CITY OF KIRKLAND
123 FIFTH AVENUE, KIRKLAND, WASHINGTON 98033-6189
(425) 587-3225

DETERMINATION OF NONSIGNIFICANCE (DNS) .

CASE #: SEP06-00024 DATE ISSUED: 1/19/2007

DESCRIPTION OF PROPOSAL

Planned Unit Development (PUD) to allow construction of 13 detached dwelling units (3 units will be Affordable Housing Units) and associated onsite infrastructure on a 1.59 acre (69,451 square foot) parcel zoned RSX 7.2. Through the PUD process, the applicant is requesting modifications from the Kirkland Zoning Code such as additional density, setback encroachments and allowing multiple dwelling units on a single parcel. Additional Zoning Provisions, per KZC Section 125.20, could be modified as part of the review process. The applicant will be required to install public improvements (curb, gutter, sidewalk, etc.) within the 132nd Avenue and NE 90th Street right-of-ways.

PROPONENT: **THE CITY MINISTRIES**

LOCATION OF PROPOSAL

8819 AND 8807 132ND AVENUE NE

LEAD AGENCY is **The City of Kirkland**

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

There is no comment period for this DNS.

Responsible official: 1/18/07
Date

Eric Shields, Director
Department of Planning and Community Development
425-587-3225

Address: City of Kirkland
123 Fifth Avenue
Kirkland, WA 98033-6189

Betty Kalon
Distributed By

1/19/07
Date:

SEPA_A, rev: 1/18/2007

ATTACHMENT 4

ZON06-00021: City Min PUD

You may appeal this determination to **NANCY COX at Kirkland City Hall, 123 Fifth Avenue, Kirkland, WA 98033 no later than 5:00 p.m., Friday, February 02, 2007 by WRITTEN NOTICE OF APPEAL.**

You should be prepared to make specific factual objections. Contact Nancy Cox to read or ask about the procedures for SEPA appeals.

Please reference case # SEP06-00024.

cc: Case # ZON06-00021

Betty Kalan

Distributed By:

1/19/07

Date:

SEPA_A, rev: 1/18/2007

CITY OF KIRKLAND
Planning and Community Development Department
123 Fifth Avenue, Kirkland, WA 98033 425.828.1257
www.ci.kirkland.wa.us

MEMORANDUM

To: Eric R. Shields, AICP, SEPA Responsible Official

From: Tony Leavitt, Planner

Date: January 17, 2007

File: ZON06-00021, SEP06-00024

Subject: **ENVIRONMENTAL DETERMINATION FOR CITY MINISTRIES PLANNED UNIT DEVELOPMENT (PUD)**

Proposal

City Ministries, represented by Riebe and Associates Inc., has submitted an environmental checklist (see Enclosure 1) and related materials for the proposed Planned Unit Development (PUD) being reviewed under file number ZON06-00021. The applicant is requesting a Planned Unit Development (PUD) to allow construction of 13 detached dwelling units (3 units will be Affordable Housing Units) and associated onsite infrastructure on a 1.59 acre (69,451 square foot) parcel zoned RSX 7.2 (see Enclosure 2). Through the PUD process, the applicant is requesting modifications from the Kirkland Zoning Code such as additional density, setback encroachments and allowing multiple dwelling units on a single parcel. The applicant will be required to install public improvements (curb, gutter, sidewalk, etc.) within the 132nd Avenue and NE 90th Street right-of-ways.

Environmental Issues

I have had an opportunity to visit the site and review the environmental checklist and the following related materials:

- Traffic Concurrency Memo from Thang Nguyen; November 23, 2005 (Enclosure 3)
- Traffic Concurrency Extension Memo from Thang Nguyen; December 22, 2006 (Enclosure 4)

Based on a review of these materials, the main environmental issue related to the development of this project is potential traffic impacts. Additionally during the initial public comment period for the zoning permit application, the City received a total of 5 emails (see Enclosures 5 thru 9). These communications raised concerns about additional potential environmental impacts of the proposed project. These concerns include neighborhood traffic impacts, increased density, and tree retention. An analysis of each of these key environmental issues follows. Additional issues brought up in these letters concern the zoning permit application and will be addresses as part of the staff's review of the application.

Traffic Impacts

Neighbors are concerned that the proposed PUD will have a negative impact on the neighborhood. The Public Works Department has reviewed the Concurrency Management Review Application for the proposed PUD (see Enclosure 3 and 4) and concluded that the project will not have a negative traffic impact on existing facilities. The proposed project will have a net trip generation increase of 105 daily trips and 11 PM Peak Trips. Based on this preliminary trip generation information, the proposed project passed concurrency on November 23, 2005 and an extension was approved on December 22, 2006. It should be noted that a typical 9 unit development (the current allowed density) would have a net trip generation increase of 67 daily trips and 7 PM Peak Trips.

Increased Density

Neighbors have concerns about the density of the proposed project. The zoning for the subject property allows one unit per 7,200 square feet of lot area. The subject property is 69,451 square feet, so the allowed density for the subject property is 9 units. Kirkland Zoning Code Chapter 125, Planned Unit Development Review process, the applicant can propose a density of up to 13 units if the 3 of the units are designated as "affordable housing units". As part of the zoning permit application review, the request to increase the allowed density will be reviewed for compliance with the Kirkland Zoning Code Chapter 125.

Significant Tree Retention

Neighbors are concerned about the removal of a significant number of trees on the subject property. According to an arborist report submitted by the applicant (see Enclosure 10), the subject property contains a total of 148 trees. A total of 78 trees are defined as significant trees. As part of the zoning permit application review, staff will review the arborist report and proposed development plans to ensure compliance with Kirkland Zoning Code Chapter 95- Tree Management and Required Landscaping.

Summary

It will be necessary to further analyze certain aspects of the proposal to determine if the project complies with all the applicable City codes and policies. That analysis is most appropriately addressed through the applicable zoning permit review process. In contrast, State law specifies that this environmental review under the State Environmental Policy Act (SEPA) is to focus only on potential significant impacts to the environment that could not be adequately mitigated through the Kirkland regulations and Comprehensive Plan.[1]

I have not identified any significant adverse environmental impacts. Therefore, I recommend that a Determination of Non-Significance be issued for this proposed action.

Should you have any questions, please contact me.

[1]ESHB 1724, adopted April 23, 1995

SEPA ENCLOSURES

1. Environmental Checklist
2. Development Plans
3. Traffic Concurrency Memo from Thang Nguyen dated November 23, 2005
4. Traffic Concurrency Extension Memo from Thang Nguyen dated December 22, 2006
5. Email from Mary Kooistra
6. Letter from Robert Brewer
7. Letter from Carol Nielson
8. Letter from John and Lyn Qualsund
9. Letter from Jan Rucker
10. Evaluation of Trees from Brian Gilles dated February 16, 2006

Review by Responsible Official:

✓ I concur _____ I do not concur

Comments:_____

Eric R. Shields, Planning Director 1/18/07 Date

CITY OF KIRKLAND

ENVIRONMENTAL CHECKLIST

RECEIVED
JUN 20 2006
PM
PLANNING DEPARTMENT
BY

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City identify impacts from your proposal, and to reduce or avoid impacts from the proposal, wherever possible.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later. If you need more space to write answers attach them and reference.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the City can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. When you submit this checklist the City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of Checklist for Non project Proposals:

Complete this checklist for non-project proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For non-project actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

ENCLOSURE 1

SEP06-00024

 Reviewed by Tony Leavitt, Project Planner

TO BE COMPLETED BY APPLICANT

10. List any government approvals or permits that will be needed for your proposal, if known.

    Planned Unit Development approval, Building and associated construction permits required by City of Kirkland

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information or project description.)

    Site is approximately 1.57 acres. Proposal is to construct 13 dwelling units in 2 story single family wood frame buildings along with site improvements.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

    The project site is located at 8819 and 8807 132nd Ave. NE.

B. ENVIRONMENTAL ELEMENTS

1. EARTH

a. General description of the site (circle one): flat, rolling, hilly, steep slopes, mountainous, other _____. Describe location and areas on the site that have different topography.

Relatively Flat Property.

b. What is the steepest slope on the site (approximate percent slope)? Describe location and areas of different topography.

The steepest slope on the site is approximately 11%.

c. What general types of soils are found on the site (for example, clay,

TO BE COMPLETED BY APPLICANT

Sand, gravel, peat, mulch)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Soils on the site are generally Alderwood gravelly sandy loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None were observed.

e. Describe the purpose, type, location and approximate quantities of any filling or grading proposed. Indicate source of fill.

Filling and grading will be for the purpose of constructing building pads, parking areas and drive aisles. An estimated 2,240 cu. yds of cut and 1,140 cu. yds of fill will occur.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No significant risk of erosion. Potential on-site erosion will be controlled by implementation of an approved temporary erosion and sedimentation control plan (TESCP).

g. About what percentage of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 39 percent of the site will be covered with impervious surfaces after project construction, including: residences, walkways, driveways, and parking areas.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

A TESC Plan will be implemented to reduce or control erosion, utilizing silt fences and/or catchbasins protection. Landscaping will also be installed to reduce the effects of erosion.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed: If any, generally describe and give approximate quantities if known.

TO BE COMPLETED BY APPLICANT

During construction period typical dust and emissions from construction equipment operations are likely. No lasting effects are anticipated upon project completion beyond those normally expected within a residential area.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None are known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Proposed measures to reduce or control emissions or other impacts during construction will include watering for dust control, and adhering to jurisdictional guidelines for construction working hours.

3. WATER

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type, location and provide names. If appropriate, state what stream or river it flows into. Provide a sketch if not shown on site plans.

No surface water body is located either on-site nor immediately adjacent to the site

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters: If yes, please describe and attach available plans. Note approximate distance between surface waters and any construction, fill, etc..

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material, if from on site.

N/A

TO BE COMPLETED BY APPLICANT

4) Will the proposal required surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

   No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

   No.

6) Does the proposal involve any discharge of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

   No.

b. Ground

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

   No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

   None.

c. Water Runoff (including storm water):

1) Describe the source(s) of runoff (including storm water) and method of collection, transport/conveyance, and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

   Stormwater will be collected from roof drains, sidewalks, parking areas and landscaped areas, and will be conveyed through a tight-line system to a combined detention/water

TO BE COMPLETED BY APPLICANT

mitigate vegetation removed for the development. See attached Evaluation of Trees dated 2/17/06 and submitted Landscape Plan.

5. ANIMALS

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds:	hawk, heron, eagle, songbirds, other: Sparrows
mammals:	deer, bear, elk, beaver, other: Squirrels
fish	salmon, trout, herring, shellfish, other: None

b. List any threatened or endangered species known to be on or near the site.

None are known.

c. Is the site part of a migration route: If so, explain.

Not that is known.

d. Proposed measures to preserve or enhance wildlife, if any:

Installation of landscaping will provide habitat for songbirds and potentially small mammals.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs: Describe whether it will be used for heating, manufacturing, etc.

The site will use electric power for typical residential purposes.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy efficient construction methods and materials will be used to reduce or control energy impacts for the project.

TO BE COMPLETED BY APPLICANT

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic equipment, operation, other)?

Traffic noise from 132nd Avenue NE and typical residential noise exist near street.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

On a short term basis, noise from construction equipment is expected. This noise will cease with the completion of construction. On a long term basis, noise typical of a residential environment is anticipated.

3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment will have operating mufflers and construction activity will be limited to approved business hours. Off site noise will be mitigated through building insulation, wall mass, and double glazed windows.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

The property is currently vacant. Dilapidated single family residences have been previously removed.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

No structures exist on site.

d. Will any structures be demolished? If so, what?

NA

e. What is the current zoning classification of the site?

TO BE COMPLETED BY APPLICANT

Inclusion of three (3) affordable and ten (10) market rate units.

10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

It is anticipated that the tallest height of any proposed structure will be approximately 30 feet; principal proposed exterior building material is wood.

30' above ABE is height max in RSX 7.2 Zone.

b. What views in the immediate vicinity would be altered or obstructed?

Neighbors South, East, and West of the site will have view of new development instead of trees and open space.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The proposed single-family development will require Planned Unit Development Approval. The project shall comply with additional design standards in the concomitant agreement.

11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce: What time of day or night would it mainly occur:

Porch, Driveway, and parking area lighting will be provided.

b. Could light or glare from the finished project be a safety hazard or interfere with views:

No.

c. What existing off-site sources of light or glare may affect your proposal?

None are known.

d. Proposed measures to reduce or control light and glare impacts, if any:

Project shall comply with the City of Kirkland Exterior Lighting Standards.

TO BE COMPLETED BY APPLICANT

13. HISTORIC AND CULTURAL PRESERVATION

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None are known.

c. Proposed measures to reduce or control impacts, if any:

None.

14. TRANSPORTATION

a. Identify public streets and highways service the site, and describe proposed access to the existing street system. Show on site plans, if any.

The project will utilize one driveway to provide access to/from NE 90th Street and NE 88th Street. (See attached site plan.)

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop.

Yes. An existing transit stop is located on 132nd Ave. in the vicinity of the project.

c. How many parking spaces would the completed project have: How many would the project eliminate?

Twenty-Six (26) parking spaces will be provided. No existing places exist.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

NE 90th Street is currently un-improved. Improvements per the City of Kirkland standards will be provided. Road improvements

TO BE COMPLETED BY APPLICANT

- water	City of Kirkland
- Sewer	City of Kirkland
- Storm Drainage	City of Kirkland
- Power	PSE
- Telephone	Verizon
- Cable	Comcast

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: E. Dennis Riebe

E. Dennis Riebe, President Riebe & Associates, Inc.

Date Submitted: 6/19/06

Relationship of signer to project: **Architect**

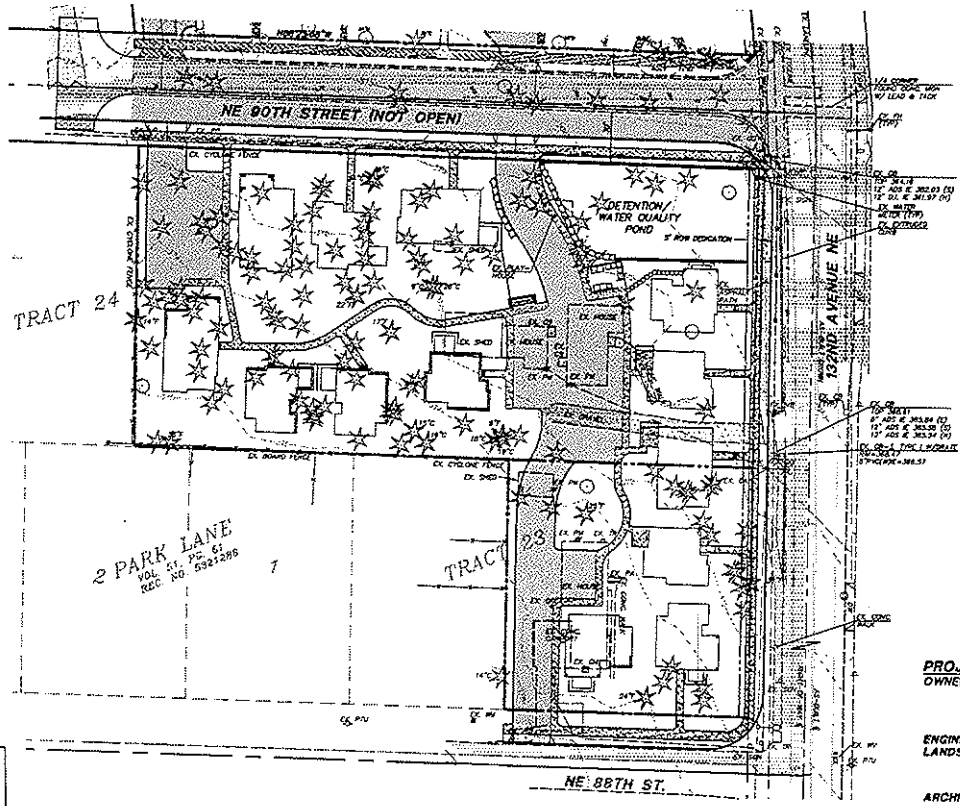
City of Kirkland
Reviewed by Tony Leavitt, Project Planner

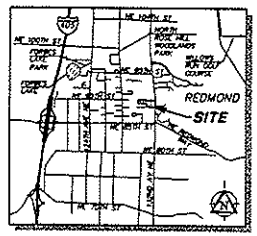
1.8.07

A PORTION OF NE 1/4, NE 1/4, SEC 4, TWP 25 N, RGE 5 E, W.E.

CITY MINISTRIES HOUSING PROJECTS

PRELIMINARY PUD





VICINITY MAP
NOT TO SCALE

SITE INFORMATION

SITE ADDRESS:	8819 132ND AVENUE NE
PERMIT NUMBER:	PREGS-00104
ACREAGE:	69,451 SF/1.59 ACRES
NO. OF LOTS:	1
PROPOSED DENSITY:	4.4 D.U./ACRE
ZONING:	RSX 7.2
SEWER DISTRICT:	CITY OF KIRKLAND
WATER DISTRICT:	CITY OF KIRKLAND
POWER:	PUGET SOUND ENERGY
TELEPHONE:	VERIZON
CABLE TELEVISION:	COMCAST
GAS:	PUGET SOUND ENERGY
SCHOOL DISTRICT:	LAKE WASHINGTON
FIRE DISTRICT:	CITY OF KIRKLAND
BUILDING SETBACKS:	20' FRONTYARD 5' STREET SIDE YARD 5' SIDE YARD 10' REAR YARD

NOTE: BUILDINGS, WALLS AND SIDEWALKS OUTSIDE OF ROAD AND ALLEY SECTIONS ARE SHOWN FOR REFERENCE ONLY AND SHALL BE APPROVED UNDER SEPARATE PERMIT BY OTHERS.

PROJECT CONTACTS

OWNER/APPLICANT:	CITY MINISTRIES 9051 132ND AVENUE NE KIRKLAND, WA 98033 (425) 893-3233 CONTACT: ESTON CATLETT
ENGINEER/ LANDSCAPE ARCHITECT:	TRIAD ASSOCIATES 12112 115TH AVENUE NE KIRKLAND, WA 98034 (425) 821-8448 CONTACT: DAVID ROBERTSON
ARCHITECT:	RIEBE AND ASSOCIATES, INC 2112 116TH AVENUE NE, SUITE A BELLEVUE, WA 98004 (425) 451-4084 CONTACT: DENNIS RIEBE
GEOTECHNICAL ENGINEER:	TERRA ASSOCIATES, INC. 12525 WILLOWS ROAD, SUITE 101 KIRKLAND, WA 98034 (425) 821-7777 CONTACT: TED SCHEPPER

SHEET INDEX

C1 OF C2	COVER SHEET
S1 OF S1	BOUNDARY AND TOPOGRAPHIC SURVEY
PUD-1 OF PUD-3	SITE PLAN
PUD-2 OF PUD-3	BUILDING ELEVATIONS
PUD-3 OF PUD-3	BUILDING HEIGHT CALCULATIONS
C2 OF C2	PRELIMINARY GRADING AND UTILITY PLAN
L1 OF L1	LANDSCAPE PLAN

LEGAL DESCRIPTION

THE EAST HALF OF TRACT 24 OF KIRKLAND ACRE TRACTS, AS PER PLAT RECORDED IN VOLUME 13 OF PLATS, PAGE 44, RECORDS OF KING COUNTY, WASHINGTON.

BASIS OF BEARING

KCAS
S01°59'21"E
BETWEEN TWO FOUND MONUMENTS ALONG THE CENTERLINE OF 132ND STREET NE AT THE INTERSECTION OF 95TH STREET NE AND NE 90TH STREET, SAID LINE BEING THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 4, T 25 N., R 5 E., W.M.

CONTOUR INTERVAL: 2 FOOT

VERTICAL DATUM

NAVD 88
ORIGINATING BENCHMARKS:
"REDMOND BM #48 1989" – 0.25" DIA. BRASS DISK IN 0.50" DIA. CONCRETE MON. IN THE SOUTHEAST CORNER OF THE INTERSECTION OF NE 104TH STREET AND 132ND AVENUE NE. MON. IS 0.62' BELOW TOP OF CASE, STAMPED – BM48 C.O.R.
EL=334.26 (NGVD 29 EL=330.669)

"REDMOND BM #49 1989" – 0.25" DIA. BRASS DISK IN 0.50" DIA. CONCRETE MON. SET ON EAST SIDE OF INTERSECTION OF NE 86TH STREET AND 132ND AVENUE NE. MON IS 0.68' BELOW TOP OF CASE, STAMPED – BM49 C.O.R.
EL=373.11 (NGVD 29 EL=369.526)

TEMPORARY BENCHMARKS:

TBM-A
SET 60d NAIL IN POWER POLE W/ STREET LIGHT ● WEST SIDE 132ND AVENUE NE, NEAR CORNER SITE.
EL=308.02

TBM-B
SET R.R. SPIKE ON SE FACE OF A POWER POLE AT THE NE QUADRANT OF THE INTERSECTION OF NE 91ST STREET AND 130TH AVENUE NE.
EL=317.59

TBM-C
SET CHISELED SQUARE AT THE SE CORNER OF A CONCRETE PAD IN PARKING LOT 130± SOUTH OF SOUTH SIDE OF MAIN CHURCH.
EL=356.80

NOTES

1. INSTRUMENTATION FOR THIS SURVEY WAS A ONE MINUTE THEODOLITE AND ELECTRONIC DISTANCE MEASURING UNIT. PROCEDURES USED IN THIS SURVEY WERE FIELD TRAVERSE, MEETING OR EXCEEDING STANDARDS SET BY WAC 332-130-090.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
3. NO EASEMENTS, RESTRICTIONS, OR RESERVATIONS OF RECORD WHICH WOULD BE DISCLOSED BY TITLE REPORT ARE SHOWN.
4. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS, ETC.). THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. EVIDENCE OF OCCUPATION OF LAND (FOR EXAMPLE; FENCES, STRUCTURES, PAVING, GRAVELED SURFACES, ETC.) MAY NOT COINCIDE WITH THE DECIDED BOUNDARY LINES AS SHOWN ON THIS DRAWING. THERE ARE AREAS ON THIS SURVEY APPEARING TO HAVE DISCREPANCIES BETWEEN THE DECIDED BOUNDARY LINES AND CERTAIN EVIDENCE OF OCCUPATION. WHERE DISCREPANCIES EXIST TRIAD RECOMMENDS THAT THE OWNER OR POTENTIAL PURCHASER CONSULT WITH LEGAL COUNSEL TO DETERMINE HOW BEST TO INTERPRET THEIR PROPERTY RIGHTS AND ADDRESS ANY POTENTIAL BOUNDARY DISPUTES.
5. TOPOGRAPHY PROVIDED BY MEAD DILMAN & ASSOCIATES DRAWING NUMBER 05269 DATED 12/09/05.

LEGEND

PROPOSED FEATURES

- BOUNDARY
- RIGHT-OF-WAY
- CUTTER, FLOW & CURB LINE
- CENTER LINE
- EASEMENT
- BUILDING SETBACK LINE (SSBL)
- STORM DRAIN PIPE
- SEWER MAIN
- SEWER SERVICE
- WATER MAIN
- 10' EXISTING CONTOURS
- 2' EXISTING CONTOURS
- 10' PROPOSED CONTOURS
- 2' PROPOSED CONTOURS
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- STORM CLEANOUT
- YARD DRAIN
- SEWER MANHOLE
- SEWER CLEANOUT
- SINGLE WATER METER
- DOUBLE WATER METER
- FIRE HYDRANT
- AIR/VAC RELEASE VALVE
- BLOW OFF
- GATE VALVE
- TEE
- BEND
- REDUCER
- CONCRETE BLOCKING
- EXISTING GRAVEL
- PROPOSED GRAVEL
- EXISTING ASPHALT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE

EXISTING FEATURES

- EXISTING STORM DRAIN PIPE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING POWER LINE
- EXISTING UNDERGROUND POWER LINE
- EXISTING GAS MAIN
- EXISTING TELEPHONE LINE
- EXISTING CATCH BASIN, TYPE I
- EXISTING CATCH BASIN, TYPE II
- EXISTING SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING POWER VAULT
- EXISTING GUY ANCHOR
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING AIR/VAC RELEASE VALVE
- EXISTING BLOW OFF
- EXISTING GATE VALVE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE

SCALE: 1" = 30'

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN 2 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

CITY OF KIRKLAND
DEPT. OF PUBLIC WORKS/UTILITIES

APPROVED BY
UTILITIES ENGINEER DATE
SUPERVISOR ENGINEER DATE

© 2006 TRIAD ASSOCIATES

TRIAD ASSOCIATES
12112 115th Ave. NE
Kirkland, WA 98034-8062
425.821.8448
425.821.3411 fax
800.446.0708 toll free
www.triadassoc.com

COVER SHEET

CITY MINISTRIES HOUSING PROJECTS

CITY OF KIRKLAND, WASHINGTON

	DATE	BY	DESCRIPTION

SURVEY BY: DATE
DRAWN BY: DATE
CHECKED BY: DATE
PROJECT MANAGER
PROJECT SURVEYOR
PROJECT ENGINEER

PROJECT LANDMARK DATUM
FIRST ESSENTIAL DATE: 6/01/06
SCALE: 1"=20' DES.H/A

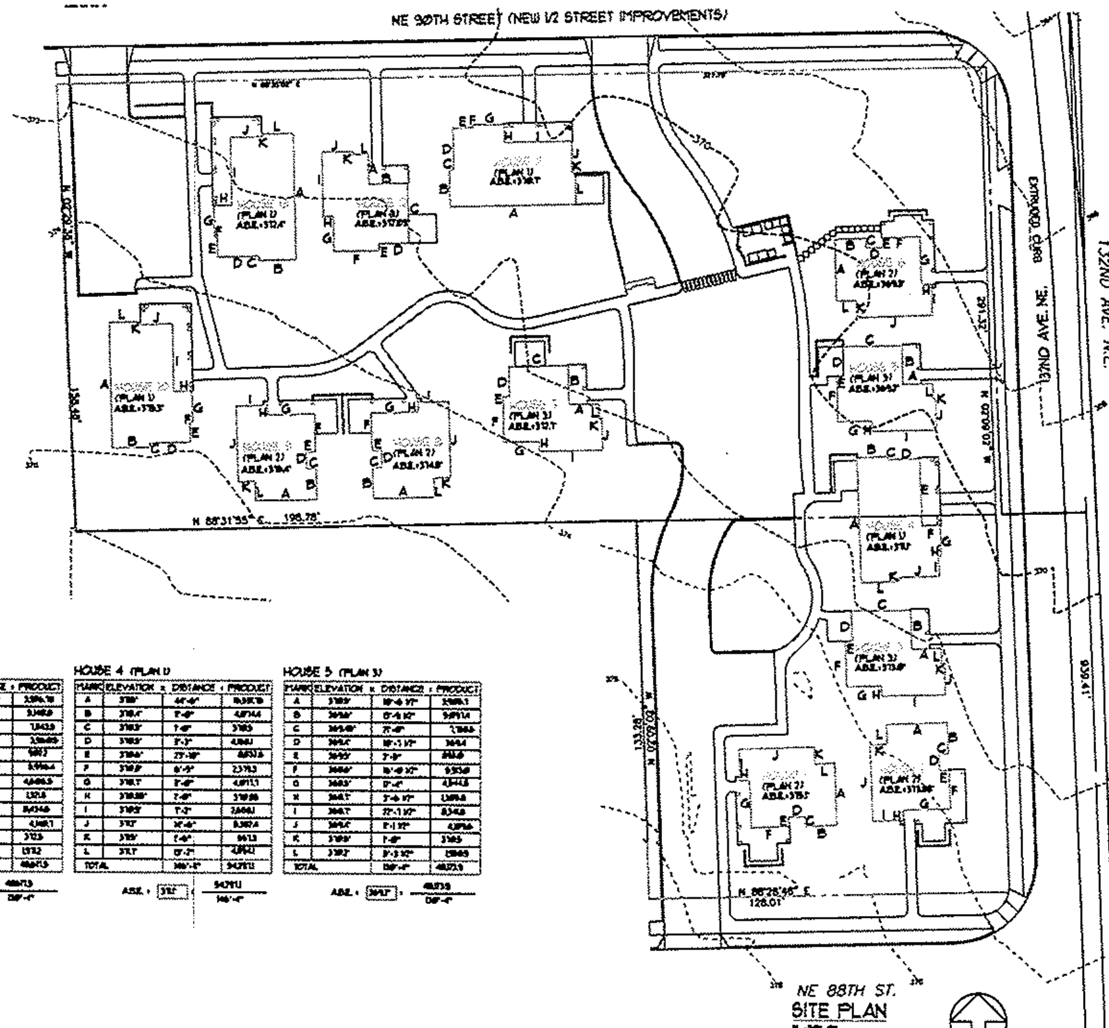
PRELIMINARY

EXPIRES 1/12/07

TRIAD NOT VALID UNLESS SEALED AND DATED

JOB NO. 05-261
SHEET NO. C1 of C2

ENCLOSURE 2
SEPOLO-00024



BUILDING HEIGHT CALCULATIONS

AVERAGE BUILDING ELEVATION (A.B.E.) = TOTAL PRODUCT / TOTAL DISTANCE

HOUSE 1 (PLAN 2)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 2 (PLAN 2)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 3 (PLAN 3)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 4 (PLAN 1)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 5 (PLAN 3)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 6 (PLAN 2)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 7 (PLAN 3)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 8 (PLAN 2)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 9 (PLAN 2)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 10 (PLAN 1)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 11 (PLAN 1)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 12 (PLAN 3)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

HOUSE 13 (PLAN 1)

MARK	ELEVATION	x DISTANCE	= PRODUCT
A	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]
C	[illegible]	[illegible]	[illegible]
D	[illegible]	[illegible]	[illegible]
E	[illegible]	[illegible]	[illegible]
F	[illegible]	[illegible]	[illegible]
G	[illegible]	[illegible]	[illegible]
H	[illegible]	[illegible]	[illegible]
I	[illegible]	[illegible]	[illegible]
J	[illegible]	[illegible]	[illegible]
K	[illegible]	[illegible]	[illegible]
L	[illegible]	[illegible]	[illegible]
TOTAL		[illegible]	[illegible]

A.B.E. = [illegible] = [illegible] / [illegible]

E. Dennis Riebe
ARCHITECT

CITY MINISTRIES
9051 132nd AVE NE
KIRKLAND, WASHINGTON 98033
TEL: (425) 803-3233

RIEBE & ASSOCIATES, INC.
ARCHITECTURE · PLANNING
2112 116th AVENUE N.E. - SUITE A
BELLEVUE, WASHINGTON 98004
PH(425)451-4084 FAX(425)451-4078

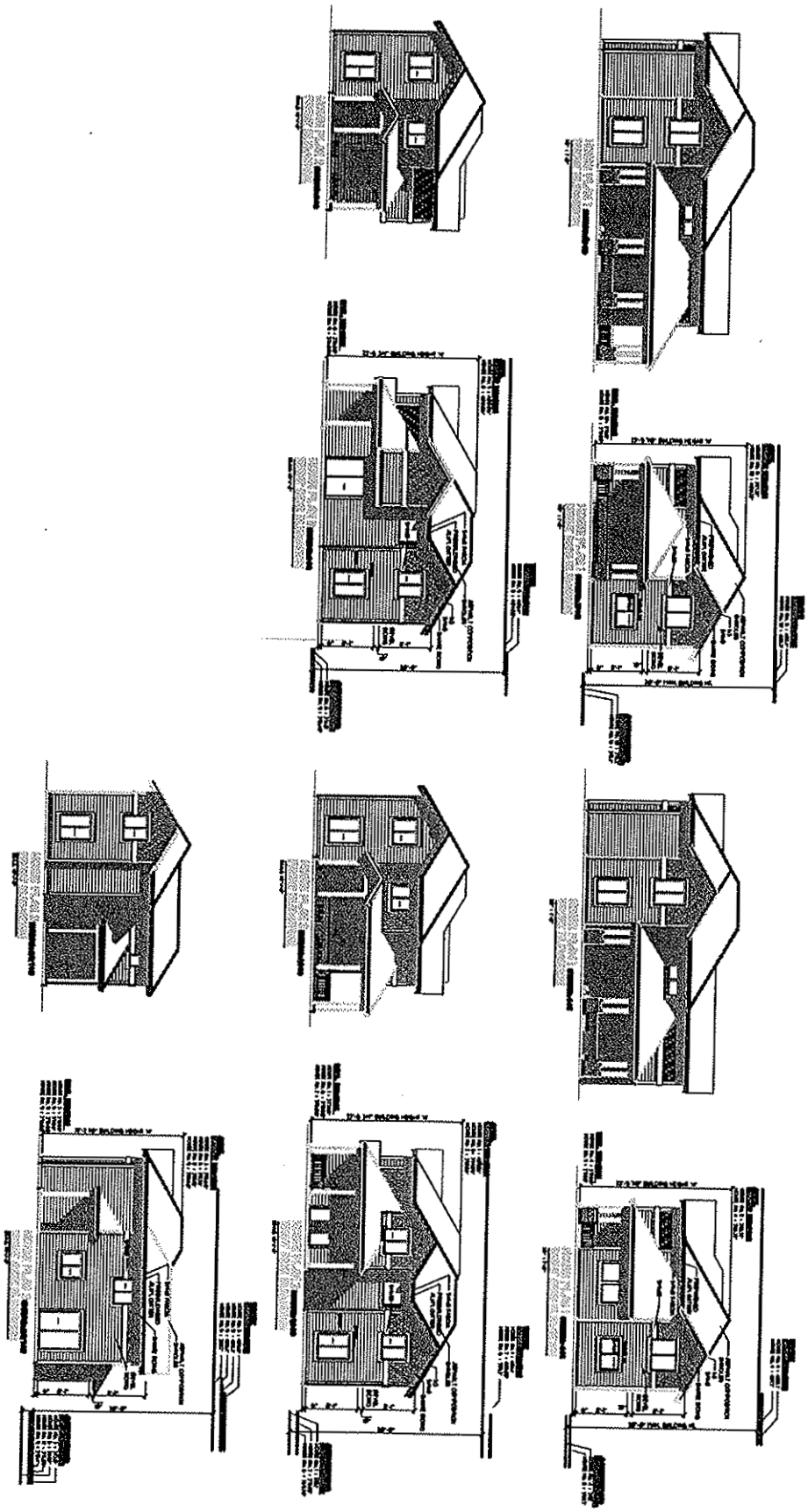
CITY MINISTRIES
HOUSING PROJECT
9019 & 8807 132nd AVE NE
KIRKLAND, WASHINGTON

BUILDING HEIGHT CALCULATIONS

PUD SUBMITTAL

ISSUED [illegible]
DATE | NO | REVISION

PUD-3



PUD SUBMITAL

PUD-2

ISSUED 9/26/00		
DATE	NO	REVISION

EXTERIOR ELEVATIONS

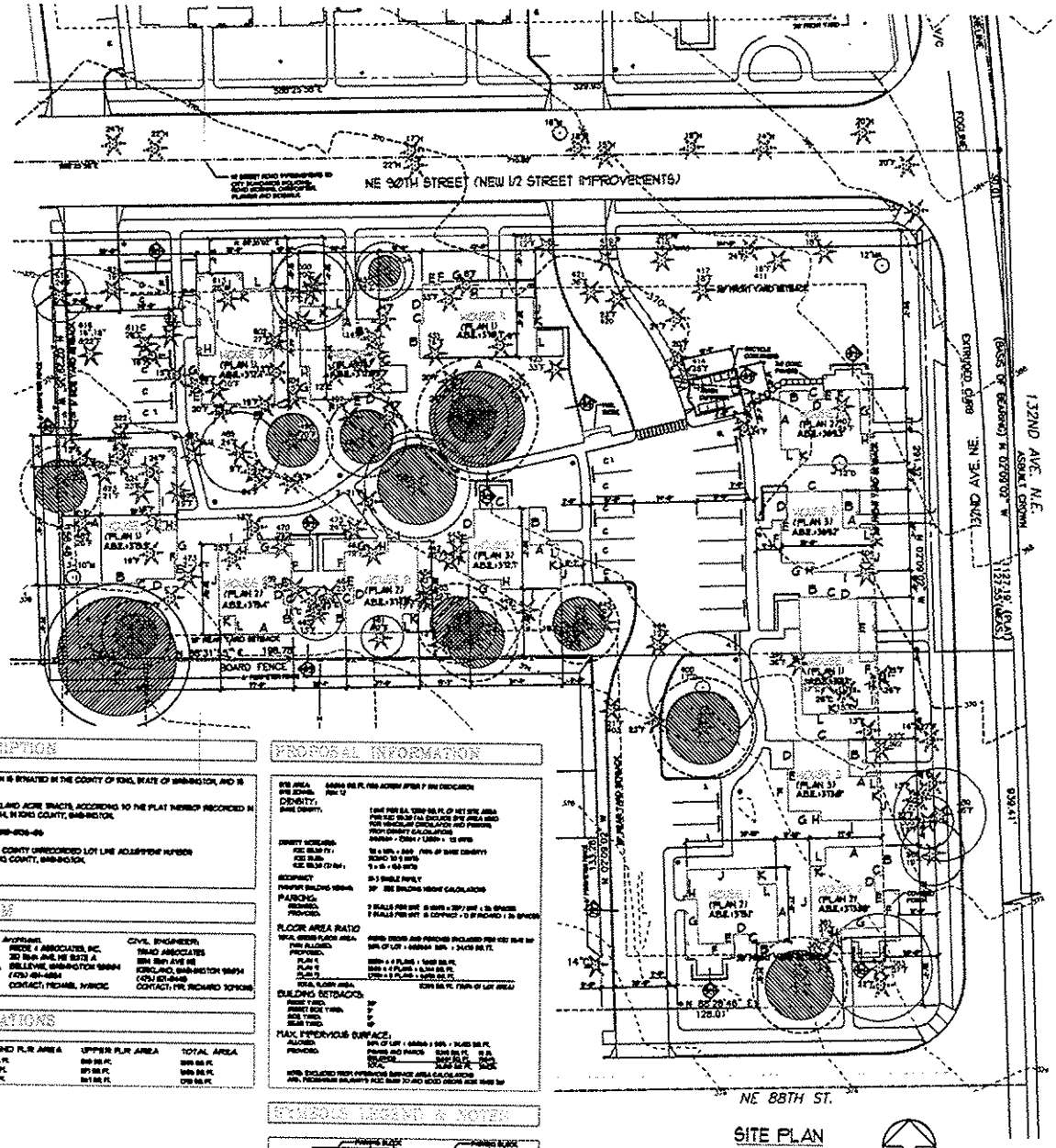
CITY MINISTRIES HOUSING PROJECT

ARCHITECTURE · PLANNING

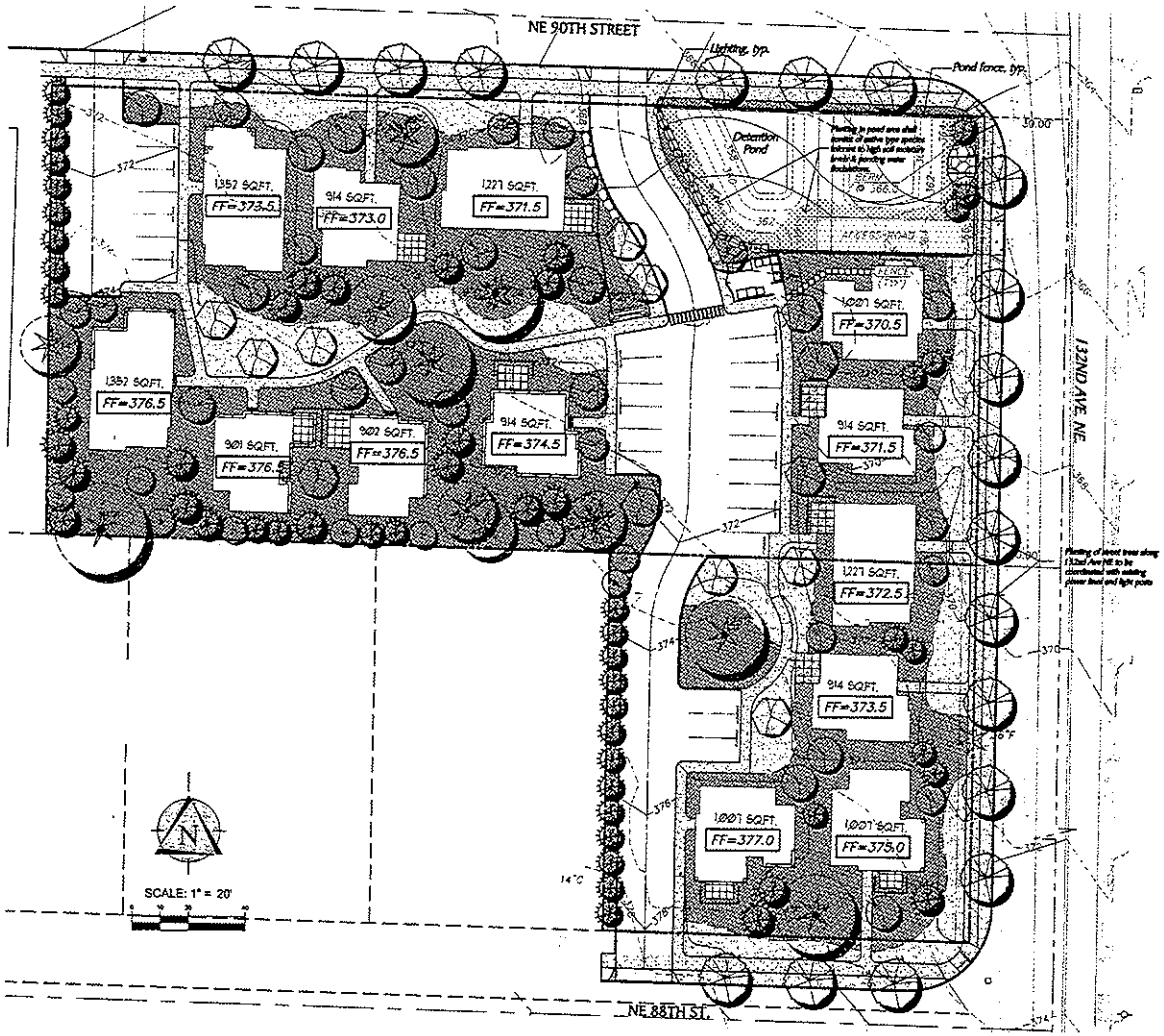
2112 116th AVENUE N.E. - SUITE A
BELLEVUE, WASHINGTON 98004
PH:(425)451-4084 FAX:(425)451-4078

CITY MINISTRIES

E.Dennis Reber
ARCHITECT


NE 90TH STREET (NEW 1/2 STREET IMPROVEMENTS)
132ND AVE. N.E.
NE 88TH ST.
(PLAN 1) ABE.=3736.4'
(PLAN 2) ABE.=3736.4'
(PLAN 3) ABE.=3732.7'
(PLAN 3) ABE.=3662'
(PLAN 2) ABE.=3736.4'
(PLAN 2) ABE.=3736.4'
(PLAN 3) ABE.=3736.4'
(PLAN 2) ABE.=3736.4'
(PLAN 2) ABE.=3736.4'
(PLAN 2

A PORTION OF NE 1/4, NE 1/4, SEC 4, TWP 25 N, RGE 5 E, W.E.



Preliminary Plant List

Street Trees-Deciduous (2" caliper)

- Acer rubrum/Red Maple
- Fraxinus oxycarpa/Raywood/Raywood Ash
- Cercidiphylum japonicum/Katsura Tree

Accent Trees-Deciduous (1-1/2" caliper)

- Acer circinatum/Vine Maple
- Acer griseum/Paperbark Maple
- Acer palmatum/Japanese Maple
- Betula utilis jacquemontii/Jacquemonti Birch
- Cornus kousa 'Chinensis'/Chinese Dogwood
- Magnolia stellata/Star Magnolia
- Malus spp./ Crab Apple
- Prunus spp./Flowering Cherry
- Pyrus c. 'Capital'/Columnar Flowering Pear
- Styrax japonica/Japanese snowbell

Coniferous Trees (5'-8' ht.)

- Abies lasiocarpa/Alpine Fir
- Chamaecyparis obtusa 'Gracilis'/Cypress
- Cupressocyparis leylandii/Cypress
- Calocedrus decurrens/Incense Cedar
- Pinus contorta/Shore Pine

Tall Shrubs (24"-36" tall)

- Arbutus unedo/Strawberry Bush
- Berberis thunbergii 'Atropurpurea'/red leaf Japanese barberry
- Ribes sanguineum 'King Edward VII'/ Red Flowering Currant
- Carrella sessequa 'White dove'/Carrella
- Chaenomeles/Flowering Quince
- Cornus stolonifera/Red Twig Dogwood
- Enkianthus campanulatus/Red Vein
- Hydrangea paniculata/Oak Leaf Hydrangea
- Myrica californica/Pacific Wax Myrtle
- Rhododendron

Low/Medium Shrubs (18"-24" tall)

- Azalea (deciduous)
- Azalea (evergreen)
- Euonymus jap 'Silver princess nanus'/Silver princess euonymus
- Ilex crenata/Japanese Holly
- Lavandula dentata 'Candicans'/Lavender
- Pieris japonica 'Mt. Fire'/Lily of the valley shrub
- Pinus mugo 'Mugo'/Dwarf Mugo Pine
- Polystichum munitum/Sword Fern
- Potentilla fruticosa 'Day dawn'/Shrubby Cinquefoil
- Spiraea bumalda 'Limemound'/Spiraea
- Spiraea nipponica 'Snowmound'/Snowmound Spiraea
- Weigela florida 'Variegata nana'/Weigela

Groundcover, Perennials (4" pots)

- Arctostaphylos uva ursi/Kinnikinnick
- Geranium sanguineum/Perennial Geranium
- Hosta sieboldiana/Plantain Lily
- Rosa eglanteria/Prickly Rose
- Rosa x flower carpet
- Rubus calycinoides 'Emerald carpet'/Bramble
- Viburnum opulus 'Nanum'/Dwarf Cranberry Bush
- Vinca minor/Dwarf Periwinkle

Seeded Lawn

Existing trees to remain. Based on preliminary site plan layout. (See note)

Approximate drip line

Note

This plan is preliminary and is intended to convey the general intent of the proposed landscaping. It is anticipated that the final design will be modified as a result of changes to the site plan, grading, civil engineering and architectural design during final design.

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN 2 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

CITY OF KIRKLAND
DEPT. OF PUBLIC WORKS/UTILITIES

APPROVED BY	
UTILITIES ENGINEER	DATE
SUPERVISOR ENGINEER	DATE

©2006 TRIAD ASSOCIATES

TRIAD ASSOCIATES

LANDSCAPE PLAN

CITY MINISTRIES HOUSING PROJECTS

CITY OF KIRKLAND, WASHINGTON

NO.	DATE	REVISION

DESIGNED BY: DAVID A. GRANDLICH, ASLA PROJECT MANAGER
REV. A. SHOCK, ASLA PROJECT SUPERVISOR
PROJECT ENGINEER
DAVID C. HILGERS PROJECT LANDSCAPE ARCHITECT
POST SUBMITTAL DATE: 6/1/06
SCALE: 1"=20' VERIFY

PRELIMINARY

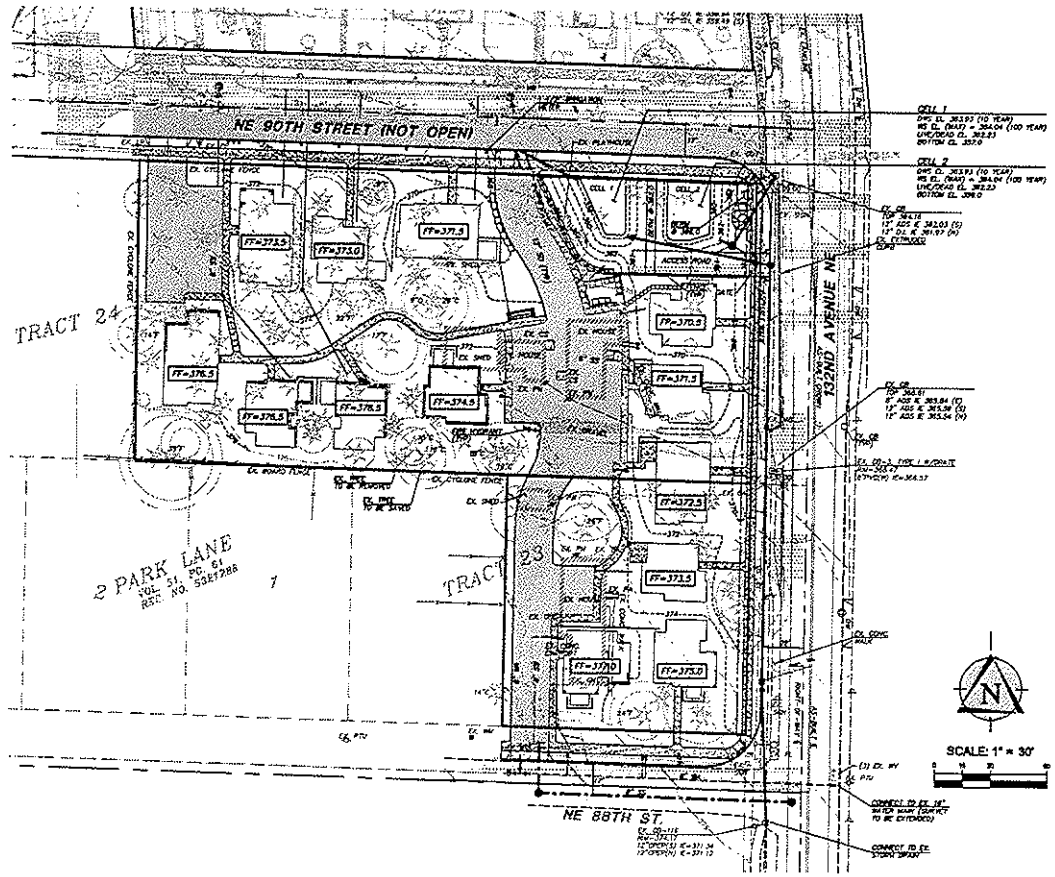
STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT 6/01/06
DAVID C. HILGERS CERTIFICATE NO. 878

STAMP NOT VALID UNLESS SIGNED AND DATED

JOB NO. 05-261

SHEET NO. L1 of L1

A PORTION OF NE 1/4, NE 1/4, SEC 4, TWP 25 N, RGE 5 E, W.E.



LEGEND

PROPOSED FEATURES

- BOUNDARY
- RIGHT-OF-WAY
- CUTTER, FLOW & CURB LINE
- CENTER LINE
- EASEMENT
- BUILDING SETBACK LINE (BSBL)
- STORM DRAIN PIPE
- SEWER MAIN
- SEWER SERVICE
- WATER MAIN
- 100' EXISTING CONTOURS
- 357' 2' EXISTING CONTOURS
- 420' 10' PROPOSED CONTOURS
- 422' 2' PROPOSED CONTOURS
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- STORM CLEANOUT
- YARD DRAIN
- SEWER MANHOLE
- SEWER CLEANOUT
- SINGLE WATER METER
- DOUBLE WATER METER
- FIRE HYDRANT
- AIR/VAC RELEASE VALVE
- BLOW OFF
- GATE VALVE
- TEE
- BEND
- REDUCER
- CONCRETE BLOCKING
- EXISTING GRAVEL
- PROPOSED GRAVEL
- EXISTING ASPHALT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CONCRETE

EXISTING FEATURES

- EXISTING STORM DRAIN PIPE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING POWER LINE
- EXISTING UNDERGROUND POWER LINE
- EXISTING GAS MAIN
- EXISTING TELEPHONE LINE
- EXISTING CATCH BASIN, TYPE I
- EXISTING CATCH BASIN, TYPE II
- EXISTING SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING POWER VAULT
- EXISTING GUY ANCHOR
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING AIR/VAC RELEASE VALVE
- EXISTING BLOW OFF
- EXISTING GATE VALVE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE

NOTE: BUILDINGS, WALLS AND SIDEWALKS OUTSIDE OF ROAD AND ALLEY SECTIONS ARE SHOWN FOR REFERENCE ONLY AND SHALL BE APPROVED UNDER SEPARATE PERMIT BY OTHERS.

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN 2 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

CITY OF KIRKLAND
DEPT. OF PUBLIC WORKS/UTILITIES

APPROVED BY
UTILITIES ENGINEER — DATE
SUPERVISOR ENGINEER — DATE

© 2006 TRIAD ASSOCIATES

TRIAD ASSOCIATES

PRELIMINARY GRADING AND UTILITY PLAN

CITY MINISTRIES HOUSING PROJECTS

CITY OF KIRKLAND, WASHINGTON

DATE:
BY: CK
REVISIONS BY:
DATE: 07/07
REVISION:

DAVID A. ROBERTSON, P.E.
PROJECT MANAGER
NICK E. WINDER, P.E.
PROJECT ENGINEER
SHEN K. MURPHY
PROJECT ENGINEER
PROJECT LANDSCAPE ARCHITECT
FIRST SUBMITTAL DATE: 6/01/06
SCALE: HORZ: 1"=30' VERT: N/A

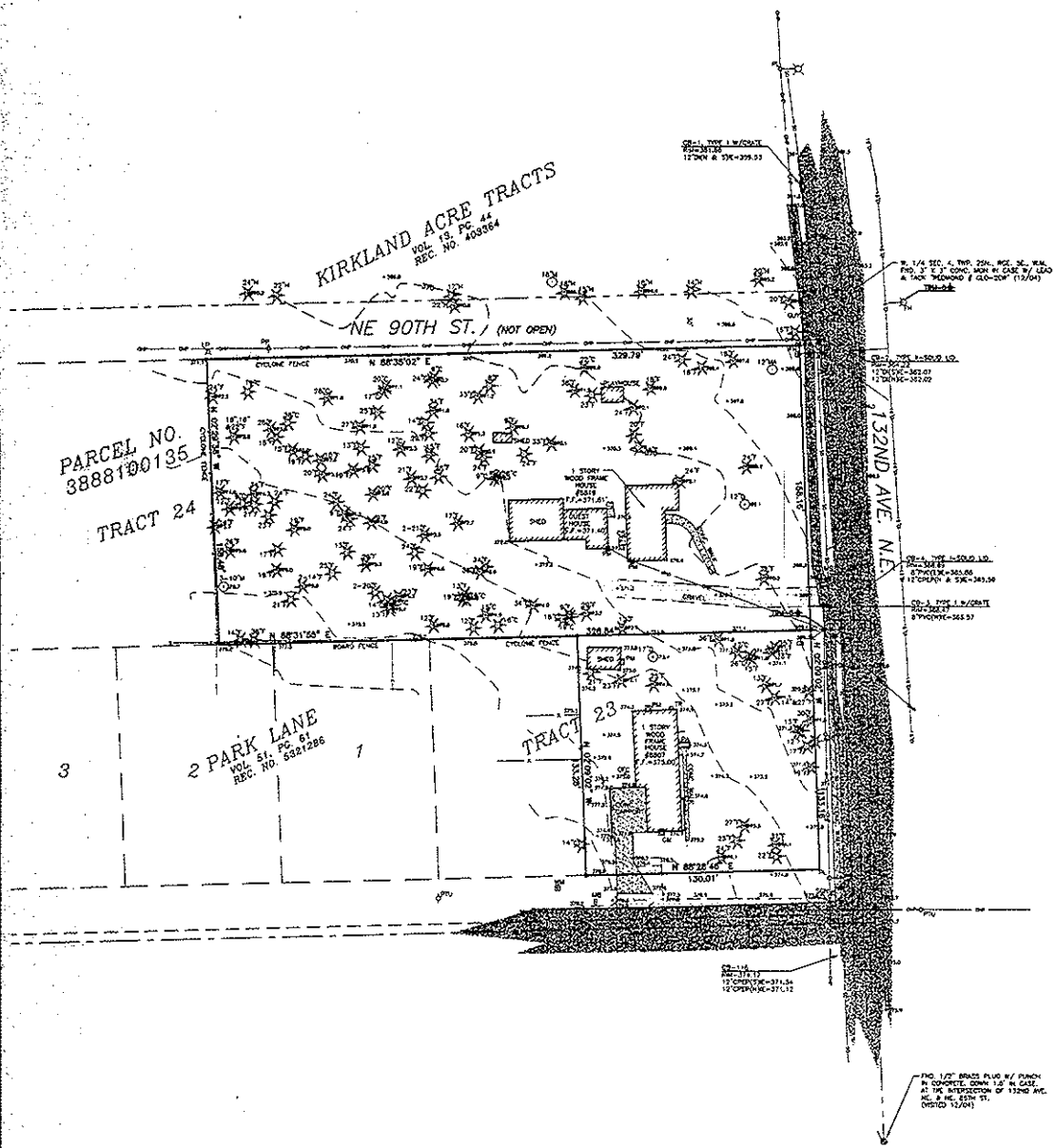
PRELIMINARY

REGISTERED PROFESSIONAL ENGINEER STATE OF WASHINGTON

EXPIRES 11/16/07

TRIAD NET VALUE
ENGINE 32420 AIR 34729

JOB NO. 05-261
SHEET NO. C2.=C2



Scale 1" = 30'

MERIDIAN:

PLAT OF KIRKLAND ACRE TRACTS AS RECORDED IN VOLUME 13 OF PLATS, PAGE 44, RECORDS OF KING COUNTY, WASHINGTON.

DATUM:

NAVD 88

CONTOUR INTERVAL = 2'

EQUIPMENT & PROCEDURES:

A 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. ACCURACY MEETS OR EXCEEDS W.A.C. 332-130-090.

BENCHMARKS:

ORIGINAL BM: CITY OF REDMOND # GLO - 2CW, 3" X 3" CONC. MON. IN W/ LEAD AND TACK @ INTERSECTION OF 132ND AVE. N.E. & N.E. 90TH ST. ELEV. = 342.95'

TBM - 5: RAILROAD SPIKE IN POWER POLE ON WEST SIDE OF 132ND AVE. N.E. @ SOUTHEAST CORNER OF PROJECT ELEV. = 370.36'

TBM - 6: SET "X" ON WEST SIDE CAP BOLT IN FIRE HYDRANT ON EAST SIDE OF 132ND AVE. N.E. @ NORTHEAST CORNER OF SITE ELEV. = 365.82'

GENERAL NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (I.E., PLANT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS ETC.) THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. TREE SIZES WERE LOCATED & SPECIES DETERMINED TO THE BEST OF OUR ABILITY, HOWEVER, MEAD GILMAN & ASSOCIATES DOES NOT WARRANT THE ACCURACY OF SIZE & SPECIES SHOWN HEREON. ANY TREES CONSIDERED TO BE CRITICAL SHOULD BE VERIFIED BY A TRAINED ARBORIST.

REFERENCES:

1. THE PLAT OF LA ROSE PARK AS RECORDED IN VOLUME 67 OF PLATS, PAGE 48, UNDER RECORDING NO. 5321286, RECORDS OF KING COUNTY, WASHINGTON.
2. THE PLAT OF BURKE & FARRAR'S KIRKLAND ADDITION DIV. NO. 21 AS RECORDED IN VOLUME 22 OF PLATS, PAGE 37, UNDER RECORDING NO. 794611, RECORDS OF KING COUNTY, WASHINGTON.
3. THE PLAT OF THE THREE PINES ADDITION, DIV. NO. 2 AS RECORDED IN VOLUME 56 OF PLATS, PAGE 44, UNDER RECORDING NO. 4072834, RECORDS OF KING COUNTY, WASHINGTON.

LEGEND:

CB	CATCH BASIN
CS	CONCRETE SLAB
FF	FINISH FLOOR
FH	FIRE HYDRANT
GA	GUY ANCHOR
GM	GAS METER
LS	LIGHT STANDARD
MB	MAILBOX
OFC	OIL FILLER CAP
PA	PLANTER AREA
PL	POWER POLE W/LIGHT
PM	POWER METER
PU	POWER POLE W/XFMR & UNDERGROUND
SGN	SIGN
TR	TELEPHONE RISER
V/C	VERTICAL CURB
WM	WATER METER
XFMR	TRANSFORMER
C	CEDAR
D	DECIDUOUS
F	FIR
H	HEMLOCK
M	MAPLE
MA	MAGNOLIA

SYMBOLS LEGEND:

	CATCH BASIN
	FIRE HYDRANT
	GUY ANCHOR
	GAS METER
	LIGHT POLE
	MAILBOX
	OIL FILLER CAP
	POWER POLE(AS NOTED)
	POWER METER
	SIGN
	TELEPHONE RISER
	WATER METER
	CONIFER (AS NOTED)
	DECIDUOUS (AS NOTED)
	FENCE LINE AS NOTED
	OVERHEAD POWER LINE
	STORM DRAIN LINE
	UNDERGROUND POWER LINE
	WATER LINE
	WATER LINE

ASPHALT HATCH

CONCRETE HATCH

GRAVEL HATCH

LEGAL DESCRIPTION:

THE EAST HALF OF TRACT 24 OF KIRKLAND ACRE TRACTS, AS PER PLAT RECORDED IN VOLUME 13 OF PLATS, PAGE 44, RECORDS OF KING COUNTY WASHINGTON;

(ALSO KNOWN AS LOT A OF KING UNRECORDED LOT LINE ADJUSTMENT NO. 88-2027, 20050228001096 IN KING COUNTY, WASHINGTON)

ALONG WITH THE EAST 130 FEET, TRACT 23, KIRKLAND ACRE TRACTS, ACCORDING TO THE PLAT THEREOF RECORDED IN VOL. 13 OF PLATS, PAGE 44, RECORDS OF KING COUNTY, WASHINGTON.

EXCEPT THE SOUTH 25 FEET THEREOF.

EXPIRES: 10/03/07

12-9-05

Mead Gilman & Assoc.
PROFESSIONAL LAND SURVEYORS
P.O. BOX 289, WOODINVILLE, WA 98072 (425) 486-1252

SCALE: 1"=30'	CITY MINISTRIES	DRAWN BY: MLP
DATE: 12-9-2005		REVISED:

CITY MINISTRIES C/O ESTON CATLETT
9051 132ND AVE. N.E. KIRKLAND, WASHINGTON 98033

BOUNDARY & TOPOGRAPHIC SURVEY	DRAWING NUMBER 05269

NE1/4, SE1/4, SEC. 4, T. 25 N., R. 5 E., W.M.

CITY OF KIRKLAND

123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1243

DEPARTMENT OF PUBLIC WORKS MEMORANDUM

RECEIVED
JUN 20 2006
AM PM
PLANNING DEPARTMENT
BY

To: Planning Department

From: Thang Nguyen, Transportation Engineer

Date: November 23, 2005

Subject: City Ministry Sub-division Concurrency Test Notice

This memo summarizes public works review of the traffic concurrency test result for the proposed development of an single family sub-division.

Project Description

The applicant proposes to replace two existing single-family homes and construct a 13 single-family unit sub-division. It is anticipated that the project will be built and fully occupied by the end of 2007.

The proposed project passed traffic concurrency. Attached is the result of the concurrency test. This memo will serve as the concurrency test notice for the proposed project. Per *Section 25.10.020 Procedures* of the KMC, this Concurrency Test Notice will expire in one year (November 23, 2006) unless a development permit and certificate of concurrency are issued or an extension is granted.

EXPIRATION

The concurrency test notice shall expire and a new concurrency test application is required unless:

1. A complete SEPA checklist, traffic impact analysis and all required documentation are submitted to the City within 90 calendar days of the concurrency test notice.

2. A Certificate of Concurrency is issued or an extension is requested and granted by the Public Works Department within one year of issuance of the concurrency test notice. (A Certificate of Concurrency is issued at the same time a development permit or building permit is issued if the applicant holds a valid concurrency test notice.)

ENCLOSURE 3

SEP06-00024

3. A Certificate of Concurrency shall expire six years from the date of issuance of the concurrency test notice unless all building permits are issued for buildings approved under the concurrency test notice.

APPEALS

The concurrency test notice may be appealed by the public or agency with jurisdiction. The concurrency test notice is subject to an appeal until the SEPA review process is complete and the appeal deadline has passed. Concurrency appeals are heard before the Hearing Examiner along with any applicable SEPA appeal. For more information, refer to the Kirkland Municipal Code, Title 25. If you have any questions, please call me at x3869.

cc: Jeffrey P. K. Hee, Transportation Solutions, Inc.

1) Project ID:	City Ministry SF subdivision	4) Transportation Concurrency Status: PASS	6) Transportation Concurrency Certificate Date:
2) Project Description:	replace 2 existing single family homes with 13 new single family homes	5) Transportation Concurrency Test Date: 7-Nov-05	7) Certificate of Occupancy Date
3) Build-out Year:	2007		

SUMMARY OF TRAFFIC IMPACTS

8) Daily Trips	105	PM Peak Trips:	11	Impacted Subarea(s):	East	TAZ:	276

Signalized Intersection PM Peak Traffic Impact

		Project PM Peak Turning Volumes															
		Eastbound			Westbound			Northbound			Southbound						
Code	Intersection	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	PM Peak Trips	Daily Trips	Sum of Critical Vol*	Vol. Capacity Ratio*
	Driveway/2nd Ave S													0		#N/A	#N/A
	State Street/2nd Ave S													0		#N/A	#N/A
401	NE 85th St/ 132nd Ave NE	3					3				1		2	9		1501	1.09
417	NE 100th St/132nd Ave NE								1			1		2		0	#DIV/0!
412	NE 85th St/128th Ave NE		3			2								5		0	#DIV/0!
402	NE 85th St/124th Ave NE		2			2								4		1366	0.99
409	NE 85th St/122nd Ave NE		2			2								4		1237	0.87
403	NE 85th St/ 120th Ave NE		1			1								2		1349	0.98
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A
	#N/A													0		#N/A	#N/A

Transportation Concurency Test

	LOS Standards		LOS with Project Impacts			
Subarea No	A= Max. Intersection LOS	B=Average 2010 V/C	a=No. exceeding 1.4	b=Average V/C	a <= A?	b<= B?
Southwest (1xx)	1.4	0.89	0	0.80	yes	yes
Northwest (2xx)	1.4	0.89	0	0.89	yes	yes
Northeast (3xx)	1.4	0.87	0	0.87	yes	yes
East(4xx)	1.4	1.05	0	1.00	yes	yes

TEST RESULTS

Result: **PASS**

* Based on Critical Movement, Planning Method TRC #212.

1. Number of intersection exceeding Average V/C LOS Standard (2012)

1. Sixth Year Target Average V/C ratio, see step 6, part 1 of the guidelines

TSI
Transportation Solutions, Inc.

8200 - 165th Avenue NE
Suite 100
Redmond, WA 98052-6628
T 425-883-4134
F 425-867-0898
www.tsinw.com

December 2, 2005

Mr. Thang Nguyen
Transportation Engineer
City of Kirkland
123 Fifth Avenue
Kirkland, Washington 98033-6189

Subject: City Ministries Single-Family Housing Development Concurrency Evaluation

Dear Mr. Nguyen:

This letter summarizes the project description and the estimated trip generation of this proposed development. An evaluation of the proposed access locations for this site has also been included. Please conduct a transportation concurrency test for this proposed project.

PROPOSED PROJECT

City Ministries is proposing to combine and develop two parcels totaling 1.5 acres into 13 single-family residential rental units. The development is to be located along the western edge 132nd Avenue NE, between NE 88th Street and a new section of NE 90th Street, which has yet to be developed. A vicinity map is attached.

Three accesses are proposed for this development, one along NE 88th Street, and two along the new segment of NE 90th Street. NE 88th Street dead-ends west of 132nd Avenue NE. The new segment of NE 90th Street is not planned to connect to any other existing portions of NE 90th Street, it will also dead-end west of 132nd Avenue NE, at the western-most site access. The two eastern-most driveways, one off the new NE 90th Street segment and the other off NE 88th Street, will be connected by the site's internal roadway system. Site plans are in the process of being finalized, however a preliminary site plan has also been attached. Please note that the preliminary site plan shows 15 single-family units and no internal connection between the two eastern-most site accesses.

There are two existing single-family residences located on the proposed site, which will be removed prior to this development's construction and occupation by 2007.

TRIP GENERATION

The trip generation for this development was estimated using the Institute of Transportation Engineers' *Trip Generation*, 7th Edition, Land Use Code 210 for "Single-Family Detached Housing."

Since there are two existing single-family homes on the site that are generating vehicular trips onto the surrounding road network, the existing trips were subtracted from the estimated trips generated by the proposed project.

Trip generation estimates for the weekday daily, weekday morning, and afternoon peak hours of adjacent street traffic are summarized in Table 1.

Table 1. Forecasted Trip Generation Calculations

Weekday Daily Trip Generation								
Condition	**LUC ***	**Size ****	**Rate**	**%-in**	**%-out**	**In**	**Out**	**Trips**
Proposed	*210*	*13*	*9.57*	*50%*	*50%*	*62*	*62*	*124*
Existing	210	2	9.57	50%	50%	10	10	19
Net New				**50%**	**50%**	**53**	**53**	**105**
Weekday Morning Peak Hour Trip Generation								
Condition	**LUC ***	**Size ****	**Rate**	**%-in**	**%-out**	**In**	**Out**	**Trips**
Proposed	210	13	0.75	25%	75%	2	7	10
Existing	210	2	0.75	25%	75%	0	1	2
Net New				**25%**	**75%**	**2**	**6**	**8**
Weekday Afternoon Peak Hour Trip Generation								
Condition	**LUC ***	**Size ****	**Rate**	**%-in**	**%-out**	**In**	**Out**	**Trips**
Proposed	210	13	1.01	63%	37%	8	5	13
Existing	210	2	1.01	63%	37%	1	1	2
Net New				**63%**	**37%**	**7**	**4**	**11**

Note:
* : Land-Use Code 210 - Single-Family Detached Housing
** : Size = number of dwelling units

As shown in Table 1, the proposed project site is expected to generate 105 new daily trips, 8 new morning peak hour trips, split 25-pecent inbound and 75-percent outbound, and 11 new afternoon peak hour trips, split 63% inbound and 37% outbound, onto the surrounding road network.

TRIP DISTRIBUTION

We understand that the City's transportation model will generate a suggested trip distribution considering the likelihood of travel from different portions of the City, considering population and travel distance, among other factors, which will then be used as part of the concurrency test.

SITE ACCESS EVALUATION

A sight distance evaluation was performed at the NE 88th Street site access. Since the new segment of NE 90th Street has yet to be constructed, sight distance measurements were not taken at the two proposed site access locations along with road.

Stopping and approaching sight distances was measured at the NE 88th Street access. Stopping sight distance was measured based on AASHTO standards and approach sight distance was measured based on Kirkland standards. There is no posted speed limit on NE 88th Street, so a 25-mph design speed was assumed for this 23-foot wide residential road with lane striping. The sight distance summary is presented below in Table 2.

Table 2. Sight Distance Summary at NE 88th Street

Direction	Stopping Sight Distance			Approach Sight Distance		
From Driveway	Measure	Standard[1]	Satisfied?	Measure	Standard[2]	Satisfied?
East	212	155	Yes	212	150	Yes
West	300+	155	Yes	300+	150	Yes

Note:
1 = AASHTO Standard
2 = City of Kirkland Standard

As shown in Table 2, stopping and approaching sight distance measures at the NE 88th Street site access eastbound and westbound movements would satisfy the AASHTO stopping sight distance and Kirkland approach sight distance standards. NE 88th Street is relatively flat from its intersection with 132nd Avenue NE west for about 200 feet before the road gradually slopes down at a less than 1-percent grade.

NE 88th Street is a dead-end street about 400-feet west of the site access. There are approximately fifteen driveway along NE 88th Street. Removal of the existing properties on the site and ensuring that no on-site obstructions are located in the sight-lines should allow for safe operations at this access location. Currently there is a fence and utility pole located west of the access. The fence is assumed to be removed and the utility pole is not expected to cause an adverse impact at this location, since a driver can easily maneuver to see around the pole. There is a large tree located about 120-feet west of the access, though it is not expected that this will cause a safety problem since it does not seem to be in a direct sight-line with the access and on-coming traffic on NE 88th Street.

The new segment of NE 90th Street has not been constructed yet and thus there were no sight distance measurements taken at the two proposed driveway locations along this road. The new section of NE 90th Street will dead-end at this location, west of the site. The applicant will need to ensure that appropriate setbacks are in place at all access locations, allowing for sufficient sight-lines.

SUMMARY

Given the small number of new trips that would be generated by the proposed expansion, and current volume/capacity ratios in east Kirkland, I expect transportation concurrency will not be an issue. Once this has been confirmed, the Applicant will complete a SEPA Application.

No safety issues associated with this proposed development's site access locations were identified.

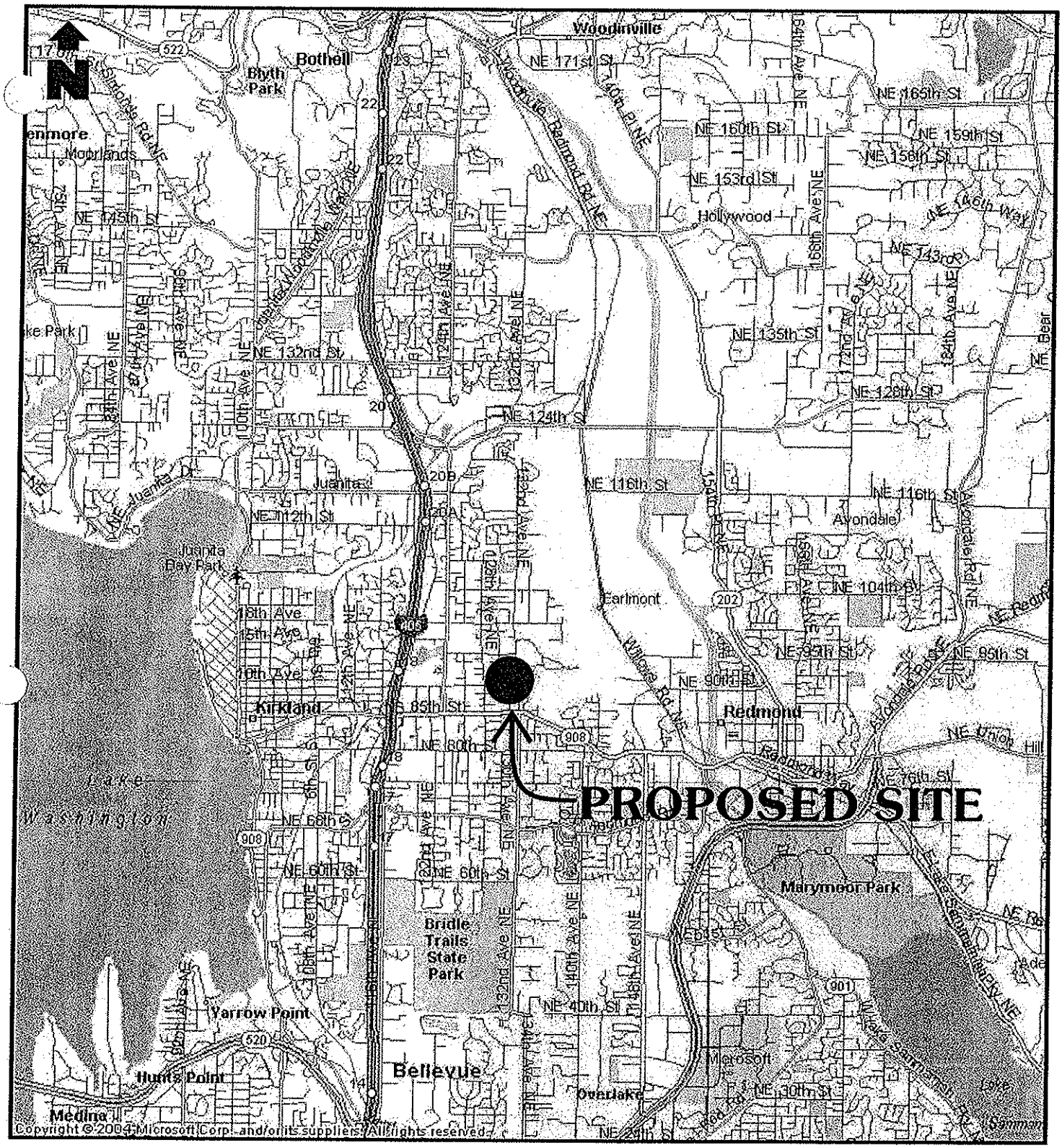
Please complete a transportation concurrency evaluation based on the trip generation attributable to the proposed expansion. A transportation concurrency application, as well as a check in the amount of the application fee are included as part of this submittal.

If you have any questions concerning this project please contact me at your convenience.

Sincerely,
Transportation Solutions, Inc.

Jeffrey P.K. Hee
Transportation Engineer

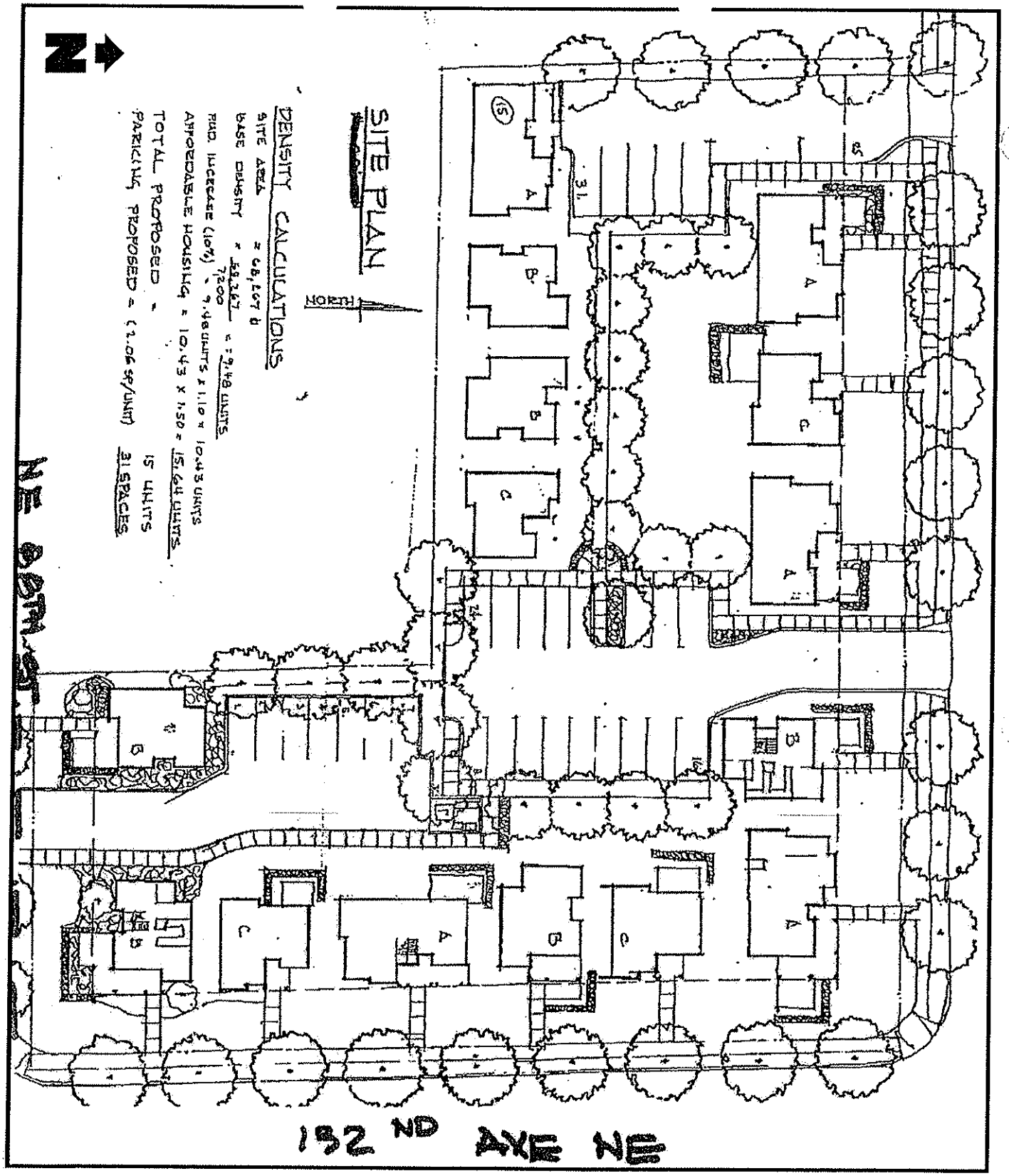
Attachments



TSI
Transportation Solutions, Inc.

Attachment 1:
Vicinity Map

City Ministries Single-Family Housing Development
City of Kirkland
City Ministries
Riebe & Associates, Inc.



* Please note that this preliminary site plan shows a 15 unit development.
The proposed project would only have 13 units
Also, there will be a connection between the two eastern-most parking areas

TSI
Transportation Solutions, Inc.

Attachment 2:
Preliminary Site Plan

City Ministries Single-Family Housing Developn.
City of Kirkland
City Ministries
Riebe & Associates, Inc.

CITY OF KIRKLAND
123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 828-1243

DEPARTMENT OF PUBLIC WORKS
MEMORANDUM

To: Tony Leavitt, Planner

From: Thang Nguyen, Transportation Engineer

Date: December 22, 2006

Subject: City Ministry Sub-division Concurrency Test Notice Extension

I have received a request for extending the traffic concurrency test notice for the City Ministry development. It appears that the applicant has made good faith effort to proceed with their development. Thus, I am granting them an extension.

This memo will serve as the concurrency test notice extension for the proposed project. Per *Section 25.10.020 Procedures* of the KMC, this Concurrency Test Notice will expire in one year (November 23, 2007) unless a development permit and certificate of concurrency are issued.

If you have any questions, please call me at x3869.

cc: Dennis Riebe, Riebe & Associates, Inc.

ENCLOSURE 4
SEP06-00024

Tony Leavitt

From: Mary Kooistra [mkooistra@berkeykooistra.com]
Sent: Monday, August 21, 2006 9:23 AM
To: Tony Leavitt
Subject: ZON06-00021

Dear Planning Department, Re: ZON06-00021

I live at 13022 NE 88th St., in Kirkland. I have the following comments concerned the proposed project:

1. It appears that many of the existing trees will be preserved. I strongly encourage this. I would appreciate a copy of the arborist's report.

2. I am concerned about increased traffic from the proposed develoment exiting onto NE 88th. I understand that the majority of vehicles will most likely be exiting to the north, but it also appears that we can expect significantly more traffic onto NE 88th than would be engendered by a single residence.
Although NE 88th is a dead end street, it does have its share of traffic, which will be increasing with development plans at the end of the street. This can be a safety hazard, particularly to pedestrians, with cars turning into and out of our street from or to 132nd. Besides the children on our street who walk to school bussing on 132nd , my mother-in-law who lives at 13014 NE 88th, often takes her walk down to 132nd and up or down 132nd. Indeed there is no other direction for her to go because of the steep hill at the end of our street. I would like to see a requirement of a sidewalk that curved around the corner from 132nd Ave NE to the end of the proposed development on NE 88th. This would provide a safer place for pedestrians as they approach the intersection.

Mary E. Kooistra
13022 NE 88th St.
Kirkland, WA 98033
e-mail mkooistra@berkeykooistra.com

ENCLOSURE 5
SEP06-00024

RECEIVED
AUG 24 2006
AM 1340 PM
PLANNING DEPARTMENT
BY

City of Kirkland
Planning and Community Development Department
123 Fifth Avenue
Kirkland, WA 98033

August 22, 2006

City Council Re: FILE NO. ZON06-00021

How much more of North Rose Hill is City Church going to be allowed to dominate?

This planned unit development will create far too much traffic, congestion, noise and pollution and should not be allowed to proceed as planned. Is City Ministries in the religion business or the real estate business? In studying this proposal I hope the City council will give first and foremost consideration to the neighborhood and residents who will be most affected and who bought their homes in the area believing it was permanently zoned for one house per parcel.

There are enough high density developments in North Rose Hill. I am not against development, I'm against over-development. I'm not against the church; I'm for my peaceful community and Quiet Street. I'm for quality of life.

In that beautiful little forest on the property in question, I have enjoyed seeing deer, coyotes, raccoons, possums, ermines, eagles, hawks, woodpeckers, including the big Pilated woodpeckers, scores of other song birds and several times on dark quiet evenings I have heard owls hooting. What happens to these beautiful creatures when the bulldozers show up? What's happening to the soul of North Rose Hill?

I am asking the City Council to NOT allow the requested modifications to the Kirkland Zoning code. No additional density, setback encroachments and no multiple dwelling units on a single parcel.

When City Ministries bought the Twogood property and rented it, on several occasions the police had to be called late at night to ask the residents to turn down their loud music and other noise. Trash accumulated, it seemed they were not capable setting out their trash containers. On many nights, for the entire night there were many more cars parked along the street than there were residents. Is this an indication of poor management we can expect from City Ministries in the future?

However this development proceeds, why not utilize the existing church parking lot for the needed parking space. Why can't the houses be set back further from the property lines? These two modifications to the plan would help a great deal.

ENCLOSURE 6
SEP06-00024

I would like to thank the City Council for allowing my comments.

Sincerely, Robert Brewer

13046 NE 88th Street, Kirkland 98033 425 828-4245

Robert A. Brewer

Dana A. Brewer

OTHER CONCERNED NEIGHBORS

Dena L Rucker 8563-132nd Ave NE Kirkland 425 827 1411

Melissa Garris 13031 NE 88th St. Kirkland 425.803.9639

Jim Garris 13031 NE 88th St., Kirkland WA 425-803-9639

Erling Hoyle 13003 N.E 88TH ST

[illegible] 13004 NE 88th ST 828-6209
($ LAND)

Shayla Riday 13004 NE 88th St 828-6209

[illegible] 13038 NE 88TH ST. 889-0269

Lyn Quaksund 13038 NE 88th St. 889-0269

Carl A. Jeppson 13030 N.E. 88TH 2-3769

RECEIVED
AUG 24 2006
AM PM
PLANNING D
BY

12915 NE 94th St
Kirkland, WA 98033
425-827-5315
gocarolgo@comcast.net

Mr. Tony Leavitt
123 5th Ave
Kirkland, WA 98033

re: file number ZON06-00021, The City Ministries Planned Unit Development

Dear Mr Leavitt:

My husband and I live in North Rose Hill, immediately to the northwest of the City Church property.

I am not totally opposed to this zoning variance to allow denser housing, but wonder what, if anything, the city will get in return - besides more demands for services and more road congestion.

As a point of curiosity, does the increase in taxes, received by our city when more houses are built, offset the increase in costs for services?
Is there any way of factoring in the cost to the environment brought by more pollution and fewer green areas?

In general, if we are to have denser housing, will it be along a bus corridor? I get the impression that, outside of downtown, Kirkland is trying to spread out any increase in housing density, allowing a variance here and a variance there - kind of a "shotgun" approach. It would make more sense to concentrate the increased housing density along bus corridors so that people would not be so dependent on their cars. Personally I would like to see a bus into Seattle along 132nd Ave NE that runs all day long, not just at rush hour.

As for the parcel owned by City Ministries, if the zone variance is permitted, can Kirkland impose more stringent development requirements in return? For instance, for this project, can Kirkland require permeable pavement for all new roads, driveways and sidewalks? Can we require all the houses to be "green built"?

As a further conditions for allowing this zoning variance, I think City Ministries should be required to make some changes to the existing parking lot at the church. This is one of the largest paved surfaces in the city of Kirkland, and it is unbroken by trees or any other plantings. In the summer it is just plain hot.

ENCLOSURE 7
SEP06-00024

The rainwater runoff from this parking lot must be enormous. I think the church should sacrifice a few of their parking spaces, tear out some paving and plant some trees. The parking lot would be much more pleasing esthetically, and there would be environmental benefits as well.

In summary, I hope Kirkland will not grant this zoning variance unless there are significant benefits to our environment in return.

Sincerely,

Carol Nielsen

Carol Nielsen

RECEIVED
AUG 28 2006
_____ PM
DEPARTMENT
BY_____

Mr. Tony Leavitt
Project Planner
ZON06-00021

24 August 2006

Mr. Leavitt,

We wish to raise the following issues and concerns regarding the City Ministries Planned Unit Development, file No. ZON 06-00021:

1) What building code allows for 13 dwelling units to be situated on property of this size? The property on the corner of NE 88th and 132nd AVE was a single family dwelling, but according to the plan there would be 3.5 units on this property. We believe that placing 3.5 units on the corner lot of NE 88th and 132nd AVE is excessive. Additionally, the adjoining 1.1 acre parcel is zoned for 7.2 units and we believe that it should remain so.

2) The proposed building sites on the south side of the 1.1 acre parcel shows the buildings would be ten feet from the property line. This would effectively eliminate any expectation of privacy in our back yard, given that the proposed buildings would be two story structures. We request that the site proposal be reviewed and that the housing sites moved to comply with current building code set-backs.

3) The distance from 132nd Ave NE to the driveway is not sufficient to allow for reasonable traffic safety. We are concerned about the vehicle traffic entering and leaving the site via the proposed driveway onto NE 88th street. We believe that the close proximity of the proposed driveway to 132nd Ave will cause traffic problems with vehicles entering NE 88th from 132nd Ave. Vehicles turning westbound onto NE 88th Street will have to contend with traffic making left turns from an unmarked driveway when exiting the property.

4) We are not educated on the definition of "Affordable Housing Units".
What is the Public Law and the criteria that requires a portion of this PUD to be designated as "Affordable Housing Units"? We understand that there will be three of these units on the proposed site. Why only three? What is the planned location of the three affordable housing units?

email: jqualsund@netscape.com

John & Lyn Qualsund
13038 NE 88th Street
Kirkland, WA. 98033

ENCLOSURE 8
SEP06-00024

JAN A. RUCKER

RECEIVED
OCT - 4 2006
_____AM_____PM
PLANNING DEPARTMENT
BY_____

September 30, 2006

Mr. Tony Leavitt
Project Planner
123 5th Avenue
Kirkland, WA 98033

Dear Mr. Leavitt:

I am writing in regard to the notice of application for the City Ministries planned unit development file #Z0N06-00021.

I oppose the requested modifications of the City of Kirkland zoning code. I do not agree that the proposed PUD will meet the criteria or provide the benefits to the community as defined by chapter 125 of the Kirkland code.

While I do not dispute the City Church's use/development of the property under current zoning code, I do not feel the proposed PUD enhances the neighborhood. The codes were established to preserve the quality of the neighborhood. I am opposed to any change that adversely effect property value, increase traffic, or disturbs the usage and enjoyment of the neighborhood.

The additional density of the proposed PUD will compound the existing issues of traffic, noise, and declining privacy of the adjacent properties. Over the last several years, the frequency and attendance of City Church's various operations have become increasingly obtrusive to the tranquility of the neighborhood.

In conclusion, I do not believe a high-density development here is consistent with the City of Kirkland's vision or the NRH Comprehensive Plan. I welcome a development consistent with current zoning codes, increased set backs to adjacent properties and respects the long time residents of this community.

Sincerely,

Jan A Rucker

Jan A. Rucker

8563 132ND AVENUE NE • KIRKLAND, WA • 98
PHONE: (425) 827-1611 • E-MAIL: d.rucker6@veri

ENCLOSURE 9
SEP06-00024

Gilles Consulting
Brian K. Gilles
425-822-4994

EVALUATION OF TREES
AT
THE CITY CHURCH, 9051 132ND AVENUE NE, KIRKLAND, WA 98033

February 17, 2006

PREPARED FOR:
Eston Catlett
Project Manager
City Ministries
9051 132ND Avenue NE
Kirkland, WA 98033

PREPARED BY:
GILLES CONSULTING
Brian K. Gilles, Consulting Arborist
ISA Certified Arborist # PN-0260
ASCA Registered Consulting Arborist # RCA-418

ENCLOSURE 10
SEP06-00024

Fax: 425-822-6314
E-mail: bkgilles@comcast.net
P.O. Box 2366 Kirkland, WA 98083

MEMBER
Printed on recycled paper

CONTENTS

ASSIGNMENT 3

EXECUTIVE SUMMARY 3

METHODOLOGY 3

Tree Tags 3

Missing Trees 4

OBSERVATIONS 4

DISCUSSION 4

CONCLUSIONS AND RECOMMENDATIONS 5

WAIVER OF LIABILITY 6

ATTACHMENTS 7

ASSIGNMENT

Eston Catlett of the City Church and Dennis Riebe, of Riebe and Associates, contacted Gilles Consulting to provide an evaluation of the trees at 8819 and 8807 132nd Avenue NE in Kirkland, Washington. A proposal was sent to City Ministries and accepted by Mr. Catlett for Gilles Consulting to accomplish the work.

The properties are now owned by the City Church. The goal is to remove the remaining house, shed on the property, and develop the area into 13 new single-family homes. This report is the evaluation of the trees on the property.

EXECUTIVE SUMMARY

There are 148 trees on the property. Seventy of these are *Non-Significant* by City of Kirkland Code standards due to poor health, poor structure, or both. Seventy-eight of the trees are *Significant* based upon City of Kirkland Code have the potential to be retained. The 78 trees total 190 tree credits according to the new Kirkland Code. However not all of these trees can be retained due to their location, the location of the new homes and associated improvements required to develop the site as proposed. The 78 trees will need to be looked at in relation to the site improvements and tree protection measures needed to preserve them in the long-term.

METHODOLOGY

To evaluate the trees and to prepare the report, I drew upon my 25+ years of experience in the field of arboriculture and my formal education in natural resources management, dendrology, forest ecology, plant identification, and plant physiology. I also followed the protocol of the International Society of Arboriculture (ISA) for Hazard Tree Assessment that includes looking at the overall health of the trees as well as the site conditions. This is a scientifically based process to look at the entire site, surrounding land and soil, as well as a complete look at the trees themselves.

In examining each tree, I looked at such factors as: size, vigor, canopy and foliage condition, density of needles, injury, insect activity, root damage and root collar health, crown health, evidence of disease-causing bacteria, fungi or virus, dead wood and hanging limbs. While no one can predict with absolute certainty which trees will or will not fail, we can, by using this scientific process, assess which trees are most likely to fail and take appropriate action to minimize injury and damage.

Tree Tags

The trees had been tagged by the survey crew. However, less than one-half of the tags remained on the trees. We did find a few tags on the ground and several nails were observed on trees where presumably the tags were located. Given that the majority of the tags were removed Gilles Consulting stapled new tags on the trees. The tags were placed generally on the south side of the trunks at approximately 7 feet above the ground. The

tags are numbered beginning at 378 to 500 and 601 through 625. The tags are made of shiny aluminum approximately one inch by three inches in size and are attached to the tree with staples. The tags were placed as high as possible to minimize their removal and were generally placed on the backsides of the trees as inconspicuously as possible. Please refer to *Attachment 1, Site Plan* for an orientation to the site and the approximate location of the trees.

Missing Trees

If one or more trees were not included on the survey, they were labeled and tagged with the next number in the sequence. The approximate location of the missing trees is indicated on *Attachment 1, Site Plan*. However, these trees will need to be surveyed to determine their exact location in relation to site improvements and their retainability.

OBSERVATIONS

In an effort to present the information and conclusions for each tree in a manner that is clear and easy to understand, I have included a detailed spreadsheet, *Attachment 2, Tree Inventory/Condition Spreadsheet*. The descriptions on the spreadsheet were left brief in order to include as much pertinent information as possible and to make the report manageable. A detailed description of the terms used in the spreadsheet and in this report can be found in *Attachment 3, Glossary*. A brief review of these terms and descriptions will enable the reader to rapidly move through the spreadsheet and better understand the information.

DISCUSSION

The two properties front onto 132nd Avenue NE and NE 88th Street. The house at 8819 NE 132nd Avenue was already removed in January 2006. The house at 8807 NE 132nd Avenue and a shed were still on the property when the trees were evaluated. The property at 8819 is generally flat and has a small lawn area near the street and scattered trees around the perimeter with a dense forest in the west end of the property. The property at 8807 is also generally flat with a few remnant trees scattered in the eastern one-half of the property.

The forest in the western half of 8819 is a typical mixed age and mixed species second growth lowland Puget Sound forest. Tree species are predominately Douglas Fir, Western Red Cedar, and Big Leaf Maple. There are a few ornamental trees around the two house sites. The forest underbrush consists primarily of Salal, Sword Fern, and Oregon Grape.

There were 148 trees evaluated on the property:

- 70 trees were rated as *Non-Significant* due to poor health, poor structure, or both.
- 78 trees were rated *Significant* and can potentially be retained if their location in relation to the site improvements allows.

- The 78 trees total 504 total tree credits.

Please note, that the number of required tree credits must be calculated by taking the total square footage of the site and dividing by 43,560 and multiplying by 30:

(Lot size in square feet) / 43,560 X 30 = Required Minimum Tree Density.

Please also note that it would be wise to retain additional trees above the required 30 credits per acre if at all possible. Many of the trees on the site show symptoms of root rot disease. There are several virulent diseases in the area that spread by root contact in the soil. It is a well-known and understood fact in the industry that pathogenic activity and the demise of trees are accelerated due to the stress of construction. Quite often trees on the edge of survival will decline rapidly as a result of construction stress. Therefore, it may be wise to save additional trees, if their location allows, and to do a quick re-evaluation of the trees after the clearing and grading is accomplished and again after the site improvements are compete to determine if additional trees must be removed for safety.

CONCLUSIONS AND RECOMMENDATIONS

The site appears to be well suited for the proposed development. There are a few trees near the perimeter property lines that may survive construction. For any of the trees selected for retention it will be critical that protection measures are clearly followed during the construction process.

In order for trees to survive the stresses placed upon them in the construction process, tree protection must be planned in advance of equipment arrival on site. If tree protection is not planned integral with the design and layout of the project, the trees will suffer needlessly and will possibly die. With proper preparation, often costing little, or nothing extra to the project budget, trees can survive and thrive after construction. This is critical for tree survival because damage prevention is the single most effective treatment for trees on construction sites. Once trees are damaged, the treatment options available are limited.

The Tree Protection Measures outlined in *Attachment 5* are a minimum protection required and are included on three separate sheets so that they can be copied and introduced into all relevant documents such as site plans, permit applications and conditions of approval, and bid documents so that everyone involved is aware of the requirements. These Tree Protection Measures are intended to be generic in nature. They will need to be adjusted to the specific circumstances of your site that takes into account the location of improvements and the locations of the trees.

WAIVER OF LIABILITY

There are many conditions affecting a tree's health and stability which may be present and cannot be ascertained, such as, root rot, previous or unexposed construction damage, internal cracks, stem rot and more which may be hidden. Changes in circumstances and conditions can also cause a rapid deterioration of a tree's health and stability. Adverse weather conditions can dramatically affect the health and safety of a tree in a very short amount of time. While I have used every reasonable means to examine these trees, this evaluation represents my opinion of the tree health at this point in time. These findings *do not guarantee future safety nor are they predictions of future events.*

The tree evaluation consists of an external visual inspection of an individual tree's root flare, trunk, and canopy from the ground only unless otherwise specified. The inspection may also consist of taking trunk or root soundings for sound comparisons to aid the evaluator in determining the possible extent of decay within a tree. Soundings are only an aid to the evaluation process and do not replace the use of other more sophisticated diagnostic tools for determining the extent of decay within a tree.

As conditions change, it is the responsibility of the property owners to schedule additional site visits by the necessary professionals to ensure that the long-term success of the project is ensured. It is the responsibility of the property owner to obtain all required permits from city, county, state, or federal agencies. It is the responsibility of the property owner to comply with all applicable laws, regulations, and permit conditions. If there is a homeowners association, it is the responsibility of the property owner to comply with all Codes, Covenants, and Restrictions (CC&R's) that apply to tree pruning and tree removal.

This tree evaluation is to be used to inform and guide the client in the management of their trees. This in no way implies that the evaluator is responsible for performing recommended actions or using other methods or tools to further determine the extent of internal tree problems without written authorization from the client. Furthermore, the evaluator in no way holds that the opinions and recommendations are the only actions required to insure that the tree will not fail. A second opinion is recommended. The client shall hold the evaluator harmless for any and all injuries or damages incurred if the evaluator's recommendations are not followed or for acts of nature beyond the evaluator's reasonable expectations, such as severe winds, excessive rains, heavy snow loads, etc.

This report and all attachments, enclosures, and references, are confidential and are for the use of the client concerned. They may not be reproduced, used in any way, or disseminated in any form without the prior consent of the client concerned and Gilles Consulting.

Thank you for calling Gilles Consulting for your arboricultural needs. Please call me if I can provide more information or be of further service.

Sincerely,

Brian K. Gilles, Consulting Arborist
International Society of Arboriculture Certified Arborist – PN-0260
American Society of Consulting Arborists, Registered Consulting Arborist – RCA—418

ATTACHMENTS

ATTACHMENT 1 - SITE PLAN
ATTACHMENT 2 - TREE INVENTORY/CONDITIONS SPREADSHEET
ATTACHMENT 3 - GLOSSARY
ATTACHMENT 4 - SITE PHOTOS
ATTACHMENT 5 - TREE PROTECTION MEASURES
ATTACHMENT 6 - REFERENCES

ATTACHMENT 1 - SITE PLAN

 # 1 Tree #: Individual tree number.
 # 2 Species:

	Ap/Msp	Apple, *Malus sp.*
	AYC/Cn	Alaska Yellow Cedar, *Chamaecyparis nootkatensis*
	BCh/Pe	Bitter Cherry, *Prunus emarginata*
	BLM/Am	Big Leaf Maple, *Acer macrophyllum*
	CR/Cc	Canadian Redbud, *Cercis canadensis*
	DF/Pm	Douglas Fir, *Pseudotsuga menziezii*
	MtnA/Sa	Mountain Ash, *Sorbus americana*
	NS/Pa	Norway Spruce, *Picea abies*
	PDW/Cn	Pacific Dog Wood, *Cornus nattallii*
	PFlDw/Cf	Pink Flowering Dogwood, *Cornus florida*
	PM/Am	Pacific Madrone, *Arbutus menziesii*
	PP/Pp	Ponderosa Pine, *Pinus ponderosa*
	RA/Ar	Red Alder, *Alnus rubra*
	WH/Th	Western Hemlock, *Tsuga heterophylla*
	WRC/Tp	Western Red Cedar, *Thuja plicata*

 # 3 DBH: Trunk diameter @ 4.5' above average ground level.
 # 4 Tree Credit: Tree Credit based on Trunk Diameter
 # 5 Drip Line: The diameter from the furthest branch tips across the tree canopy.
The distance from the tree trunk that is equal to the furthest extent of the tree's crown
 # 6 LCR: *Live Crown Ratio* - the amount of live canopy expressed as a % of the entire tree height
 # 7 Symmetry: General shape of canopy and weight distribution of the tree around the trunk.
 # 8 Foliage: General description of foliage density that indicates tree health and vigor.
abs/ase = Average Bud Set/Average Shoot Elongation, **pbs/sse** = Poor Bud Set/Short Shoot Elongation
 # 9 Crown Condition: The most important external indication of tree health and vigor.
 # 10 Trunk: Description of trunk condition or abnormalities if any.
 # 11 Root Collar: The base of the tree where the trunk flares into the roots--deformities or problems are noted here.
 # 12 Roots: Root problems are noted here.
 # 13 Comments: Additional observations about the tree's condition.
 # 14 Current Health Rating: *ISA Hazard Rating* - an indication of tree health, and a rating on the scale of 3 - 12 with 12 being most hazardous.
 # 15 Recomm.: *Recommendation* -- the best course of action based on the evaluation of the tree.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
378	AYC/Cn	16.8"		24.0'	85%	Gen. Sym.	Dense	Healthy	Slight Lean South	Partially Exposed	Rot to South	In Corner of Driveway and Yard, Open Wound on West Side from Base up 3' with Rot and Carpenter Ant Infestation, Root Rot	Poor	Non-significant
379	DF/Pm	25.0"	8	26.0'	80%	Min. Asym.	Dense	Healthy	Bowed NE	NAD	-	Early Bark Beetle Infestation, Grape Vines, Beams nailed @3' with Railroad Spikes	Fair	Potential Keeper
380	DF/Pm	27.8"	10	28.0'	65%	Maj. Asym.	Dense	Healthy	Straight	NAD	-	Early Bark Beetle Infestation	Good	Potential Keeper
381	DF/Pm	29.1"	10	30.0'	76%	Maj. Asym.	Average	Average	Straight	NAD	-	Early Bark Beetle Infestation, Significant Storm Damage in Canopy - Lots of Broken Branches	Fair	Potential Keeper
382	DF/Pm	20.9"		32.0'	50%	Maj. Asym.	Average	Broken Out	Leans SE, Serpentine	Possible Base Rot	-	Bark Beetle Infestation	Poor	Non-significant
383	DF/Pm	37.3"	14	40.0'	85%	Gen. Sym.	Average	Healthy	Straight	NAD	-	Storm Damage	Good	Potential Keeper
384	PDw/Cn	9.6"		16.0'	85%	Gen. Sym.	ABS/ASE	Utility Pruned	Base Rot	Base Rot	Rot	Open Wound on West Side from Base up 2', Forked @ 10'	Poor	Non-significant
385	DF/Pm	20.8"	6	20.0'	75%	Min. Asym.	Average	Broken Out	Slight Bow SE	NAD	-	Banana Cracks on SW side 4' up 11' on SW Side, Storm Damage, Hangers	Fair	Potential Keeper
386	DF/Pm	17.1"	4	20.0'	60%	Maj. Asym.	Average	Weak	Slight Bow East	NAD	-	Early Bark Beetle Infestation, Epicormic Growth	Fair	Potential Keeper
387	DF/Pm	36.1"	14	35.0'	60%	Gen. Sym.	Dense	Healthy	Straight	NAD	Rot	By Sidewalk	Good	Potential Keeper
388	DF/Pm	13.5"		16.0'	50%	Maj. Asym.	Chlorotic & Thin	Broken Out	Leans West	Possible Base Rot	-	Bark Beetle Infestation, Base Against Tree #389	Poor	Non-significant
389	DF/Pm	11.8"		16.0'	20%	Maj. Asym.	Thin	Weak	Center Rot	Base Rot	-	Base Against Tree # 388	Poor	Non-significant
390	DF/Pm	29.1"		20.0'	40%	Maj. Asym.	Thin	Weak	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Non-significant
391	DF/Pm	29.3" & 13.6"		22.0'	45%	Min. Asym.	Average	Average	Forked @ 3', Center Rot	Base Rot	-	Larger Trunk Forks @ 7' and leans, SE Trunk Removed with Rot and Fungal Fruiting Bodies	Poor	Non-significant
392	DF/Pm	28.3"	10	38.0'	80%	Min. Asym.	Average	Average	Straight	NAD	-	Bark Beetle Infestation	Fair	Potential Keeper
393	DF/Pm	14.1"		22.0'	75%	Maj. Asym.	Chlorotic & Thin	Broken Out	Center Rot	Base Rot	-	Burl on SW side from 7' to 8.5' with Sap Flow, Advanced Bark Beetle Infestation	Poor	Non-significant
394	DF/Pm	32.4"		24.0'	70%	Min. Asym.	Average	Average	Straight	Possible Base Rot	-	Base Against Tree # 395, Sap Flow on South Side from 4' down to Base, Bark Beetle Infestation, Sap Flow on North Side from 4' down to Base	Poor	Non-significant
395	DF/Pm	26.1"		24.0'	60%	Maj. Asym.	Short Shoot Elongation	Broken Out	Slight Bow North	Possible Base Rot	-	Base Against Tree # 394	Poor	Non-significant

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
396	DF/Pm	16.9"		22.0'	70%	Maj. Asym.	Average	Suppressed	Straight	Base Rot	-	trunk and base are fused to # 397 base up 4', advanced Bark Beetle Infestation	Poor	Non-significant
397	WRC/Tp	22.3"		24.0'	90%	Min. Asym.	Dense	Average	slight bow at base, slight lean south	Possible Base Rot	-	fused to 396 base up 4', ivy up 10'	Poor	Non-significant
398	WRC/Tp	17.1"	4	28.0'	95%	Min. Asym.	Dense	Healthy	slight lean west	NAD	-		Good	Potential Keeper
399	DF/Pm	36.5"	14	36.0'	85%	Maj. Asym.	Short Shoot Elongation, Dense	Healthy	slight bow to the north	NAD	surface	early Bark Beetle Infestation	Fair	Potential Keeper
400	MtnA/Sa	19.4"	5	42.0'	70%	Gen. Sym.	ABS/ASE	Average	fork @ 9'	Ivy	-	Ivy up 15', Sapsucker activity, rot pockets in old branch collar wounds	Fair	Potential Keeper
401	DF/Pm	28.0"	10	26.0'	90%	Gen. Sym.	Average	Average	Straight	Ivy	-	Ivy up 10', Bark Beetle Infestation	Good	Potential Keeper
402	WH/Th	21.9"		0.0'	0%	none	none	Dead	Center Rot	Base Rot	-	woodpecker activity, early bark beetle infestation	Dead	Non-significant
403	DF/Pm	23.6"	8	30.0'	60%	Min. Asym.	Dense	Healthy	Straight	NAD	-	next to old shed 1' to base of tree, early bark beetle infestation	Good	Potential Keeper
404	CR/Cc	7.0" & 6.1"			45%	Min. Asym.	ABS/ASE	Average	fork at 3', Center Rot	Base Rot	-		Poor	Non-significant
405	PFIDw/Cf	6.3"	1	16.0'	60%	Min. Asym.	ABS/ASE	regenerating - average	fork at 3.5' and 6' and 9'	NAD	surface		Fair	Potential Keeper
406	DF/Pm	37.8"	15	64.0'	75%	Gen. Sym.	Average	Average	Straight	NAD	-	Early Bark Beetle Infestation	Good	Potential Keeper
407	NS/Pa	20.3"	6	32.0'	95%	Gen. Sym.	Average	Average	Straight	NAD	-	spider mites on foliage	Good	Potential Keeper
408	Ap/Msp	8.2 & 7.8		16.0'	40%	Min. Asym.	ABS/ASE	Weak	Center Rot	Base Rot	-	carpenter ant infestation, broken collar 3rd trunk	Poor	Non-significant
409	PM/Am	313.0"		18.0'	25%	Maj. Asym.	Average	Utility Pruned	leans east	bowed	-		Poor	Non-significant
410	DF/Pm	17.0"	4	20.0'	60%	Gen. Sym.	Average	Average	Straight	NAD	surface	Epicormic Growth, trunk side sheared for utility pruning on north side, early bark beetle infestation	Fair	Potential Keeper
411	DF/Pm	20.3"	6	24.0'	60%	Min. Asym.	Average	Average	slight lean west	NAD	-	Epicormic Growth, trunk side sheared for utility pruning on north side, early bark beetle infestation, rotten stump NE side--20" diameter, 36" tall with advanced rot extending down into base of tree	Fair	Potential Keeper
412	DF/Pm	26.5"		28.0'	60%	Maj. Asym.	Average	regenerating - poor	Straight	NAD	-	Epicormic Growth, trunk side sheared for utility pruning on north side, early bark beetle infestation, rot column 3' to base with fungal fruiting bodies	Poor	Non-significant
413	PP/Pp	9.9"		16.0'	50%	Maj. Asym.	Thin	regenerating - poor	Center Rot	Base Rot	-		Poor	Non-significant
414	DF/Pm	31.7"	12	48.0'	75%	Maj. Asym.	Average	Average	slight bow south	NAD	-	Short Shoot elongation, early bark beetle infestation, wood nailed to trunk at 6' and 10' on east side	Fair	Potential Keeper
415	DF/Pm	25.3"			50%	Gen. Sym.	Thin	Weak	Straight	Possible Base Rot	-	Epicormic Growth, Necrosis, early bark beetle infestation, wood nailed to east side at 10', woodpecker activity	Poor	Non-significant
416	DF/Pm	22.2"			35%	Min. Asym.	Thin	Weak	Straight	Possible Base Rot	-	Epicormic Growth, Necrosis, bark beetle infestation, woodpecker activity	Poor	Non-significant
417	DF/Pm	16.8"	4	24.0'	40%	Min. Asym.	Average	Average	Straight	NAD	-	early bark beetle infestation	Fair	Potential Keeper
418	WRC/Tp	18.3"	5	20.0'	70%	Min. Asym.	Average	Utility Pruned	Straight	bowed at base	-	fork at 25', topped under utility poles	Fair	Potential Keeper
419	WRC/Tp	17.4"	4	18.0'	75%	Min. Asym.	Average	Utility Pruned	Straight	Partially Exposed	-		Fair	Potential Keeper

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
420	DF/Pm	25.3"	8	36.0'	60%	Min. Asym.	Average	Average	Straight	NAD	-	bark beetle infestation	Fair	Potential Keeper
421	DF/Pm	35.5"	14	50.0'	50%	Gen. Sym.	Average	Average	Straight	NAD	-	Epicormic Growth, early bark beetle infestation	Good	Potential Keeper
422	DF/Pm	11.7"	1	24.0'	35%	Gen. Sym.	Average	Average	slight bow west	NAD	-		Good	Potential Keeper
423	DF/Pm	28.0"	10	46.0'	40%	Min. Asym.	Average	Average	Straight	NAD	-	Epicormic Growth, Dead Branches in Canopy	Fair	Potential Keeper
424	DF/Pm	9.9"			20%	Min. Asym.	Sparse	regenerating - poor	Center Rot	Base Rot	-		Poor	Non-significant
425	DF/Pm	20.2"			35%	Min. Asym.	Average	Suppressed	Center Rot	Base Rot	-	previously topped @ 35', crown regenerating fair, early bark beetle infestation	Poor	Non-significant
426	DF/Pm	25.3"			30%	Maj. Asym.	Average	Weak	Center Rot	Base Rot	root rot	Epicormic growth, bark beetle infestation	Poor	Non-significant
427	WRC/Tp	28.8"	10	36.0'	85%	Min. Asym.	Dense	Healthy	Straight	NAD	-		Fair	Potential Keeper
428	WRC/Tp	8.7"	1	18.0'	80%	Min. Asym.	Average	Average	Straight	NAD	-		Fair	Potential Keeper
429	DF/Pm	18.9"		18.0'	25%	Maj. Asym.	short shoot elongation	Suppressed	Slight Lean South	Base Rot	-	early bark beetle infestation	Poor	Non-significant
430	DF/Pm	20.5"			25%	Min. Asym.	short shoot elongation	Weak	bowed north, center rot	Base Rot	-	bark beetle infestation	Poor	Non-significant
431	DF/Pm	17.1"	4	20.0'	30%	Min. Asym.	Average	Average	leans north	NAD	-	Epicormic growth, bark beetle infestation	Fair	Potential Keeper
432	DF/Pm	32.6"			60%	Gen. Sym.	Necrosis, Epicormic Growth, Short shoot elongation	Weak	Straight	Base Rot	surface	extensive sap flow west side 8' to base, possible Armillaria Root Rot, Bark Beetle Infestation	Poor	Non-significant
433	DF/Pm	9.4"			60%	Gen. Sym.	Average	Average	Straight	Possible Base Rot	-	fungal fruiting bodies at base, early bark beetle infestation	Poor	Non-significant
434	WRC/Tp	8.9"	1	12.0'	60%	Maj. Asym.	Dense	regenerating - average	Leans West	NAD	-		Fair	Potential Keeper
435	WRC/Tp	23.0"		18.0'	80%	Min. Asym.	Average	Average	Straight	NAD	-	side pruned for utilities	Fair	Potential Keeper
436	DF/Pm	27.8"			30%	Min. Asym.	Necrosis, Epicormic Growth, Short shoot elongation	Weak	Straight	growing out of nurse stump	-	not wind firm--poor health	Poor	Non-significant
437	DF/Pm	14.1"			30%	Maj. Asym.	short shoot elongation	Suppressed	Center Rot	Base Rot	-	bark beetle infestation	Poor	Non-significant
438	DF/Pm	23.5"	7	24.0'	65%	Min. Asym.	Average	Average	bowed east	NAD	-	short shoot elongation, Epicormic growth, bark beetle infestation	Fair	Potential Keeper
439	DF/Pm	14.5"			35%	Maj. Asym.	Average	Suppressed	Center Rot	Base Rot	-	Epicormic Growth, early bark beetle infestation	Poor	Non-significant
440	DF/Pm	7.8"			15%	Maj. Asym.	Sparse	Suppressed	Center Rot	Base Rot	-		Poor	Non-significant
441	DF/Pm	27.6"			35%	Maj. Asym.	Epicormic Growth	regenerating - healthy	bowed south	NAD	-	Ivy up 60', bark beetle infestation, poor health	Poor	Non-significant
442	DF/Pm	31.0"	11	36.0'	70%	Min. Asym.	Epicormic Growth	regenerating - average	Straight	slight bow at base	surface	callused wound east side at 10'	Fair	Potential Keeper
443	DF/Pm	24.2"	8	26.0'	60%	Gen. Sym.	Average	Healthy	Straight	NAD	-		Good	Potential Keeper
444	DF/Pm	10.6"	1	16.0'	90%	Gen. Sym.	Average	Healthy	Straight	NAD	-		Good	Potential Keeper
445	DF/Pm	30.5"	11	32.0'	80%	Gen. Sym.	Dense	Healthy	slightly serpentine	NAD	-	early bark beetle infestation	Good	Potential Keeper
446	WRC/Tp	18.8"	5	20.0'	80%	Maj. Asym.	Dense	Weak	leans SE	NAD	-	adjacent to 447	Good	Potential Keeper
447	DF/Pm	9.5"			40%	Maj. Asym.	Average	Weak	Center Rot	Base Rot	-	adjacent to 446, bark beetle infestation	Poor	Non-significant

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
448	WRC/Tp	19.0 & 6.8		30.0'	90%	Gen. Sym.	Dense	Healthy	fork at 2'	NAD	-		Good	Non-significant
449	WRC/Tp	36.4"	14	38.0'	95%	Gen. Sym.	Dense	Healthy	Straight	NAD	-		Good	Potential Keeper
450	WRC/Tp	16.5"	4	22.0'	85%	Min. Asym.	Average	Dead	slight bow–east	NAD	-		Good	Potential Keeper
451	WRC/Tp	6.8"		12.0'	50%	Maj. Asym.	Thin	Suppressed	Straight	NAD	-	fork at 16 feet with included bark down 1 foot	Poor	Non-significant
452	WRC/Tp	15.7"	4	20.0'	80%	Min. Asym.	Average	Average	Straight	NAD	-		Fair	Potential Keeper
453	DF/Pm	11.8"		40.0'	40%	Maj. Asym.	Epicormic Growth	Average	Center Rot	Base Rot	-	popping bark, bark beetle infestation	Poor	Non-significant
454	WRC/Tp	7.5"	1	10.0'	80%	Maj. Asym.	Average	Average	Serpentine	against 455	-	base against 454	Fair	Potential Keeper
455	DF/Pm	12.5"	2	16.0'	35%	Maj. Asym.	Thin	Suppressed	leans east	against 454, 456, and 457, bowed	-	base against 455	Fair	Potential Keeper
456	DF/Pm	19.8"	6	30.0'	30%	Min. Asym.	short shoot elongation, Epicormic Growth	Average	Straight	against 457 and 455	-		Fair	Potential Keeper
457	WRC/Tp	17.1"		20.0'	60%	Maj. Asym.	Thin	Suppressed	leans south	against 456 & 455	-	Bark Beetle Infestation	Poor	Non-significant
458	BLM/Am	8.8"		16.0'	30%	Maj. Asym.	pbs/sse	Suppressed	Center Rot	Base Rot	-	open wound southwest side 5 feet to 16 feet with center rot and carpenter ant infestation	Poor	Non-significant
459	BLM/Am	9.8"		N/A	20%	Maj. Asym.	Sparse	Suppressed	Center Rot	Base Rot	-		Poor	Non-significant
460	BLM/Am	10.4"		N/A	25%	Maj. Asym.	Thin	Suppressed	Center Rot	Base Rot	-		Dying	Non-significant
461	BLM/Am	12.3"	2	16.0'	30%	Maj. Asym.	Thin	Suppressed	Straight	NAD	-	fork @ 20 feet	Fair	Potential Keeper
462	DF/Pm	1.5"		N/A	25%	Maj. Asym.	Sparse	Weak	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
463	DF/Pm	18.5"	5	25.0'	30%	Min. Asym.	Average	Average	kink	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
464	DF/Pm	21.0"	6	30.0'	25%	Maj. Asym.	Average	Average	Straight	Partially Exposed	-		Fair	Potential Keeper
465	BLM/Am	12.7"	2	20.0'	30%	Maj. Asym.	abs/ase	Dying	bowed south	adjacent to 466	-	2 crowns regenerating but dying, tree fort damage	Poor	Potential Keeper
466	WRC/Tp	22.2"		N/A	20%	Maj. Asym.	Thin	Weak	Straight	Base Rot	-	tree fort damage	Fair	Non-significant
467	BLM/Am	9.0"		N/A	0%	None	None	Dead	rotten	Internal Structural Weakness	-	tree fort damage	Dead	Non-significant
468	WRC/Tp	13.8"		N/A	75%	Min. Asym.	Thin	Suppressed	Center Rot	Base Rot	-	open wound southwest side base up 16 feet with center rot and carpenter ant infestation, tree fort damage	Poor	Non-significant
469	DF/Pm	18.6 & 16.4		30.0'	45%	Min. Asym.	Epicormic Growth	Average	leans NE	Internal Structural Weakness	-	fork at 2.5 feet, included bark to base, tree fort damage	Fair	Potential Keeper
470	DF/Pm	28.0"	5	35.0'	35%	Min. Asym.	Epicormic Growth	Weak	slight bow west	Unusual Butt Swell	-	Early Bark Beetle Infestation	Fair	Potential Keeper
471	DF/Pm	13.0"		N/A	35%	Min. Asym.	Epicormic Growth	Broken Out	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
472	DF/Pm	23.7"		N/A	25%	Maj. Asym.	Thin	Average	bowed NE	Possible Base Rot	-	deformed bark base up 4 feet, early bark beetle infestation, popping bark at base	Poor	Non-significant
473	DF/Pm	27.1"	9	32.0'	35%	Min. Asym.	a	Average	Straight	Internal Structural Weakness	-	fork at 5.5 feet, swollen "ears" below fork to base, tree is not wind firm	Fair	Potential Keeper
474	DF/Pm	19.2"		N/A	55%	Min. Asym.	Epicormic Growth	Average	bowed west	Possible Base Rot	-	ground flower northeast side base up 2 feet	Poor	Non-significant
475	BLM/Am	7.8"		N/A	45%	Min. Asym.	Thin	Suppressed	Center Rot	Base Rot	-		Poor	Non-significant

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
476	BCh/Pe	6.2, 3.5, & 3.4	1	16.0'	55%	Min. Asym.	Average	Average	Typical	Exposed	-	fork at base	Fair	Potential Keeper
477	BCh/Pe	7.9"		N/A	30%	Maj. Asym.	Thin	Dying	Center Rot	Base Rot	-		Poor	Non-significant
478	DF/Pm	36.4"	14	45.0'	50%	Gen. Sym.	Epicormic Growth	Weak	Straight	NAD	-	in fence line, early bark beetle infestation	Fair	Potential Keeper
479	DF/Pm	17.2"		N/A	10%	Gen. Sym.	Epicormic Growth	Broken Out	Center Rot	Base Rot	-	in fence line, early bark beetle infestation	Poor	Non-significant
480	BCh/Pe	7.1		N/A	25%	Min. Asym.	Thin	Suppressed	Serpentine	Partially Exposed	-	ivy up 25 feet	Poor	Non-significant
481	BLM/Am	19.9, 12.8, & 11.0		N/A	60%	Maj. Asym.	pbs/sse	Weak	Center Rot	Base Rot	-	fork at 2 feet, fungal fruiting bodies	Poor	Non-significant
482	DF/Pm	24.2"	8	40.0'	35%	Min. Asym.	Average	Average	Straight	Partially Exposed	-	Early Bark Beetle Infestation	Fair	Potential Keeper
483	DF/Pm	16.1"		N/A	30%	Min. Asym.	Sparse	Average	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
484	DF/Pm	16.3"		N/A	15%	Maj. Asym.	Thin	Broken Out	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
485	BLM/Am	7.3"		N/A	55%	Maj. Asym.	Thin	Dead	Center Rot	Base Rot	-		Poor	Non-significant
486	DF/Pm	18.3"	5	26.0'	25%	Maj. Asym.	Average	Average	Straight	Base Rot	-	Bark Beetle Infestation	Fair	Potential Keeper
487	BLM/Am	6.1"	1	24.0'	60%	Gen. Sym.	Average	Average	Straight	NAD	-		Fair	Potential Keeper
488	DF/Pm	12.3"		N/A	25%	Maj. Asym.	Sparse	Weak	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
489	DF/Pm	23.1"	7	30.0'	35%	Min. Asym.	Epicormic Growth	Weak	slight bow NW	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
490	DF/Pm	10.6"		N/A	20%	Maj. Asym.	Epicormic Growth	Broken Out	Center Rot	Base Rot	-	Bark Beetle Infestation	Poor	Non-significant
491	DF/Pm	24.9"		N/A	20%	Maj. Asym.	Epicormic Growth	Average	Straight	Base Rot	root rot	popping bark, bark beetle infestation	Poor	Non-significant
492	DF/Pm	9.6"		N/A	25%	Maj. Asym.	Sparse	Weak	Center Rot	Base Rot	-		Poor	Non-significant
493	WRC/Tp	18.9"	7	20.0'	80%	Min. Asym.	Average	Average	Straight	NAD	-		Fair	Potential Keeper
494	DF/Pm	20.7 & 20.6		N/A	30%	Maj. Asym.	Sparse	Weak	Center Rot	Base Rot	-	fork at 2.5 feet, popping bark, 12 inches diameter stump on the north side that has center rot, base rot and carpenter ant infestation, rot extends down into the base of the other two trunks	Poor	Non-significant
495	DF/Pm	18.5"	5	30.0'	30%	Maj. Asym.	Thin	Weak	Straight	NAD	-	ivy up 20 feet, bark beetle infestation	Fair	Potential Keeper
496	DF/Pm	19.3"	5	20.0'	35%	Maj. Asym.	Average	Weak	leans SE	Partially Exposed	-	historic ivy up 30 feet, early bark beetle infestation	Fair	Potential Keeper
497	DF/Pm	20.2"	6	32.0'	25%	Min. Asym.	Average	Weak	Straight	Partially Exposed	-	historic ivy up 30 feet, early bark beetle infestation	Fair	Potential Keeper
498	WRC/Tp	8.5"	1	20.0'	80%	Min. Asym.	Average	Average	Straight	Possible Base Rot	-		Fair	Potential Keeper
499	WRC/Tp	17.5"	4	30.0'	90%	Min. Asym.	Average	Average	Straight	NAD	-	open wound south side 1 to 2 feet, adjacent to 500	Fair	Potential Keeper
500	WRC/Tp	22.0"	7	30.0'	90%	Min. Asym.	Average	Average	Straight	NAD	-	adjacent to 499	Fair	Potential Keeper
601	DF/Pm	23.1"	7	24.0'	20%	Min. Asym.	Epicormic Growth	Average	Straight	NAD	-	kink at 40 feet, historic ivy up 30 feet, early bark beetle infestation	Fair	Potential Keeper
602	DF/Pm	24.2"	8	22.0'	25%	Min. Asym.	Epicormic Growth	Average	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
603	DF/Pm	11.3"		N/A	20%	Maj. Asym.	Average	Broken Out	Center Rot	Base Rot	-	Early Bark Beetle Infestation	Poor	Non-significant
604	DF/Pm	18.0"	5	16.0'	20%	Maj. Asym.	Average	Weak	slight bow west	Partially Exposed	-	Bark Beetle Infestation	Fair	Potential Keeper
605	DF/Pm	16.2"		N/A	30%	Min. Asym.	Average	Weak	bowed north	Possible Base Rot	-	popping bark, bark beetle infestation	Poor	Non-significant

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
TREE #	SPECIES	DBH	TREE CREDIT	DRIP LINE	LCR	SYMMETRY	FOLIAGE	CROWN CONDITION	TRUNK	ROOT COLLAR	ROOTS	COMMENTS	CURRENT HEALTH RATING	RECOMMENDATIONS
606	DF/Pm	8.3"		N/A	10%	Min. Asym.	Thin	Suppressed	Center Rot	Base Rot	-	callused crack west side with fungal fruiting bodies at 2 to 4 feet	Poor	Non-significant
607	DF/Pm	19.0"	5	26.0'	35%	Min. Asym.	Epicormic Growth	Weak	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
608	DF/Pm	14.4"		N/A	20%	Min. Asym.	Thin	Average	Straight	Possible Base Rot	-	Bark Beetle Infestation	Poor	Non-significant
609	DF/Pm	13.1"		N/A	20%	Maj. Asym.	Average	Weak	slight lean north	Base Rot	-	Bark Beetle Infestation	Poor	Non-significant
610	DF/Pm	14.0"		N/A	20%	Maj. Asym.	Epicormic Growth	Average	lean south	Base Rot	-	sap flow from branch collars, early bark beetle infestation	Poor	Non-significant
611	DF/Pm	27.3"	9	20.0'	15%	Maj. Asym.	Epicormic Growth	Weak	Straight	NAD	-	historic ivy up 30 feet, early bark beetle infestation	Fair	Potential Keeper
612	WRC/Tp	32.6"	12	30.0'	90%	Maj. Asym.	Average	Weak	Straight	NAD	-		Fair	Potential Keeper
613	WRC/Tp	26.2 & 5.7	9	28.0'	80%	Min. Asym.	Average	Average	Straight	slight bow	-	fork at 18 feet	Fair	Potential Keeper
614	WRC/Tp	18.2"	5	24.0'	85%	Gen. Sym.	Dense	Healthy	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
615	DF/Pm	23.4"	7	20.0'	20%	Min. Asym.	Epicormic Growth	Weak	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
616	DF/Pm	33.2 & 20.5	12	26.0'	35%	Min. Asym.	Epicormic Growth	Weak	leans outward	NAD	-	fork at 3 feet with included bark to base, historic ivy up 40 feet, forks at 9 feet with included bark down 3 feet and fork at 40 feet, early bark beetle infestation	Fair	Potential Keeper
617	DF/Pm	6.9"		N/A	10%	Maj. Asym.	Thin	Suppressed	Center Rot	Base Rot	-		Poor	Non-significant
618	DF/Pm	15.3"	3	20.0'	15%	Min. Asym.	Average	Weak	slight lean NE	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
619	DF/Pm	9.4"		N/A	15%	Maj. Asym.	Average	Broken Out	Center Rot	ground flower	-	fungal fruiting bodies north side at base, bark beetle infestation	Poor	Non-significant
620	DF/Pm	13.4"	2	20.0'	35%	Min. Asym.	Average	Average	slight bow south	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
621	WRC/Tp	8.9"		N/A	0%	None	Sparse	Dying	Center Rot	Base Rot	-		Dying	Non-significant
622	DF/Pm	28.4"	10	26.0'	20%	Min. Asym.	Epicormic Growth	Average	Straight	NAD	-	small trunk south side with center rot but does not appear to have spread to base of tree, early bark beetle infestation	Fair	Potential Keeper
623	DF/Pm	21.0"	6	26.0'	20%	Min. Asym.	Average	Average	Straight	NAD	-	Early Bark Beetle Infestation	Fair	Potential Keeper
624	DF/Pm	22.3"	7	24.0'	30%	Maj. Asym.	Average	Average	slight lean south	NAD	-	woodpecker activity, early bark beetle infestation	Fair	Potential Keeper
625	DF/Pm	17.2"		N/A	20%	Maj. Asym.	Epicormic Growth	Weak	Center Rot	Base Rot	-		Poor	Non-significant

SUMMARY:

- 148 trees on the site were evaluated
  - 70 trees were ***Non-Significant*** due to poor health, poor structure, or both
  - 78 tree were rated ***Significant*** or ***Potential Keepers*** – meaning that they have the potential to be retained based on health and structure. The specific requirements of the site may require that many of these trees will need to be removed.
  - the 78 ***Significant Trees/Potential Keepers*** total 504 tree credits

ATTACHMENT 3 - GLOSSARY

In an effort to clearly present the information for each tree in a manner that facilitates the reader's ability to understand the conclusions I have drawn for each tree, I have collected the information onto a spreadsheet format. This spreadsheet was developed by Gilles Consulting based upon the *Hazard Tree Evaluation Form* from the book, *The Evaluation of Hazard Trees in Urban Areas*, by Matheney and Clarke. The descriptions were left brief on the spreadsheet in an effort to include as much pertinent information as possible, to make the report manageable, and, to not bore the reader with infinite levels of detail. A review of these terms and descriptions will allow the reader to rapidly move through the report and understand the information.

1) **TREE #**--The individual number of each tree.
2) **SPECIES**—This describes the species of each tree with both most readily accepted common name and the officially accepted scientific name.
3) **DBH**—Diameter Breast Height. This is the standard measurement of trees taken at 4.5 feet above the average ground level of the tree base.
    i) Occasionally it is not practical to measure a tree at 4.5 feet above the ground. The most representative area of the trunk near 4.5 feet is then measured and noted on the spreadsheet. For instance, a tree that forks at 4.5 feet can have an unusually large swelling at that point. The measurement is taken below the swelling and noted as, '28.4" at 36"'.
    ii) Trees with multiple stems are listed as a "clump of x," with x being the number of trunks in the clump. Measurements may be given as an average of all the trunks, or individual measurements for each trunk may be listed.
        (1) Every effort is made to distinguish between a single tree with multiple stems and several trees growing close together at the bases.
4) **Tree Credit:** Kirkland Tree Credit rating based upon a healthy structurally sound tree and its diameter. The City Code goal is to achieve 30 tree credits per acre. Therefore, development sites must calculate the number of required tree credits based upon the following formula:
    i) **(Lot size in square feet) / 43,560 X 30 = Required Minimum Tree Density.**
5) **Drip Line:** The diameter from the furthest branch tips across the tree canopy.
6) **% LCR**—Percentage of Live Crown Ratio. The relative proportion of green crown to overall tree height. This is an important indication of a tree's health. If a tree has a high percentage of Live Crown Ratio, it is likely producing enough photosynthetic activity to support the tree. If a tree has less than 30 to 40%, LCR it can create a shortage of needed energy and can indicate poor health and vigor.
7) **SYMMETRY**—is the description of the form of the canopy. That is, the balance or overall shape of the canopy and crown. This is the place I list any major defects in the tree shape—does the tree have all its foliage on one side or in one unusual area. Symmetry can be important if there are additional defects in the tree such as rot

pockets, cracks, loose roots, weak crown etc. Symmetry is generally categorized as Generally Symmetrical, Minor Asymmetry or Major Asymmetry:

i) Gen. Sym.—Generally Symmetrical. The canopy/foliage is generally even on all sides with spacing of scaffold branches typical for the species, both vertically and radially.
ii) Min. Asym.—Minor Asymmetry. The canopy/foliage has a slightly irregular shape with more weight on one side but appears to be no problem for the tree.
iii) Maj. Asym.—Major Asymmetry. The canopy/foliage has a highly irregular shape for the species with the majority of the weight on one side of the tree. This can have a significant impact on the tree's stability, health and hazard potential—especially if other defects are noted such as cracks, rot, root defects.

8) **FOLIAGE/BRANCH**—Describes the foliage of the tree in relation to a perfect specimen of that particular species. First, the branch growth and foliage density is described, and then any signs or symptoms of stress and/or disease are noted. The condition of the foliage, or the branches and buds for deciduous trees in the dormant season, are important indications of a tree's health and vigor.

i) For Deciduous trees in the dormant season:
   (1) The structure of the tree is visible,
   (2) The quantity and quality of buds indicates health, and is described as good bud set, average bud set, or poor bud set. These are abbreviated in the spreadsheet as: gbs, abs, or pbs.
   (3) The amount of annual shoot elongation is visible and is another major indication of tree health and vigor. This is described as:
      a) Excellent, Good, Average, or Short Shoot Elongation. These are abbreviated in the spreadsheet as ESE, GSE, ASE, OR SSE.

ii) For evergreen trees year round and deciduous trees in leaf, the color and density of the foliage indicates if the tree is healthy or stressed, or if an insect infestation, a bacterial, fungal, or viral infection is present. Foliage is categorized on a scale from:
   (1) Dense—extremely thick foliage, an indication of healthy vigorous growth,
   (2) Good—thick foliage, thicker than average for the species,
   (3) Normal/Average—thick foliage, average for the species, an indication of healthy growth,
   (4) Thin or Thinning—needles and leaves becoming less dense so that sunlight readily passes through; an indication that the tree is under serious stress that could impact the long-term survivability and safety of the tree,
   (5) Sparse—few leaves or needles on the twigs, an indication that the tree is under extreme stress and could indicate the future death of the tree
   (6) Necrosis—the presence of dead twigs and branchlets. This is another significant indication of tree health. A few dead twigs and branches are reasonably typical in most trees of size. However, if there are dead

twigs and branchlets all over a certain portion of the tree, or all over the tree, these are indications of stress or attack that can have an impact on the tree's long-term health.

(7) Hangers—A term to describe a large branch or limb that has broken off but is still hanging up in the tree. These can be particularly dangerous in adverse weather conditions.

9) **CROWN CONDITION**—The crown is uppermost portion of the tree, generally considered the top 10 to 20% of the canopy or that part of the canopy above the main trunk in deciduous trees and above the secondary bark in evergreen trees.

i) The condition of the tree's crown is a reflection of the overall health and vigor of the entire tree. The crown is one of the first places a tree will demonstrate stress and pathogenic attack such as root rot.

ii) If the **Crown Condition** is healthy and strong, this is a good sign. If the crown condition is weak, broken out, or shows other signs of decline, it is an indication that the tree is under stress. It is such an important indication of health and vigor that this is the first place a trained forester or arborist looks to begin the evaluation of a tree. Current research reveals that, by the time trees with root rot show significant signs of decline in the crown, fully 50% or more of the roots have already rotted away. **Crown Condition** can be described as:

(1) Healthy Crown—exceptional growth for the species.

(2) Average Crown—typical for the species.

(3) Weak Crown—thin spindly growth with thin or sparse needles.

(4) Flagging Crown—describes a tree crown that is weak and unable to grow straight up.

(5) Dying Crown—describes obvious decline that is nearing death.

(6) Dead Crown—the crown has died due to pathological or physical injury. The tree is considered to have significant stress and/or weakness if the crown is dead.

(7) Broken out—a formerly weak crown condition that has been broken off by adverse weather conditions or other mechanical means.

(8) Regenerated or Regenerating—formerly broken out crowns that are now growing back, Regenerating crowns may appear healthy, average, or weak and indicate current health of the tree.

(9) Suppressed—a term used to describe poor condition of an entire tree or just the crown. Suppressed crowns are those that are entirely below the general level of the canopy of surrounding trees that receive no direct sunlight. They are generally in poor health and vigor. Suppressed trees are generally trees that are smaller and growing in the shade of larger trees around them. They generally have thin or sparse needles, weak or missing crowns, are prone to insect attack as well as bacterial and fungal infections.

10) **TRUNK**—this is the area to note any defects that can have an impact on the tree's stability or hazard potential. Typical things noted are:

i) FORKED—bifurcation of branches or trunks that often occur at a narrow angle.
ii) INCLUDED BARK—a pattern of development at branch or trunk junctions where bark is turned inward rather than pushed out. This can be a serious structural defect in a tree that can and often does lead to failure of one or more of the branches or trunks especially during severe adverse weather conditions.
iii) EPICORMIC GROWTH—this is generally seen as dense thick growth near the trunk or scaffold branches of a tree. Although this looks like a healthy condition, it is in fact the opposite. Trees with Epicormic Growth have used their reserve stores of energy in a last ditch effort to produce enough additional photosynthetic surface area to produce more sugars, starches and carbohydrates to support the continued growth of the tree. It is an indication of advanced stress.
iv) INTERNAL STRUCTURAL WEAKNESS—a physical characteristic of the tree trunk, such as a **kink, crack, rot pocket, or rot column** that predisposes the tree trunk to failure at the point of greatest weakness.
v) BOWED—a gradual curve of the trunk. This can indicate an Internal Structural Weakness or an overall weak tree. It can also indicate slow movement of soils or historic damage of the tree that has been corrected by the curved growth.
vi) KINKED—a sharp angle in the tree trunk that indicates that the normal growth pattern is disrupted. Generally, this means that the internal fibers and annual rings are weaker than straight trunks and prone to failure, especially in adverse weather conditions.
vii) GROUND FLOWER—an area of deformed bark near the base of a tree trunk that indicates long-term root rot.

11) **ROOT COLLAR**—This is the area where the trunk enters the soil and the buttress roots flare out away from the trunk into the soil. It is here that signs of rot, decay, insect infestation, fungal or bacterial infection are noted. **NAD** stands for **N**o **A**pparent **D**efects.
12) **ROOTS**—Any abnormalities such as girdling roots, roots that wrap around the tree itself that strangle the cambium layer and kill the tree, are noted here.
13) **COMMENTS**—This is the area to note any additional information that would not fit in the previous boxes or attributes about the tree that have bearing on the health and structure of the tree.
14) **CURRENT HEALTH ASSESSMENT**—A description of the tree's general health rating from dead, poor, suppressed, fair, good, to excellent.
15) **STATUS/RECOMMENDATION**—This is an estimate of whether or not the tree is off sufficient health, vigor, and structure that it is worth consideration of retention.

NOTE: TREES WITH THE SAME DESCRIPTION AND DIFFERENT RATINGS: Two trees may have the same descriptions in the matrix boxes, one may be marked "Significant," while another may be marked "Non-Significant." The difference is in the

degree of the description; early "necrosis" versus advanced "necrosis" for instance. Again, these descriptions were left brief in an effort to include as much pertinent information as possible, to make the report manageable, and, not to bore the reader with infinite levels of detail.

ATTACHMENT 4 - TREE PROTECTION MEASURES

- Tree Protection Fences will need to be placed around each tree or group of trees to be retained.
  - Tree Protection Fences are to be placed according to the attached drawing at a distance of not less than 5 feet outside the dripline of the tree or group of trees to be saved.
  - Tree Protection Fences must be inspected prior to the beginning of any construction work/activities.
  - Nothing must be parked or stored within the Tree Protection Fences—no equipment, vehicles, soil, debris, or construction supplies of any sorts.
- No burning is to be allowed within the Tree Protection Zone, under the dripline of any retained trees, or within 30 feet of the Tree Protection Fences.

- Cement trucks must not be allowed to deposit waste or wash out materials from their trucks within the Tree Protection Fences.

- The Tree Protection Fences need to be clearly marked with the following or similar text in four inch or larger letters:

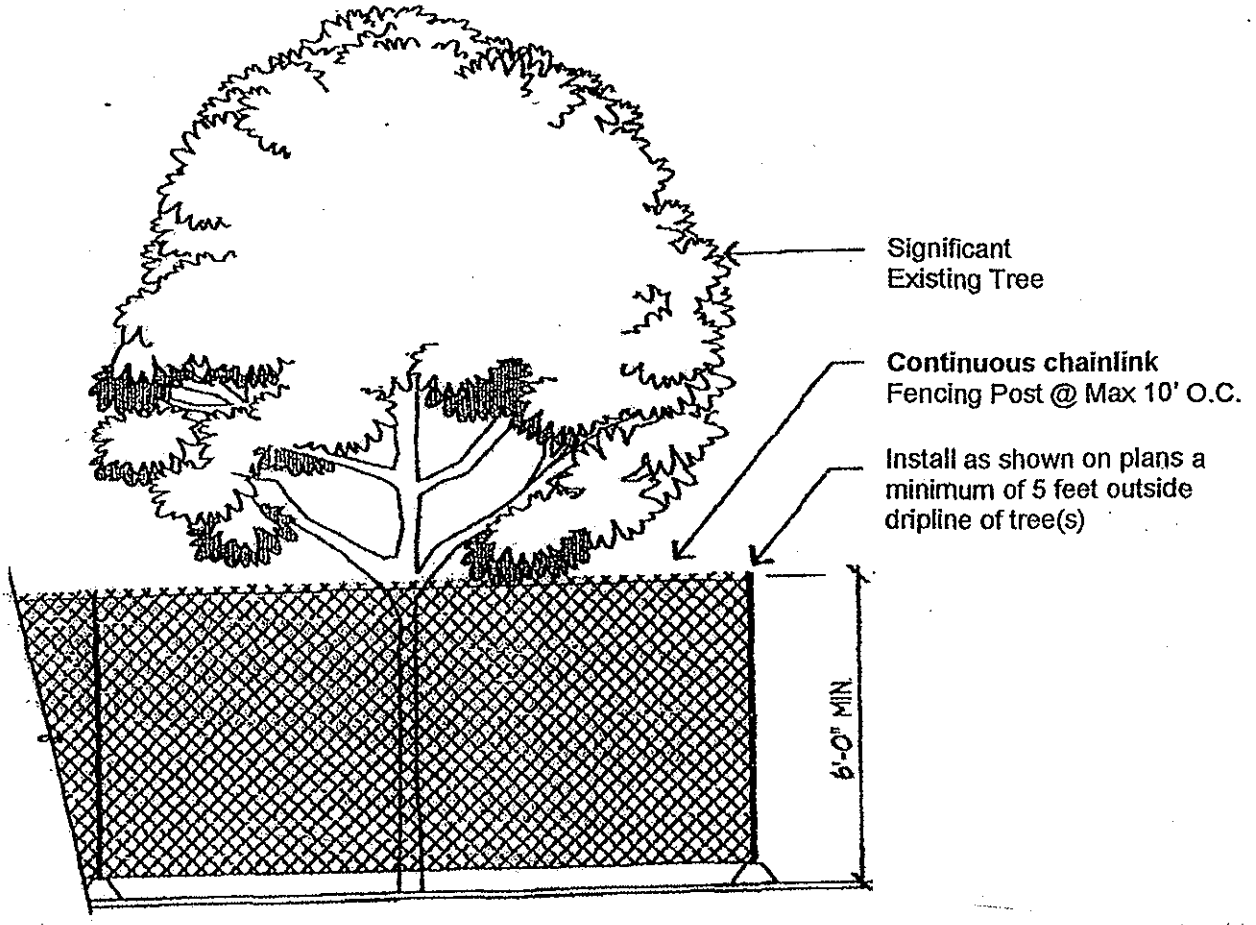
  "TREE PROTECTION FENCE
  DO NOT ENTER THIS AREA
  DO NOT PARK OR STORE MATERIALS
  WITHIN THE PROTECTION AREA

  Any questions, call Brian K. Gilles at Gilles Consulting
  @ 425-417-0850"

- The area within the Tree Protection Fencing must be covered with wood chips, hog fuel, or similar materials to a depth of 8 to 10 inches. The materials should be placed prior to beginning construction and remain until the Tree Protection Fencing is taken down.

- When excavation occurs near trees that are scheduled for retention, the following procedure must be followed to protect the long term survivability of the tree:
  - An International Society of Arboriculture, (ISA) Certified Arborist must be working with all equipment operators.
  - The Certified Arborist should be outfitted with a shovel, hand pruners, a pair of loppers, a handsaw, and a power saw (a "sawsall" is recommended).

- When any roots of one inch diameter or greater, of the tree to be retained, is struck by the equipment, the Certified Arborist should stop the equipment operator.
- The Certified Arborist should then excavate around the tree root by hand/shovel and cleanly cut the tree root.
- The Certified Arborist should then instruct the equipment operator to continue.
- Boring under the root systems of trees (and other vegetation) shall be done under the supervision of an ISA Certified Arborist. This is to be accomplished by excavating a limited trench or pit on each side of the critical root zone of the tree and then hand digging or pushing the pipe through the soil under the tree. The closest pit walls shall be a minimum of 7 feet from the center of the tree and shall be sufficient depth to lay the pipe at the grade as shown on the plan and profile.
- Tunneling under the roots of trees shall be done under the supervision of an ISA Certified Arborist in an open trench by carefully excavating and hand digging around areas where large roots are exposed. No roots 1 inch in diameter or larger shall be cut.
- The contractor shall verify the vertical and horizontal location of existing utilities to avoid conflicts and maintain minimum clearances; adjustment shall be made to the grade of the new utility as required.



1. Six-foot high temporary chainlink fence shall be placed as shown on plans. Fence shall completely encircle tree(s). Install fence posts using pier blocks only. Avoid driving posts or stakes into major roots.

2. Make a clean straight cut to remove damaged portion of root for all roots over 1" in diameter damaged during construction. ***All*** exposed roots shall be temporarily covered with damp burlap and covered with soils the same day, if possible, to prevent drying. If not possible, burlap must be kept moist at all times.

3. Work with the protection fencing shall be done manually. No stockpiling of materials, soil, debris, vehicle traffic, or storage of equipment or machinery shall be allowed within the limit of the fencing.

4. Cement trucks must not be allowed to deposit waste or wash out materials from their trucks within the Tree Protection Fences.

5. The area within the Tree Protection Fencing must be covered with wood chips, hog fuel, or similar materials to a depth of 8 to 10 inches. The materials should be placed prior to beginning construction and remain until the Tree Protection Fencing is taken down.

ATTACHMENT 5 - REFERENCES

1. Harris, Richard W. et al, *Arboriculture, Integrated Management of Landscape Trees, Shrubs, and Vines, Fourth Edition,* Prentice Hall, Upper Saddle River, New Jersey. 2004.

2. Matheney, Nelda P. & Clark James R., *Evaluation of Hazard Trees, Second Edition,* The International Society of Arboriculture Press, Savoy, Illinois. 1994

3. Matheney, Nelda P. & Clark James R., *Trees & Development, A Technical Guide to Preservation of Trees During Land Development,* The International Society of Arboriculture Press, Savoy, Illinois. 1998.

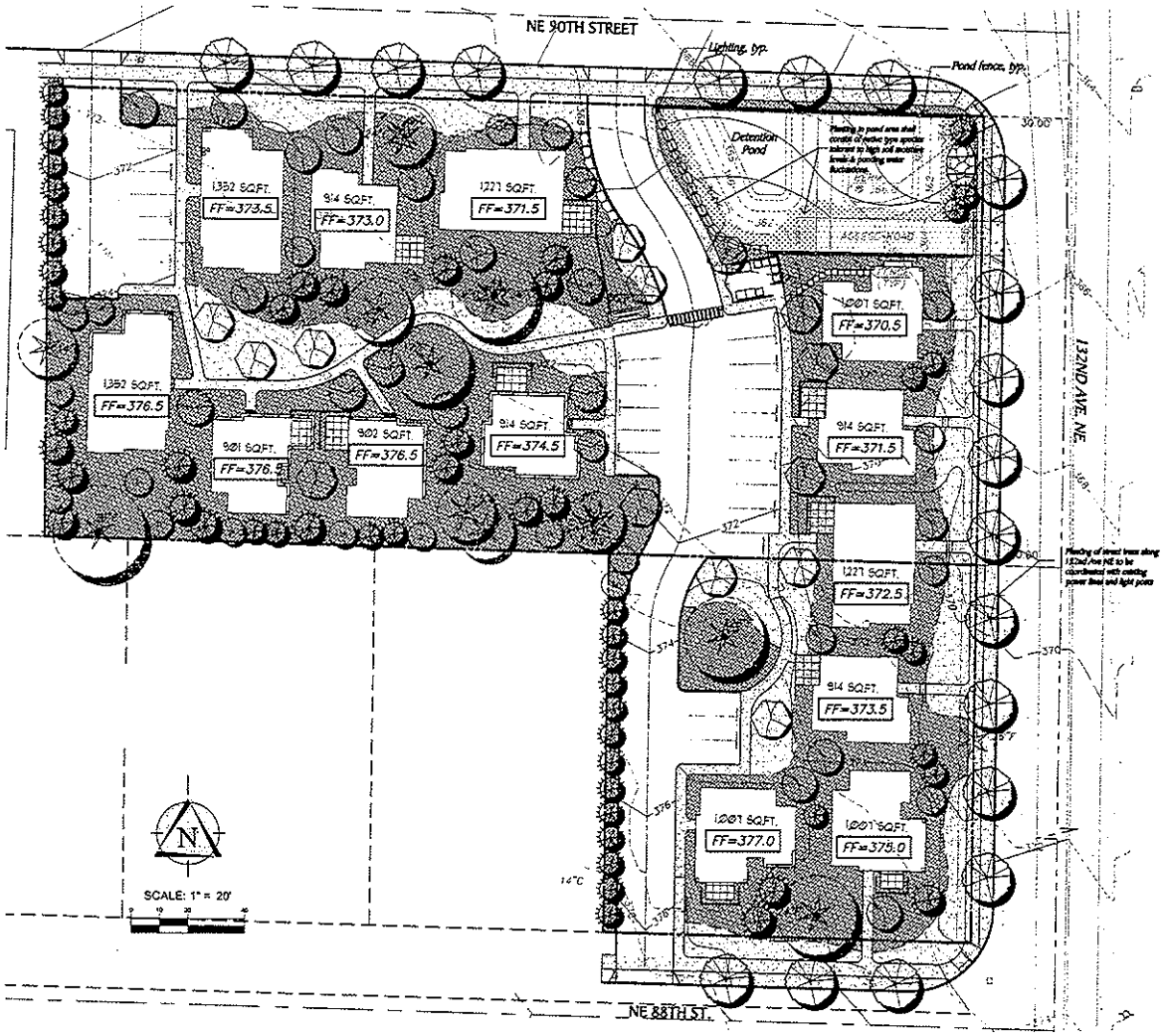
4. Mattheck, Claus Prof. and Ass. Jur Mrs. Helge Breloer, *The Body Language of Trees, A Handbook for Failure Analysis,* HMSO, London, England. 1994.

5. Scharpf, Robert F. *Diseases of Pacific Coast Conifers,* USDA Forest Service, Agriculture Handbook 521, revised June 1993

6. Sinclair et al, *Diseases of Trees and Shrubs,* Cornell University Press, Ithaca, NY, 1987.

7. Watson, Dr. Gary W., & Dr. Dan Neely Editors, *Trees & Building Sites,* The International Society of Arboriculture Press, Savoy, IL. 1995.

A PORTION OF NE 1/4, NE 1/4, SEC 4, TWP 25 N, RGE 5 E, W.E.



Preliminary Plant List

Street Trees-Deciduous (2" caliper)

- Acer rubrum/Red Maple
- Fraxinus oxycarpa'Raywood'/Raywood Ash
- Cercidiphyllum japonicum/Katsura Tree

Accent Trees-Deciduous (1-1/2"caliper)

- Acer circinatum/Vine Maple
- Acer griseum/Paperbark Maple
- Acer palmatum/Japanese Maple
- Betula utilis jacquemontii/Jacquemonti Birch
- Cornus kousa 'Chinensis'/Chinese Dogwood
- Magnolia stellata/Star Magnolia
- Malus spp/ Crab Apple
- Prunus spp./Flowering Cherry
- Pyrus c. 'Capital'/Columnar Flowering Pear
- Styrax japonica/Japanese snowbell

Coniferous Trees (5'-8' ht.)

- Abies lasiocarpa/Alpine Fir
- Chamaecyparis obtusa 'Gracilis'/Cypress
- Cupressocyparis leylandii/Cypress
- Calocedrus decurrens/Incense Cedar
- Pinus contorta/Shore Pine

Tall Shrubs (24"-36" tall)

- Arbutus unedo/Strawberry Bush
- Berberis thunbergii 'Atropurpurea'/red leaf japanese barberry
- Ribes sanguineum 'King Edward VII'/ Red Flowering Currant
- Corylus avellana 'White doves'/Filberts
- Chaenomeles/Flowering Quince
- Cornus stolonifera/Red Twig Dogwood
- Enkianthus campanulatus/Red Vein
- Hydrangea petiolaris/Oak Leaf Hydrangea
- Myrica californica/Pacific Wax Myrtle
- Rhododendron

Low/Medium Shrubs (18"-24" tall)

- Azalea (deciduous)
- Azalea (evergreen)
- Euonymus jap 'Silver princess nanus'/Silver princess euonymus
- Ilex crenata/Japanese Holly
- Lavandula dentata 'Canaloane'/Lavender
- Pieris japonica 'Mt. Fire'/Lily of the valley shrub
- Pinus mugo 'Mugo'/Dwarf Mugo Pine
- Polystichum munitum/Sword Fern
- Potentilla fruticosa 'Day dawn'/Shrubby Cinquefoil
- Spiraea bumalda 'Limeround'/Spiraea
- Spiraea nipponica 'Snowmound'/Snowmound Spiraea
- Weigelia florida 'Variegata nana'/Weigelia

Groundcover, Perennials (4" pots)

- Arctostaphylos uva ursi/Kinnikinnick
- Geranium sanguineum/Perennial Geranium
- Hosta sieboldiana/Plantain Lily
- Rosa soulaniana/Prickly Rose
- Rosa x flower carpet
- Rubus calycinoides 'Emerald carpet'/Bramble
- Vibornum opulus 'Nana'/Dwarf Cranberry Bush
- Vinca minor/Dwarf Periwinkle

Seeded Lawn

Existing trees to remain. Based on preliminary site plan layout. (See note)

Approximate drip line

Note

This plan is preliminary and is intended to convey the general intent of the proposed landscaping. It is anticipated that the final design will be modified as a result of changes to the site plan, grading, civil engineering and architectural design during final design.

CAUTION
LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. YOU MUST CALL 1-800-424-5555 NOT LESS THAN 2 FULL BUSINESS DAYS BEFORE BEGINNING EXCAVATION WHERE ANY UNDERGROUND UTILITIES MAY BE LOCATED. FAILURE TO DO SO COULD MEAN BEARING SUBSTANTIAL REPAIR COSTS.

CITY OF KIRKLAND
DEPT. OF PUBLIC WORKS/UTILITIES

APPROVED BY
UTILITIES ENGINEER DATE
SUPERVISOR ENGINEER DATE

© 2006 TRIAD ASSOCIATES

TRIAD ASSOCIATES
12112 116th Ave. NE
Kirkland, WA 98034-8923
425.821.8448
425.821.3411 fax
800.446.0756 toll free
www.triadassoc.com

LANDSCAPE PLAN

CITY MINISTRIES HOUSING PROJECTS

CITY OF KIRKLAND, WASHINGTON

NO.	REVISION	DATE	BY	CK

DAVID A. HOROWITZ, P.E.
PROJECT MANAGER
NICK J. TUCKER, P.E.
PROJECT SUPERVISOR
BRIAN A. MARATTA
PROJECT ENGINEER
DAVID C. NILGES
PROJECT LANDSCAPE ARCHITECT
FIRST SUBMITTAL DATE: 6/1/06
SCALE: SHEET 1" = 20' TEST: N/A

PRELIMINARY

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
6/01/06
DAVID C. NILGES
CERTIFICATE NO. 879

TRIAD NOT VALID UNLESS SIGNED AND DATED

JOB NO. 05-261
SHEET NO. L1 of L1