



City of Richmond
Planning and Development Department

Report to Development Permit Panel

To: Development Permit Panel
From: Brian J. Jackson, MCIP
Director of Development
Date: March 2, 2011
File: DP 09-453125
Re: Application by Paul Goodwin - GBL Architects for a Development Permit at
9388 Odlin Road (formerly 9340, 9360 and 9400 Odlin Road)

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a 245 unit (including 10 affordable housing units), four storey residential apartment condominium development at 9388 Odlin Road (formerly 9340, 9360 and 9400 Odlin Road) on a site zoned "Low Rise Apartment (ZLR24), Alexandra Neighbourhood (West Cambie)" and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to increase the maximum lot coverage from 45% to 48%.

Brian J. Jackson, MCIP
Director of Development

BJJ:dj
Att.

Staff Report

Origin

On August 11, 2010, Development Permit Panel endorsed the Development Permit Application from GBL Architects Ltd. to develop a 221 unit apartment complex that includes 10 affordable housing units, over one level of parking on the subject site at 9388 Odlin Road (formally 9340, 9360 and 9400 Odlin Road) zoned "Low Rise Apartment (ZLR24) – Alexandra Neighbourhood (West Cambie)". The minutes of that meeting are included in **Attachment 1**.

Since that time, City Council adopted an amendment to the Alexandra District Energy Utility Bylaw (No. 8641) on January 24, 2011, that expanded the service area boundary for the Alexandra District Energy Utility (ADEU) to include the subject property. The staff report contains a section that outlines how the City would process rezoning applications that were already in-stream when the ADEU Bylaw came into effect. A copy of the staff report is included with this report as **Attachment 2**.

Some in-stream applications did not anticipate the requirement to hook into the ADEU, and their projected costs did not reflect the increased costs to connect into the system at the time they made their application to the City. To continue working with the applicant on their development proposal and achieve this new civic objective, it was reasonable for the City to find ways to at least partially off-set those costs for these developers.

Out of five (5) options that were identified in the staff report, the density bonus option was the one that was recommended by staff and endorsed by Council. This option listed the calculations that resulted in an allowable increase in floor area ratio (FAR) of up to 4%. Staff have reviewed the small percentage gain and have determined that such an increase would not affect the overall built form of the in-stream proposals and would still be able to meet the objectives of the West Cambie Area Plan. This chosen option was offered to all in-stream applicants for their consideration. The applicant of the subject site is the only one to take advantage of this density bonusing provision to date.

When the ADEU amendment was adopted by Council on January 24, 2011, Council set the condition that staff bring forward a Bylaw that would amend the OCP Neighbourhood Plan (West Cambie – Schedule 2.11A) to reflect the density bonus for in-stream applications. This OCP amendment to the Neighbourhood Plan (Bylaw No. 8715) was brought to the February 22, 2011 Planning Committee meeting and the February 28, 2011 meeting of City Council, where Council gave first reading to the OCP amendment as well as an amendment Bylaw (No. 8716) to the current rezoning application for the subject site to update the rezoning considerations. A Public Hearing for these items is scheduled for March 21, 2011. Should the Public Hearing on this matter proceed, it is anticipated that second and third reading will be given on March 21, 2011.

As a condition of rezoning, a separate Servicing Agreement (SA 10-530751) is required for road construction and frontage improvements to Tomicki Avenue, as well as frontage improvements to Odlin Road, and to complete the Alexandra Way pedestrian corridor as well as service connections, water and storm upgrades and sanitary sewer.

Development Information

Please refer to attached Development Application Data Sheet (**Attachment 3**) for a comparison of the proposed development data with the relevant Bylaw requirements.

Rezoning and Public Hearing Results

The Public Hearing on both these Bylaws was held on March 21, 2011 where two written submissions were received (**Attachment 4**). Staff comments are in *bold italics*.

The first submission is from Mr. Tommy Yan of #418 - 9500 Odlin Road who thought the subject site would be park space and the introduction of a District Energy Utility facility as well as a 245 unit apartment complex goes against those plans. A development of this scale would have a negative impact on the neighbourhood and he also questions the health risks of having a energy utility on the site.

According to the Staff Report that introduced the Alexandra District Energy Utility Bylaw to the General Purposes Committee on November 15, 2010, the District Energy Utility facility is projected to be located not on the subject site, but on future park space to the south of Odlin Road, between No. 4 Road and May Drive. The intent of the Bylaw is to allow the developer to take advantage of connecting into the proposed District Energy Utility which does not pose unacceptable environmental, social or economic impacts.

The West Cambie Area Plan (Alexandra Neighbourhood) land use map has had the subject site designated for the potential development of a multi family apartment complex and not park space since it's adoption in 2006.

The second submission is from Mr. Kenneth Chan of #106 – 9500 Odlin Road who disagrees with the addition of a new District Energy Utility as it will increase risk of fire and potential risk to personal health for people living close by. The proposal may have reduce property values because the original City plan was to have green space surrounding his property, not an energy utility and a 245 unit apartment complex which will cause additional traffic, increase car accidents, parking demand in an area that is already tight for parking, increase demand for community facilities, emergency services and infrastructure while reducing greenspace.

As with the staff response on the above noted submitted comment, the District Energy Utility is not to be located on the subject site and the proposed development does fall within the land use designation outlined in the West Cambie Area Plan (Alexandra Neighbourhood).

Staff Comments

The revised design of this proposal, 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, and meets the density bonus criteria allowed under the ADEU amendment Bylaw No. 8688.

Zoning Compliance/Variances (staff comments in bold)

The plan is in general compliance with Zoning Bylaw 8500, however the applicant requests:

- 1) Increase the maximum lot coverage from 45% to 48%.

Staff supports the proposed variance as it stems from the allowable density bonus provision and is considered a relatively minor variance. The requested variance does not impact the requirements for outdoor amenity space or the overall massing of the development.

Analysis

The changes made due to the additional density bonusing allowance resulted in an overall increase in the total floor area of the proposal. This also resulted in an increase to the total number of units proposed as a reconfiguration to the units from the previous proposal took place to avoid introducing substantial changes to the form and character of the previous proposal. The applicant has made great efforts not to alter the appearance to the façade fronting the street and the public view by making most of the alterations to the units face the interior courtyard as much as possible.

The main changes to the proposal are reflected in the following tables:

	Previous	Proposed
Total Floor Area	19,271.1 m ² (207,432 sq. feet)	19,971.3 m ² (214,969 sq. feet) Increase of 700.2 m ² (7,537 sq. feet) approximately 3.6% increase
Number of Units	221	245
Parking		
Resident stalls	317	339
Visitor stalls	44	45
Affordable Housing stalls	10	10
Accessible stalls	8 (included with total)	9 (included with total)
Tandem stalls	17 (34 total)	18 (36 total)
Total	371	394

Unit Count	Previous	Proposed
1 Bedroom	32	28
1 Bedroom + Den	39	69
2 Bedroom	38	56
2 Bedroom + Den	96	92
3 Bedroom	0	0
3 Bedroom + Den	16	0
Total	221	245

This reconfiguration affected the units facing the interior courtyard of the east and west wings of both buildings in addition to the end units at the tip of each wing. As a result, the alterations added one (1) unit to each wing on all floors to the south building. This adds up to a total increase to eight (8) units to the south building. The north building added two (2) units to each wing on each floor for a total of 16 additional units to the north building. This results to a grand total of 24 additional units to the original proposal of 221 total units to 245 units.

With the number of new residential units added to the total in this complex, the number of parking stalls no longer meet the parking requirements of Zoning Bylaw 8500, with the number of proposed stalls at 394 and the required stalls at 412 (deficient by 18 stalls). To address this deficiency, the applicant has provided a Transportation Demand Management (TDM) plan that supports an allowable 10% variance (to be granted by Transportation Staff) to the number of required parking stalls by measures to enhance the environmental impact of the project. The TDM plan will require the applicant to install an electrical plug-in outlet to four (4) of their

underground parking stalls to service electric vehicles. This TDM plan has been accepted by the Transportation Engineering Division that will allow a reduction of required parking stalls from 412 to the proposed 394 if TDM measures are provided. The location of the parking stalls are shown on the attached plans.

Advisory Design Panel Comments

Given the changes to the building only affected the internal appearance of the courtyard and not the elevations exposed to the public, it was determined that the changes to the building due to the minor increase to the FAR did not warrant further review by the Panel.

Conclusions

The proposed development responds well to the West Cambie Area Plan – Alexandra Neighbourhood Guidelines and the Character Area Neighbourhood Guidelines in particular. The proposal responds well to the design challenges presented by the increase in FAR; the changes to the exterior of the building is kept within the central courtyard and the architect was able to keep the character of the building to that previously reviewed by of the Development Permit Panel. The applicant has adequately resolved staff comments associated with the changes and are recommending approval of this Development Permit application.



David Johnson
Planner

DJ:cas

Attachments

- | | |
|---------------|---|
| Attachment 1: | Minutes from the August 11, 2010 meeting of Development Permit Panel |
| Attachment 2: | Staff report for the Alexandra District Energy Utility Bylaw (No. 8688) |
| Attachment 3: | Development Application Data Sheet |
| Attachment 4: | Written submissions from the March 21, 2011 Public Hearing meeting. |

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 \$525,100.00. Based on a quotation from Senga Landscape Architecture.
- Issuance of a letter to indicate the applicant's intent to connect to the City's Direct Energy System.

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 Division at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Division (<http://www.richmond.ca/services/ttp/special.htm>).

**Excerpt from the Minutes from
The Development Permit Panel Meeting**

**Wednesday, August 11, 2010
Council Chambers
Richmond City Hall**

DEVELOPMENT PERMIT 09-453125

(File Ref. No.: DP 09-453125) (REDMS No. 2922140)

APPLICANT: GBL Architects Inc.

PROPERTY LOCATION: 9340, 9360 and 9400 Odlin Rd

INTENT OF PERMIT:

To permit the construction of a 221 unit (including 10 affordable housing units), four storey residential apartment condominium development at 9340, 9360 and 9400 Odlin Road on a site zoned "Low Rise Apartment (ZLR24), Alexandra Neighbourhood (West Cambie)"; and

To vary the provisions of Richmond Zoning Bylaw 8500 to:

- a) increase the maximum lot coverage from 45% to 46%.

Applicant's Comments

Paul Goodwin, GBL Architects Ltd., provided information regarding the proposed apartment complex, and mentioned in particular:

- to the east of the subject site is a multi-apartment Polygon Development, and to the west of the subject site is another multi-apartment Polygon development;
- the GBL development features 221 residential units; ten units are affordable; 19 units are adaptable;
- the development features two "U-shaped" buildings around a central landscaped courtyard, over one level of underground parking;
- the buildings were pushed down as far as possible, to match the Polygon buildings to the east and west, with parking at a grade of six feet; screening elements will be used to cover the six foot grade;
- all ground floor units have direct access to the Tomicki Avenue or the Odlin Road sidewalks, through individual, custom designed gates;
- street elevations have a break, to emphasize that a glazed portion of the building is treated with a window wall to provide light; and
- materials are of high quality, and include brick on the first two levels, with balconies featuring a heavy timber appearance, hardiboard is utilized to provide additional articulation to the façade on the upper levels, and all soffits and facias feature stained Cedar.

Landscape Architect, Lindsay Senga, of Senga Landscape Architecture Inc., provided the following information:

- ground level units facing the interior courtyard feature individual patios that connect to the outdoor amenity area;
- a child's play structure has been added to the outdoor amenity area; and

- a pedestrian-orientated path is situated along the western edge of the proposed development, and the eastern edge of the neighbouring Polygon development.

In response to a query from the Chair, Ms. Senga advised that the pedestrian-oriented Alexander Way, that runs through the GBL site, and adjacent Polygon site to the west, will be fully landscaped, with a combination of trees and a variety of lush plants.

Staff Comments

Mr. Jackson noted that a representative from Polygon was in attendance and he commended the working relationship between the two developers, resulting in the Alexander Way passageway, the first real permanent portion of the walkway in the neighbourhood.

With the subject development and Polygon projects on both sides, the construction of the north half of Tomicki Avenue, and the roads in the area, is falling into place to provide traffic options, to disburse traffic coming to and from the multi-family residential developments.

Mr. Jackson stated that the GBL development features a different architectural vernacular, but one that works well with the two other Polygon projects that flank it.

The only comment of concern at the July, 2010 Public Hearing was in relation to the usable play structure supplied, and the applicant has responded by adding a play structure in the outdoor amenity area, in addition to a short climbing wall.

Mr. Jackson advised that staff supports the application and the variance.

Correspondence

None.

Gallery Comments

None.

Panel Discussion

A comment was made commending the applicant for their intention to connect to the West Cambie District Energy System (DES), as this would help achieve the City's sustainability objectives.

The Chair expressed support for the project and noted that the density bonus led to 198 accessible units.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

- 1. permit the construction of a 221 unit (including 10 affordable housing units), four storey residential apartment condominium development at 9340, 9360 and 9400 Odlin Road on a site zoned "Low Rise Apartment (ZLR24), Alexandra Neighbourhood (West Cambie)"; and***
- 2. vary the provisions of Richmond Zoning Bylaw 8500 to:***
 - a) Increase the maximum lot coverage from 45% to 46%.***

CARRIED



**City of
Richmond**

Report to Committee

To: General Purposes Committee

Date: Dec. 20, 2010

From: John Irving, P.Eng. MPA
Director, Engineering

File: 10-6600-10-01/2010-
Vol 01

Re: **Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 8688**

Staff Recommendation

That:

1. the Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 8688 be introduced and given first, second and third reading, and
2. subsequent to the adoption of the Amendment Bylaw No. 8688 staff bring forward to Council an amendment to the West Cambie Area Plan that would allow for the density bonus structure outlined in **Attachment 3**.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

FOR ORIGINATING DEPARTMENT USE ONLY					
ROUTED TO:		CONCURRENCE		CONCURRENCE OF GENERAL MANAGER	
Budgets		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Sustainability Unit		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Law		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Parks Planning, Design & Construction		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Building Approvals		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Development Applications		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
Policy Planning		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
REVIEWED BY TAG		YES	NO	REVIEWED BY CAO	
		<input type="checkbox"/>	<input type="checkbox"/>	YES	NO
				<input type="checkbox"/>	<input type="checkbox"/>

Staff Report

Origin

Council has endorsed the Alexandra District Energy Utility Bylaw No. 8641 at the Regular Council Meeting of December 13, 2010. Adoption of Bylaw No. 8641 has established the regulatory framework for the Alexandra District Energy Utility (ADEU), however the service area defined therein encompasses only the two Oris developments, the Remy and Alexandra Gate.

The purpose of this report is to introduce the proposed Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 8688 (**Attachment 1**) for 1st to 3rd readings. This amendment will expand the ADEU service area to the majority of the Alexandra Neighbourhood.

This initiative aligns with Council's Term Goal #7 that states:

“Sustainability and the Environment – Demonstrate leadership in and significant advancement of the City’s agenda for sustainability through the development and implementation of a comprehensive strategy that among other objectives includes incorporating sustainability into our City policies and bylaws”.

Analysis

The air conditioning requirements of the OCP aircraft noise section that are applicable to West Cambie make district energy and specifically geothermal technology applicable as the ADEU can provide cooling for minimal additional capital cost. The proposed ADEU expansion would directly support the West Cambie Area Plan sustainability guidelines stated as follows:

“8.4 Alexandra’s Building Sustainability Guidelines - “Sustainability features of building design may be incorporated in many ways, including: a green roof or any strategy that assists in storm water management, enhanced biomass and energy efficiency; reduction of greenhouse gas (GHG) emissions through energy systems that result in lower greenhouse gas emissions and improved building mechanical systems,

8.4.1 Energy and Water Use - Design teams will be required to identify ways in which they are accomplishing optimal energy (e.g. heat, light, etc.) and water use in site planning and building design.”

Proposed Bylaw Amendment

The proposed Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 8688 is a replacement of the Schedule A service area map that will expand the ADEU service area to the majority of the Alexandra Neighbourhood where future serviceable multi-family residential and commercial development is anticipated.

ADEU Expansion Potential

To leverage economies of scale and realize the long-term social, economic and environmental benefits of the ADEU, expansion to service future development is critical. Some of the benefits of scale are as follows:

Distribution Piping Efficiency – A given length of distribution piping can service one side of the street or two sides (more development) at almost the same cost. Also doubling the size of a given length of pipe to service twice the demand only marginally increases the full cost of that pipe installation.

Peak Load Balancing – A single home may have its furnace on or off, representing a range of output from zero to 100%. Of course the furnace has to be sized to meet the highest demand (100%) even though for much of the time it will be off. As more units are added to a single system, that system can be more economically sized as the probability of everyone requiring peak demand simultaneously decreases. Other building types such as commercial and institutional also have different demand patterns, so adding these to a residential system creates further efficiencies.

Waste Heat Capture – Some industrial, commercial and retail uses actually generate significant waste heat from air-conditioning and chilling activities. With an expanded DEU this waste heat can be captured and used to meet heating demand, resulting in further reductions in system sizing and potential GHG reductions

Fuel Switching – The DEU essentially places a larger district or neighbourhood on one system, and it is relatively simple to switch the energy generation technology in that system when more economic technologies are available.

Energy Security – Establishing a local source of energy supply for a neighbourhood greatly increase the security of supply as dependency on remote generation and supply chains are decreased.

GHG Reduction – The proposed first phase of the DEU moves an on-site geothermal energy system onto City-owned property. This does not result in any greenhouse gas emission reductions immediately but does provide the infrastructure for future system connections which would reduce greenhouse gas emissions (e.g., capture and use of waste heat, displacement of conventional energy systems, etc.)

The ADEU concept and preliminary design work completed to date identifies the highest returns on energy efficiency and capital occur with higher density development and high demand users. With respect to planned building forms in the Alexandra neighbourhood, there is currently not a strong business case to service townhouses and smaller stand-alone retail units. Therefore for the purposes of defining ADEU expansion potential, staff have identified serviceable unit numbers and building areas that do not include the lower density forms.

The approximate quantities of ADEU serviceable units and building area for the undeveloped portion of the Alexandra Neighbourhood are broken down in the following tables:

Servicable Residential	Units	Building sq.ft. (millions)	Percent
<i>Oris</i>	453	0.36	15%
In Process	848	0.82	27%
Future	1811	1.63	58%
Total	3112	2.81	100%

Servicable Non- Residential			
<i>Oris</i>		0.01	1%
In Process		0.40	36%
Future		0.70	63%
Total		1.10	100%

The Oris developments (Remy and Alexandra Gate) represent 15% of the residential and 1% of the non-residential square feet of serviceable building that is anticipated for the Alexandra Neighbourhood under the current OCP. The remaining in-stream and future developments represent 85% of residential and 99% of non-residential totals.

In terms of combined building square feet, Oris represents 360,000 sq.ft. while in-process and future development represents 3.9 million sq.ft. Therefore expansion of the ADEU service area as proposed in the Amendment Bylaw No. 8688 represents an approximate ten-fold increase in the size of the utility over the first phase.

The ADEU expansion is anticipated to support the achievement of significant ecological health benefits at a broader scale (more local energy systems means lower expansions of centralized systems, greater opportunity to re-use waste and greater efficiencies which again reduce resource consumption). Based on preliminary calculations, use of the ADEU for heating and cooling of the Remy and Alexandra's 453 units will result in an estimated avoidance of 200 to 600 Tonnes of GHG generation annually. At full build-out of the proposed expanded service area, the potential avoidance of GHG generation would be 2,000 to 6,000 Tonnes annually, which is equivalent to removing 700 to 2,000 vehicles from the road.

Proposed Expansion Preliminary Concept Design

Staff engaged Hemmera Energy Ltd. to complete preliminary concept design work for the Alexandra District Energy Utility (ADEU). The first phase of the ADEU will use ground source heat pump (GSHP) technology for the primary renewable energy source. Underground well and piping infrastructure will be sited on park land between Odlin Rd and Cambie Rd. (the Greenway) and the Energy Centre building would be sited on park land south of the Greenway.

The design concept for the future build-out of the ADEU includes two distribution pipe loops that would service the northern and southern areas of the neighbourhood and expansion of the Energy Centre building.

There exists the potential to expand the geothermal well-field through parkland, road rights-of-way, or other publicly held lands to service the fully expanded ADEU, however the best technology and configuration would be defined through analysis at each expansion phase. Renewable energy source options to be considered would include open-loop geothermal, biomass, sewage heat recovery, and interim high efficiency gas boilers.

Consultation

Staff have consulted with UDI, local landowners and developers and the City’s Advisory Committee on the Environment. Copies of Bylaw No. 8641 and the preliminary concept design report have been distributed to these groups for review and comment. The main concern identified to date is the potential for increased construction costs resulting from the need to install DEU compatible in-building systems. Issues and responses are summarized as follows:

Stakeholder	Issue Raised	Response
Developers and Landowners	Installing in-building hydronic systems that are DEU compatible represents an increased construction cost over conventional systems	Staff have identified options for addressing this in the following section.
Developers and Landowners	Will the ADEU be as reliable as conventional electric and gas energy sources?	The geothermal technology is proven and will have back-up systems in place to maximize continuous performance. DEU systems typically have lower failure rates than gas and electrical systems.
Developers and Landowners	The flat rate service charge defined in the current bylaw does not provide the opportunity for customers to save through conservation.	The flat rate as adopted in the current ADEU Bylaw is intended to be a temporary “placeholder” rate that provides certainty of cost to new users. After a short monitoring of the first phase system, staff will bring forward options for amended rate structures that would include variable kilowatt-hour charges.
SmartCentres	Retail and commercial leasees are accustomed to direct metering and energy billing.	Staff are continuing to work with SmartCentres and consultants on defining the optimal servicing strategy for the various users that could exist on the SmartCentres site. The current ADEU Bylaw permits a variety of servicing configurations, however should an acceptable solution be defined that would not be permitted under the current bylaw, an amendment would be brought forward for Council’s consideration.

In-Stream Applications

There are six active rezoning applications at various stages of processing (listed in **Attachment 2**) within the proposed ADEU expanded service area. The in-stream developers purchased the properties and significantly advanced development concepts as part of their applications. The addition of the cost of ADEU represents an unforeseen development cost and it is reasonable to find ways to at least partially off set the increased cost for those developers with projects in-stream.

In the absence of a regulated service area, Planning staff have been negotiating commitments from developers to be serviced from the ADEU and have been accelerating application processing for those that commit. While consultation on the ADEU concept has been ongoing for 6 months, the proposed bylaw amendment will be effective immediately upon adoption at 4th reading. At that point ADEU servicing would be mandatory for any applicable development without a building permit, impacting those developers that have in-stream development applications.

There are various in-building hydronic systems that a developer can choose which are compatible with ADEU servicing. The additional construction cost to install any given hydronic system over the cost to install conventional heating and cooling systems will therefore vary depending on the specific hydronic system chosen. Additional construction costs estimates have ranged from \$1,500 to over \$5,000 per residential unit.

Four options for mitigating this cost impact to those with in-stream applications are presented for consideration as follows:

Option 1 – No Mitigation (Not Recommended)

Under this option there would be no consideration of financial or other relief provided to developers with in-stream applications. Other established DEU's such as Lonsdale Energy Corporation and the South-East False Creek Neighbourhood Energy Utility have not compensated developers for additional in-building costs. The recommendations in this staff report do not include any mitigation for those properties that do not have a development application in-stream.

There is long term value accrued to the ADEU from servicing as much development as possible within the servicing area as early as possible, hence the staff recommendation to adopt the proposed bylaw amendment. In consideration of the impacts to in-stream developments created by bringing this amendment forward in a timely manner, Option 1 is not recommended.

Option 2 -- Revise Development Cost Charges (Not Recommended)

Development Cost Charges (DCCs) are levied to fund the construction of infrastructure necessary to support development. The City cannot waive DCC charges established in the DCC Imposition Bylaw. The DCC program could be revised to permit some benefit, however this would require revision to the bylaw which is a lengthy process that ultimately requires Provincial approval. Any reduction in DCC income would restrict the City's ability to deliver the necessary capital program.

Developers also receive DCC credits for the construction of DCC works under servicing agreement. In many cases these credits can exceed the DCC charges, so there is effectively no remaining DCC charge left to lower. This would create variable benefit to each developer depending on the extent of DCC works they are required to construct. For these reasons revising the DCCs is not recommended.

Option 3 – Refund of Sewer Charge (Not Recommended)

In 2007 the City entered a “latecomer” agreement with Polygon under which the City and Polygon are constructing storm and sanitary sewer works that benefit lands in the Alexandra Neighbourhood, and the costs of these works are recovered through benefit charges applied to new developments in the area.

A key component of these works currently being constructed by the City is the No. 4 Rd Drainage Pump Station. This project is fully funded through the capital program but has also received grant support through the Federal/Provincial Flood Protection Program. The value of this grant is ultimately dependent on approved eligible costs, but is currently estimated to be \$2 Million or greater.

The City’s portion of the benefit charges could be refunded to a total amount equivalent to the grant with no impact to the works program or the front-ender agreement, however this refund would have to be distributed to all developments within the benefit area that develop within the agreement term (15 years).

This would result in a refund amount of approximately \$600 per residential unit and \$0.40 per sq.ft. of commercial building as shown in the following table:

	Benefit Charge	Proposed Refund Amount	Est. Total Value of refund for the 6 in-stream applications
Multi-family	\$1,836.72 + interest per unit	\$600 per unit	\$498,000
Commercial	\$1.24 + interest per sq.ft.	\$0.40 per sq.ft.	\$156,000
Total			\$654,000

The impact of the refund at this level is low, and with the benefit distributed to all future development in the Alexandra Neighbourhood, there is no relative benefit to the in-stream applicants. For these reasons Option 3 is not recommended.

Option 4 – Unit Owner Grant (Not Recommended)

The ultimate owners of the constructed units could be awarded a City grant valued at \$2,000 per unit. The grant would be provided to owners at the time of occupancy. Corporations or other business entities would not be eligible for the grant, only individual persons who are unit owners.

There is \$6 M in available borrowing from the water utility reserve of which \$4 M is allocated to the ADEU 1st Phase construction. The remaining \$2 M could be used to fund the \$2,000 unit owner grant. The total number of potential eligible units would be approximately 900, therefore the total grant program cost would be \$1.8 M. Based on current known developer schedules, the grants would be likely be paid out over a period of 3 to 6 years. The borrowed amount plus interest would be repaid to the water utility reserve from ADEU revenue or other non-City grant sources.

The unit owner grant would only be of indirect benefit to developers as this value would have to be realized through potential increased unit value and marketability.

Option 5 – Density Bonus (Recommended)

Density bonuses are of significant value to most developers in that additional units can be constructed and sold on the same land base. Staff could bring forward to Council for consideration an amendment to the West Cambie Area Plan that would provide increased density bonuses for the in-stream applications.

The proposed density bonus structure is outlined in **Attachment 3** that would raise allowable floor area ratios (FAR's) up to 4%. This level of proposed increase has been calculated to provide value equivalent to the value that would be provided under Option 3 – Refund of Sewer Charge. Staff have reviewed the proposed small increase in density and find that in all cases it can be deployed without changing the overall built form and character of the West Cambie Plan.

While the 5 residential and commercial projects would benefit from this bonus, the FNDA (Ismaili Jamatkhana) application would not because the Area Plan allows a maximum FAR of 1.25 and their project is at 0.14, so they are not close to fully using their currently available density. Given this situation, in this one particular case staff recommend that the City reimburse engineering costs related to FNDA district energy up to \$50,000.

Developers who choose to take advantage of the density bonus outlined herein, will be asked to enter into agreements that would, in addition to the bylaw, contractually commit the developer to hook-up to the ADEU. Also, in order to take advantage of the density bonus, rezoning bylaws may need amendment and, depending on the stage of the rezoning application, an additional public hearings may be required.

Should the proposed bylaw amendment be supported, it is recommended that staff be directed to bring forward an amendment to the West Cambie Area Plan to provide the density bonus structure outlined in **Attachment 3**.

Financial Impact

Expansion of the ADEU service area will create future capital funding requirements for additional ADEU infrastructure as well as generate return on investment.

\$4 M for the ADEU 1st Phase has been allocated in the 2011 Capital Budget. This \$4 M is funded from a total of \$6 M in available borrowing from the water utility reserve. Based on the known development schedules of in-stream applications, it is likely that the total \$6 M will be sufficient to fund any required 1st Phase expansion of the ADEU through 2011.

All development schedules are ultimately controlled by developers, projects are advanced or halted at various stages depending on market conditions and a variety of business considerations. At the current pace of development it is estimated that the Alexandra Neighbourhood could be fully developed by 2020, as shown in the following table:

	Building sq.ft.	Est. Occupancy Dates
Oris Developments (Remy and Alexandra Gate)	0.36 M	2011-2013
In-stream applications	1.21 M	2012-2016
Future buildable	2.32 M	2013-2020

Additional capital funding would be required in 2012 and beyond for additional expansion phases that would occur in step with development. Through extrapolation of the 1st phase costs, the total additional capital cost to build-out the ADEU is estimated at approximately \$24 Million in 2010 dollars, which would bring the total estimated capital cost of the ADEU to \$30 Million. The timing of these capital expenditures would depend on the development schedules, but is currently estimated as shown in the following table:

	Est. year of implementation	Est. Capital Cost (2010 dollars)	Cumulative total sq.ft. of buildings serviced
1 st Phase	2011-2012	\$6 M (funded)	0.7 M sq.ft.
2 nd Phase	2014	\$6 M	1.4 M sq.ft.
3 rd Phase	2017	\$10 M	2.7 M sq.ft.
4 th Phase	2020	\$8 M	3.9 M sq.ft.
Total		\$30 M	3.9 M sq.ft.

As with the 1st phase capital costs, all of these costs would be ultimately recovered through user rates and charges.

As additional phases are identified in detail, funding opportunities would be explored and brought forward to Council for consideration. Future funding sources could include provisional account allocation, borrowing from accumulated reserves, or grant funding, however at this stage these funding sources are either limited or uncertain.

Given that the ADEU will generate revenue and have full cost recovery over time, debt financing of future capital costs will likely be the most prudent and viable strategy. Long-term debt financing can be implemented by the City through approval by the electors and the Inspector of Municipalities or directly through a wholly City owned corporate entity. A financial analysis of the full build-out based upon debt financing to fund future capital infrastructure for expansion of the ADEU (based on the estimated schedules above and debt financing of future phases) is provided in **Attachment 4**. This analysis estimates a 14 year payback on the initial capital investment with a rate of return above 12%.

The financial analysis provided in Appendix 4 represents future-oriented financial information, which contains assumptions and estimates that are based upon current information available and known to staff at this time. These assumptions reflect current business and economic conditions and planned courses of action that staff believes to be the most probable. However, as with all such assumptions, there is a measure of uncertainty surrounding them. This uncertainty increases as the forecast horizon extends. Therefore, the actual results achieved for the fiscal years covered in the accompanying future-oriented financial information will vary from the information presented, and the variations may be material.

At the appropriate time when capital funds are required for expansion of the ADEU, staff will bring forward a report to Council with funding alternatives and recommendations.

Conclusion

Expansion of the ADEU will represent one of the most significant advancements to date towards meeting the City's sustainability and GHG reduction goals. It is recommended that the Alexandra District Energy Utility Bylaw No. 8641 Amendment Bylaw No. 8688 be introduced and given first, second and third reading.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

Jl:jp

Att: (4)

**Attachment 1 – Proposed Alexandra District Energy Utility Bylaw No. 8641 Amendment
Bylaw No. 8688**

Attachment 2 – In-Stream Applications

Rezoning Application	Address	Project Description	Applicant	Project Status
RZ 08-410760	9411/9371 Alexandra Rd	139 dwelling units and 369m ² of commercial space	0797460 BC LTD	RZ & DP adopted BP not yet submitted
RZ 04-270168	9560/80 Cambie Rd 9531/51/71 Odlin Rd	Assembly Use for Ismaili Temple	FNDA	RZ bylaw @ 3 rd Reading
RZ 09-453123	9340, 9360, 9400 Odlin Rd	221 dwelling units	Paul Goodwin GBL Architects	RZ bylaw @ 3 rd Reading
RZ 10-528877	4660, 4680, 4700, 4720, 4740 Garden City Rd, 9040, 9060, 9080, 9180, 9200, 9260, 9280, 9320, 9340, 9360, 9400, 9420, 9440, 9480, 9500 Alexandra Rd	32,860m ² 353,700 ft ² commercial floor area	Smart Centres	Staff Review Not ready to move forward to PC
RZ 10-537689	9331/9351/9371/9391 /9411 Odlin Rd	approx. 359 dwelling units	Polygon	RZ Bylaw @ 1 st reading. Scheduled for Dec 20 Public Hearing
RZ 10-534751	9251/9291 Alexandra Rd	approx 131 dwelling units and 381m ² of commercial	Fred Adab Architecture	Staff Review Very close to moving forward to PC

Attachment 3 – Density Bonus

As a proposed method for partially offsetting the in-stream developers' costs of providing in-building ADEU compatibility, the density bonus structure is outlined in this attachment.

- Background:
 - Land values in West Cambie for lands permitting residential use is \$90 psf of site area.
 - At FARs of 1.5, this equates to \$60 psf buildable, and at 1.7 FAR \$53 psf buildable.
 - See the example below in mathematical sequence.
 - If we assume, for example, that Polygon is building to 1.7 FAR, then at their "sewer benefit charge" of \$657,546 and at a buildable land rate of \$53 psf then the additional square footage they need to cover the refund is 12,407 sf.
 - Based on the total proposed project before bonus of 351,000 sf, the additional square footage is an increase of 3.53%, thus the total FAR with bonus would be 1.76.
 - There is a negligible difference in percentage increase required dependent on the actual FAR being proposed.
 - Therefore, a suggestion may be to simply provide a 3.75% to 4% increase in density to account for any arguments regarding land value - current versus what they paid for the land, thus the base 1.7 FAR becomes 1.768.

- The incentive will apply only to the in-stream projects listed in **Attachment 2**. The proposed bonus would result in new FAR allowances as follows:

In Process	Approved/ Proposed FAR	Additional Square Footage	New Total FAR
Residential			
- Paul Goodwin Architects	1.7	7,624	1.76
- 0797460 BC Ltd	1.6	4,627	1.66
- Polygon	1.68	12,275	1.74
- Fred Adab Architecture	1.5	4,095	1.55
Commercial			
- SmartCentres	0.61	3,026	0.615

Developers who choose to take advantage of the density bonus outlined herein, will be asked to enter into agreements that would, in addition to the bylaw, contractually commit the developer to hook-up to the ADEU. Also, in order to take advantage of the density bonus, rezoning bylaws may need amendment and, depending on the stage of the rezoning application, an additional public hearings may be required

Attachment 4 - Financial Analysis for Build-Out of ADEU to service 3.9 million sqft

	2010	2011	2012	2013	2015	2018	2021	2040
Year (Date)	0	1	2	3	5	8	11	30
Year (Count)								
Initial Capital Outlay								
(\$6 M borrowed from water utility reserve)	(\$ 3,200,000)	(\$2,800,000)	\$	-	\$	-	\$	-
Revenue:								
Sq ft. Serviced (max 3.9 million)	-	180,000	363,000	715,000	1,400,000	2,740,000	3,907,000	3,907,000
User Fee per Sq ft. Serviced	\$ 0.96	\$ 0.96	\$ 1.00	\$ 1.04	\$ 1.12	\$ 1.26	\$ 1.42	\$ 2.99
Annual Revenue	\$ -	\$ 86,400	\$ 271,066	\$ 559,663	\$ 1,403,830	\$ 3,120,337	\$ 5,551,982	\$ 11,697,188
Expense:								
Op. Exp as % of Revenue				50%	50%	50%	50%	50%
Annual Expense	\$ -	(\$ 60,000)	(\$ 100,000)	(\$ 279,832)	(\$ 701,915)	(\$ 1,560,169)	(\$ 2,775,991)	(\$ 5,848,594)
Annual Net Revenue	\$ -	\$ 26,400	\$ 171,066	\$ 279,832	\$ 701,915	\$ 1,560,169	\$ 2,775,991	\$ 5,848,594
Oris Revenue Share Payment								
Phase 2 - \$6 M (2010 \$) Debt Repay	(\$ 13,200)	(\$ 85,533)	(\$ 136,541)	(\$ 147,683)	(\$ 166,123)	(\$ 186,866)	(\$ 186,866)	(\$ 393,699)
Phase 3 - \$10 M (2010 \$) Debt Repay				(\$ 476,000)	(\$ 476,000)	(\$ 476,000)	(\$ 476,000)	(\$ 476,000)
Phase 4 - \$8 M (2010 \$) Debt Repay					(\$ 791,000)	(\$ 791,000)	(\$ 791,000)	(\$ 791,000)
Total Annual Debt Repayment	\$ -	(\$ 13,200)	(\$ 85,533)	(\$ 136,541)	(\$ 623,683)	(\$ 1,433,123)	(\$ 2,083,866)	(\$ 2,290,699)
Net Annual Cash Inflow (Outflow)	\$ -	(\$ 3,186,800)	(\$2,714,467)	\$ 143,290	\$ 78,232	\$ 127,045	\$ 692,125	\$ 3,557,896
Cumulative Cash Inflow (Outflow)	\$ -	(\$ 3,186,800)	(\$5,901,267)	(\$5,757,977)	(\$ 5,331,757)	(\$ 4,392,420)	(\$ 2,149,032)	\$ 36,318,008
Discount Rate	5%	5%	5%	5%	5%	5%	5%	5%
PV of Cashflow	\$ -	(\$ 3,035,048)	(\$2,462,102)	\$ 123,780	\$ 61,297	\$ 85,989	\$ 404,671	\$ 823,217

NPV of Inv. Over Asset's Life	\$12.8 M
Payback Period	14 years
Internal Rate of Return	12.25%

Assumptions:
 Interest rate on debt: 4.5%
 Term: 25 yrs
 Rate Increase: 4% per year



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 09-453125

Attachment 3

Address: 9388 Odlin Road (Formally 9340, 9360 and 9400 Odlin Road)

Applicant: GBL Architects - Paul Goodwin Owner: Chibo Capital Holdings Inc.

Planning Area(s): West Cambie Area Plan (Alexandra Neighbourhood)

	Existing	Proposed
Site Area:	12,154.4 m ²	11,354.6 m ²
Land Uses:	Single Detached Residential	Apartment residential
OCP Designation:	Residential Area 1 – 1.50 base FAR (1.70 max. FAR for affordable housing). Townhouse, low rise apartments (4-storey typical) (1.76 max. FAR for connecting to the Alexandra District Energy Unit)	No change
Zoning:	Single Detached (RS1/F)	Low Rise Apartment (ZLR24), Alexandra Neighbourhood (West Cambie)
Number of Units:	1 per lot	245 units (Includes 10 units for affordable housing)

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	1.50 base FAR (maximum 0.2 FAR density bonus with providing affordable housing) (additional 4% maximum density bonus for connecting to the Alexandra District Energy Unit)	1.76 FAR (10 affordable housing units to be constructed as provided) (connection to the Alexandra District Energy Unit)	none permitted
Lot Coverage:	Max. 45%	48%	3% (340.6 m ²)
Setback – North Front Yard: (Odlin Road)	Min. 6.0 m	6.0 m	none
Setback – West Side Yard:	Min. 6.0 m	7.50 m	none
Setback – East Side Yard:	Min. 6.0 m	6.0 m	none
Setback – South Front Yard: (Tomicki Avenue)	Min. 6.0 m	6.0 m	none
Height (m):	Max. 20.0 m	17.9 m	none

	Bylaw Requirement	Proposed	Variance
Lot Size:	N/A	N/A	N/A
Off-street Parking Spaces – Regular	353 Resident 49 Visitor 10 Affordable Housing Total: 412 stalls 371 stalls if TDM measures are provided	339 Resident 45 Visitor 10 Affordable Housing Total: 394 stalls	none if TDM measures are provided
Off-street Parking Spaces – Accessible:	9 (included in total)	9 (included in total)	none
Small Car Ratio	Min. 50% to be standard size spaces	56.8% standard size stalls	none
Tandem Parking Spaces	Permitted	18 tandem spaces 36 stalls	none
Amenity Space – Indoor:	Min. 70 m ²	317.6 m ²	none
Amenity Space – Outdoor:	Min. 1,470.0 m ²	2,046.0 m ²	none



No. DP 09-453125

To the Holder: PAUL GOODWIN (GBL ARCHITECTS)

Property Address: 9388 ODLIN ROAD
 (FORMALLY 9340, 9380 AND 9400 ODLIN ROAD)

Address: 140 – 2034 WEST 11TH AVENUE
 VANCOUVER, BC V6J 2C9

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. The "Richmond Zoning Bylaw 8500" is hereby varied to:
Increase the maximum lot coverage from 45% to 48%.
4. 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 #21 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$525,100.00 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.
7. 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 09-453125

To the Holder: PAUL GOODWIN (GBL ARCHITECTS)
Property Address: 9388 ODLIN ROAD
(FORMALLY 9340, 9380 AND 9400 ODLIN ROAD)
Address: 140 – 2034 WEST 11TH AVENUE
VANCOUVER, BC V6J 2C9

8. 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

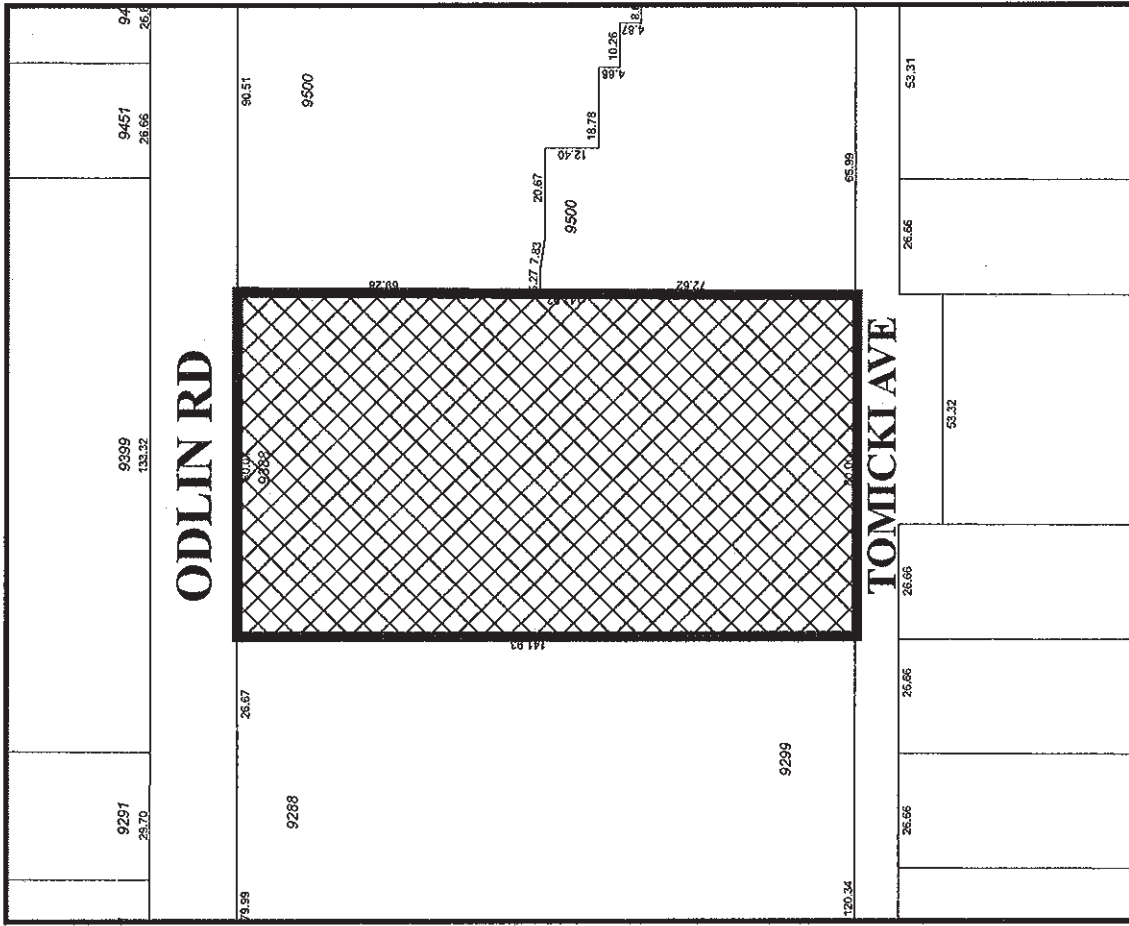
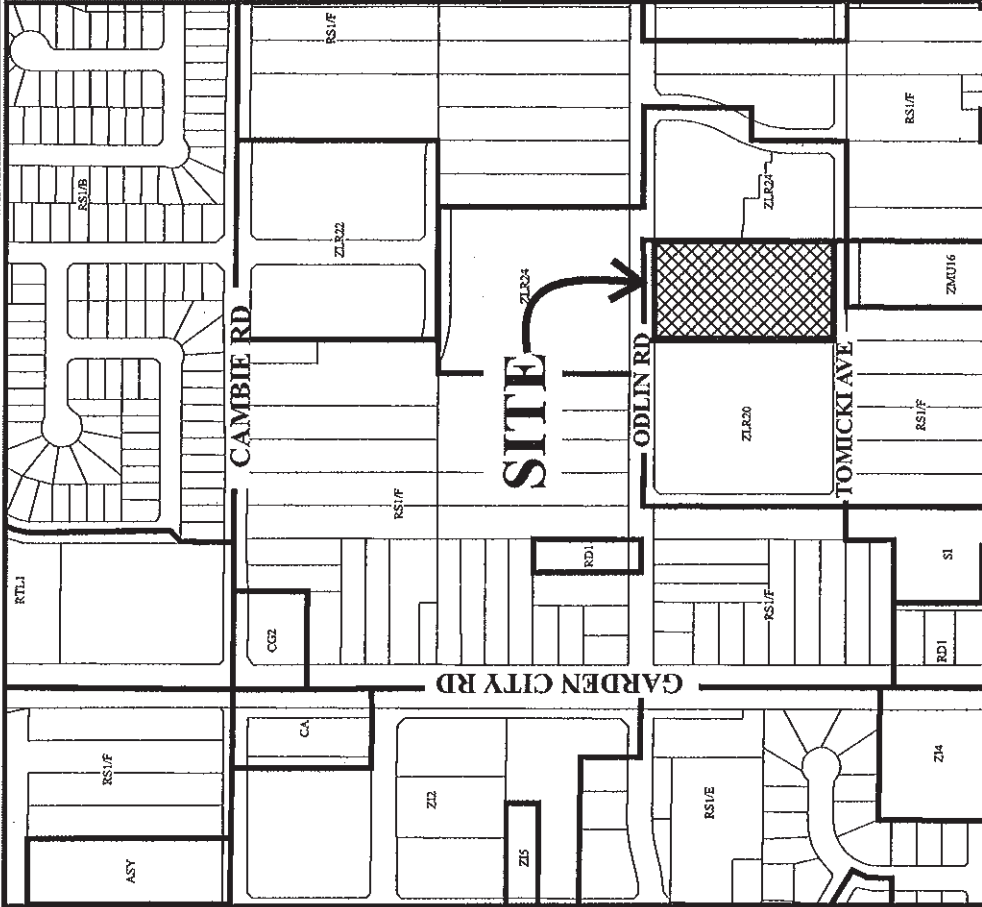
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF

MAYOR



City of Richmond



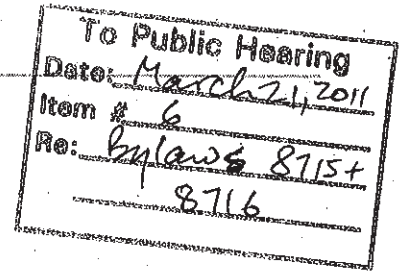
DP 09-453125 SCHEDULE "A"

Original Date: 01/28/09
 Revision Date: 03/21/11
 Note: Dimensions are in METRES

ATTACHMENT 4

MayorandCouncillors

From: City of Richmond Website [webgraphics@richmond.ca]
Sent: March 21, 2011 1:55 PM
To: MayorandCouncillors
Subject: Send a Submission Online (response #547)



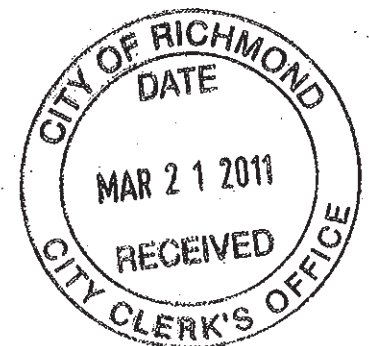
Send a Submission Online (response #547)

Survey Information

Site:	City Website
Page Title:	Send a Submission Online
URL:	http://cms.city.richmond.bc.ca/Page1793.aspx
Submission Time/Date:	3/21/2011 1:53:55 PM

Survey Response

Your Name:	Tommy Yan
Your Address:	#418- 9500 Odlin Rd, Richmond, BC
Subject Property Address OR Bylaw Number:	8715/ 8716
Comments:	I am the owner of 9500 Odin Road. I won't be able to attend the hearing tonight at 7:00. But, I am against the Bylaws 8715 and 8716 which is unfair to existing owner at Cambridge Park. We have no knowledge of this two subjects before I purchased this. I thought that area are supposed to be a park and it will limit our recreation area if the Districk Energuy Utility was built in that area. It is really unfair for residents in this area and it might also raise possible health corncern for those who has implanted pace maker as it might be too close to the residents. Also, I am not sure if the community is well planned for such a big increase in demand for traffic, health service, etc. So, I would like to voice this up.



To Public Hearing	
Date:	March 21, 2011
Item #	6
Re:	Bylaws 8715 + 8716

MayorandCouncillors

From: City of Richmond Website [webgraphics@richmond.ca]
Sent: March 21, 2011 1:14 PM
To: MayorandCouncillors
Subject: Send a Submission Online (response #546)

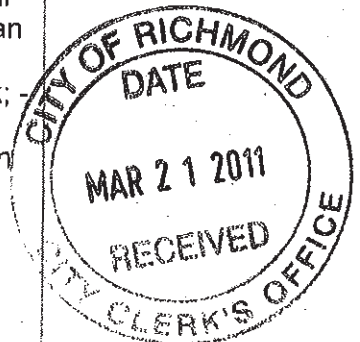
Send a Submission Online (response #546)

Survey Information

Site:	City Website
Page Title:	Send a Submission Online
URL:	http://cms.city.richmond.bc.ca/Page1793.aspx
Submission Time/Date:	3/21/2011 1:13:11 PM

Survey Response

Your Name:	Kenneth Chan
Your Address:	106 - 9500 Odlin Rd, Richmond, BC, V6X 1C9
Subject Property Address OR Bylaw Number:	106 - 9500 Odlin Rd, Richmond, BC, V6X 1C9
Comments:	<p>I'm living at CambridgePark on 9500 Odlin Rd, Richmond, BC. I won't be able to attend to tonight's meeting but I have concerns regarding Bylaws 8715 and 8716. I understand there will be adding a new District Energy Utility (ByLaws 8715) between Meridian gate and Camabridge Park building due to an additional 245 units apartment complex (ByLaws 8716) in this area and I would like to voice out that I disagree for these 2 proposals as a neighbor living in this area (ByLaws 8715) Adding new District Energy Utility will - It will increase the risk for this area such as fire. - It may have potential risk to our health for people living close-by an energy utility. - Reducing the green area. - Direct affect house price at Cambridge Park; - I bought this property was because the original city planning where it has a lot green areas, trees and parks surrounding this building and in this area not because of an unexpected District Energy Utility. (ByLaws 8716) Adding an additional 245 unit apartment complex in this packed area will cause a lot of problems. - It will cause</p>



additional traffic usage and causing traffic jams; increase chance of car accidents. -
Increasing parking usage on street which is already very limited at this moment. -
Increasing usage of community facilities for this area such as library and parks -
Increasing need of hospital, fire and police. It may also increase the crime rate due to increasing of populations. - Increasing the amount of infrastructure such as road expansion and increasing water pipes; etc. -
Decreasing the green area. - It will decrease the housing prices for this area due to increasing of population density and it will be direct affecting people who are living in this area as well as our property investment.
Again, I bought this property was because of the original city planning, low density and lot of green areas, parks, trees that are surrounding this building, CambridgePark and in this area Thank you for your kind consideration.

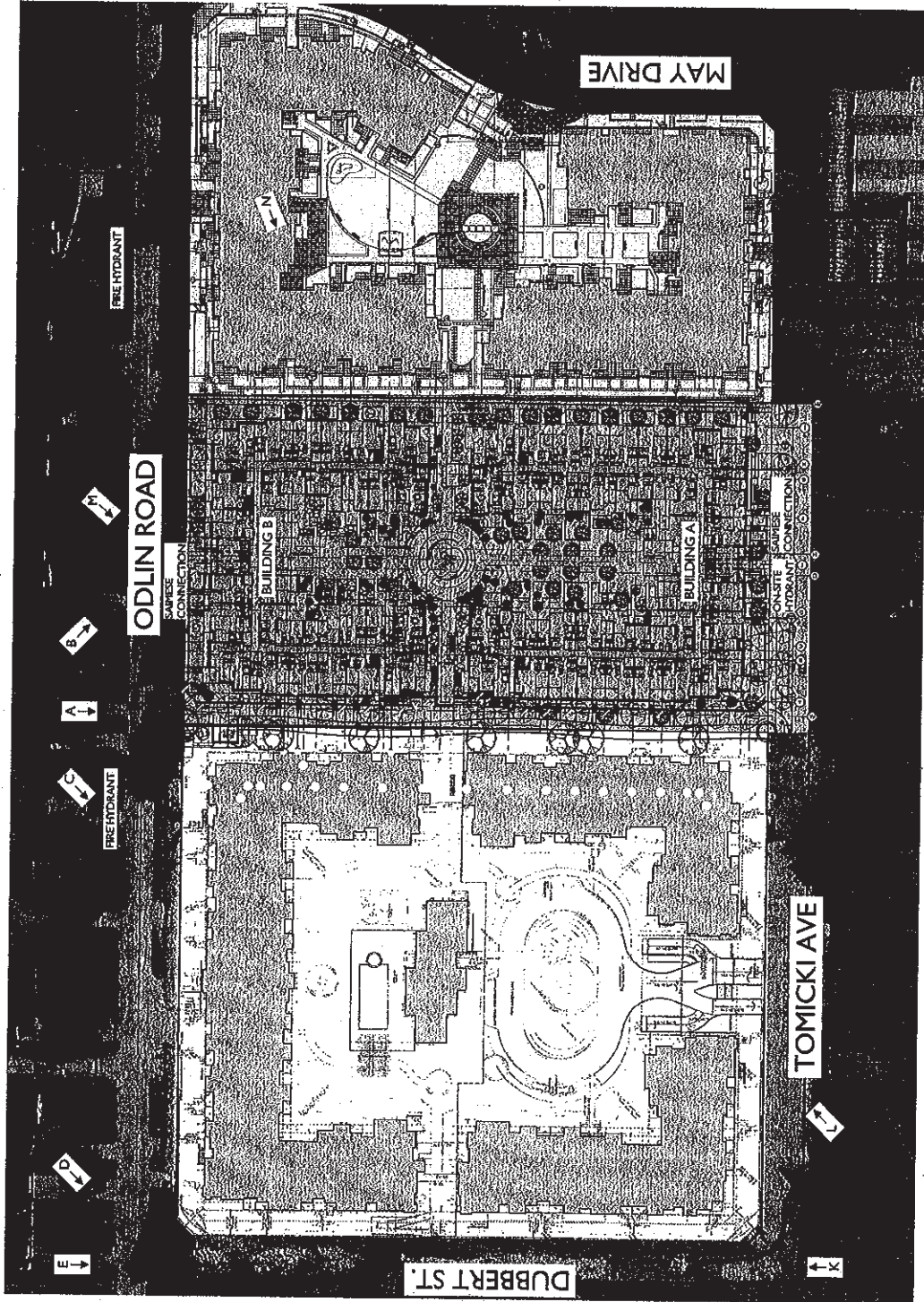
245 RESIDENTIAL UNITS AT GOLDEN ROAD

DP 09453125
PG. #1

gBT



Signature



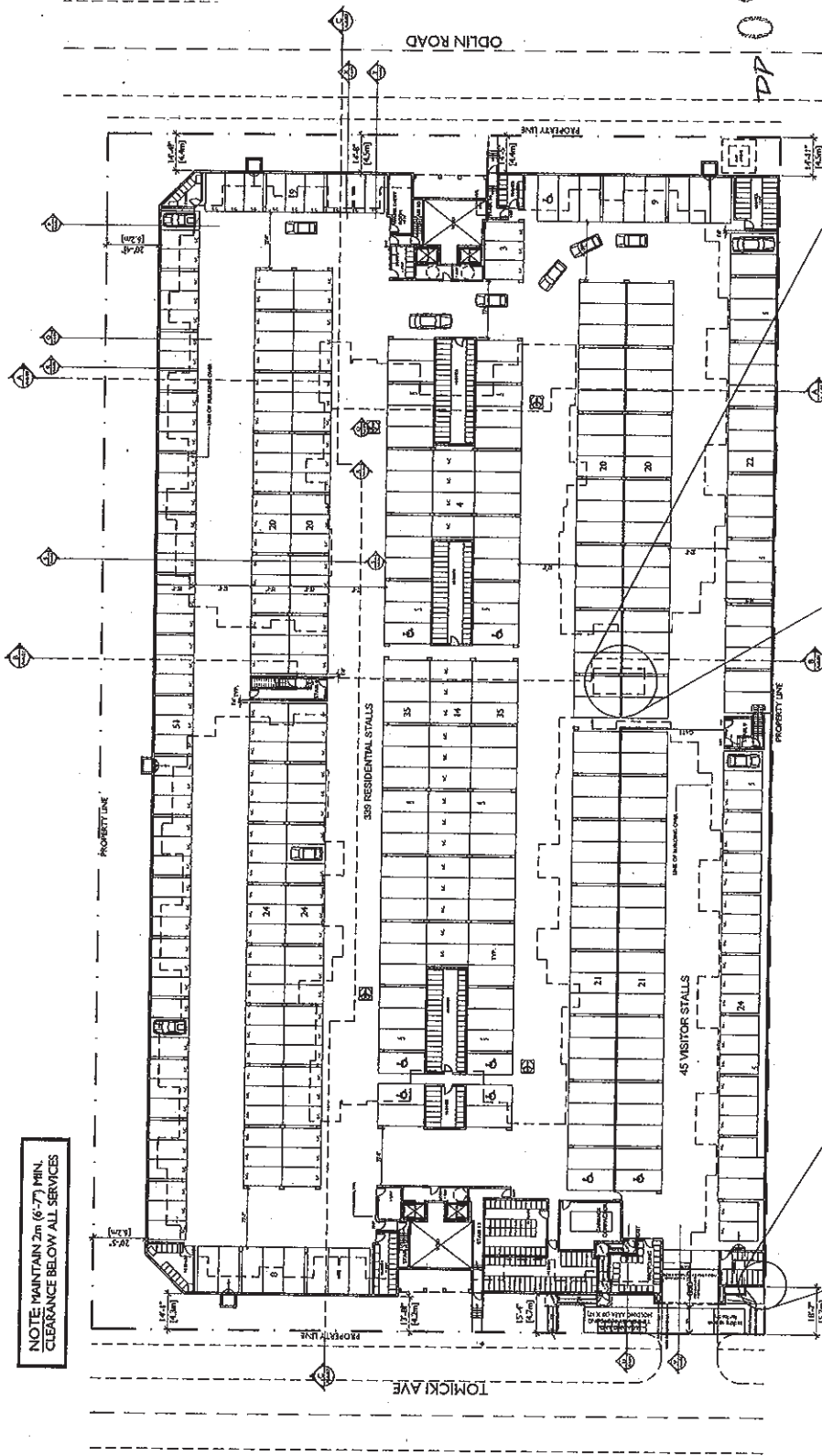
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DESCRIPTION	
BY	
CHECKED	
DATE	

VILLA ESPERANZA
24 UNIT DEVELOPMENT
245
RISK EVALUATION REPORT
FOR ESPERANZA HOMES
CONTEXT PLAN 2

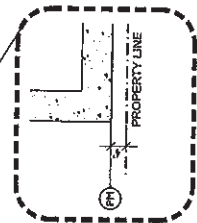
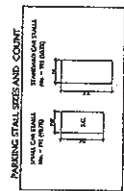
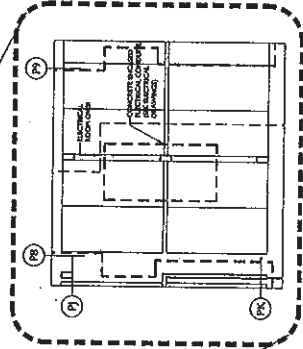
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A-0.03

DP 09453125
Pg. #3



NOTE: MAINTAIN 2m (6'-7") MIN. CLEARANCE BELOW ALL SERVICES



DP 09453125
Pg. #5

VILLA ESPERANZA
241 UNIT DEVELOPMENT
245
ROAD, 1800 ODLIN ROAD
FOR ESPERANZA HOMES
PARKING PLAN
NO. 0831
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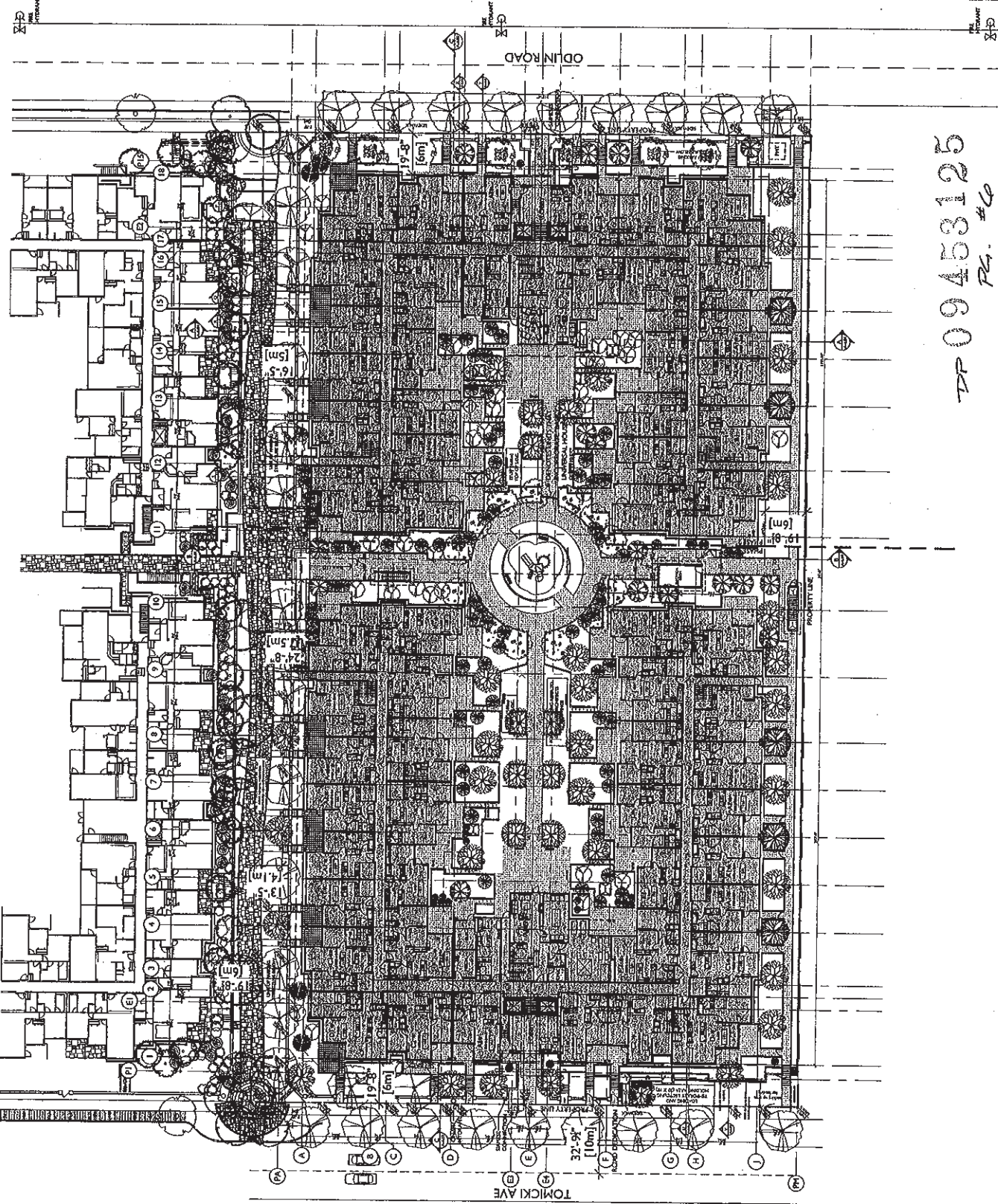


PROPOSED	...
EXISTING	...
...	...
...	...

VILLA ESPERANZA
 LIGHT DEVELOPMENT
 2727
 2000 sq. ft. per lot
 2000 sq. ft. per lot
 2000 sq. ft. per lot

GROUND FLOOR PLAN
 0821

A-3.01



DR 09453125
 Pg. #4



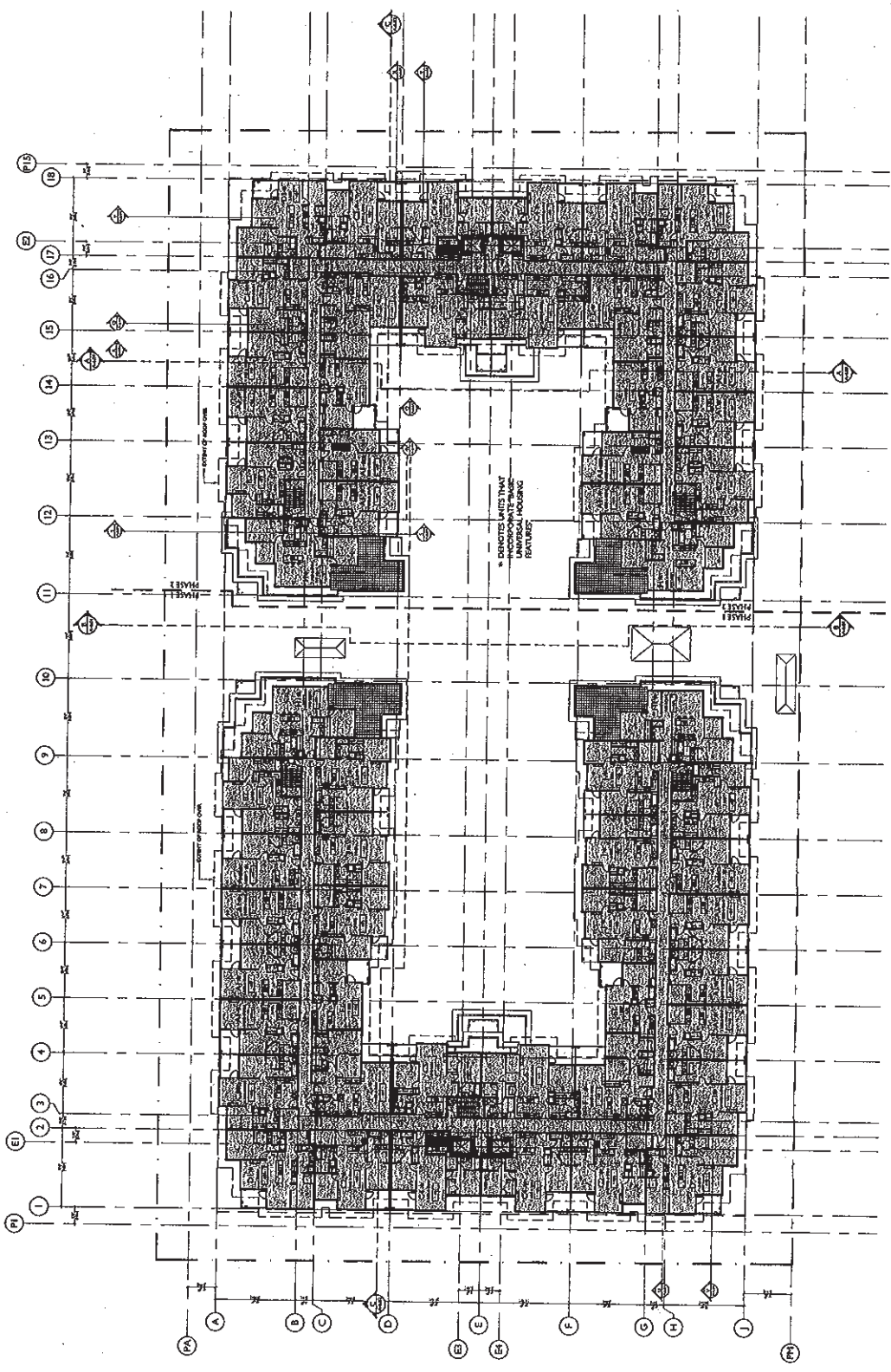
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2	REVISED PER COMMENTS
3	REVISED PER COMMENTS
4	REVISED PER COMMENTS
5	REVISED PER COMMENTS

VILLA ESPERANZA
 24 UNIT DEVELOPMENT
 24-55
 10000 S. 100TH AVENUE, SUITE 100
 MIAMI, FLORIDA 33156
 FOR ESTHETIC PURPOSES

FOURTH FLOOR
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 CHECKED BY: [Name]
 SCALE: AS SHOWN

A-3.03



DP 09453125
 Pg. #8

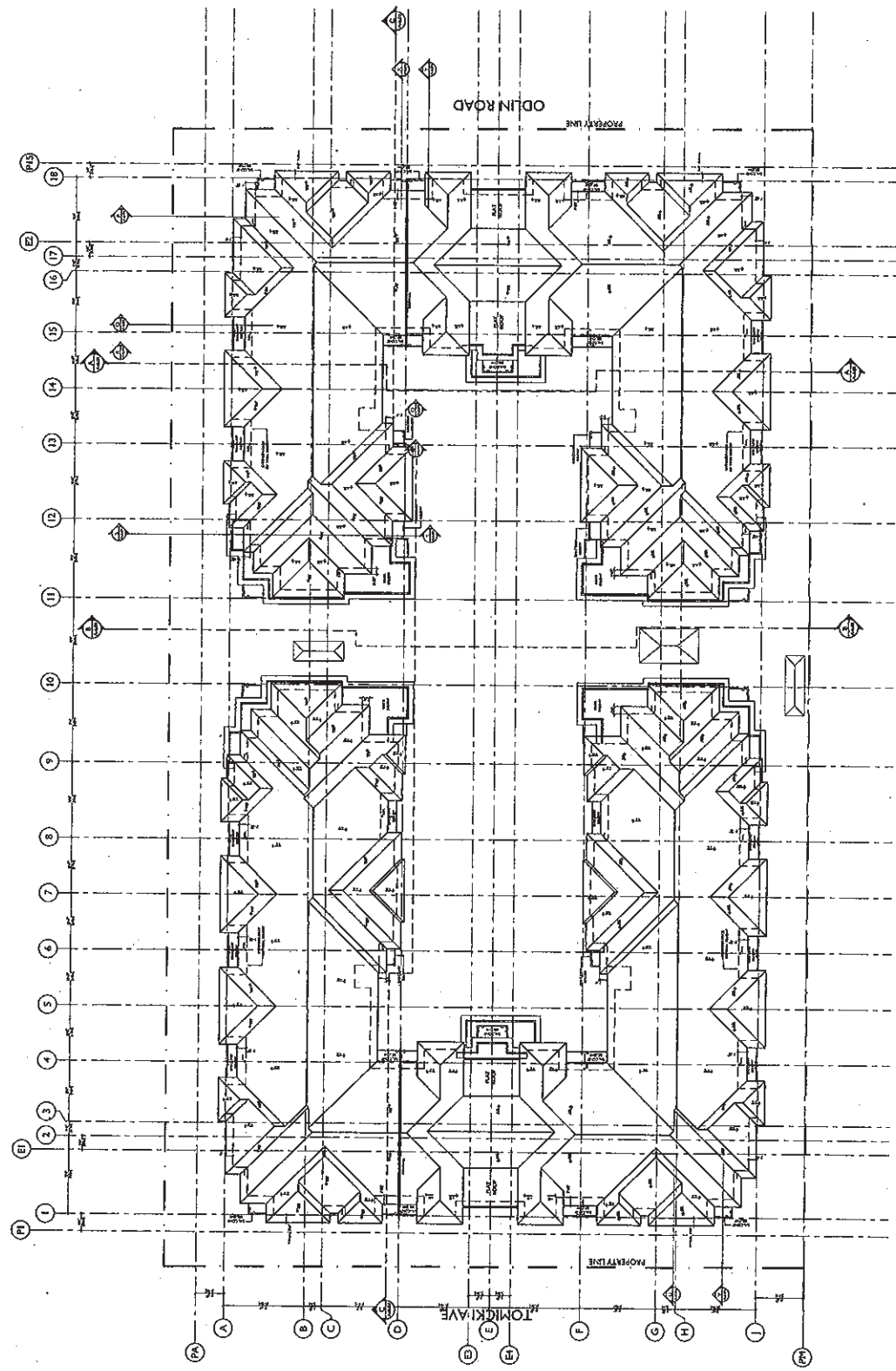


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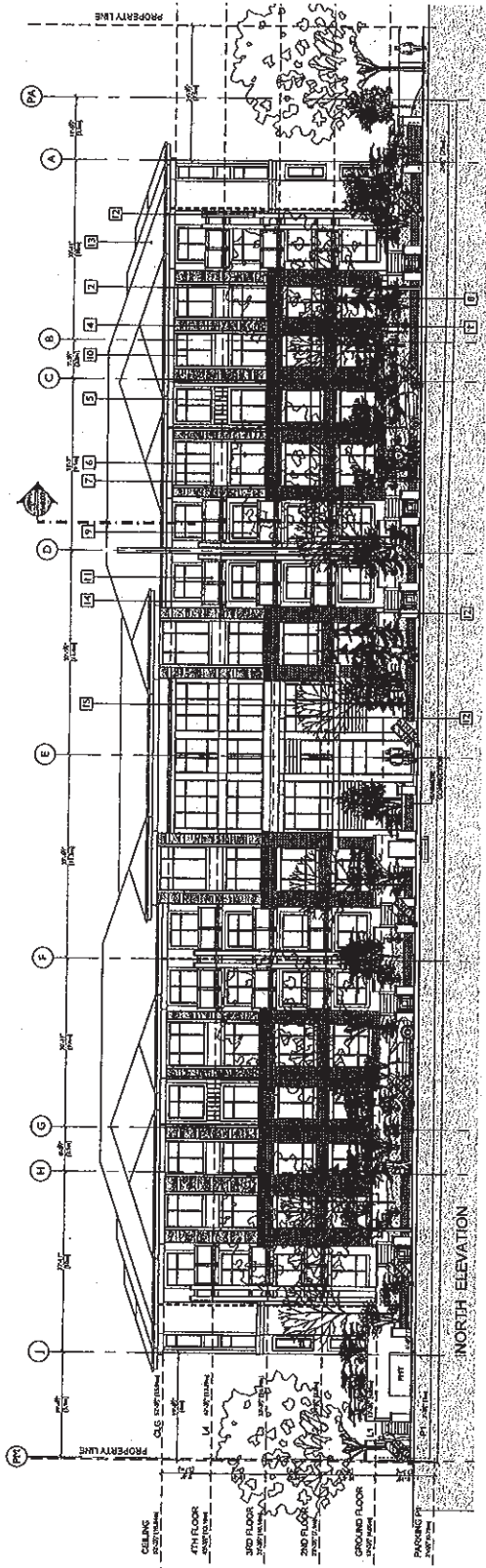
VILLA ESPERANZA
 245 UNIT DEVELOPMENT
 245
 PROJECT NO. 09453125
 FOR ESPERANZA HOMES

ROOF PLAN
 DATE: 08/31
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 CHECKED BY: [blank]
 PROJECT NO.: 0831

A-3.04



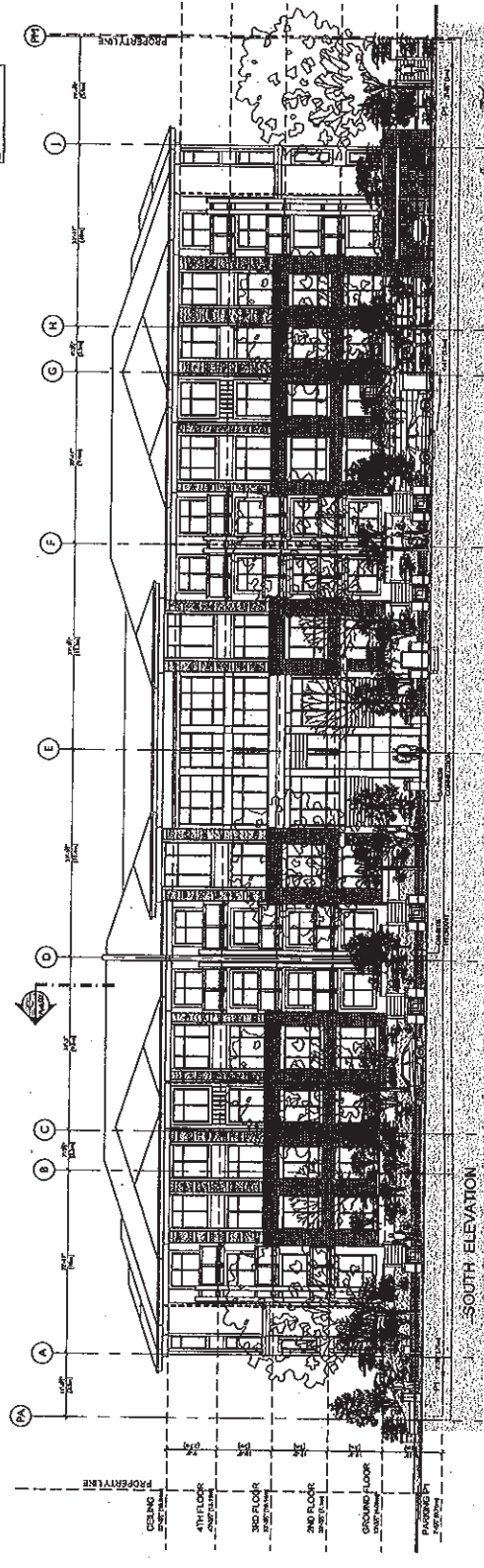
DP 09453125
 PL #8



LEGEND

1	GLASS CURTAIN WALL
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100	GLASS CURTAIN WALL

NORTH ELEVATION



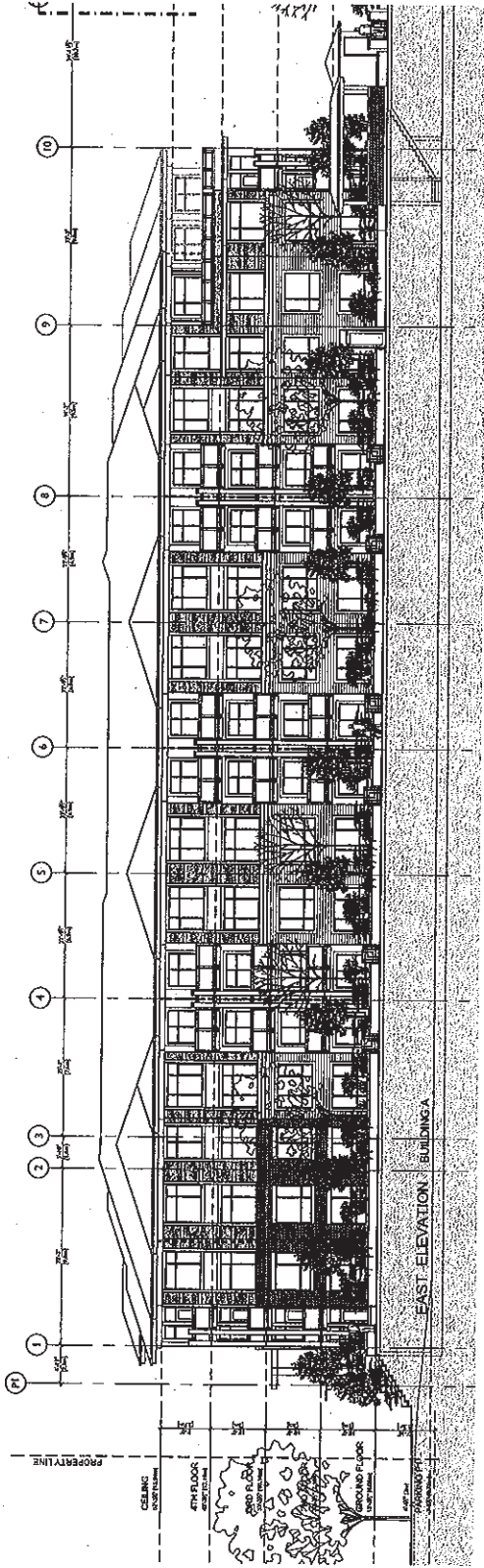
SOUTH ELEVATION

VILLA ESPERANZA
 271 UNIT DEVELOPMENT
 1000 N. RAY BLVD. SOUTH ROAD
 CHICAGO, ILL. 60642
 FOR CONSULTING PURPOSES

ELEVATIONS
 (NORTH & SOUTH)

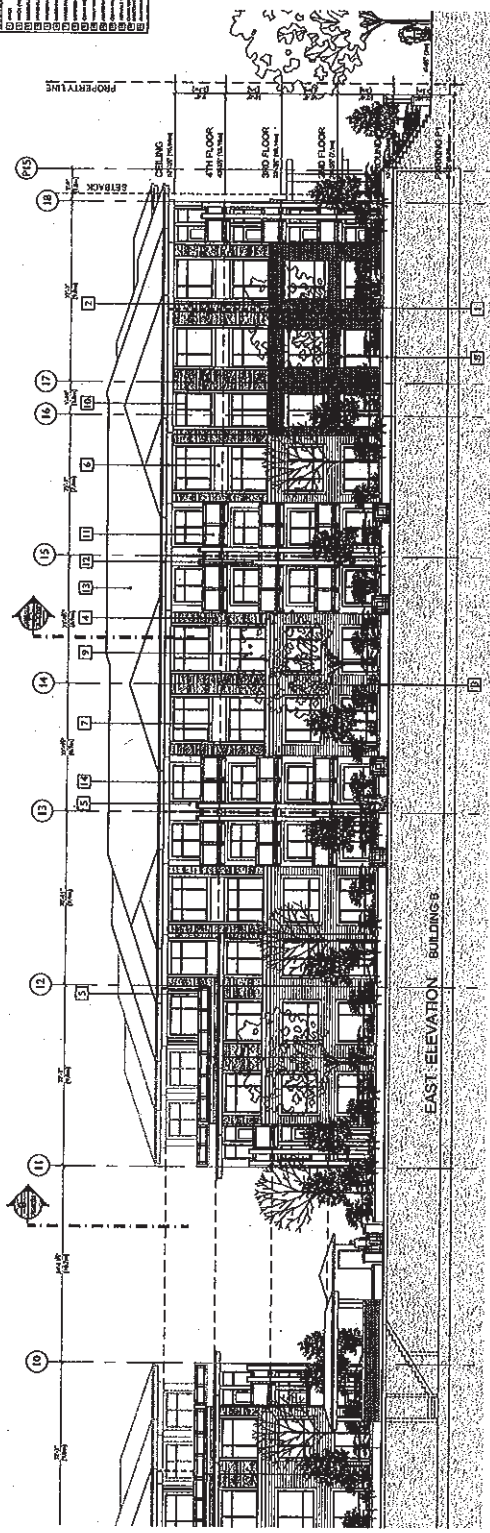
DATE: 10/14/14
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO: 0831

DP 09453125
 R. #9



REVISIONS

NO.	DATE	DESCRIPTION
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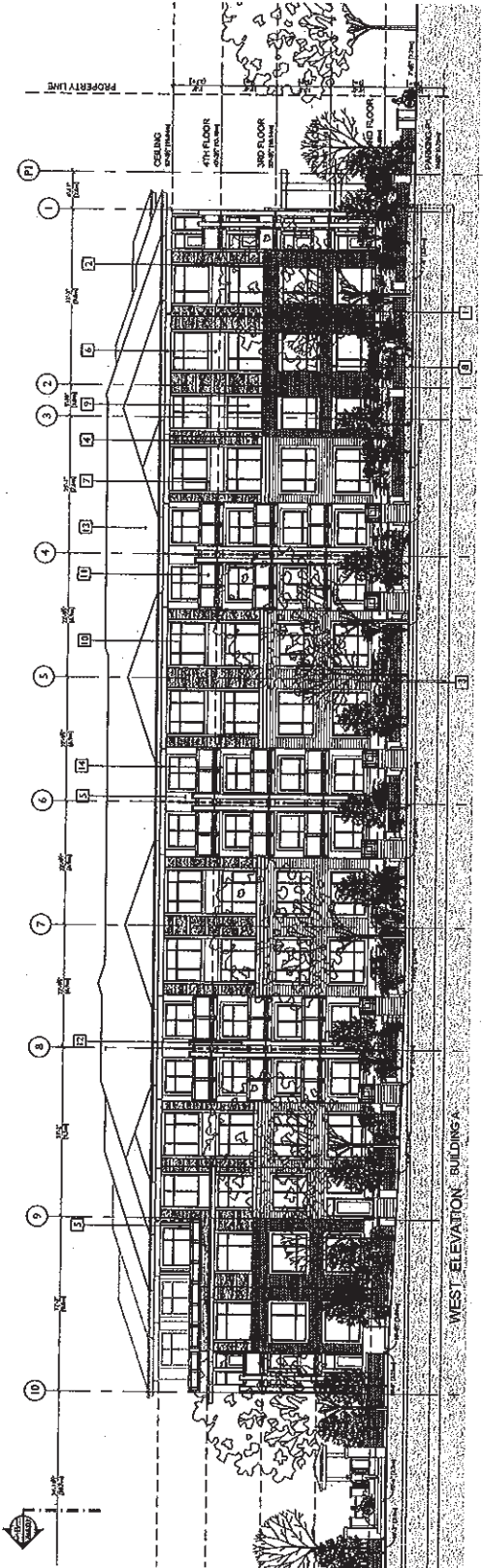


VILLA ESPERANZA
 27 UNIT DEVELOPMENT
 2465
 10000 W. CENTRAL EXPRESSWAY
 SUITE 1000
 DALLAS, TEXAS 75243
 FOR CONSTRUCTION PERMITS

EAST ELEVATIONS

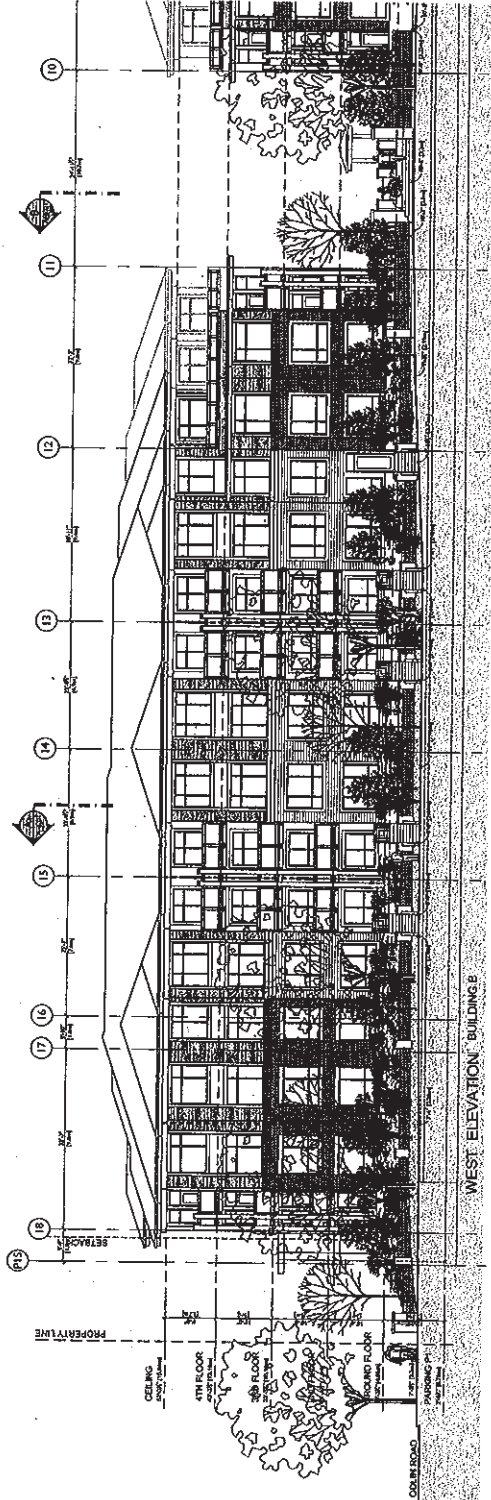
A-5.02

DP 09453125
 PL. #10



NOTES:

1. REFER TO ARCHITECTURAL SPECIFICATIONS FOR MATERIALS AND FINISHES.
2. REFER TO MECHANICAL AND ELECTRICAL SPECIFICATIONS FOR SYSTEMS AND EQUIPMENT.
3. REFER TO STRUCTURAL SPECIFICATIONS FOR CONCRETE AND STEEL.
4. REFER TO CIVIL SPECIFICATIONS FOR SITEWORK AND UTILITIES.
5. REFER TO LANDSCAPE ARCHITECTURE FOR PLANTING AND HardsCAPE.
6. REFER TO INTERIOR ARCHITECTURE FOR FINISHES AND FIXTURES.
7. REFER TO EXTERIOR ARCHITECTURE FOR CURBSIDE AND ENTRYWAYS.
8. REFER TO SIGNAGE SPECIFICATIONS FOR MARKETING AND IDENTIFICATION.
9. REFER TO SCHEDULE FOR MATERIALS AND EQUIPMENT.
10. REFER TO GENERAL NOTES FOR CONSTRUCTION AND INSTALLATION.

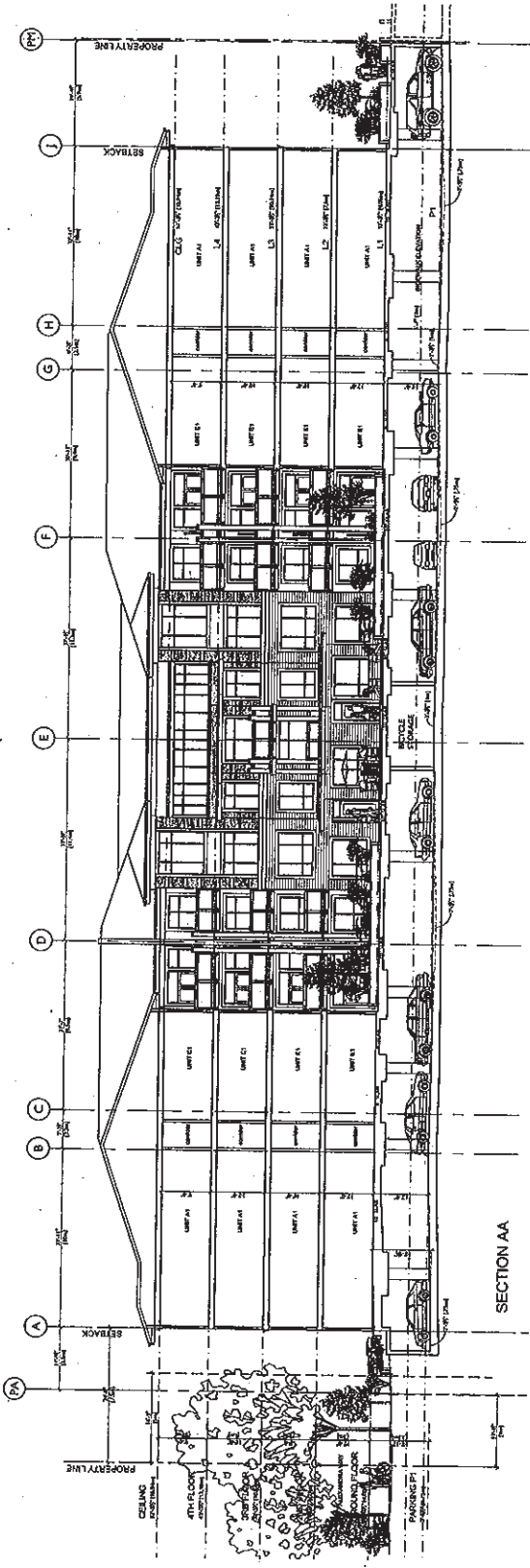


VILLA ESPERANZA
 277 UNIT DEVELOPMENT
 10000 W. CENTRAL EXPRESSWAY, SUITE 100
 DALLAS, TEXAS 75243
 TEL: 972.962.0000
 FAX: 972.962.0001
 WWW.GBLGROUP.COM

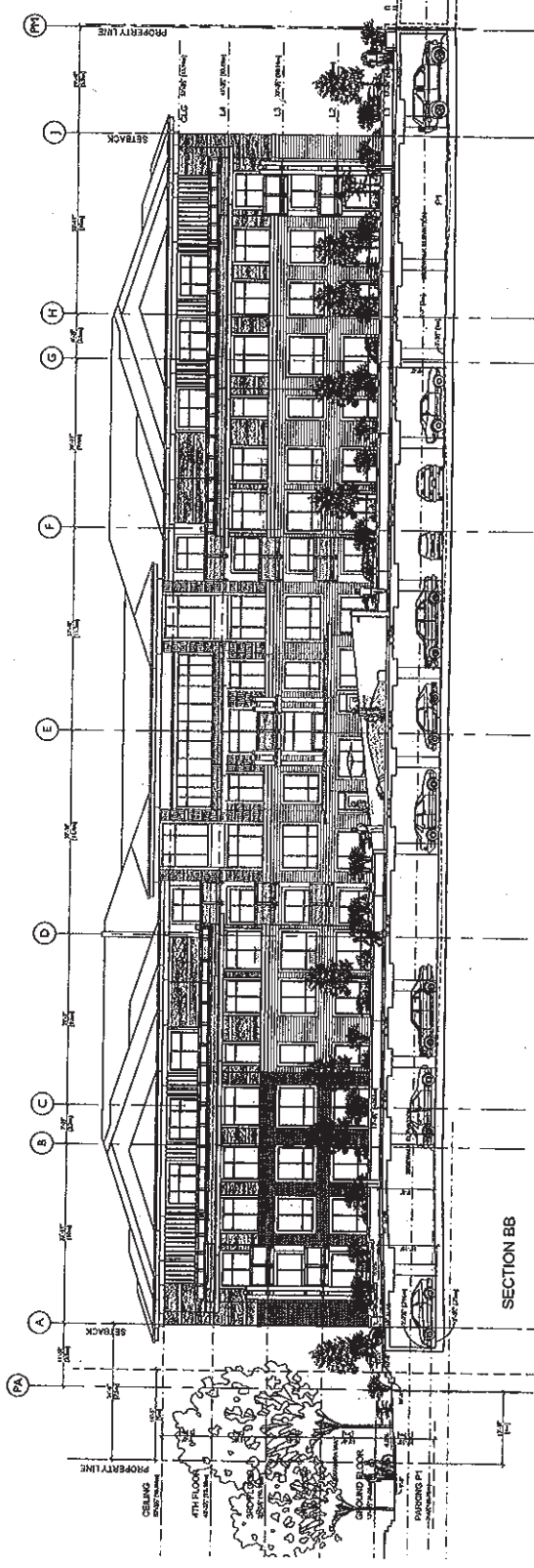
WEST ELEVATIONS

DATE: 08/31
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO: [Number]

DP 09453125
 Rev. # 11



SECTION AA



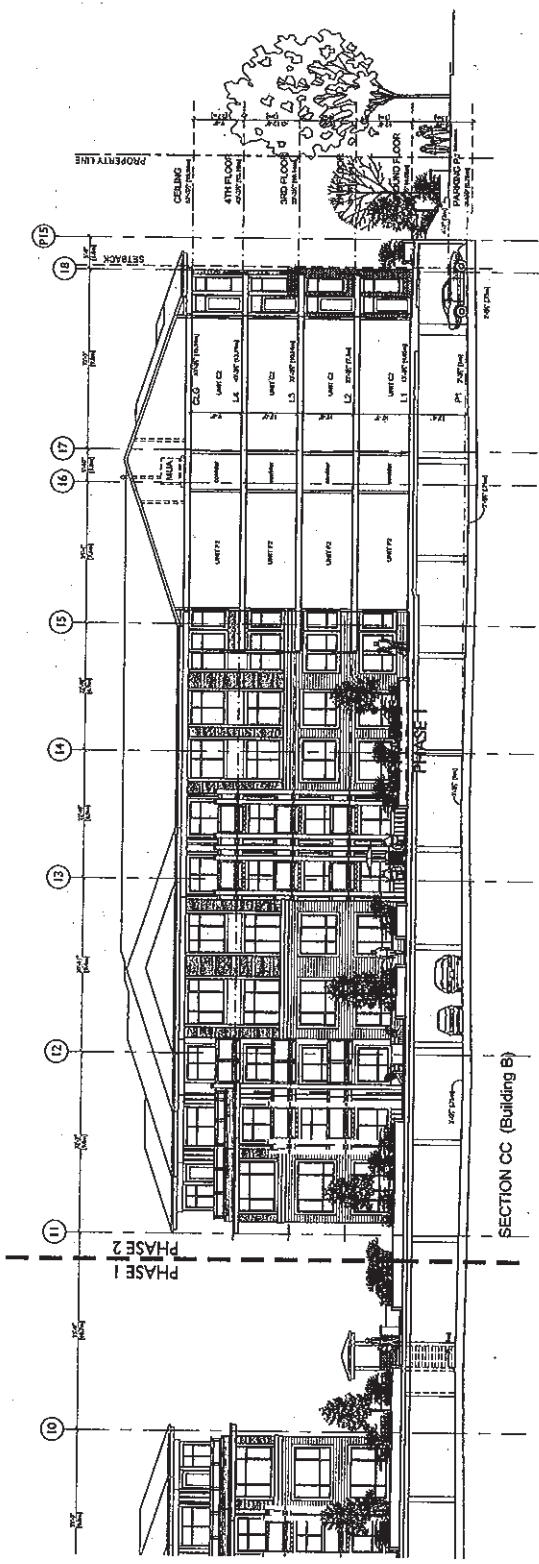
SECTION BB

VILLA ESPERANZA
 PLANT DEVELOPMENT
 10000 N. CENTRAL EXPRESSWAY, SUITE 100
 DALLAS, TEXAS 75243
 TEL: 214.424.4444
 FAX: 214.424.4445
 WWW.GBLARCHITECTURE.COM

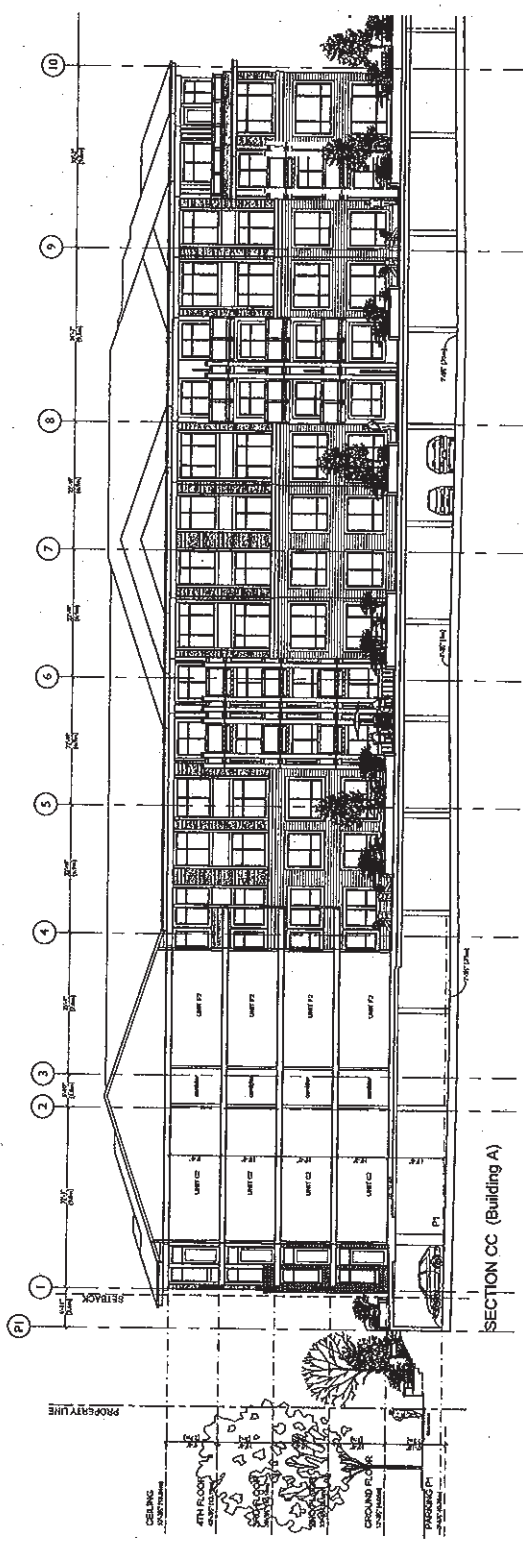
SECTION AA + BB

DATE: 08/11
 DRAWN BY: GBL
 CHECKED BY: GBL

DP 09453125
 PG. #12



SECTION CC (Building B)



SECTION CC (Building A)

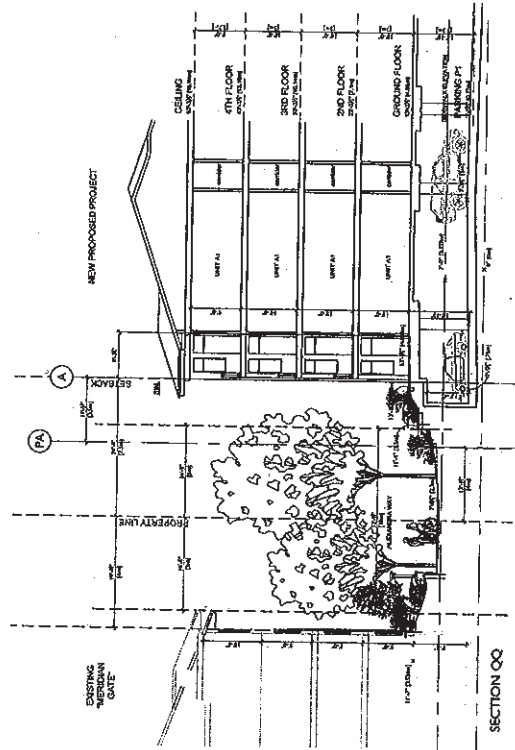
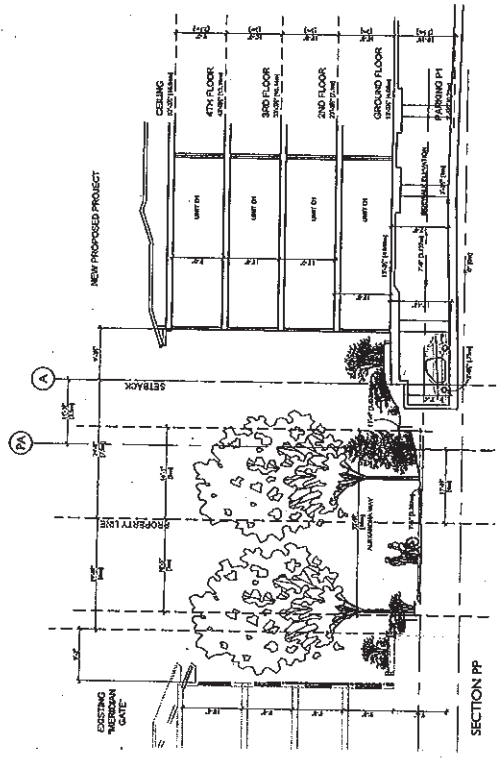
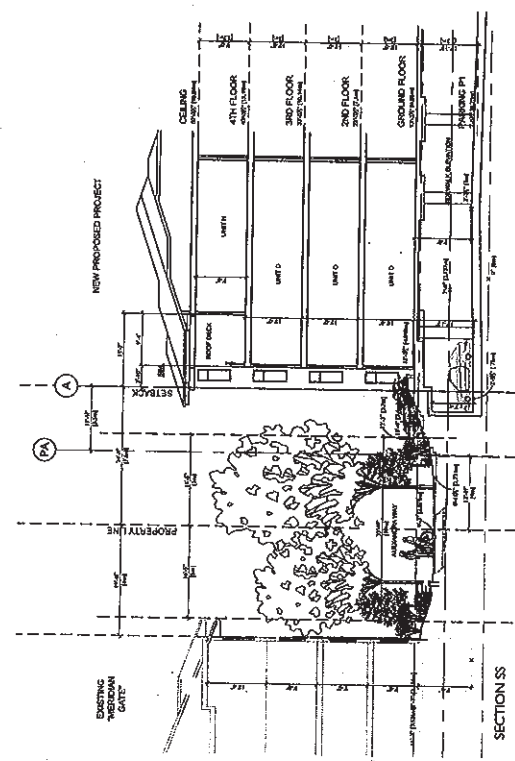
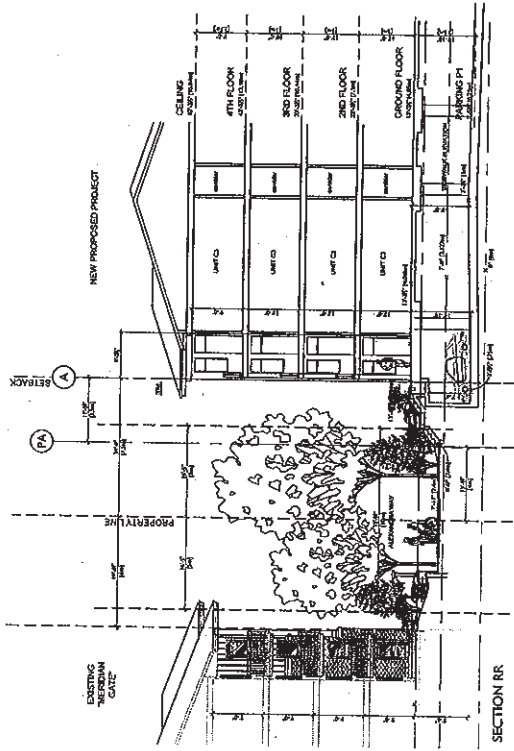
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 10. [unclear]

VILLA ESPERANZA
 240 UNIT DEVELOPMENT
 340 S
 10000 W. 16TH AVENUE, DENVER
 FOR CONSTRUCTION PERMITS

SECTION CC

DATE: 08/11/11
 DRAWN BY: [unclear]
 CHECKED BY: [unclear]
 PROJECT NO: 0831

DP 09453125
 PG # 13



REVISION	DATE	BY	CHKD
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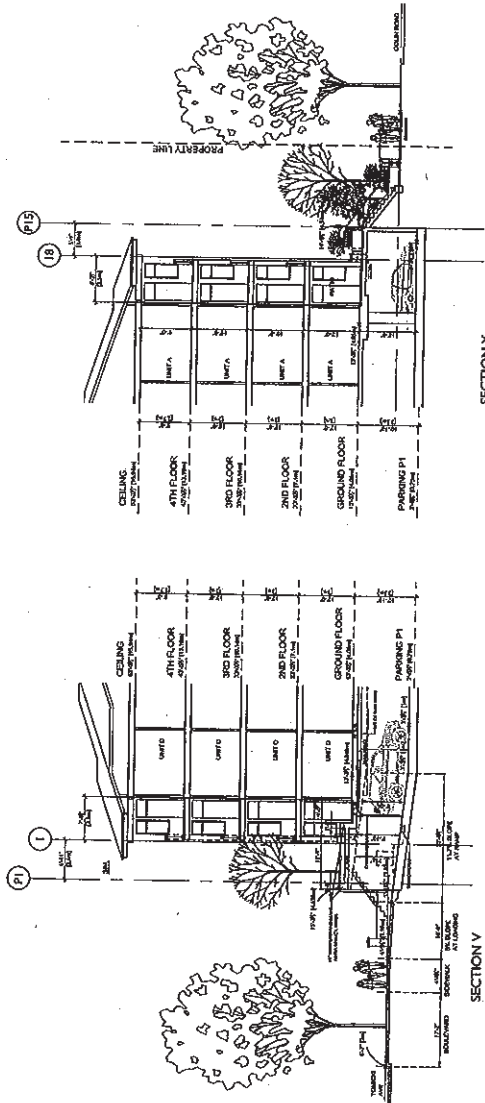
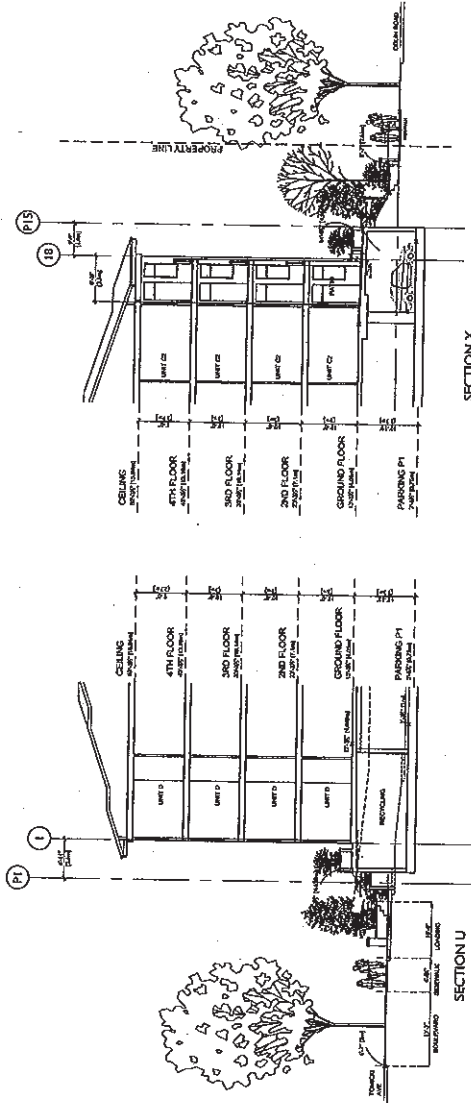
VILLA ESPERANZA
 117 DEVELOPMENT
 2445
 FROM: 1800 DOLAN ROAD
 FALLS CHURCH, VA 22044
 FOR: ESPERANZA HOMES

PARTIAL SECTIONS AT
 ALEXANDRA WAY

DATE: 08/11/14
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 SCALE: [Scale]
 PROJECT NO: 0831

A-6.03

DP 09459125
 Pg. # 14



DATE	DESCRIPTION

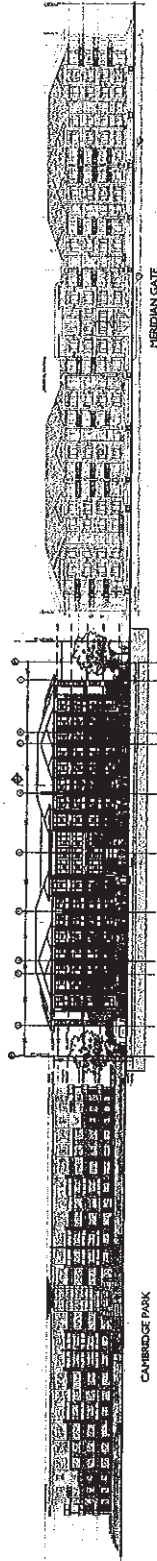
VILLA ESPERANZA
 APARTMENT DEVELOPMENT
 245
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 10000, 10000, 10000, 10000, 10000, 10000

PARTIAL SECTIONS
 AT STREET EDGES

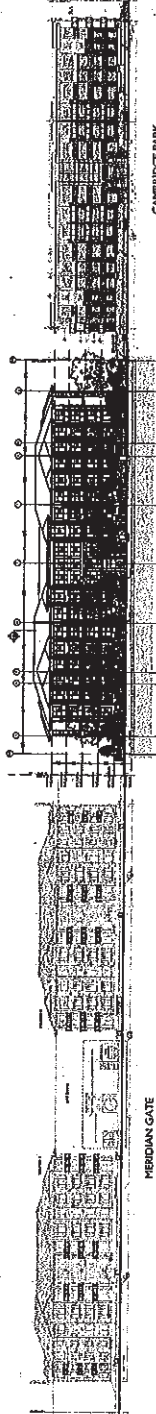
DATE: 08/15/15
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO: 0831

A-6.04

DP 09453125
 PG. #15



ODLIN ROAD STREETScape - (NORTH)



TOMICKI AVE STREETScape - (SOUTH)

REVISIONS
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VILLA ESPERANZA
 287 UNIT DEVELOPMENT
 2425
 10000 W. 10TH AVE. SUITE 100
 BOCA RATON, FL 33433
 FOR ESPERANZA HOMES
 STREETScape

DATE
DESIGNED BY
DRAWN BY
CHECKED BY
PROJECT NO.
0831

A-10.01

DP 09453125
 Rev. # 14



A-10.02 MATERIALS
DP 09453125
Pg. #17

ROOF

ASPHALT SHINGLE
"WEATHERWOOD"
CRC BILTMORE 30

FASCIA

CLEAR STAINED CEDAR
NATURAL TONE

WALL PANEL

HARDIE PANEL
TIMBER BARK
JH40-30

UPPER STOREY

HARDIE PANEL
COBBLE STONE
JH40-10

TRIM BOARD

HARDIE PANEL
ARCTIC WHITE
JH10-20

FASCIA TRIM

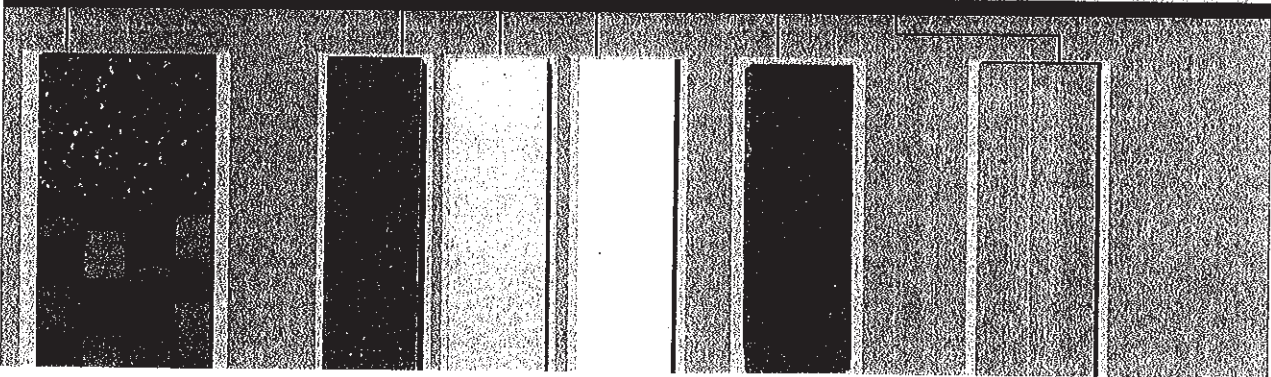
HARDIE PANEL
TO MATCH CEDAR

BASE STOREY

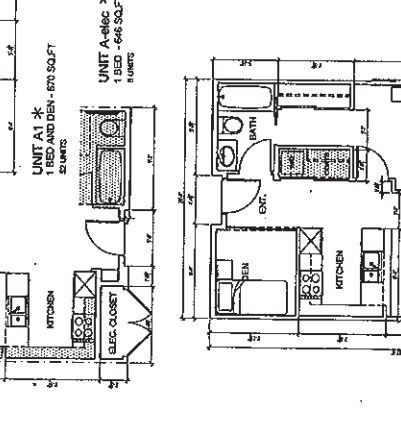
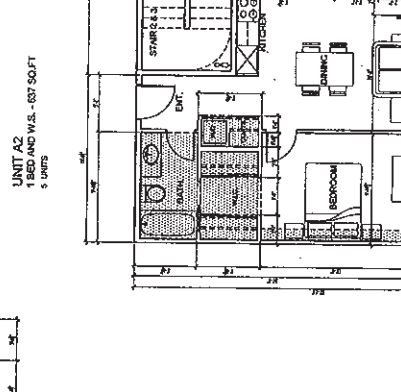
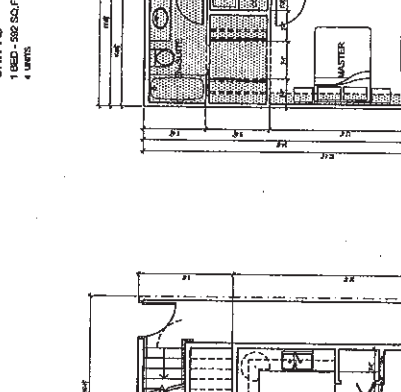
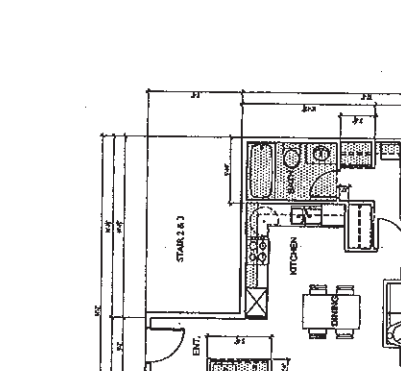
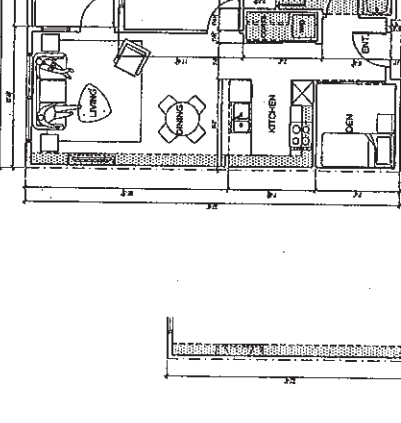
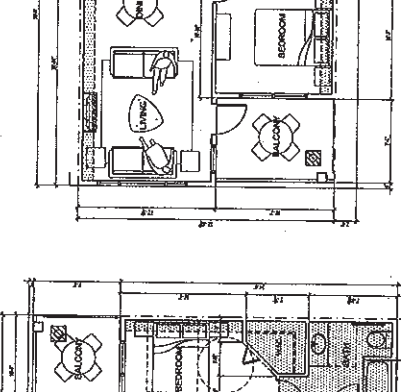
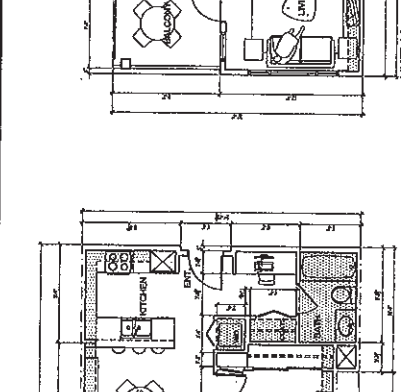
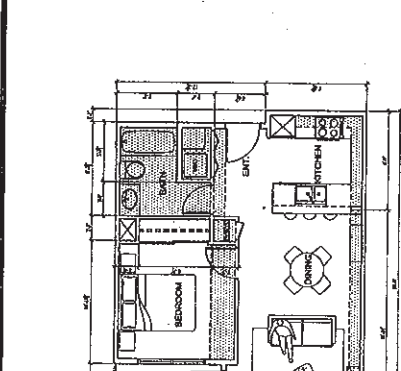
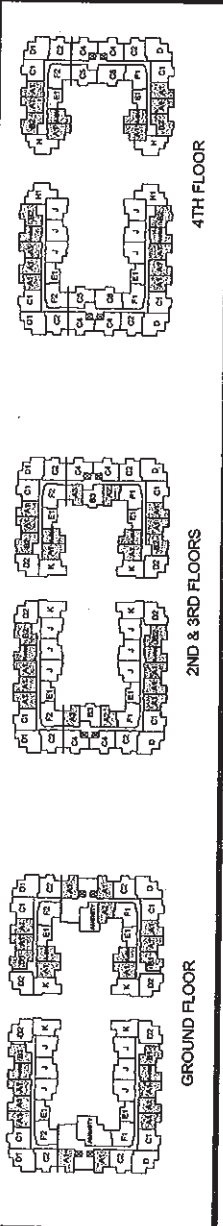
BRICK
(HARDIE PANEL FOR
INSIDE ELEVATIONS)
CHARCOAL

WOOD POST

CLEAR STAINED CEDAR
NATURAL TONE



NOT TO SCALE
 ALL DIMENSIONS TO FACE UNLESS OTHERWISE NOTED
 ALL WALLS TO BE CONCRETE
 ALL FLOORS TO BE CONCRETE
 ALL CEILING TO BE CONCRETE
 ALL ROOF TO BE CONCRETE
 ALL EXTERIOR FINISH TO BE CONCRETE
 ALL INTERIOR FINISH TO BE CONCRETE
 ALL MECHANICAL TO BE CONCRETE
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 ALL PLUMBING TO BE CONCRETE
 ALL PAINT TO BE CONCRETE



REF. PG. #1

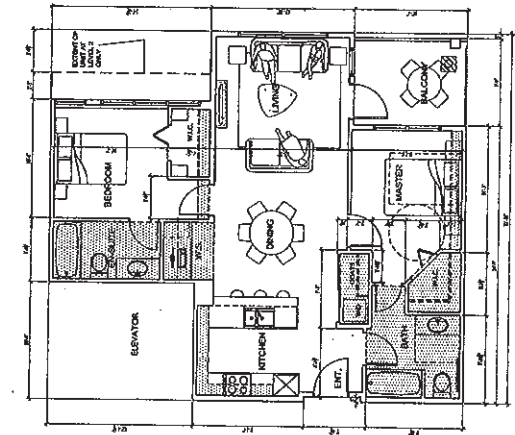
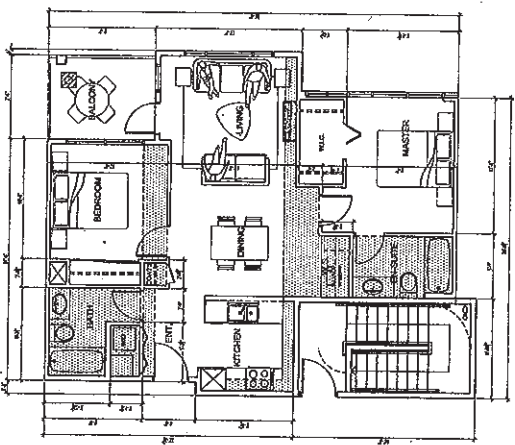
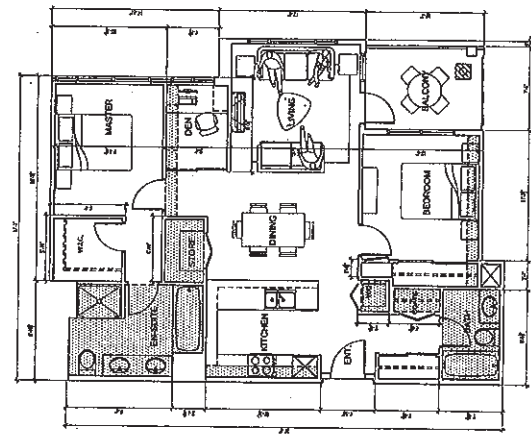
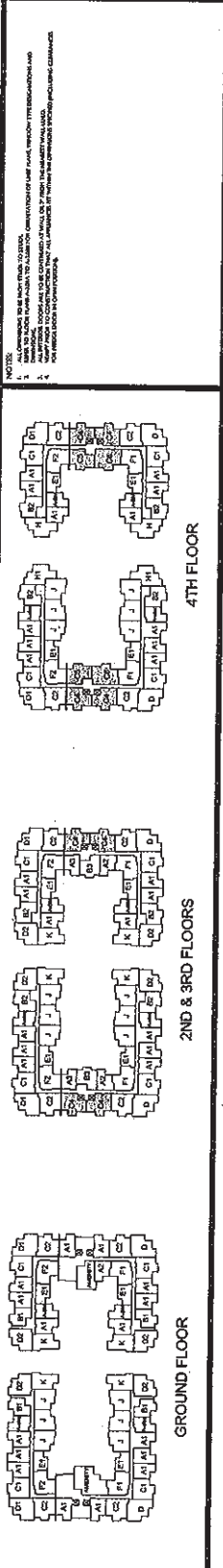
09453125

08/31/11

SCALE: AS SHOWN

GBL INTERNATIONAL, INC. 10000 W. CENTURY BLVD. SUITE 1000
 LOS ANGELES, CA 90045
 TEL: (310) 552-1000 FAX: (310) 552-1001
 WWW.GBL.COM

VILLA ESPERANZA
 271 UNIT DEVELOPMENT
 10000 W. CENTURY BLVD. SUITE 1000
 LOS ANGELES, CA 90045
 TEL: (310) 552-1000 FAX: (310) 552-1001
 WWW.GBL.COM



DP 09453125
 REF. PL. #3



gBI

GENERAL CONTRACTOR

10000 W. 10TH AVENUE, SUITE 1000, DENVER, CO 80202

TEL: 303.733.1100 FAX: 303.733.1101

WWW.GBI-CO.COM

NOT SCALE

1. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

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7th to copy

and you loose

add of plan #4

and

VILLA ESPERANZA
221 UNIT DEVELOPMENT

10000 W. 10TH AVENUE, SUITE 1000, DENVER, CO 80202

TEL: 303.733.1100 FAX: 303.733.1101

WWW.GBI-CO.COM

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NOTES:

1. REFER TO THE GENERAL NOTES FOR THIS PROJECT.

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3. REFER TO THE GENERAL NOTES FOR THIS PROJECT.

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5. REFER TO THE GENERAL NOTES FOR THIS PROJECT.

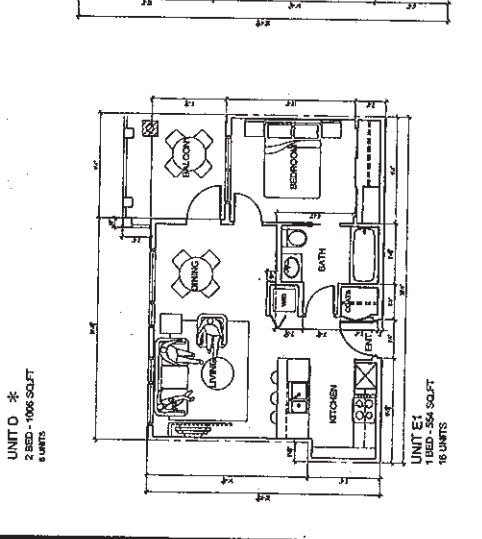
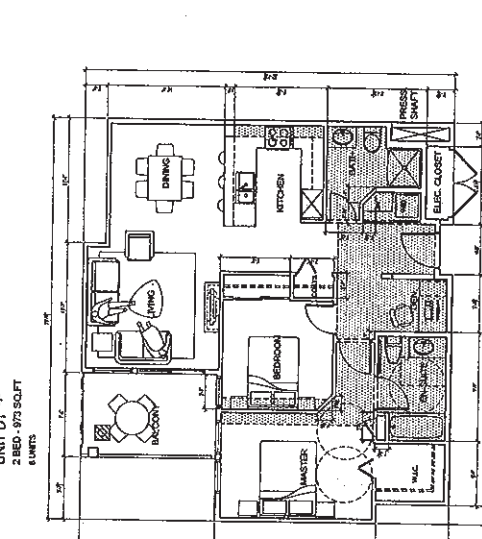
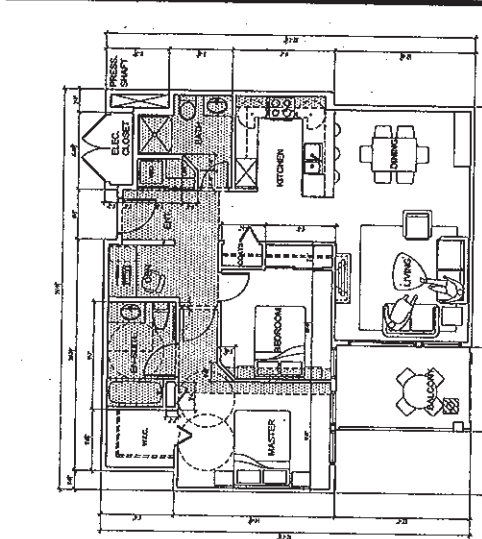
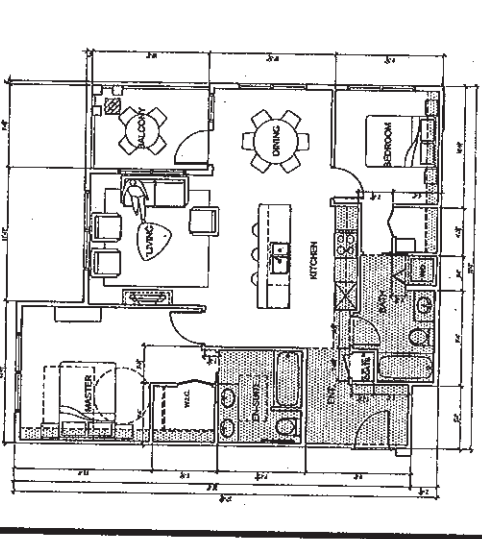
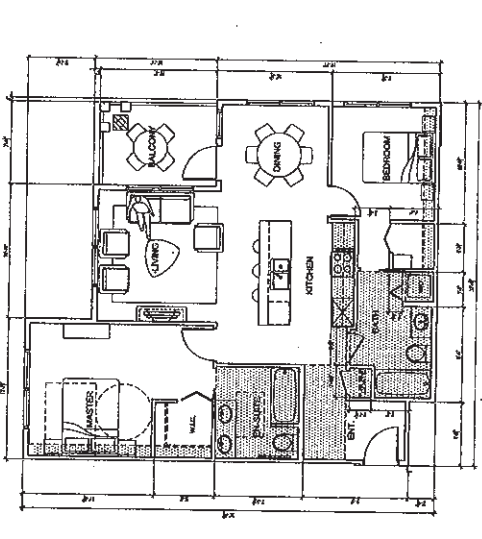
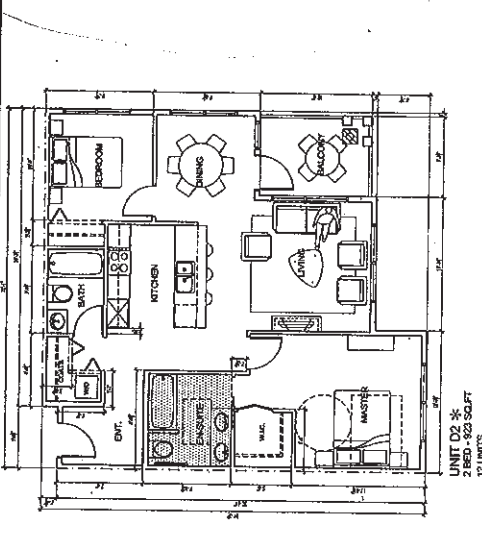
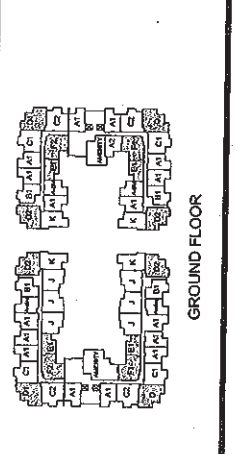
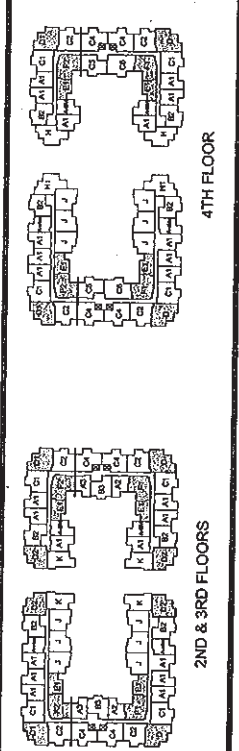
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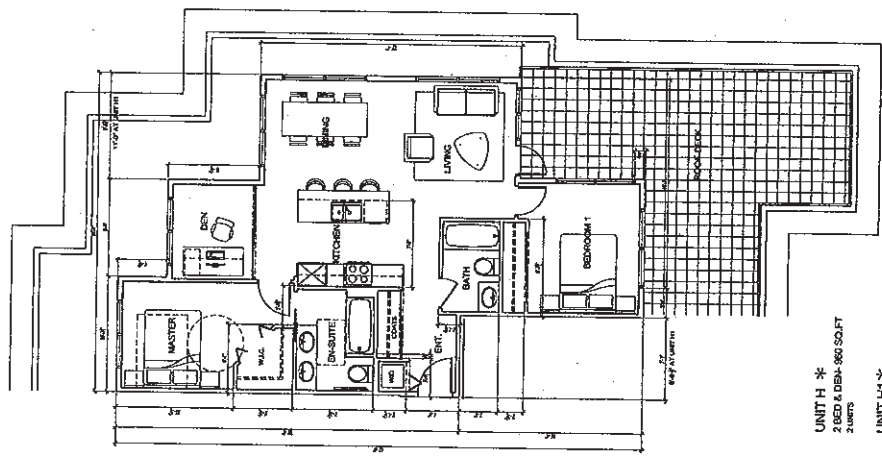
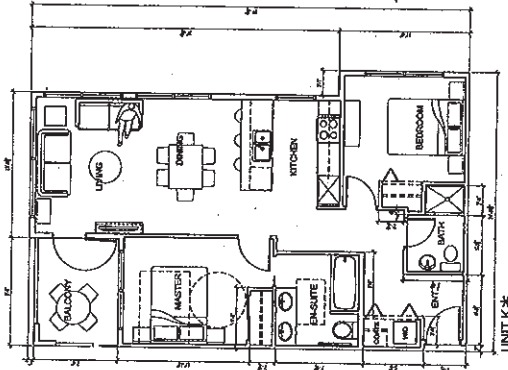
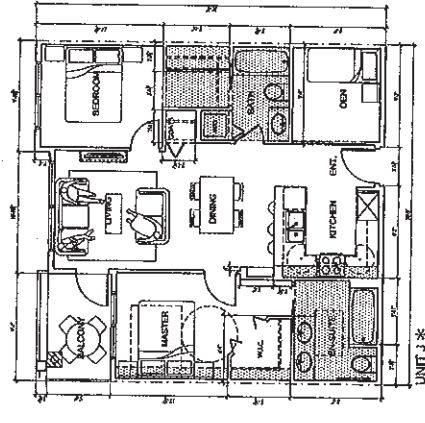
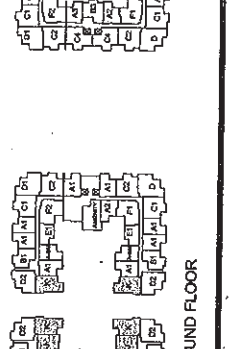
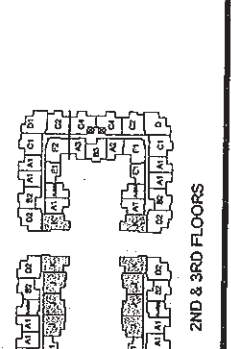
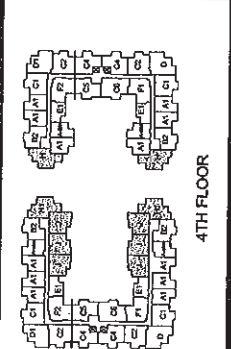
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RSE TR. #4



NOTES:
 1. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
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NOTE:
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 8. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
 9. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
 10. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.



UNIT H *
 2 BED & DEN - 988 SQ.FT
 2 UNITS

UNIT K *
 2 BED & DEN - 865 SQ.FT
 2 UNITS

DP 09453125
 REF. PL. #5



REVISIONS	DATE	BY	CHKD

VILLA ESPERANZA
 221 UNIT DEVELOPMENT
 8800 WEST BIRCH CIRCLE ROAD
 DALLAS, TEXAS 75243
 FOR CONTRACTING HOMES

UNIT PLANS
 SHEET NO. 0831
 PROJECT NO. 0831

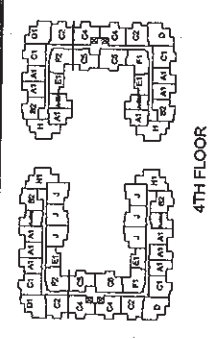
NOTES:
 1. ALL DIMENSIONS ARE IN FEET AND INCHES.
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 10. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

REVISIONS:
 1. 11/15/11
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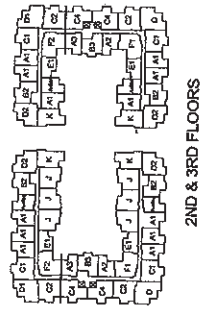
VILLA ESPERANZA
 221 UNIT DEVELOPMENT
 10000 BAYVIEW BLVD. SUITE 100
 FORT LAUDERDALE, FL 33304
 10000 BAYVIEW BLVD. SUITE 100
 FORT LAUDERDALE, FL 33304
 10000 BAYVIEW BLVD. SUITE 100
 FORT LAUDERDALE, FL 33304

UNIT PLANS
 DATE: 11/15/11
 DRAWN BY: J. B. BROWN
 CHECKED BY: J. B. BROWN
 APPROVED BY: J. B. BROWN
 0831

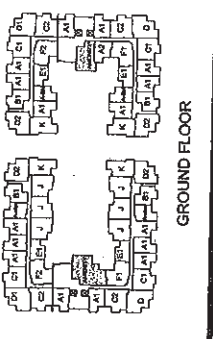
NOTE:
 1. ALL DIMENSIONS ARE IN FEET AND INCHES.
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
 3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
 4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
 5. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
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 9. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
 10. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.



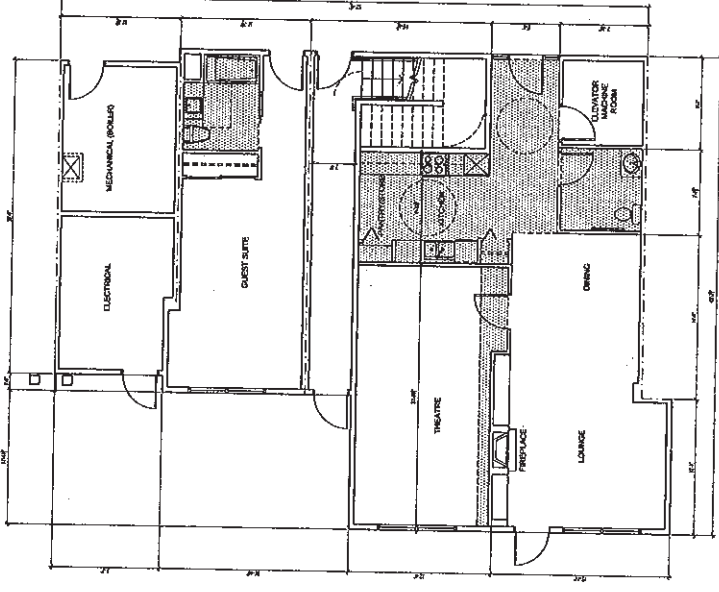
4TH FLOOR



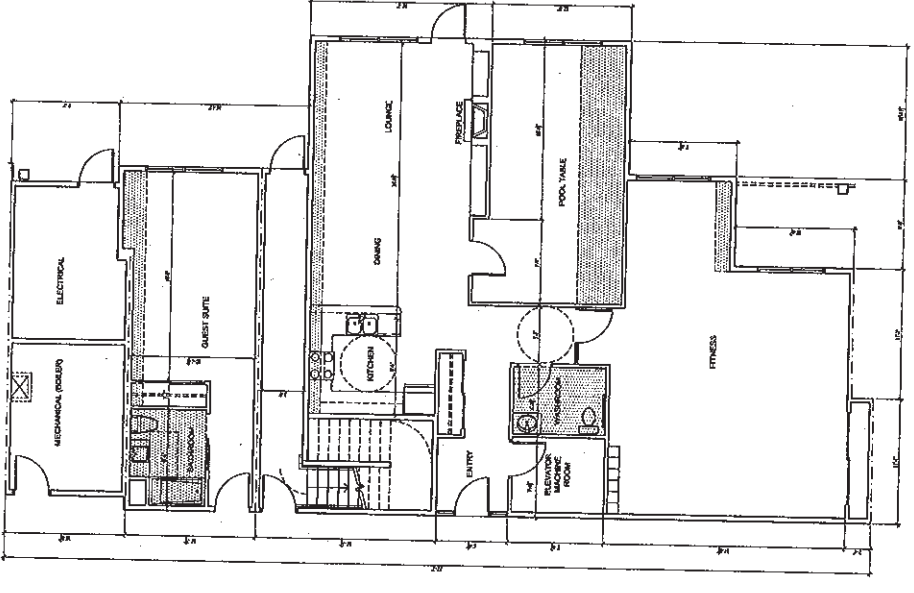
2ND & 3RD FLOORS



GROUND FLOOR



AMENITY (BUILDING B)
 GROUND FLOOR - 1390 SQ.FT



AMENITY (BUILDING A)
 GROUND FLOOR - 2023 SQ.FT

DP 09453125
 REF. P. #9