



City of
Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: July 20, 2015

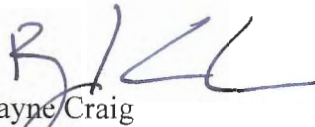
From: Wayne Craig
Director of Development

File: DP 14-672830

Re: **Application by JM Architecture for a Development Permit at 10019 Granville Avenue**

Staff Recommendation

That a Development Permit be issued which would permit the construction of a licensed child care facility for a maximum of 88 children with an accessory residential caretaker unit at 10019 Granville Avenue on a site zoned "Child Care (ZR8) – McLennan".


Wayne Craig
Director of Development

WC:mp
Att.

Staff Report

Origin

JM Architecture has applied to the City of Richmond for permission to develop a licensed child care facility for a maximum of 88 children with an accessory residential caretaker unit at 10019 Granville Avenue on a site zoned “Child Care (ZR8) – McLennan”. The site is currently vacant.

In 2012, the subject site was rezoned from “Local Commercial (CL)” to “Congregate Housing and Child Care (ZR8) - McLennan” to develop a 10-bed congregate housing care facility with full-time medical care, a child care facility for a maximum of 37 children and a residential security/operator’s unit. Subsequently, a Development Permit was issued on September 10, 2012 but the owner did not proceed with the proposal as he could not secure funding for the congregate housing facility and the permit lapsed in 2014.

A zoning text amendment application is being processed under Bylaw 9209 (RZ 14-671974) to remove “congregate housing” from the permitted uses in the site-specific zone and increase the maximum number of children permitted in a licensed child care facility from 37 to 88. The bylaw received third reading at a Public Hearing on March 16, 2015.

Prior to final adoption of the zoning amendment bylaw, the developer is required to enter into a Servicing Agreement for the design and construction of public road frontage upgrades along No. 4 Road and Granville Avenue, including widening of the north side of Granville Avenue.

The subject site is contained in the Agricultural Land Reserve (ALR); however, it is exempt from the Agricultural Land Commission (ALC) regulations because the property was on separate certificate of title and was less than 2 acres in size as of December 21, 1972.

Development Information

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

Surrounding Development

Development surrounding the subject site is as follows:

To the North: A single detached dwelling on a small “Agriculture (AG1)” zoned parcel (less than 0.5 acres) contained in the ALR.

To the East: A single detached dwelling on a small “Agriculture (AG1)” zoned parcel (less than 0.5 acres) contained in the ALR.

To the South: single detached dwellings on small “Agriculture (AG1)” zoned parcels (less than 0.5 acres) contained in the ALR.

*note: None of the immediately neighbouring sites in the ALR are currently farmed.

To the West: Across No. 4 Road, a duplex on a property zoned “Two-Unit Dwellings (RD1)” located outside of the ALR. The property is located in the City Centre Area McLennan North Sub-Area and the Plan designates the property for two family dwellings or 2 & 3 storey townhouses.

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following design issues to be resolved at the Development Permit stage:

- Composition of the landscape buffer to the existing single family dwellings in the immediate area
- Streetscape design along No. 4 Road and Granville Avenue
- Refinement of the proposed building form and massing
- Landscape and open space design details
- Refinement of the children’s outdoor play area design including the choice of play equipment.

Staff are satisfied that all issues identified at rezoning have been addressed. The Public Hearing for the rezoning of this site was held on March 16, 2015. At the Public Hearing, no concerns or public comments were received.

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, the proposal is consistent with the applicable sections of the 2041 Official Community Plan and is in compliance with the “Child Care (ZR8) – McLennan” zoning regulations.

Advisory Design Panel Comments

The application was initially considered by the Advisory Design Panel on April 16, 2015. The Panel identified a number of design issues and asked the applicant to consider the Panel’s comments and return to the Panel for further review. A copy of the excerpt from the Advisory Design Panel minutes is attached for reference. The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in ‘***bold italics***’ (Attachment 2).

The applicant substantially revised the building design based on the ADP and staff comments and further developed the landscape design with more detailed children’s outdoor play area programming. The revised design was presented to the Advisory Design Panel on June 17, 2015. Since quorum was not present, the Panel did not vote on the item; however the consensus of the Panel was that there had been significant improvement to the building and landscape design. The Panel had a few additional minor comments and suggestions and supported the application to proceed to the Development Permit Panel. The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in ‘***bold italics***’ (Attachment 3).

Analysis

Conditions of Adjacency

- The height, siting and orientation of the proposed two-storey building respects the existing single family homes immediately adjacent to the site.
- The building is proposed to be located at the southwest corner of the site to minimize potential privacy and overlook concerns for the immediate neighbours to the north and east.
- A 1m landscape buffer strip with 6' high wooden fence, hedge and columnar trees is proposed along the north and east property lines for screening.
- The garbage and recycling area proposed at the northeast corner will be enclosed in a structure and will be further screened from the immediate neighbours by the wooden fence and hedge.

Urban Design and Site Planning

- The location of the building will create a strong street presence through architecturally interesting building facades, varied rooflines and high-quality landscape treatment, which will contribute to the pedestrian experience along No.4 Road and Granville Avenue.
- The primary vehicle access/egress is provided via a full movement access from Granville Avenue and a right-out only exit is proposed on No. 4 Road. A covenant has been registered on title to restrict the No. 4 Road exit to right-out only as part of the previous rezoning application (RZ10-552527).
- From the streets, the parking and loading area will be screened by the building and a perimeter landscape buffer and metal fence. The proposal will provide 24 parking stalls and a loading space which meets the zoning requirement.
- Once accessible parking stall will be located close to the main entrance of the child care facility for ease of access.
- A pedestrian access will be provided from Granville Avenue adjacent to the driveway and will be connected to the entrances to the child care facility and the residential suite on the north side of the building.
- A garbage and recycling enclosure is proposed at the northeast corner where it can be easily accessed by a collection vehicle. A pathway is proposed adjacent to the enclosure for convenient access by occupants.
- Children's outdoor play areas are proposed around the building along the south and west property lines to maximize the sun exposure and provide direct access from indoors to outdoors. An additional children's outdoor play area is proposed on the second floor deck at the north of the building.

Architectural Form and Character

- The building provides a playful, dynamic and colourful design, which is appropriate for the proposed use.
- The building is articulated with variation in roof form, height, materials, colours and architectural details including gable roof elements, trellis, canopies and wood trims.
- The proposed building features high quality cladding materials including fiber-cement siding, shingles and board and batten.
- The proposed colour scheme consists of a grey tone with bright/bold colour accents for contrast.

- Various colours and building materials will be used to differentiate individual classrooms for different age groups and help break the massing of the building.
- Vertical lattice with climbing vines is proposed on the north side of the building to add visual interest and avoid a large blank wall.

Landscape Design and Open Space Design

- The landscaping and open space design focuses on mitigating site impacts along the public road frontage. To soften the impact of the required protective fence for the child care, a wave form hedge and fence have been provided.
- A 1m landscape buffer with hedge and wooden fence is proposed along the north and east property lines.
- Columnar trees and landscape islands will be incorporated into the parking area to provide shadow, colour and rhythm.
- The children's outdoor play area is designed to provide a range of opportunities for the social, physical and emotional development of children while providing an attractive urban face to the public realm. Design details are as follows:
 - The programming focuses on providing opportunities for children to interact with the natural landscape and explore various activities.
 - The location of the outdoor play area would maximize the southern and western exposures for natural light. Substantial windows are proposed to maximize natural lighting available to the interior space.
 - Canopies will be provided for the entrances to the indoor classrooms to act as a transition zone from the indoors to the outside.
 - The proposed trees in the children's outdoor play area will be a mix of evergreen and deciduous trees including fruit trees to provide seasonal interest. The trees will also provide natural shade and cooling during the summer months.
 - Each outdoor play area is designed to serve a different age group (separated by a 3' fence) and is contiguous with the age group's indoor classroom.
- For children's safety, the children's outdoor play area is completely fenced with metal fence and hedge. The height of the fence and hedge will be between 4' and 5' and will have a playful oscillating shape to enhance the character of the development. In addition, wooden trellis and lockable gates are proposed to add visual interest.
- A Letter-of-Credit for landscaping in the amount of \$86,106.41 inclusive of a 10% contingency cost is included in the DP considerations.

Crime Prevention Through Environmental Design

The proposed development includes the following design elements that support CPTED principles:

- The corner site has good visibility from the streets.
- The children's outdoor area will be fenced completely for the safety of children.
- The accessory residential unit on the second floor provides natural surveillance of the streets and surrounding areas.
- Vandal resistant hardware to all doors, restricted opening to all windows and selected purpose-driven lighting to all access and egress doors will be provided.
- All gates will have security hardware installed to lessen the opportunity for vandalism.
- Entry points to and from the site are clearly defined from the adjacent streets.

Accessible Housing

- The proposed development includes the following accessibility features for a future resident with mobility challenges:
 - The accessible parking stall will be located close to the main entrances of the building.
 - All bedroom doorways in the accessory residential unit will be 3' wide to ensure wheelchair accessibility.
 - One of the bedrooms is designed to be an accessible unit; a closet and bathroom are designed to ensure universal accessibility.
 - Manoeuvring space in the kitchen will accommodate wheelchair accessibility.
- Additional accessibility features may be incorporated once further design work is completed for a building permit.

Energy and Sustainability

The applicant has indicated that the following sustainability measures will be incorporated into the development:

- Low-flow plumbing fixtures to reduce water consumption
- LED lighting where practicable to minimize energy consumption
- All appliances and fixtures will be selected based on ENERGY STAR® ratings
- Increased thermal insulation and high-quality windows with Low E glass
- Instructions to the consultant engineers will be provided to achieve a 10-15% reduction in mechanical and electrical loads wherever possible
- Using the BC Building Code as a base reference, insulation levels will be increased by 10-15% over the ASHREA 90.1.-2010 standards

Conclusions

The Development Permit application has addressed the issues and comments related to the site's existing condition of adjacency, urban design and site planning, architectural form and character and landscaping design. Staff recommend support of the Development Permit application.



Minhee Park
Planner 1

MP:cas

Attachment 1: Development Application Data Sheet

Attachment 2: Advisory Design Panel Meeting Minutes (Excerpt), April 16, 2015

Attachment 3: Advisory Design Panel Discussion Notes (Excerpt), June 17, 2015

The following are to be met prior to forwarding this application to Council for approval:

- Receipt of a Letter-of-Credit for landscaping in the amount of \$86,106.41

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be

required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Department at 604-276-4285.*

- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).



DP 14-672830

Attachment 1

Address: 10019 Granville Avenue

Applicant: JM Architecture

Owner: Haraka Enterprises Inc.

Planning Area(s): East Richmond McLennan Sub Area

Floor Area Gross: 1,145.3 m²

| | Existing | Proposed |
|-------------------------|---------------------------------------|---|
| Site Area: | 2,448 m ² | No Change |
| Land Uses: | Vacant | 88 space child care facility + Residential Security/Operator Unit |
| OCP Designation: | Agriculture | No Change |
| Zoning: | Agriculture, Institutional and Public | No Change |

| | Bylaw Requirement | Proposed | Variance |
|---|---|--|-----------------|
| Floor Area Ratio: | Max 0.5 FAR | 0.47 FAR | none permitted |
| Lot Coverage: | Max. 40% | 28.7% | none |
| Setback – Public Road | Min. 3 m | 4 m (Granville Avenue) 5 m (No. 4 Road) | none |
| Setback – North | Min. 5 m to building Min. 0.9 m to garbage and recycling enclosure | 5.7 m to building 0.9 m to garbage and recycling enclosure | none |
| Setback – East | Min. 9 m to building Min. 0.9 m to garbage and recycling enclosure | 21.2 m to building 0.9 m to garbage and recycling enclosure | none |
| Height (m): | Max. 12.5 m | 10.3 m | none |
| Off-street Parking Spaces – Total Regular/Commercial: | Min. 24 | 24 | none |
| Loading Spaces | Min. 1 | 1 | none |

Excerpt from the Minutes from
The Design Panel Meeting

Wednesday, April 16, 2015 – 4:00 p.m.
Rm. M.2.002
Richmond City Hall

4. **DP 14-672830 – 88-SPACE CHILD CARE FACILITY**

APPLICANT: JM Architecture Inc.

PROPERTY 10019 Granville Avenue

Applicant's Presentation

Architect Joe Minten, JM Architecture Inc., and Landscape Architect Clark Kavolinas, CJK Landscape Architecture, presented the project and answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- good break in the building façade; use of different building materials visually breaks down the large building and provides good articulation; different heights provide an interesting roofline;

General Information

- outdoor spaces appear too linear but understand that they are subject to lot dimensions;

General Information

- use of sandy brown and desert colours and significant amount of stucco materials makes the building look outdated; consider alternative colours and materials to create a more modern expression;

The revised plans illustrate a complete departure from the original submission to a more vibrant dynamic colour palette. The stucco and stone materials have been deleted in favour of shiplap and panel siding (James Hardie products).

- suggest that the applicant set specific target efficiencies with regard to the sustainability aspect of the project, e.g. 20 percent water consumption savings;

Also noted in the design brief goals to the following will be sought:

- *10% to 15% reduction in mechanical and electrical loads over BCBC regulations.*
- *10% to 15% increase in thermal insulation over the ASHREA 90.1.2010 standards.*

- consider introducing public art in the project as it will benefit the children and the public;

The layout of fencing at the intersection has been changed to permit two triangular areas – in these we have inserted a playful nod to the day care use. This interactive piece of artwork should be looked upon as a definition to the use of the daycare facility and can be used to sit on as well thus promoting a degree of public meeting and interaction. The materials of the letters are proposed to be concrete at the base and transparent lit pieces (by means of solar collection).

- consider design development to the cross gable roof on the tower element at the corner of Granville Avenue and No. 4 Road as it is very prominent; at the south elevation of the tower, consider relocating the three windows and the double door to the centre;

The cross gable roof has been changed to a single gable facing No. 4 Road added rooflets provide shading to the interior classroom spaces.

- reconsider the extensive use of cultured stone in the tower element; introduce larger windows;

The cultured stone has all been deleted.

- proposed colour palette appears bland; consider more “fun” colours;

As noted above, the colour palette has been completely revised to suit this comment.

- entrances/doors to the building appear confusing from the outside; use different colours or colour blocks to identify entrances and uses of the building according to various age groups;

The doors from the classrooms to the exterior are now framed in different coloured trim boards – the same colours are reintroduced as horizontal trims on the tower element and the north edge of the building.

- agree with comments regarding the choice of colours and extensive use of cultured stone on the tower element;

Reference notes to colour change

- the project has a stage-set feel; sill heights of windows at the upper level of the building are very high; consider enlarging the windows;

Several changes have addressed this concern:

- *The floor to ceiling height of the second floor has been lessened.*
- *The windows throughout the project have been given heavier more pronounced trims and on the tower, they have been pushed out of the exterior wall plane.*

- the building appears flat, e.g. no window reveals and thin bargeboards and fascias; needs more detailing;

Similar to above the revisions noted address the “set-stage” appearance previously presented.

- proposed colours need some contrast; agree with comments regarding the extensive use of cultured stone, lack of detailing in the tower element and size of windows; proportions work but overall design refinement is needed;

Reference comments related to colour palette change.

- additional screening of the outdoor children’s play area located along Granville Avenue which is a busy street is needed; location of children’s play area is a concern;

The edge interface of street and play area along No. 4 Road and Granville Avenue comprises a continuous hedge backed by a four foot high metal fence; aligned to the classroom egress doors the fence is changed to a fixed gate of five height and topped y a wood trellis.

- consider a one direction gable roof on the tower element in lieu of a cross gable roof;

Done.

- a more developed outdoor children’s play area consistent with the intended use of the proposed facility is needed; children’s play area lacks definition; and

A new landscape plan has been developed; please refer to it.

- the applicant is encouraged to work with City staff to introduce tree planting along Granville Avenue to provide some shading to the south side of the proposed development and screening of the children’s play area.

Trees along the city boulevard have been approved as part of the off-site civil works – they are now presented in graphic form in this presentation.

Panel Decision

It was moved and seconded

That DP 14-672830 return to the Panel for further review with the applicant giving consideration to the comments of the Panel.

CARRIED

Opposed: Steve Jedreicich

Excerpt from the Discussion Notes from
The Design Panel Meeting

Wednesday, June 16, 2015 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

2. **DP 14-672830 - 88 SPACE CHILD CARE FACILITY**

APPLICANT: JM Architecture Inc.

PROPERTY LOCATION: 10019 Granville Avenue

Applicant's Presentation

Architect Joe Minten, JM Architecture, and Landscape Architect Meredith Mitchell, M2 Landscape Architecture, presented the project and answered queries from the Panel on behalf of the applicant.

Panel Discussion

Comments from the Panel were as follows:

- the applicant has introduced good improvements to the project since its previous presentation the Panel;
- design changes to the project addressed the concerns of the Panel; the enhanced character of the building fits a daycare centre;
- appreciate the efforts of the applicant to make a lot of improvements to the project; also appreciate the applicant's presentation of the project and the renderings and elevations provided by the applicant to the Panel;
- entry canopy on the main entrance at the south elevation (along Granville Avenue) appears skimpy; consider enlarging the scale of the canopy;

There really is no wall space available to enlarge this canopy and still have it address the entry doors it serves; the canopy roof remains as presented.

- big improvement on the fascias;
- consider a chimney/fireplace expression in the suite;

A chimney has been added as recommended.

- windows to the kitchen in the south elevation (along Granville Avenue) and opposite windows in the north elevation are pushed up; consider bringing the window sills down;

Windows on the south side could not be enlarged as there are kitchen cabinets which determine the height of the sill. Windows on the north side have been increased as recommended.

- gable element introduced to the play space appears weak and does not appear to be coordinated with the landscape plan; consider an open frame element;

The west facing gable component was revised, reviewed and rejected by the architect and the client – we felt the design was foreign to the integrity of the overall facade facing No. 4 Road.

- the proposed development appears less institutional; choice of colours and introduction of colour contrast and gables make the project fit with its site context;
- agree with comments regarding the improvements on the project; appreciate the architectural details;
- appreciate the positive details of the outdoor play area programming and support the proposed landscaping which is going in the right direction; and
- appreciate the introduction of trellis elements along the street; however, look at control of children's access.

The Chair noted that the Panel members present expressed general support for the project.

Due to the absence of a quorum, a Panel recommendation could not be considered.



City of Richmond

Development Permit

No. DP 14-672830

To the Holder: JM Architecture Inc.
Property Address: 10019 Granville Avenue
Address: c/o Joe Minten
Main Floor, Building 4
15243 – 91st Avenue
Surrey, BC V3R 8P8

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 #18 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 \$86,106.41 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.

To the Holder: JM Architecture Inc.
Property Address: 10019 Granville Avenue
Address: c/o Joe Minten
Main Floor, Building 4
15243 – 91st Avenue
Surrey, BC V3R 8P8

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

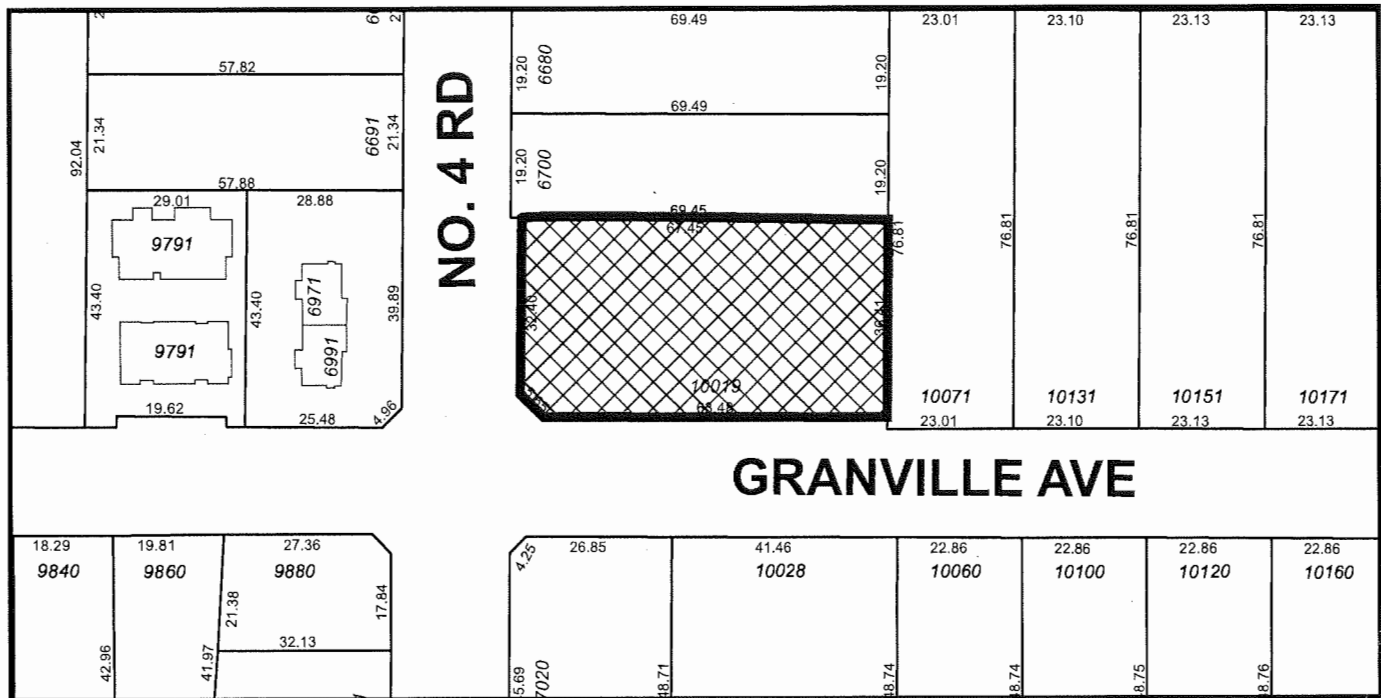
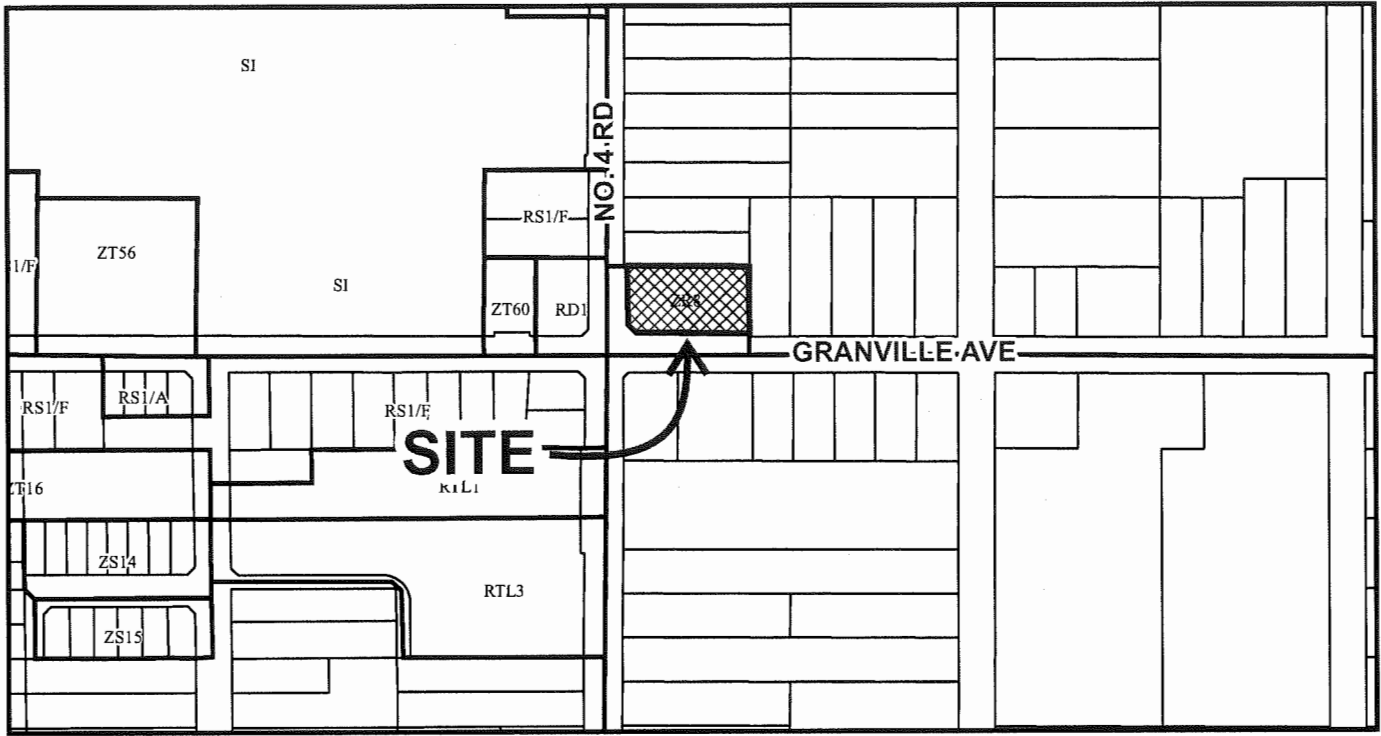
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF

MAYOR



City of Richmond



DP 14-672830 SCHEDULE "A"

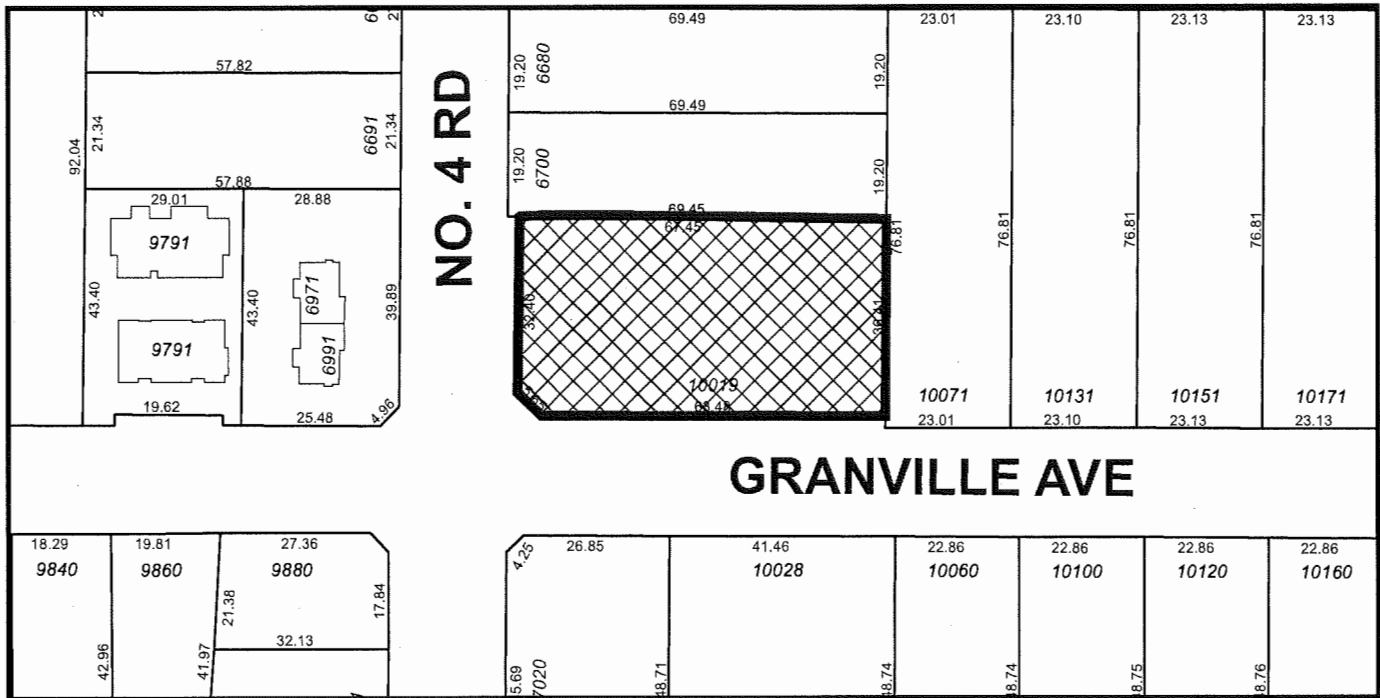
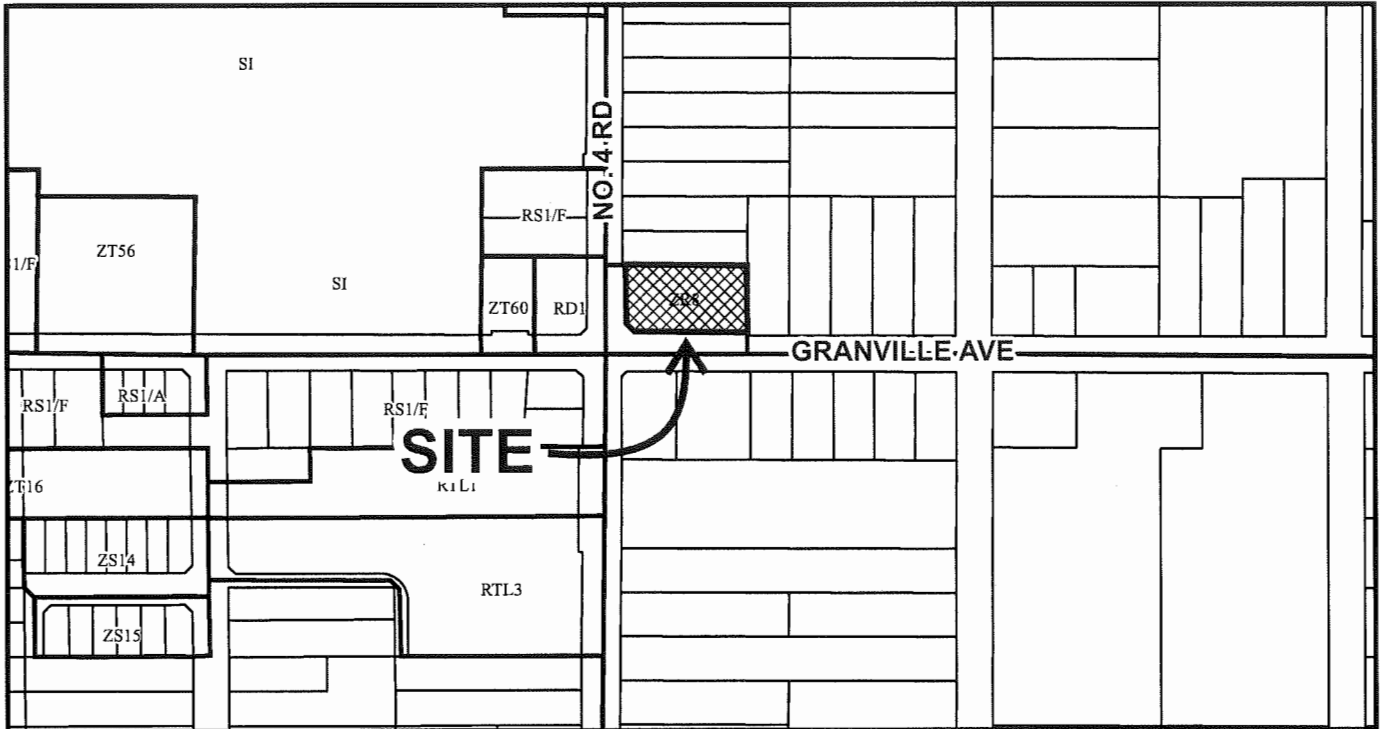
Original Date: 10/01/14

Revision Date:

Note: Dimensions are in METRES



City of Richmond



| | | |
|--|-----------------------|---|
| | <h2>DP 14-672830</h2> | Original Date: 10/01/14 Revision Date: Note: Dimensions are in METRES |
|--|-----------------------|---|

MIXED USE RICHMOND

City of Richmond, BC
10019 Granville Avenue
Richmond, BC

RENDERING – SNAP SHOTS



SITE MAP



DP SUBMISSION

Contact

OWNER
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8545 Glenville Avenue
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TEL: 604 502 7889
FAX: 604 271 7700
EMAIL: am@mdca@shaw.ca
MR. AMIN ALIDINA

ARCHITECT
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#100 - BLDG 4 - 15243 91st Avenue
SURREY, B.C. V3R 8P8
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FAX: 604 583 1004
EMAIL: JMARCH@SHAW.CA
CONTACT: JOE MINTEN, mbtc, asa

SURVEYOR
MATSON BECK & TOPLESS SURVEYORS & ENGINEERS
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LANDSCAPE ARCHITECT
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CIVIL ENGINEERING
CORE CONCEPT CONSULTING LTD.
#1289 - 13351 Commerce Parkway
RICHMOND, B.C. V6V 2K7
TEL: 604 248 5040
FAX: 604 248 5041
EMAIL: dkoza@coreconcept.ca
CONTACT: DAVID KOZAK, ASst

Drawing List

| DRAWING No. | DRAWING TITLE |
|------------------|---------------------------------|
| A-100.1 | SITE CONTEXT AND RECONCILIATION |
| A-100.2 | SITE PLAN |
| A-100.2B | STREET CONTEXT MAP |
| A-100.3 | SITE DETAILS |
| A-101.1 | MAIN FLOOR PLAN |
| A-101.2 | 2ND FLOOR PLAN |
| A-101.3 | ROOF PLAN |
| A-103.1 | ELEVATIONS |
| A-103.2 | ELEVATIONS |
| A-103.3 | PERSPECTIVES |
| A-103.4 | PERSPECTIVES |
| SURVEY | |
| DRAWING No. | DRAWING TITLE |
| 1 | SITE SURVEY |
| LANDSCAPE | |
| DRAWING No. | DRAWING TITLE |
| 1 | LANDSCAPE PLAN |

BRAINTREE E.L.C., 10019 GRANVILLE AVE., RICHMOND, BC

DP-14-672830

Plan #1

COPYRIGHT & USE OF DOCUMENTS

This plan and design are considered the "works of art" of the Architect and shall be the property of the Architect. No part of this plan or design shall be reproduced, copied, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written consent of the Architect. The Architect shall not be held responsible for any errors or omissions in this plan or design, and shall not be held responsible for any consequences arising from the use of this plan or design. The Architect shall not be held responsible for any changes to this plan or design made by others.

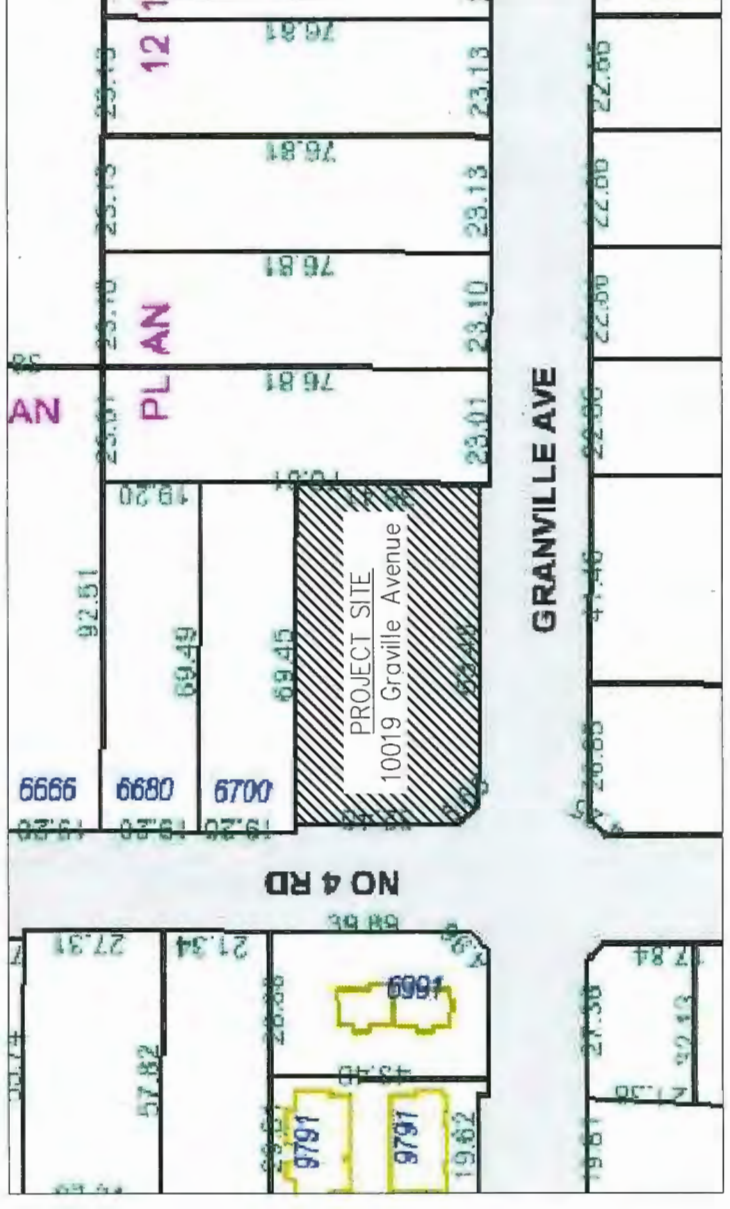


JM Architecture Inc.
 architecture
 interior design
 planning
 Architect: Joe M. Minchin
 Building 4 - Main Floor
 3243 B. V. Way
 804 - 683 2003 - 1
 804 - 683 2003 - 2
 804 - 683 2003 - 3
 804 - 683 2003 - 4
 804 - 683 2003 - 5

DO NOT SCALE DRAWING



SITE CONTEXT PLAN
 SCALE 1/8" = 1'-0"



LEGAL DESCRIPTION
 LOT 1, SEC 11, BLOCK 4 NORTH, RANGE 6 WEST, NWD,
 PL BCP 20081. PID: 026-483-734

| ZONING RECONCILIATION | |
|---|---|
| CIVIC ADDRESS 10019 Granville Avenue, Richmond, BC Legal Address Lot 1, Sec 11, Block 4 North, Range 6 West, NWD, PL BCP 20081. PID: 026-483-734 | Local Commercial Comprehensive Development CD |
| EXISTING ZONE PROPOSED ZONE | CD PROVIDED |
| BASED ON RICHMOND ZONING BY LAW | REQUIRED |
| LOT AREA GROSS SITE AREA | N/A 2,446m ² (26,351 SF) |
| DENSITY GROSS DENSITY | N/A 1,145.3m ² / 2,446.0m ² = 0.47 |
| LOT COVERAGE GROSS LOT COVERAGE | N/A 704.66m ² / 2,446.00m ² = 28.7% |
| YARD SET BACK FRONT SET BACK (INC. 4 ROAD) FRONT SET BACK (GRANVILLE AVENUE) SIDE YARD SET BACK REAR YARD SET BACK | 5.0m (16'-5") 4.01m (13'-2") 21.22m (69'-7 1/4") 5.78m (18'-11 5/8") |
| HEIGHT BUILDING HEIGHT OF BUILDING TO AVERAGE GRADE (1.92) | N/A 10.33m (33'-10 1/8") |
| OFF-STREET PARKING CHILD CARE | 13 9 2 24 |
| GROUP INFANT 1 - UNDER 18 MONTHS (12 CHILD) - STAFF REQUIRED: 1 INFANT EDUCATOR & 1 OTHER EDUCATOR & 1 ASSISTANT = 3 EMPLOYEES GROUP INFANT 2 - UNDER 18 MONTHS (8 CHILD) - STAFF REQUIRED: 1 INFANT EDUCATOR & 1 OTHER EDUCATOR = 2 EMPLOYEES GROUP TODDLER 1 - BETWEEN 18 AND 36 MONTHS (10 CHILD) - STAFF REQUIRED: 1 INFANT EDUCATOR & 1 OTHER EDUCATOR & 1 ASSISTANT = 3 EMPLOYEES GROUP TODDLER 2 - BETWEEN 18 AND 36 MONTHS (6 CHILD) - STAFF REQUIRED: 1 INFANT EDUCATOR & 1 OTHER EDUCATOR = 2 EMPLOYEES 30 MONTHS TO SCHOOL AGE (25 CHILD) - STAFF REQUIRED: 1 EDUCATOR & 1 ASSISTANT = 2 EMPLOYEES ADMINISTRATION = 1 EMPLOYEE 17 EMPLOYEES X 0.75 1 PER 10 CHILDREN (88 CHILD) | 13 9 2 24 |
| OWNERS/RESIDENCE TOTAL REQUIRED PARKING SPACES | 2 2 |
| TOTAL PROVIDED PARKING SPACES | 24 |
| BICYCLE STORAGE CLASS 1 LONG TERM SECURED BIKE LOCKERS 1.25 SPACES PER DWELLING UNIT CLASS 2 SHORT TERM BICYCLE RACKS 0.2 SPACES PER DWELLING UNIT | 2 1 |
| PART 3 - CHILD CARE LICENSING REGULATION | |
| GROUP CHILD CARE - 30 MONTHS - SCHOOL AGE - GROUP 1 - 24 CHILD (MAIN FLOOR) 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 24 CHILD) | PROVIDED 3.75m ² x 24 90.00m ² (968.70 SF) |
| GROUP CHILD CARE - 30 MONTHS - SCHOOL AGE - GROUP 2 - 24 CHILD (MAIN FLOOR) 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 24 CHILD) | PROVIDED 3.85m ² x 24 92.02m ² (990.50 SF) |
| GROUP CHILD CARE - INFANT - UNDER 18 MONTHS - GROUP 1 - 12 CHILD 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 12 CHILD) | PROVIDED 3.72m ² x 12 44.63m ² (480.42 SF) |
| GROUP CHILD CARE - INFANT - UNDER 18 MONTHS - GROUP 2 - 8 CHILD 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 8 CHILD) | PROVIDED 3.716m ² x 8 29.73m ² (320 SF) |
| GROUP CHILD CARE - TODDLER - BETWEEN 18 AND 36 MONTHS - GROUP 1 - 12 CHILD 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 12 CHILD) | PROVIDED 3.70m ² x 12 44.4m ² (478 SF) |
| GROUP CHILD CARE - INFANT - BETWEEN 18 AND 36 MONTHS - GROUP 2 - 8 CHILD 3.7m ² OF FLOOR AREA PER CHILD (MAX GROUP OF 8 CHILD) | PROVIDED 3.90m ² x 8 31.20m ² (335.90 SF) |
| OUTDOOR PLAY AREA 7.0m ² OF OUTDOOR PLAY AREA PER CHILD GROUP 1 - TODDLER - BETWEEN 18 AND 36 MONTHS GROUP 2 - INFANT - UNDER 18 MONTHS GROUP 3 - INFANT - UNDER 18 MONTHS GROUP 4 - TODDLER - BETWEEN 18 AND 36 MONTHS GROUP 5 - 3-5 YR OLD GROUP 6 - 3-5 YR OLD | REQUIRED 8 x 7m ² = 56m ² 6 x 7m ² = 42m ² 12 x 7m ² = 84m ² 24 x 7m ² = 168m ² 24 x 7m ² = 168m ² TOTAL 7.0m ² X 88 616m ² (6,630.57 SF) |

DP-14-672830

Plan #2

Project No. 3.0
 200-10
 A-100.1

Project Name
BRAINTREE E.L.C.
 10019 Granville Avenue
 RICHMOND, B.C.
 Mr. Jeff Miller
 Title: Planning Consultant
 540 Don Mills Ave. (RICHMOND)
 2018-07-22

START DATE: MARCH 2010
 PROJECT No.: 2008-10
 DR.: EB
 CH.: JM
 SCALE: AS SHOWN

| REV | DATE | DESCRIPTION | BY |
|-----|----------|------------------|----|
| 01 | 20-08-08 | ISSUE FOR PERMIT | JM |
| 02 | 20-09-08 | ISSUE FOR PERMIT | JM |
| 03 | 20-09-08 | ISSUE FOR PERMIT | JM |
| 04 | 20-09-08 | ISSUE FOR PERMIT | JM |
| 05 | 20-09-08 | ISSUE FOR PERMIT | JM |

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JM Architecture Inc.
architecture
interior design
planning

Architect: Joe M. Milton
Consultant: Joe M. Milton
Address: 15243 - 81st Avenue, Richmond, BC
Phone: 604-271-5933, 604-271-5934
Fax: 604-271-5935

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SHEET NOTES

1. SOCKET NOTE: THIS DRAWING HAS BEEN PREPARED USING INFORMATION OBTAINED FROM A SOCKET PROVIDED BY THE CLIENT. THE CONSULTANT HAS CONDUCTED VISUAL GENERAL VERIFICATION OF THE INFORMATION BUT HAS NOT PERFORMED A DETAILED CHECK OF THE INFORMATION. THE CLIENT IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION. THE CONSULTANT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THEM BY THE CLIENT.
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|------|------------|-------------------|----|
| 01 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 02 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 03 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 04 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 05 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 06 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 07 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 08 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 09 | 2015-07-22 | ISSUED FOR PERMIT | JM |
| 10 | 2015-07-22 | ISSUED FOR PERMIT | JM |

LEGEND

EXISTING GRADE ELEVATION FROM SOCKET

FINISHED GRADE ELEVATION

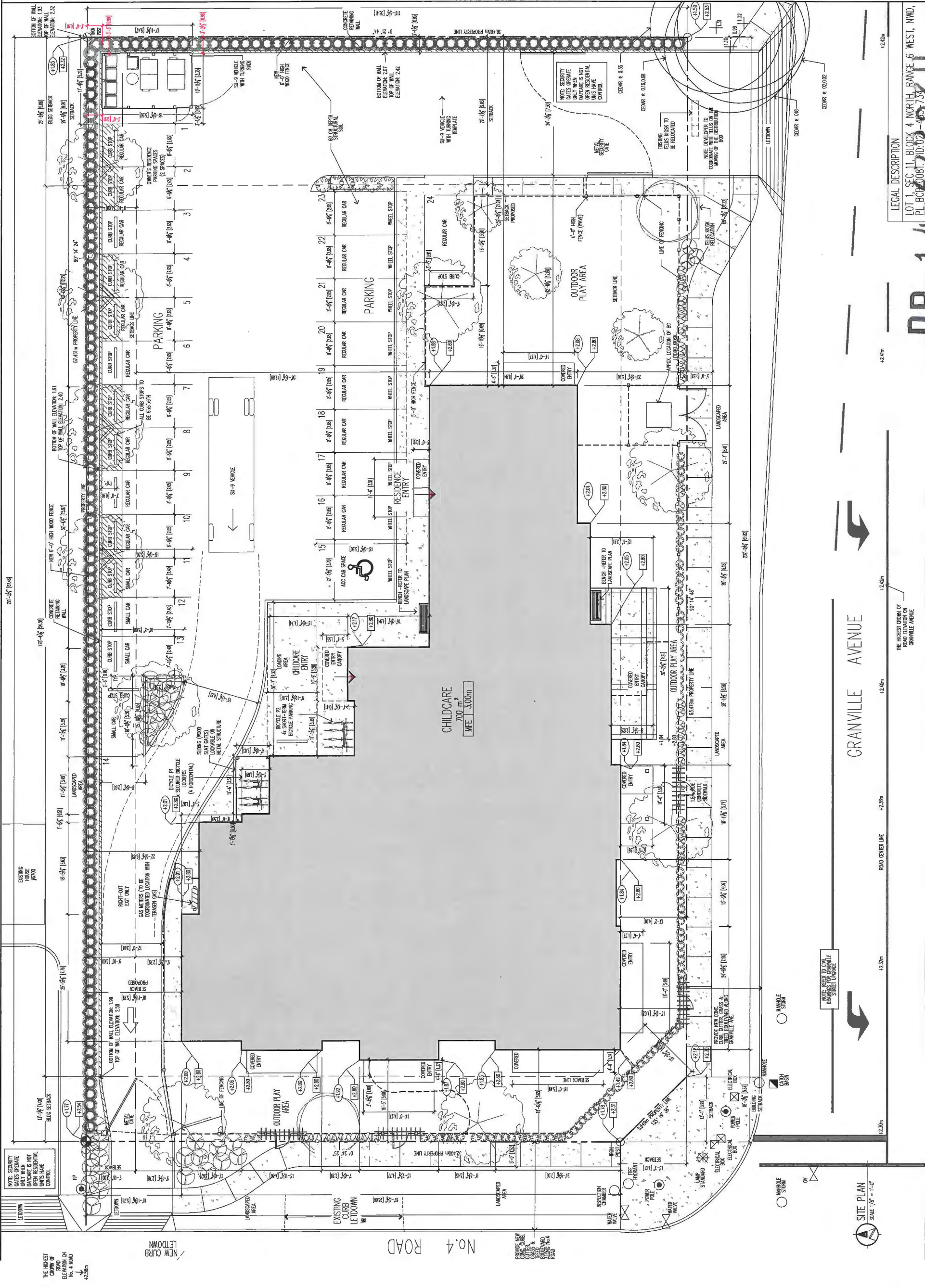
| PROJ. NO. | DATE | SCALE |
|------------|------------|----------|
| 2015-07-22 | 2015-07-22 | AS SHOWN |

Project Name
BRAIN TREE E.L.C.
10019 Granville Avenue
RICHMOND, B.C.

DATE: 2015-07-22

Project No: A-100.2

Revision: 6.0 2015-10



LEGAL DESCRIPTION
LOT 1, SEC 11, BLOCK 4 NORTH, RANGE 6 WEST, N.W.D.,
P.L.C.P.# 0081, 210-02-4973

DP-14-072030

Plan #3

NOTE: REFER TO CH. 14.01 FOR DIMENSIONS AND SETBACKS FOR GRANVILLE STREET (UNWIDE).

NOTE: REFER TO CH. 14.01 FOR DIMENSIONS AND SETBACKS FOR GRANVILLE AVENUE.

NOTE: REFER TO CH. 14.01 FOR DIMENSIONS AND SETBACKS FOR GRANVILLE AVENUE.

NOTE: REFER TO CH. 14.01 FOR DIMENSIONS AND SETBACKS FOR GRANVILLE AVENUE.

SITE PLAN
SCALE 1/8" = 1'-0"

PROVIDE NEW CONC. CURB, BASES & ROSTERS TO BE SET BACK 1.00M ALONG NO. 4 ROAD

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 interior design
 planning

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 604 - 885 1004 - F
 604 - 885 1004 - C
 jweston@jma.ca

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| REV | DATE | DESCRIPTION | BY |
|-----|-------|-------------|----|
| 20 | 26/06 | PROPOSALS | JM |
| 19 | 24/03 | REVISIONS | JM |

START DATE: OCT 2009
 PROJECT No: 200919
 DR: B
 CH: JM
 SCALE: AS SHOWN
 Architects Seal

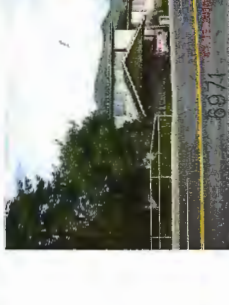
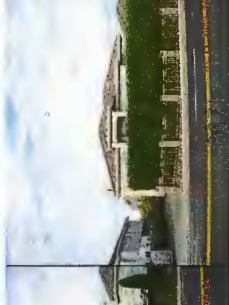
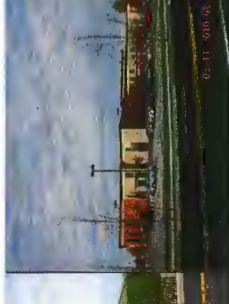
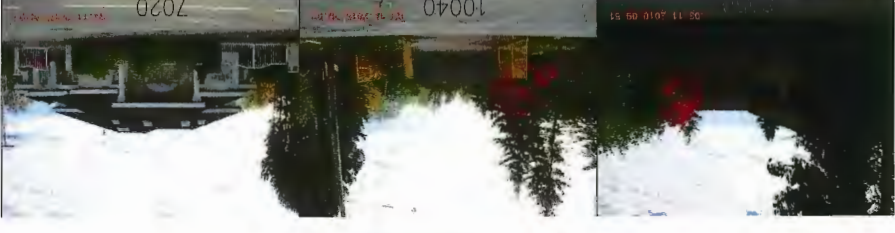
Project Name
BRAINTREE E.L.C.
 1010 CRANVILLE AVENUE
 RICHMOND, BC

Mr. Arif Akbar
 Triple A - Planning Consultants
 2548 Granville Avenue, RICHMOND

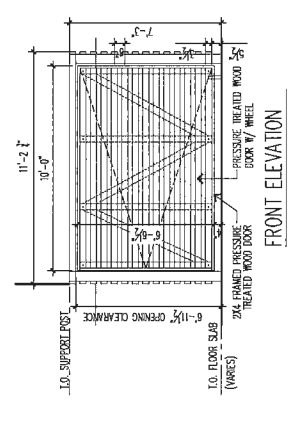
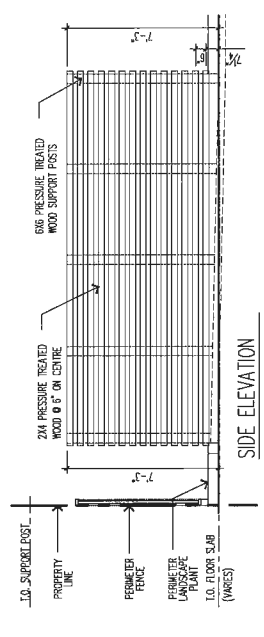
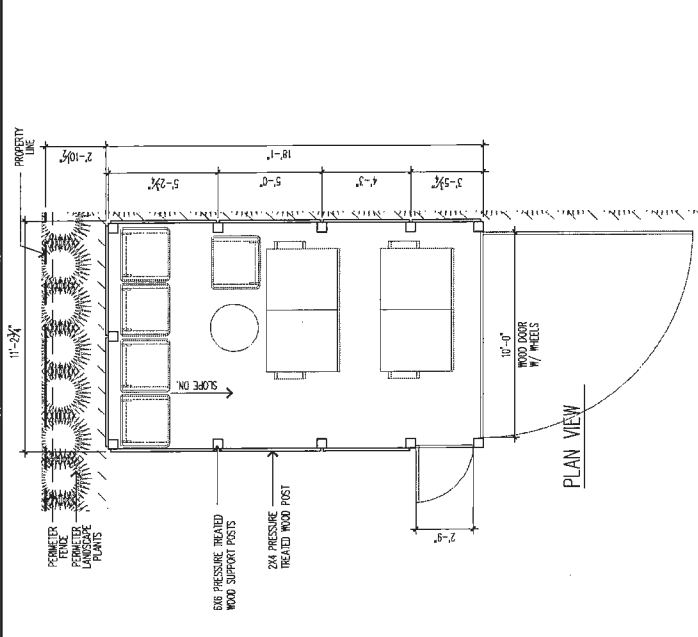
STREET SCAPE
 CONTEXT MAP

Project No: A-100.2
 2.0

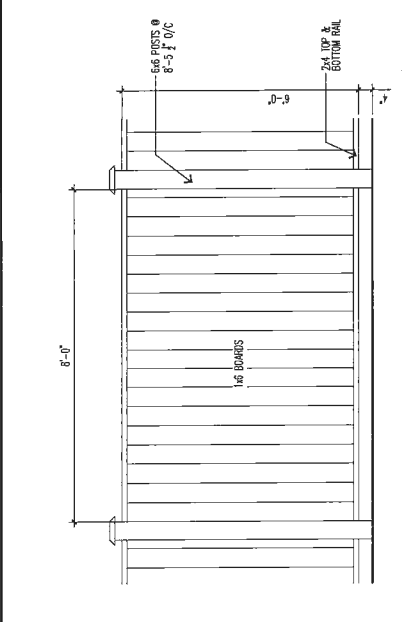
Plan # 4



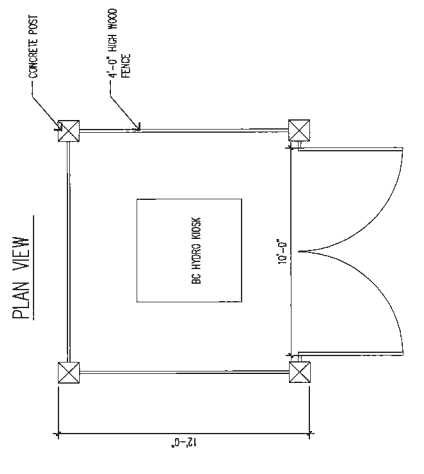
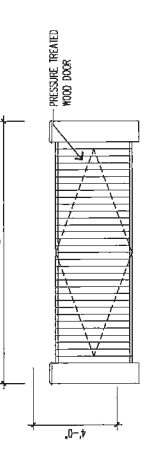
DP-14-672830



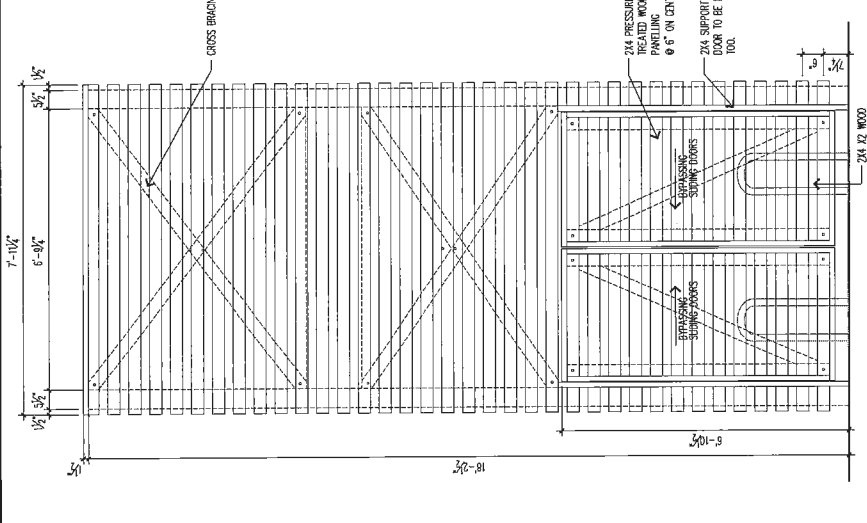
1. GARBAGE ENCLOSURE DETAIL
A-1002 SCALE: 1/4" = 1'-0"



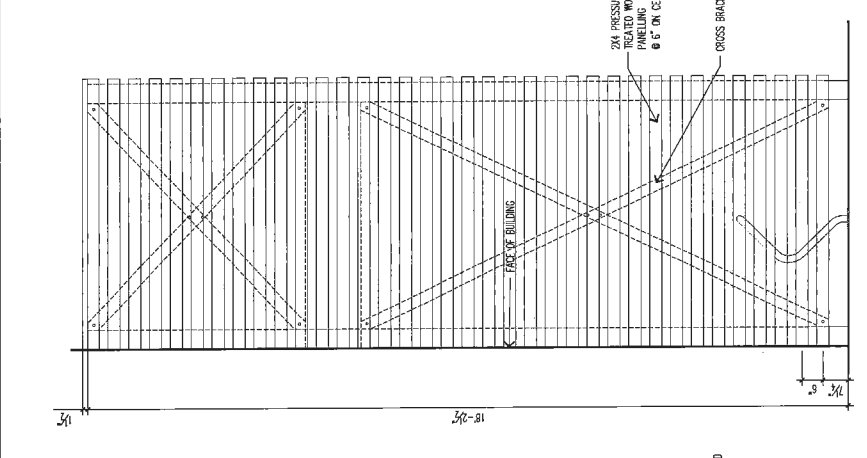
3. PERIMETER SOLID FENCE DETAILS (NORTH & EAST SITE BDRY)
A-1002 SCALE: 1/2" = 1'-0"



8. BC HYDRO PAD MOUNTED TRANSFORMER
A-1002 SCALE: 1/4" = 1'-0"



6. SECURED BICYCLE ENCLOSURE DETAIL
A-1002 SCALE: 1/2" = 1'-0"



7. BICYCLE RACK DETAIL
A-1002 SCALE: 1/2" = 1'-0"

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architect, pbc, inc. made
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304743 B.C. V3R 8P8
604-2-593 2003 - T
604-2-593 2003 - F
jwhitten@jmw.com
www.jmarchitect.com

DO NOT SCALE DRAWING

| REV | DATE | DESCRIPTION | BY |
|-----|------------|-------------------------------|----|
| 15 | 2010-03-03 | REVISED | JP |
| 14 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 13 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 12 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 11 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 10 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 9 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 8 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 7 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 6 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 5 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 4 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 3 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 2 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |
| 1 | 2010-02-25 | REVISED FOR CONCRETE / FINISH | JP |

START DATE: MARCH 2010
PROJECT No: 2010-10
DR: JB
CH: JMW
SCALE: AS SHOWN
Architects Seal

Project Name: **CASA DEL SOL**
10011 Glenview Avenue
RICHMOND, B.C.
Mr. Josh Miles
Title: A Planning Consultant
530 Granville Ave. RICHMOND

SITE DETAILS
Project No: 2010-10
Sheet: 6.0
Total Sheets: 100.3

DP-14-67203U
BICYCLE RACK DETAIL
PLAN #5

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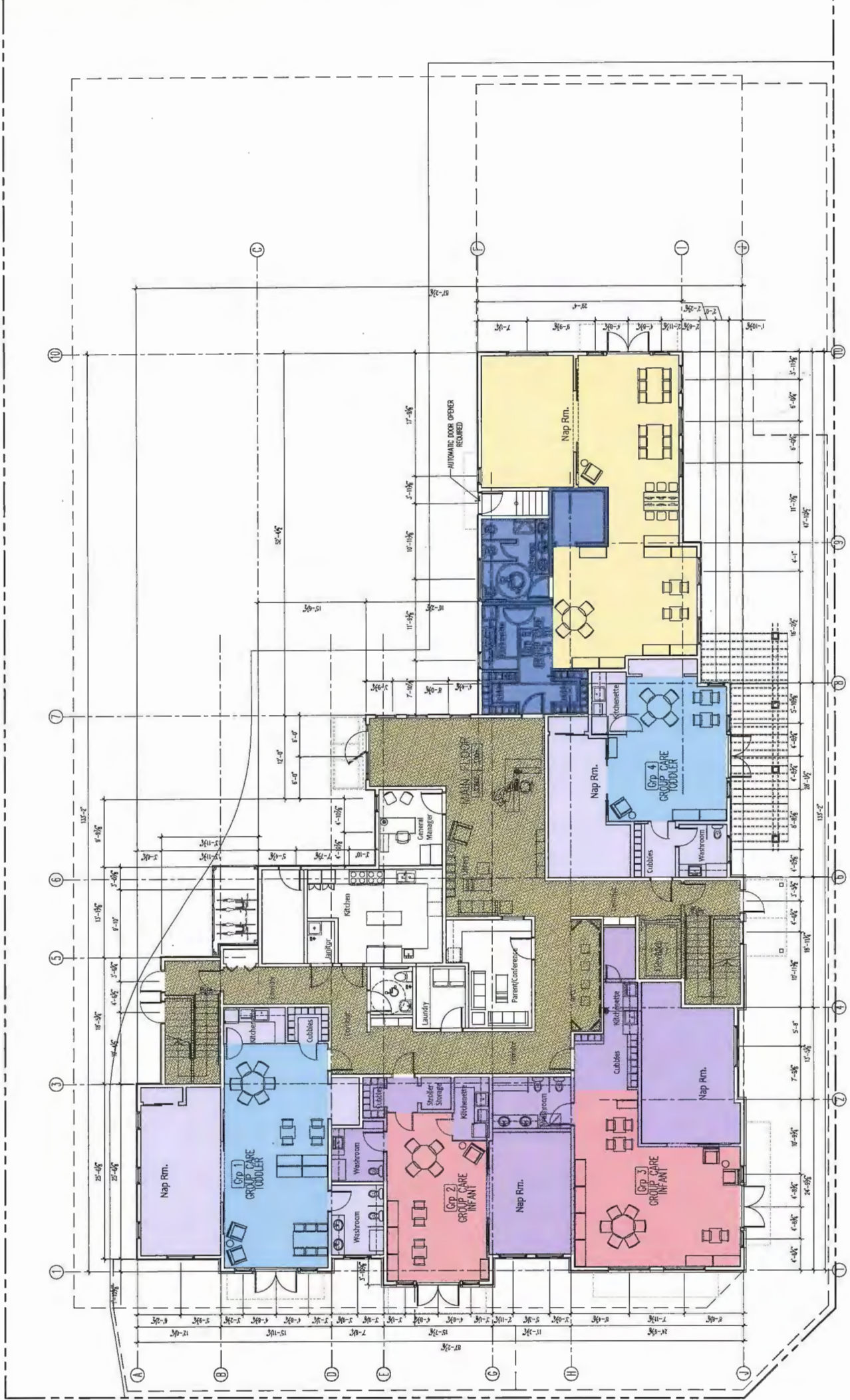
JM Architecture Inc.
 architecture
 interior design
 planning

Architect: Joe W. Watson
 15243 8th Avenue
 Richmond, B.C. V6V 2G3
 604-275-2003

DO NOT SCALE DRAWING

| ROOM | REQUIRED | PROVIDED |
|------------------------------|----------------------------------|-------------------------------------|
| Group 1- Toddler (8): | | |
| Usable area | 318.50 SF (29.6m ²) | 322.61 SF (29.97 m ²) |
| Nap room | 187 SF (17.34m ²) | 195 SF (18.12 m ²) |
| Outdoor play area | 602.78 SF (56m ²) | 889.51 SF (82.64 m ²) |
| Group 2 Infant (6): | | |
| Usable area | 318.50 SF (29.6m ²) | 330 SF (30.86 m ²) |
| Nap room | 187 SF (17.34m ²) | 207.68 SF (19.29 m ²) |
| Outdoor play area | 602.78 SF (56m ²) | 607.15 SF (56.4 m ²) |
| Group 3 Infant (12): | | |
| Usable area | 477.74 SF (44.40m ²) | 480.20 SF (46.54 m ²) |
| Nap room | 279.86 SF (26m ²) | 287.44 SF (26.70 m ²) |
| Outdoor play area | 904.15 SF (84m ²) | 918.16 SF (85.30 m ²) |
| Group 4 Toddler (12) | | |
| Usable area | 477.74 SF (44.40m ²) | 485.89 SF (45.14 m ²) |
| Nap room | 279.86 SF (26m ²) | 280.38 SF (26.03 m ²) |
| Outdoor play area | 904.15 SF (84m ²) | 782.60 SF (72.71 m ²) |
| Group 5 3-5 YO (24): | | |
| Usable area | 955.49 SF (88.80m ²) | 968.70 SF (90m ²) |
| Outdoor play area | 388.34 SF (36m ²) | 1894.50 SF (174.03 m ²) |

Note: Infant outdoor play area is combined (total of 20 infants).
 Required: 1506.95 SF (140m²)
 Provided: 1527.59 SF (141.88m²)



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

| REV | DATE | DESCRIPTION | BY |
|-----|------------|------------------|----|
| 1 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 2 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 3 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 4 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 5 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 6 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 7 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 8 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 9 | 2016-07-22 | ISSUE FOR PERMIT | JM |
| 10 | 2016-07-22 | ISSUE FOR PERMIT | JM |

START DATE: MARCH 2010
 PROJECT No: 2010-10
 DIR: JB
 CH: JM
 SCALE: AS SHOWN
 ARCHITECT: JM Architecture Inc.



Project Name:
BRAINTREE E.L.C.
 8009 Gamble Avenue
 RICHMOND, B.C.

Mr. John Miller
 Title: Project Consultant
 5340 Brantree Ave. RICHMOND

MAIN FLOOR PLAN

Project No. A-101.1
 4.0 2010-10

DP-14-672830

Plan # 6

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JM Architecture Inc.
 architecture
 interior design
 planning

Architect: Joe M. Nelson
 Building 4 - Main Floor
 15243 - 81st Avenue
 Richmond, BC V6V 2G7
 604 - 273-5555
 604 - 890 1004 - F

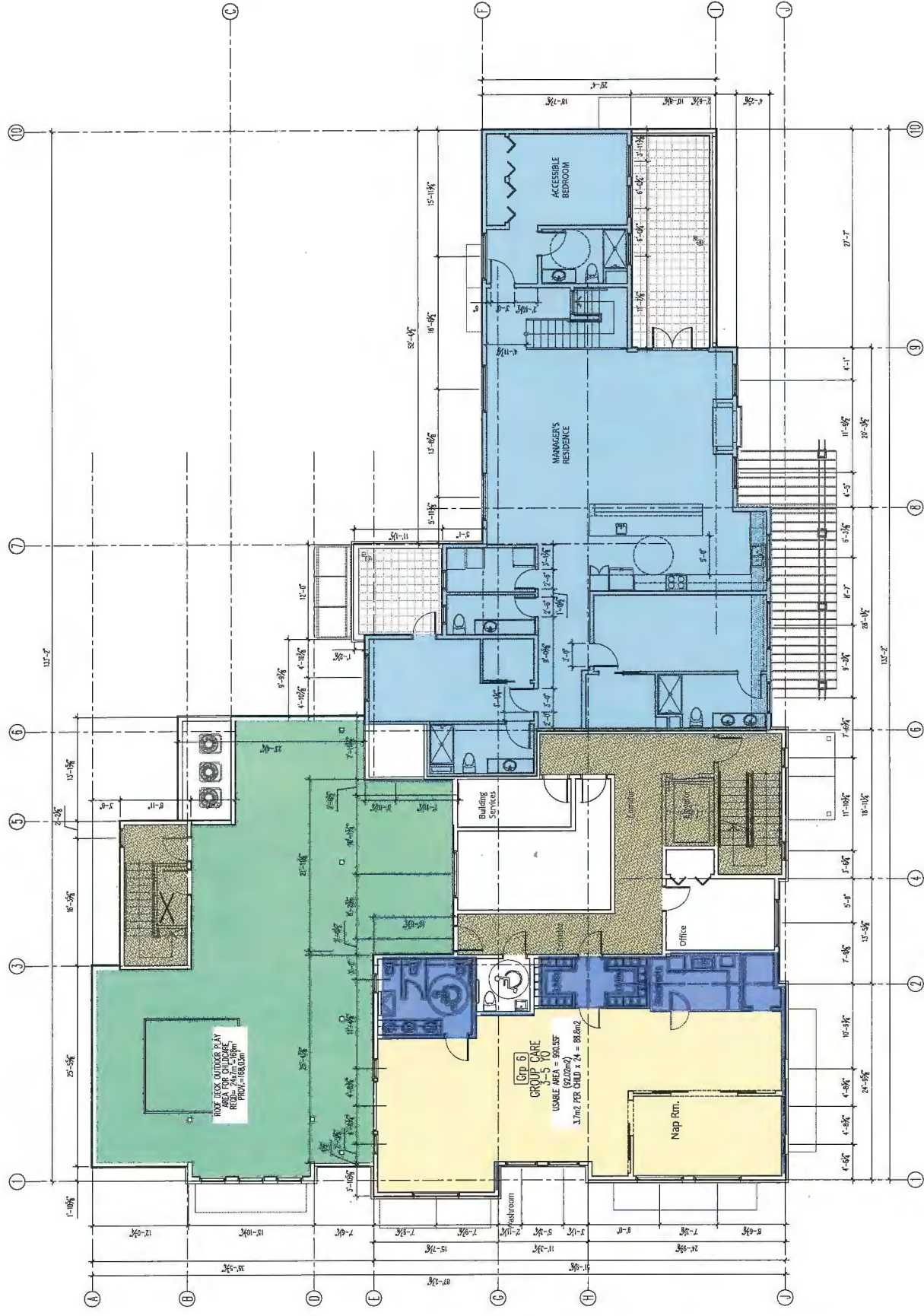
DO NOT SCALE DRAWING

Group 6 S-5 TO (24):

| Usable area | 1955.49 SF (88.80m ²) | 1032.44 SF (94.84m ²) |
|-------------------|-----------------------------------|------------------------------------|
| Outdoor play area | 1808.34 SF (168m ²) | 1088.66 SF (100.03m ²) |

AREAS:

| CHILDCARE FACILITY | MANAGER'S RESIDENCE | OFFICE | GROUP CARE | OUTDOOR PLAY |
|--------------------|----------------------|-------------------------|------------|--------------|
| 1706.7 | 18.484 | 11.464 | 3.064 | 18.484 |
| 1808.34 | 232.476 | 235.764 | 235.764 | 235.764 |
| TOTAL | 957.22m ² | 10,004.67m ² | | |



2nd FLOOR PLAN
 SCALE 1/8" = 1'-0"

| REV | DATE | DESCRIPTION | BY |
|-----|------------|-------------------|----|
| 01 | 2016-03-22 | ISSUE FOR PERMITS | JM |
| 02 | 2016-03-22 | ISSUE FOR PERMITS | JM |
| 03 | 2016-03-22 | ISSUE FOR PERMITS | JM |
| 04 | 2016-03-22 | ISSUE FOR PERMITS | JM |

START DATE: MARCH 2016
 PROJECT No: 2016-10
 DR: JB
 CH: JM
 SCALE: AS SHOWN

Architect's Seal: Joe M. Nelson, Architect, BC Reg. No. 12345

2016-07-22

BRAINTREE E.L.C.
 10018 Granville Avenue
 RICHMOND, B.C.

Mr. Neil Aldred
 Compliance
 5340 Granville Ave. (RICHMOND)

2ND FLOOR PLAN

Project No. 2016-10
 A-101.2

DP-14-672830

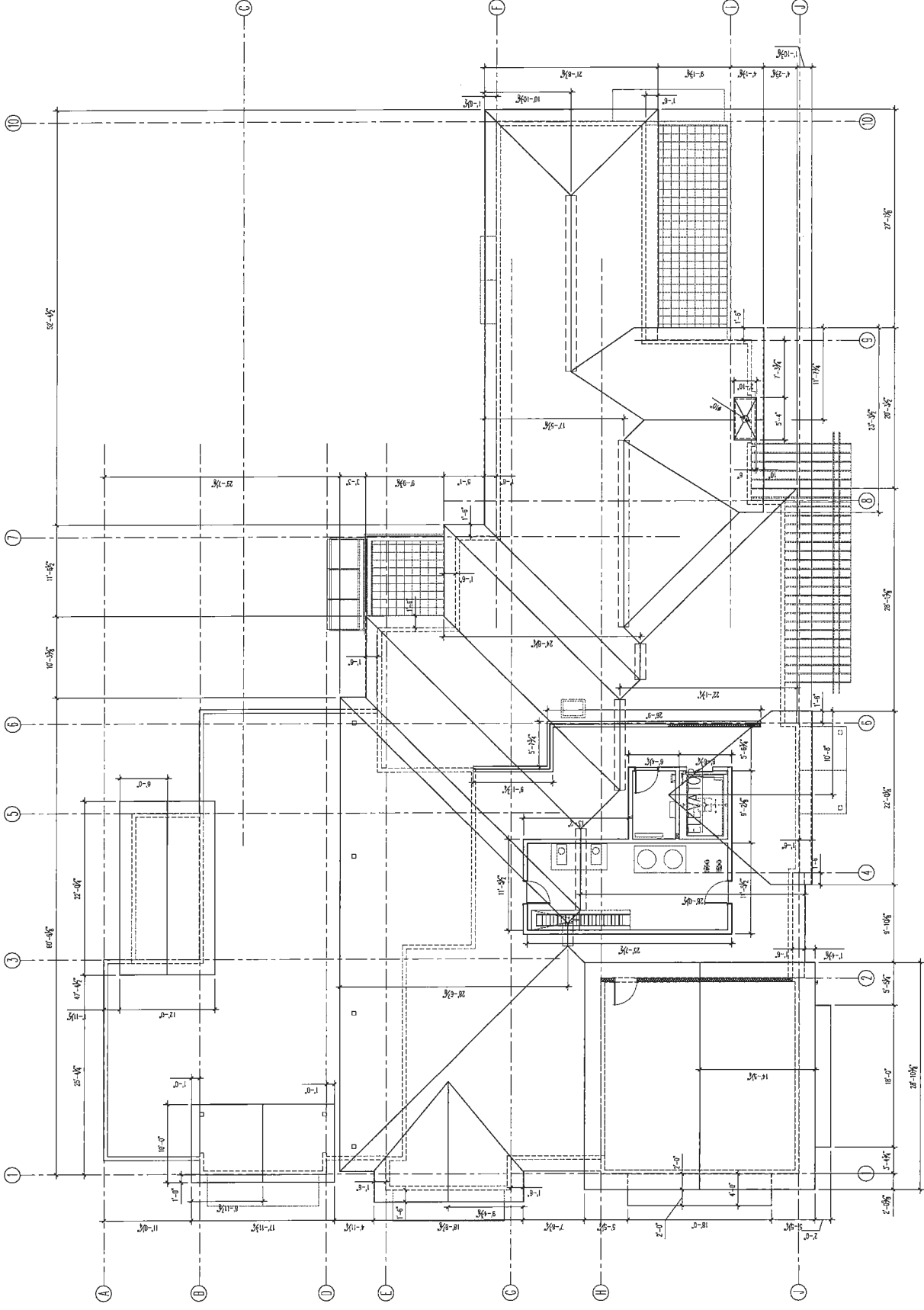
Plan # 7

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Architect: Joe M. Wilson
 Architect: Joe M. Wilson
 Building 4 - Main Floor
 12243 B St. Avenue
 Richmond, BC V6V 2G3
 604-273-2003
 604-273-2004
 604-273-2005
 604-273-2006
 604-273-2007
 604-273-2008
 604-273-2009
 604-273-2010

DO NOT SCALE DRAWING



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

| REV | DATE | DESCRIPTION | BY |
|-----|------------|--------------|----|
| 10 | 2010-03-10 | IF REVISIONS | JP |
| 09 | 2010-03-10 | IF REVISIONS | JP |
| 08 | 2010-03-10 | IF REVISIONS | JP |
| 07 | 2010-03-10 | IF REVISIONS | JP |
| 06 | 2010-03-10 | IF REVISIONS | JP |
| 05 | 2010-03-10 | IF REVISIONS | JP |
| 04 | 2010-03-10 | IF REVISIONS | JP |
| 03 | 2010-03-10 | IF REVISIONS | JP |
| 02 | 2010-03-10 | IF REVISIONS | JP |
| 01 | 2010-03-10 | IF REVISIONS | JP |

| | |
|------------------|------------|
| START DATE | MARCH 2010 |
| PROJECT No. | 2010-10 |
| DR. | EB |
| CH. | JM |
| SCALE | AS SHOWN |
| Architect's Seal | |

Project Name
BRAINTREE E.L.C.
 1009 Granville Avenue
 Richmond, B.C.
 Mr. John Wilson
 1009 Granville Ave.
 Richmond, B.C.

ROOF PLAN

Project No. A-101.3
 2.0 2010-10

Plan # 2

DP-14-672830

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 interior design
 planning
 Architect: Joe M. Wilson
 Building # - Main Floor
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 jmarch@shaw.ca - 1
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SOUTH ELEVATION (GRANVILLE AVENUE)
 SCALE 3/16" = 1'-0"



WEST ELEVATION (No. 4 ROAD)
 SCALE 3/16" = 1'-0"

MATERIAL/COLOUR SELECTION

| BUILDING MATERIALS | FINISH | COLOUR |
|-------------------------------------|----------|--|
| A ASPHALT SHINGLES | INTEGRAL | ROYAL ESTATE |
| B HARDBOARD SIDING | PAINTED | HARVEST SLATE |
| C HARDBOARD SIDING | PAINTED | GENERAL PAINT VIGILANTE CL. 1517N |
| D HARDBOARD SIDING | PAINTED | GENERAL PAINT PRAIRIE WHEAT CLC 1242D |
| E HARDBOARD SIDING - HORIZONTAL | INTEGRAL | IRON GRAY |
| F HARDBOARD SIDING - BOARD & BATTEN | INTEGRAL | IRON GRAY |
| G WOOD TRIM | PAINTED | GENERAL PAINT DEER FEATHER CLW 1077W |
| H WOOD TRIM | PAINTED | GENERAL PAINT CL. 1517N |
| I TIMBER SLATS | PAINTED | 3- VIGILANTE CL. 1517N 4- PRAIRIE WHEAT CLC 1242D 5- TRACING PAPER CL. 2862W |
| J METAL GUARDRAILS & FENCE | PAINTED | GENERAL PAINT TRACING PAPER CL. 2862W |
| K PRE FINISHED METAL AWNING | INTEGRAL | GENERAL PAINT TRACING PAPER CL. 2862W |
| | | IRON MOUNTAIN GREY |

NOTE:
 FOR FENCING AND RELATED TO LANDSCAPE DETAILS REFER TO LANDSCAPE DRAWINGS.

| REV | DATE | DESCRIPTION | BY |
|-----|------------|------------------------|----|
| 3.0 | 2019-02-14 | ISSUED TO CITY FOR DP | FK |
| 4.0 | 2019-06-19 | ISSUED TO CITY FOR DP | FK |
| 3.0 | 2019-06-19 | ADD REVISION DOCUMENTS | FK |
| 3.0 | 2019-08-01 | ISSUED TO CLIENT | FK |
| 1.0 | 2019-08-01 | ISSUED TO CITY FOR DP | AP |

| | |
|-----------------|-----------|
| START DATE | 007-2019 |
| PROJECT No | 2019-19 |
| DR. | AP / FK |
| CH. | JM |
| SCALE | A5 3/16"K |
| Architects Seal | |

Project Name
EDAIN TUBE E.L.C.
 1009 GRANVILLE AVENUE
 RICHMOND, BC
 Mr. Amin Alidina
 Triple A - Planning Consultants
 5346 Granville Avenue, Richmond BC
ELEVATIONS

Project No
 5.0
 2019-19
 A-103-1

Plan # 9

DP-14-672850

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JM Architecture Inc.

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 Architects: Jon A. Milson
 Building 10 - Main Floor
 5343 - 81st Avenue
 604 - 583-2023 - 1
 604 - 583-2023 - 1
 jmarc@shaw.ca - E

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| REV | DATE | DESCRIPTION | BY |
|------|------------|-----------------------|----|
| 1.0 | 2014-09-24 | ISSUED TO CITY FOR DP | AP |
| 2.0 | 2015-05-26 | ISSUED TO CLIENT | FK |
| 3.0 | 2015-06-04 | ISSUED TO CITY FOR DP | FK |
| 4.0 | 2015-06-24 | ISSUED TO CITY FOR DP | FK |
| 5.0 | 2015-07-06 | ISSUED TO CITY FOR DP | FK |
| 6.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
| 7.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
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| 38.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
| 39.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
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| 48.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
| 49.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |
| 50.0 | 2015-08-11 | ISSUED TO CITY FOR DP | FK |

START DATE: OCT 2009
 PROJECT No: 2004-0
 DR: AP / FK
 CH: JM
 SCALE: AS SHOWN
 Architects' Seal

Project Name:
BRAIN TIDE E.L.C.
 1005 GRANVILLE AVENUE
 RICHMOND, BC
 Mr. Amin Alidina
 Triple A - Planning Consultants
 5340 Granville Avenue, Richmond, BC
PERSPECTIVES

Project No. 5.0
 2010-10
 A-103-3

Plan # 11

DP-14-672830

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| 5.0 | 2019-02-24 | ISSUED TO CITY FOR DP | JK |
| 4.0 | 2019-02-24 | ISSUED TO CITY FOR DP | JK |
| 3.0 | 2019-02-24 | APP REVISION DOCUMENTS | JK |
| 2.0 | 2019-02-24 | ISSUED TO CLIENT | JK |
| 1.0 | 2019-02-24 | ISSUED TO CITY FOR DP | JK |

START DATE: OCT 2019
PROJECT No: 2019-09
DR: AP / JK
CR: JM
SCALE: AS SHOWN
Architects Seal

Project Name
BDAIN IDIFF E.L.C.
1000 GRANVILLE AVENUE
RICHMOND, BC

Mr. Amin Alidina
Triple A - Planning Consultants
5340 Granville Avenue, Richmond BC

PERSPECTIVES

5.0 Project No. A-103.4
2019-10

DP-14-672830

Plan #12

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| NO. | DATE | REVISION DESCRIPTION | DR. |
|-----|----------|--------------------------------|-----|
| 1 | 12/02/20 | ASAP SUBMISSION | SMC |
| 2 | 12/02/20 | ISSUED FOR CP | SMC |
| 3 | 12/02/20 | REVISED AS PER CITY COMMENTS | SMC |
| 4 | 12/02/20 | REVISED AS PER ANSA ADJUSTMENT | SMC |
| 5 | 12/02/20 | REVISED AS PER CITY COMMENTS | SMC |

PROJECT:
DAYCARE
 10009 GRANVILLE AVENUE
 RICHMOND, BC.

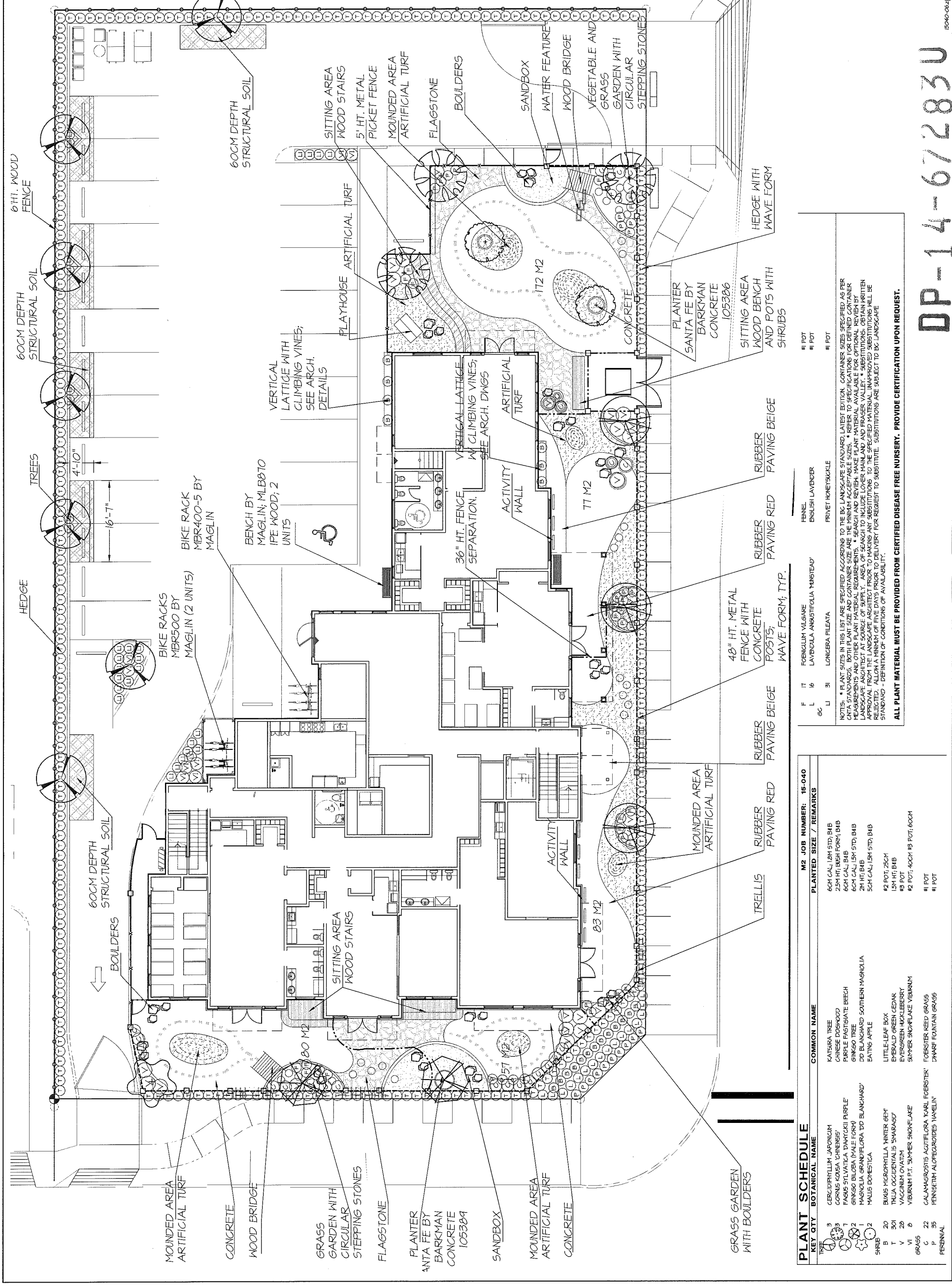
DRAWING TITLE:
**MAIN FLOOR
 LANDSCAPE PLAN**

DATE: 05/04/21
 SCALE: 1/50
 DRAWN: SMC
 DESIGN: SMC
 CK'D: MM

DRAWING NUMBER:
L1

M2LA PROJECT NUMBER:
JOB NO 15-040

OF 6



PLANT SCHEDULE

| KEY | QTY | BOTANICAL NAME | COMMON NAME | PLANTED SIZE / REMARKS |
|--------|-----|---|--------------------------------|----------------------------|
| TREE | 3 | CERCIDIPHYLLUM JAPONICUM | KATSURKA TREE | 6CM CAL, 12M STD, B4B |
| TREE | 3 | QUERCUS KOONSII 'CHINENSIS' | CHINESE DOGWOOD | 23M HT, BSH FORM, B4B |
| TREE | 1 | FAGUS SYLVATICA 'DARTMOUTH PEARLE' | PEARLE FASTIGIATE BEECH | 6CM CAL, B4B |
| TREE | 2 | GINSENG BILOBA (MALE FORM) | GINSENG TREE | 6CM CAL, 15M STD, B4B |
| TREE | 1 | MAGNOLIA GRANDIFLORA 'DD BLANCHARD' | DD BLANCHARD SOUTHERN MAGNOLIA | 21 HT, B4B |
| TREE | 2 | MALUS DOMESTICA | EATING APPLE | 5CM CAL, 15M STD, B4B |
| SHRUB | 20 | BUXUS MICROPHYLLA 'WINTER BEY' | LITTLE-LEAF BOX | #2 POT, 25CH |
| T | 301 | TRILIA OCCIDENTALIS 'SHARASO' | EMERALD GREEN CEDAR | 15M HT, B4B |
| V | 28 | VACCINIUM OVATUM | EVERGREEN HUCKLEBERRY | #8 POT |
| VI | 6 | VIBURNUM P.T. 'SNOWSNOFLAKE' | SUMMER SNOWFLAKE VIBURNUM | #2 POT, 40CH, 15 POT, 60CH |
| C | 22 | CALAMAGROSTIS AGASTIFLORA 'KARL FORSTNER' | FORSTNER REED GRASS | #1 POT |
| P | 35 | PENSTEMON ALPECUROIDES 'HAWELIN' | SHARP FOUNTAIN GRASS | #1 POT |
| FERNAL | | | | |

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

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

DP-14-67283U

Plan #13

15-040-06-2P

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| NO. | DATE | REVISION DESCRIPTION | DR. |
|-----|-----------|---------------------------------|-----|
| 4 | 18 JUL 21 | REVISED AS PER AECOM ADJUSTMENT | SMC |
| 3 | 18 JUL 20 | REVISED AS PER CITY COMMENTS | SMC |
| 2 | 18 JUN 20 | ISSUED FOR CP | SMC |
| 1 | 15 JUN 20 | ACP SUBMISSION | SMC |



CONCEPT
ARTIFICIAL TURF WITH MOUNDS



PANELS FOR ACTIVITY WALL
BY BLUE IMP



CONCEPT
PAINTED BOULDERS



CONCEPT
WOOD STAIRS AMPHITHEATRE

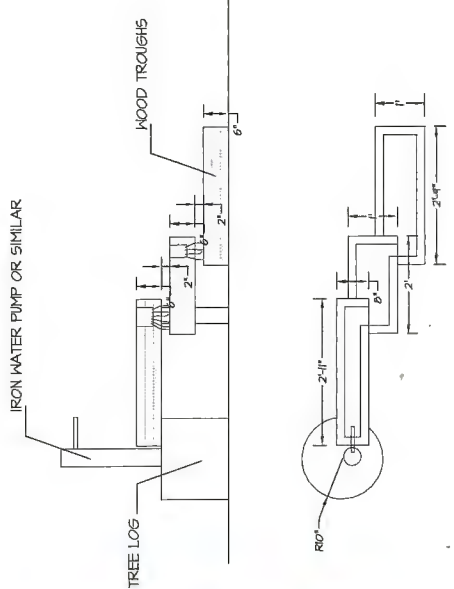
CONCEPT
WOOD STAIRS AMPHITHEATRE

CONCEPT
PLAYHOUSE
BY BIG TOYS

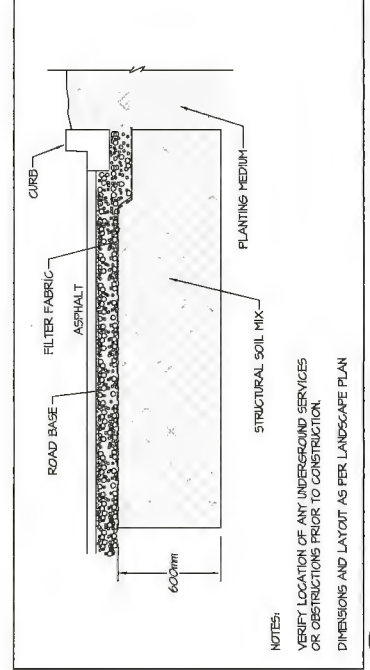
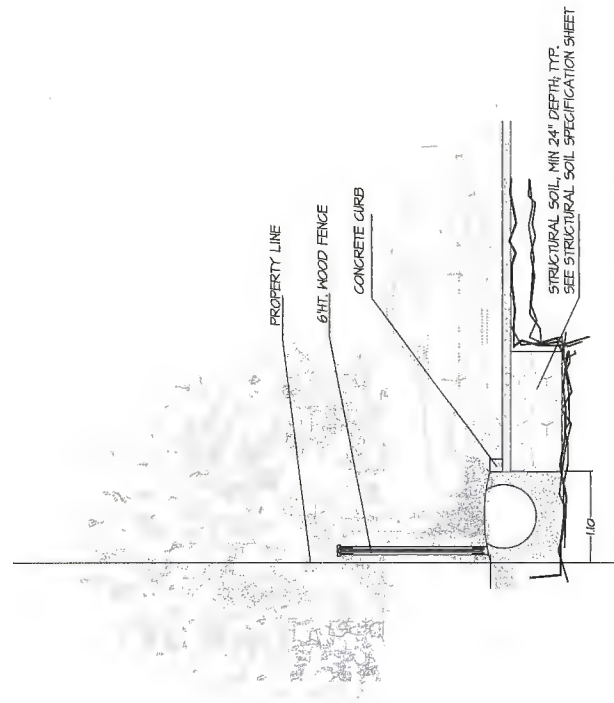
CONCEPT
SANTA FE PLANTER
BARKMAN CONCRETE
1 X MODEL 105309
4 X MODEL 105306

DP-14-672830

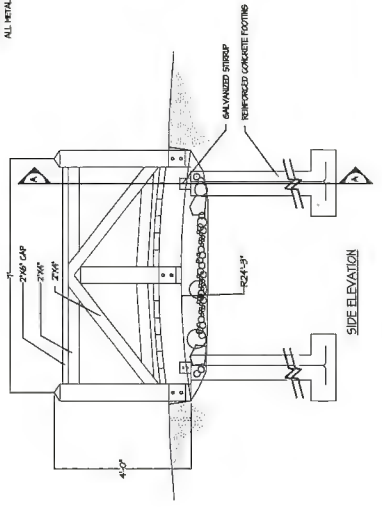
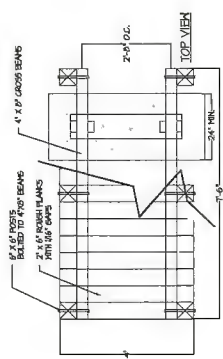
Plan #15



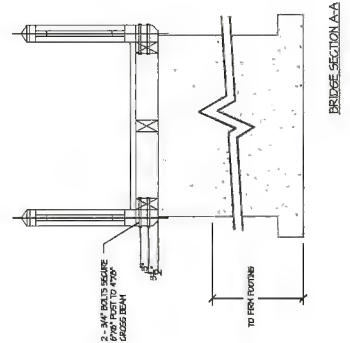
1 WEST WATER FEATURE
L3 CONCEPT DRAWING
1/50



2 SECTION THROUGH STRUCTURAL SOIL
L3
N.T.S.



3 PEDESTRIAN WOOD BRIDGE
L3
1/50



BRIDGE SECTION A-A

15040-02-8P

M2LA PROJECT NUMBER: JOB NO 15-040

DATE: 15 MAY 21 DRAWING NUMBER: L3

SCALE: DRAWN: SMC

DESIGN: SMC

CHKD: MM

OF 6

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PROJECT:
DAYCARE
 10009 GRANVILLE AVENUE
 RICHMOND, B.C.

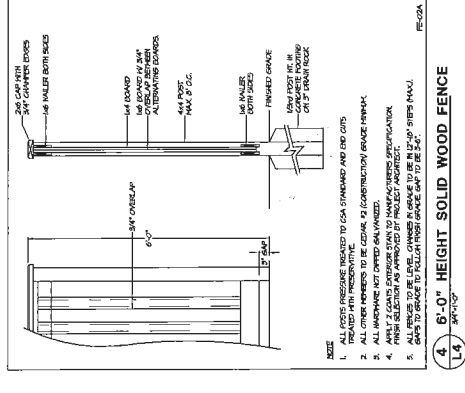
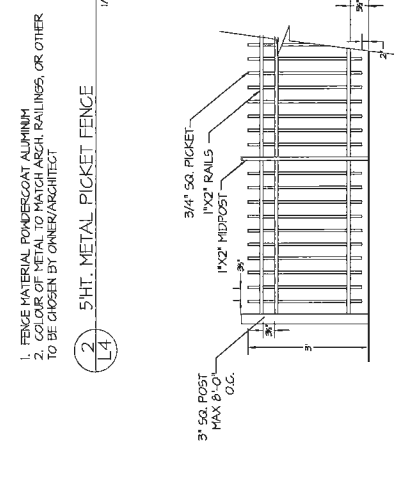
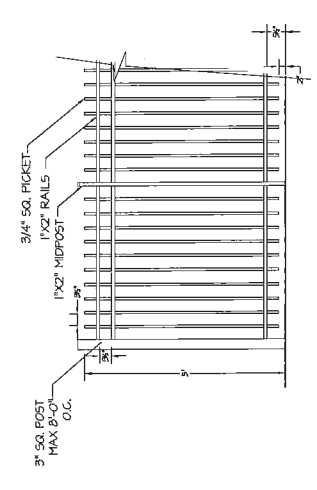
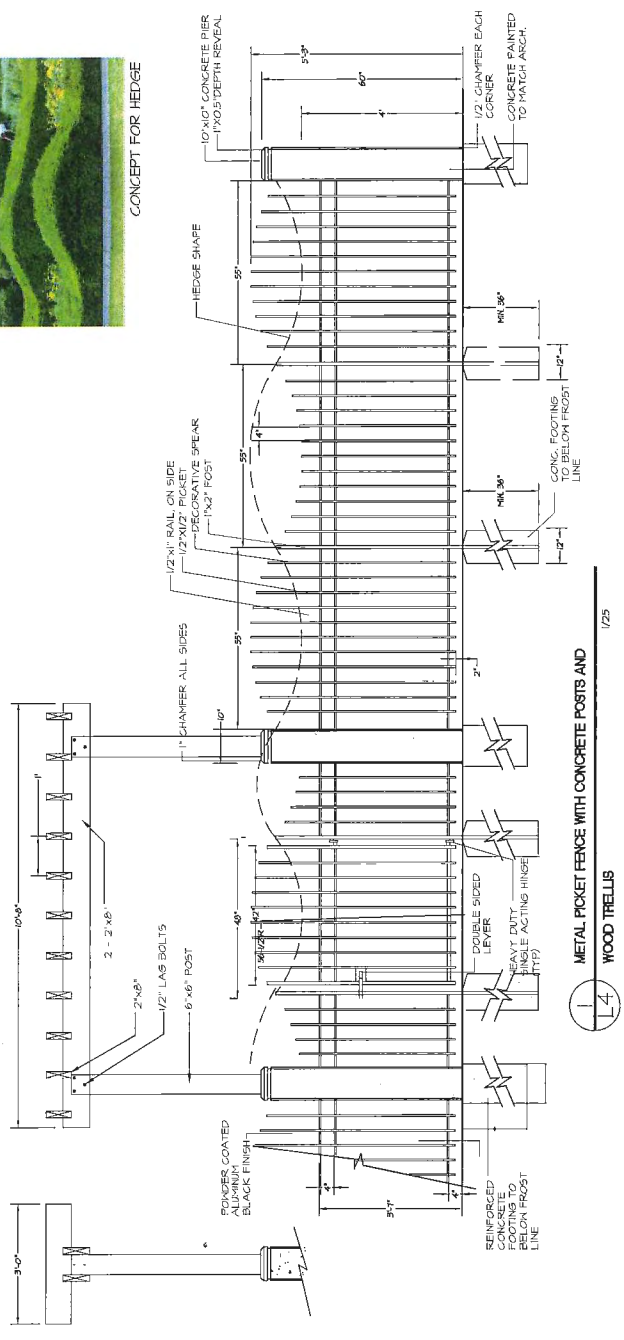
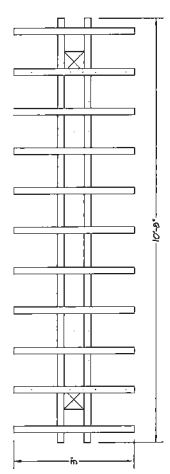
DRAWING TITLE:
**LANDSCAPE
 DETAILS 2: FENCES**

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| DATE: | 15-MAY-21 | DRAWING NUMBER: | |
| SCALE: | - | | |
| DRAWN: | SKC | | L4 |
| DESIGN: | SKC | | |
| CHK'D: | MM | | |
| M2LA PROJECT NUMBER: | | | OF 6 |
| | | | JOB NO 15-040 |

15-040-05-#B

Plan #16

- NOTES:**
1. ALL WOOD PRESURE TREATED TO CSA STANDARDS.
 2. ALL HARDWARE TO BE HOT-DIPPED GALVANIZED.
 3. APPLY TWO COATS OF STAIN TO MATCH THE COLOUR OF THE BUILDING (TO BE APPROVED BY LANDSCAPE ARCHITECT OR ARCHITECT).
 4. COAT ALL CUT SURFACES WITH SIMILAR PRESERVATIVE AS ABOVE.



| NO. | DATE | REVISION DESCRIPTION | DR. |
|-----|-----------|--------------------------------|-----|
| 1 | 15-JUN-21 | ISSUED FOR DP | SKC |
| 2 | 15-JUN-21 | ISSUED FOR DP | SKC |
| 3 | 15-JUN-21 | REVISED AS PER CITY COMMENTS | SKC |
| 4 | 15-JUN-21 | REVISED AS PER AREA ADJUSTMENT | SKC |

DP-14-67283U



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PROJECT:
DAYCARE
 10009 GRANVILLE AVENUE
 RICHMOND, B.C.

STRUCTURAL SOIL SPECIFICATIONS

| | | | |
|----------------------|-----------|-----------------|--|
| DATE: | 15-MAY-21 | DRAWING NUMBER: | |
| SCALE: | 1/200 | | |
| DRAWN: | SKC | | |
| DESIGN: | SKC | | |
| CHECK: | MY | | |
| M2LA PROJECT NUMBER: | | | |

Plan #18
 OF 6
 JOB NO 15-040

PART THREE - EXECUTION (cont)

316 MIXING

- Do not OVER MIX. OVER HANDLING can result in segregation of the growing medium from the stones. Further and final mixing will occur during the placement of the material.
- All mixing shall be performed on a flat hard, level surface approved by the consultant, using the appropriate soil mixing equipment.
- Prepare sample Structural Soil Mass to determine ratio of the components. Submit sample with test results for approval.

317 PLACEMENT

- Subgrade shall be approved by the Consultant prior to placement of the structural soil mixture.
- Structural soil shall be mixed, but not saturated with water when placed. Placement shall be hauled to avoid damage to drainage structures, irrigation equipment, concrete structures or pavement.
- Place Stone mixture in 300mm lifts through entire area of structural soil mixture.
- Compact each lift of structural soil mixture with vibrating drum roller to the satisfaction of the civil engineer.
- Provide Geotechnical Report to confirm compaction. Test to ensure uniform, acceptable compaction rates have been achieved for each lift and in all areas of structural soil mixture. Refer to Quality Assurance, section 15.
- Provide a uniformly firm and level surface allowing for specified depths of root base and/or growing medium to meet finished design grade.
- Installation of structural soil in the location of the tree is not recommended. Various techniques such as mechanical wood boxes, steel boxes, large diameter PVC pipe, etc. have been employed to allow for soil to be installed at the tree location with the compacted structural soil surrounding the hole. At the time of tree installation, the soil is removed and growing medium for per Section 2.14 added to surround the root ball.

318 INSTALLATION OF FILTER FABRIC

- After approval of structural soil mixture composition, install Filter Fabric.
- Ensure minimum 60cm overlap of all fabric seams and beyond edge of structural soil.

319 GRANULAR BASE MATERIAL

- Compact granular base to 95% Modified Proctor Density. Compaction must be consistent with other surrounding granular base materials.
- All areas shall be graded to the contours and elevations indicated on the contract drawings. Ensure positive drainage.

319 PROTECTION

- Prevent existing conditions from damage or staining and make good any damage.
- All areas shall be repaired at the expense of the installation contractor.

320 TREE PLANTING

- Remove structural soil or other backfill material based, see comments in section 3.1.7 from the full dimensions of the tree grade area (12m x 12m x depth of root ball).
- Re-compact all material below root ball to original specified density to prevent settling of the root ball in the hole.
- Ensure trees are planted in the exact centre of the specified planting station (straight and true).
- Install tree in accordance with BCSA Landscape Standard. Cut away synthetic root ball ties, cut back improperly sized wire baskets, pull back burlap from around trunk etc.
- Backfill with Growing Medium as per Section 2.1. Ensure the same growing medium used in the structural soil mix is installed as backfill material.
- Place 50mm depth compacted 15mm bark mulch over the top of the open tree pit area.

321 TREE GRATES

- Site Furniture and to contract drawings for tree grates, frames and footings.

322 ACCEPTANCE

- Consultant shall inspect structural soil "in place" and determine acceptance of material, and finish grading prior to paving.
- Final grade shall be to within 5mm of proposed grades within 3.0m of any adjacent final elevation and to within 5mm of proposed grades over any other 3.0 length. Final grades shall not be within 100mm of any adjacent final elevation and to within 5mm of proposed grades over any other 3.0 length. Final grades shall not be within 100mm of any adjacent final elevation.

323 SUPPLIES MATERIAL

- Remove all excess fill soils and mix stock piles and dispose of all waste materials, trash and debris from the site.
- Clean up any soil or dirt spilled on any paved surface at the end of each working day.
- Upon completion of the structural soil mixture installation, leave area brown-green. Avoid washing the area until all of the paving has been completed.

PART TWO - PRODUCTS

21. GROWING MEDIUM

- TABLE ONE
- Provide a growing medium required to complete this work.
- Comply with the requirements of Table 1 below.
- Organic material in the growing medium must be well decomposed to prevent oxygen consumption caused as a result of decomposition of the organic matter in the soil mixture.

| TABLE ONE | PROPERTIES | GROWING MEDIUM FOR GAP-SIZED MIXTURE |
|---|--|--------------------------------------|
| Gravel greater than 75mm - less than 150mm | TEXASPEC Particle Size Classes by the Canadian System of Soil Classification | 1 |
| Sand greater than 0.075mm - less than 75mm | | maximum 60% |
| Silt greater than 0.002mm - less than 0.075mm | | maximum 30% |
| Clay less than 0.002mm | | maximum 10% |
| ADDITIONAL | | maximum 10% |
| DOMESTIC (Minimum saturated hydraulic conductivity (lambda) in place) | | 0.5 - 1.0 |
| SALINITY: Saturated extract conductivity shall not exceed | | 3.0 |
| BREAKING CAPACITY: Percent of Dry Weight (M) | | 10 addition/min at 25°C |
| | | 10% - 15% |

22. AGGREGATE

- Crush inert stone of high angularity is preferred over washed gravel.
- Stone dimension aspect ratio should approach 1:1 with a maximum of 2:1:1 length width depth.
- Single size stone, 75mm clear size designation Banded Quarry Rock.
- Aggregate to be used for structural soil shall be free of any foreign elements or material. Provide samples and test reports as described in section 15 and 18 that would fit in a laboratory tumbler or test bed.
- Aggregate quality: Material shall be sound, durable, free from soft, thin, elongated or laminated particles, organic material, clay lumps or material, or other substances that would fit in a laboratory tumbler or test bed.

23. SOIL STABILIZER

- A non-toxic organic binder.
- Product: Stabilizer, The Original Natural Binder, as available from Island Sport Turf, Parkerville, BC, 794-596-1079. Also available from Turfworks Supply Ltd., Aldergrove, BC 604-897-3906.

24. GRANULAR BASE

- To Meet Municipal Specification Section 02226, Appropriate and Granular Materials.

25. FILLING MATERIALS

- Refer to architectural drawings.

26. FILTER FABRIC

- New woven filter fabric shall be installed as a separation layer directly above the compacted structural soil mixture. Do not install fabric until adequate compaction of the structural soil mixture has been confirmed.
- Filter fabric shall be selected and designed to withstand wear and tear during construction and to prevent any aggregate or other materials from passing through. Confirm the following ASTM Designations:
 - Geotextile Fabric ASTM-D-4832 400 LK
 - Needle Puncture ASTM-D-3165 400 LK
 - Pull Force ASTM-D-3165 400 LK
 - Flow Rate ASTM-D-4491 100 LK/m²
 - Fabric shall be Annex 0545 or approved equivalent.

PART ONE - GENERAL

11. COPYRIGHT

- The Structural Soil specifications are provided as an instrument of service and remain the property of M2 Landscape Architecture. The information provided in this document is for the use of the contractor only. This information contained in this document may not be reproduced or distributed in whole or in part, without the permission of M2 Landscape Architecture.

12. SCOPE OF WORK

- The work of this section shall govern the supply of all equipment, materials and labour necessary for the preparing and placing and compacting Structural Soil mix on a prepared sub grade.
- It is the intent that the structural soil mixture will provide the necessary load bearing characteristics for light road hard surface paving areas while allowing and promoting the development of tree roots. The long term goals are the promotion of healthy, long lived trees while reducing the potential negative implications of large scale road development on the surrounding areas.
- Refer to drawings for location and dimension of structural soil mixture.
- All other related work as described in the drawings and/or this specification.

13. RELATED WORK

- Section 02700, Landscape Requirements
- Section 02710, Landscape Drainage
- Section 02720, Irrigation System
- Section 02730, Fertilizer and Soil Amendments
- Section 02740, Planting, Trees, Shrubs, and Groundcover

14. RELATED MUNICIPAL SPECIFICATIONS

- Section 02700, Landscape Requirements
- Section 02710, Landscape Drainage
- Section 02720, Irrigation System
- Section 02730, Fertilizer and Soil Amendments
- Section 02740, Planting, Trees, Shrubs, and Groundcover

15. STANDARDS

- BCSQA/BCMA Landscape Standard (latest current edition)
- Canadian System of Soil Classification

16. QUALITY ASSURANCE

- All structural soil mixed and placed in situ shall be approved by the Consultant and all other materials supplied to the site shall be of similar quality and from a single source. It is the intent that the structural soil mixture be installed in situ, unless the Consultant of proposed source and provides a copy of an approved test report approved by the owner. At the Contractor's expense and indicating the particle size characteristics of the proposed material in written form as laid out in 2.11 of this section.
- All materials to be used for structural soil shall be from a source approved by the Consultant and all other materials supplied to the site shall be of similar quality and from a single source. It is the intent that the structural soil mixture be installed in situ, unless the Consultant of proposed source and provides a copy of an approved test report approved by the owner. At the Contractor's expense and indicating the particle size characteristics of the proposed material in written form as laid out in 2.11 of this section.
- Organic material content as a percentage of dry weight:
 23.1 100%
 23.2 100%
 23.3 100%
 23.4 100%
 23.5 100%
 23.6 100%
 23.7 100%
 23.8 100%
 23.9 100%
 24. Satisfy in millivolts at 25 degrees C.
 25. Basic fertility (total nitrogen available) C, Ca, P, K
 26. Recommendation for incorporation of necessary amendments.
- Provide and pay for all required testing of materials proposed for use on this project. At the Consultant's discretion, all materials may be re-tested. Contractor will be responsible for costs of re-testing if materials do not meet specifications and for correction of the deficiency.
- Cost of reported materials shall include cost of modifications from source to ensure that these materials meet specifications.
- Acceptance of material at source does not preclude future rejection if materials fails to conform to requirements specified.
- Confirm completion of subgrade and structural soil by Geotechnical Reports from qualified Geotechnical Engineer.
- Aggregate Test
- Provide source and size designation of proposed aggregate material prior to ordering.
- At the Landscape Architect's discretion, materials may be re-tested. Contractor is responsible for costs of testing if sample does not meet specifications and for correction of the deficiency.
- Submit 2.5% sample of stone to Landscape Architect prior to mixing. Sample should be labelled to include source of material submitted.
- Structural Soil Mix Design
- Prepare sample of structural soil mix with proposed ratios for approval by Landscape Architect a minimum of 14 days prior to placement. Notify Landscape Architect of sample preparation and testing requirements.
- Landscape Architect may request additional samples of Structural Soil mixture to be tested in the event that further refinement of the mixture is necessary.

17. SCHEDULING

- Obtain approval from Consultant of schedule 14 days in advance of structural soil preparation or delivery of material to site. Co-ordination of the installation of the structural soil mixture is critical. Ensure scheduling has been co-ordinated with all consultants and related contractors.
- Schedule to include:
 21. sub grade preparation at site
 22. sub grade preparation at site
 23. sub grade preparation at site
 24. arrival dates on site
 25. installation dates
- Schedule work to co-ordinate with installation of any drainage, irrigation, tree grade (walkways, lighting, paving etc).
- Complete work to ensure tree planting will occur under optimum conditions
- Do not handle or place structural soil mix in rain.

18. FIELD REVIEW

- Start up meeting with Consultant to confirm the areas of installation and mixing. If not previously submitted, ensure growing medium sample and test report, aggregate stone sample and structural soil sample and report are submitted at the start-up meeting.
- Co-ordinate site meeting with Consultant at the following times:
 21. aggregate installation and compaction
 22. sub grade preparation at site
 23. sub grade preparation at site
 24. installation of structural soil mixture
 25. sub grade preparation and layout
 26. installation of trees
- When materials are installed in phases, it is the contractor's responsibility to inform the Consultant of critical installation lines for each phase as noted in Section 18.2.

19. SAMPLES

- Provide the location of all materials required for the preparation of structural soil mixture 14 days prior to commencement of installation. Samples of all material shall be submitted with test report from approved testing agency as per section 13.2 and 13.3

20. PRODUCT HANDLING

- All materials used in the composition of structural soil shall not be prepared, worked or handled when in a wet or frozen condition.
- Equip and methods (excavator, loader, fertilizer, stabilizer and other chemical amendments is standard, tested, well-proven containers with net weight and product analysis clearly marked on exterior of package.

21. DELIVERY, STORAGE AND PROTECTION

- For structural soil prepared at source and delivered to site, deliver all materials to site in such a manner as to prevent damage to or separation of all materials used in the preparation of structural soil.
- On-site storage of prepared structural soil shall be undertaken in such a manner as to prevent damage or separation of any materials.
- Structural soils to be installed as soon as practicable after mixing. Any structural soils stored overnight weather on-site or at source shall be covered with tarpaulin material approved by the Consultant and such tarpaulin material shall be secured.
- All material to be stockpiled shall be protected in accordance with B.C. Ministry of Environment guidelines.

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