



City of Richmond
Planning and Development Department

Report to Development Permit Panel

To: Development Permit Panel

Date: December 12, 2006

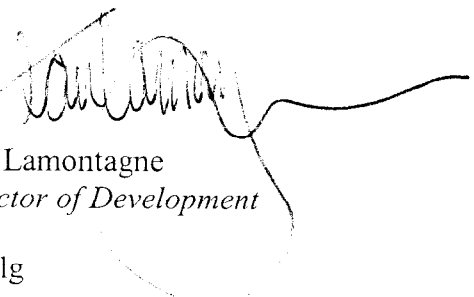
From: Jean Lamontagne
Director of Development

File: DP 06-325115

Re: **Application by AM-PRI Construction Ltd. for a Development Permit at
9751 Ferndale Road (formerly 9711, 9751 and 9771 Ferndale Road)**

Staff Recommendation

That a Development Permit be issued which would permit the construction of 21 townhouse units at 9751 Ferndale Road on a site zoned "Comprehensive Development District (CD/153)".



Jean Lamontagne
Director of Development

SB:blg
Att.

Staff Report

Origin

AM-PRI Construction Ltd. has applied to the City of Richmond for permission to develop a 21-unit townhouse development, predominantly three-storey. The site formerly contained three (3) single-family homes.

The site is being rezoned from “Single-Family Housing District, Subdivision Area F (R1/F)” to “Comprehensive Development District (CD/153) for this project under Bylaw No. 7997 (RZ 05-300409).

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

The consolidated development site is in the City Centre McLennan North Sub-Area located west of No. 4 Road. The site is within Residential Area 4, which is characterized by 2 ½ storey townhouses, or three-storey where a maximum 30% lot coverage is achieved, and a base density of 0.55 F.A.R. The existing development surrounding the site is described as follows:

- To the west is an existing home on an orphan lot, zoned “Single-Family Housing District, Subdivision Area F (R1/F)”;
- Further to the west, and to the north, Cressey’s Brandywine 59 three-storey townhouse development is under construction at 6188 Birch Street (DP 05-290431), zoned “Comprehensive Development District (CD/153)”;
- To the east are three (3) existing homes fronting onto Ferndale Road and No. 4 Road, zoned “Single-Family Housing District (R1/F)”;
- To the south, across Ferndale Road, is the newly constructed 98-unit townhouse development by Cressey (DP 02-221259), zoned “Comprehensive Development District (CD/71)”.

Rezoning and Public Hearing Results

During the rezoning process, there were no design issues identified by staff to be resolved at the Development Permit stage.

The Public Hearing for the rezoning of this site was held on December 12, 2005. At the Public Hearing, no concerns about rezoning the property were expressed.

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 generally in compliance with the “Comprehensive Development District (CD/153)”.

Advisory Design Panel Comments

The Advisory Design Panel was generally supportive of the proposal conditional to design development to the paving, garbage and recycling collection enclosures, elevation refinement and definition of outdoor amenity area. The applicant has addressed these issues and a copy of the relevant excerpt from the Advisory Design Panel Minutes from November 8, 2006 is attached for reference including the applicant's design response (**Attachment 2**).

Analysis

Conditions of Adjacency

- The form and massing of the three-storey development generally complies with Official Community Plan (OCP) guidelines for MacLennan North Sub-Area of City Centre;
- The units fronting onto Ferndale Road present a front yard interface with a walkway and low wood picket fence opening onto Ferndale Road;
- The proposed height, siting and orientation of the buildings respect the massing of the existing adjacent single-family homes. Townhouse unit back yard, side yard and cross-access drive aisle conditions are presented at the interfaces to the existing single-family home lots to the west, east and north with varying setbacks;
- The applicant has addressed privacy for the adjacent single-family homes to the west, east and northeast through: providing varying setbacks of 3 m to 8.5 m, the provision of 1.8 m height solid wood privacy fencing, the planting of new trees and continuous hedging; and
- The applicant is proposing to raise the low site to meet the elevation of the crown of the road with maximum 0.6 m high retaining walls. The adjacent older single-family lots will also likely raise their sites through the redevelopment anticipated in the area plan. Perimeter drainage will be installed as part of the building permit to ensure the proposed grade change does not adversely impact the surrounding sites.

Urban Design and Site Planning

- The Ferndale Road streetscape is animated with pedestrian-oriented front entries (**Plan #4**). A communal pedestrian entry to the development is also provided;
- Vehicle access is provided from Ferndale Road with moving truck loading onsite in the drive aisle. Cross-access was secured through the rezoning for the benefit of the future development sites to the east at 9791 Ferndale Road and 6091 and 6131 No.4 Road, and to the west at 9691 Ferndale Road. Vehicle access to the adjacent sites will be further evaluated as part of future Rezoning and Development Permit applications;
- With the provision of a two-car garage in each townhouse unit, resident parking exceeds the Bylaw requirement. The provision of visitor parking meets the Bylaw requirement with five (5) spaces provided, including one (1) accessible parking space;
- Headlight glare into adjacent single-family lots is mitigated by hedge planting and 1.8 m height privacy fencing;
- The site has been designed to accommodate fire-fighting requirements and moving truck turning movement onsite. Mailbox, recycling cart and garbage dumpster enclosures have been centrally provided adjacent to the interior pedestrian walkway and hydro kiosks;
- Universal accessibility measures have been incorporated into this development. Blocking inside of the walls will be provided in all washrooms in all units to facilitate future potential installation of grab bars/handrails;

- An accessible unit has not been provided in this 21-unit development. An alternate floor plan demonstrating conversion potential to accommodate a person in a wheelchair is provided for the one (1) two-storey “B” unit with the installation of a chair lift (**Reference Plan A**); and
- Registration of an aircraft noise covenant was secured through rezoning, which includes agreeing to have the buildings designed to incorporate adequate sound measures against aircraft noise.

Architectural Form and Character

- The building forms are articulated; with a combination of mix of building materials, projecting bays, shed and gable pitched roofs;
- The proposed building materials (Horizontal vinyl siding, Hardi-plank siding, Hardi-board and batten, wood trim, metal garage doors with transom windows and wood shake appearance asphalt shingle roofing) are generally consistent with the Official Community Plan (OCP) Guidelines;
- Visual interest and variety has been incorporated with six (6) different building types; and
- The impact of blank garage doors has been mitigated with transom windows, overhanging bays, skirt roofs, decorative brackets, planting islands and pedestrian entries.

Landscape Design and Open Space Design

- A tree retention and replacement strategy was not presented to the public and Council during rezoning and no concerns were expressed about tree retention at Public Hearing. The arborist advises that there are 20 existing bylaw trees and four (4) existing hedges onsite; two (2) of the trees are considered to straddle the shared property line with the adjacent neighbour to the west (**Attachment 3**). The developer is proposing to transplant two (2) existing trees onsite, remove sixteen (16) bylaw size trees, and remove two (2) trees which straddle the west property line which are deemed to be hazardous by the arborist (#5587 and #5588) (**Plan #3D**). To this end, a registered arborist and tree moving company have been retained as an agreed condition of the Development Permit (**Attachment 4**). The applicant has also agreed to provide a \$10,000 security to ensure the survival of the trees being relocated onsite;
- A tree removal permit has been issued to the neighbouring property to the west at 9691 Ferndale Road for the removal of the two (2) hazardous trees which straddle the shared property line and the overgrown hedgerow in the front yard setback. A private agreement has been reached between the developer and the neighbour to the west for the tree removal and lawn re-establishment. For the protection of other neighbouring trees, a registered arborist has been retained and protective tree fencing installation to his satisfaction is an agreed condition of the Development Permit (**Attachment 4**);
- Existing hedging in the City boulevard will be removed for the installation of frontage improvements required through a separate Servicing Agreement prior to future Building Permit issuance. Improvements include road widening, grass boulevard with street trees and a 1.75 m wide sidewalk at the property line;
- The removal of 16 bylaw size trees onsite will be replaced with the planting of 39 new trees ranging in size from 2.5 m height to 10 cm calliper including both evergreen and deciduous, which exceeds the 2:1 replacement goal in the OCP. In addition to new trees, the landscape design includes shrubs, ground cover, vines, perennials, annuals and lawn planting;
- The mailbox stand is centrally located off the drive aisle, adjacent to the outdoor amenity area, recycling cart and garbage dumpster enclosures;

- Children's play opportunities on-site include private yards and a central outdoor amenity. Children's play equipment is provided in the outdoor amenity area with a climbing structure with slide. The outdoor amenity area size (147 m²) exceeds the minimum requirement (126 m²) and also includes trees, under-storey planting, lawn and pavers;
- The landscape design will be complimented with Public Art. The applicant will be working with the Public Art commission for artist and artwork selection. A contribution in the amount of \$0.60 per square foot of maximum floor area ratio (e.g. \$14,596) to the City's Public Art fund in the form of a built installation onsite is an agreed condition of the Development Permit;
- Fencing will include low and open wood picket fencing along Ferndale Road, and 1.8 m height wood privacy fencing along the north, west and east property lines (reduced to maximum 1.2 m height in the front yard setback);
- Paving treatment includes a variety of materials to mitigate the length of the drive aisle and to differentiate between pedestrian entries and vehicle areas. Concrete pavers and permeable pavers with patterning and colour have been incorporated throughout the site, significantly improving the permeability of this development; and
- Payment of cash-in-lieu of indoor amenity space was secured through the rezoning in the amount of \$23,000 in compliance with the Official Community Plan (OCP).

Affordable Housing

- No affordable housing units are proposed in this proposed 21-unit development. A voluntary contribution towards the City's affordable housing fund was secured through the rezoning in the amount of \$0.60 per square foot of maximum floor area ratio (e.g. \$14,596).

Crime Prevention Through Environmental Design

- Site lighting will be provided for the central drive aisle and should not impact the neighbouring single-family lots;
- Natural surveillance opportunities are provided for the central outdoor amenity space, mailboxes, and visitor parking spaces;
- Natural surveillance opportunities are provided for the front entries which face the drive aisle, central walkway or Ferndale Road; and
- Space differentiation has been established between public and semi public outdoor spaces with landscape buffers.

Servicing and Utilities

- As noted in the staff report on the rezoning, the developer has submitted storm and sanitary sewer capacity analyses as requested by the City's Engineering Department. There are no identified sanitary sewer upgrades required to facilitate the proposed development;
- Registration of a 6 m utility Right-of-Way (for sewer) was required through the rezoning along the proposed drive aisle to provide sewer access to 6091 and 6131 No 4 Road. The Right-of-Way and sewer extension are no longer required as sanitary sewer will be extended along No. 4 Road through future redevelopment; and
- Contribution of \$6.00/ft² of gross site area (e.g. approximately \$224,562) towards land and construction costs of the three (3) north-south roads (Birch/Alder/Katsura) between Westminster Highway and Ferndale Road was secured through rezoning.

Flood Indemnity Covenant

- The registration of a flood indemnity covenant (Minimum 0.9 m geodetic) is an agreed condition of the Development Permit.

Conclusions

The applicant has satisfactorily addressed issues that were identified through the rezoning process, as well as staff and the Advisory Design Panel's comments regarding conditions of adjacency, site planning and urban design, architectural form and character, and landscape design. Staff recommend support of this Development Permit application.



Sara Badyal, M.Arch.
Planner 1
(Local 4282)

SB:blg

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

- Registration of a flood indemnity covenant (Min. 0.9 m geodetic);
- Contribution of \$0.60 per buildable square foot (e.g. \$14,596) to the City's Public Art fund in the form of an equivalent built installation onsite;
- Installation of protective tree fencing and periodic inspection during construction to the satisfaction of a registered arborist for the protection of onsite and neighbouring trees;
- Proof of a contract with a registered arborist (with a minimum of four (4) site visits through construction) to ensure proper protection of existing onsite and neighbouring trees;
- Proof of a contract with a tree moving company for the removal, storage and re-planting of retention trees; and
- Receipt of a Letter-of-Credit for landscaping in the amount of \$81,110. This amount includes security in the amount of \$2,500 for off-site grading and lawn re-establishment associated with the neighbour's mature hedgerow removal in the interface area between the subject development and 9691 Ferndale Road (TP 06-354406). This amount also includes tree replacement security in the amount of \$10,000 to be held through a 1-year maintenance period after re-planting for the successful establishment of the relocated retention holly and monkey puzzle trees.

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

- Enter into a Servicing Agreement for the design and construction of frontage improvements, which include, but are not limited to: road widening, a 1.41 m wide grass boulevard (with street trees and black Zed street lights) and a 1.75 m wide sidewalk at the property line. Ferndale Road is on the Development Cost Charge (DCC) program, so Roads DCC credit will be applied at Building Permit stage;
- Receipt of a construction parking and traffic management plan to the satisfaction of the Transportation Division (<http://www.richmond.ca/services/ttp/special.htm>); and
- Incorporation of accessibility measures for aging in place in Building Permit drawings for all units including lever handles for doors and faucets and blocking in all washroom walls to facilitate future potential installation of grab bars/handrails.

- Attachment 1 Development Application Data Sheet
- Attachment 2 Advisory Design Panel Minutes
- Attachment 3 Arborist Report
- Attachment 4 Conditional DP requirements



City of Richmond

6911 No. 3 Road
 Richmond, BC V6Y 2C1
 www.richmond.ca
 604-276-4000

**Development Application
 Data Sheet
 Development Applications Division**

DP 06-325115

Attachment 1

Address: 9751 Ferndale Road (formerly 9711, 9751 and 9771 Ferndale Road)

Applicant: AM-PRI Construction Ltd. Owner: same

Planning Area(s): McLennan North Sub-Area

Floor Area Gross: 3,187 m² Floor Area Net: 2,258 m²

	Existing	Proposed
Site Area:	3474 m ²	No change
Land Uses:	Formerly single-family	Multi-family
OCP Designation:	Residential (Area 4)	No change
Zoning:	Formerly R1/F	CD/153
Number of Units:	3	21

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.65	0.65	None permitted
Lot Coverage:	Max. 30%	30%	None
Setback – Ferndale Road:	Min. 6 m	6 m	None
Setback – Side Yard:	Min. 3 m	Min. 3 m	None
Setback – Rear Yard:	Min. 3 m	Min. 3 m	None
Height (m):	Max. 12 m	Max. 12 m	None
Lot Size:	0.344 ha (0.85 acres) <i>Amended by Bylaw 7997</i>	0.348 ha (0.86 acres)	None
Off-street Parking Spaces – Regular/Commercial:	32 and 5	42 and 5	None
Off-street Parking Spaces – Accessible:	1	1	None
Total off-street Spaces:	37	47	None
Tandem Parking Spaces	Permitted	42	None
Amenity Space – Indoor:	Min. 70 m ²	\$23,000 cash-in-lieu	None
Amenity Space – Outdoor:	Min. 126 m ²	147 m ²	None

**Annotated Excerpt from the Minutes from
The Design Panel Meeting**

**Wednesday, November 08, 2006 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall**

The design response from the applicant and appropriate staff comments have been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

2. DP 06-325115
T. Yamamoto Architect Inc. 9711/9751/9771 Ferndale Road
(Formal)

Comments from the Panel were as follows:

- the provisions for adaptable units were appreciated;
- there are some great pieces of public art in the area,
- reconfigure the recycling and garbage facilities, the present location intrudes on the front yard area and four windows of unit A2. Reconfiguring the amenity area to fit the garbage and recycling is a possible solution;
- siting of the buildings works well and has a good scale;
- appreciates the pedestrian access to the individual units;
- buildings are identical and articulation is needed to create differentiation. A possible solution is different colour schemes;
- the extremely high roof pitch raises the visual height of the buildings. The other developments in the neighbourhood have a lower eave expression. Integrate roof design with porches;
- electrical kiosk needs treatment, but must meet Hydro requirements, could it be gated?;
- try to articulate garage doors as much as possible;
- overall mass does not match the single-family home style, there is a feeling of looming. Variation in roof, and use of colour and materials is a possible solution;
- concerned about the removal of trees from the neighbouring property – ***The developer is required to protect neighbouring trees. A tree removal permit was issued at the request of the neighbour upon the arborist's advice and with a private agreement with the developer for tree removal and lawn re-establishment;***
- paving is too close to oak tree #5576 to allow it to be retained;
- bedroom liveability is questionable, interior design is tight and it may be very difficult to get furniture into the bedrooms;
- roof will be a dominant element and colour and material should compliment the siding and other treatments. It will be dominant in the elevation;
- there are opportunities to break up the 3 storeys, for example, treating the second and third storeys with a consistent material. This would give more of an interconnection and would get away from the layered effect shown;
- the children's play structure in the amenity space is good for the project;
- the permeable concrete pavers are a plus but could be extended to the front edge of the amenity space, tying in the visitor's stall between the buildings;

- consider extending the trellis to define the edge of the amenity space and add benches and plants underneath;
- the buildings seem high, unstable and wobbly with a dominant upper roof. Needs a heavier base to better anchor the buildings;
- use of colour accents would help to differentiate some of the building masses;
- if the size must be kept for the central paved area, consider softening the corners of the adjacent units with landscaping or cutting back the corners of the buildings – ***The large central intersection is required to accommodate fire truck and moving truck turning for the benefit of the subject site and required cross-access to the east and west.***

It was moved and seconded

That DP 06-325115 move forward with the support of the Advisory Design Panel conditional to the applicant addressing the following comments:

- design development or relocation of the garbage and recycling area – ***Garbage and recycling enclosure design refined and relocated from the entry drive to a central location between the amenity area and hydro kiosks;***
- consider introducing more variety to the colour palette – ***Two colour schemes are provided for the 6 buildings and a more vivid red accent colour was introduced for gable ends and bay projections;***
- paved area needs design development, look at extending to tie into the amenity areas and softening the corners – ***With the relocation of the garbage and recycling enclosures, a pedestrian sidewalk and landscaping buffer were introduced adjacent to the driveway and central paved area;***
- tree retention requires further consideration – ***A tree-moving company has been contracted to remove, store and re-plant the 2 existing monkey puzzle and Ilex trees onsite. The applicant's arborist has specified the retaining wall design for the retention of the neighbour's Oak tree to the east. In addition, permeable paving will be used both in the accessible visitor parking space and apron;***
- design development to elevations to address the 3 storey building heights and massing – ***A hip roof element was introduced to the gable end roofs to mitigate the apparent building height and the layered design was refined to consolidate the second and third floor expression by lining up projections and breaking up continuous second floor shed roofing;***
- design development to the trellis in the amenity area to define edges – ***Upon consideration, the applicant is concerned that the small amenity area would feel contained with a continuous trellis fence. A continuous low open fence is provided to define the outdoor amenity area and is anchored to an expanded trellis structure, which was extended to enclose the pedestrian gateway, mailboxes, garbage and recycling.***

CARRIED



VanArbor Vegetation Consulting Ltd.
Consulting Arborist & Urban Forest Resources

Arboriculture Report (REV 1.0)

Date of Report: October 29, 2006

Project Address: 9711, 9751, 9771 Ferndale Road, Richmond, BC

Arborist: Ken Bell, P.Ag., CAC, ISA Certified Arborist

Distribution: AM – PRI Construction Ltd.
T. Yamamoto Architect Inc.
City of Richmond

Introduction

AM – PRI Construction Ltd. has applied to the City of Richmond for permission to develop a 21 unit 3 storey townhouse development which includes the following properties at 9711, 9751 and 9771 Ferndale Road. File No. DP 06-325115. There are significant sized trees on the three building lots, neighbouring properties and along Municipal boulevard roadway allowances.

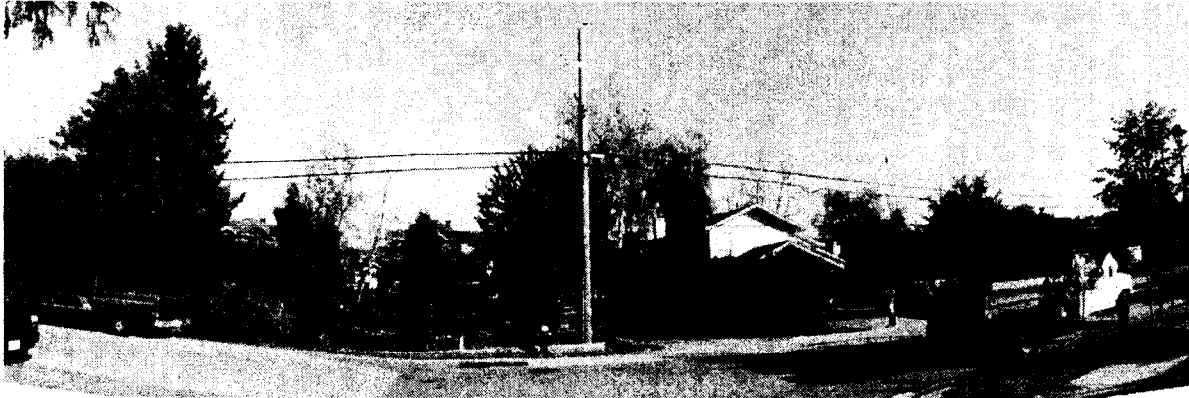
The purpose of this Arborist report is to provide a *Tree Preservation Plan* and provide compliance with the City of Richmond Tree Protection By-law No. 8057. The report includes a tree survey, tree inventory, a tree protection plan and tree replacement calculations. The Landscape Architect is to provide a landscape scheme for the proposed development that will include replacement trees.

Tree Survey

VanArbor conducted the field work to review trees and site conditions on October 5, 2006. Appendix 1 shows the Tree Survey Site Map plotting the locations of the significant sized trees, hedgerows, proposed townhouse layout and tree preservation notes. A majority of trees and hedgerows are field identified with numerical tree tags attached to the lower trunks. Appendix 2 provides an inventory and evaluation of trees and hedgerows located in the vicinity of the proposed development site. The Tree Inventory/Evaluation includes off-site trees that are located on Municipal and neighbouring properties immediately adjacent to the proposed development.

Site Conditions and Tree Assessment

The site at 9771 Ferndale Road is presently occupied by an existing home; the homes on the remaining two building lots have been demolished and removed from site. The ground area is relatively flat and there are no water courses on the lots or any other significant environmental features. It was observed that the existing ground elevations are significantly below the existing Ferndale Road roadway grade. The yards are landscaped with assorted trees and conifer hedgerows around the perimeter of the building lots.



Photograph 1 shows a panorama view of the three residential lots proposed for townhouse development

The general results of the tree assessment include the following findings:

- There are 29 trees and 8 Western red cedar hedgerows associated with the proposed development site
- Of the 29 trees:
 - 2 trees are in moderate – good condition and small enough to be considered for mechanical transplant and preservation
 - 19 Birch trees in poor or dead condition and not considered for preservation
 - 3 ornamental trees tree in poor - moderate condition and not considered for transplant or on-site preservation
 - 5 trees located off-site on neighbouring properties
 - 4 trees on neighbouring properties are proposed for removal
 - 1 tree proposed for preservation
- Of the 8 Western red cedar hedgerows
 - 3 hedgerows are located on municipal road easement and proposed for removal
 - 4 hedgerows are located on-site and proposed for removal
 - 1 hedgerow located off-site on the neighbouring property and proposed for preservation

Tree Preservation Plan

This report has classified the preservation plan into three (3) categories:

- 1) Off-site trees and conifers hedgerows located on Municipal easements
- 2) Off-site specimen trees located on the neighbouring property
- 3) On-site trees located on the proposed building lots

1) Off-site conifers hedgerows located on municipal easements:

Three (3) conifer hedgerows are planted along Ferndale Road roadway easement. The hedgerows are expected to be displaced due to infrastructure improvements planned for the site; (.i.e.) the hedgerows interfere with underground services and installation of new sidewalks. It is proposed the hedgerow trees on Municipal easements be removed to enable infrastructure improvements and the proposed development. It is to be noted that: Individual trees in the off-site hedgerows are < 20 cm DBH and are not considered in the tree replacement calculations

Hedgerow trees # 5594 appear to be specimen quality trees, however they are located next to a retaining wall and it is technically difficult to mechanically transplant the trees. Trees of similar sizes are readily available from local nurseries and it is not considered economical to transplant the trees in comparison to replacing the trees at a lesser cost.

The remaining *hedgerows # 5595 and 5596* are moderate quality hedges and not considered worthy of preservation.

2) Off-site trees located on the neighbouring properties:

There are 5 off-site trees and one (1) conifer hedgerow located on neighbouring properties (East and West of the proposed development site) that may be impacted by development. The off-site trees are included in the tree preservation plan, otherwise off-site trees intended for retention may be severely injured due to poor planning and construction impacts. Off-site trees and hedgerows include:

- a. Four (4) trees (# 5590, 5591, 5592, 5593) are located near the property line at 9691 Ferndale Road. The conifer trees are considered to be in moderate condition. The trees have been girdled with a wire at lower-mid trunk and there may be a health and structural issue associated with these trees in the future¹. The trees may fail as a result of trunk girdling.

The proximity of the subject trees also interferes with the proposed development. The canopies of the trees extend up to 5 meters over the proposed development property line. The set back of the proposed buildings from the property line immediately adjacent to the subject trees is 3 meters. The canopies of the subject

¹ Girdling: df = restriction or destruction of the vascular system within the stem, branch, or root that causes an inhibition of the flow of water and photosynthates in the phloem. (Glossary of Arboriculture Terms, ISA, 2005)

trees will interfere with the proposed buildings. As well, digging building envelopes and perimeter drainage near the subject trees will occur within the drip line of the trees and remove critical roots.

The owner of the trees 5590, 5591, 5592, 5593 located at 9691 Ferndale Road has verbally agreed to have the trees removed to enable the proposed development. AM-PRI Construction Ltd. (proponent of the proposed development) is required to obtain written permission from the owner(s) authorizing the removal of the subject trees. It is to be noted that the removal of the subject trees will be subject to tree replacement compensation rules as per Bylaw No. 8057, Schedule A and are included in the Tree Replacement Section of this report.

- b. Hedgerow trees # 5575 and Oak tree # 5576 are located near the property line at 9791 Ferndale Road. These trees are scheduled for preservation. Tree preservation considerations include, but not limited to:
 - a. Preserving the root system of the off-site trees # 5575 and 5576
 - i. Small trees and vegetation located near the property line (on the development side of the property line immediately adjacent to subject trees) are to be cut at base and not dug-up during demolition.
 - 1. Stumps are to be stump ground, if required
 - ii. A tree protection zone (TPZ) fence is to be installed at 3 meters from property line, immediately adjacent to the subject off-site trees
 - iii. Concrete pre-load blocks to be installed at 3 meters from property line property line (next to TPZ fence) to hold pre-load sand
 - iv. After pre-load sand is removed:
 - 1. The TPZ dismantled and a retaining wall is to be constructed at/near property line to raise the natural grade (approximately 35 cm) to development specifications
 - a. The retaining wall is to be constructed using discontinuous footings:
 - i. Retaining wall to be designed to engineer and/or Landscape Architect specifications
 - ii. Fill to be placed up to property line
 - 2. Drainage system to be installed to enable free drainage of excess water from around the subject off-site trees. The design of the drainage system shall minimize root removal within the drip line of the trees.

3) On-site trees located on the proposed building lots

- a. Two (2) trees (# 5572 and 5573) are proposed for mechanical transplant and relocation. The proposed transplant trees are relatively small, in good condition and are worthy of preservation. The viability of the tree spade transplant is to be verified by the tree spade operator prior to site demolition. The proposed transplant trees/shrubs may be dug-up and stored at an off-site location until they are relocated back into the project site, during the landscape installation phase of development. The re-location sites for the subject tree/shrubs are to be determined by the project

Landscape Architect. Alternatively, the tree/shrubs may be used as a replacement tree on another development site.

- b. The remaining on-site trees and hedgerows located within the development area are proposed for removal. The remaining trees and hedgerow are in poor – moderate condition and not worthy of preservation and/or conflict with the design of the proposed development. Appendix 2 Tree Survey / Evaluation contain a listing of trees and hedgerows proposed for removal.

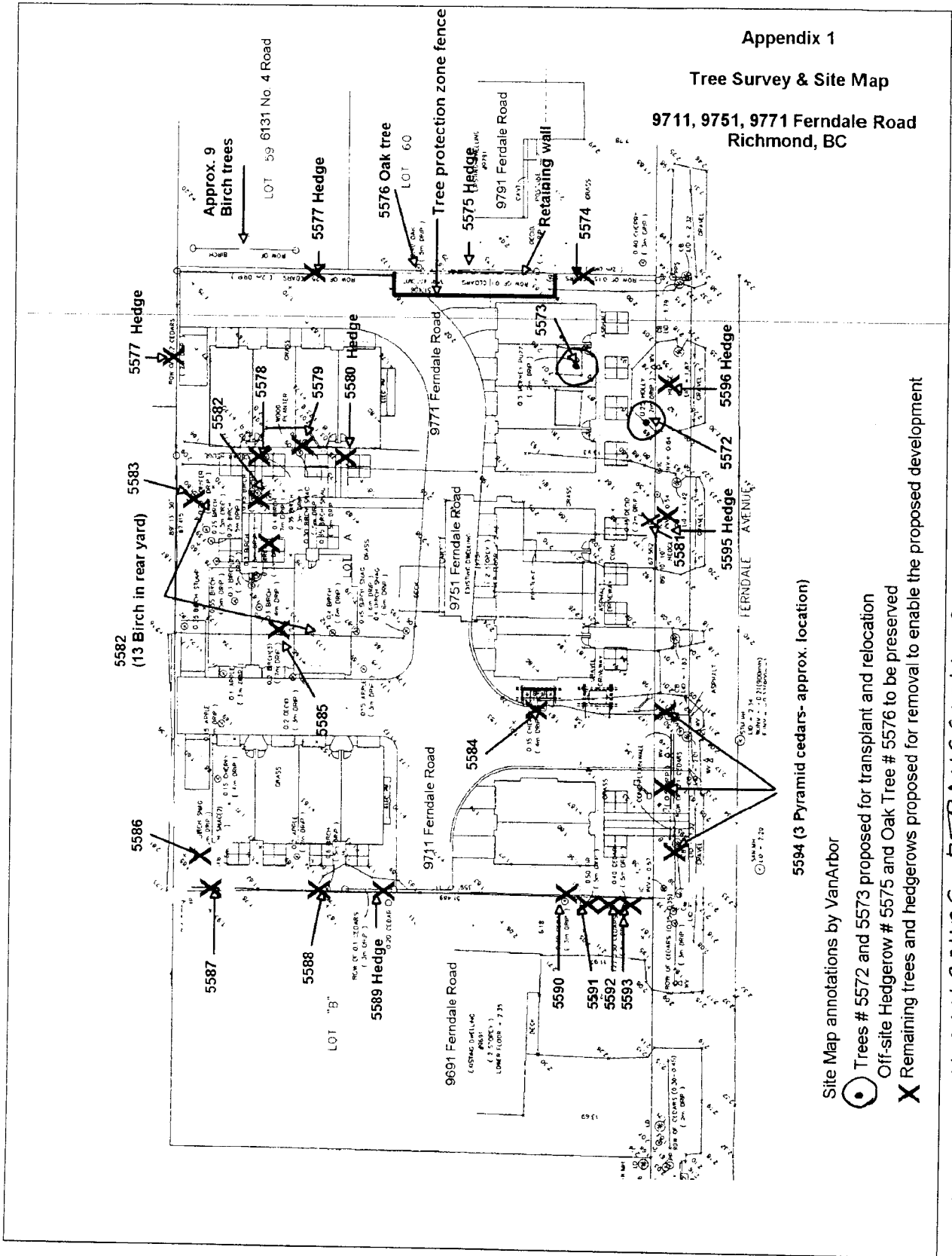
Tree Replacements

In accordance to City of Richmond Tree Protection Bylaw No. 8057, Schedule A, significant sized trees scheduled for removal are to be replaced with specific sized trees. Appendix 3 provides a calculation and summary of tree replacement type and replacement sizes. Table 1 summarizes a total of eight (8) trees that are to be replaced on the proposed development site, in accordance to Bylaw 8057 Schedule A calculations. It is to be noted that the Landscape Architect is to provide a landscape design for the proposed development. In the event that the total number of replacement trees cannot be accommodated on the parcel, the applicant may be required to plant replacement trees on City of Richmond owned properties as designated by the City.

Table 1: Summary of type and size of replacement trees:

Quantity	Type (Conifer / Deciduous)	Minimum replacement tree size
2	Conifer	3.5 meters tall
1	Conifer	5.0 meters tall
1	Conifer	5.5 meters tall
1	Conifer	6.0 meters tall
1	Deciduous	8 cm caliper
2	Deciduous	9 cm caliper
Total replacement trees = 8		

Note: Total number and type of replacement trees may be adjusted to conform to City of Richmond landscape design standards



Appendix 1

Tree Survey & Site Map

9711, 9751, 9771 Ferndale Road
Richmond, BC

Site Map annotations by VanArbor

- Trees # 5572 and 5573 proposed for transplant and relocation
- Off-site Hedgerow # 5575 and Oak Tree # 5576 to be preserved
- X Remaining trees and hedgerows proposed for removal to enable the proposed development

NEIGHBOURS PERMISSION REQUIRED FOR OFFSITE AND SHARED TREES / HEDGES

Appendix 2

Tree Survey / Evaluation

9711, 9751, 9771 Ferndale Road
Richmond, BC

October 5, 2006

Tree #	Species	DBH (cm)	Condition rating	Observations	Preservation Recommendation
5572	Ilex	19.3 + 9.8	Moderate - good	<ul style="list-style-type: none"> Tree has codominant trunks and pruned as a "poodle" tree Tree has 25.4 cm caliper 	Transplant
5573	Monkey puzzle	27.5	Good	<ul style="list-style-type: none"> Good specimen tree worthy of transplant Viability of transplant to be verified by tree spade operator/firm Tree has 33.7 cm caliper 	Transplant
5574	Western red cedar hedgerow	4 meters tall	Moderate	<ul style="list-style-type: none"> Hedgerow overhangs proposed development property by 2 meters 	Remove
5575	Western red cedar Hedgerow	4 meters tall	Moderate	<ul style="list-style-type: none"> Trees located on neighbouring lot at property line; no overhang onto proposed development property 	On-site Preserve
5576	English oak	38.2	Good	<ul style="list-style-type: none"> Tree located on neighbouring lot Tree overhangs proposed development property line by 3 meters 	On-site Preserve
5577	Western red cedar hedgerow	4 meters tall	Good	<ul style="list-style-type: none"> Hedgerow appears to be located on the development side of the property line; \approx 2 meter overhang 	Remove
5578	Birch	40.4	Poor	<ul style="list-style-type: none"> Dead tree 	Remove
5579	Birch	35.2 + 30.2	Poor	<ul style="list-style-type: none"> Dead tree 	Remove
5580	Western red cedar hedgerow	4 meters tall	Good	<ul style="list-style-type: none"> Hedgerow runs the length of the building lot 	Remove
5581	Hazel nut	15.1	Good	<ul style="list-style-type: none"> Undersized tree/shrub Abundant sucker growth 	Remove
5582	Birch	40.2 + 45.9	Moderate	<ul style="list-style-type: none"> Two trees growing together and counted as one specimen. One tree is dead. Dead trees located in the rear yard at 9751 Ferndale Road. Trees with \approx DBH size sited in brambles and DBH estimated 	Remove
	13 Birch	19.8	Poor		Remove
		24.4	Poor		Remove
		36.0	Poor		Remove
		\approx 30	Poor		Remove
		\approx 25	Poor		Remove
		\approx 25	Poor		Remove
		\approx 25	Poor		Remove

Tree #	Species	DBH (cm)	Condition rating	Observations	Preservation Recommendation
		≈ 30	Poor		Remove
		≈ 30 + 30	Poor		Remove
		48.3	Poor		Remove
		47.5	Poor		Remove
		39.2	Poor		Remove
5583	Deodara	23.0	Poor	<ul style="list-style-type: none"> Tree exhibits a lean and root heave Poor crown symmetry Not good transplant candidate 	Remove
5584	Cherry	38.3	Moderate	<ul style="list-style-type: none"> DBH measured at 1.0 m above base 5 meter crown radius 	Remove
5585	Purple leaf plum	16.7 + 15.6 + 9	Poor	<ul style="list-style-type: none"> Tree exhibits a lean; root heave evident ≈ 8 meter radius crown spread 	Remove
5586	Birch	40.4	Poor	<ul style="list-style-type: none"> Dead tree Tree crown overhangs the neighbouring development 	Remove
5587	Birch	41.1	Poor	<ul style="list-style-type: none"> Located on property line Requires written permission from neighbour to enable the removal of the tree 	Remove
5588	Birch	56.2	Poor	<ul style="list-style-type: none"> Dead crown Located on property line Requires written permission from neighbour to enable the removal of the tree 	Remove
5589	Western red cedar hedgerow	≤ 18.6	Moderate	<ul style="list-style-type: none"> Located on property line Requires written permission from neighbour to enable the removal of the tree 	Remove
5590	Western red cedar	28.9	Moderate	<ul style="list-style-type: none"> Tree located on the neighbouring property Tree has suppressed crown Requires written permission from neighbour to enable the removal of the tree 	Remove
5591	Douglas fir	52.6	Moderate	<ul style="list-style-type: none"> Tree located on the neighbouring property Requires written permission from neighbour to enable the removal of the tree Tree has a girdled trunk 	Remove
5592	Cypress	41.5 + 37.5	Poor – moderate	<ul style="list-style-type: none"> Tree located on the neighbouring property Requires written permission from neighbour to enable the removal of the tree Tree has a girdled trunk 	Remove
5593	Cypress	49.0	Poor – moderate	<ul style="list-style-type: none"> Tree located on the neighbouring property Requires written permission from neighbour to enable the removal of the tree Tree has a girdled trunk English ivy growing up trunk 	Remove
5594	3 Pyramid cedar hedgerow + Highbush cranberry &	Cedars 5 meters tall	Good	<ul style="list-style-type: none"> Trees in hedgerow are < 20 cm DBH Trees located on municipal roadway easement at 9711 Ferndale Road Trees sited next to retaining wall; not able to transplant trees due to site difficulty 	Remove

Tree #	Species	DBH (cm)	Condition rating	Observations	Preservation Recommendation
	Rhododendron shrubs			<ul style="list-style-type: none"> Trees interfere with infrastructure upgrade Rhododendron may be good candidate for transplant 	
5595	Western red cedar hedgerow	2 meters tall	Moderate	<ul style="list-style-type: none"> Individual trees in hedgerow are < 10 cm DBH Sheared hedgerow located in roadway easement in front of 9751 Ferndale Road Hedgerow conflicts with infrastructure upgrade 	Remove
5596	Western red cedar hedgerow	2 meters tall	Moderate	<ul style="list-style-type: none"> Individual trees in hedgerow are < 10 cm DBH Sheared hedgerow located in roadway easement in front of 9771 Ferndale Road Hedgerow conflicts with infrastructure upgrade 	Remove

Appendix 3

Replacement tree calculations in accordance to Bylaw 8057:

Note: The following trees are not considered in the tree replacement calculation:

1. Trees proposed for removal that are < 20 cm DBH
2. Dead trees: (i.e.) Trees with >50% die-back / deadwood in crown are considered dead trees

Tree #	Species	DBH (cm)	Comments	Type and Minimum Size of Replacement Tree
5572	Ilex	19.3 + 9.8	Transplant tree	-
5573	Monkey puzzle	27.5	Transplant tree	-
5574	Western red cedar hedgerow	4 meters tall	Trees < 20 DBH; tree replacements not required	-
5575	Western red cedar Hedgerow	4 meters tall	Trees to be preserved	-
5576	English oak	38.2	Tree to be preserved	-
5577	Western red cedar hedgerow	4 meters tall	Trees < 20 DBH; tree replacements not required	-
5578	Birch	40.4	Dead tree; tree replacement not required	-
5579	Birch	35.2 + 30.2	Dead tree; tree replacement not required	-
5580	Western red cedar hedgerow	4 meters tall	Trees < 20 DBH; tree replacements not required	-
5581	Hazel nut	15.1	Undersized shrub; replacement not required	-
5582	2 Birch	40.2 + 45.9	1 stem is alive, 2 nd stem dead; one replacement tree	Deciduous: 9 cm caliper
	13 Birch (Dead)	19.8	Birch trees in rear yard of 9751 Ferndale Road are dead; tree replacement not required	-
		24.4		-
		36.0		-
		≈ 30		-
		≈ 25		-
		≈ 25		-
		≈ 25		-
		≈ 25		-
		≈ 30		-
		≈ 30 + 30		-
		48.3		-
		47.5		-
	39.2	-		
5583	Deodara	23.0		Conifer: 3.5 meter tall
5584	Cherry	38.3		Deciduous: 8 cm caliper

Tree #	Species	DBH (cm)	Comments	Type and Minimum Size of Replacement Tree
5585	Purple leaf plum	16.7 + 15.6 + 9= 41.3 cm		Deciduous: 9 cm caliper
5586	Birch	40.4	Dead tree; tree replacement not required	-
5587	Birch	41.1	Dead tree; tree replacement not required	-
5588	Birch	56.2	Dead tree; tree replacement not required	-
5589	Western red cedar hedgerow	≤ 18.6	Trees < 20 DBH; tree replacements not required	-
5590	Western red cedar	28.9		Conifer: 3.5 meter tall
5591	Douglas fir	52.6		Conifer: 5.5 meter tall
5592	Cypress	41.5 + 37.5		Conifer: 6.0 meter tall
5593	Cypress	49.0		Conifer: 5.0 meter tall
5594	3 Pyramid cedar hedgerow + Highbush cranberry & Rhododendron	54.5 meters tall	Trees < 20 DBH; tree replacements not required	-
5595	Western red cedar hedgerow	2 meters tall	Trees < 20 DBH; tree replacements not required	-
5596	Western red cedar hedgerow	2 meters tall	Trees < 20 DBH; tree replacements not required	-

Summary of type and size of replacement trees:

Quantity	Type (conifer / Deciduous)	Replacement tree sizes
2	Conifer	3.5 meters tall
1	Conifer	5.0 meters tall
1	Conifer	5.5 meters tall
1	Conifer	6.0 meters tall
1	Deciduous	8 cm caliper
2	Deciduous	9 cm caliper
Total replacement trees = 8		

Note: Total number of replacement trees may be adjusted to conform to City of Richmond Landscape design standards

Assumptions and Limiting Conditions

1. The assessment of the trees undertaken for this project has been made using accepted arboriculture techniques. These include an examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discoloured foliage, condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. However, notwithstanding the recommendations made in this report, it must be realized that trees are living organisms, and their health and vigor changes over time. They are not immune to changes in site conditions, or seasonal variations in weather.

While every effort has been made to ensure that the trees recommended for retention are both healthy and safe, no guarantees are offered, or implied, that those trees remain standing. It is both professionally and practically impossible to predict with absolute certainty the behavior of any single tree, or group of trees, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of adverse weather conditions and this risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure this assessment is as good as can be, the trees should be re-assessed periodically. In accordance the standard practice, the assessment work undertaken for this report is valid for the day of the assessment.

2. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.
3. This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified result, the occurrence of a subsequent event, nor upon any finding reported. Issuance of permits by governing agencies and / or municipalities is not guaranteed, regardless of the recommendations provided by the consultant/appraiser.
4. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
5. Photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
6. Care has been taken to obtain all information from reliable sources. All data has been verified in so far as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
7. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the consultant/appraiser.
8. Loss or alteration of any part of this report invalidates the entire report.

9. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
10. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written consent of the consultant/appraiser, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant/appraiser as stated in his qualifications.
11. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownership's to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
12. VanArbor retains ownership of the documents and reports as instruments of professional service.

Qualifications of Author

Ken Bell, P.Ag., CAC

14778 Thrift Avenue
White Rock, BC
V4B 2J5

Tel (604) 538-6350
Fax (604) 535-1225
Cellular (604) 230-2462
E-mail: vanarbor@canada.com

- President of VanArbor Vegetation Consulting Ltd.
- Professional Agrologist, P.Ag.
- Certified Agriculture Consultant, CAC
- Certified Arborist accredited by the International Society of Arboriculture, Certification # PN-0276
- WCB Certified Tree Assessor
- Certified Landscape Inspector
- Diploma Horticulture, Olds College, 1980
- Bachelor of Science in Agriculture, University of Alberta, 1986
- Consulting Arborist and Landscape Consultant: April 1992 – Present
- Member:
 - International Society of Arboriculture
 - British Columbia Institute of Agrologists
 - Canadian Consulting Agrologist Association
 - City of White Rock Tree Conservation By-law Task Force
 - City of White Rock Environmental Advisory Committee
- Over 25 years of professional employment in Landscape Horticulture and Arboriculture

ATTACHMENT 4

Conditional Development Permit Requirements

**9751 Ferndale Drive
DP 06-325115**

Prior to forwarding this application to Council for Development Permit approval, the developer is required to complete the following requirements:

1. Registration of a flood indemnity covenant (minimum 0.9 m geodetic);
2. Voluntary contribution of \$0.60 per buildable square foot (e.g. \$14,596) to the City's Public Art fund in the form of an equivalent built installation on site;
3. Installation of protective tree fencing and periodic inspection during construction to the satisfaction of a registered arborist for the protection of onsite and neighbouring trees;
4. Proof of a contract with a registered arborist (with a minimum of four (4) site visits through construction) to ensure proper protection of existing onsite and neighbouring trees;
5. Proof of a contract with a tree moving company for the removal, storage and re-planting of retention trees; and
6. Receipt of a Letter-of-Credit for landscaping in the amount of \$81,110. This amount includes security in the amount of \$2,500 for offsite grading and lawn re-establishment associated with the neighbour's mature hedgerow removal in the interface area between the subject development and 9691 Ferndale Road (TP 06-354406). This amount also includes tree replacement security in the amount of \$10,000 to be held through a 1 year maintenance period after re-planting for the successful establishment of the relocated retention holly and monkey puzzle trees.

Signed _____

Date Dec 4, 2006

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

7. Incorporation of accessibility measures for aging in place in Building Permit drawings for all units including lever handles for doors and faucets and blocking in all washroom walls to facilitate future potential installation of grab bars/handrails;
8. Enter into a Servicing Agreement* for the design and construction of frontage improvements complete with, but not limited to road widening, a 1.41 m wide grass boulevard (with street trees and black Zed street lights) and a 1.75 m wide sidewalk at the property line. Ferndale Road is on the DCC program, so Roads DCC credit will be applied at Building Permit stage; and
9. Receipt of a construction parking and traffic management plan to the satisfaction of the Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).

* Note: This requires a separate application.



No. DP 06-325115

To the Holder: AM-PRI CONSTRUCTION LTD.

Property Address: 9751 FERNDALE ROAD
 (FORMERLY 9711, 9751 AND 9771 FERNDALE ROAD)

Address: C/O MR. T. YAMAMOTO
 TOMIZO YAMAMOTO ARCHITECT INC.
 2386 OAK STREET
 VANCOUVER, BC V6H 4J1

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 #6 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 \$81,110. 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 06-325115

To the Holder: AM-PRI CONSTRUCTION LTD.

Property Address: 9751 FERNDALE ROAD
(FORMERLY 9711, 9751 AND 9771 FERNDALE ROAD)

Address: C/O MR. T. YAMAMOTO
TOMIZO YAMAMOTO ARCHITECT INC.
2386 OAK STREET
VANCOUVER, BC V6H 4J1

- 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.

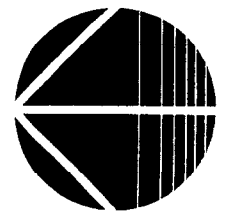
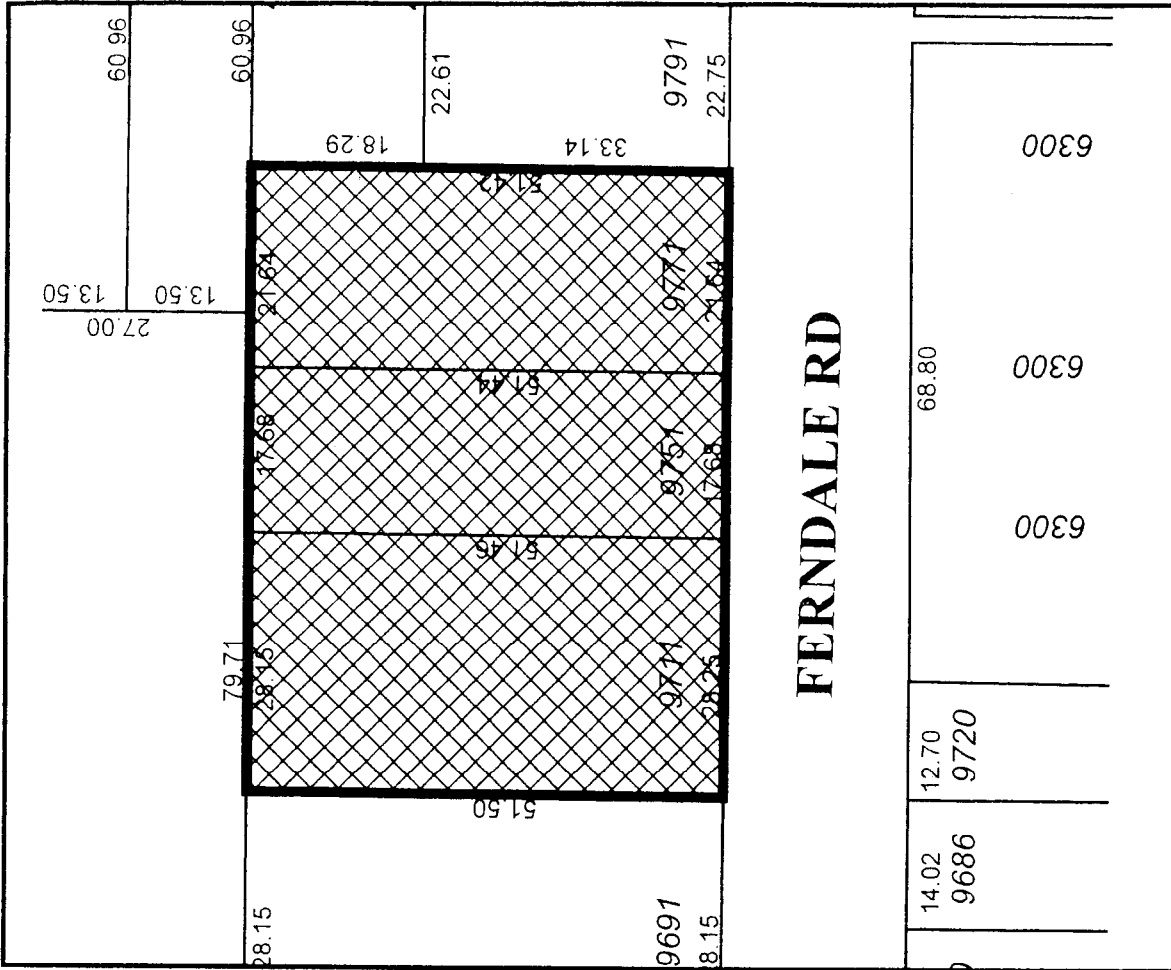
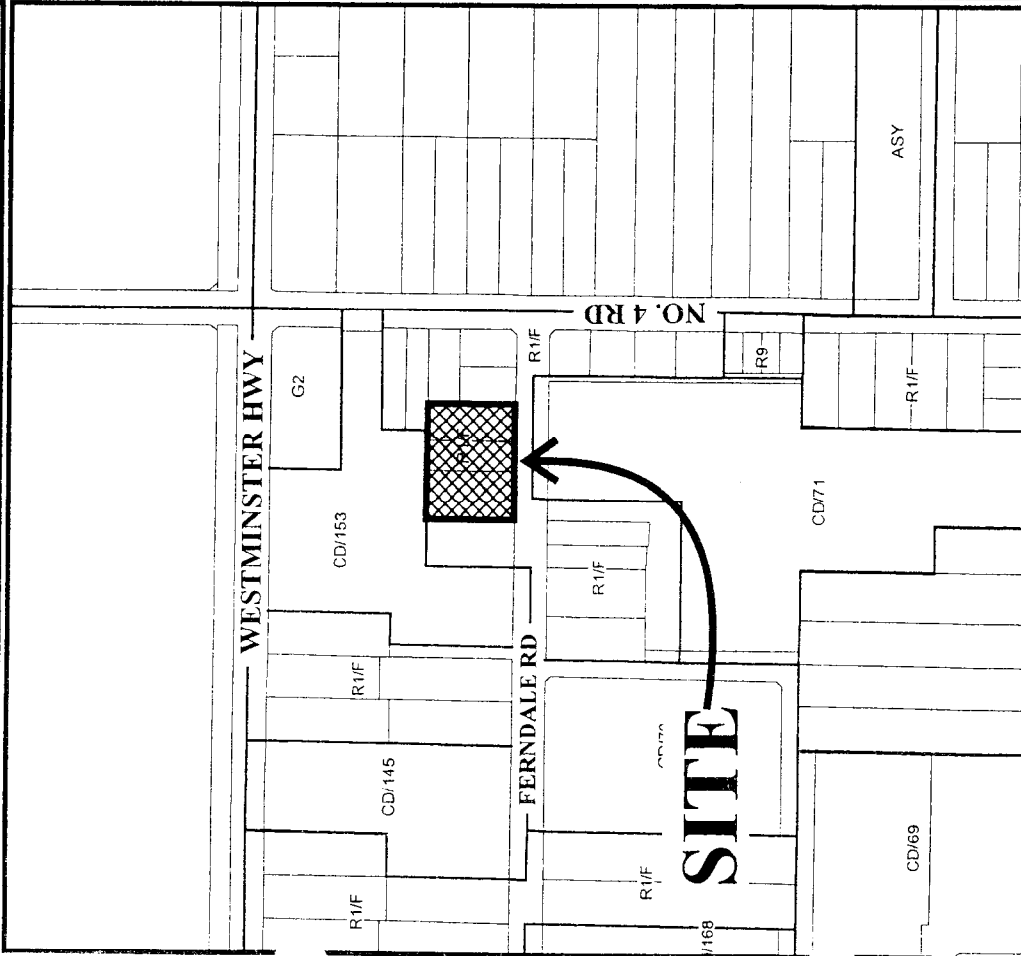
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DAY OF _____, _____

DELIVERED THIS _____ DAY OF _____, _____

MAYOR



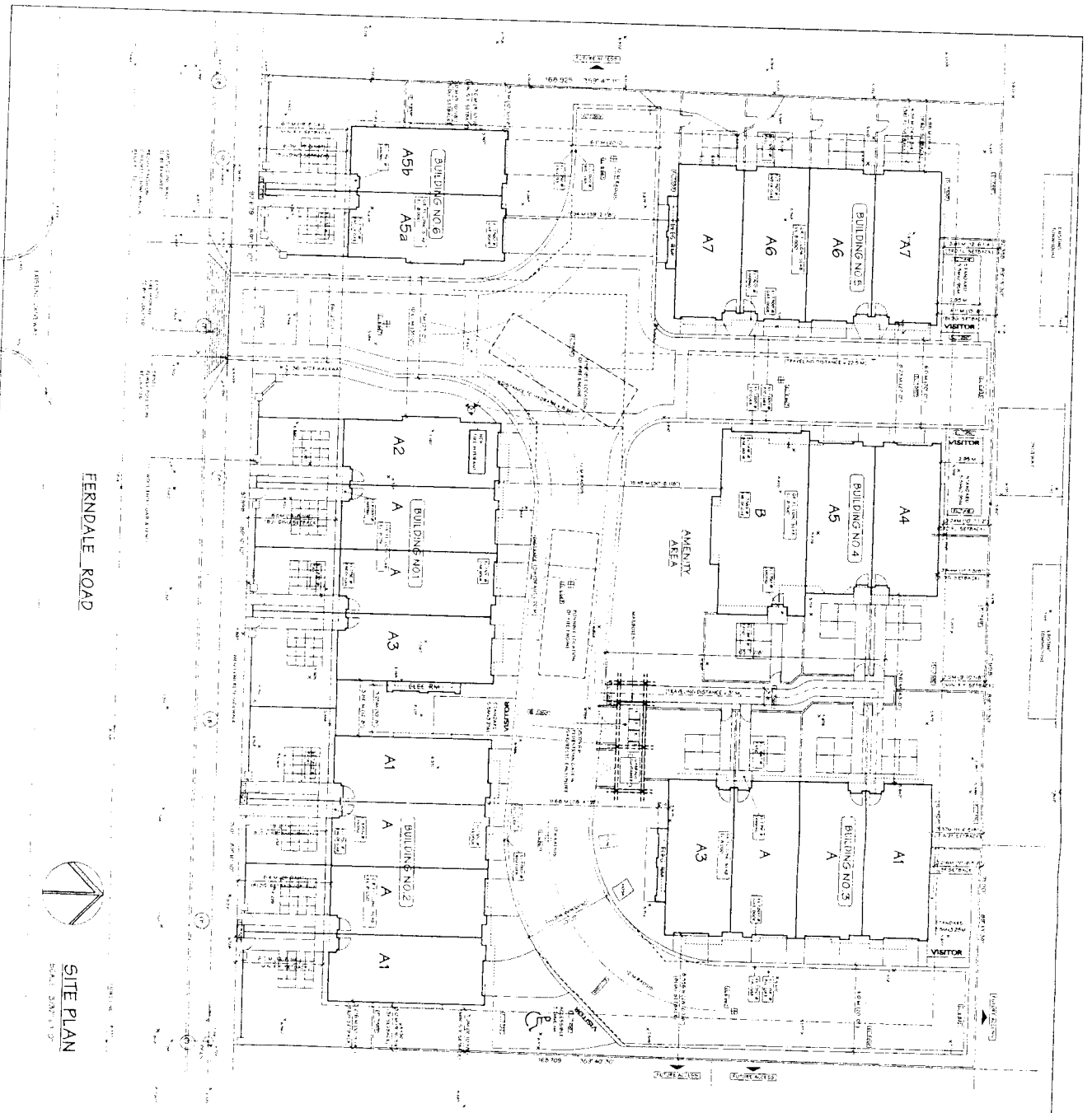
City of Richmond



DP 06-325115
SCHEDULE "A"



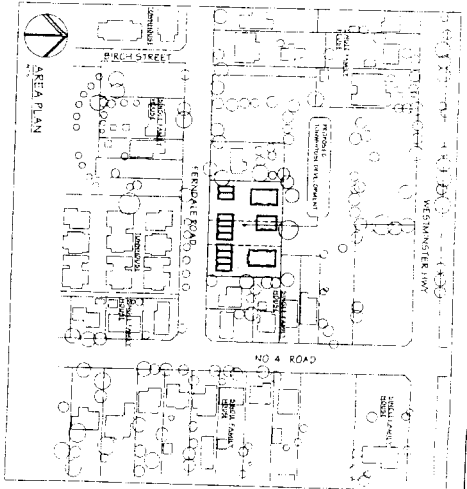
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Revision Date:
Note: Dimensions are in METRES



FERNDALE ROAD



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



STATISTICS 9751 FERNDALE ROAD

LOT AREA: 111,200 S.F.
 LOT AREA: 111,200 S.F.
 TOTAL LOT AREA: 111,200 S.F.
 TOTAL LOT AREA: 111,200 S.F.
 TOTAL LOT AREA: 111,200 S.F.

PROPOSED FLOOR AREA

NO.	DESCRIPTION	AREA (S.F.)	TOTAL AREA (S.F.)
1	BUILDING NO. 1 (A)	15,000	15,000
2	BUILDING NO. 2 (A)	15,000	30,000
3	BUILDING NO. 3 (A)	15,000	45,000
4	BUILDING NO. 4 (A)	15,000	60,000
5	BUILDING NO. 5 (A)	15,000	75,000
6	BUILDING NO. 6 (A)	15,000	90,000
7	BUILDING NO. 7 (A)	15,000	105,000
8	BUILDING NO. 3b	15,000	120,000
9	BUILDING NO. 3a	15,000	135,000
10	BUILDING NO. 6b	15,000	150,000
11	BUILDING NO. 6a	15,000	165,000
12	AMENITY AREA	15,000	180,000
13	PARKING	15,000	195,000
14	LANDSCAPING	15,000	210,000
15	UTILITIES	15,000	225,000
16	ROADS	15,000	240,000
17	TOTAL		240,000

PLAN # 1
 JAN 10 2007

DP 06-305115

STATISTICS

NO. OF LOTS	17
TOTAL LOT AREA	111,200 S.F.
TOTAL FLOOR AREA	240,000 S.F.
AVERAGE FLOOR AREA	14,118 S.F.
AVERAGE LOT AREA	6,541 S.F.
AVERAGE FLOOR AREA PER LOT	1,424 S.F.

SITE PLAN

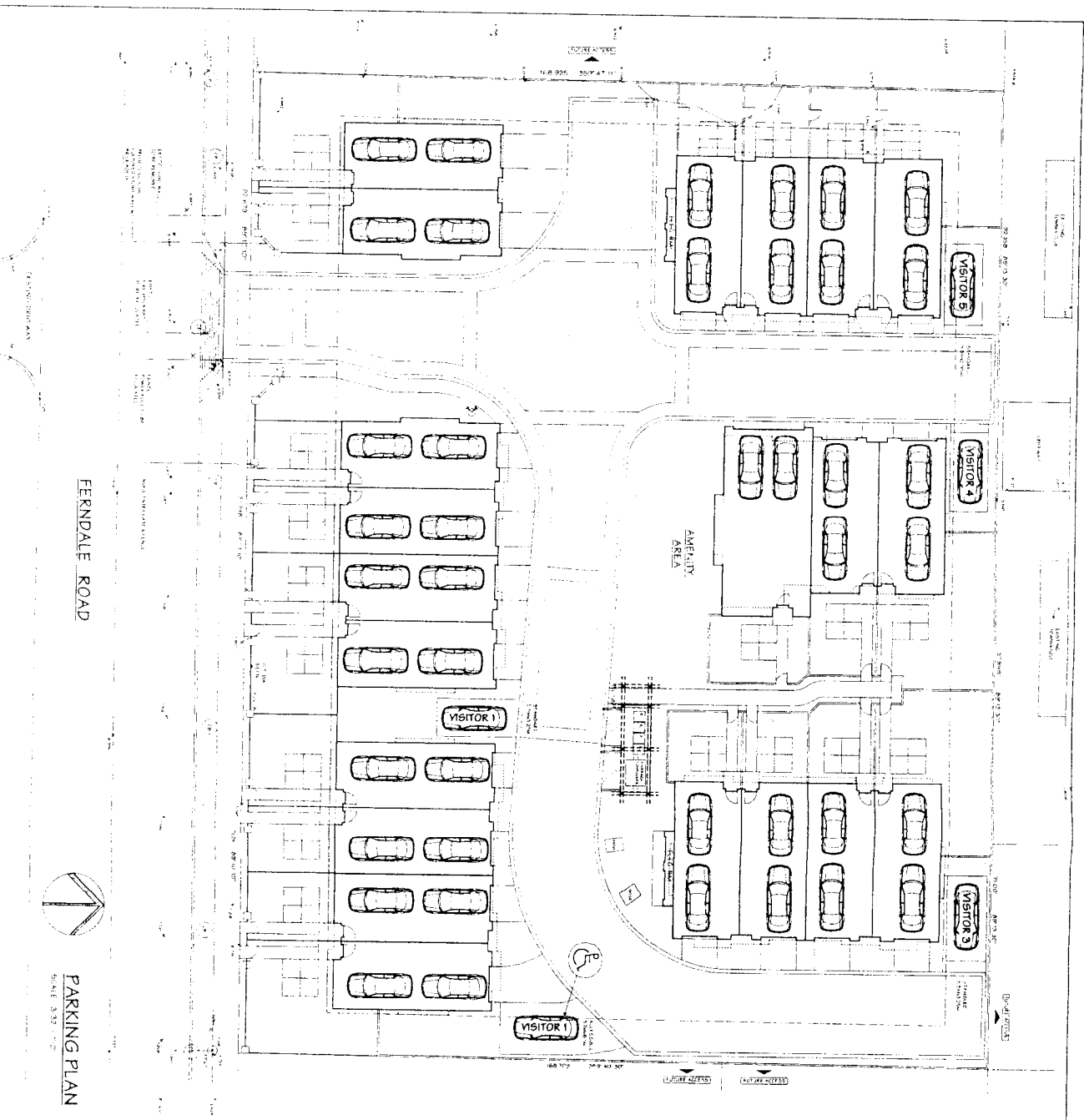
NO.	1
DATE	JAN 10 2007
SCALE	1/8" = 1'-0"
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CLIENT

TOMIYO YAMAMOTO ARCHITECT INC.

21 UNIT TOWNHOUSE DEVELOPMENT

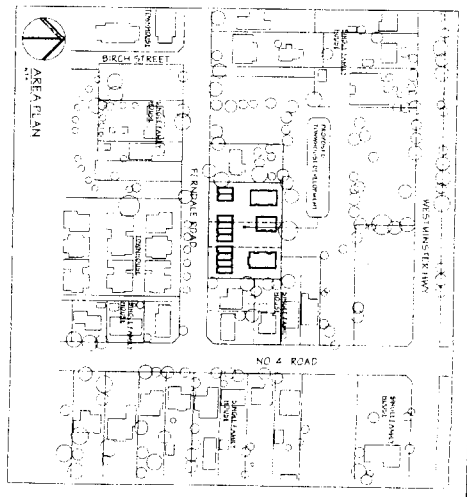
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FERNDALE ROAD



PARKING PLAN
SCALE 3/32"



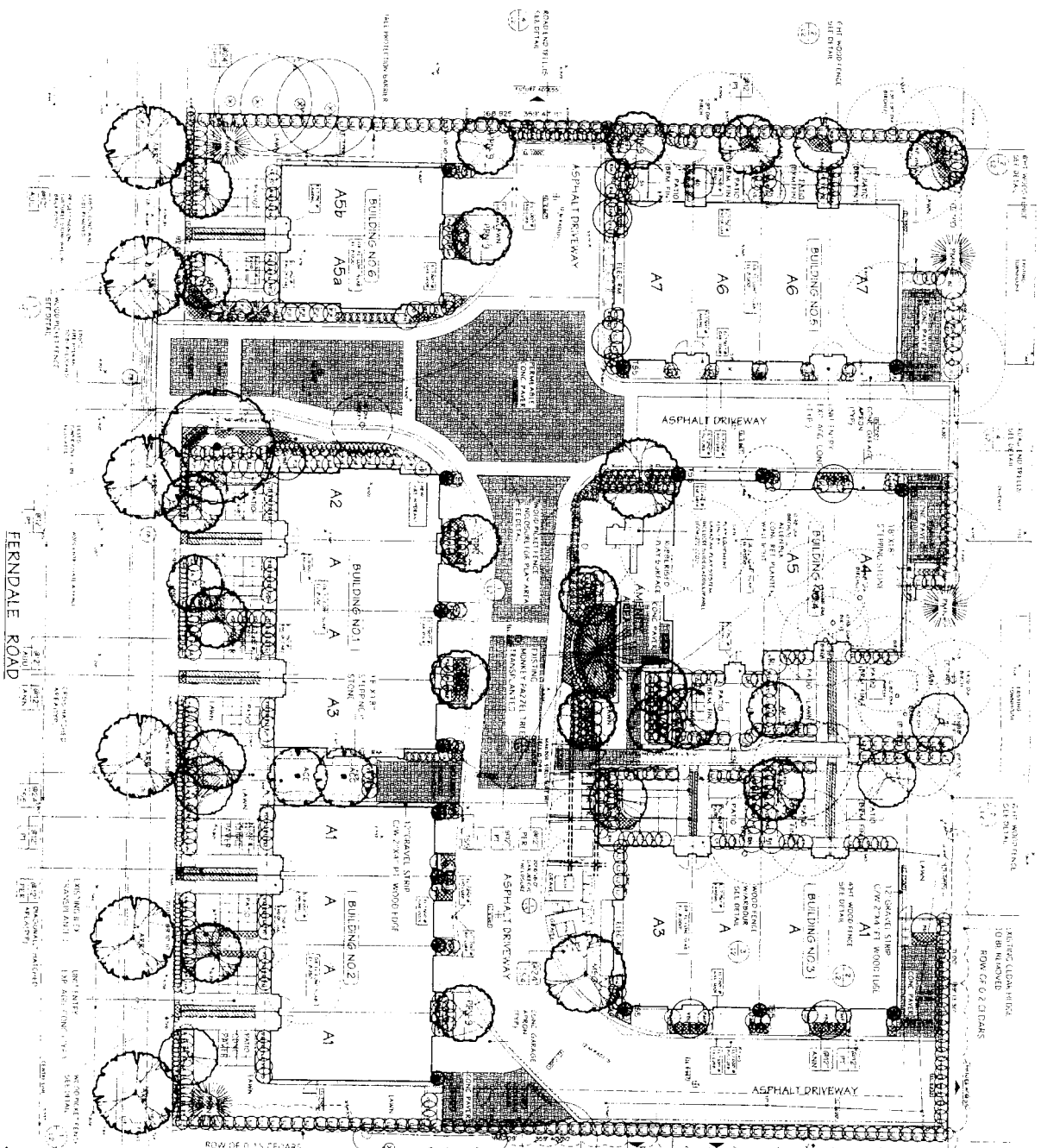
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PLAN 2
JAN 10 2007
DP 06-325115

27 UNIT TOWNHOUSE DEVELOPMENT
TOWNHOUSE DEVELOPMENT
ARCHITECT INC.

NO.	DATE	DESCRIPTION
1	10/10/06	PRELIMINARY
2	11/15/06	REVISED
3	12/15/06	REVISED
4	01/10/07	REVISED



FERNDALE ROAD

LEGEND

- SECTION C&D TREES TO BE RETAINED
- CONFIRMED TREES TO BE RETAINED
- TREES TO BE REMOVED

PLAN # 3A JAN 10 2007
 DP 063 25115

DATE	DESCRIPTION
10/11/06	ISSUED FOR PERMITTING
11/15/06	ISSUED FOR PERMITTING
12/15/06	ISSUED FOR PERMITTING
01/10/07	ISSUED FOR PERMITTING

21 UNITS
 2 DOWNHOUSES
 17/11 - 9771
 Ferndale Road
 Richardson B C

Am-Pol Development
 Landscape Plan

LANDSCAPE PLAN

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

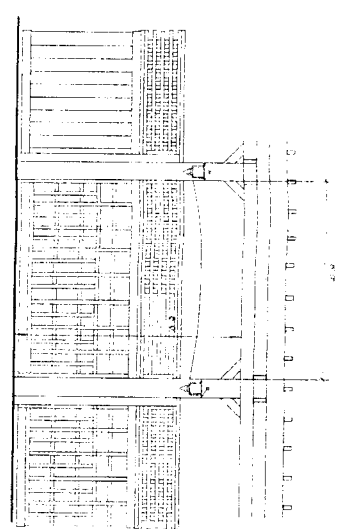
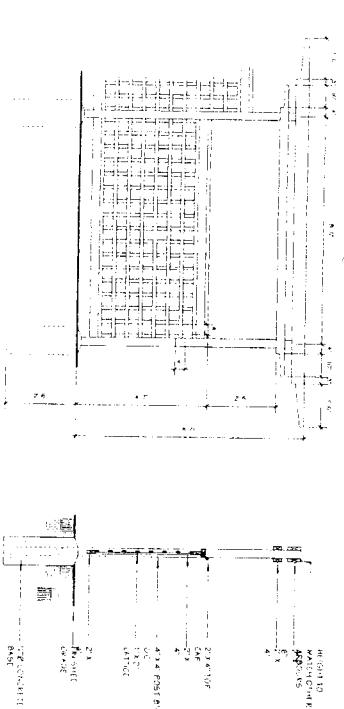
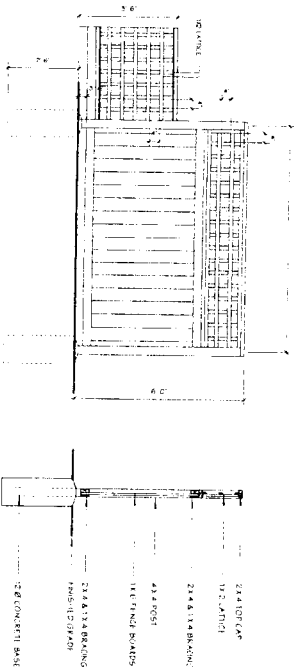
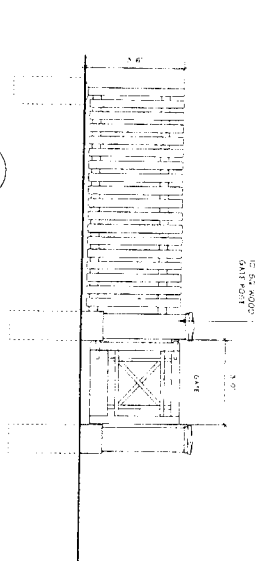
Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
 Landscape Plan

Am-Pol Development
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Am-Pol Development
 Landscape Plan



PLANT LIST

2011 FENNELLE DRIVE, RICHMOND

ALT	QTY	SYMBOL	COMMON NAME	SIZE
TREES				
452	2	A1	ACER FRAXINOSA	2 1/2\"/>

ALT	QTY	SYMBOL	COMMON NAME	SIZE
453	2	A2	ACER FRAXINOSA	2 1/2\"/>

NOTE:
 ALL DIMENSIONS FOR MATERIALS
 SHALL BE IN ACCORDANCE WITH THE
 CANADIAN STANDARDS FOR
 CONSTRUCTION MATERIALS
 (CSA) AND THE CANADIAN
 NATIONAL BUILDING CODE (CNBC)
 UNLESS OTHERWISE SPECIFIED.

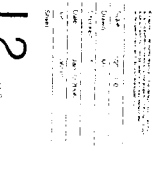
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NOTE:
 ALL DIMENSIONS FOR MATERIALS
 SHALL BE IN ACCORDANCE WITH THE
 CANADIAN STANDARDS FOR
 CONSTRUCTION MATERIALS
 (CSA) AND THE CANADIAN
 NATIONAL BUILDING CODE (CNBC)
 UNLESS OTHERWISE SPECIFIED.

21 UNITS
 21 HOUSE
 9711 97 Road
 Richmond, BC

Am-Pm Development
 LANDSCAPE
 DETAILS

DATE: 1/10/2007
 DRAWN BY: [Name]
 CHECKED BY: [Name]



21 UNITS
 21 HOUSE
 9711 97 Road
 Richmond, BC

Am-Pm Development
 LANDSCAPE
 DETAILS

DATE: 1/10/2007
 DRAWN BY: [Name]
 CHECKED BY: [Name]

21 UNITS
 21 HOUSE
 9711 97 Road
 Richmond, BC

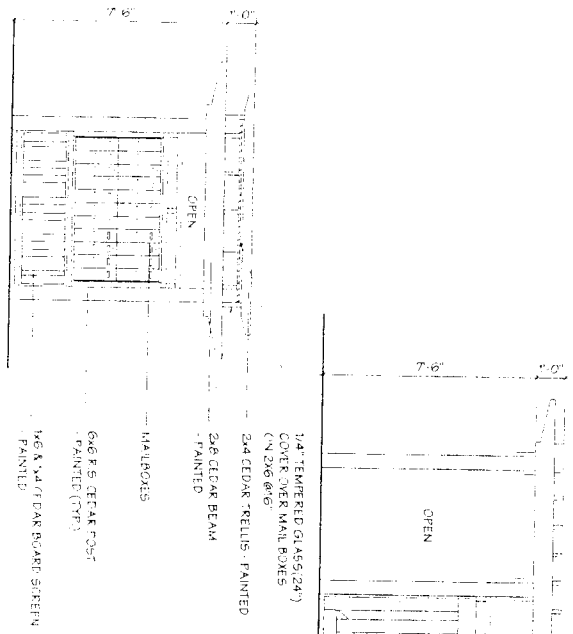
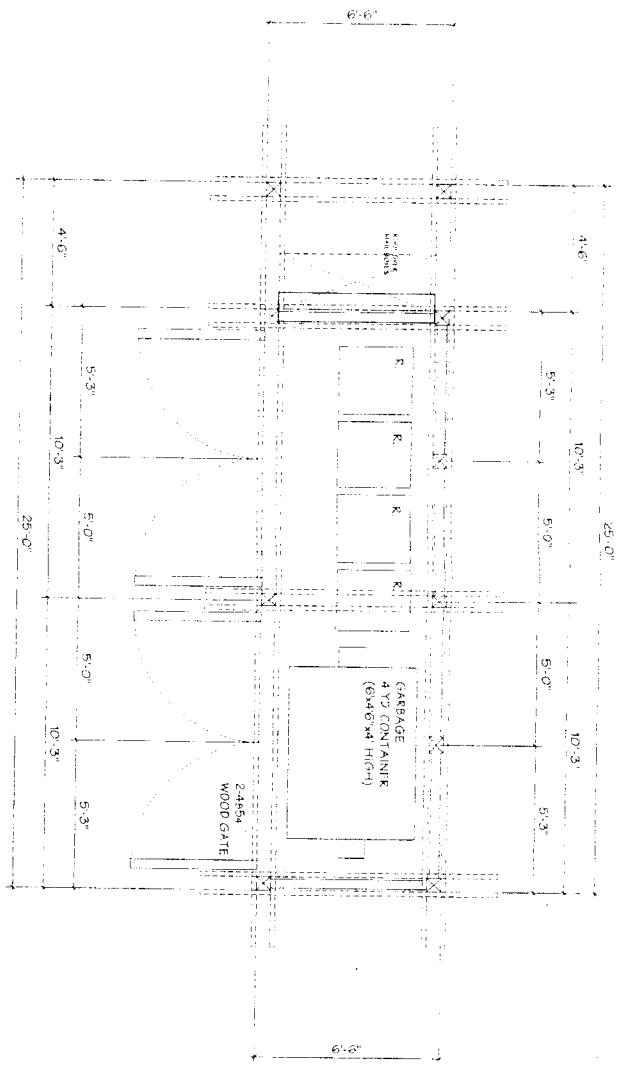
Am-Pm Development
 LANDSCAPE
 DETAILS

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21 UNITS
 21 HOUSE
 9711 97 Road
 Richmond, BC

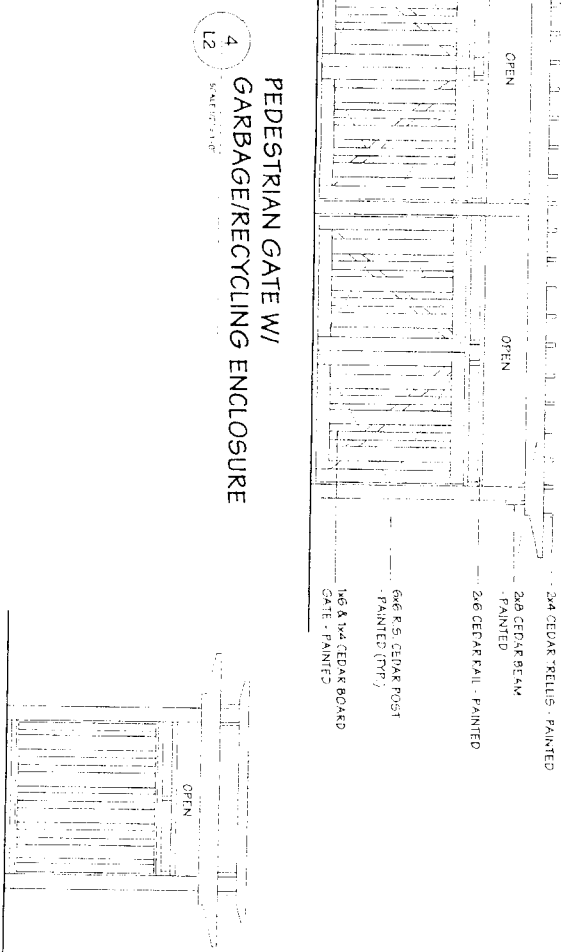
Am-Pm Development
 LANDSCAPE
 DETAILS

DATE: 1/10/2007
 DRAWN BY: [Name]
 CHECKED BY: [Name]



WEST ELEVATION
SCALE: 1/4" = 1'-0"

4
L2
PEDESTRIAN GATE W/
GARBAGE/RECYCLING ENCLOSURE

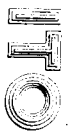


EAST ELEVATION
SCALE: 1/4" = 1'-0"

PLAN # 3C
JAN 10 2007
DP 06325115

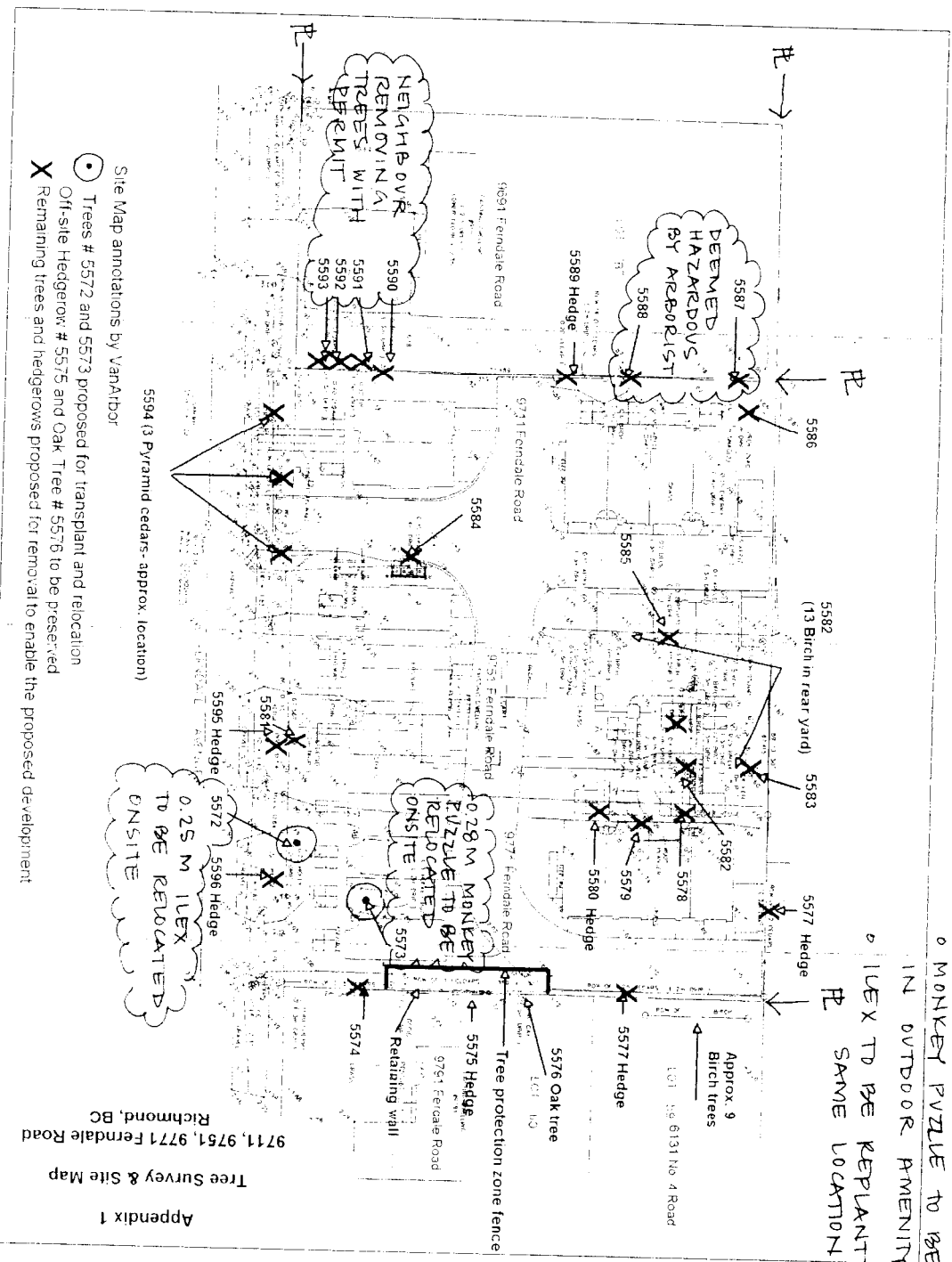
L3
073

21 UNITS
 TOWNHOUSE
 9711 - 9771
 FERRIS ROAD
 RICHMOND, 3 C.
 Am-Pil Development
 LANDSCAPE DETAILS
 1/2" = 1'-0"



ITO & ASSOCIATES
 LANDSCAPE ARCHITECTS
 3180 Linn Street
 Richmond, BC V6V 2A4
 Voice: 604.275.2918
 Fax: 604.275.2919
 Email: info@itoassoc.com
 Website: www.itoassoc.com

21 UNITS
 TOWNHOUSE
 9711 - 9771
 FERRIS ROAD
 RICHMOND, 3 C.
 Am-Pil Development
 LANDSCAPE DETAILS
 1/2" = 1'-0"

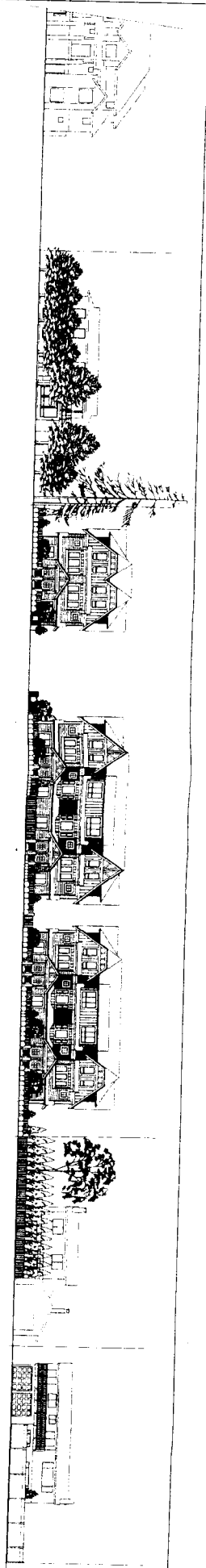


- Site Map annotations by VanArbor
- Trees # 5572 and 5573 proposed for transplant and relocation
 - Off-site Hedgerow: # 5575 and Oak Tree # 5576 to be preserved
 - X Remaining trees and hedgerows proposed for removal to enable the proposed development

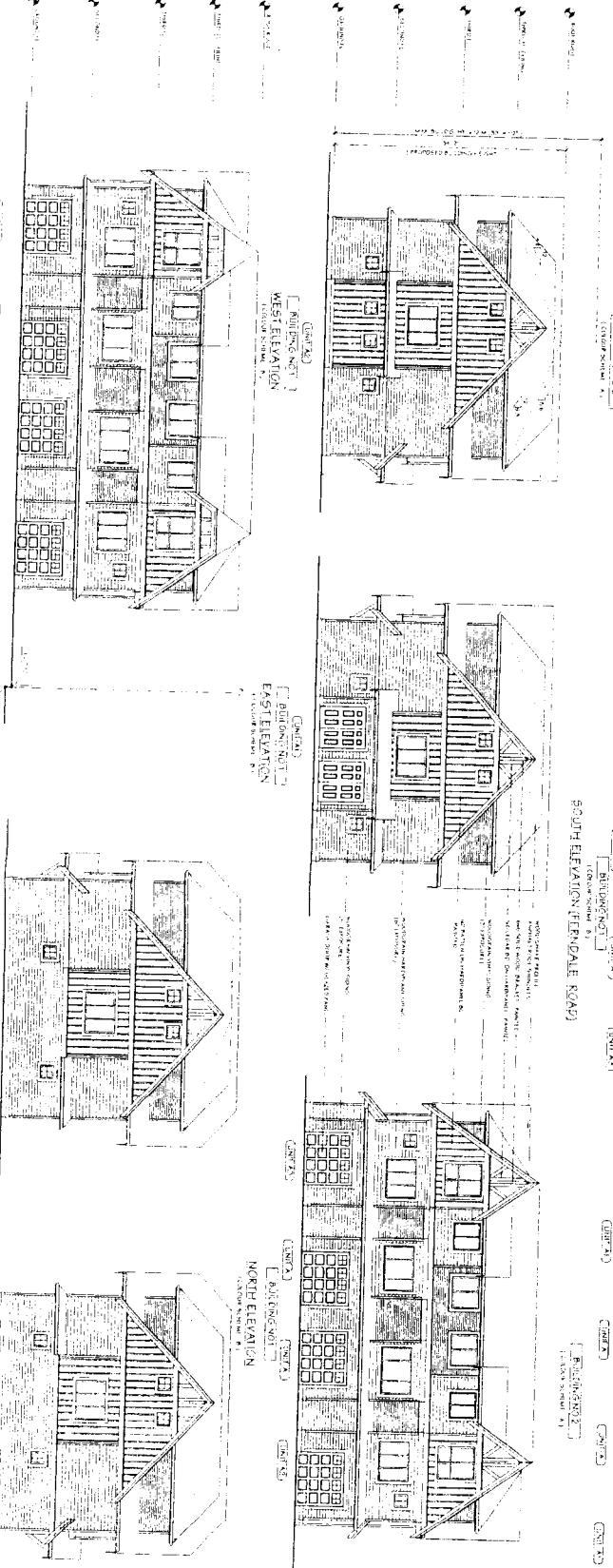
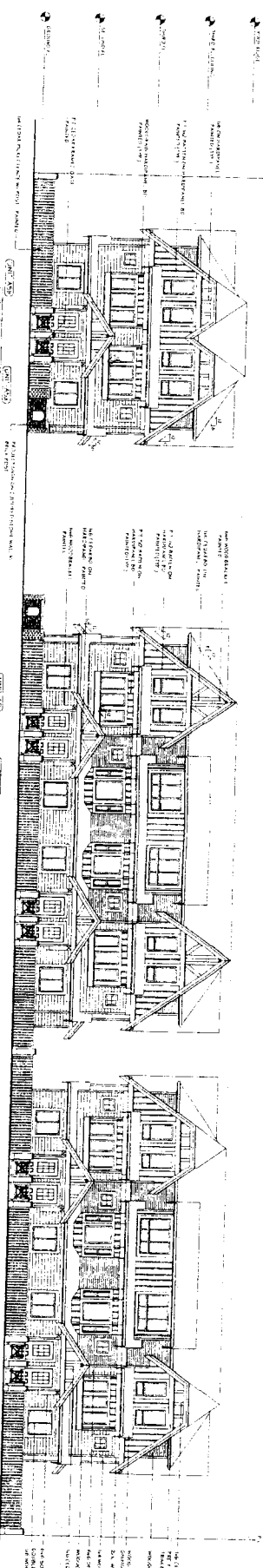
○ MONKEY PUZZLE TO BE REPLANTED IN OUTDOOR AMENITY AREA
 ○ ILEX TO BE REPLANTED AT SAME LOCATION GENERALLY

Appendix 1
 Tree Survey & Site Map
 9711, 9751, 9771 Fensdale Road
 Richmond, BC
 PLAN # 3D JAN 10 2007
 DP 06325115

TREE SURVEY & RETENTION PLAN



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

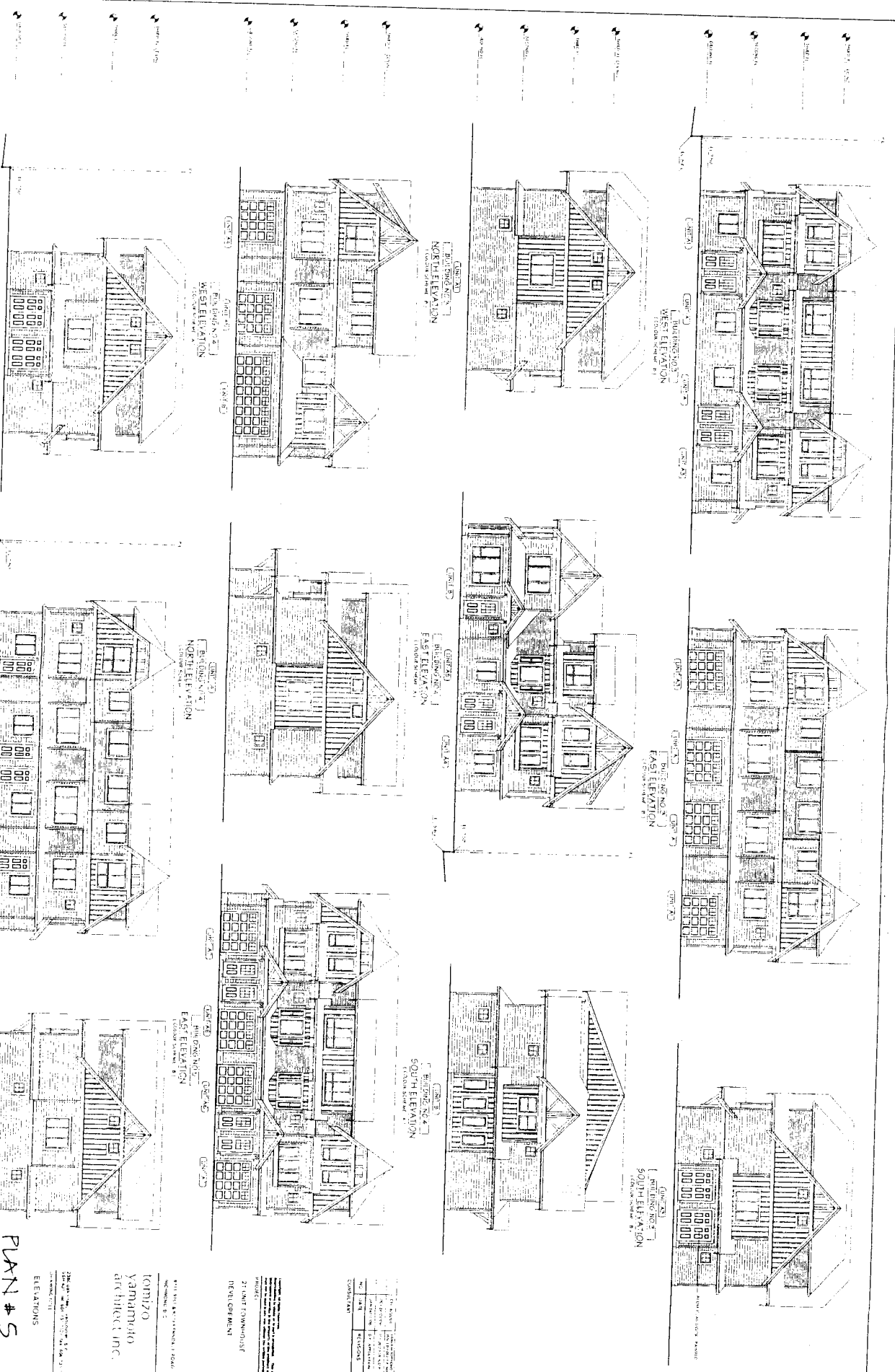


NO.	DATE	REVISIONS	COMMENTS
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2	1/10/07	REVISED PER PERMITS	

PROJECT: 21 UNIT TOWNHOUSE DEVELOPMENT
 ARCHITECT: IOMIZO YAMAMOTO ARCHITECT INC.
 DATE: JAN 10 2007

PLAN # 4

JAN 10 2007



TO SHOW: [Symbol] BUILDING NO. 1 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 2 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 3 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

TO SHOW: [Symbol] BUILDING NO. 1 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 2 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 3 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

TO SHOW: [Symbol] BUILDING NO. 1 [Symbol]
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 TO SHOW: [Symbol] BUILDING NO. 3 [Symbol]
 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

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 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

TO SHOW: [Symbol] BUILDING NO. 1 [Symbol]
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 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

TO SHOW: [Symbol] BUILDING NO. 1 [Symbol]
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 TO SHOW: [Symbol] BUILDING NO. 4 [Symbol]

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PROJECT:
 27 UNIT TOWNHOMES
 DE SOTO BEACH

ARCHITECT:
 TOMIYO YAMAMOTO ARCHITECT, INC.
 2701 W. CENTRAL AVENUE
 SUITE 110
 DE SOTO BEACH, FL 33431
 (407) 251-1311

DATE:
 JAN 10 2007

SCALE:
 AS SHOWN

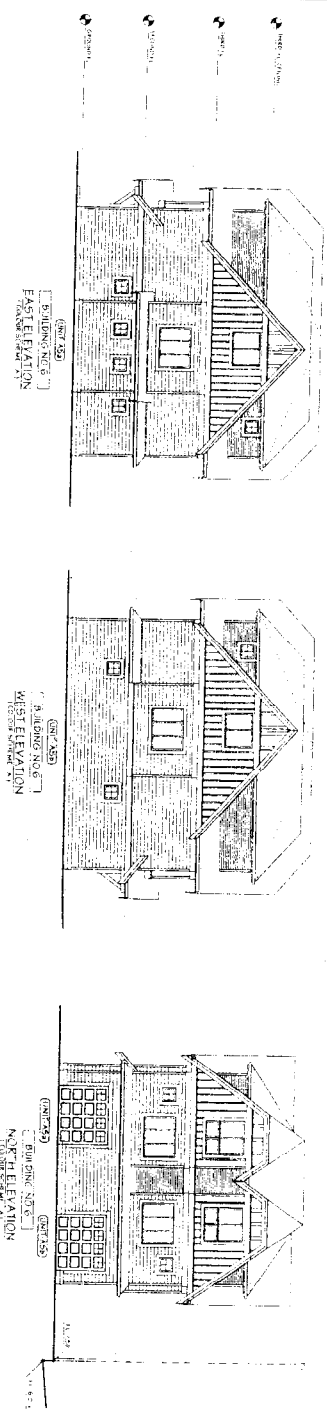
NOTES:

- SEE ARCHITECT'S PLAN SET FOR DIMENSIONS AND MATERIALS.
- SEE ARCHITECT'S PLAN SET FOR FINISHES AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR LIGHTING FIXTURES AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR HARDWARE AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR PAINT AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR GLASS AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR ROOFING AND SCHEDULES.
- SEE ARCHITECT'S PLAN SET FOR METALS AND SCHEDULES.

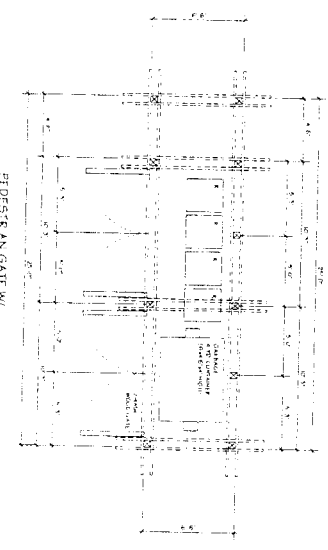
PLAN # 5

DP 06-325115

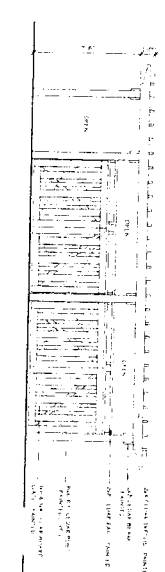
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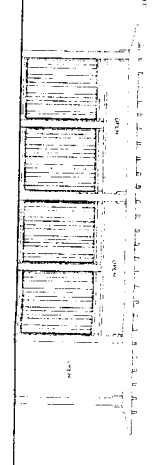
PEDESTAL GATE W/ GABLE ROOF AND ENCLOSURE



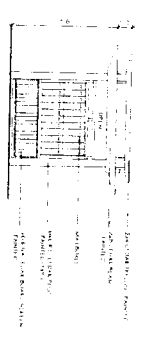
SOUTH ELEVATION



NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION



NOTES:

1. SEE ARCHITECTURAL PLAN FOR DIMENSIONS AND MATERIALS.
2. ALL EXTERIOR SURFACES TO BE PAINTED WITH A QUALITY EXTERIOR PAINT.
3. ROOFING TO BE AS SPECIFIED ON ARCHITECTURAL PLAN.
4. FOUNDATION TO BE CONCRETE ON GRADE.
5. ELECTRICAL AND PLUMBING TO BE INSTALLED AS PER LOCAL CODES.
6. ALL WORK TO BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
8. MATERIALS TO BE STORED PROPERLY ON-SITE.
9. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES.
10. ALL WASTE TO BE REMOVED FROM THE SITE.
11. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES.
13. THE CONTRACTOR SHALL MAINTAIN A NEAT AND CLEAN WORK SITE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT PROPERTIES.
15. THE CONTRACTOR SHALL MAINTAIN A NEAT AND CLEAN WORK SITE.

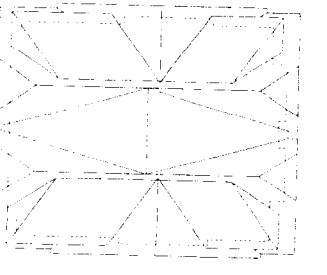
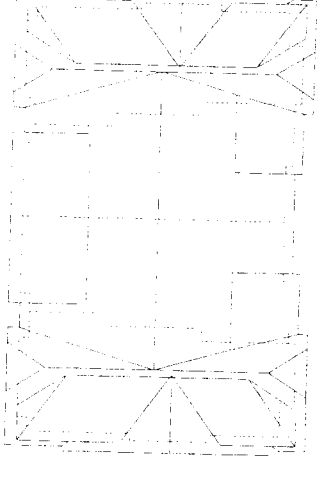
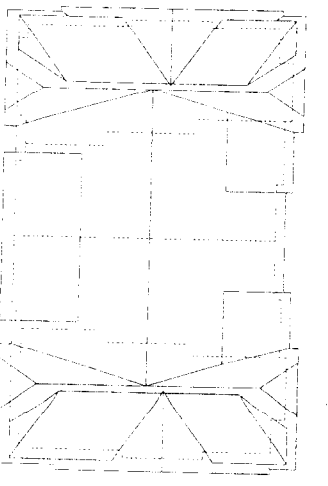
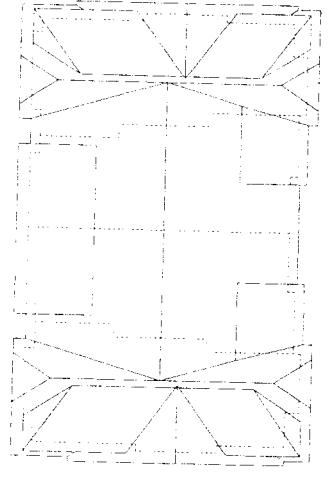
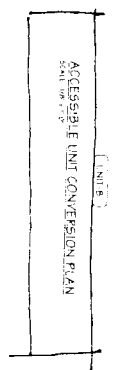
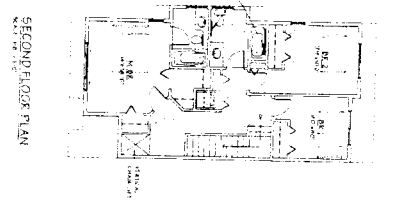
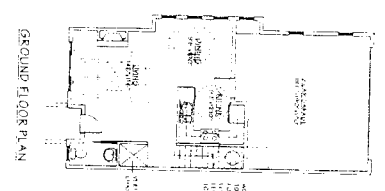
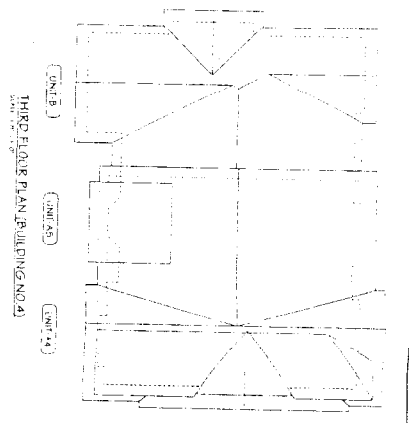
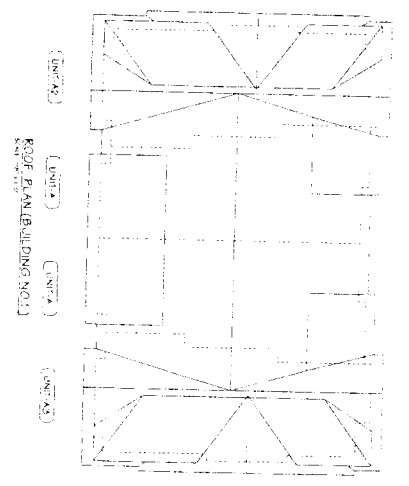
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8	01/10/07	ISSUED FOR PERMITTING
9	01/10/07	ISSUED FOR PERMITTING
10	01/10/07	ISSUED FOR PERMITTING

3111 BIRCH AVE. FARMINGTON, CT 06030
 ARCHITECT: IONIZO YAMAMOTO ARCHITECT INC.
 21 UNIT TOWNHOUSE DEVELOPMENT

PLAN # 6
 JAN 10 2007

DP 06-325115

NO.	DATE	REVISIONS
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2	01/10/07	ISSUED FOR PERMITTING
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4	01/10/07	ISSUED FOR PERMITTING
5	01/10/07	ISSUED FOR PERMITTING
6	01/10/07	ISSUED FOR PERMITTING
7	01/10/07	ISSUED FOR PERMITTING
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9	01/10/07	ISSUED FOR PERMITTING
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NO.	DATE	REVISION
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PROJECT
21 UNIT TOWNHOUSE
DEVELOPMENT

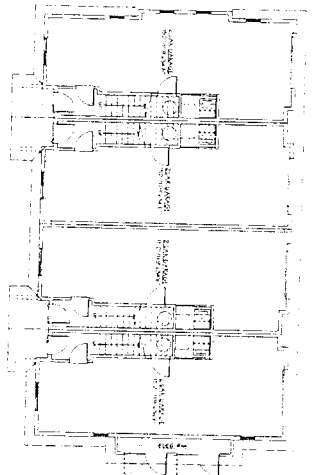
YAMAMOTO ARCHITECT INC.
CONSULTANT

FLOOR PLANS

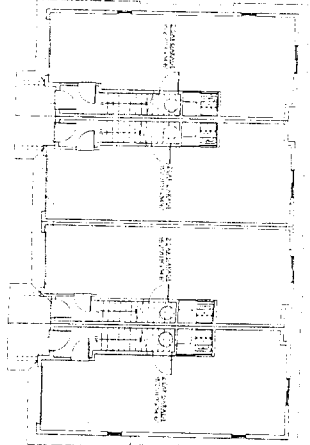
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PLAN A

JAN 10 2007
DP 06-325115

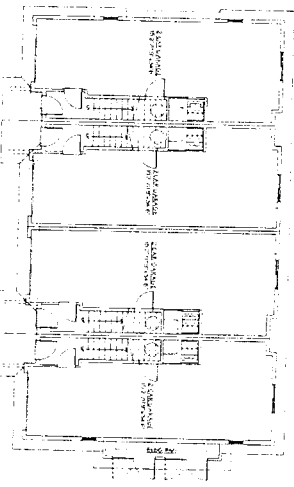
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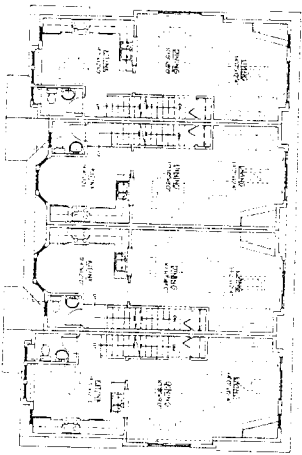
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GROUND FLOOR PLAN (BUILDING NO. 1)



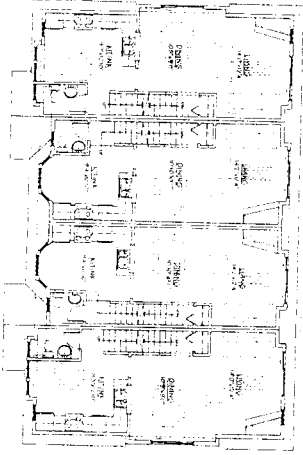
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GROUND FLOOR PLAN (BUILDING NO. 2)



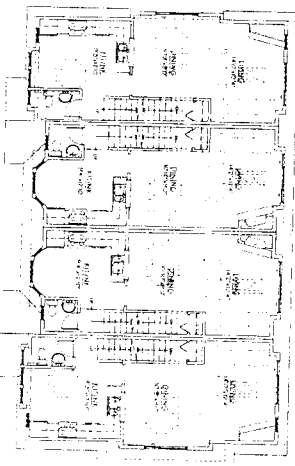
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GROUND FLOOR PLAN (BUILDING NO. 3)



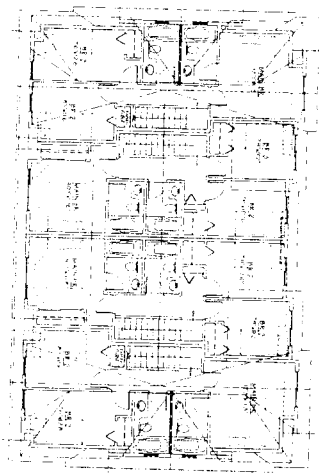
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SECOND FLOOR PLAN (BUILDING NO. 1)



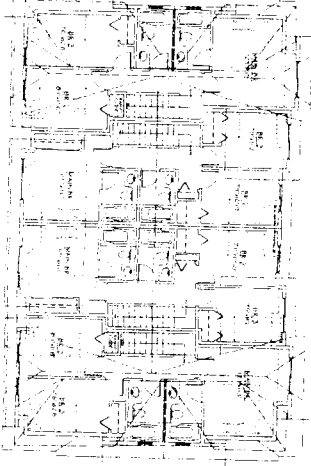
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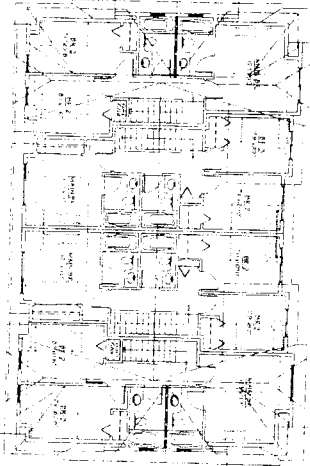
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SECOND FLOOR PLAN (BUILDING NO. 3)



(UNIT 18) (UNIT 17) (UNIT 16) (UNIT 15)
THIRD FLOOR PLAN (BUILDING NO. 1)



(UNIT 14) (UNIT 13) (UNIT 12) (UNIT 11)
THIRD FLOOR PLAN (BUILDING NO. 2)



(UNIT 10) (UNIT 9) (UNIT 8) (UNIT 7)
THIRD FLOOR PLAN (BUILDING NO. 3)

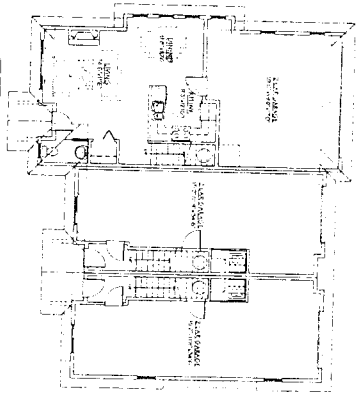
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PROJECT: 21 UNIT TOWNHOUSE DEVELOPMENT
 DRAWING NO.: 21 UNIT TOWNHOUSE DEVELOPMENT
 DATE: 2007.01.10

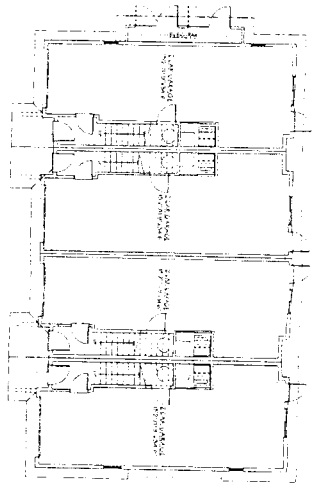
DESIGNED BY: ARCHITECTURE
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DATE: 2007.01.10
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 DATE: 2007.01.10

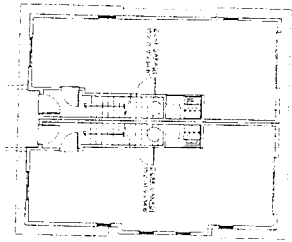
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 NP 06-525115
 JAN 10 2007



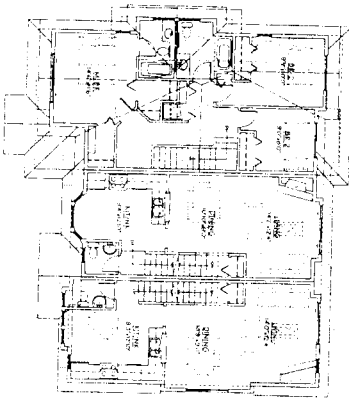
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GROUND FLOOR PLAN (BUILDING NO. 4)



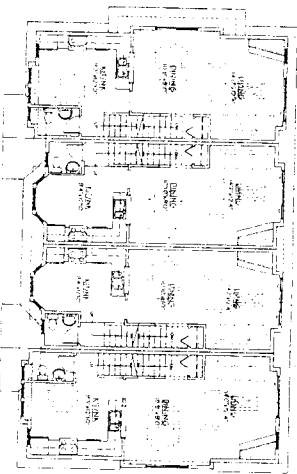
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GROUND FLOOR PLAN (BUILDING NO. 5)



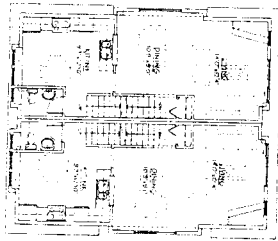
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GROUND FLOOR PLAN (BUILDING NO. 6)



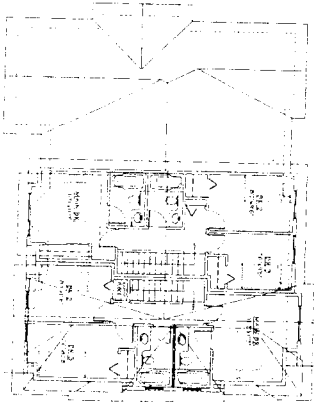
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SECOND FLOOR PLAN (BUILDING NO. 4)



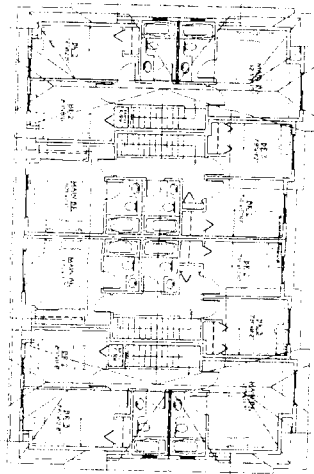
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SECOND FLOOR PLAN (BUILDING NO. 5)



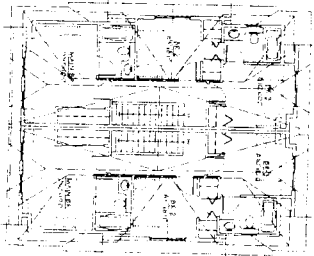
UNIT 6
SECOND FLOOR PLAN (BUILDING NO. 6)



UNIT 4
THIRD FLOOR PLAN (BUILDING NO. 4)



UNIT 5
THIRD FLOOR PLAN (BUILDING NO. 5)



UNIT 6
THIRD FLOOR PLAN (BUILDING NO. 6)

NO.	REVISION
1	ISSUED FOR PERMITTING
2	ISSUED FOR CONSTRUCTION
3	ISSUED FOR OCCUPANCY
4	ISSUED FOR AS-BUILT
5	ISSUED FOR FINAL

JAN 10 2007
DP 063 25115

PROJECT: 21 UNIT TOWNHOUSE DEVELOPMENT

ARCHITECT: IOMIZO YAMAMOTO ARCHITECT INC.

REFERENCE PLAN 10

DATE	NO.	DESCRIPTION
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