FLOORING JOIST EXTENDS BEYOND THE WALL TO PREVENT A CONVERSION TO USABLE FLOOR SPACE.

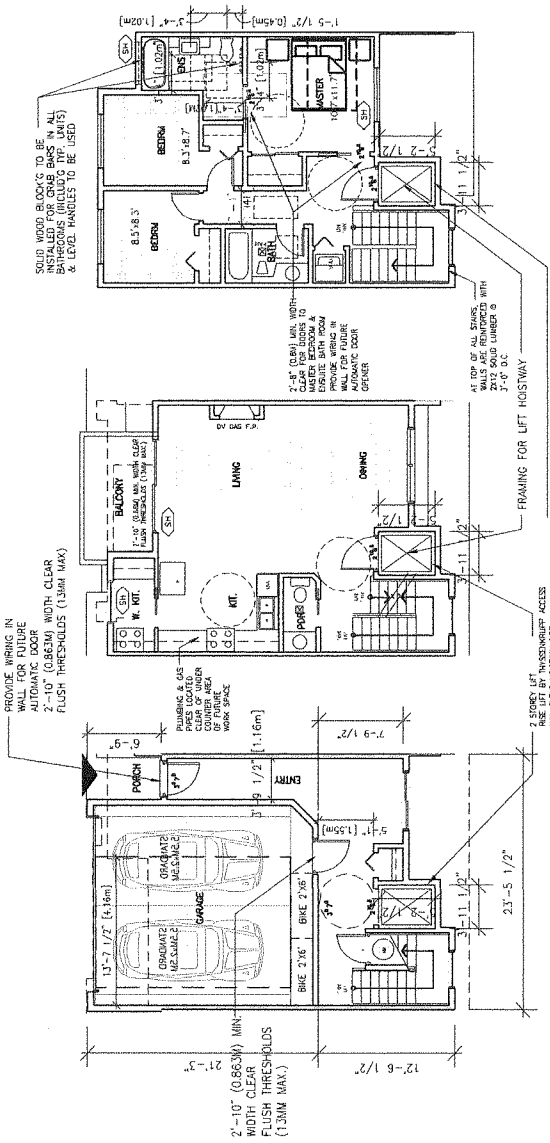
- WINDOW THAT CAN BE OPENED WITH A SINGLE HAND
- AGING IN PLACE FEATURES FOR ALL UNITS:
- SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;
- LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES
- ENERGUIDE RATING OF 82 OR ABOVE IS TO BE ACHIEVED FOR THE DEVELOPMENT PROJECT.
- SUSTAINABILITY FEATURES (TO BE PROVIDED IN ALL UNITS):
- DOUBLE GLAZED VINYL FRAMED WINDOW W/LOW E GLASS (TYP.);
- ENERGY STAR APPLIANCES AND LOW FLOW FIXTURES;
- LOW EMITTING SEALANTS, PAINTS, ADHESIVES, CARPETS & COMPOSITE WOOD

**PLAN #3**

GROUND FLOOR

SECOND FLOOR

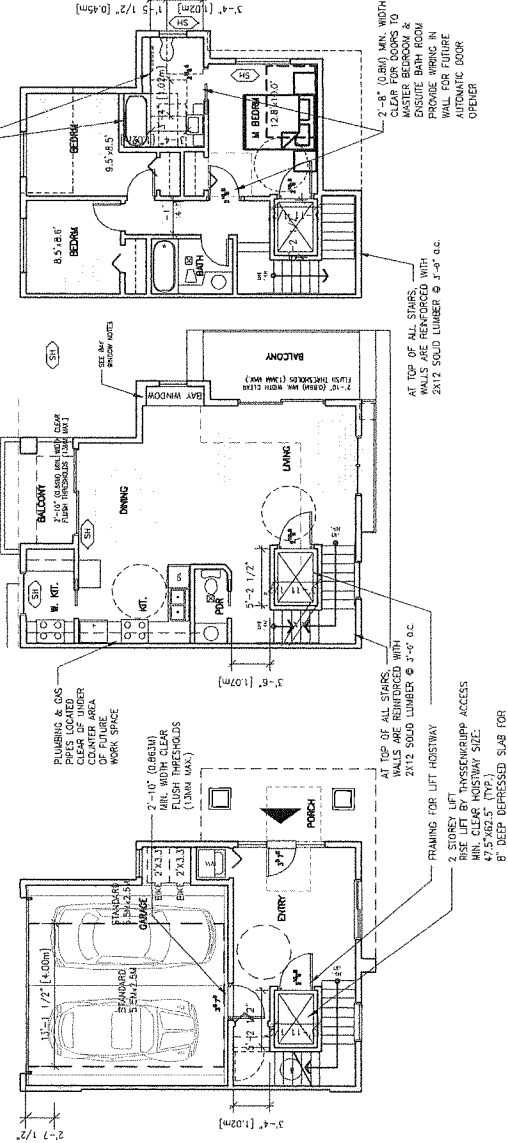
THIRD FLOOR



CONVERTIBLE UNIT  
LOWER FLOOR PLAN (UNIT 'F')  
SCALE: 3/16"=1'-0"

CONVERTIBLE UNIT  
MAIN FLOOR PLAN (UNIT 'F')  
SCALE: 3/16"=1'-0"

CONVERTIBLE UNIT  
UPPER FLOOR PLAN (UNIT 'F')  
SCALE: 3/16"=1'-0"



CONVERTIBLE UNIT  
LOWER FLOOR PLAN (UNIT 'G')  
SCALE: 3/16"=1'-0"

CONVERTIBLE UNIT  
MAIN FLOOR PLAN (UNIT 'G')  
SCALE: 3/16"=1'-0"

CONVERTIBLE UNIT  
UPPER FLOOR PLAN (UNIT 'G')  
SCALE: 3/16"=1'-0"

**SUSTAINABILITY FEATURES (TO BE PROVIDED IN ALL UNITS):**  
 -DOUBLE GLAZED VINYL FRAMED WINDOW W/LOW E GLASS (TYP.);  
 -ENERGY STAR APPLIANCES AND LOW FLOW FIXTURES;  
 -LOW EMITTING SEALANTS, PAINTS, ADHESIVES, CARPETS & COMPOSITE WOOD;  
 -WINDOW THAT CAN BE OPENED WITH A SINGLE HAND

**AGING IN PLACE FEATURES FOR ALL UNITS:**  
 -SOLID BLOCKING IN WASHROOM WALLS FOR FUTURE GRAB BARS;  
 -LEVER-TYPE HANDLES FOR PLUMBING AND DOOR HANDLES

**BAY WINDOW NOTES:**  
 BAY WINDOW SEAT MIN. 2' ABOVE FINISHED FLOOR IS STRUCTURALLY PROVIDED FROM THE WALL TO FLOORING WITH EXTENSIVE BEYOND THE FLOORING PRESENT A CONVERSION TO USABLE FLOOR SPACE.

**CHECKLIST - CONVERTIBLE UNIT FEATURES**

**DOORS & DOORWAYS**  
 ENTRY DOOR MIN. 883 MM BUT IDEALLY 914MM AND HAVE CLEAR ACCESS.  
 ENTRY DOOR CLEAR WIDTH MIN. 1020 MM DEPTH BY DOOR WIDTH MIN. 1020 MM.  
 FUTURE AUTOMATIC DOOR OPENERS  
 INTERIOR DOORS TO MAIN LIVING AREAS, 1 BATHROOM AND 1 BEDROOM, MIN. 800 MM CLEAR OPENING WITH FLUSH THRESHOLDS MAX. 13MM HEIGHT. DEMONSTRATE WHEELCHAIR ACCESS NECESSARY TO SECURE ACCESS.  
 2X12/2X10 BAY WINDOW CLEAR OPENING, NOTE HOW ACCESSED.  
 ALL INTERIOR THRESHOLDS WITHIN UNITS COMPLY BC BUILDING CODE.  
 LEVER-TYPE HANDLES FOR ALL DOORS.

**VERTICAL CIRCULATION**  
 VERTICAL LIFT, DEPRESSURE SJAB AREA, AND LANDINGS, AS NOTED ON FLOOR PLANS IN COMPLIANCE WITH JANUARY FACILITY SPECIFICATIONS. STAIRWAYS TO ACCOMMODATE SHAFT CLEARANCES FROM GARAGE TO LIVING ROOMS.  
 AT THE TOP OF ALL STAIRWAYS, WALLS ARE REINFORCED WITH 2X12 SOLID LUMBER AT 914MM TO CENTRE.

**HALLWAYS**  
 MIN. 1.000 MM WIDTH

**GARAGE**  
 MIN. 1. ACCESSIBLE PARKING SPACE WITH MIN. 4.6 GARAGE WIDTH.  
 2. CLEARANCE FROM GARAGE TO LIVING ROOMS TO LUMBER (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) AND FLUSH THRESHOLDS MAX. 13 MM HEIGHT

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 #225-11181 Voyageur Way,  
 Richmond, BC V6X 3N9  
 Tel. (604) 275-8882  
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 Email: info@zhaoarch.com  
 Web: zhaoarch.com

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28/MAR/17	DP APPLICATION
NOV/16	CITY COMMENTS
31/AUG/16	
Date:	Issued For:
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	B LOCATION SHEET
	C DETAIL SHEET

At drawings, specifications and other related documents, the CONSULTANT and shall be returned upon request.  
 Revisions of drawings and related documents shall be made in accordance with the written permission of the CONSULTANT.  
 The contractor shall ensure and verify that all work is done in accordance with the specifications to the CONSULTANT and before proceeding with the work.

Project:  
 TOWNHOUSE DEVELOPMENT  
 GRANVILLE AVE  
 8880 GRANVILLE AVE.  
 RICHMOND, BC

Drawing Title:  
 UNIT FLOOR PLANS & OVERLAYS  
 (convertible unit)

Date:  
 Scale:  
 Drawn By:  
 Checked By:  
 Project No.:  
 Drawing No.:  
 A7

REFERENCE PLAN  
 OCT 23 2018  
 DP 17-785944

**BATHROOMS (MIN. 1)**  
 TOILET CLEAR FLOOR SPACE MIN. 1020 MM AT SIDE AND IN FRONT.  
 (814MM AND IN-FLOOR) LOCATED CLEARLY FROM THE TUB AND SHOWER, REINFORCED WITH 2X12 SOLID LUMBER IN ALL BATHROOMS, SHOWER, AND TOILET LOCATIONS.  
 LEVER-TYPE HANDLES FOR PLUMBING FIXTURES.  
 PRESSURE AND TEMPERATURE CONTROL VALVES ARE INSTALLED ON ALL SHOWER FAUCETS.  
 CABINETS UNDERNEATH SINK(S) ARE EASILY REMOVED.  
 DEMONSTRATE BATH AND SHOWER CONTROLS ARE ACCESSIBLE (LAYOUT OR FIXTURE PLACEMENT).  
 MIN. 800 MM CLEAR DOOR OPENING (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) WITH FLUSH THRESHOLDS MAX. 13 MM HEIGHT

**KITCHEN**  
 CLEAR AREA NEEDED UNDER FUTURE WORK SPACE, PLUMBING AND GAS PIPES (814MM AND IN-FLOOR) LOCATED CLEARLY FROM THE TUB AND SHOWER, REINFORCED WITH 2X12 SOLID LUMBER IN ALL BATHROOMS, SHOWER, AND TOILET LOCATIONS.  
 CABINETS UNDERNEATH SINK ARE EASILY REMOVED.  
 1500 MM TURNING DIAMETER OR TURNING PATH DIAGRAM  
 MIN. 800 MM CLEAR DOOR OPENING (2'-8" SLIDING OR 2'-10" SWINGING DOOR SPEC.) WITH FLUSH THRESHOLDS MAX. 13 MM HEIGHT  
 LEVER-TYPE HANDLES FOR PLUMBING FIXTURES.

**WINDOWS**  
 MIN. 1 WINDOW THAT CAN BE OPENED WITH A SINGLE HAND (BATHROOM, KITCHEN, LIVING ROOM)

**OUTLETS & SWITCHES**  
 PLACEMENT LOCATIONS OF ELECTRICAL OUTLETS, BESIDE WINDOW, BOTTOM OF STAIRWAYS, BESIDE TOILET, ABOVE EXTERNAL DOORS (OUTSIDE AND INSIDE), ON FRONT FACE OF KITCHEN COUNTER, WITH PROXIMITY OF CONTROL CENTRE FOR SMART HOME OPTIONS.  
 RECREATION ROOM



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Web: zhaorich.com

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28/MAR/17	DP APPLICATION
NOV/16	CITY COMMENTS
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**A** A DETAIL NUMBER  
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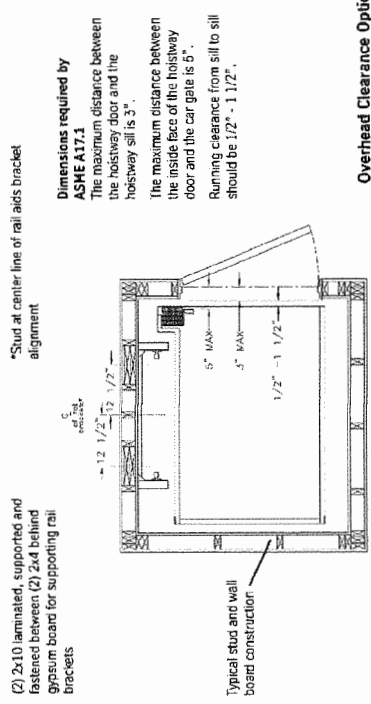
It is the responsibility of the contractor to verify the dimensions of the work shown on this drawing. The consultant is not responsible for any errors or omissions in this drawing. The consultant is not responsible for any errors or omissions in this drawing. The consultant is not responsible for any errors or omissions in this drawing.

Project:  
**TOWNHOUSE  
DEVELOPMENT  
GRANVILLE AVE**

9880 GRANVILLE AVE.  
RICHMOND, BC

Drawing Title:  
Date:  
Scale:  
Drawn By:  
Checked By:  
Project No.:  
Drawing No.: **A7.1**

**Recommended Hoistway Construction**



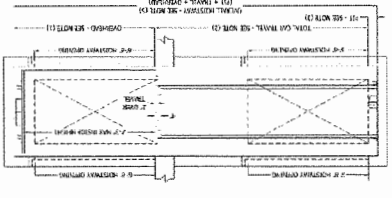
**Overhead Clearance Options**

CAB	RMR	RMD (in the shaft)	RMD (in the attic)	HYDR0
6'8"	96"	105"	90"	90"
7'2"	96"	111"	96"	96"
7'11"	105"	120"	105"	105"

These numbers are based on our standard cab traveling 40' per minute. Add 1" for Level VI cab.

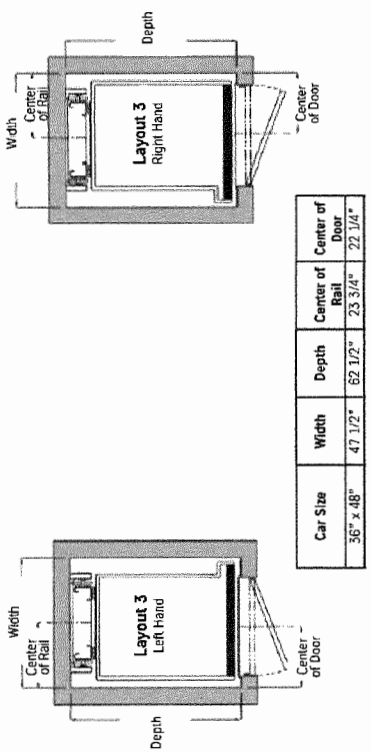
**Impact Load @ Pit**  
4300 lbs (750# Capacity)  
4650 lbs (950# Capacity)

**Static Load @ Pit**  
2675 lbs (750# Capacity)  
2700 lbs (950# Capacity)



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REF 08.24.11, DH-204

**Typical Hoistway Layouts**



Dimensions are from the inside finished hoistway and calculated using 1 1/4" car wall thickness. Please contact your local dealer for more information on our custom cab sizes.  
We recommend the handing of the car gates to be the same as the hoistway door. The car doors can be either hand, but this handing must be consistent on every level. Changing the door swing may affect hoistway dimensions. Contact your local representative or ThyssenKrupp Access Manufacturing, LLC for more details on our car sizes.

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08.24.11, DH-204

**Equipment**

- Pit switch
  - Manual lowering device
  - Load capacity:
    - Roped Hydraulic Drive - 950 lbs up to 44'
    - Two stops (750 lbs up to 50')
  - Auto-homing
  - Single opening
  - Three year limited parts warranty
- Optional Features:**
- Custom car size
  - 7'4" & 7'10" car heights
  - No.8 (polished) brass, No.8 (polished) stainless steel, or No.4 oil rubbed brass hall call, car operation panel and phone box
  - Melamine, laminate or custom wood veneer interiors
  - Wood veneer or clear panel accordion gate
  - Raised or recessed panel car - birch, red oak, cherry, maple or hickory
  - Single or deluxe frame ceiling in matching hardwood
  - Auto gate operator (accordion gate only) with battery backup
  - Finished flooring - light oak or dark oak
  - Three to six stops
  - Handrail
    1. No.4 (brushed) brass
    2. No.8 (polished) brass
    3. No.4 (brushed) stainless steel
    4. No.8 (polished) stainless steel
    5. No.4 oil rubbed brass
- Choice of Drive Systems:**
- Roped Hydraulic Drive
    1. 1:2 roped hydraulic.
    2. Remote machine room can be located up to 40' from the unit.
    3. 3HP submerged motor with 2-speed valve assembly.
  - Winding Drum Drive
    1. 3HP inverter controlled winding drum unit.
    2. RMD (Rail Mount Drum), RMR (Reduced Machine Room), plus other varieties of drum layout configurations.
- Standard Features:**
- Car size: Up to 15 sq.ft.
  - 7' interior ceiling height
  - No.4 (brushed) stainless steel or No.4 (brushed) brass hall call and car operating panel
  - Wood handrail
  - Birch, oak, or maple veneer interior walls
  - Accordion gate
  - Two recessed halogen lights
  - White melamine, oak veneer, birch veneer, or maple veneer ceiling
  - Unfinished plywood floor
  - Sill set for 3/4" finished floor
  - Telephone jack - surface mount
  - Digital floor position indicator
  - "Car Here" and call acknowledgement lights
  - Automatic on/off car lighting
  - Emergency stop switch and alarm button
  - Emergency lighting
  - Self Diagnostic System

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08.24.11, DH-204

REFERENCE PLAN  
**DP 17-785944**  
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