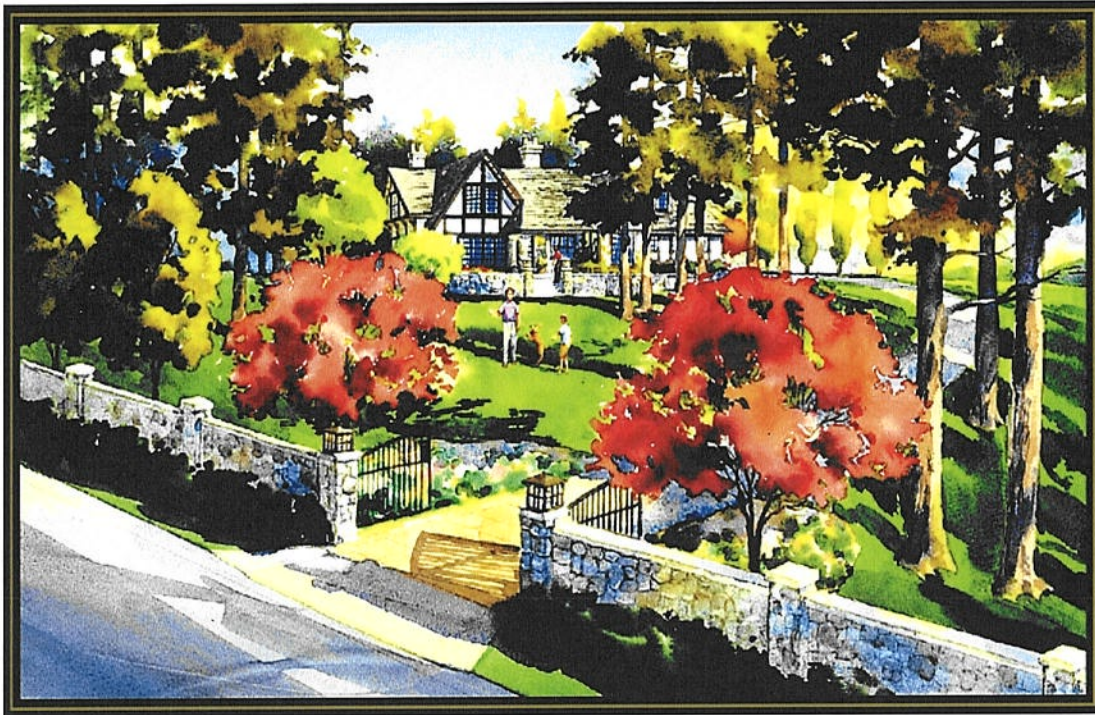


GRAND RIDGE DRIVE



ARCHITECTURAL STANDARDS

ARCHITECTURAL STANDARDS

NOVEMBER 15, 2017

[Design Provisions; Submittal and Approval Requirements;
ARC Fees; Forms; Construction Standards]

TABLE OF CONTENTS

Vision – why we have this	1
Neighborhood Map	3
Sample Site Plan	4
Specific Design Provisions	5
Custom Architectural Review Committee Review Procedures	Appendix A
Custom ARC Process Chart.....	Appendix A-1
Project Team Approval Form	Appendix A-2
Custom ARC Fees.....	Appendix A-3
Custom ARC Enforcement	Appendix A-4
Application for Architectural Review and Submittal Checklist [.....	Appendix B-1
Custom ARC Conceptual Acceptance Form.....	Appendix B-2
Custom ARC Approval Form – Architectural and Landscape Plans	Appendix B-3
Intentionally Omitted	Appendix C
Intentionally Omitted.....	Appendix D
Landscape & Irrigation Design & Construction Acknowledgement	Appendix E
General Landscape Notes	Appendix F
Plant Size and Spacing Requirements	Appendix G
Recommended Plant List	Appendix H
Sustainable Building Acknowledgement	Appendix I
Issaquah Highlands Data Network Specifications	Appendix J
Issaquah Highlands Water Conservation Standards.....	Appendix K
Signage & Logo Guidelines for Residential Neighborhoods.....	Appendix L
Builder’s Project Manual	Appendix M
General Contractor’s Notice of Completion/Inspection Request	Appendix N
Construction and Administrative Punchlist.....	Appendix O
Custom ARC Letter of Final Acceptance.....	Appendix P
Glossary of Terms	Appendix Q
Insurance Requirements	Appendix R

VISION

At the Grand Ridge Drive neighborhood at Issaquah Highlands (“**GRD**”), we envision an enclave of private estate properties along a rural lane, with each home unique in design and character and surrounded by a forest, in which architectural diversity is encouraged. Each home will be a reflection of the needs, tastes and expectations of its owner (“**Owner**”), as expressed through fine architectural design, quality home building and sensitive landscaping.

Our goal is to create a community that will grow in character over time to be recognized as one of the finest residential communities in this region.

WHY WE HAVE THIS DOCUMENT

These Grand Ridge Drive Architectural Standards (“**Architectural Standards**”) implement the Declaration of Covenants, Conditions, and Restrictions for Issaquah Highlands Residential Properties, originally recorded April 28, 1997, and restated June 1, 2012, under King County Recording No. 20120607000111 (“**CC&Rs**”). These Architectural Standards establish a framework to assure a level of quality, while still allowing for variation in style and detail for the GRD neighborhood. This document provides design guidance for the applicant and assists the Architectural Review Committee (“**Custom ARC**”) established under the CC&Rs in reviewing submittal packages for the GRD neighborhood. The initial Custom ARC is appointed by the Declarant, and the Declarant at any time may delegate architectural review to an ARC that is appointed by the Board of the Issaquah Highlands Community Association (“**Association**” or “**IHCA**”) pursuant to Section 4.2 of the CC&Rs. As provided in the CC&Rs, these Architectural Standards may be modified as deemed necessary by the Declarant (or by the IHCA’s Custom ARC after the delegation of authority from the Declarant). After the delegation, the IHCA Board may appoint some or all of the regular residential ARC members to serve as the “Custom ARC” under these GRD Architectural Standards. These Architectural Standards apply to all new buildings, building additions, site work, landscape and any subsequent alterations or additions to previously approved plans or existing structures, including exterior finishes, roofing materials, building heights, massing, color and materials within the GRD neighborhood. The images and illustrations in this document are intended to provide an indication of an acceptable level of detailing and quality expected for this legacy neighborhood.

The exterior of structures and all landscaping will be reviewed for consistency with these Architectural Standards, the natural setting, and the quality of the community. The review process will be conducted in a spirit of cooperation and encouragement designed to help everyone achieve the goals of the Architectural Standards.

These Architectural Standards will be most helpful if each Owner and the members of his/her Project Team review them before starting the design of the home. In that way, the Project Team can incorporate them in their design thinking and avoid later surprises or needless expense. Each Owner is free to propose solutions other than those listed in the Architectural Standards for consideration by the Custom ARC if the Project Team believes that alternative solutions achieve the vision for Grand Ridge Drive.

As used in these Architectural Standards, the terms “Owner” or “applicant” may be used interchangeably, and either term includes the members of the Project Team, unless the context otherwise denotes that the reference is only to the Owner or applicant.

IMPORTANT NOTE: These Architectural Standards supplement, but do not replace, the various applicable governmental regulations that apply. In addition to meeting these Architectural Standards, each applicant must ensure compliance with the various applicable governmental regulations. For information concerning other applicable regulations, please contact King County.

NEIGHBORHOOD MAP



SPECIFIC DESIGN PROVISIONS

I. ARCHITECTURAL QUALITY

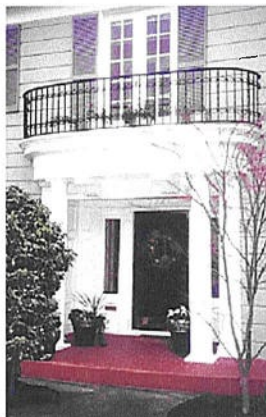
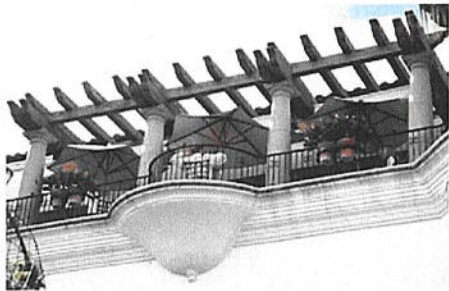
- a. Quality Design and Craftsmanship – All structures in the Grand Ridge Drive community will be designed by a licensed architect and shall feature high-quality design and craftsmanship. Exterior materials, detailing, and colors are to reflect a consistent architectural style.
- b. Exterior Elevations Visible from Offsite – All elevations of a structure are to feature a level of detail similar to the front of the structure, and match the architectural style of the house.
- c. Repetition of Plans – Each home is to be unique and not



duplicated on any other homesite and shall be developed specifically for the proposed lot.

- d. Garages – Garages should not be a dominant visual feature from the street. To maintain this, when visible from the street, no more than three garage doors are allowed and the garage doors and structure will feature high quality doors and a high level of detailing including glazing. Metal garage doors are discouraged and may be prohibited at certain locations. See also Section IV(h) below--doors.

- e. Home Orientation – The front of a home should ideally be oriented so that it is parallel to the street. This is encouraged where site conditions allow to provide the maximum visual impact of each quality home to the public. This will reinforce the neighborhood feel of Grand Ridge Drive.
- f. Sustainable Building– All homes shall comply with Sustainable Building requirements, supporting the vision of the community to create homes that promote sustainability, energy efficiency, and healthier homes, as set forth in **Appendix I**.



II. HEIGHT LIMITS, SETBACKS & IMPERVIOUS SURFACES

- a. This community has ridge height requirements of 35 and 40 feet on designated lots. For specific information height calculation methods, please contact King County.
- b. Setback requirements have been established individually for the homesite and are identified in a Building Envelope Site Plan for each Lot.
- c. Impervious Surfaces. Effective July 10, 2016, King County ordinances and regulations should be reviewed to determine the applicable impervious surface standards and what counts as “pervious” or “impervious”, to assure that the project does not exceed the County’s impervious surface



limitations. Each owner is encouraged to maintain a reserve of impervious surface for future projects. Likewise, while the County may allow certain pervious and semi-pervious products to be used when calculating impervious surface limitations, these Architectural Standards set aesthetic limits on the use of those products. For example, asphalt paving is not allowed even if it is technically semi-pervious. The use of pavers, grasscrete and other semi-pervious surfaces will need to meet both the County’s legal

standard and the aesthetic standard of these Architectural Standards and should be discussed with the Custom ARC early in the planning process.

III. CHIMNEYS

- a. Chimneys visible from the street are to be masonry.
- b. Chimneys on exterior walls must extend to grade.
- c. Chimneys are required to be capped with terracotta chimney pots, shrouds, or other ornamental termination to conceal the flue(s).
- d. Wood burning fireplaces are not permitted in the Grand Ridge Drive neighborhood.



IV. WINDOWS & DOORS

- a. Window and door styles, shapes, and sizes are to be appropriate for the architectural style of the structure.
- b. Wood windows and metal clad wood windows are allowed.
- c. Hollow metal or aluminum (storefront system) windows are allowed when appropriate to the architectural style of the home.



- d. High quality vinyl windows are permitted on a case-by-case basis dependent on the character of the home and the location of the home in relation to the street and its visibility from the street.

- e. Windows that feature a mullion and/or muntin pattern shall be simulated-divided-lites, or true-divided-lites. Grid inserts are not

permitted.

- g. Window and door trims are to be an appropriate size for the architectural style of the home and are to be used consistently on all elevations.



- h. Garage doors visible from the street shall be high quality doors that include a high level of detail in keeping with the architecture of the home.
- When garages have three doors and are visible from the street, the third door shall be set back a minimum of four (4) feet from the face of the first two doors.
- Garage doors shall be a maximum of 9 feet wide.



V. ROOF & PLUMBING VENTS

- a. Roof venting is encouraged to be accomplished with the use of continuous ridge vents and/or gable end vents in combination with eave venting.
- b. Plumbing vents and similar penetrations are to be located so they are not visually prominent from the street in front of the home.
- c. Roof-jacks, if used, are not permitted to be visible from the street.

VI. EXTERIOR LIGHTING

- a. Exterior lighting will be reviewed by the ARC with a focus on coordination with architectural character and quality, preventing light pollution and glare to other lots and/or the street..

VII. MATERIALS

- a. Siding materials are to be high-quality and consistent with the architectural style of the home.
- b. Vinyl siding is not permitted.
- c. Exterior Insulation Finishing Systems (EIFS) are not permitted.
- d. Cementitious or similar lap siding materials are permitted on a case by case basis.
- e. Siding materials are to be used consistently on all sides of the home, including dormers and gables. Where the architectural design of the home includes a change in siding materials, the transition is to occur at a logical architectural element.
- f. Classic masonry details such as masonry lintels and sills are to be used where masonry is used.
- g. When concrete block is used and is visible from the street in front of or next to a home, it shall be ground-face. Split face and natural block are not permitted.
- h. Roofing materials are to be of a high-quality, long lasting material such as slate, tile, wood shakes, or wood shingles. Metal roofs will be considered on a case-by-case basis, and if allowed shall be a dark color. The applicant has the burden of demonstrating that the roof material is minimally reflective, which will require the applicant to provide the roof material specifications, and/or a physical mock-up of the proposed roofing material on site. Additional landscape may be required for mitigation of glare.
- i. Roofing materials shall be consistent with the architectural style of the structure.
- j. When used on an exterior elevation, shutters are to be proportional to window size and shall be used consistently on all elevations visible from the street and shall be operational or have the correct hardware to appear operational. Examples: hinges, shutter dogs and hold backs.
- k. Copper and exposed galvanized roofing are prohibited by Section 2(v) of the Use Rules adopted under the CC&Rs.
- l. While composition roofing is not an approved material for this neighborhood, it may be considered on a case-by-case basis.
- m. Balconies on front elevations shall be useable and directly accessible from an interior living space.
- n. Balconies shall be constructed of high quality durable materials in keeping with the overall design of the home, such as powder-coated steel, carved stone, or cast stone.



VIII. DRIVEWAYS

If King County regulations limit the amount of impervious surfaces for Grand Ridge Drive lots, pervious paving solutions may be required for each homesite.

- a. Because of their high visibility in the community, driveways shall be paved in special materials such as pavers or colored patterned concrete with pavers or stone accents.
- b. Exposed aggregate, broom finish and stamped concrete, and asphalt are not permitted.



c. Driveways and parking areas may be use pervious paving materials if approved by King County and the Custom ARC. While the County may allow certain pervious and semi-pervious products to be used when calculating impervious surface limitations, these Architectural Standards set aesthetic limits on the use of those products. For example, asphalt paving is not allowed



even if it is technically semi-pervious. The use of pavers, grasscrete and other semi-pervious surfaces will need to meet both the County's legal standard and the aesthetic standard of these Architectural Standards and should be discussed with the Custom ARC early in the planning process.

- d. Each Owner's driveway shall extend to the right-of-way.

IX. COLORS

- a. The exterior color scheme of the home is to be compatible with its architectural style and the neighborhood.
- b. The color of all edges of window and door trim is to match the color of the face of the trim. Materials and color changes shall occur at an inside corner.
- c. Exotically colored stone, such as pink and blue, are discouraged.
- d. Wood decks, porches, and railings shall be painted or stained a color. Semi-transparent stains, semi-solid, and solid stains are encouraged.
- e. In certain circumstances, the Custom ARC may require that a proposed color or color scheme be painted on a small section of the house (or on an acceptable sample) and conduct an on-site review prior to approval of the color or color scheme.
- f. Color schemes are intended to be unique for each home. Therefore, the review of the proposed colors and materials will include an examination of existing and proposed homes.



X. LANDSCAPE & DRAINAGE GUIDELINES

Landscape is to be designed by a licensed Landscape Architect to enhance the appearance of each home and the community and to provide privacy where desired. There is special emphasis placed on the quality of landscape design and the preservation of privacy from adjacent homesites.



- a. All cleared areas on a homesite not occupied by a physical improvement such as a house, garage, driveway, patio, deck, spa, sport court, etc. are to be landscaped.
- b. Additional screening may be required if the septic field is visible from the public right-of-way.
- c. Landscape design solutions are to include a variety of trees, shrubs, lawn and groundcover in sufficient quantity and appropriate locations so as to provide visual interest within the community, especially from the street in front of the home.
- d. When adjacent to a street, landscape shall be installed up to the edge of the street pavement. When adjacent to native forest, landscape shall be native undergrowth and trees to match the existing forest such as Oregon Grape, Salal, Ferns, Bleeding Hearts, native evergreen trees and Vine Maple.
- e. Trellises, arbors, feature plantings, fountains and or other signature landscape elements are encouraged.
- f. Design of courtyards, decks and outdoor spaces are to be in keeping with the architectural style of the home.
- g. Trash and recycling container storage shall be screened from view with a fence and evergreen landscape and is encouraged to be animal resistant such as locked storage and fenced bins.
- h. Subtle, low-level lighting of landscape is encouraged.
- i. Effective July 10, 2016, King County ordinances and regulations should be reviewed to determine the applicable lot drainage standards. Historically, some lots have been required by King County to install on-site stormwater runoff facilities that comply with King County requirements for stormwater runoff Best Management Practices for their lot(s) ("Runoff BMPs").
- j. Appendix F to these Architectural Standards contains specific requirements related to soil amendments for all landscaped areas in Grand Ridge Drive. Please refer to Appendix F when preparing the landscape plans.
- k. Irrigation systems are encouraged but not required.
- l. Prior to occupancy being allowed in the home, the Custom ARC will perform a final inspection of installed landscape. During this inspection, the Custom ARC will review the installed landscape in regard to the approved drawings and the neighborhood standards. Please note that the Custom ARC reserves the right to require additional landscape as the ARC deems necessary to satisfy the neighborhood vision.



XI. TREE PRESERVATION & CLEARING LIMITS

Many of the homesites feature exceptional trees. The Building Envelope Site Plan identifies the portion of the homesite that is recommended for clearing and for construction of the home.

- a. Clearing. Effective July 10, 2016, King County ordinances and regulations should be reviewed to determine the applicable lot clearing standards, and what constitutes “clearing,” to assure that the project does not exceed the County’s clearing limitations.
- b. Privacy between homesites is intended to be preserved. The Building Envelope Site Plan establishes setback areas. A landscape plan shall also be submitted to the Custom ARC for approval. The landscape plan should focus on planting that will enhance privacy between the homesites and include native plantings along roads from the right-of-way to the property line.
- c. Cleared portions of the homesites shall be re-landscaped in accordance with the landscape provision in Appendices F, G, H and K, with a focus on plantings that enhance privacy between the homesites.



- d. As part of the Custom ARC Presentation Meeting (Appen A, Step #3), the ARC will meet with the Owner and/or the Owner’s representative(s) on site to observe the flagged location of the proposed clearing limits and the building footprint and driveway prior to the removal of any trees. Clearing limits shall be flagged with pink surveyor’s tape; trees inside of the proposed clearing limits that intended to be retained shall be flagged with blue surveyor’s tape. The building footprint can be flagged with orange surveyor’s tape and may be a rectangle (rather than following modulations in the actual footprint) that is sufficient to contain all of the building’s perimeter.
- e. If trees in sideyards between lots are removed, the installation of a sight barrier shall be required. The density of that barrier shall depend on the proximity of the structures on the affected lot(s). Some examples of barriers are:
 - Dense sight barrier:
 - Two or more staggered rows of evergreen trees, a minimum of ten feet in height and planted at intervals no greater than 20 feet on center.
 - Shrubs, a minimum of 3.5 feet in height planted in an area at least 5 feet in width, and other plant materials, planted so that the ground will be covered within 3 years.
 - Moderately dense sight barrier:
 - Evergreen and deciduous trees, with no more than 30 percent being deciduous, a minimum of 8 feet in height, and planted at intervals no greater than 20 feet on center.
 - Shrubs, a minimum of 3.5 feet in height planted in an area at least 5 feet in width, and other plant materials, planted so that the ground will be covered within 3 years.

XII. ENTRY ELEMENTS

- a. Entry elements are required and are to be located at the entrance and exit of driveways, with one (1) on each side of the driveway(s). Exceptions are considered on a case by case basis.



- b. Entry columns shall be masonry, concrete, steel, or other materials supportive of the architectural character of the home. Stucco caps are not permitted.

- c. Entry columns shall be a minimum of 24" x 24" wide x 48" high above the adjacent grade.

- d. Each house address number is to be placed on at least One (1) of the entry columns.



- e. Lighting is required

on all entrances and is to be of a design that does not allow light to project upward or onto adjacent homesites.

- f. The style and materials of entry gates and arches are to be consistent with the quality the community and the architectural character of the home. In general, this means good design and quality materials along with appropriate landscaping and illumination.



- g. Entry gates may not open outward across the property line and shall include equipment as required by the Eastside Fire and Rescue Fire Marshall for emergency access.

- h. Entry gates are required to be setback a minimum of 20 feet from the right-of-way to provide a loading area that will limit the impact to the home's neighbors.



XIII. POOLS, SPAS, SPORT COURTS

- a. To maintain the high quality private estate appearance of the community from the street, all pools, spas, and sport courts are to be located in backyards unless special circumstances warrant a different location.
- b. Lighting is not to spill beyond property lines or cast glare to surrounding homesites.
- c. Significant evergreen screening may be required depending on location.



XIV. FENCES & WALLS

- a. The style, materials, and color of fences are to be compatible with the architectural style of the home.
- b. Fences are to be painted or stained.
- c. Metal fences are to be of high quality, a dark color, and in keeping with the architectural quality of the home. Wood fences are permitted on a case by case basis.
- d. Fences, walls, and screens built on slopes greater than 15% and visible from a street are to step in sections.



- e. Walls visible from the street in front of or next to the home are to be masonry, stucco with masonry, cast-stone, or dry stack stone consistent with the architectural style of the home. Stucco wall caps are not permitted.



- f. Chainlink fences are permitted in side yards. They are required to be fully screened from the street and adjacent properties with an evergreen hedge that provides full screening at installation. Front yards include all areas between the main structure and the front property line including the side property lines.
- g. Chainlink fences may not be installed within the front yard setback, and no closer to the street than 50 feet, whichever is greater.
- h. Chainlink, when used, shall be black.

- i. Fences and walls over 6 feet in height may be allowed and will require modulation and landscape screening.



XV. UTILITY EQUIPMENT & SURVEILLANCE CAMERAS

- a. Electric meters, gas meters, security equipment, HVAC units, water heaters, water softeners, swimming pool equipment, etc. are to be screened from view.
- b. Roof mounted utility equipment is to be screened from view.
- c. If used, a surveillance camera shall be a dark color and placed in a location so as not to detract from the overall appearance of the fence, wall, structure, etc. on which it is placed.
- d. All equipment shall be screened from view and shall not exceed current jurisdictional requirements.



APPENDIX A

CUSTOM ARCHITECTURAL REVIEW COMMITTEE REVIEW PROCEDURES

REVIEW PROCEDURES

General

The review procedures are designed to promote timely and complete reviews by the Custom ARC. Architectural and Landscape Plans must be approved by the Custom ARC prior to commencing any Work and prior to submitting any applications to King County (“County”). To ensure each submittal is processed in a timely fashion, we ask for each Owner’s cooperation and understanding of these procedures. Note: All building permit submittals must bear an ARC signed approval stamp (“**wet stamp**”) before permit submittal to the County. The term “**ARC**” means both the initial Custom ARC appointed by the Declarant under Section 4.2 of the CC&Rs, as well as the successor Custom ARC that is appointed by the Board of the IHCA once the Declarant delegates architectural review to the Board-appointed ARC pursuant to Section 4.2 of the CC&Rs. After the delegation, the IHCA Board may appoint some or all of the regular residential ARC members to serve as the “Custom ARC” under these GRD Architectural Standards.

Projects to be Reviewed (collectively “**Work**”)

- New Construction: Construction of any new structure, residence, accessory and landscape structures.
- Alterations, additions, exterior revisions or reconstruction of an existing structure: Any new construction that alters the original massing or exterior finishes of an existing structure including but not limited to window placement, roof structure, exterior lighting or other significant design element. Or construction to replace or significantly repair a structure damaged by fire or other event.
- Major site or landscape improvements or revisions including sport courts, swimming pools or other similar improvement.
- Sales or construction trailers require Custom ARC approval with separate submittal requirements. Please contact the Custom ARC for the submittal checklist.

Approved Design Professionals and General Contractors

Design teams for GRD projects are to include the following licensed professionals, to be approved for each application by the Declarant or ARC (collectively “**Project Team**”):

- Licensed Architect
- Licensed Landscape Architect
- Licensed General Contractor
- Additional professionals as required.

Protocol for Approval of Architects, General Contractors, and Landscape Architects

Architects, General Contractors and Landscape Architects may be approved to work on GRD projects provided the following conditions are met to the satisfaction of the Declarant.

- Satisfaction of all applicable Washington State license and registration requirements. Required licenses and registration(s) are current and in good standing.
- Review of completed projects of similar quality and scale. The review may also include examples of drawings that were prepared for similar projects.
- Client references.
- Compatibility with existing approved Architect and General Contractor group.
- Design style and construction quality are consistent with the neighborhood vision.
- Applicant shall demonstrate an understanding of the Architectural Standards for the GRD neighborhood.
- Demonstration of a willingness to work with the ARC in a collaborative manner to achieve the neighborhood vision.

The Declarant initially (and the IHCA-appointed ARC after delegation of authority by Declarant), has the sole discretion to approve or disapprove any Architect, General Contractor, or Landscape Architect. Approvals will be based on a review of qualifications, experience, design style, reputation, collaborative manner, understanding of the design requirements and vision of the community and other factors that the Declarant deems relevant. The Custom ARC will periodically review with Declarant employees or Declarant's agents/consultants the conduct of an Architect, General Contractor or Landscape Architect that has worked within GRD on a project(s) based on the overall experience. Other factors shall include the degree of cooperation and professional competency demonstrated through the duration of the project. **Appendix A-2** sets forth the forms for the (a) Request for Qualifications from Builders, with additional approval criteria; (b) Request for Qualifications for Architects, Landscape Architects and Designers, with additional approval criteria; and (c) Project Team approval.

Note: Prior to submittal of any design drawings, the Architect, General Contractor and Landscape Architect shall familiarize themselves with these Architectural Standards and overall design requirements of the community.

The Declarant and the Custom ARC do not warrant the work of any design or construction team member.

Note: The IHCA-appointed ARC will approve the Project Team, conduct the reviews, issue approvals and otherwise will exercise the rights of Declarant after Declarant has recorded a delegation of the Custom ARC authority pursuant to the CC&Rs.

REVIEW PROCESS OVERVIEW

The GRD review process is as follows:

- Custom ARC Orientation

- Project Team Certification
- Conceptual Review and Custom ARC Approval
- Architectural and Landscape Plan Submittal and Custom ARC Approval— Prior to County Building Permit Submittal
- Custom ARC Wet Stamping Prior to County Building Permit Submittal
- Pre-Construction Meeting—after County issuance of a Building Permit
- Landscape Pre-Construction Meeting – prior to installation of landscape
- Field Reviews of architecture and site improvements during/after construction
- Closeout

Review Process

1. Custom ARC Orientation

A team member from the Custom ARC will contact the Owner to discuss the Custom ARC process and gather information on the Project Team (architect, landscape architect, and general contractor). The term “Owner” means the lot owner as well as any owner representative, such as a member of the Owner’s Project Team.

2. Conceptual Review Meeting and Custom ARC Acceptance

- a. The Owner shall schedule a meeting with the Custom ARC to review the conceptual design of the home and landscape. The Owner must (i) email a PDF of the proposed conceptual architectural and landscape design to the Custom ARC at least seven (7) days prior to the Conceptual Review meeting in order for the Custom ARC to prepare for the meeting, and (ii) deposit the Custom ARC fee (See **Appendix A-3** for fee information). The purpose of this meeting is to discuss the proposed conceptual designs and ensure conformance with these Architectural Standards. The use of materials, colors, and landscape concepts and relationship of the proposed home to adjacent lots will also be discussed. See the Submittal Checklist attached as **Appendix B-1 (Part A)**. Additional submittal requirements will be discussed as may be necessary to secure conceptual acceptance.
- b. Conceptual design may be hand drawn or a computer generated drawing to scale of the following:
 - Exterior Elevations
 - Site plan including proposed and existing contours.
 - Site section drawing showing relationship of residence to the site conditions.
 - Landscape Plan proposing overall concept, preliminary hardscape and softscape.
 - Include proposed square footage of each structure.
 - Photographs that reflect the proposed architectural and landscape concepts (optional).

- c. Custom ARC may (i) accept with or without conditions, (ii) accept a portion and disallow a portion, or (iii) disallow the proposed concept within 15 days of the meeting with the Owner.
- d. In the case of an acceptance with conditions or a disallowance, the Owner must submit a revised concept, and the Custom ARC will respond within 15 days.
- e. Upon conceptual acceptance by the Custom ARC, the Owner will be given an acceptance letter. See **Appendix B-2** for the form of the Conceptual Acceptance letter.
- f. Note: conceptual acceptance will expire after 12 months if a complete application of the Architectural and Landscape Plans to the Custom ARC has not been made.

3. Architectural and Landscape Plans Submittal and Custom ARC Approval Meeting—pre building permit application and Clearing Limits Flagging

The Owner shall schedule a meeting with the Custom ARC to review the Architectural and Landscape Plans for the home and lot. The Owner must email a PDF of the complete Architectural and Landscape Plans Submittal to the Custom ARC at least seven (7) days prior to the Custom ARC Presentation Meeting to review the Architectural and Landscape Plans for the home and lot. See the Submittal Checklist attached as **Appendix B-1 (Part B)**. The Owner and the Owner's architect shall meet with the Custom ARC to present the submittal.

As part of the Custom ARC Presentation Meeting, the Owner shall have a surveyor flag the location of the proposed (i) clearing limits for the Lot, (ii) footprint for all buildings, and (iii) centerline of the driveway for the Custom ARC to review. (See Section XI, "Tree Preservation & Clearing Limits," in the Specific Design Provisions of these Architectural Standards).

Within 15 business days after the Presentation Meeting, a Custom ARC comment/approval letter will be issued for the Architectural and Landscape Plans. The Custom ARC may (i) approve with or without conditions, (ii) approve a portion and disapprove a portion, or (iii) disapprove the applicant's Architectural and Landscape Plans. The Custom ARC will issue mark-ups of the Plans, if applicable. The Custom ARC may, but shall not be obligated to, specify the reasons for any disapproval or objections or offer suggestions for resolving any disapproval or objections. The Custom ARC approval is subject to the Declarant's veto to the extent provided in Section 4.3(b) of the CC&Rs. If no response is received from the Owner within 15 business days after issuance of the Custom ARC's review comments/approval, the Custom ARC's decision shall be deemed final. See **Appendix B-3** for the form of the Custom ARC Approval Letter for Architectural and Landscape Plans.

Note: Incomplete applications will not be accepted and may delay the architectural review process and may result in additional costs at the responsibility of the Owner beyond the basic fee assessed for Custom ARC review.

4. [Optional] Additional Custom ARC Review Meetings

The Owner shall have the option of meeting with the Custom ARC to discuss the Custom ARC's review decision and comments. If the Owner desires a meeting with the Custom ARC to discuss the review decision and comments, the Owner must schedule a meeting with the Custom ARC within thirty (30) calendar days of issuance of the review comments. The goal of this meeting is for the Owner, the Owner's representative, and the Custom ARC to discuss the review decision and comments and arrive at a clear understanding of revisions needed to the Plans.

5. Custom ARC Wet Stamping Prior to County Building Permit Submittal

Once all conditions set forth in the Custom ARC comment/approval decision (or expressed at the meeting) for compliance with the Architectural Standards are satisfied, the Custom ARC will “wet stamp” the Architectural and Landscape Plans. This wet stamp is a pre-condition of the Owner submitting a building permit application to the County.

To obtain the wet stamp, the Owner’s representative must email a PDF of the proposed County Building Permit Submittal at least six (6) business days prior to the intake appointment at the County. The Custom ARC will review for compliance with the Custom ARC Approval Conditions and Architectural Standards. The Custom ARC will notify the Owner within three (3) business days if the Permit Submittal is ready for Custom ARC Stamping.

6. County Building Permit Application and Approval; Electronic Record

Following Custom ARC’s wet stamp approval, the Owner is authorized to submit its building permit application to the County. Any changes that occur during the County’s review processes must be reviewed and approved by the Custom ARC for compliance with the Architectural Standards prior to re-submittal to the County. This re-submittal shall be emailed in an electronic format by the Applicant, and the Applicant should allow at least five (5) business days for the Custom ARC review and approval, which approval shall require a new wet stamp.

Upon receipt of the County’s permit approval, an electronic record set with the Custom ARC and the County approval stamps shall be submitted to the Custom ARC prior to the commencement of any construction.

7. Pre-Construction Meeting

Prior to starting any tree removal, clearing or construction, the Owner and the approved General Contractor must attend a pre-construction meeting with the Custom ARC and sign off on the applicable documents contained within the Builder’s Project Manual (**Appendix M**). The following items will be reviewed at this meeting:

- a. Existence of a Certificate of Insurance, with named additional insureds: IHCA, PBC, PB Properties, Grand-Glacier (see **Appendix R**)
- b. Issaquah Highlands Project Manual (See **Appendix M**)
- c. Outstanding submittals
- d. Project schedule
- e. Custom ARC field reviews and changes
- f. General conduct
- g. Close-out process

8. Construction Process; Field Inspections

During construction, the Custom ARC may undertake a number of site field verification visits (“**Site Visit**”) of the home construction and other improvements to assess compliance of architecture and landscape with the approved Architectural Plans and Landscape Plans. The Owner’s architect must approve in writing the completion of the construction stages (a), (b) and (d) listed below, in accordance with the approved Architectural Plans. The Owner’s landscape architect or designer

APPENDIX A

must approve in writing the completion of construction stage (d) listed below, in accordance with the approved Landscape Plans. The General Contractor or Owner must (i) deliver to the ARC the architect's and landscape architect's or designer's written approval and (ii) notify the Custom ARC when the following aspects of the project are completed so that the Custom ARC may conduct a site visit at the following stages of construction:

- a. Framing – when the openings for the windows, doors, and building massing and roof sheathing are completed;
- b. Siding – approximately 95% of the exterior materials have been installed; and
- c. Landscape Pre-Construction Meeting – the Owner or General Contractor shall contact the Custom ARC to schedule a pre-construction meeting with the General Contractor and landscape subcontractor (if applicable), the Landscape Architect, and the Custom ARC to review the process for the installation of the landscape.
- d. Final – all exterior architecture and landscape are completed and installed.

The Custom ARC will notify Applicant in writing after each site visit if non-conformance is determined. The Applicant shall have fourteen (14) days to resolve any non-conformance with Custom ARC-approved Architectural Plans and Landscape Plans. If the structure and other improvements do not come into conformance within fourteen (14) days, it shall be in formal non-compliance. The Owner must submit written request for compliance review to inform the Custom ARC that the home and landscape areas in compliance and ready for re-review.

9. Revisions to Custom ARC Approved Architecture and Landscape Plans

The Owner must notify the Custom ARC of any revisions to Custom ARC-approved plans and shall be reviewed on a case-by-case basis prior to implementing a change. The design and construction team must submit the proposed change to the Custom ARC for review and approval. The change can be emailed initially and the Custom ARC will determine if additional information or on-site meetings are required. The Custom ARC will respond within five (5) business days to the request.

- a. Field Changes – Field changes are minor changes that are consistent with the approved plans. Field changes can be reviewed and approved by a Custom ARC member.
- b. Design Changes – Design changes are changes that in the opinion of the Custom ARC member constitute more than a minor departure from the approved plans. Design changes must be submitted to the full Custom ARC for review and approval. Additional fees will apply for review of design changes.

10. Paint-Down and Mock Up Requirements

If a paint-down and/or mock-up of the exterior colors and materials is required by the Custom ARC, the Owner shall schedule a meeting with the Custom ARC to review the materials and colors in the field prior to final approval for use. The paint down may occur on a section or sections of the building that will represent the final scheme or on plywood. The mock up is a representative example of the material finishes and execution. If the Custom ARC determines that the proposed colors or mock-up are not acceptable, the Owner shall submit new colors or materials for review and approval.

11. Final Construction; Applicant's Notice of Completion/Inspection Request

When the General Contractor has completed the construction of all improvements, including landscape, the General Contractor will request final Custom ARC sign off and acceptance by delivering a written Notice of Completion/Inspection Request to the Custom ARC. See **Appendix N** for the form of Notice.

The General Contractor should deliver the Notice to the Custom ARC at least five (5) business days prior to the requested final site visit by the Custom ARC.

12. Custom ARC Construction and Administrative Punchlist.

The Custom ARC will undertake a site visit to determine full compliance with the approved Architectural and Landscape Plans and will prepare a "punchlist" of any work that is incomplete. Further, the Custom ARC will review the list of required close out items that need to be submitted to the Custom ARC. See **Appendix O** for the form of Construction and Administrative Punchlist.

13. Custom ARC Final Completion Letter; ARC Deposit Refund.

Upon the Custom ARC's satisfaction of the completion of all work in compliance with the approved Architectural and Landscape Plans, the ARC will notify the General Contractor with a final completion letter. See **Appendix P** for the general form of Custom ARC Letter of Final Acceptance. The Letter of Final Acceptance reflects Custom ARC requirements only and in no way constitutes approval or compliance with standards or requirements set forth by County or any other governmental agency. The ARC Deposit will be refunded to the extent provided in **Appendix A-1**.

Construction Period Requirements

1. Custom ARC approval must be obtained prior to building permit submittal to the County and start of Work. The CC&Rs require that each Owner shall construct a residence on the Lot within the following schedule:

- (a) begin construction of foundation work on the residence within **36 months** after the date of Owner's closing of the lot; and
- (b) continuously construct the residence after beginning, with all construction of the Work of the residence and landscape completion within **18 months** after beginning construction.

2. If construction has not started within the required 36 months, then the Custom ARC will have the option of voiding the Custom ARC approval and exercising its rights and remedies under this document. If construction is not substantially complete within 18 months from the date construction is started, including installation of all landscape, then the Custom ARC will enforce the **rights and remedies** under this document. Any Owner who does not meet the dates for the start and completion of construction as provided in the CC&R's shall pay a fine to the Association of **\$200/day** for each day that commencement or completion is delayed beyond the required dates, or the fine may be collected through use of the Security Deposit or any other remedy at law or equity, unless the Custom ARC grants a construction period variance (which may include a waiver of some or all of the fines due for failure to timely complete construction, in the Custom ARC's sole discretion).

3. Residential occupancy shall not occur until all of the following:

- (a) written Notice of Completion/Request for Inspection has been submitted to the Custom ARC by the Owner;

- (b) joint inspection has occurred between the Custom ARC and Owner; and
- (c) ARC has verified that all Work has been done according to submitted plans by delivering a Letter of Final Acceptance (See **Appendix P**).

Decision Criteria

The GRD Architectural Standards are intended to be utilized by the Custom ARC in the review of development submittals. In reviewing each submittal, the Custom ARC may consider other factors it deems relevant, including, without limitations, harmony of external design with surrounding structures and environment. Decisions may be based on purely aesthetic considerations. The Owner acknowledges that determinations as to such matters are purely subjective and opinions may vary as to the desirability or attractiveness of particular improvements. Custom ARC decisions may be based on aesthetics alone. The GRD Architectural Standards are not the exclusive basis for decisions by the Custom ARC, and compliance with the Architectural Standards does not guarantee approval of any submittal. Similarly, the GRD Architectural Standards do not include federal, state or local regulations. It is the responsibility of the Owner to ensure compliance with the various applicable governmental regulations and any conditions of approval for a plat, site development permit, or other permits required by the County.

Non-Compliance: Appeals and Enforcement

Custom ARC Design Decisions. Any Owner/applicant that believes s/he has been adversely affected by a decision of the Custom ARC in approving with or without conditions or disapproving all or any portion of any conceptual designs or any Architectural and Landscape Plans may appeal such action to the Declarant (if prior to Declarant recording a delegation of Custom ARC authority to the IHCA) or to the executive director of the IHCA (if after Declarant records a delegation of ARC authority to the IHCA). The appeal must be made in writing within ten (10) calendar days of the Custom ARC's action and shall contain the written decision of the Custom ARC along with specific objections or mitigating circumstances justifying the appeal. A final, conclusive decision shall be made by the Declarant or the IHCA's executive director (as applicable) within ten (10) business days after receipt of such appeal notification.

Violations/Non-Compliance. Any violations of these Architectural Standards, changes to the Project Team without Custom ARC approval, or the failure to obtain or strictly follow approved Architectural and Landscape Plans or revisions thereof may be enforced by the Custom ARC and the IHCA as provided in **Appendix A-4**. The construction of improvements and facilities that have not been approved by the Custom ARC and/or field revisions that are not approved by the Custom ARC may result in a **STOP WORK ORDER**. All expenses incurred by Declarant or the Association associated with non-compliance will be the responsibility of the Owner. Complete payment will be required prior to the removal of the Stop Work Order. Violations of rules, covenants, or restrictions may be subject to a fine.

Non-Waiver, No Inadvertent Precedents

An approval by the Custom ARC of drawings, specifications, materials or work done or proposed, or in connection with other matters requiring approval under these Architectural Standards, including a waiver by the Custom ARC, shall not be deemed to constitute a waiver of the right to withhold subsequent approval. An oversight by the Custom ARC of non-compliance at any time during the review process, construction process or during its Final Review does not relieve the Owner from compliance with these Architectural Standards.

Any error, omission or misjudgment by the Custom ARC in any instance shall not constitute the creation of a precedent governing future or existing approvals or disapprovals. The Custom ARC

APPENDIX A

reserves the right to learn from any such occurrence and is not required to approved or permit the repetition such occurrences.

Disclaimer

The Custom Architectural Review Committee's review in no way constitutes approval or compliance with any regulations or standards required by the County or any other governmental entity. For example, an approved preliminary plat may contain conditions that could affect individual plot plans, architectural plans, or landscape plans. Additionally, Custom ARC review does not relieve the Owner/applicant of the responsibility to obtain approval from all appropriate governmental entities if such approval is required. Furthermore, if approval is required from any other entities, written evidence of such approval must be received prior to the commencement of Work. If Work is commenced prior to the receipt of written approval, any and all Work related costs and inconvenience costs are the responsibility of the Owner.

Non-Liability

In addition, the Custom ARC does not take responsibility nor does it review drawings or construction for code compliance, water intrusion, indoor air-quality, life safety, site drainage, slope stability, structural issues, methods and means or project costs.

The Custom ARC or any member, employee or agent of the Custom ARC will not be liable to any party for any action, or failure to act, with respect to any matter if such action or failure to act was in good faith and without malice. This outline of the review procedures is intended to be of assistance in understanding the process. When followed, it will result in saving time and money.

Contact Information:
Erica Buckley
CHARC Coordinator
Phone: (206) 682-2500
Email: ebuckley@htland.com

Mailing Address:
Custom Architectural Review Committee
Attn: Port Blakely
c/o.: Heartland LLC
1301 First Avenue, Suite 200
Seattle, WA 98101

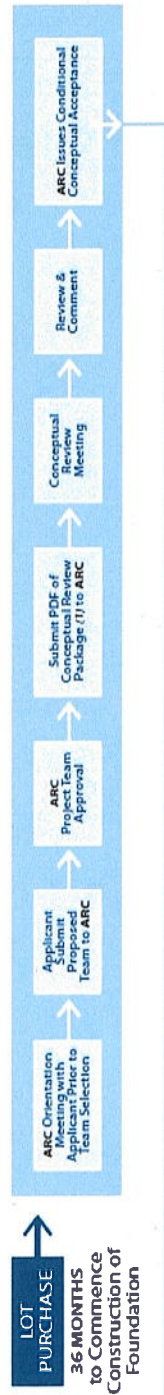
APPENDIX A-1

CUSTOM ARCHITECTURAL REVIEW COMMITTEE PROCESS CHART

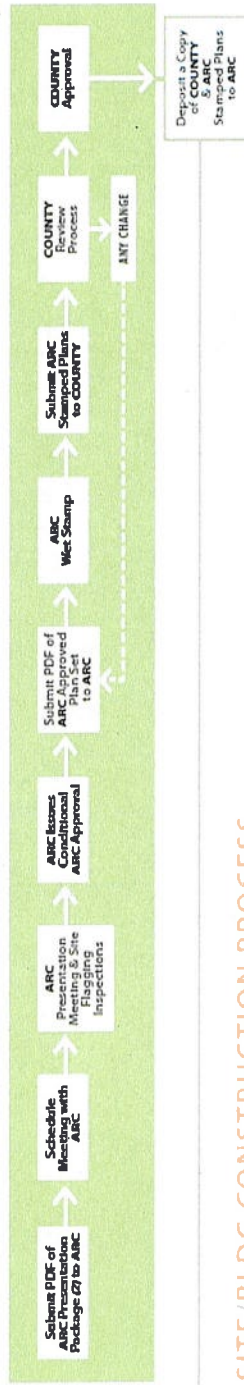
See attached.

Grand Ridge Drive ARC Review Process

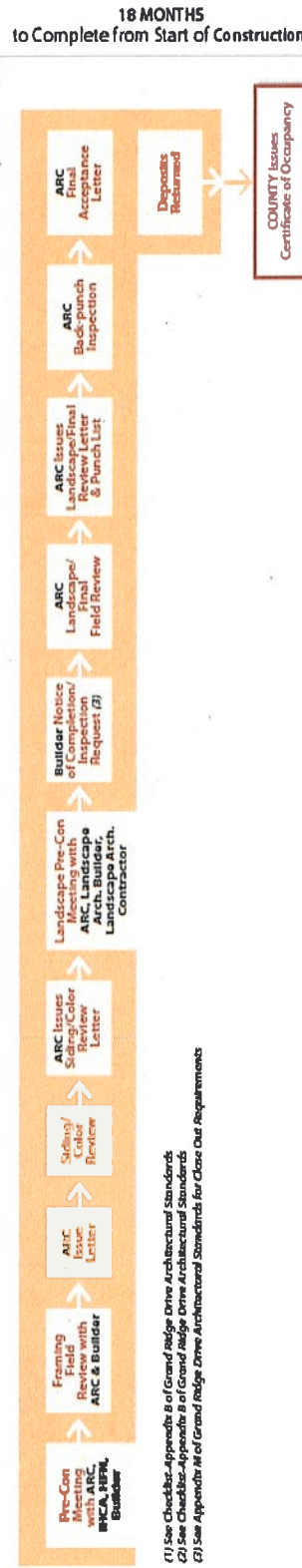
ORIENTATION/CONCEPTUAL REVIEW PROCESS



ARCHITECTURAL & LANDSCAPE APPROVAL



SITE/BLDG CONSTRUCTION PROCESS



(1) See Checklist Appendix B of Grand Ridge Drive Architectural Standards
 (2) See Checklist Appendix B of Grand Ridge Drive Architectural Standards
 (3) See Appendix M of Grand Ridge Drive Architectural Standards for Close Out Requirements

8/19/2015

APPENDIX A-2

PROJECT TEAM APPROVAL FORM

Project Team Designation and Agreement

The undersigned Lot Owner hereby designates the following named companies and/or individuals as the Project Team for the design and construction of the home to be built on the property known as Lot ____ in the GRD neighborhood.

The Lot Owner and each of the undersigned Project Team members acknowledge and agree that:

He/she has read and agrees to adhere to the GRD Architectural Standards and the Appendices thereto, such as the Builders' Project Manual, insurance and design standards;

The Lot Owner shall (a) obtain Custom ARC approval of all work required under the Architectural Standards and Declaration of Covenants, Conditions and Restrictions, and (b) construct the house, landscaping and other improvements strictly in accordance with the Custom ARC-approved plans; and

No changes shall be made to the Custom ARC-approved plans or to the approved Project Team designated below without the Custom ARC's prior written approval.

Lot Owner(s): _____ (print)

By _____ (signature) Date: _____

By _____ (signature) Date: _____

Architect: _____ (print firm name)

By _____ (signature) Date: _____

Landscape
Architect: _____ (print firm name)

By _____ (signature) Date: _____

General Contractor: _____ (print firm name)

By _____ (signature) Date: _____

Designated Job Superintendent

Name: _____ (print)

Cell: _____

Email: _____

HARRISON STREET & GRAND
RIDGE DRIVE

BUILDER REQUEST FOR
QUALIFICATIONS

May 4, 2017

-1-

INTRODUCTION

This RFQ is intended to assist Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC) in approving qualified builders to construct custom homes in the Issaquah highlands neighborhoods Harrison Street and Grand Ridge Drive.

HARRISON STREET VISION:

"A hillside neighborhood with a variety of extraordinary homes in which the essence of design, quality of construction and cohesiveness of landscaping and streetscape blend together to create a neighborhood."

GRAND RIDGE DRIVE VISION:

"We envision an enclave of private estate properties along a rural lane, each unique in design and character and surrounded by a forest in which architectural diversity is encouraged. Each home will be a reflection of the needs, tastes and expectations of its Owner, as expressed through fine architectural design, quality home building and sensitive landscaping."

The vision is upheld by the following qualities:

- Timeless Architecture
- Cohesive Streetscape
- Assurance of Quality
- Urban Village
- Built Green

We are looking for craftsmen whose primary business purpose is to create a custom home with exemplary attention to detail while working within a realistic budget.

In order to meet the visions of the Architectural Standards, the following criteria will be used to evaluate potential custom homebuilders. Final approval of proposed custom homebuilders will be made jointly by Port Blakely Communities and the CHARC.

CRITERIA

1. Reputation for building homes of uncompromising quality.
2. Consistent customer satisfaction.
3. Uncompromising commitment to working jointly with the CHARC, and architects to successfully complete a project of utmost design and building quality.
4. Commitment to expediting design of home with selected architects, and construct home according to the timelines established by the Declaration of CC&R's.
5. Demonstrate that customer service "best practices" are employed.
6. Financial stability, excellent credit status and a demonstrated ability to complete projects on time and on budget.
7. References are required, and we recommend that references include sub-contractor, suppliers and previous clients.
8. No pending lawsuits or track record for legal claims.
9. Custom residential building must be primary business.
10. Willingness to comply with Port Blakely Communities requirements, including:
 - a. Attitude of collaboration on design of home and landscaping with the CHARC.
 - b. Compliance with community standards, i.e. work hours, site cleanliness, and orientation to Issaquah Highland's Community Association.

DELIVERABLES

1. Brief description of your company and its structure, business philosophy and methods.
2. List of comparable custom residential construction projects with a brief description of the project, including photographs and design team if possible.
3. List of references (owners, architects, engineers and contractors) with names, telephone numbers and e-mail addresses from recent past project, similar in size and scope, that clearly reveal your company's skills and experience to perform the work on this project.
4. Provide information of proposed team for custom home, including a brief description of experience and role.

Please email the deliverables to:

Erica Buckley
ebuckly@htland.com
206-682-2500

ATTACHMENTS

1. Applicable Architecture Standards

HARRISON STREET & GRAND
RIDGE DRIVE

ARCHITECT
LANDSCAPE ARCHITECT
LANDSCAPE DESIGNERS
REQUEST FOR QUALIFICATIONS

May 4, 2017

-1-

INTRODUCTION

This RFQ is intended to assist Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC) in approving architects, landscape architects, and/or landscape designers ("Applicant") qualified to design custom homes and landscaping in the Issaquah Highlands neighborhoods, Harrison Street and Grand Ridge Drive.

The vision for these neighborhoods simply put is:

"A hillside neighborhood with a variety of extraordinary homes in which the essence of design, quality of construction and cohesiveness of landscaping and streetscape blend together to create a neighborhood."

This vision is upheld by the following qualities:

- Timeless Architecture
- Cohesive Streetscape
- Assurance of Quality
- Urban Village Experience
- Built Green

We are looking for firms whose primary business purpose is to design a custom home and/or landscape for custom homes with exemplary attention to detail while working within a realistic budget.

The CHARC will seek to verify that Applicant designs unique high-end custom homes or landscapes of uncompromising quality and enjoys a reputation for excellent customer service and satisfaction.

Final approval of proposed Applicants will be made jointly by Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC).

DELIVERABLES

Applicants must:

1. Provide satisfactory evidence of professional education, experience, credentials, and licenses.
2. Provide a brief description of the Company and its structure, business philosophy and methods.
3. Confirm that Applicant's primary business is to design custom homes or landscapes.

4. Commit to working collaboratively with the CHARC, lot-owner, and general contractor to design and build a custom home or landscape that fully complies with the applicable architectural standards.
5. Provide a portfolio of Applicant's comparable custom residential projects, including a project description and photographs.
6. Provide a list of references (Owners, Engineers and General Contractors) with names, telephone numbers and e-mail addresses from recent past projects similar in size and scope that clearly reveal your Company's skills and experience to perform the work on this project.
7. Verify that Applicant has no pending lawsuits.
8. Verify that Applicant has read and discussed the attached Architectural Standards with the lot owner and contractor.

Please email the deliverable information to:

Erica Buckley
ebuckley@htland.com
206 682-2500 EXT 123

ATTACHMENTS

1. Applicable Architecture Standards

APPENDIX A-2

PROJECT TEAM APPROVAL FORM

Project Team Designation and Agreement

The undersigned Lot Owner hereby designates the following named companies and/or individuals as the Project Team for the design and construction of the home to be built on the property known as Lot _____ in the GRD neighborhood.

The Lot Owner and each of the undersigned Project Team members acknowledge and agree that:

He/she has read and agrees to adhere to the GRD Architectural Standards and the Appendices thereto, such as the Builders' Project Manual, insurance and design standards;

The Lot Owner shall (a) obtain Custom ARC approval of all work required under the Architectural Standards and Declaration of Covenants, Conditions and Restrictions, and (b) construct the house, landscaping and other improvements strictly in accordance with the Custom ARC-approved plans; and

No changes shall be made to the Custom ARC-approved plans or to the approved Project Team designated below without the Custom ARC's prior written approval.

Lot Owner(s): _____ (print)

By _____ (signature) Date: _____

By _____ (signature) Date: _____

Architect: _____ (print firm name)

By _____ (signature) Date: _____

Landscape Architect: _____ (print firm name)

By _____ (signature) Date: _____

General Contractor: _____ (print firm name)

By _____ (signature) Date: _____

Designated Job Superintendent

Name: _____ (print)

Cell: _____

Email: _____

HARRISON STREET & GRAND
RIDGE DRIVE

BUILDER REQUEST FOR
QUALIFICATIONS

May 4, 2017

-1-

INTRODUCTION

This RFQ is intended to assist Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC) in approving qualified builders to construct custom homes in the Issaquah highlands neighborhoods Harrison Street and Grand Ridge Drive.

HARRISON STREET VISION:

"A hillside neighborhood with a variety of extraordinary homes in which the essence of design, quality of construction and cohesiveness of landscaping and streetscape blend together to create a neighborhood."

GRAND RIDGE DRIVE VISION:

"We envision an enclave of private estate properties along a rural lane, each unique in design and character and surrounded by a forest in which architectural diversity is encouraged. Each home will be a reflection of the needs, tastes and expectations of its Owner, as expressed through fine architectural design, quality home building and sensitive landscaping."

The vision is upheld by the following qualities:

- Timeless Architecture
- Cohesive Streetscape
- Assurance of Quality
- Urban Village
- Built Green

We are looking for craftsmen whose primary business purpose is to create a custom home with exemplary attention to detail while working within a realistic budget.

In order to meet the visions of the Architectural Standards, the following criteria will be used to evaluate potential custom homebuilders. Final approval of proposed custom homebuilders will be made jointly by Port Blakely Communities and the CHARC.

CRITERIA

1. Reputation for building homes of uncompromising quality.
2. Consistent customer satisfaction.
3. Uncompromising commitment to working jointly with the CHARC, and architects to successfully complete a project of utmost design and building quality.
4. Commitment to expediting design of home with selected architects, and construct home according to the timelines established by the Declaration of CC&R's.
5. Demonstrate that customer service "best practices" are employed.
6. Financial stability, excellent credit status and a demonstrated ability to complete projects on time and on budget.
7. References are required, and we recommend that references include sub-contractor, suppliers and previous clients.
8. No pending lawsuits or track record for legal claims.
9. Custom residential building must be primary business.
10. Willingness to comply with Port Blakely Communities requirements, including:
 - a. Attitude of collaboration on design of home and landscaping with the CHARC.
 - b. Compliance with community standards, i.e. work hours, site cleanliness, and orientation to Issaquah Highland's Community Association.

DELIVERABLES

1. Brief description of your company and its structure, business philosophy and methods.
2. List of comparable custom residential construction projects with a brief description of the project, including photographs and design team if possible.
3. List of references (owners, architects, engineers and contractors) with names, telephone numbers and e-mail addresses from recent past project, similar in size and scope, that clearly reveal your company's skills and experience to perform the work on this project.
4. Provide information of proposed team for custom home, including a brief description of experience and role.

Please email the deliverables to:

Erica Buckley
ebuckly@htland.com
206-682-2500

ATTACHMENTS

1. Applicable Architecture Standards

HARRISON STREET & GRAND
RIDGE DRIVE

ARCHITECT
LANDSCAPE ARCHITECT
LANDSCAPE DESIGNERS
REQUEST FOR QUALIFICATIONS

May 4, 2017

- 1 -

INTRODUCTION

This RFQ is intended to assist Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC) in approving architects, landscape architects, and/or landscape designers ("Applicant") qualified to design custom homes and landscaping in the Issaquah Highlands neighborhoods, Harrison Street and Grand Ridge Drive.

The vision for these neighborhoods simply put is:

"A hillside neighborhood with a variety of extraordinary homes in which the essence of design, quality of construction and cohesiveness of landscaping and streetscape blend together to create a neighborhood."

This vision is upheld by the following qualities:

- Timeless Architecture
- Cohesive Streetscape
- Assurance of Quality
- Urban Village Experience
- Built Green

We are looking for firms whose primary business purpose is to design a custom home and/or landscape for custom homes with exemplary attention to detail while working within a realistic budget.

The CHARC will seek to verify that Applicant designs unique high-end custom homes or landscapes of uncompromising quality and enjoys a reputation for excellent customer service and satisfaction.

Final approval of proposed Applicants will be made jointly by Port Blakely Communities and the Custom Home Architectural Review Committee (CHARC).

DELIVERABLES

Applicants must:

1. Provide satisfactory evidence of professional education, experience, credentials, and licenses.
2. Provide a brief description of the Company and its structure, business philosophy and methods.
3. Confirm that Applicant's primary business is to design custom homes or landscapes.

4. Commit to working collaboratively with the CHARC, lot-owner, and general contractor to design and build a custom home or landscape that fully complies with the applicable architectural standards.
5. Provide a portfolio of Applicant's comparable custom residential projects, including a project description and photographs.
6. Provide a list of references (Owners, Engineers and General Contractors) with names, telephone numbers and e-mail addresses from recent past projects similar in size and scope that clearly reveal your Company's skills and experience to perform the work on this project.
7. Verify that Applicant has no pending lawsuits.
8. Verify that Applicant has read and discussed the attached Architectural Standards with the lot owner and contractor.

Please email the deliverable information to:

Erica Buckley
ebuckley@htland.com
206 682-2500 EXT 123

ATTACHMENTS

1. Applicable Architecture Standards

APPENDIX A-3

ARCHITECTURAL REVIEW COMMITTEE FEES

Effective May 1, 2014

**Issaquah Highlands Custom Architectural Review Committee ("ARC")
Harrison Street and Grand Ridge Drive Design Approval and
Construction Inspection Process Fee Schedule**

	Foot Notes	Schedule of Fees
Base Review Fee (described below)	(1)	<u>\$7,500</u>
Grand Ridge Lots - Staking Review	(2)	\$700
Total Fee Collected at lot closing	(3)	\$ _____
<i>Additional Meeting & Inspection Fees if needed: (collected at the time of service)</i>		
Additional Conceptual Design Presentation or Project Team Reviews	(4)	\$1,000
Additional Architectural Plan or Landscape Plan Presentation to Custom ARC	(5)	\$2,000
Construction Change Requests via email	(6)	\$500
Construction Change Requests via Meeting	(7)	\$1,000
Additional Site Inspection Visit	(8)	\$300

The Architectural Review Process for Harrison Street and Grand Ridge Drive is meant to be a rigorous but collaborative process and is designed to create neighborhoods with unique high-quality homes that have a timeless appeal. The Custom ARC is a team of well-experienced licensed architects and landscape architects actively practicing in the greater Seattle/Eastside area.

Custom ARC fees are designed to recover the costs incurred by the Custom ARC to analyze and approve a project. The costs cover the professional fees paid to the Custom ARC committee professionals. Before the applicant engages an architect or contractor, the applicant or his/her representative must attend an orientation meeting with the Custom ARC Coordinator to learn about the Custom ARC process and steps that can help keep fees to a minimum.

The **Base Review Fee** covers all of the activities of the Custom ARC in a normal project review and incorporates the following:

1. one orientation meeting with the Custom ARC Coordinator;
2. one project team review and approval;
3. two Conceptual meetings and Custom ARC approval;
4. one Architectural Plan presentation meeting;
5. one Landscape Plan presentation meeting;

6. building permit stamping;
7. one pre-construction meeting;
8. four construction field review inspections;
9. the associated administrative services during the Design and Construction processes; and
10. the Custom ARC close out letter.

The Base Review Fee assumes that the applicant will use a Project Team of professionals that meet the qualifications set out in the Architectural Standards to perform work in the Harrison Street and GRD communities: custom home experience, design style, reputation, collaborative manner, understanding of the design requirements and vision of the community and other relevant requirements. Applicants are encouraged to use Project Team members that have previously been approved to work on projects in those communities and have successfully performed on those projects. A Project Team consists of an architect, contractor, and landscape architect. Experience shows that Project Team members that are new to Harrison Street or Grand Ridge Drive require additional Custom ARC time and effort in order to meet the standards of the neighborhoods. Accordingly, the fee schedule contemplates additional services that may be necessary if the Custom ARC does not approve all persons initially proposed to be part of Project Team and the Custom ARC is not familiar with applicant's proposed replacement on the Project Team.

Footnotes:

- (1) The Base Review Fee may be adjusted for applications received later than 12 months from Lot Closing to reflect current fee schedule at time of application.
- (2) Grand Ridge Lots are in King County and a Staking review is required to verify clearing limits.
- (3) A Base Review Fee is refundable but is not transferrable to a new buyer.
- (4) Cost per meeting if additional Conceptual meetings are required. It is not guaranteed that your requested Project Team or any member of it will be approved, which may result in additional review costs.
- (5) Cost per meeting if additional Architectural Plan or Landscape Plan meetings are required.
- (6) Change requests to approved plans that can be handled via email correspondence.
- (7) Change requests to approved plans that require Custom ARC Meeting(s). This cost is per meeting.
- (8) Cost per inspection if additional inspections are required beyond a post-framing inspection, a post-siding inspection, a post- final construction/landscape meeting, and a final punch list meeting.

APPENDIX A-4

ENFORCEMENT PROCEDURES FOR ARCHITECTURAL STANDARDS

Each Owner/applicant and the members of the Project Team are subject to the following enforcement procedures for any violations of the GRD Architectural Standards. “Violations” include but are not limited to the following:

- changes to the project team listed above without Custom ARC approval,
- failure to follow any requirement in the Architectural Standards and the Appendices thereto, such as the Builders’ Project Manual, insurance and design standards, and
- failure to (a) obtain Custom ARC approval of all work required under the architectural standards and declaration of CC&Rs and/or (b) construct the house, landscape and other improvements strictly in accordance with the Custom ARC-approved plans.

The enforcement procedures for any Violation are as follows (to be undertaken at the discretion of the Custom ARC Coordinator and/or the Issaquah Highlands Community Association):

1. **Notice of Violation.**

The Custom ARC or IHCA will deliver a written Notice of Violation (“**Notice**”) that includes the following: (a) the specific Violation; (b) the required compliance and corrective action (“**Compliance**”); (c) the sanction(s) to be imposed if Compliance does not occur; and (d) stating the recipient’s right within ten (10) days after receipt of the Notice of Violation either to file an appeal or make arrangement with the Custom ARC or IHCA in writing to accomplish Compliance. Any appeal must be submitted in writing to the Covenants Panel of the IHCA (if then existing) or otherwise to the Board of IHCA, outlining the reasons for the appeal. Appeals are governed by Section 4.24 of the IHCA bylaws. The appeal may be delivered to the lot owner or to one of the persons listed above on the project team.

2. **Compliance Due Date.**

The “**Due Date**” for Compliance means one of the following, as applicable:

- (i) completion of Compliance within ten (10) days after the Notice of Violation if the recipient of the Notice does not file an appeal within the ten-day period;
- (ii) if the recipient makes arrangements with the Board or its designee, then expiration of the date of Compliance set by the Board or its designee; or
- (iii) if the recipient filed a timely appeal, then expiration of the time allowed for Compliance is set forth in the final appeal decision (or within ten days after the appeal decision if no time for Compliance is set forth in the appeal decision).

3. **Stop Work Order/Fines.**

If Compliance is not fully completed by the Due Date, then the work on the Lot is subject to all of the following:

3.1. Stop Work Order

The Custom ARC coordinator or IHCA may deliver a Stop Work Order to the job superintendent (or other person on-site if the job superintendent is not present), as well as posting a copy of the Stop Work Order at the Lot. All work by the General Contractor and all subcontractors and workers at the Lot shall cease immediately upon delivery of the Stop Work Order. No work shall resume until Compliance is completed.

3.2. Notification to County

The Custom ARC or IHCA may notify the County of the Stop Work Order and request the County to cease inspections or any other County processing for the Lot.

3.3. Fines

The Owner will be fined **one hundred dollars (\$100) per day** beginning with the date of the Stop Work order and continuing until full completion of Compliance. As provided in Section 7.4 of the declaration of CC&Rs, imposition of the reasonable monetary fine constitutes a lien on the Lot. The IHCA has the right to foreclose the lien and/or seek an injunction and other legal or equitable relief.

3.4. Recorded Notice on Title

The IHCA is entitled to record a Notice of Violation on the legal title to the Lot, which shall be removed upon the Owner's full Compliance.

3.5. Remedial Work and Damages

In addition to the remedies in Section 3.1 through 3.4 above, the Owner is subject to payment for all remedial work under Section 6.02 and for all damages under Section 6.03 of the Construction Procedures contained in the Builder's Project Manual (which is part of the Architectural Standards).

APPENDIX B-1

APPLICATION FOR ARCHITECTURAL REVIEW AND SUBMITTAL CHECKLIST

☐ First Submittal ☐ Submittal No. _____

Owner's Name: _____

Date Submitted: _____

Lot Number: _____

Applicant Contact Information:

Name: _____

Company: _____

Address: _____

Office: (____) _____

Cellular: (____) _____

Fax: (____) _____

Email: _____

Application Details:

Description: _____

Attachment Information:

____ Submittal Checklist;
____ Required Plans;
____ Required Fee(s);
____ Landscape & Irrigation Design & Construction Acknowledgement (App. E);
____ Sustainable Building Checklist Acknowledgement (App. I);

Plans Information:

____ Initial Set _____ Revision Set _____ Number of Sets

SUBMITTAL CHECKLISTS

Each application for architectural review shall include the following information in the identified form and format. The submitted information is used for the Custom ARC Review and Construction process. Submittal of additional information that supports the application is acceptable. The following information shall be submitted for the (A) Conceptual Acceptance Meeting (Step #2 in the “Review Procedures” in Appendix A), and (B) Architectural and Landscape Plans Approval Meeting (Step #3 in the “Review Procedures” in Appendix A):

A. CONCEPTUAL ACCEPTANCE SUBMITTAL – One (1) PDF provided per instructions in the Review Procedures (*i.e.* Step #2 in the Review Procedures in Appendix A). Recommend providing one full size for the purpose of the Conceptual Meeting. A Conceptual Acceptance Submittal shall include the following information:

1. Every sheet must contain the following information:

- Project Name and GRD Lot Number (e.g. GRD Lot #1).
- Drawing Title.
- Drawing Number.
- Date and Revision Column, Filled In.
- Name, Address and Phone of the firm primarily responsible for drawing.
- Scale: Numerical and Bar Scale.
- North Arrow (as applicable).

2. Architectural Site Plan –The site plan must accurately reflect the approved plat and include the following information:

- Site plan to scale: legible and appropriate to the site.
- Location Map indicating location of lot within Issaquah Highlands.
- Lot number.
- Adjacent streets, sidewalks, tracts, easements, critical areas, etc. Indicate use of tracts.
- Indicate grade points (existing or proposed) of adjacent streets and/or alleys.
- Building footprints with finished floor elevations for each lot; include detached garages and any other structures.
- Location of driveways and hardscape.

3. Building Massing and Architectural Character

- Provide general building massing such as number of stories, modulation, and roof forms.
- Provide photos or representative examples of proposed architectural character.

4. Building Plans

Floor plans (all floors); include porches, decks and patios.

- Plan to scale: legible and appropriate to the site.
- Indicate the use of occupied areas.
- Include approximate square footage per floor, garage, and any accessory structures.
- Provide conceptual exterior materials

5. Site Sections

- Plan to scale: legible and appropriate to the site.
- Show proposed building massing with existing and proposed grades in relation to surrounding site, including adjacent residences and roads.

6. Landscape Plan

- Plan to scale: legible and appropriate to the site.
- Lot dimensions including easements.
- Lot number.
- Lot improvement footprints (house/building, garage, patios, decks, etc.), with conceptual design and layout for landscape (fencing, site furnishings; path, common area, and exterior lighting).
- Provide landscape design intent and types or character of plant materials and supplement with photos.
- Indicate locations of hardscape.
- Indicate location and type of fences, screens, rockeries, and retaining walls, if any.

- B. ARCHITECTURAL AND LANDSCAPE PLANS--COMPLETE BUILDING SETS –**
One (1) PDF provided per instructions in the Review Procedures (*i.e.* Step #3 in the Review Procedures in Appendix A). Recommend providing one full size for the purpose of the ARC Presentation Meeting. A Custom ARC Submittal shall include the following information: Architectural Site Plan, Streetscape Elevations, Building Plans, Site Sections, Landscape Plan, Colors and Materials, and Study Model (optional). The Building Elevations shall be rendered in color illustrating the proposed colors and materials.

1. Every sheet must contain the following information:

- Project Name and Lot Number (e.g. GRD Lot #1).
- Drawing Title.
- Drawing Number.
- Date and Revision Column, Filled In.

- Name, Address and Phone of the firm primarily responsible for drawing.
- Scale: Numerical and Bar Scale.
- North Arrow (as applicable).

2. Architectural Site Plan –The site plan must accurately reflect the approved plat and include the following information:

- Site plan scale: 1" = 10'-0" or as otherwise approved by Custom ARC.
- Location Map indicating location of the Lot within Issaquah Highlands.
- Lot number.
- Adjacent streets, sidewalks, tracts, easements, critical areas, etc. Indicate use of tracts.
- Indicate grades (existing or proposed) of adjacent streets and/or alleys.
- Building footprints with finished floor elevations for each lot; include detached garages and any other structures.
- Location of driveways, parking area, turnarounds, walkways, on-site alleys, easements, entry features, drainage, fences/walls, patios, decks, pools, and other site amenities:
- Rockeries and retaining walls, including height at top and toe.
- Above grade utility locations, if known.
- Finished grade contours (existing or proposed) at 2-foot intervals.

3. Building Plans

- Floor plans (all floors); include porches, decks and patios.
- Plan to scale: 1/4"=1'-0" or 1/8"=1'-0" or as otherwise approved by Custom ARC.
- Show door and window openings.
- Show walls, partitions and stairways.
- Indicate the use of occupied areas.
- Include overall outside dimensions.
- Include approximate square footage per floor, garage, and any accessory structures.

4. Building Elevations (all sides) shall be rendered in color illustrating the proposed colors and materials.

- Plan to scale: 1/4"=1'-0" or 1/8"=1'-0" or as otherwise approved by Custom ARC. Include bar scale.

- Show details at appropriate scale including typical exterior finish details such as eaves, foundation conditions, window/door trims, Inside/outside corner siding details, and deck edge/railings.
- Show window, door and garage door openings specific to proposed style and size.
- Show exterior features (i.e. roof pitch, venting, siding, trim, etc.)
- Show porches, decks and exterior stairways (include railings, screening, etc.)
- Show foundation where above grade.
- Indicate type of exterior siding materials (e.g. lap siding, board & batten, masonry, stucco, etc.).
- Include ridge height.
- Show location and provide detail sheets for exterior lighting.

5. Roof Plans

- Plan to scale: 1/4"=1'-0" or 1/8"=1'-0" or as otherwise approved by Custom ARC.
- Indicate location of all attic venting.
- Indicate utility penetrations on the elevations for through wall and through roof penetrations.

6. Site Sections

- Plan to scale: 1/8"=1'-0" or 1"=10'-0" or as otherwise approved by Custom ARC.
- Show proposed buildings, building heights, and elevations with existing and proposed grades in relation to surrounding site, including adjacent residences and roads.

7. Landscape Plan

- Plan to scale: 1/8"=1'-0" or 1"=10'-0" or as otherwise approved by Custom ARC.
- Lot dimensions including easements.
- Lot number
- Lot improvement footprints (house/building, garage, patios, decks, etc.).
- Rockeries and retaining walls, including height at top and toe.
- Plant material layout keyed to a legend indicating the following for all plant materials (trees, shrubs, groundcover, lawn, other): type/name (both common and botanical), quantity, standards, size of plant material.

- Indicate locations of driveways, alleys, auto courts, walkways, etc. (indicate dimensions, materials and paving/jointing patterns).
- Finished grade contours (existing or proposed) at 2-foot intervals.
- Include detail sheet(s) for the location and type of all hardscape features: *e.g.* fencing, screens, rockeries, retaining walls, site furnishings, path, common area, accessory structures, and exterior lighting.
- Include general notes stating compliance with guideline size and spacing and soil amendments.

8. **Colors and Materials Information** – Representative examples of colors and materials for all exterior finishes and elements is required for Custom ARC review. Provide color rendering of all elevations on all structures. Indicate the relationship of the proposed colors and materials to all elevations. Bring samples to the Custom ARC meetings for review and approval. An Custom ARC representative will document the materials via photograph and samples will be return to the applicant.

Provide manufacturer, and name and number of each color and material. Provide specifications of exterior materials including doors and windows. A paint down may be required at the discretion of the Custom ARC.

9. **Story Poles** – May be required to be erected at the discretion of the Custom ARC. This requirement may be identified at preliminary review.

10. **Insurance Documents** – Custom ARC approval will not be granted until all insurance documents are accepted by Declarant. Please contact the Custom ARC to submit the following:

- Owner's/General Contractor's Insurance Requirements – properties where Owner hires a contractor, contractor needs to meet insurance requirements See Appendix R, Owner's / General Contractor's Insurance Requirements
- Liability
- Automobile
- Worker's Compensation
- Additionally Insured

****Insurance policy shall be deemed primary and noncontributory with other insurance that may be in effect. Insurance policy shall waive right of subrogation against any of the insured or additional insured hereunder.**

APPENDIX B-2

CUSTOM ARC CONCEPTUAL ACCEPTANCE FORM



**PORT BLAKELY
COMPANIES**

Integrity and Innovation since 1864

c/o Heartland LLC P: 206-682-2500
1301 First Avenue, Suite 200
Seattle, WA 98101

[DATE]

[NAME]

[ADDRESS]

[CITY, STATE ZIP]

Re: Grand Ridge Drive Neighborhood Lot # _____ – Conceptual Design Review Mtg

Dear [NAME],

Thank you for meeting with your team and the Issaquah Highlands Custom Architectural Review Committee (Custom ARC) on [DATE] to review your conceptual design. The Custom ARC is pleased to grant **Conditional Conceptual Design Acceptance**. The next step in the process will require a complete Custom ARC submittal package with the following conditions addressed:

- 1)
- 2)

Future Steps: Custom ARC Submittal

The next step in the process will be for your team to submit for the Custom ARC review. The requirements are outlined in Appendix A of the *Harrison Street Architectural Standards*. Please note that we will need a pdf of the package emailed seven days prior to our review meeting. This allows the Custom ARC to check for completeness and also prepare for the review meeting. Please call Erica Buckley to make arrangements to submit the Custom ARC Submittal package and make your appointment for the presentation.

I would be happy to walk you through these comments and address any questions you may have. Please feel free to call or email me. We are looking forward to working with you
Sincerely,

Custom Home ARC Program Director
On Behalf of the Issaquah Highlands Custom Architectural Review Committee

cc:

APPENDIX B-3

CUSTOM ARC APPROVAL FORM – ARCHITECTURAL AND LANDSCAPE PLANS



**PORT BLAKELY
COMMUNITIES**

Integrity and Innovation since 1864

c/o Heartland LLC P: 206-682-2500
1301 First Avenue, Suite 200
Seattle, WA 98101

[DATE]

[NAME]

[ADDRESS]

[CITY, STATE ZIP]

Re: Grand Ridge Drive Neighborhood Lot # _____ – Custom ARC Presentation

Dear

Thank you for meeting with your team and the Issaquah Highlands Custom Architecture Review Committee (Custom ARC) to review your Custom ARC Presentation on {insert DATE}. The Custom ARC is issuing **Conditional Custom ARC Approval** where your team will need to address the following prior to your plans being stamped for Custom ARC approval:

- 1)
- 2)

Once the Custom ARC has reviewed the above changes, your architect will need to schedule a time for your plans to receive a final check and to be stamped by the Custom ARC. This stamp is required before applying for a building permit with the County.

Please feel free to call or email me with any questions.

Sincerely,

Custom Home ARC Program Director
On Behalf of the Issaquah Highlands Custom Architectural Review Committee

cc:

APPENDIX C

CLEARING LIMITS ACKNOWLEDGEMENT AND CERTIFICATION

INTENTIONALLY OMITTED

APPENDIX D

IMPERVIOUS SURFACE ACKNOWLEDGEMENT AND INDIVIDUAL LOT DRAINAGE GUIDELINES

INTENTIONALLY OMITTED

APPENDIX E

LANDSCAPE & IRRIGATION DESIGN AND CONSTRUCTION ACKNOWLEDGEMENT

We hereby verify that we have read and understand and will comply with the requirements of landscape, irrigation and drainage provisions of the Grand Ridge Drive Architectural Standards, including the Custom ARC Submittal Checklist (**Appendix B**), General Landscape Notes (**Appendix F**), Plant Size and Spacing Requirements (**Appendix G**), Recommended Plant List (**Appendix H**), and Water Conservation Standards (**Appendix K**). We acknowledge that the Custom ARC will not review compliance with the Water Conservation Standards, but instead will rely on your agreement to design your irrigation system in compliance with the Water Conservation Standards.

Owner's Agent Signature

Company

Title

Date

If it is determined, by the Custom ARC, that this document has not been received prior to the commencement of landscape construction, the Custom ARC reserves the right to assess financial penalty and/or issue a "Stop Work Order" until such time that this document is received.

APPENDIX F

GENERAL LANDSCAPE NOTES

The following notes establish a minimum standard for landscape construction. The project Landscape Architect shall verify specific site conditions and design criteria and modify project specifications as appropriate to fit specific project parameters.

Include all above-ground utilities (*i.e.* light poles, hydrants, street signage, etc.) on all plan submittals.

1. Conflicts between approved planting plans, landscape performance and existing field conditions shall be identified to the Custom ARC prior to planting.
2. Proposals for plant substitutions, location adjustments, soil amendments or any variations from the approved plans shall require prior approval by the Custom ARC.
3. All planting areas are to receive the following soil preparation: Scarify or rototill existing subgrades to a minimum depth of 8". Remove all large stones and other miscellaneous debris. Place one-half depth specified topsoil and incorporate into prepared subgrade. Place remaining topsoil and finish grade. Topsoil depths are to be measured after compaction.
4. The Custom ARC shall verify the need for additional soil amendments prior to commencement of landscape construction. Recommended amendments shall be applied prior to planting
5. All shrub and groundcover areas are recommended to receive 12" compacted depth approved topsoil [but with a minimum of 8"]. All lawn areas to receive a minimum 8" compacted depth approved topsoil.
6. Tree pits shall be a minimum of two times (2x) the diameter of the tree's root mass. Additional aeration may be required as directed by the Landscape Architect. Add water tubes to the tree plantings in paved areas to ensure positive drainage.
7. Turf areas shall consist of a low water use seed mix that is well adapted to the region. Specific seed selection shall be chosen based on soils, maintenance expectations and proposed use of the planting area.
8. All planting areas to receive 2" depth approved mulch.
9. Please refer to **Appendix G** (Plant Size and Spacing Requirements), **Appendix H** (Recommended Plant List), and **Appendix K** (Water Conservation Standards) for further information on landscape design.

APPENDIX G

PLANT SIZE AND SPACING REQUIREMENTS

Plant Selection Requirements:

All plants shall be adapted to their sites (sun exposure, cold hardiness, moisture requirements, soil type, soil pH, etc.).

Required Plant Sizes and Spacing:

Type of Plant	Minimum Size at Installation*	Maximum Spacing at Installation**
Groundcover:	4 inch pot <u>or</u> 1 gallon pot	12 inches 18 inches
Small shrub (mature size under 3 feet tall):	2 gallon pot <u>or</u> balled and burlapped equivalent – 15"	24 inches
Medium Shrub (mature size from 3 to 6 feet tall):	5 gallon pot <u>or</u> balled and burlapped equivalent – 30"	36 inches
Large Shrub (mature size over 6 feet tall):	5 gallon pot <u>or</u> balled and burlapped equivalent – 36"	48 inches
Small Tree (broad-leaved):	1 ½" cal.	Per plan or 20 feet
Medium Tree (broad-leaved):	2" cal.	Per plan or 30 feet
Large Tree (broad-leaved):	2 ½" cal.	Per plan or 30 feet
Coniferous Tree	6-foot height	Per plan or 25 feet
Dense Sight Barrier Tree	10-foot height	Per plan or 20 feet

* All trees and shrubs are categorized by size in the Approved Woody Plant List.

** Hedges shall have no more than 4" clear between plants at installation, regardless of size.

APPENDIX H

RECOMMENDED PLANT LIST

Plant Materials

The following plant materials illustrate the type and performance desired at Issaquah Highlands. Other plant materials may be considered that have these characteristics and similar maintenance requirements.

Deciduous Trees

Small

- Acer circinatum – Vine Maple
- *Acer ginnala – Amur Maple
- Acer griseum – Paperbark Maple
- Acer palmatum – Japanese Maple
- Amelanchier var. – Serviceberry varieties
- Oxydendrum arboreum - Sourwood
- Styrax japonicus – Japanese Snowbell
- Cornus florida, kousa, etc.
- Malus sp. – Crabapple (some)

Medium

- Acer rubrum
- Acer rufinerve – Redvein Maple
- *Acer pseudoplatanus – Sycamore Maple
- *Carpinus betulus – European Hornbeam
- *Ulmus ‘Frontier’ – Frontier Elm
- Japanese Hornbeam
- Katsura
- Prunus sp – Flowering Cherry
- Malus sp. – Some Crabapples
- *Parrotia persica – Persian Parrotia
- *Zelkova serrata – Sawleaf Zelkova
- Tilia euchlora – Crimean Linden
- *Betula jacquemontii – Jacquemonti Birch
- *Tilia cordata – Little Leaf Linden

Large

- *Aesculus hippocastanum – Common Horse Chestnut
- *Fagus sylvatica – European Beech
- Liquidambar styraciflua – Sweet Gum
- Acer truncatum hybrids
- Liriodendron tulipifera – Tulip Tree
- *Platanus acerifolia - Planetree
- *Quercus rubra – Red Oak
- Acer rubrum varieties
- Ulmus parvifolia – Chinese Elm

Columnar Narrow

- *Carpinus betulus pyramidalis – Pyramidal Hornbeam
- *Fagus sylvatica ‘Dawyck’ – Pyramidal Beech
- *Prunus sargentii columnaris – Columnar Sargent Cherry
- *Pyrus calleryana ‘Glen’s Form’ – Chanticleer Pear
- *Quercus robur fastigiata – Upright English Oak
- *Tilia cordata (corzan) – Corinthian Linden

Conifers

- **Abies- Concolor - Concolor Fir
- **Abies Nordmanniana – Nordmann Fir
- Metasequoia glyptostroboides – Dawn Redwood
- Taxus baccata – Irish yew

- Calocedrus decurrens – Incense Cedar
- *Chamaecyparis obtusa - Hinoki False Cypress
- Cupressocyparis leylandii – Leyland Cypress
- **Juniperus scopulorum (var.) –Juniper
- Thuja plicata “Green Sport” – Green Sport Cedar
- *Thuja plicata excelsa – Excelsa Cedar
- Pinus species, various: contorta, Tanyosho, etc.
- Tsuga mertensiana – Mountain Hemlock

Shrubs

Small

- *Berberis (var.) – Dwarf Barberry varieties
- *Gaultheria shallon – Salal
- Prunus laurocerasus ‘Otto Luyken’ – Otto Luyken Laurel
- Ilex crenata ‘Green Island’ – Green Island Holly
- *Mahonia aquifolium, nervosa, repens
- Viburnum species – Viburnum varieties (numerous)
- *Pinus mugo (var.) – Mugo Pine (dwarf varieties)
- *Potentilla (var.) – Potentilla varieties
- Ilex crenata ‘Helleri’ – Helleri Holly
- Spirea (var.) – Spirea varieties
- Viburnum davidii – David Viburnum

Medium/Large

- *Arbutus unedo (compacta) – Strawberry Tree
- *Osmanthus heterophyllus – Holly Leaf Osmanthus
- Viburnum species – Viburnum varieties (numerous)
- Euonymus fortunei
- *Mahonia aquifolium – Oregon grape
- *Berberis (var.) – Barberry varieties
- *Osmarea burkwoodi – Burkwood Osmarea
- Prunus lusitanica – Portugese Laurel
- Rhododendron (var.) - Rhododendron
- *Euonymus alata

Hedges

- Buxus microphylla
- *Prunus lusitanica – Portugese Laurel
- Buxus sempervirens.- Common Boxwood
- Buxus suffruticosa - True Dwarf Boxwood
- Ilex crenata ‘Helleri’ – Helleri Holly
- Ilex crenata ‘Green Island’ – Green Island Holly
- Viburnum species – Viburnum varieties (numerous)
- *Osmanthus heterophyllus – Hollyleaf Osmanthus
- Prunus laurocerasus ‘Otto Luyken’ Otto Luyken
- *Mahonia aquifolium – Oregon grape
- Taxus sp. – Yew species
- Thuja occidentalis – Emerald Green
- Ligustrum japonicum – Japanese Privet

Groundcover

- *Arctostaphylos uva-ursi – Kinnikinnick varieties
- *Juniperus (var.) – Juniper varieties

- Cotoneaster vars. – Cotoneaster varieties
- Evergreen flowering vines
- *Fragaria vars. – Strawberry varieties
- *Hypericum calycinum – St. Johnswort
- Parthenocissus - Boston Ivy
- Lawn Grass
(Puget Sound Turf Grass varieties – sod or seed)
- *Mahonia nervosa – Lingleaf Mahonia
- Ornamental grasses
- *Vinca minor – Periwinkle

Accent Plantings

- Annuals
- Bulbs
- Ornamental grasses
- Perennials
- * Drought-tolerant plant
- ** Requires well-drained soil

APPENDIX I

SUSTAINABLE BUILDING PROGRAM CHECKLIST AND CHECKLIST ACKNOWLEDGMENT and WATER-WISE LIVING

Owner's Name: _____

Lot Number: _____

We as the Owner hereby acknowledge the requirements to build our home to the sustainable building standards adopted for Issaquah Highlands. The Declarant has adopted the attached checklist entitled "Issaquah Highlands Community Sustainable Building Program" to demonstrate environmental responsibility for the community. We will ensure that our builder complies with the Sustainable Building Program requirements, including completion of a third-party verification by a person approved by the Declarant or IHCA as a third-party verifier.

As part of a sustainable community, owners are to follow the program and practices set out in the handbook entitled "Water-Wise Living in Issaquah Highlands." Your builder should provide a copy for you, or you may request a copy from the CHARC Coordinator or IHCA.

Print Name

Signature

Date: _____

Title

If it is determined by the Architectural Review Committee that the Checklist has not been received prior to the submittal of the building permit application for approval and its subsequent submittal to the City/County, the ARC will withhold approval of the building permit application until such time that the Checklist is received.

ISSAQUAH HIGHLANDS COMMUNITY SUSTAINABLE BUILDING PROGRAM

“Maintaining environmental practices”



Issaquah Highlands Community Sustainable Building Program

The Declarant requires all buildings in Issaquah Highlands to demonstrate a spirit of environmental responsibility by meeting or exceeding the following checklist for its sustainable building program. All items on the checklist must be met and third party verification must be performed by a third party verifier approved by the Declarant or IHCA. To the extent that architectural standards, the local jurisdiction's laws and regulations and this Sustainable Building Program provide conflicting direction, the most rigorous standard is required.

This program is a "pass-fail" system and all items must be met. Some items will have options to choose from and others will only have one option.

Required

AIR ENVIRONMENTS

{ }

Paint – walls required to be less than 50 VOC's per liter

{ }

Formaldehyde free insulation

Heating –

{ }

Option 1 - High efficiency furnace filter –
minimum 10 merv.

{ }

Option 2 – Ductless system

{ }

Option 3 – Heat pump

Note: Wood-burning fireplaces prohibited.

{ }

Ventilate the home at wet finish applications to avoid
moisture build-up or mold issues

{ }

No use of indoor products containing urea formaldehyde

{ }

Inform and require trades to comply with a healthy site
for air quality practices.

Flooring –

- { } Option 1 - Use carpet with an IAQ certification
- { } Option 2 – no carpet
- { } Option 3 – Low pile or low allergen
- { } Option 4 – Natural fiber carpet
- { } Use low-toxic, water based or solvent free for tile grout, drywall tape, floor adhesive, or brick mortar
- { } Clean bottom plate and use caulk to seal
- { } Install wall insulation in full contact with all sides of the cavity and install around plumbing, HVAC and electrical components

Required

WATER EFFICIENCY

Indoor water –

- { } Option 1 - Recirculation system – can be built into the water heater
- { } Option 2 – Low flow faucets (kitchen faucet 2.0 GPM; bath faucet 1.5 GPM; OR showerhead 2.0 GPM)
- { } Option 3 – Point source water heater in 2 locations
- { } Option 4 – No spa, pool or jetted tub
- { } Option 5 – Dual flush toilets

Outdoor water –

- { } Option 1 – Automatic irrigation system including water saving spray heads or drip/micro-spray irrigation systems, soil sensors and smart control systems that monitors soil moisture levels and adjusts watering times to provide optimal water availability to plants.
- { } Option 2 – Hand watering with monitoring to avoid over application of water.
- { } Follow a landscaping plan approved by ARC demonstrating low water plantings
- { } Provide homeowners a copy of the Issaquah Highlands Water-Wise Living Manual (copy attached) regarding watering, limited chemical use, moss control and other green practices of exterior landscaping

Required

ENERGY EFFICIENCY

- { } Meet 2015 Washington State Energy Code or most current code

Note: Homes permitted under 2012 must meet 2012 Washington State Energy Code

Choose one additional item from option list

- { } Option 1 – Install ductless heating system
- { } Option 2 – Air leakage test results of 3.5 ACH or less
- { } Option 3 – Install 100% LED, CFL's or other approved high efficiency lighting
- { } Option 4 – Solar panels or shingles

- { } Option 5 – Duct leakage test results of 3.5% or less
- { } Use insulated headers where possible
- { } Design the heating system using the ACCA manual J
- { } Design the heating distribution system using the ACCA manual D
- { } Use interior occupancy sensors, timers, motion detectors, humidistat controls or other efficiency sensors in several locations
- { } Install Energy Star or equivalent efficiency dishwasher and bath fans
- { } Insulation knee walls in attic, crawl space access, attic hatches, skylights and drop down stairs

Required

MATERIAL SPECIFICATIONS

Roofing Material –

- { } Option 1 – Use slate, tile, metal or 40 year composition roof material
- { } Option 2 – TPO roofing if minimum 20 year warranty

Note: Roofing material must be approved by ARC

Note: Use of copper or galvanized materials on the exterior of any building is prohibited

Note: Production and attached units must be minimum 35 year composition or equal

- { } All job site waste must be taken to a site with 75% recycling rate (facility rates are attached)

- { } Review information about program with all trades on site and conduct meetings keeping a record of meetings
- { } Use a minimum of 2 building products that are produced in Washington State
- { } Use minimum 2 recycled content products for tile, carpet pad, drywall, doors, roofing material, countertops, insulation or other verifiable products

Other recommended or encouraged sustainable practices –

Use existing material on site for landscaping or interior construction
 Use engineered wood products where possible
 Encourage solar heating, green roofs or grey water recovery systems

Recognizing many other sustainable practices, please list any items not on the list for acknowledgement.

This program must be used for all new construction commenced after November 15, 2017, and construction in process as of November 15, 2017 can elect to comply with either this Sustainable Building Program or other Sustainable Building Program it has previously committed to follow so long as the sponsor of the other program approves.

Checklist must be verified by an “approved” third party verifier/inspector who must submit a letter of compliance to the appropriate Issaquah Highlands ARC at completion of construction as part of the ARC sign off.

Owner: _____

Contractor: _____

Lot #: _____ or Home Address: _____

Approved Verifier/Inspector: _____

APPENDIX J

ISSSAQUAH HIGHLANDS DATA NETWORK SPECIFICATIONS

ISSAQUAH HIGHLANDS DATA NETWORK SPECIFICATIONS

Revised February 19, 2008

1. PURPOSE

Port Blakely ("The Developer") has made a major investment in telecommunications infrastructure for Issaquah Highlands. It adds value to the development by greatly improving the speed and quality of Internet access available. The purpose of this document is to provide instructions and specifications to builders on how to extend the fiber network into the residents' units in the Highlands.

2. SPECIFICATIONS FOR DEVELOPER-PROVIDED INFRASTRUCTURE

A. Main Backbone and Backbone Distribution System

- i. The Developer will provide the main backbone and backbone distribution system
- ii. Large Conduit/Duct. Large conduit shall be 4" industry standard DB 120 PVC pipe with integral bell (or better) with appropriate fittings. Pipe should be in accordance with TC-6 and ASTM F512 standards: O.D. 4.5", I.D. 4.192" with minimum wall thickness .166". Conduit to be installed with the maximum bend radius possible with no 90-degree bends. Duct shall be placed with a minimum of 36" cover over the top of the highest duct. A 10 THHN locator cable shall be buried next to the conduit duct. Multiple levels of duct shall have spacers installed to maintain correct conduit location.
- iii. Small Conduit/Duct. 1" or 1 1/4" smooth walled polyethylene SDR-11 conduit pipe (or better) with appropriate fittings will be installed in a "quad" configuration of one or more units of 4 conduits per length of run. All conduits will have a pre-installed pull rope or tape. 1" nominal size: O.D. 1.055", I.D. 1.315", minimum wall thickness 0.120". 1 1/4" nominal size: O.D. 1.338", I.D. 1.660", minimum wall thickness 0.151". Conduit will be installed with the maximum bend radius possible with no 90-degree bends. Duct shall be placed with a minimum of 36" cover over the top of the highest duct. A 10 THHN locator cable shall be buried next to the conduit duct. Multiple levels of duct shall have spacers installed to maintain correct conduit location.
- iv. Precast Vaults. Vaults will be standard 48" x 48" x 48" deep communications vaults (Utility Vault Company 444-LA or equivalent). Vault covers will have a full 180 degree opening cover with spring assisted galvanized diamond plate covers with locking latch and a recessed lift handle (Utility Vault Company 44-332P or equivalent). Vaults will be set at grade level. Vaults must be placed upon a 4" sand/gravel drainage bed. Note: Some vaults will require pad-mounted equipment cabinets placed above the vault opening. Specifications for the placement and installations of these vaults will be provided on a case-by-case basis by The Developer or their designated representative.

3. SPECIFICATIONS FOR BUILDER-PROVIDED INFRASTRUCTURE

All work will comply with applicable building and electrical codes, as well as ANSI/TIA/EIA 568A, 570A and 758 (latest revision, see TABLE 2).

A. Service Distribution System

The service conduit coming from the street shall enter the building either through the foundation (preferred) or through an approved external junction box. In-home conduit shall be used to extend service conduit from the Service Entrance to the Central Communication Distribution Panel located at the Main Distribution Location (MDL) for the home.

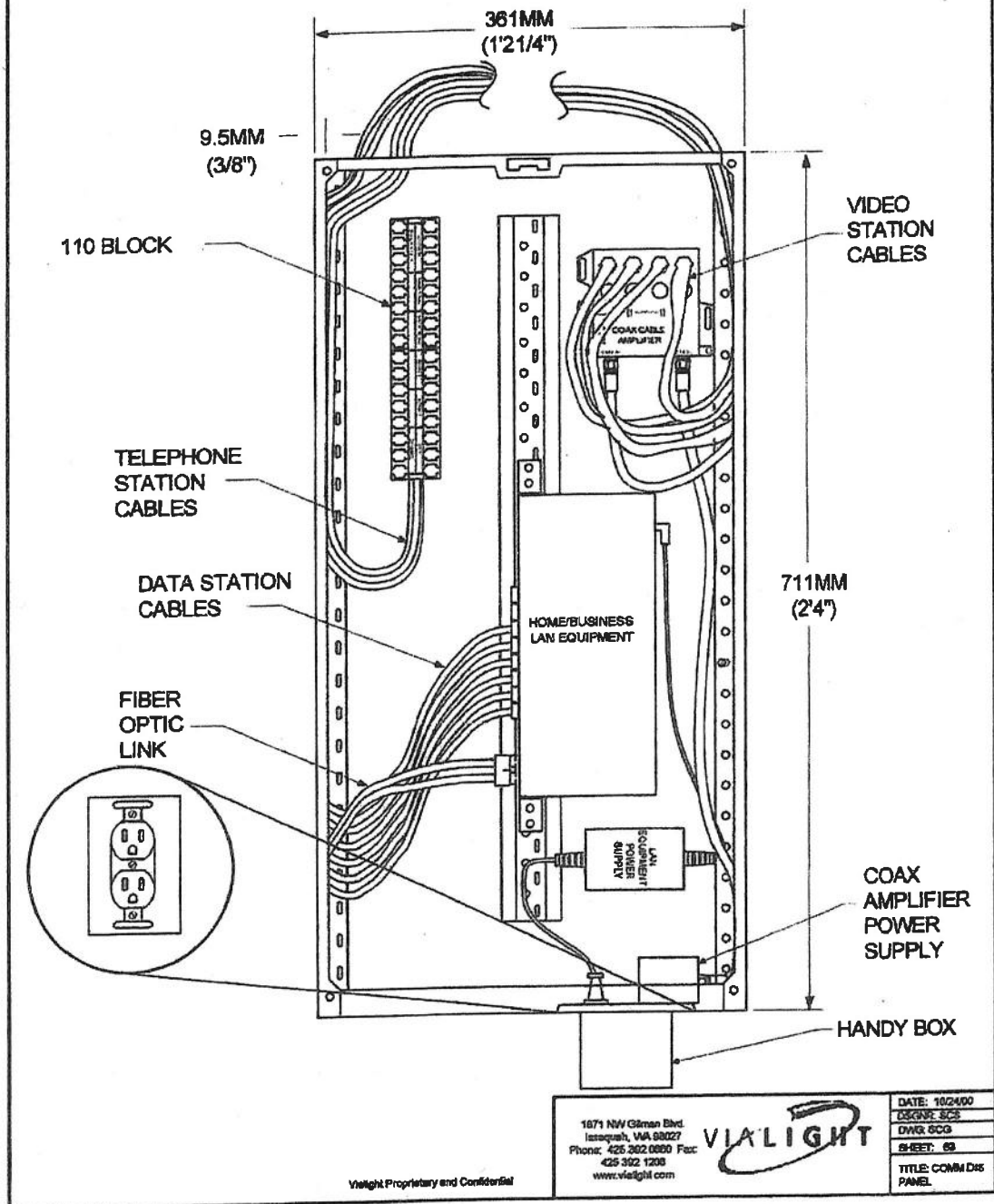
- i. The Builder must install a Carson Ind. Series 910 junction box or pre-approved equivalent junction box. (Refer to standard detail). This type of junction box allows HFN and the Builder to have a definitive delineation of responsibility, one tie-in point, and a reduction in conduit "dig-ups." The Carson/junction box lid must be ordered with "Fiber" permanently stamped on it.
- ii. The Builder must install a fire-rated single 1-1/4" flexible continuous service conduit to enter the home either through the foundation or through an approved external junction box. Location shall be determined in the field and coordinated between the Builder and HFN or their designated representative.
- iii. Jet line or pull rope is mandatory and must be tied-off in a manner that restricts the jet line from being pulled back through the conduit. If the jet line is missing or has not been installed in the service conduit by the Builder, then HFN will not be able to provide service immediately. HFN will not return until the Builder has rectified the problem. Once the jet line is installed, the Builder must call HFN to return. Jet line or pull rope is required in all conduits, including, but not limited to those that lead to the attic, in the crawlspace, and from the Carson box to the house.
- iv. The builder is responsible for having a clear path in their conduit.
- v. Service conduits coming from the backbone distribution system shall maintain the separation from power conduits or cables required by the local power company, preferably a minimum of 12".
- vi. Communication service conduit must be installed a minimum of 18 inches underground. A 3" wide orange warning tape shall be buried at least 12" below ground level and approximately 6" over the conduit ducts.
- vii. Communication service conduit shall have watertight connections and be sloped properly so water will drain away from the home entrance.
- viii. All Service Distribution System conduits shall be labeled identically at both ends with a unique identification utilizing permanent ink.
- ix. The Developer, or their designated representative, will install fiber cable from the backbone distribution system to the central communications distribution panel using the service conduit when the network is installed.

B. Residential Structured Wiring System

All work will comply with applicable building and electrical codes, as well as ANSI/TIA/EIA 568A, 570A and 758 (latest revision, see TABLE 2).

- i. The CDP is the distribution point for all horizontal data cable in the structure. The CDP shall be an OnQ model #363475-01 (28"h x 14.25"w x 4"d) or pre-approved equivalent with hinged door. Provisions are also made within this panel for the termination of telephone and video cables.
- ii. The Communications Distribution Panel should be centrally located within the structure. Suitable locations include basements, closets, under stairwells, and in utility rooms. An attic is not a suitable place. Placement should allow easy access for the customer as well as service personnel. Two panels, interconnected by 2" conduit, should be installed to accommodate structured wiring for dwellings over 4,000 square feet. See drawing of CDP on the next page.
- iii. The CDP shall be installed where the normal ambient temperatures do not go below 32 degrees F, or above 110 degrees F.
- iv. One (1) dedicated 15-amp electrical circuit shall be installed inside the communication distribution panel. The circuit is required for data service and communication equipment supplied by the homeowner. The circuit shall be terminated in a duplex electrical outlet.
- v. The data panel location shall have at least (1) one additional duplex electrical outlet nearby for tools, diagnostic and test equipment. This outlet can be part of a shared 20-amp circuit.
- vi. All equipment shall be grounded according to TIA/EIA-607 standards for grounding, and electronically isolated from one another.
- vii. The builder will run the conduit all the way into the CDP.
- viii. Each Home will have its own service conduit.
- ix. The Builder must run a spare service conduit from the CDP to the attic or crawl space to ensure that the future homeowner will have the ability to run additional data lines.
- x. Individual Category 5e cables from RJ45 data and telephone jacks in the living/user areas shall be terminated in the central communications distribution panel with single male RJ45 connectors, or to a patch panel. The Category 5e data cables must be clearly coded, tagged, and bundled at the data panel. Category 6 data cables may be used instead of Category 5e.
- xi. A service loop of 24" (minimum) shall be neatly looped and secured within the central communications distribution panel.
- xii. All installations shall conform to the latest ANSI/TIA/EIA/568A and 570A standards (see TABLE 2).

COMMUNICATION DISTRIBUTION PANEL AND CONNECTING HARDWARE COMPONENT LOCATIONS



C. Equipment Rooms for Multi-family buildings

Equipment rooms or communications closets are special-purpose rooms that provide space and a suitable operating environment for communications and/or computer equipment, and will be provided with sufficient space to house standard 19" equipment racks and sufficient working space. Provision should also be made for the installation of a backboard for equipment mounting. The Builder should coordinate the design with the Developer or its representative. Equipment rooms should be furnished with the following:

- i. Power. Dedicated 110VAC power terminated on 4-plex outlets as necessary.
- ii. Lighting. Sufficient lighting for a normal working environment.
- iii. HVAC The equipment rooms or communications closets shall have normal ambient temperatures maintained between 32 degrees F and 110 degrees F.
- iv. Inside Service Conduit with jet lines shall be run from each residence's CDP to an equipment room. The maximum length for an Inside Service Conduit run is 100 meters. Multiple equipment rooms may be required in large structures to comply with this distance limitation.
- v. Minimum diameter 2" service conduit must be run from the service entrance of the structure to the equipment room. If multiple equipment rooms are required, additional 2" service conduit must be run between each equipment room.

D. High Speed Data Cables

Data cables will be extended between the central communications distribution panel and associated data outlet jacks and will consist of Category 5e, 4 pair UTP, or Category 6 UTP, 4 Pair and shall be terminated on 8 pin modular jacks provided at each outlet in the T568A configuration. Cable jacket shall comply with Article 800 of the NEC for use as plenum or non-plenum cable.

- i. Terminations. Cables shall be marked with wire markers at both ends, and terminals on terminal blocks shall bear the cable number. Trunk cables shall be neatly marked with "From-To" information. Wire twist shall be maintained to within 0.25" of the terminal block fingers.
- ii. Cable. All 4 pair Category 5e cables shall conform to ANSI/TIA/EIA 568-A Commercial Building Telecommunications Cabling Standard, Horizontal Cable Section, and be part of the UL LAN Certification and Follow-up Program. Applications standards supported should include, but should not be limited to, 1000BASE-T, and shall meet or exceed the electrical and mechanical specifications for Category 5e per ANSI/TIA/EIA 568-A and associated technical service bulletins (TSBs).
- iii. A service loop of 24" (minimum) shall be neatly looped and secured within the central communications distribution panel.
- iv. An un-connectorized (dark), 2-strand single-mode fiber optic cable may optionally be run parallel to, and along with, each Category 5e data drop cable for future accessibility.
- v. The Category 6 UTP specification is TIA/EIA-568-B.2-1.

E. Data and Telephone Outlets

- i. Faceplates shall be available in single, duplex, triplex, quad-plex, or six-plex arrangement in a single gang configuration. At the Builder's option, data faceplates can be combined for data, voice, and cable applications.
- ii. Surface mount boxes shall be available in single, dual, quad, and six-plex configurations.
- iii. Communications outlets shall consist of one, two or three gang utility outlet boxes with cover plates designed to accept RJ-45 jacks, utilizing the T568A termination style.
- iv. Outlets shall be provided with blank module inserts for all unused module locations.
- v. Low voltage wiring or devices shall not occupy the same wiring channel as high voltage wiring or devices.
- vi. Category 5e Jacks
 - a) All Category 5e Jacks shall conform to ANSI/TIA/EIA 568-A Commercial Building Telecommunications Cabling Standard, Horizontal Cable Section along with Technical Service Bulletins (TSBs), and be part of the UL LAN Certification and follow-up program.
 - b) All Category 5e jacks will be wired with a T568A wiring configuration.
 - c) Category 6 jacks are required for use with Category 6 cabling.

F. Cable Installation

- i. Follow cable manufacturer's specification regarding handling methods, retaining/support methods, bending radius and maximum pulling tension limitations.
- ii. Telecommunication cables shall not be installed in the same raceway as power cables. Cables shall maintain a minimum separation of 12" from high voltage cables and only cross high voltage cables at right angles.
- iii. Cables placed in cable trays shall be installed in a neat and orderly manner and shall not cross or interlace other cables except at breakout points.
- iv. Cables in vertical trays shall be individually retained with straps at a maximum of 6' on center.
- v. Tie-wraps shall not deform the cable insulation when tightened.
- vi. All cables shall be identified with a permanent label. Identical information shall appear at each end of all cables. Inside plant cables shall be labeled with room designations. Feed and outside cables shall be labeled with unique street addresses of unit being served. Labels shall be machine generated or otherwise extremely legible.
- vii. Fire stopping material shall be applied at appropriate locations throughout the system in order to fully conform to applicable standards, codes and ordinances.
- viii. Installation shall be warranted by the Builder for a period of one year after acceptance of the installation. It shall be the responsibility of the Builder to repair any faulty installation component(s) within one year at no additional cost to The Developer or Homeowner.
- ix. All cables shall be routed to minimize EMI and RFI interference. All cable shall be routed according to the attached Table 1. Spacing is minimum.

G. Cable Testing

The entire Category 5e or Category 6 cabling system, including all jacks in the home shall be tested with a level II (minimum) cable tester to the highest standard officially recognized by ANSI/TIA/EIA. Tests performed shall include wire map, length, propagation delay, delay skew, attenuation, NEXT, ELFEXT (pair-to-pair as well as Power Sum), and return loss. Test results shall include all test data results and a statement of compliance (pass/fail).

H. Documentation

Items to be provided to The Developer or their designated representative upon completion of low voltage installation:

- i. Category 5e or Cat 6 test results (printed or on electronic file) sorted according to (a) address, (b) outlet and (c) link.
- ii. A legible and accurate listing of all cables must be submitted along with the aforementioned test results. The listing must detail all cable runs, cable lengths, room names, and wire numbers.

I. Certification

Builders shall provide documentation that the wiring meets the specifications called out in this document. Cables or jacks not passing testing shall be repaired or replaced at Builder's expense. Certification of installed wiring shall be delivered to The Developer or its representative after successful completion of installation, required testing and documentation, but at least 15 days prior to occupancy date. At the Developer's option, the Developer, or its designated representative, will provide certification services at Builder's expense.

J. Inside Wiring Distribution Points

All Master Bedrooms, Kitchens, and Office/Dens will be wired and terminated with:

- i. Data - one (1) Category 5e cable.
- ii. Video - one (1) RG 6 - "F" style Compression connectors.
- iii. Telephone - one (1) Category 5e cable.

Additionally, Living Rooms and Entertainment Centers shall be wired and terminated with:

- i. Data - one (1) Category 5e cables.
- ii. Video - two (2) RG 6 - "F" style Compression connectors.
- iii. Telephone - one (1) Category 5e cable.
- iv. One (1) flexible conduit to the attic and/or crawl space.

Distribution outlets shall be located as shown on the home plans, as specified in the construction documents or as otherwise directed.

K. Wiring for Telephone Service

Every telephone termination point provided in the home must be fully faceplate terminated to RJ-45 and must be terminated to the Telephone Termination Block.

Every telephone outlet in the home is required to be "Active" for lines 1 through 4.

RJ-45 Termination Option: If the telephone termination points are RJ-45 jacks, then EACH RJ-45 jack MUST be appropriately color coded and clearly labeled for "TELEPHONE" or "DATA."

If the telephone termination points are RJ-45 jacks, then they must be able to be fully provisioned with external-to-the jack line selectors, line splitters, dongals, or similar devices, to receive RJ-11 male line jacks, for all 4 active telephone lines.

Builders using the RJ-45 Termination Option are required to provide the following components, services, and warranties to their Residents:

- i. The Builder will provide information such that residents can obtain external-to-the jack line selectors, line splitters, dongals, or similar devices, to receive RJ-11 male line jacks, on all 4 lines provided. This information must be provided before or at initial Resident Move-In.
- ii. The Builder must include, at a minimum, the following written and receipted disclosure to the initial Residents – "Using an RJ-45 Jack, Identified as TELEPHONE, for DATA use, may cause significant damage to the DATA equipment connected."

L. Laboratory Listing

Where a Nationally Recognized Testing Laboratory (NRTL) listing or classification exists for a product and the product is suitable for the purpose specified and indicated, the product shall bear the appropriate marking indicating the listing or classification. Where a UL Standard is in effect, equipment shall a) meet that standard and b) bear the UL Label.

M. Other Components

Any item of equipment not specifically addressed in this document and required to provide a complete and functional installation shall be provided at a level of quality consistent with other specified items.

N. Requirements for Complete System

Minimum system requirements as set forth in these specifications shall consist of the required components including but not limited to all cable, wire, distribution panels, application outlets, accessories and other components required for a complete and operable system.

4. INSPECTION AND TESTING

In addition to the required Builder Inspections and Testing, there will be two (2) inspections that must be passed: low voltage Rough-In and low voltage Trim-Out inspections.

A. Rough-in inspection

Rough-in inspection will be done prior to the fiber being pulled in to the CDP. This means that the Builder must notify HFN after the low voltage wiring has been completed and before sheet rock is installed. This will help ensure that all Data, Video and Telephone have been properly installed to all designated locations.

B. Trim-out inspection

Trim-out inspection is required to ensure that all data lines have been punched down correctly and proper connectors have been installed. The low voltage trim-out inspection is done after the low voltage wiring has been terminated, trimmed-out and dressed. This must be performed in accordance with the inspection schedule and at least 2 weeks before occupancy.

C. Inspection Requests

Builders are to request inspections one week in advance, using the website below:

<https://www.hIGHLANDSFIBERNETWORK.COM/Builders/>

If there are problems entering the request, the builder can click on the "Contacts" tab and send the request via email.

The Builder or a representative for the builder must be present during each inspection and will be required to sign each inspection form. If an inspection has failed, the Builder and the inspector will set a re-inspection date at least 2 weeks prior to occupancy. The Builder will have until the re-inspection date to resolve any and all problems found.

D. Inspection Fee

If an inspection has failed, the Builder and the inspector will set a re-inspection date. The Builder will have until the re-inspection date to resolve any and all problems found. The Builder will be billed \$150 for *each* return for re-inspection. This will also apply to conduit problems. A trip charge of \$150 will be charged to the Builder each time that an HFN contractor must return to a home that is not ready. Failure to schedule inspections in allotted timeframe will result in a \$500 fine. Failure to submit Cat 5 certification in allotted timeframe will result in fines up to \$500.

E. Inspection Emphasis

Special emphasis will be placed on inspecting the model homes and the early production homes, in the beginning of each Model Phase or Construction Phase. The purpose is to identify, as early and completely as possible, any design issues, installation issues, or other issues, related to that floor plan, before it goes in to the Production Phase. For this purpose the Inspector will meet with the Site Superintendent and the Low Voltage Cabling Contractor on the job site prior to the system being installed. This will be a one-time meeting to allow everyone to start off with the same understanding of the specification and how it may apply to each dwelling type. Once under construction, all homes will be inspected. Site Superintendent and the Low Voltage Cabling Contractor are preferred to attend the scheduled inspections, however it is not mandatory.

F. Inspection Results

All homes inspected will receive a report accessible at the web site address provided above, indicating "Pass", or "Fail", based upon the Inspector's professional judgment.

Homes receiving a "Fail" on Pre-Wire Inspection, must be corrected, and re-inspected, with-in one week. This remedial inspection must be PRIOR to insulation.

Homes receiving a "Fail" on Trim-Out Inspections, must be corrected, and re-inspected, with-in Five (5) working days. This remedial inspection must be PRIOR to Home Owner Move-In Inspection and to Homeowner Move In.

The cost of remedial or subsequent inspections, by the Developer, is a Builder cost.

SWS Inspections and Testing will normally be done after notification to the Builder. The Builder, normally through their Site Superintendent, is responsible to notify the Inspector, of an appropriate time, and date when the inspection can be completed.

A copy of the Inspection Report will be provided to Builder Representative, after the inspection is complete.

The cost of the initial SWS Inspection is normally a Developer cost. If such initial inspection is not possible due to Builder delay, or incorrect scheduling, it is a Builder cost.

5. LOW VOLTAGE CABLING CONTRACTOR (LVCC)

The Builder, through their LVCC, is responsible for the correct installation, testing, and warranty, of all installed SWS cabling, and components, within the home premises. The Builder must carefully select their LVCC to insure their capability, to correctly install, maintain, change, upgrade, update, and warrant the SWS, in full compliance with all the specific codes, standards, and requirements, of this low voltage application.

Specific responsibilities of the Builder, through their LVCC, include, but are not limited to:

- i. Pre-wiring of all required wire, cable, and pre-wire installation hardware, including brackets, enclosures, back boxes, etc.
- ii. Termination and labeling of all wire and cabling
- iii. Detailed visual inspection of all installed low voltage cable, to confirm the minimum required offsets, from line voltage cable, are achieved
- iv. Testing of all wire and cable runs for opens, shorts, crossed pairs, etc.
- v. Testing of all wire and cable runs for throughput, if required by Developer, Builder, or other entity
- vi. Installation and testing of all distribution electronics (active and passive)
- vii. Proper trim out of all Telecommunications Service Outlet (TSO) locations, including plug inserts, faceplates, etc.
- viii. Providing accurate, as-built documentation (wiring lists, drawings etc.), of the completed installation
- ix. Providing warranty that all installed SWS cabling, enclosures and system components, meet or exceed the requirements, of the UBC, UL, local codes, the ANSI/TIA/EIA-570-A Residential Telecommunications Cabling Standard, the Original Equipment Manufacturer(s), and the SWS

- x. Providing warranty that all installation procedures, meet or exceed the requirements, of the UBC, UL, local codes, the ANSI/TIA/EIA-570-A Residential Telecommunications Cabling Standard, the Original Equipment Manufacturer(s), and the SWS
- xi. Complete and professional correction of any identified SWS deficiencies

6. BUILDER OR BUYER OPTIONAL EQUIPMENT

The Issaquah Highlands Exhibit K specifically does not provision:

- Satellite Reception of Television or Other Signal
- Off-air Reception of Television or Other Signal
- Security Wiring
- Security Systems
- Distributed Audio
- Entertainment Systems or Distribution
- Home Automation or Control
- Smart Appliances
- Home Gateway Functionality
- Firewalls
- Routers
- Wireless Systems
- Any Other Resident Optional Home Systems
- In-home Local Area Networking of computers

The term **"Provider"** means the entity that is responsible to provide the specified component and to pay for it. The term **"Alternate Provider,"** if any, means the entity that, at their discretion, may elect to assume this cost from the "Provider," subject to all other SWS requirements.

7. MINIMUM SEPARATION REQUIREMENTS FOR BUILDERS

TABLE 1

Minimum Separation of Telecommunications pathways from 480 volt or less power lines			
Condition	<2 kVA	2-5 kVA	>5 kVA
Unshielded power lines or electrical equipment in proximity to telecommunications open or nonmetal pathways.	5 in	12 in	24 in
Unshielded power lines or electrical equipment in proximity to telecommunications grounded metal conduit pathways	2.5 in	6 in	12 in
Power lines enclosed in a grounded metal conduit (or equivalent shielding) in proximity to a telecommunications grounded metal conduit pathway	N/A	3 in	6 in
Power lines enclosed in a grounded metal conduit (or equivalent shielding) in proximity to telecommunications open or nonmetal pathways.	2.5 in	6 in	12 in
Mechanical ductwork, metal floors and other metallic planes to telecommunications open or nonmetal pathways.	2 in	N/A	N/A
Mechanical ductwork, metal floors and other metallic planes to telecommunications open or grounded metal conduit pathways.	0 in	N/A	N/A
Fluorescent or HID lighting fixtures	5 in	5 in	5 in

8. REFERENCE CODES AND STANDARDS

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only, latest edition. The reference codes and standards are minimum requirements.

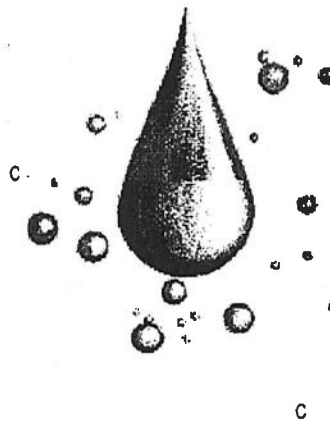
TABLE 2

Reference	Title/Revision
ANSI/ICEA S-80-576	Communications Wire and Cable for Wiring of Premises
ANSI/ICEA S-83-596	Fiber Optic Premises Distribution Cable Technical Requirements
ANSI/ICEA S-87-640	Fiber Optic Outside Plant Communications Cable
ANSI C2	National Electrical Safety Code
ANSI/NFPA 70	National Electrical Code
ANSI T1.318	Electrical Protection Applied to Telecommunications Network Plant at Entrances to Customer Structures or Buildings
ANSI/TIA/EIA-568-A	Commercial Building Telecommunication Cabling Standard (October 1995)
ANSI/TIA/EIA-569	Commercial Building Standards for Telecommunications Pathways and Spaces (October 1990)
ANSI/TIA/EIA-570A	Residential Telecommunications Cabling Standard
ANSI/TIA/EIA-571	Environmental Considerations for Telephone Terminals
ANSI/TIA/EIA-606	Administration Standard for the Telecommunications Infrastructure of Commercial Buildings (February 1993)
ANSI/TIA/EIA-607	Commercial Building Grounding and Bonding Requirements for Telecommunications
ANSI/TIA/EIA-758	Customer-Owned Outside Plant Telecommunications Cabling Standard
ANSI/TIA/EIA-TSB 67	Transmission Performance Specifications for Field Testing of Unshielded Twisted-Pair Cabling Systems (October 1995)
ANSI/TIA/EIA-TSB 72	Centralized Optical Fiber Cabling Guidelines (October 1995)
ANSI/TIA/EIA-TSB 95	Additional Transmission Performance Guidelines for 4-pair 100 Ohm Category 5 Cabling
BICSI TDMM	Telecommunications Distribution Methods Manual
BICSI CO-OSP	Customer Owned Outside Plant Design Manual

APPENDIX K

ISSAQUAH HIGHLANDS WATER CONSERVATION STANDARDS

Issaquah Highlands Water Conservation Standards



PREPARED BY
12MHILL
Hough Beck & Baird

August 1997

For additional information contact:

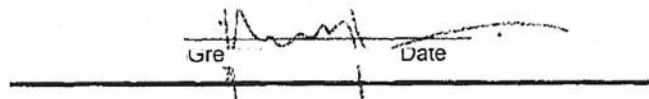
City of Issaquah
1775 12th Avenue NW
Issaquah, WA 98027

(425) 557-2560

APPROVED	
ONLY DOCUMENTS WITH AUTHORIZING SIGNATURES HAVE BEEN APPROVED.	
Planner	Engineer
<u>Thomas P. Fox</u>	
Thomas P. Fox	Date Tracylia
	ey.
o	
Lucy Sloman Date	Date
Reviewed and Determined to be	Reviewed and Determined to be

Not Applicable

Not Applicable



Contents

1. Applicability	1
1.1 Single Family Residential	1
1.2 Multi Family Residential and Commercial	1
1.3 Parks, Trails, and Open Spaces	1
1.4 Streets	2
2. Water Conservation Indoor Standards	2
3. Water Conservation Landscape Standards	2
3.1 Design Criteria	3
3.2 Landscape Maintenance Criteria	4
3.3 Single Family Landscape Criteria	5
3.4 Landscape Standards References	6
4. Water Conservation Irrigation Standards	6
4.1 Irrigation Types	6
4.2 Irrigation System Design Criteria	7
4.3 Landscape Water Budget Requirements	8
4.4 Irrigation System Maintenance	9

Appendix A - Suggested Drought-Tolerant Landscape Materials

Appendix B - Irrigation Water Budget and Use Calculations

Appendix C - Conservation Standards Submittals Forms

Issaquah Highlands Water Conservation Standards

These water conservation standards comply with the requirements and intent of the *Grand Ridge Annexation and Development Agreement [2 Party]*, Appendix F, Grand Ridge Water Service adopted on February 5, 1996 by ordinance 2104 and amended by ordinance 2142 in December 1996 and ordinance 2144 in February 1997.

1. Applicability

These Water Conservation Standards apply to all new construction and landscaping within the Issaquah Highlands development. Conservation requirements vary by land use as described below. Refer to Table 1 for a summary of standard applicability and submittal requirements.

1.1 Single Family Residential

Individually maintained single family residential lots with a proposed irrigated area of less than 2,000 square feet using only low volume, e.g. drip, irrigation and/or manual irrigation must comply with the Indoor Standards in Section 2 and the Landscape Standards in Section 3. No submittals are required.

Single family residential lots which install automatic irrigation systems other than low volume systems and/or propose irrigation of 2,000 square feet or more must comply with the Irrigation Standards in Section 4. Irrigated areas are any area with artificial application of water including manual watering and installed drip or above ground irrigation systems. Temporary irrigation for plant establishment is not included. Compliance with Section 4 requires submittal of a water budget, landscape and irrigation design certification, and landscape and irrigation installation certification. These lots must also comply with the Indoor Standards and Landscape standards in Sections 2 and 3, respectively.

1.2 Multi Family Residential and Commercial

All multi family residential and commercial lots must comply with all sections of these Conservation Standards. These lots require submittal of a water budget, landscape and irrigation design certification, and landscape and irrigation installation certification. There are no provisions for water use above the calculated water budget.

1.3 Parks, Trails, and Open Spaces

Parks and open spaces must, at a minimum, comply with the Landscape and Irrigation Standards, Sections 3 and 4, which include meeting the water budget requirements. These areas require submittal of a Special Water Use Permit, landscape and irrigation design certification, and landscape and irrigation installation certification. Turf portions of public athletic facilities where turf provides a playing surface and turf portions of public access land used for purposes of public recreation and activities may be allowed an additional water budget through the special permit application. All requests will be reviewed and decided upon by the Responsible Official. A limited amount of water is available.

1.4 Streets

Permanent street irrigation is allowed only through Special Permit application to the Responsible Official. Only a small portion of the total Issaquah Highlands annual water budget has been allocated to this use; a limited amount of water is available for permanent street median and boarder irrigation and will be allocated judiciously. Irrigation permits for these areas require submittal of landscape and irrigation design and installation certifications, as well as the Special Permit. All requests will be reviewed and decided upon by the Responsible Official.

TABLE 1
Water Conservation Standards Applicability and Submittal Summary

Land Use	Applicable Standards				Submittal Requirements				
	Section 2, Indoor	Section 3, Landscape	Section 4, Irrigation	Section 5, Special	Landscape Design Cert.	Irrigation Design Cert.	Landscape Installation Cert.	Irrigation Installation Cert.	Special Water Use Permit
Single Family - Manual/Drip Irrigation System on < 2,000 sf	4	4							
Single Family - Above Ground Irrigation and/or > 2,000 sf	4	4	4	4	4	4	4	4	
Multi Family	N	4	4	4	4	4	4	4	
Commercial	1	4	4	4	4	4	4	4	
Open Spaces, Parks, and Trails (permanent irrigation)		4	4		4	4	4	4	4
Streets (permanent irrigation)		4	4		4	4	4	4	4
All other temporary and manual irrigation areas		4							

2. Water Conservation Indoor Standards

All new construction shall comply with the Washington State Plumbing Code in effect upon the date the building permit application is submitted.

3. Water Conservation Landscape Standards

Water conserving landscape is a desired feature of the Issaquah Highlands to optimize use of current water sources in the City of Issaquah and promote conservation and optimization of natural resources in general. The following standards are intended to promote landscape sustainability through the use of xeriscape principles. Xeriscape is "quality landscaping that conserves water and protects the environment". This concept of landscaping is not intended to promote desert-like landscape, brown grass, or large paved areas; rather, the concepts promote natural, native, healthy-looking plants and landscapes. Xeriscape includes the following seven design principles:

1. Thoughtful space planning and design
2. Soil analysis and amendments
3. Reduction of lawn areas
4. Appropriate plant selection
5. Efficient irrigation
6. Mulching
7. Appropriate maintenance

3.1 Design Criteria

Water conservation practices shall be incorporated into the landscape by following the seven xeriscape principles outlined above.

1. When *planning and designing* a landscaped area, the following guidelines are recommended:
 - Consider the drainage patterns of the area to be landscaped. For example, plants that require a higher quantity of water should be placed at the base of hills, in depressions, or down-slope of drainage and irrigation areas.
 - Group plants that have similar water needs together by hydrozones.
 - Consider the microclimate of the area, both existing and created, and how it might effect the suitability of a landscape design.
 - Plant during the fall season. This allows plants to establish, when they need high quantities of water, during the rainy season and reduces the need for irrigation.
2. Conduct a *soil analysis* and add the necessary *soil amendments* prior to planting. Soil analysis may consist of a simple "feel" test and physical examination or a more complete laboratory analysis. The following guidelines are recommended when analyzing and amending soil for landscape needs:
 - Re-use top soil from the greater project area when possible.
 - Use organic, slow-release fertilizers (*see Issaquah Highlands Fertilizer Best Management Practices Guidelines*) that can add necessary nutrients over time.
 - Water-absorbing polymers can be used to increase the water holding capacity of the soil and reduce the need for irrigation. Polymer products for use in the landscape are commercially available.
 - The use of organic matter, such as compost, can improve the water-holding capacity of soil and reduce the need for irrigation while adding important nutrients. Use only permitted suppliers of compost material, issued by the City or County Health Department where the supplier is located.
 - When possible, incorporate organic matter into the existing soil.
3. Reduce *lawn areas* as much as possible. Where lawn is not needed for recreation, consider replacing it with alternative plantings such as groundcover and low growing shrubs which require less water. The following guidelines are recommended when installing grass lawn:

- Use only drought-tolerant, deep-rooted grass species such as a fescue and rye grass blend. For low foot traffic, drought tolerant planting areas, use a higher percentage of fescue grasses (tall, hard and sheep fescue varieties). For high foot traffic planting areas use a higher percentage of perennial rye grasses.
 - Use a seed mix that is naturally resistant to insects and diseases.
 - Use slower growing varieties that need less mowing and require less fertilizer.
4. *Plant selection* should include the following guidelines:
- Choose drought-tolerant species. Refer to Appendix A for recommended drought tolerant landscape materials list.
 - Consider other aspects of the microclimate, such as shade and wind tolerances, which can effect the water absorbency of some plant species.
 - Choose native species and/or plants that are adapted to the Issaquah climate.
5. *Efficient irrigation* is discussed in Section 4, Water Conservation Irrigation Standards.
6. *Mulching* conserves water, suppresses weeds, and reduces soil erosion. The following guidelines are recommended when applying mulch:
- In general, mulches should be two to three inches in depth. Large particle size mulches could require a greater depth. Over mulching may restrict the soil's oxygen supply and suffocate plants or reduce water penetration into the soil. Under mulching may allow the sun to penetrate and promote weed growth. Compost is not as likely to restrict weed growth as other mulch alternatives.
 - Use organic mulches, such as composted yard waste and composted sawdust/manure, when available, since they have the additional advantage of adding nutrients to the soil.
 - Do not place mulch in direct contact with the base of the plant. This can cause rotting or decay of the stem or trunk.
 - Use only permitted suppliers of mulch material, issued by the City or County Health Department where the supplier is located.

3.2 Landscape Maintenance Criteria

To increase the sustainability and overall health of the environment, the following landscape maintenance guidelines should be applied:

Maintenance guidelines will vary from one planting area to another. Management generally includes weed control, irrigation, and pest control. Management techniques related to irrigation are discussed in Section 4, Water Conservation Irrigation Standards. The following are general landscape maintenance guidelines:

1. Regular weeding reduces competition for water and other nutrients.
2. Use alternative means to herbicides for pest control, such as Integrated Pest Management (see *Issaquah Highlands Fertilizer Best Management Practices Guidelines*).

Integrated Pest Management is a concept where the manipulation of all the environmental factors is used to control pests to an acceptable population. It includes techniques such as manipulation of the microclimate and use of plants and environmental factors that are known to deter pests or to attract pests' natural predators.

3.3 Single Family Landscape Criteria

Single family outdoor water use has been estimated for the development of these Water Conservation Standards. The estimated water use for the Issaquah Highlands is representative of water conserving landscape achieved through appropriate plants, soil preparation, water-wise irrigation practices, and proper operation and maintenance. Issaquah Highland landscapes should provide reduced lawn area and emphasize other lower water-use landscaping, such as vegetable gardens, shrubs, and ground covers. Drought-tolerant and low water use plants are encouraged. A suggested list of Northwest drought-tolerant plants is provided in Appendix A. The estimated water use does not include temporary irrigation which may be required for plant establishment.

The Irrigation and Water Budget and Estimated Use form in Appendix C may be used to estimate a water budget and water use for various landscape designs; however, **NO SUBMITTALS ARE REQUIRED FOR SINGLE FAMILY LOTS WITH LESS THAN 2,000 SQUARE FEET OF PROPOSED IRRIGATED AREA USING MANUAL OR LOW VOLUME IRRIGATION SYSTEMS ONLY.** The water budget technique and irrigation types are defined in Section 4. Single family lots with above ground irrigation or 2,000 square feet or more of irrigated area must also comply with the water budgeting requirements of Section 4, Water Conservation Irrigation Standards.

The following landscape alternatives are general guidelines which can assist homeowners with the planning and design of their landscape.

Landscape 1

- 75% - Grass lawn (high water use)
- 25% - Drought tolerant plants without irrigation

Landscape 2

- 60% - Grass lawn (high water use)
- 10% - Vegetable garden (medium water use) 10% -
- Shrub and groundcovers (low water use) 20% -
- Drought tolerant plants without irrigation

Landscape 3

- 50% - Grass lawn (high water use)
- 40% - Shrub and groundcovers (low water use)
- 10% - Drought tolerant plants without irrigation

Landscape 4

- 40% - Grass lawn (high water use)
- 10% - Vegetable garden (medium water use) 30% -
- Shrubs and groundcovers (low water use) 20% -
- Drought tolerant plants without irrigation

3.4 Landscape Standards References

1. Ellefson, Conie; Tom Stephens; Doug Welsh. Xeriscape™ Gardening: Water Conservation for the American Landscape. New York: MacMillan Publishing Company, 1992.
2. Rumary, Mark. The Dry Garden. London: Conran Octopus Limited, 1994.
3. Taylor, Jane. Drought-Tolerant Plants. New York: Frances Lincoln Limited, 1993.

4. Water Conservation Irrigation Standards

Irrigation water shall be applied with goals of avoiding runoff, low head drainage, overspray, or other similar conditions through the following:

1. Considering soil type and infiltration rates,
2. Using proper irrigation equipment and schedules, including such features as repeat cycles and matched application and infiltration rates, and
3. Considering special problems posed by irrigation on slopes, in median strips, and in narrow hydrozones.

4.1 Irrigation Types

Three types of irrigation systems are recommended depending on plant materials, anticipated use, and location: permanent, temporary, and manual. Table 2 provides a guideline for irrigation system applications. These irrigation types are described as follows:

- **Permanent Irrigation.** An automatic controlled system that is designed and installed to provide permanent, on-going water as necessary to meet the needs of ornamental plant material and landscapes with high recreation use.
- **Temporary Irrigation.** Temporary irrigation systems are designed and installed to provide a watering system necessary during the establishment period of native and drought-tolerant plant materials. Temporary systems may consist of quick couplers to allow for manual watering or an automated irrigation system for automatic watering. Temporary systems may be removed after 2 growing seasons provided the plants are established. Temporary irrigation systems are not included in the water budget.
- **Manual Irrigation.** Manual irrigation systems are commonly operated from hose bibs and quick couplers using garden hoses and portable sprinklers. Manual systems typically occur in landscapes where a single owner, tenant, or occupant is responsible for maintenance of the landscape. Manual irrigation water use is not included in the water budget. It is assumed that manual irrigation is not used on properties where permanent irrigation has been installed, except for plant establishment if necessary over the first two (2) years.

TABLE 2
Allowable Irrigation Types by Land Use

Land Use	Irrigation Type		
	Permanent	Temporary	Manual
Urban Landscape			
Detached Residential	N	A	I
Attached Residential	q	g	
* Commercial/Retail *		A	
Open Space, Parks, and Trails 'P'			
Parks "		T	
Trails	Community Gardens	V	
Open Space Transition *		V	
Wet Ponds and Detention Ponds	N		
Streets ""			
Principal Arterial	N	A	
Minor Arterial and Collector Arterial		A	
Neighborhood Collector		V	
Sub Collector	N	I	
Residential Street	V	i	
Cul-De-Sac	g	A	
Boulevard Park Road	g	A	
Roundabout		A	
Alley			-■/
Emergency and Maint. Vehicle Access			Ai
Notes: * Irrigation system is determined by vegetation type, as follows: (a) Ornamental Landscapes - permanent irrigation (b) High-use Landscape Areas/Recreation Areas - permanent irrigation (c) Drought-Tolerant and Native Landscapes - temporary irrigation "" Water budgets for open spaces, parks, and streets must be provided by water savings derived in the urban landscape areas. Landscapers must submit a Special Water Use Permit Application.			

4.2 Irrigation System Design Criteria

For the purposes of this section, irrigation shall include any means of applying water to landscaped areas. Irrigation systems shall be subject to the following provisions:

1. Irrigation systems shall not be located on any turf-grass slopes exceeding a slope of four horizontal feet to one vertical foot (4:1).
2. Systems in landscape strips less than four feet in width shall be designed to ensure that overspray and/or runoff does not occur by use of system design options such as low volume emitters.
3. Systems shall be designed to be consistent with the requirements of the hydrozone in which they are located.
4. Separate valves shall be used to irrigate plants with differing water needs.

5. Sprinkler heads with consistent application rates shall be selected for proper area coverage, operating pressure, and adjustment capability.
6. Irrigation systems shall be designed and constructed in such a way that a minimum average distribution uniformity of 62.5% for conventional above ground spray systems and 92.5% for low volume or drip irrigation systems is achieved. The distribution uniformity (DU) is defined as the amount of water that must be applied through the existing irrigation system to adequately 'refill' the root zone of the least 25% irrigated area. The minimum irrigation system efficiencies should be achievable by following standard design practices. Well designed and maintained irrigation systems easily achieve DU values ranging from 70% to 80%. Irrigation system designers must certify on the attached form that the system is designed and installed to meet the required distribution uniformity requirements.
7. The use of low volume or drip irrigation systems is encouraged.
8. Irrigation systems shall be designed to include an automatic rain shut-off device.
9. Systems shall utilize a master control valve connected to an automatic controller.
10. Systems shall include a backflow prevention device. Coordinate with the City of Issaquah.
11. All irrigation water outlets, except those using alternative water sources, shall be downstream of the meter used to measure irrigation water use.
12. Irrigation systems shall be designed with provisions for winterization by providing either manual drains at all low points (automatic valves are not permitted) or means to blow out irrigation system pipes with pressurized air.

4.3 Landscape Water Budget Requirements

The water budget requirements have been developed to promote water conservation in landscape and accommodate limited water resources. These water conservation standards are intended to assist the Issaquah Highlands development in meeting aggressive water conservation goals. The goals are based on local and regional water resource availability. The water budget establishes an amount of water available to each site based on land use and available irrigable landscape area. The water budget applies to all permanent irrigation systems on commercial and multi family lots and single family lots with over 2,000 square feet of proposed irrigated area and/or above ground irrigation systems.

Irrigation water budgeting is performed in two steps. First, the irrigation water budget (IWB) is determined. This represents the maximum amount of irrigation water that the landscape can be designed to use. Second, the total estimated water use (EWU) is calculated. The EWU represents the total amount of water needed to sustain the landscape design. The landscape design's EWU may not exceed the IWB.

Refer to Appendix B for water budget calculation instructions. The IWB must be reported to the Responsible Official on the attached form along with a copy of the landscape's design/plans prior to installation of the landscape.

4.4 Irrigation System Maintenance Criteria

All landscaped areas designed to meet water budget requirements shall be installed, operated and maintained such that the allowed annual water use is not exceeded. Irrigation system maintenance is intended to maintain irrigation equipment for efficient, water-wise irrigation.

4.4.1 Irrigation System Management Plans

Irrigation system designs shall include a written irrigation system management plan which includes:

1. An irrigation system operating schedule based upon the Evapotranspiration Demand Curve in Appendix B, the Estimated Water Use (EWU) for each hydrozone, and the total Estimate Water Use (EWU) for the landscape which details the run time for each hydrozone (station) in minutes per cycle and cycles per week for each week of the irrigation season (May 1st through October 31st) and the total weekly and annual amount of water to be applied by each hydrozone, and the total landscape, in gallons and in hundreds of cubic feet (ccf). (748 gallons = 1 ccf).
2. Additional operating criteria such as avoiding irrigation during times of high winds, when raining, and/or in the middle of the day.
3. Regular maintenance activities necessary to
 - Prevent, detect, and repair irrigation system damage, excess wear, and leakage.
 - Maintain a minimum average distribution uniformity of 0.625 for conventional above ground spray systems and 0.925 for low volume or drip irrigation systems.
 - Activate the irrigation system for use in the spring.
 - Deactivate and winterize the irrigation system in the fall.
4. Specifications for all irrigation system components originally used, and recommended for use when making repairs to or replacing parts of the irrigation system to maintain:
 - Minimum average distribution uniformity of 0.625 for conventional above ground spray systems and 0.925 for low volume or drip irrigation systems.
 - Good overall operational performance of the irrigation system.

4.4.2 Routine Maintenance

The following are common routine maintenance tasks for irrigation systems:

Sprinkler Heads:	Repair heads that have been damaged from mowers, vandalism, and physical wear. Clean soil from system. Adjust heads which are out of alignment. Adjust heads which are not properly set with finish grade.
------------------	---

Automatic Valves: Clean valves which malfunction due to soil intrusion.
Repair solenoid failure on electric valves.

Control Wires: Repair wires damaged by hand digging or power equipment.

Winterization: Fully drain or blow out irrigation system to prevent freeze damage during winter months.

Automatic Controllers: Adjust watering times based on weather conditions to avoid over watering.

Maintenance adjustment needs may be indicated by the following common irrigation performance problems:

1. Dry areas between sprinkler heads
2. Wet areas due to over coverage
3. Water applied to areas not requiring water
4. Ponding water at sprinkler heads
5. Loss of water pressure

Appendix A

Suggested Drought Tolerant Landscape Materials

Appendix A

Suggested Drought Tolerant Landscape Materials

NOTE: This list of suggested plant materials is recommended for use within Issaquah Highlands. Additional plants may be added to this list as deemed appropriate. Plants shall be selected based upon site specific conditions which may affect plant growth such as sun exposure, soil types, adjacent site improvements, etc.

Large Deciduous Trees

<u>Scientific Name</u>	<u>Common Name</u>
Acer hippocastanum	Horsechestnut
Acer platanoides species	Norway Maple
Acer pseudoplatanus	variety Sycamore
Catalpa speciosa	Maple Western
Fagus sylvatica	Catalpa European
Fraxinus oxycarpa 'Raywood'	Beech Raywood
Fraxinus pennsylvanica	Ash Green Ash
Ginkgo Biloba	Maidenhair Tree
Liquidambar styraciflua	American Sweetgum
Platanus x acerifolia	London Plane Red
Quercus rubra	Oak

Medium Deciduous Trees

<u>Scientific Name</u>	<u>Common Name</u>
Acer campestre	Hedge Maple
Acer glabrum	Rocky Mountain Maple
Aesculus carnea	Red Horsechestnut
Arbutus menziesii	Madrone
Carpinus betulus	European Hornbeam
Cornus nuttallii	Pacific Dogwood
Corylus colurna	Turkish Filbert
Prunus species	Flowering Cherry
Pyrus calleryana species	variety Flowering Pear
Nyssa sylvatica	variety Sour Gum
Parrotia persica	Persian Parrotia

Small Deciduous TreesScientific Name

Acer circinatum Acer
ginnala Amelanchier
canadensis Cornus
kousa
Crataegus species
Koeleria paniculata
Prunus species Rhus
typhina

Common Name

Vine Maple
Amur Maple
Serviceberry
Kousa Dogwood
Hawthorn variety
Goldenrain Tree
Flowering Cherry variety
Staghorn Sumac

Evergreen TreesScientific Name

Abies concolor
Abies grandis
Cedrus deodara
Chamaecyparis nootkatensis
Calocedrus decurrens
Pinus contorta
Pinus contorta latifolia
Pinus densiflora
Pinus monticola
Pinus nigra
Pinus ponderosa
Pinus sylvestris
Pinus thunbergii
Pseudotsuga menziesii
Sequoiadendron giganteum

Common Name

White Fir
Grand Fir
Deodar Cedar
Alaska Cedar
Incense Cedar
Shore Pine
Lodgepole Pine
Japanese Red Pine
Western White Pine
Austrian Black Pine
Ponderosa Pine
Scotch Pine
Japanese Black
Pine Douglas Fir
Giant Sequoia

Deciduous ShrubsScientific Name

Amelanchier alnifolia
Berberis species
Buddleia davidii
Corylus cornuta
Cotinus coggygria
Elaeagnus species
Euonymus alata
'Compacta' Holodiscus
discolor Potentilla
fruticosa Rhus species
Ribes sanguineum
Rosa rugosa
Rosa species
Spiraea species
Symphoricarpos albus
Viburnum opulus

Common Name

Western Serviceberry
Barberry variety
Butterfly Bush
Western Hazelnut
Smoke Tree
Elaeagnus variety
Winged Euonymus
Ocean Spray
Potentilla
Sumac variety
Red-flowering Currant
Rugosa Rose
Shrub Roses
Spiraea variety
Snowberry
Highbush cranberry

SEA/CONSVAPPA.DOC

A2

Evergreen ShrubsScientific Name

Arctostaphylos manzanita
 Cotoneaster species
 Ilex species
 Juniper species
 Mahonia aquifolium
 Nandina domestica
 Osmanthus delavayi
 Osmanthus heterophyllus
 Osmarea x burkwoodii
 Photinia frazeri
 Photinia species
 Pinus mugo
 Potentilla species
 Prunus laurocerasus
 Prunus laurocerasus Otto Luyken
 Prunus lusitanica
 Vaccinium ovatum
 Viburnum davidii
 Viburnum rhytidophyllum

Common Name

Common Manzanita
 Cotoneaster variety
 Holly varieties
 Juniper varieties
 Oregon Grape
 Heavenly Bamboo
 Delavay Osmanthus
 Holly Leaf Osmanthus
 Burkwood Osmarea
 Japanese Photinia
 Photinia varieties
 Mugho Pine
 Potentilla varieties
 English Laurel
 Otto Luyken Laurel
 Portuguese Laurel
 Evergreen Huckleberry
 Davids Viburnum
 Leatherleaf Viburnum

GroundcoversScientific Name

Arctostaphylos uva-ursi
 Berberis nervosa
 Cotoneaster dammeri
 Cotoneaster microphyllus
 'Cochleatus'
 Fragaria chiloensis
 Fragaria 'Pink Panda'
 Gaultheria shallon
 sp. Poie
 Hedera helix
 Hypericum calycinum
 Mahonia species
 Sarcococca hookerana
 Sedum species
 Thymus species
 Vinca minor

Common Name

Kinnikinnick
 Cascade Mahonia
 Bearberry Cotoneaster
 Rockspray Cotoneaster
 Evergreen Strawberry
 Pink Panda Strawberry
 Salal
 Broom varieties
 English Ivy
 St. Johns Wort
 Mahonia variety
 Sarcococca
 Stonecrop varieties
 Thymes varieties
 Periwinkle

Perennials and Grasses

<u>Scientific Name</u>	<u>Common Name</u>
Achillea	Yarrow
Anemone x hybrida	Japanese Anemone
Bergenia crassifolia	Winter Blooming Bergenia
Crocoshia species	Crocoshia varieties
Crocus species	Crocus varieties
Festuca ovina 'Glaucia'	Blue Fescue
Galanthus nivalis Iris species	Snowdrop
Iris	Iris
Lavandula species	Lavender varieties
Narcissus species	Daffodil varieties
Pennisetum setaceum	Fountain Grass
Phlomis fruticosa	Jerusalem Sage
Salvia species	Sage varieties
Teucrium chamaedrys	Germander
Tulipa species	Tulip varieties

Vines

<u>Scientific Name</u>	<u>Common Name</u>
Podranca ricasoliana	Pink Trumpet Vine
Polygonum aubertii	Knotweed
Wisteria species	Wisteria varieties

Appendix B
Irrigation Water Budget and Use Calculations

Appendix B

Irrigation Water Budget and Use Calculations

1. General Irrigation Water Budget Information

Irrigation water budgeting is performed in two steps. First, the irrigation water budget (IWB) is determined. This represents the maximum amount of irrigation water that the landscape may be designed to use. Second, the total estimated water use (EWU) is calculated. The EWU represents the total amount of water needed to sustain the landscape design. The landscape design's EWU may not exceed the IWB.

2. Water Budget Submittals

For each proposed landscape design, a State registered Landscape Architect, Washington Certified Nurseryman, or Washington Certified Landscaper shall complete the Irrigation Water Budget and Total Estimated Water Use form (Appendix C). The landscape designer must also certify that the estimated annual water use will not exceed the irrigation water budget, as calculated pursuant to the methodology contained in these standards (Appendix B) and that the landscape was installed as designed. The certification forms are attached in Appendix C. Copies of the forms and supporting calculations shall be submitted to the Responsible Official.

The irrigation system design and installation must be certified to be in compliance with the Issaquah Highlands Water Conservation Standards by the Washington State registered Landscape Architect, Professional Engineer, or Irrigation Association Certified Irrigation Designer designing the irrigation system. The certification forms are attached in Appendix C and must be submitted to the Responsible Official.

The IWB and EWU must be reported to the Responsible Official on the attached Irrigation Water Budget and Estimated Use form (Appendix C) along with a copy of the landscape and irrigation design/plans and design certification forms (Appendix C) prior to installation. The landscape and design system certification of proper installation must be submitted within 30 days after the installations are complete.

A Special Irrigation Water Use Permit application is required in lieu of the Irrigation Water Budget and Estimated Use form for all projects other than commercial, multi family, or single family.

3. Calculation of the Irrigation Water Budget (IWB) and Estimated Water Use (EWU)

A landscape design's IWB shall be calculated based on the total square footage of the proposed landscape area including retained native vegetation areas (excluding impervious surfaces) using the following formula:

$$IWB = ET \times AF \times LA \times CF$$

IWB: Irrigation Water Budget in gallons/year

ET: Evapotranspiration rate = 14.49 inches per irrigation season. Refer to Section 3.1.

AF: Adjustment Factor

- f. Multi-Family and Commercial adjustment factor = 0.64 (= 0.4/0.625 irrigation system efficiency)
- Single-Family adjustment factor = 1.2 (=0.75/0.625 irrigation system efficiency)

LA: Landscape area in square feet

CF: Conversion factor = 0.62 (inches to gallons per square foot)

A landscape design's EWU shall be calculated by determining the estimated water use (EWU) for each hydrozone and adding the EWU for all landscape hydrozones together. The sum of the EWU for all hydrozones is the landscape's total EWU. The following formula shall be used to determine the EWU for each hydrozone:

$$EWU = (ET \times PF \times HA \times CF) / IE$$

EWU: Estimated water use for each hydrozone in gallons/year

ET: Evapotranspiration rate = 14.49 inches per irrigation season. Refer to Section 3.1.

PF: Plant factor value for hydrozone. Refer to Section 3.2.

HA: Hydrozone area in square feet

ter.. Conversion factor = 0.62 (inches to gallons per square foot)

IE: Irrigation system efficiency value for hydrozone. Refer to Section 3.3.

3.1 Evapotranspiration Data for the Puget Sound Lowlands Region

The water budget and estimated water use shall be based upon the following evapotranspiration (ET) data which represents historical monthly net irrigation requirements for turf-grass typically used in commercial landscapes. The ET data is in inches per month for the Puget Sound Lowlands Region and is based upon the 30 year average of the National Weather Service data:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0.00	0.00	0.00	0.00	1.59	3.13	4.46	3.51	1.77	0.03	0.00	0.00	14.49

3.2 Plant Factor Values for Hydrozone EWU Calculations

PF values represent the ratio of ET demand a particular plant species, or hydrozone, has in comparison to turf-grass. In other words, if a particular plant species has only one-half the water demand per square foot that turf-grass does, it would be assigned a PF value of 0.5.

The PF values below shall be used for all plant species selected for use in a landscape. The landscape designer shall, based on professional experience, assign a PF value to each plant species designed within a hydrozone. The PF for the hydrozone shall be that of the plant species with the highest PF within the hydrozone, accounting for:

1. Each plant species typical water needs in an appropriate planting.
2. Conditions which may decrease or increase a plant's water needs, such as improper exposure, soil conditions, density of planting, adaptability to area's climate, etc.

Plant factor values assigned shall reflect the plant species' actual water demand as planted according to the final landscape design/plan.

Basic Plant Factor Class	PF Range
Low water use plants	0.0 to 0.3
Medium water use plants	0.4 to 0.6
High water use plants	0.7 to 1.0
All irrigated turf-grass	0.8 to 1.0

3.3 Irrigation System Efficiency Values

Irrigation system efficiency values shall be assigned as follows in calculating the Estimated Water Use for each hydrozone of a landscape:

Type of Irrigation System Used in Hydrozone	Minimum Efficiency Value
Conventional above ground spray system (i.e. rotors and pop-up spray systems; most commonly used to irrigate turf, but also used in plant beds)	0.625
Low volume or drip irrigation system (i.e. micro-spray, bubbler, drip, or other low volume systems which apply water below the ground surface, or directly to the plants root zone; most commonly used in plant beds)	0.925

If different irrigation system efficiency values are to be used, supporting documentation must be provided by the manufacturer or through field studies.

Appendix C
Conservation Standards Submittal Forms

Irrigation Water Budget and Estimated Use

Project Number: _____

Project Name: _____

Project Address: _____

Person Responsible for Completing Form: _____

Contact Number: _____

Irrigation Water Budget

Calculate the Irrigation Water Budget as follows:

$$IWB = ET \times AF \times LA \times CF$$

IWB: Irrigation Water Budget (gallons/year)

ET: Evapotranspiration rate = 14.49 inches per irrigation season.

AF: Adjustment Factor

Multi-Family and Commercial adjustment factor = 0.64

Single-Family adjustment factor = 1.2

LA: Landscape area = total lot area - impervious area (sq. feet)

CF: Conversion factor = 0.62 (inches to gallons per square foot)

Single-Family Lot IWB = $1018 \times LA$
--

Multi-Family and Commercial Lot IWB = $5.75 \times LA$
--

Landscape Area (square feet) = _____

Irrigation Water Budget (gallons/year) = _____

Estimated Water Use

Calculate the EWU as follows:

$$EWU = (ET \times PF \times HA \times CF) / IE$$

EWU: Estimated water use per hydrozone (gallons/year)

ET: Evapotranspiration rate = 14.49 inches per irrigation season

PF: Plant factor (as determined for hydrozone)

HA: Hydrozone area (square feet)

CF: Conversion factor = 0.62 (inches to gallons per square foot)

IE: Irrigation system efficiency value for hydrozone:

Conventional overhead spray system = 0.625

Low volume or drip system = 0.925

$EWU = (HA \times PF \times IE) \times 8.98$
--

Hydrozone	HA (sq. ft.)	Hydrozone Average PF	I E	Hydrozone EWU (gallons/year)
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x 8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ + _____	x 8.98	_____
_____	_____	x _____ + _____	x8.98	_____
_____	_____	x _____ ± _____	x8.98	_____
Total Area = _____		Total EWU = _____		_____

Attach additional pages if necessary.

Summary

Irrigation Water Budget (IWB) = _____ gallons/year

Estimated Water Use (EWU) = _____ gallons/year

NOTE: Total Estimated Water Use may not exceed the Irrigation Water Budget.

Issaquah Highlands

Water Efficient Landscape Design Certification

Project Number: _____

Project Name: _____

Project Address: _____

Project Owner or Manager:

Company Name _____

Contact Name _____

Street Address _____

City, State, Zip _____

Phone _____

Landscape Design Contact:

Company Name _____

Contact Name _____

Street Address _____

City, State, Zip _____

Phone _____

The landscape design/plans for the above stated project have been verified by the Washington State registered Landscape Architect, Washington Certified Nurseryman, or Washington Certified landscaper stated above to be in compliance with the Issaquah Highlands Water Conservation Standards, Section 3 - Water Conservation Landscape Standards and Section 4, Water Conservation Irrigation Standards. All data, calculations, and information required are attached or shown on the landscape plans.

Landscape Designer's Signature

Approval Signature

Printed Name

Date

Responsible Official

Date

Issaquah Highlands
Water Efficient Irrigation System Design Certification

Project Number: _____
Project Name: _____
Project Address: _____
Project Owner or Manager:
 Company Name: _____
 Contact Name: _____
 Street Address: _____
 City, State, Zip: _____
 Phone: _____
Irrigation System Design Contact:
 Company Name: _____
 Contact Name: _____
 Street Address: _____
 City, State, Zip: _____
 Phone: _____

The irrigation system designs/plans for the above stated project have been verified by the Washington State registered Landscape Architect, Washington State Registered Professional Engineer, or Irrigation Association Certified Irrigation Designer stated above to be in compliance with the Issaquah Highlands Water Conservation Standards. All data, calculations, and information required are attached or shown on the irrigation system plans.

Irrigation Designer's Signature

Approval Signature

Printed Name

Date

Responsible Official

Date

Issaquah Highlands Landscape Installation Certification

Project Number: _____
Project Name: _____
Project Address: _____
Project Owner or Manager: _____
Company Name _____
Contact Name _____
Street Address _____
City, State, Zip _____
Phone _____

Landscape Installation Contact:

Company Name _____
Contact Name _____
Street Address _____
City, State, Zip _____
Phone _____
Designer _____
Registration No. _____

The landscaping for this property has been installed in conformance with the approved landscape design, certified to be in compliance with the Issaquah Highlands Water Conservation Standards as documented by the Water Efficient Landscape Design Certification submitted for this property. Any landscape changes that may affect water use require re-submittal of the Water Efficient Landscape Design Certification prior to installation.

Landscape Designer's Signature

Approval Signature

Printed Name

Date

Responsible Official

Date

Issaquah Highlands
Irrigation System Installation Certification

Project Number: _____

Project Name: _____

Project Address: _____

Project Owner or Manager:

Company Name _____

Contact Name _____

Street Address _____

City, State, Zip _____

Phone _____

Irrigation System Installation Contact:

Company Name _____

Contact Name _____

Street Address _____

City, State, Zip _____

Phone _____

Designer _____

Registration No. _____

The irrigation system for this property has been installed in conformance with the approved irrigation system design, certified to be in compliance with the Issaquah Highlands Water Conservation Standards as documented by the Water Efficient Irrigation System Design Certification submitted for this property. Any irrigation system changes that may affect water use require re-submittal of the Water Efficient Irrigation Design Certification prior to installation.

Irrigation System Designer's Signature

Approval Signature

Printed Name

Date

Responsible Official

Date

Issaquah Highlands

Special Irrigation Water Use Permit

Project Number: _____

Project Name: _____

Project Address: _____

Person Responsible for Completing Form: _____

Contact Number: _____

Irrigation Water Budget

Calculate the Irrigation Water Budget as follows:

$$IWB = ET \times AF \times LA \times CF$$

IWB: Irrigation Water Budget (gallons/year)

ET: Evapotranspiration rate = 14.49 inches per irrigation season.

AF: Adjustment Factor = 0.64

LA: Landscape area = total lot area - impervious area (sq. feet)

CF: Conversion factor = 0.62 (inches to gallons per square foot)

$IWB = 5.75 \times LA$

Landscape Area (square feet) = _____

Irrigation Water Budget (gallons) = _____

Additional Water Budget Request

(Complete only if requesting additional water for special purpose land use, e.g. playing field, picnic area, etc.).

Reason for Additional Water Budget/Land Use Purpose: _____

Estimated Water Use

Calculate the EWU as follows:

$$EWU = (ET \times PF \times HA \times CF) / IE$$

EWU: Estimated water use per hydrozone (gallons/year)
 ET: Evapotranspiration rate = 14.49 inches per irrigation season
 PF: Plant factor (as determined for hydrozone)
 HA: Hydrozone area (square feet)
 CF: Conversion factor = 0.62 (inches to gallons per square foot)
 IE: Irrigation system efficiency value for hydrozone:
 Conventional overhead spray system = 0.625
 Low volume or drip system = 0.925

$$EWU = (HA \times PF \times IE) \times 8.98$$

HA Hydrozone	(sq. ft.)	Hydrozone Average PF	IE	Hydrozone EWU (gallons/year)
	x			x 8.98
	x			x 8.98
	x	4		x 8.98
	x			x 8.98
	x			x 8.98
	x			x 8.98
	x			x 8.98
	x			x 8.98
	x			x 8.98

Total Area = _____

Total EWU = _____

Clearly indicate special purpose hydrozones which will require additional water if requested above. Attach additional pages if necessary.

Summary

Irrigation Water Budget (IWB) = _____ gallons /year

Estimated Water Use (EWU) = _____ gallons/year

Additional Water Requested (EWU - IWB) = _____ gallons/year

APPENDIX L

SIGNAGE AND LOGO STANDARDS FOR RESIDENTIAL NEIGHBORHOODS

The signage and logo standards are administered by the Issaquah Highlands Community Association. Contact the IHCA for a copy of the applicable standards and for submittal/approval requirements.

APPENDIX M

BUILDER'S PROJECT MANUAL



BUILDER'S PROJECT MANUAL GRAND RIDGE DRIVE

Includes:

- ❖ Builder Emergency Contact Information
- ❖ Construction Procedures
- ❖ Close Out Procedure
- ❖ Contractor's Guide
- ❖ Hazardous Material Plan

October 9, 2015

APPENDIX M



Issaquah Highlands Builder's Project Manual

The Standards require the Builder/Owner and its contractors and subcontractors to comply with this Project Manual (the "Manual"), including, but not limited to, the Construction Procedures, the Contractor's Guide, and the Emergency Response and Hazardous Spill Control Plan as part of its Work on the Property. Builder/Owner understands that it is responsible to require all contractors and subcontractors conducting Work on its behalf at the Property to comply with the provisions of this Manual. The Manual is not intended to be an exhaustive resource of the Builder's/Owner's responsibilities while performing Work within Issaquah Highlands and does not relieve Builder/Owner from any requirements or obligations under the Agreement or other agreements with Grand-Glacier (or Grand Ridge Partnership, its predecessor) or Port Blakely Communities. Builder/Owner and its contractors and subcontractors must comply with the Agreement, including the "Construction Site Maintenance and Security Deposit" and all rules and regulations generally applicable to Issaquah Highlands relating to construction access or practices designated by Declarant and communicated to Builder/Owner. By signing below, Builder/Owner agrees to read, understand, and abide by the applicable guidelines outlined in the Manual and to require its contractors and subcontractors to do the same.

As an authorized representative of the undersigned, I agree to the above and acknowledge receipt of this Manual prior to the start of construction on the Property:

Owner's Name: _____

Address: _____

Signature: _____

Print Name / Title: _____

Date: _____

Builder Name and No.: _____

Builder's Signature: _____

Print Name / Title: _____

Date: _____



BUILDER'S EMERGENCY CONTACT INFORMATION

Builder shall appoint and make available a 24 hour emergency contact person who is authorized to address safety and erosion control issues.

Builder Name _____

Project Location _____

1st Contact

Name _____

Title _____

Cell # _____

Home # _____

Other # _____

2nd Contact

Name _____

Title _____

Cell # _____

Home # _____

Other # _____



CONSTRUCTION PROCEDURES

These Construction Procedures apply to all Owners/Builders at Issaquah Highlands and are part of the Architectural Standards adopted under the Declaration of Covenants, Conditions and Restrictions ("CCRs") governing all residential properties at Issaquah Highlands [KC Rec # 20120607000111, as amended]. These Construction Procedures apply not only the original Builder who acquired title under the REPSA from Declarant (Grand-Glacier LLC), but also any successor Owners/Builders who acquired title to the Project Site by approved assignment, foreclosure purchase, operation of law or any other means. Since most Owners/Builders will be the original purchasers, these Construction Procedures refer to the REPSA and Contract Documents, but all provisions of these Construction Procedures apply whether or not the Builder is a successor who was not a party to a REPSA with Grand-Glacier LLC.

SECTION 1 - CONDUCT OF THE WORK

1-01 WORK HOURS AND SITE ACCESS

1-01.1 Work Hours - Community Enforcement

Monday through Friday	7:00 AM - 6:00 PM
Saturday	9:00 AM - 5:00 PM By City-Issued Permit Only
Sunday	No Work Allowed
Holidays	No Work Allowed

Workers are permitted to arrive at the job prior to the start time, however, all activities with the potential to create noise are prohibited, including, but not limited to: idling vehicles or equipment, music, shouting, unloading of tools, equipment, or materials. No work is permitted outside of the established work hours.

Vendors' delivery trucks are not permitted on Site or within the Community before or after work hours. While not encouraged, street sweeper trucks and garbage trucks are the only exceptions to this provision.

The Community reserves the right to patrol the neighborhood before and after established work hours. Verbal warnings are typically provided to violators working within 30 minutes of City work hours.

1-01.2 Site Access

Due to the design of this community as a "walking community," the roadways were built very narrow to help reduce traffic speed. This poses a unique challenge for hauling to specific sites. The Builder shall take this into consideration and work with subcontractors and trades to minimize truck traffic through bottle-necked and round-a-bout areas.

Use of compression brakes is prohibited within the Community.

1-02 AUTHORITY OF PORT BLAKELY COMMUNITIES AND ISSAQUAH HIGHLANDS COMMUNITY ASSOCIATION

Nothing contained in this Manual shall be construed as requiring that Declarant or the Association direct the method or manner of performing the Work. Further, no inspections, requests, or other action by Declarant



or the Association under this document shall create any liability or obligation on the part of the Developer or Association.

Declarant and the Association reserve the right to:

- A. Appoint employees or agents to observe and document the Builder operations in accordance with the overall Architectural Standards (including this Manual) and all applicable Contract Documents; inspect materials used and Work performed for improvements to be conveyed to the Association.
- B. Perform site observation, with documentation, and direct concerns or required corrections directly to the Owners/Builders' authorized representative.
- C. Reject defective Work or materials any time before Final Acceptance of Work, in accordance with the overall Architectural Standards (including this Manual) and all applicable Contract Documents. Notice of such rejection shall be provided to the Builder in writing. Failure or neglect on the part of Declarant or the Association to reject material or Work shall in no way release the Builder of performing its obligation, or mean the acceptance thereof, nor shall the final acceptance bar Declarant or the Association from recovering damages for fraud or dishonesty or failure by the Builder to comply with the overall Architectural Standards (including this Manual) and all applicable Contract Documents.
- D. Perform Remedial Work necessary to meet the provisions of the overall Architectural Standards (including this Manual) and all applicable Contract Documents or this Manual, including but not limited to removal and disposal of waste, and the right to use the Security Deposit under the REPSA to pay for the Remedial Work.
- E. Perform irrigation Remedial Work adjacent to the Builder Work site and invoice the Builder for such Work and/or use the Security Deposit under the REPSA to pay for such repair work.
- F. Require perimeter fencing and/or screening around the Builder Project Site.
- G. Require immediate and permanent removal of any employee or subcontractor's employee it feels have conducted themselves in a manner inconsistent with the Community's standards for safety and/or professionalism.
- H. Notify and report violations to Governing Authorities.

Declarant and the Association will use reasonable efforts, in accordance with, and subject to, the terms and conditions of the Contract Documents and this Manual to:

- A. Communicate its Project schedule that may have an impact on the Builder operations.
- B. Perform all of its obligations in such time and manner as to facilitate the orderly progression of the Builder Work.
- C. Accept completed Builder Work.



- D. Provide Builder with name and contact information of Declarant and Association's authorized representatives.

1-03 RESPONSIBILITY OF THE BUILDER

The Builder shall:

- A. Obtain all permits required to perform their Work and perform all Work to obtain Final Acceptance.
- B. Maintain project building site in an organized and safe condition, free of waste and debris.
- C. Secure project materials, equipment, and Project Site Work.
- D. Provide prompt response to Declarant and Association requests, concerns, and requirements.
- E. Coordinate the design, installation, and start up of franchise utilities, fiber optics, underdrainage and irrigation systems.
- F. Check and compare all documents and field conditions for errors, omissions, or discrepancies in the course of planning for performance of each phase, or unit, of the Builder Work, prior to the time that any error, omission or discrepancy, would cause a field problem. Builder will also identify any damage to existing improvements as provided in 2-06 below.
- G. Observe all Community rules. Use only parking areas and Project Site entrance locations as designated by Declarant and the Association.
- H. Understand the Issaquah Highlands Project activities, sensitive areas, and drainage basins.
- I. Provide Declarant and the Association with a schedule of its Work at a frequency required to facilitate comprehensive Project coordination.
- J. Comply with the Standards (including this Manual) and all applicable Contract Documents.

1-04 EMERGENCY CONTACT INFORMATION

The Builder shall provide the Association with names and numbers for office, cellular, pager, fax, and home telephones of all key personnel the Association will need to contact for daily communication, data transmittal, and after-hour emergencies.

1-05 THIRD PARTY COORDINATION

The Builder shall be responsible for coordinating its Work with the third parties. Such coordination may include utility connections, soils management, excavation and paving operations, traffic control, parking, landscape and irrigation operations.

1-06 PRE-EXISTING IMPROVEMENT AND UTILITY DAMAGE

The Builder accepts the Project Site in "as is" condition at the time of Conveyance, less any documented and jointly agreed-upon pre-existing damages established in the pre-conveyance Lot Inspection. The Builder shall provide remedy for all damages not documented as pre-existing at the time of Project Site(s) Builder Closing. Damages include but are not limited to concrete curb, gutter, sidewalk, driveway or alley apron cracks and chips, asphalt degradation, damage to street light poles, street signs and posts, landscape, and native area disturbances. To make such claim, Builder bears the burden to demonstrate that the Developer or an agent of the Developer has caused damages following the date of Project Site Conveyance. All Builder repairs are subject to inspection and approval by the Developer, IHCA and the City of Issaquah.

1-07 PROTECTION OF EXISTING IMPROVEMENTS AND UTILITIES

CALL BEFORE YOU DIG 1-800-424-5555. It shall be the sole responsibility of the Builder to notify all underground utility companies prior to any clearing, grubbing, excavating, drilling, or other activity which may disturb or disrupt existing underground utilities.

The Builder shall protect all irrigation system components, landscape materials, concrete or asphalt flat work, pipes, conduits, poles, wires or other apparatus which may be in any way affected by the Builder Work, and shall also support, sustain and protect the same under, over, adjacent, or across the Builder Work.

1-08 DAMAGE TO EXISTING IMPROVEMENTS

The Builder shall not modify or repair Declarant's, or the Association's, irrigation system without advance approval.

The Builder shall not enter upon, or place materials or equipment on premises other than the Project Site of its Work, except by written consent of the individual owner of such premises.

The Builder shall bear the cost of any damage to any irrigation system components, landscape materials, concrete or asphalt flat work, pipes, conduits, poles, wires or apparatus. The Builder shall be financially responsible for complete repair of any damage caused by its operations to the satisfaction of the property owner. The Builder shall notify the Association within twenty-four (24) hours of suspected or known irrigation damage caused by its Work, or the work of third parties.

If for any reason an underground utility is disturbed, it shall be the sole responsibility of the Builder to notify the appropriate utility company immediately of damages to that utility.

1-09 WATER AND POWER

In instances other than specifically mentioned by this Manual or the REPSA (for original Owners/Builders), the Builder shall make all necessary arrangements for temporary water and power. All costs, thereof, shall be borne by the Builder. Use of water and power of an occupied residence is strictly prohibited and is considered utility theft.

1-10 STORAGE AND STAGING

Storage and staging of tools, equipment, materials, containers, and Builder field office trailer shall be kept within the limits of the Owners/Builders Project Site unless prior arrangements have been made. Staging of materials, collection bins, portable toilets, etc., within the right-of-way is prohibited, unless expressly approved by the City of Issaquah.

1-11 RECYCLING

Recycling is required by the Development Agreement between the City of Issaquah, King County, and Declarant. All Owners/Builders are required to have a recycling plan in place prior to the start of construction. Please see the Contractor's Guide contained within this Manual for further information.

1-12 SURPLUS MATERIALS AND WASTE DISPOSAL

Collection, containment, and disposal of the Builder waste shall be the responsibility of the Builder. The Builder shall legally dispose of all waste beyond the Community limits. Contaminated materials shall be removed from the Builder Project Site immediately. Excess materials shall only be stockpiled within the limits of the Builder Project Site. The Builder shall not store, stage, or dump materials beyond the limits of its Project Site.

1-13 MISCELLANEOUS

1-13.1 Concrete Clean Out

Concrete clean out locations shall be within the limits of the Builder Project Site and shall not leach into sensitive areas.

1-13.2 Portable Toilets

The Builder shall provide and maintain portable toilet facilities. Portable toilets shall not exceed maximum usage as designated by the manufacturer or supplier. Portable toilets shall be located outside of the public right of way, unless otherwise approved.

1-13.3 Graffiti Removal

Graffiti can potentially ruin a community's good reputation if allowed to persist. It can cast a concern into a potential buyer's mind or with an existing resident as to the safety of the Community. Additionally, experience demonstrates that immediate removal of graffiti reduces the likelihood it will reappear.

Graffiti shall be removed immediately upon discovery, but in no case shall it be permitted to remain for a period of time longer than twelve (12) business hours. All graffiti and vandalism shall be reported to the Association and the City of Issaquah Police Department.

1-13.4 "Off Highway" Rated Equipment

"Off-Highway" construction equipment such as, but not limited to, scrapers, off-highway trucks, (trucks having greater than HS-20 axle loading), and track equipment are prohibited from operating outside of the limits of the Builder Project Site.

1-13.5 Prohibited Activities

The following activities, uses, and/or practices shall not be permitted within the Community.

Fishing, hunting, off road motor sports, swimming, firewood cutting, use or possession of illegal drugs, consumption of alcoholic beverages, playing loud music, burning, including campfires; unauthorized travel over trails and haul roads, and loitering within the Community during non-work hours.

The Builder shall observe "No Trespassing" postings, and shall not travel through non-Builder construction areas.

Dogs are prohibited and shall not be brought to the Builder Project Site.

SECTION 2 - CONSTRUCTION AND COMPLETION

2-01 GRAND RIDGE DRIVE SPECIAL PROVISIONS

The CCRs include limitations and specifications for installation and maintenance of right-of-way landscaping, architectural review, soil amendments, clearing limits and impervious surface limits, and construction timelines for each residence, and other items. This Boulder's Project Manual summarizes some of the relevant CCRs and describes the process at the time of publication.

2-01.1 Maximum Clearing and Impervious Surface

Clearing shall not exceed 58,800 SF and impervious surfaces shall not exceed 9,000 SF.

2-01.1a Clearing Limit Review Process

1. Boulder shall submit to the ARC, a site plan and clearing limit calculations indicating compliance with clearing limits.
2. ARC will conduct site meeting to review staked clearing limits. A ARC representative will photo-document prior to clearing activity.
3. Prior to Permit submittal the ARC will verify the clearing limits illustrated and calculated in the permit document are consistent with the clearing limit requirements.
4. ARC will issue a letter to the Boulder with the results of item # 3 above. Any variation from the proposed and approved clearing limits is the property Boulder's responsibility to mitigate.
5. Boulder shall submit copy of approved permit set to ARC.

The above steps are also outlined in Appendix A of the ARC Standards. Proposed revisions to clearing limits must be submitted and approved by ARC. King County and ARC may impose penalties if clearing exceeds the allowable area and potentially require additional mitigation planting. Clearing or grading within any portion of the reserve drainfield area is strictly prohibited; primary drainfield areas is counted against the allocated lot clearing.

2-01.1b Clearing Limit Setbacks

Each Grand Ridge lot includes established clearing limit setbacks. Tree removal within the clearing limit set back requires ARC approval, including an approved landscape plan for the setback area proposed to be cleared.

2-01.1c Impervious Surface

Clearing shall not exceed 58,800 SF and impervious surfaces shall not exceed 9,000 SF.

2-01.1d Soil Amendment

All cleared areas not covered with impervious surface shall be amended. Two inch (2") scarification of underlying till to preclude stratification and eight inches (8") amended topsoil in accordance with the specification shall be placed. Amended topsoil with an organic content from eight to thirteen percent (8-13%) dry weight, fines ranging from ten to thirty percent (10-30%) passing the number 200 sieve meets the specification to enhance absorption of rainwater. The Boulder shall submit for approval to King County a soil and sieve analysis prepared by a certified laboratory as required for verification of an acceptable product. A letter of verification that this permit obligation has been met is required for close out with the ARC. Copies of the letters of inspection by a licensed landscape architect and copies of the lab reports documenting the soil amendments met the permit requirements must be received and approved by the ARC prior to close out.



2-02 ARCHITECTURAL REVIEW COMMITTEE

The Builder shall obtain ARC approval for construction and location of sales trailers prior to mobilization to the Builder Project Site. Please refer to the Standards applicable to the Project Site for further information.

2-02.1 Design Changes

The Builder shall notify the ARC of any changes to ARC approved plans and receive written approval before implementing the changes.

1. Field Changes – Field changes are minor changes to the approved plans which shall be reviewed and approved by an ARC Representative in the field. Field changes that are executed without prior ARC approval are the responsibility of the Owner and may require correction at the discretion of the ARC.
2. Design Changes - Design changes are changes that, in the opinion of the ARC, constitute a significant departure from the approved plans. Design changes must be submitted to the full ARC for review and approval.

2-02.2 Field Review

The ARC may perform multiple field inspections of all homes for architectural and landscape compliance, including (a) at framing (b) at siding completion; and (c) after ARC receives Notice of Completion. The ARC may conduct additional field reviews in its discretion. The ARC will notify the Owner in writing within 3 business days after each field review if any non-conformance is identified or if the ARC determines that the design style, final materials and/or construction quality are not consistent with the neighborhood vision or the Architectural Standards. The Owner shall have 14 calendar days to resolve any non-conformance with ARC approved plans. If the home does not come into conformance within that 14-day period, the home shall be determined to be in Non-Compliance with the approved plans and subject to a Stop Work Order as provided below and in The Builder's Project Manual (Appendix M). After any finding of non-conformance, the Owner must submit a written request for compliance review to inform the ARC that the home is in compliance and ready for re-review.

The fact that the Work as it is being constructed is consistent with the approved plans shall not prevent the ARC from disapproving aspects of the Work as constructed, delivering a notice of Non Compliance, issuing a Stop Work Order, and imposing reasonable requirements for changes in design and materials to a home during construction, if in the judgment of the ARC such changes are necessary (a) due to inferior workmanship, quality of construction or materials, (b) because final materials and details that were not specifically approved by the ARC are not consistent with the neighborhood vision and the ARC Standards, and/or (c) to ensure that the home as ultimately constructed will be in compliance with the neighborhood vision and the ARC Standards.

2-02.3 Non-Compliance

If construction of any Work has not been approved by the ARC and/or if the ARC delivers a notice of Non-Compliance as part of its field review and/or the ARC determines that there is any other violation of the CCRs or the ARC Standards, then the ARC may issue a STOP WORK ORDER. All expenses incurred by Declarant or the Association associated with Non-Compliance will be the responsibility of the Owner. Complete payment and correction of the Non-Compliance will be



required prior to the removal of the Stop Work Order. Violations of rules, covenants, or restrictions may be subject to a fine.

2-03 PERMANENT POWER

Each Grand Ridge Drive lot has been provided a stubbed electrical conduit to the property. The Builder is responsible for purchasing and having installed the power transformer for permanent electrical service. Application shall be made with Puget Sound Energy. The transformer shall be installed within the utility easement, next to the other franchise utilities, no alternative location is acceptable.

2-04 WATER METERS

Each Grand Ridge Drive Project Site is provided a domestic meter setter and an infiltration meter setter. The Water Purveyor will purchase and install the domestic water service meter and infiltration water meter, at Builder's expense. The Builder is responsible for purchasing and installing the backflow prevention devices. The wholesale water agreement limits domestic water service and infiltration water meters to a maximum size of 5/8"x3/4".

King County may require that a separate fire suppression meter may be installed. At the Builder's cost, the Water Purveyor will obtain necessary permits and purchase and install the meter setter, and water meter, for the residential fire suppression system, but the Builder is responsible for purchasing and installing the backflow prevention device.

Water Purveyor will test and certify backflow prevention devices as needed for operation and will provide Builder with copies of the backflow prevention device's certification.

The Water Purveyor, when installing the water meters, will excavate, bed, backfill, and restore the Project Site to the same condition in which it existed before any such entry upon the Project Site was undertaken.

Contact the Association to schedule installation(s).

2-05 HAZARD AND FALLEN TREES

The Grand Ridge Drive neighborhood is heavily wooded. Potential hazard trees susceptible to wind damage may exist. It is the responsibility of each Builder to address hazard or fallen trees with the appropriate landowner.

For example, if a hazard tree exists on King County property, or if a tree originally located on King County property has fallen onto a Builder's Project Site, said Project Site Builder shall contact King County for resolution.

Hazard trees on a Builder Project Site which are located outside of the ARC / King County approved clearing limits shall be addressed with the ARC and King County prior to removal.

Should a tree originating on a Builder Project Site fall onto property owned by others, the Project Site Builder must contact the affected party upon discovery.

2-06 HIGHLANDS FIBER NETWORK (HFN)

The Builder shall coordinate fiber optic installation, inspection, and documentation with HFN, which are set forth in the document titled "Data Network Specifications," which is contained within the Standards. The



Builder shall schedule, and successfully pass, two (2) inspections, one at Rough-In, and one at Trim-Out. After a successful completion of the Rough-In inspection, the Builder low voltage Contractor will test and submit a pass certification on the CAT 5 wiring to HFN. The Trim inspection request should take place at least (2) two weeks prior to occupancy.

Rough-In and Trim-Out inspections should be requested through the HFN website: www.hIGHLANDSFIBERNETWORK.com/Owners/Builders/. Since failure to request inspections causes problems for homeowners, the Builder may be fined for such failures.

2-07 FRANCHISE UTILITIES

The Builder shall coordinate its Work with third party franchise utility companies. The Builder improvements shall not interfere with the serviceability of third party facilities in accordance with third party specifications. The Builder shall advise any franchise utility company of a facility within the Builder Project Site that is believed to have been constructed in error, and of grade changes that may prohibit serviceability of any franchise utility.

2-06 GOVERNING AUTHORITY

The Builder shall be responsible for understanding, coordinating, and scheduling inspections and obtaining approvals required by the Governing Authority for each phase of its Work. Declarant at its sole discretion, and without any liability, may provide facilitation between the Builder and a Governing Authority, however, statements or inference by Declarant are not representations to any Governing Authority.

2-07 CERTIFICATIONS

Required certifications include, but are not limited to Built Green, energy star, fiber optics, "as built" clearing limits and calculations, and "as built" impervious surfaces and calculations, landscape and soil amendments acceptance by a licensed Landscape Architect.

2-08 FINAL ACCEPTANCE

The Builder construction obligations shall not be considered fulfilled until all required approvals and acceptances have been obtained. At the Builder request, the Association, Declarant and the Builder will review the Project limits and agree upon a final punch list. Upon satisfactory approval and acceptance of the Builder completed punch list Work in the form of a Final Acceptance Letter, and the Security Deposit, minus any applicable fees or charges will be refunded by the Declarant if applicable. See the Close Out Procedures within this Manual for more information.

SECTION 3 - SAFETY AND SECURITY

3-01 SAFETY REGULATIONS

The Builder shall comply with, and assume full responsibility for compliance of all contractors and subcontractors of any tier, with safety and health regulations of Federal, State, and Local authorities. The Builder is entirely responsible for the safety of their Project Site, including the safety of employees, subcontractors, and all visitors.

All laws applicable to public roads and highways shall apply to the roads within the Community.



The Builder shall be responsible for all orientation and training of their employees and subcontractors of any tier, including orientation to the Community and Project specific rules. The Builder shall remedy safety hazards without delay.

3-02 HOUSEKEEPING

In accordance with 1-02, Declarant and the Association retain the right to correct Builder housekeeping deficiencies at the Builder expense.

An emphasis shall be placed on achieving minimum housekeeping standards on Friday afternoons. Work performed on Saturday shall not compromise the organized, safe, and clean condition of the Builder Project Site.

3-02.1 Public Right-of-Way

Providing safe pedestrian routes throughout the Community is a priority. All sidewalks, wheel chair ramps, trails and other pedestrian routes shall be kept clear of Builder activities. Builder activities that encroach upon the right of way, shall meet the City's minimum vehicular and pedestrian traffic control requirements.

Roadways, right-of-ways and trails used by the Builder shall be maintained to equal or better condition than at the time of conveyance to the Builder. Maintenance responsibilities may include scheduled, prorated cash contributions to a comprehensive program, or self performance of the Work required for cleaning, repair, or maintenance activities. Hard surfaces shall be swept as needed to prevent accumulation of soil, gravel, snow and other foreign objects. Soft surfaces shall be raked to maintain an even grade, an even transition with adjacent surfaces and to remove debris.

Unprotected electrical extension cords shall not cross the traveled roadway.

3-02.2 Project Site

Clean sites sell more homes and provide a safer environment for workers, homebuyers, inspectors and visitors. Material waste, garbage and debris, shall be consolidated daily. Consolidation containers must be enclosed trash receptacles in hopes of limiting the migration of debris and shall be emptied weekly, or regularly as needed, to allow for continual use. Accumulation of material waste, garbage and debris in a pile, is prohibited. If waste piles are created, they shall be removed daily.

The Project is susceptible to high winds. Debris shall be managed to prevent being carried by the wind beyond the limits of the Builder Project Site. It is strongly advised the Builder utilize a Consolidation container with a lid or cover to prevent wind borne debris from littering the Project Site.

Plant material shall not be permitted to grow between the back of sidewalk and the Builder fence material. When the Builder Project Site is adjacent to any improvement, the Builder shall maintain a minimum two-foot (2') wide perimeter buffer at the improvement. Said buffer shall be maintained at a maximum height of two inches (2"). Weeds and brush within other areas shall be maintained at a maximum height of twelve inches (12").

3-03 TRAFFIC AND PEDESTRIAN CONTROL

The Builder shall obtain any and all permits issued from the City of Issaquah that are necessary to close the roadway or sidewalk and submit details to the Community Managers for public notice at least 48 hours prior to the Work being done.



The Builder shall provide flaggers, signs and other traffic control devices for the safety of the public, the Builder own employees, and the Community, and to facilitate the movement of the traveling public, third party operations, and emergency vehicles. The Builder shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Builder operations which may occur on roads, streets, sidewalks, or within other rights-of-ways. Right-of-ways shall not be obstructed, nor shall Work be done within the roadway until all necessary signs and traffic control devices are in place.

Upon failure of the Builder to immediately provide flaggers; erect and maintain and remove signs; or provide, erect, maintain, and remove other traffic control devices when ordered to do so by the Community or Developer, the Community may, without further notice to the Builder, perform any of the above, at the Builder expense.

The Builder shall be liable for injuries and damages to persons and property suffered by reason of the Builder operations or any negligence in connection therewith.

3-03.1 Traveling Safety

All individuals conducting business within the Community shall obey temporary and permanent traffic control signage. Negligent or reckless driving, equipment operations and speeding are prohibited. The Community reserves the right to require immediate and permanent removal of any person engaged in negligent or reckless driving while conducting business within the Project.

3-04 PARKING

At a minimum, Builder parking shall be in accordance with Appendix H, Urban Road Design Standards, of the Development Agreement for Issaquah Highlands. The Builder shall provide for emergency vehicle and community through access at all times. The Builder shall participate in the development of, and abide by, a designated parking plan for its Project Site. Development and maintenance of a parking pad within its Project Site, erection and maintenance of no parking signs, barricades and other devices may be required to comply with this section. The Association and Declarant reserve the express right to prohibit the Builder, the Builder employees and subcontractors access to on street parking.

Builder will establish provisions to prevent parking within restricted zones at fire hydrants, mailbox structures and intersection approaches, to assure ingress and egress of third parties and the traveling public past or through its project site. The Builder shall not park adjacent to occupied homes. The Builder shall monitor roadways adjacent to its Project Site to insure that none of its employees or subcontractors are parking in prohibited areas.

3-05 TEMPORARY CONSTRUCTION GATE

Declarant has installed a temporary construction gate to deter unauthorized access to Grand Ridge Drive during non-working hours. The Association provides after hours security patrol to all Issaquah Highlands residents. However, Builder is advised of potential security and theft issues due to the Project Site's remote location. A video camera and perimeter fence around the Lot are recommended. Law enforcement services within Grand Ridge Drive are provided by King County Sheriff Department.

SECTION 4 - ENVIRONMENTAL IMPACT

4-01 RESPONSIBILITY

It is paramount that the Builder manages its operations to prevent:

- A. Turbid water discharge greater than permissible under current King County requirements; and,



B. Release or spill of hazardous materials from its Project Site.

The Builder shall prepare a response and reporting plan that is in accordance with its legal obligations under federal, state, and local requirements as well as any requirements under the Development Agreement.

4-02 STORMWATER EROSION AND SEDIMENT CONTROL

This section identifies minimum temporary erosion and sediment control guidelines. The Builder shall abide by all rules and regulations established by King County and other governing authorities. The Builder may be subject to supplemental terms and conditions set forth by agreements with Declarant.

Builder is advised that portions of the Issaquah Highlands Site are within Sensitive Areas, including wetlands and wetland buffers. The Builder Work activities shall not encroach upon buffers beyond the limits approved under its permit. The Builder is advised that the Issaquah Highlands Site is high profile with regards to storm water discharge; surface water from the Builder Site may potentially discharge into wetlands, streams, other sensitive areas, and residential properties.

The Builder is responsible for understanding the limits of its Project Site boundaries and shall be responsible for all damages resulting from failure to perform its Work in accordance with governing regulations and Development Agreement, in addition to the terms set forth by the REPSA.

The Builder shall monitor storm water run-off and discharge regularly when storm or ground water is present and shall modify its operations so as to minimize sedimentation to storm water. Stormwater runoff, mud, dust, snow, etc. that originates on or migrates through the Owners/Builders Project Site shall be the responsibility of the Builder. The Builder shall practice best management practices, monitor the weather forecast, prepare for storm events, maintain and improve, as necessary, all temporary erosion and sediment control measures before, during, and after storm events. The Builder shall be responsible for preventing turbid water from leaving its Project Site.

The Builder shall understand and perform its work in accordance with governing regulations. This includes but is not limited to supplying a plan to the authority having jurisdiction for the wet weather season, typically between October 1st and April 1st prior to working within these dates.

4-03 ROADSIDE DRAINAGE

The Grand Ridge Drive neighborhood does not have an underground stormwater drainage system, it relies upon conveyance of stormwater through a surface drainage swale system. In most cases, the contiguous, rock armored or unlined stormwater swale is located adjacent to the roadway's pavement edge, within the utility easement of each private Lot. The Builder is strictly prohibited from altering the existing drainage swale or interfering with the surface water drainage within this easement without the Association's written consent. The Builder will be liable for repair and mitigation costs required as a result of its activities which interfere with the surface drainage system's integrity.

The Builder is aware its King County approved construction plans may include a provision to construct a vegetative buffer, rock drainage system, driveway culvert, and/or stormwater piping system to accommodate stormwater from the adjacent roadway.

4-04 HAZARDOUS MATERIALS

As a part of the Builder hazardous material management and communication program in accordance with the Hazardous Material Plan contained within this Manual, it shall develop a written Spill Response, Control, and



Reporting Plan. The Plan shall be kept on the Project Site at all times, be clearly labeled and made accessible during work hours to all individuals who perform Work on the Project Site.

SECTION 5 – EXISTING LANDSCAPE IMPROVEMENTS

5-01 PROTECTION

The Builder shall protect common area and privately owned landscape and infiltration (non-builder owned landscape), including Grand Ridge Drive entry and adjacent improvements. Builder shall provide the Association advance notification of all activities that may potentially cause damage to common area landscape. Activities that may damage common area landscape are not limited to; operation of equipment over the improvements; removal, excavation, or drilling within the limits of the improvements; sign or fence post installation; and placement of tools, equipment, and materials within limits of the improvements.

5-02 RESTORATION AND REPAIR

The Builder shall be liable for restoration and repair costs for damage to improvements adjacent to its Project Site, and for plant material within the infiltration zone limits of infiltration system damage adjacent to the Builder's Project Site. The Builder shall not perform restoration or repair work to common area or private landscape and infiltration without express consent of the Association or private property Builder.

SECTION 6 – MISCELLANEOUS PROVISIONS

6-01 FINES

In addition to remedial work charges and damages, Declarant and the Association will assess non-compliance fines for Builder activities that are inconsistent with the Builder obligations in accordance with the Contract Documents. Fines or other amounts due, under these provisions, at the Association's discretion will be invoiced and payable to the Issaquah Highlands Council or the Association as applicable, within ten (10) days of date of invoice. Fines are authorized for (and not limited to) the following:

Work Hour Violations – the Association will endeavor to provide the Builder with division and lot number or street address, description of activity being performed and/or violator's company name, license plate number, vehicle description, and date and time of violation. However, failure of the Association to do so shall not provide relief.

Water and Power Violations – Builder use of water and power from an occupied residence. Association will provide location of violation, date and time and will endeavor to notify the Builder authorized representative upon discovery of the violation.

Surplus Materials, Waste Disposal, Housekeeping – Builder failure to properly respond to Association's notification of housekeeping violations in a timely manner, including, but not limited to; staging and stockpiling equipment and materials beyond its legal property limits, accumulation of waste and debris within its property limits, and blowing debris.

Traffic Control – For right-of-way obstruction, failure to erect and maintain traffic control devices, and failure to facilitate safe travel of the public.



Parking Violations – Including, but not limited to, those that impose a safety hazard and for improper use of alleyways.

Environmental Impact – Failure to install and maintain erosion control measures that could potentially, or does result in turbid storm water discharge, for failure to develop and implement a Hazardous Material Spill Response, Control and Reporting Plan, and in maintaining a Spill Response Kit.

Common Area Landscape and Irrigation – Failure to communicate and coordinate Builder activities that result in damage to landscape improvements, or the irrigation system, and for unauthorized repair to existing improvements.

Failure to Participate - Willful disregard of Community expectations and policies in accordance with the Contract Documents, not limited to consistent failure to demonstrate collaborative efforts with the Developer, the Association and third parties; including using an unapproved builder or architect for the Project Site, and failure to participate in established coordination procedures and programs.

HFN Trip Charge – for each supplemental trip required for any fiber network contractor to perform its work or re-inspect the Builder Work, when the supplemental trip resulted from a deficiency caused by the Builder Work.

Non Compliance – All Work that has not been approved by the ARC and/or field revisions that are not approved by the ARC.

Additional fines may apply in accordance with subsequent agreements.

6-01.1 Amount of Fines

- First Violation – One hundred fifty dollars (\$150.00)
- Second Violation - Willful failure to remedy first violation within specified period of time – Three hundred dollars (\$300.00)
- Third Violation - Willful failure to remedy first violation within twenty-four (24) hours of second notice – Five hundred dollars (\$500.00)
- Work Hour Fines - Typically assessed at one hundred fifty dollars (\$150.00) per incident. However, repeat violators will be assessed three hundred dollars (\$300.00) per incident. Sunday and Holiday work hour fines are assessed at five hundred dollars (\$500.00) per incident.
- Improper Disposal – Five hundred dollars (\$500.00) plus removal and restoration costs.
- Failure to Participate – Five hundred dollars (\$500.00).
- HFN Trip Charge – One hundred fifty dollars (\$150.00).
- HFN Failure to Schedule Inspection – Five hundred dollars (\$500.00).
- CC & R Violation - Violations of rules, covenants, or restrictions may be subject to a special charge of one hundred dollars (\$100.00) per day, or the special charge specifically listed in the CCRs for the violation(s).

- Non Compliance - One hundred dollars (\$100.00) per day.

In the event of conflict between documents, the greatest fine value shall apply.

6-02 **REMEDIAL WORK**

The Builder shall bear any extra expenses incurred by Declarant, or the Association, for work performed by Declarant or the Association, or others at the direction of Declarant or the Association, which is required due to the Builder failure to complete, in a timely manner, any portion of the Work required to comply with the Architectural Standards (including this Manual) and any Contract Documents. These expenses shall include all increased costs for completing the Work, including overtime and premium rates, and all damages sustained, or which may be sustained, by Declarant, or Association, by reason of such refusal, neglect, failure or discontinuance of Work by the Builder. Declarant will notify the Builder of such Remedial Work charges.

Builder hereby agrees to reimburse Declarant from the Builder own funds for all costs of Remedial Work and to make any such payments within the period required by Declarant's written demand for payment. Declarant may enforce the payment obligation using any remedies at law or in equity, as well as all remedies set forth in the REPSA, including but not limited to the Security Deposit.

6-03 **DAMAGES**

The Builder agrees to pay all actual damages incurred by Declarant or the Association, which result from the Builder failure to perform its obligations under the Architectural Standards (including this Manual) and any Contractual Documents. Builder payment for damages includes plant material damage resulting from irrigation system damage caused by the Builder activities.

GENERAL CLOSE OUT REQUIREMENTS

The following steps must be completed prior to release of security deposit:

1. Builder delivery of the Builder Notice of Completion /Request to Inspect to ARC (see Appendix N)
2. HFN Acceptance of Category 5 Cable Certification
3. Drainage Inspection Reports
4. Ridge Height Certification
5. Sustainable Building Verification from Third Party Inspector
6. Declarant Accounting Clearance
7. IHCA Accounting Clearance
8. Highlands Council/HFN Accounting Clearance
9. Adjacent Improvements Acceptance
10. ARC Letter of Final Acceptance
11. Declarant to process any applicable deposit refund in accordance with these Standards or the REPSA.

The Letter of Final Acceptance reflects ARC requirements only and in no way constitutes approval or compliance with standards or requirements set forth by City, County, or any other governmental agency.

Issaquah Highlands Contractor's Guide
Best Management Practices

Issaquah Highlands
Contractor's Guide

1997-1998

Including Best Management
Practices for Waste Management

Prepared by Port Blakely Communities
with
City of Issaquah Public Works Engineering Department
King County Solid Waste Division
King County Local Hazardous Waste Management Program
Washington State Department of Ecology

Written by
O'Brien & Company

© 1997 by Port Blakely Communities



Printed on Recycled Paper

Issaquah Highlands Contractor's Guide

Best Management Practices

Table of Contents

Purpose.....	3
Why Use the Guide?	4
How to Use This Guide	4
General Practices Checklist	6
Solid Waste Management Checklist	9
Hazardous Waste Management Checklist.....	15
Appendices*	
A. Definitions	
B. Agreement to Comply (form)	
C. Application for Approval of Alternative to Guide (form)	
D. Resource List	

Issaquah Highlands Development Resource Center: A number of resources have been compiled and are available for reference at the Port Blakely Communities Office, including:

Hazardous Waste Directory, 1996-1997 Revised Edition, "The Yellow Book," published by the Local Hazardous Waste Management Program in King County

Emergency Response & Hazardous Material Spill Control Plan

Environmental Handbook for Washington Construction Contractors - Regulatory Guidance, published by Department of Ecology

Issaquah Highlands Emergency Spill Containment Plan (wetponds)

"Making Your Program Work," *Designing a Waste Management Plan Fact Sheet* prepared by King County/BIRV

Recycling Plus Program Manual, published by the Clean Washington Center

Seattle/King County 1997 Construction Recycling Directory

Stormwater Pollution Prevention Plan (SWPPP)

The Contractor's Guide to Preventing Waste and Recycling prepared by King County Solid Waste Division

Issaquah Highlands Contractor's Guide

Best Management Practices

Purpose

This Guide describes Best Management Practices (BMPs) for material selection, purchase and installation, construction waste management, pollution prevention, and site protection. The BMPs incorporate concepts of waste prevention, reuse, job-site recycling, and other methods.

Compliance Information

The Guide has been compiled to meet development standards for water quality protection, stormwater management and ground water protection as set forth in an agreement between King County, the City of Issaquah, and the owner/developer of Issaquah Highlands (Grand Ridge Limited Partnership and Glacier Ridge Limited Partnership). The agreement requires the development of this Guide and that it be distributed to all developers, contractors, and subcontractors working on the Issaquah Highlands Development. (Builders and General Contractors will be responsible for distributing the Guide to Subcontractors.) It is a condition of permit issuance that contractors and subcontractors agree in writing to abide by this Guide or an equivalent. You will be required to sign either a form stating you are abiding by the Guide, or submit an application for approval of an alternative. Forms are provided in the back of this Guide. (For more details, see "Compliance With Guide," p. 19).

Environmental Stewardship and Sustainability

The development standards referenced above were created, in part, because Issaquah Highland Development is located on aquifers used by citizens living in the City of Issaquah, and is considered an environmentally sensitive area. However, they are also part of a larger vision to develop a "sustainable community" on the Issaquah Highlands Plateau. To achieve this vision a variety of progressive planning concepts will be used. Among them is the idea that the development will be designed and constructed to "encourage and promote a community ethic of environmental stewardship and sustainability."

To further define this planning concept, Issaquah Highlands Development has set the following goals and objectives:

- To provide for the growth of a thriving human community functioning within a sustainable relationship with the natural environment. This includes protecting wildlife habitat, maintaining the area's natural water cycle, and reducing the need for auto travel within the community.
- To foster the development of leadership and technologies that protects the natural environment by disseminating technical information ; and
- To foster an awareness of our collective responsibility as stewards of our developed and natural environment by restoring, conserving, reducing and recycling site and landscape materials during construction and operational maintenance, by maximizing community recycling, and by providing information on these programs to community residents.

Issaquah Highlands Contractor's Guide

Best Management Practices

Taking Part in the Vision

As a contractor involved in the Issaquah Highlands Development, you will play an important role in protecting the environment during build-out and after you leave. In particular, by incorporating sustainable principles in materials and waste management practices you will help to:

- reduce the amount of raw materials used to build the development;
- protect soil and natural vegetation;
- prevent pollution of surface and ground waters; and
- reduce the land and other resources used to build and maintain local disposal facilities.

Why Use the Guide?

In addition to satisfying environmental goals of the Issaquah Highlands Development, there are other benefits for developers, contractors, and subcontractors who use these BMPs as a general practice. In fact, you may already employ many of them, simply because they make good business sense. Briefly, the benefits are:

- reduced liability associated with improper waste management;
- reduced costs as a result of reduced material use and waste disposal;
- increased job site safety; and
- good public relations.

Because of the Issaquah Highland's special commitment to progressive planning concepts and its environmentally sensitive and attractive appeal, you can expect that the development will draw tenants and homeowners with a heightened awareness and desire for environmental protection. Implementing the BMPs in this Guide is one way to meet this demand.

How to Use the Guide

The BMPs are intended to provide guidance when developing your own work plans. As such they do not include detailed instructions but describe a number of practices you should apply *as appropriate*. The Guide is not intended to eliminate or substitute for the developers' or contractors' own judgment or accepted engineering and construction methods. All contractors are required to abide by the management practices indicated in the Guide as they apply to particular sites and projects unless a waiver, approved alternative, regulation, or code specifically excludes it. Local, State, and Federal regulations must be followed and are not to be superseded by this Guide.

BMPs are provided that apply to both solid and hazardous waste materials. Some BMPs are common to all waste management activities and are presented together as General Practices. Resources are included or listed in the Appendix D for more detailed information.

Issaquah Highlands Contractor's Guide Best Management Practices

First, Develop a Plan

Although a formal workplan is not required, a project-specific plan is key to successful incorporation of the types of practices recommended in this Guide. Your plan should:

- identify the practices you intend to employ;
- identify the goals your company has set with regard to these practices and overall;
- identify who is responsible for coordinating or carrying these practices out.

The text of the Guide is organized as a checklist. Simply check off items that are applicable to your project (some are required, and are already checked). Provide the list and company's goals to the person(s) responsible for coordinating or carrying these practices out. You can also incorporate the checklist in subcontractor agreements. Several resources provide assistance in developing waste management plans. These resources will be available for use at the Port Blakely Communities' office during the build-out phase.

Then, Let Everyone Know

Make sure that all key people, including job-site coordinators, superintendents, foremen, subcontractors and service providers are aware of your plan and that you are committed to it. Prominently posted construction signage and routine reminders at regular safety meetings is often a good way to let everyone on the site know what you expect of them and how well they are doing. Language in subcontractor agreements can reinforce the plan.

The Recycling Plus Program Manual is an important resource if you wish to adopt a company-wide program and get the benefit of a team approach. The manual includes camera-ready art and signage ideas, as well as other communication tools. (Copies of the *Recycling Plus Program Manual* have been made available to construction businesses working on the Issaquah Highlands office. You can pick a copy up there.)

Also, let the public know about your contributions to the environment -- take credit for your efforts. King County has business recognition programs that are applicable to your work at the Issaquah Highlands Development. For information about GreenWorks/Construction Works, call Theresa Koppang of King County Solid Waste Division at 296-8480; for information about EnviroStars, call Laura Tomchick of the King County Local Hazardous Waste Management Program at 689-3063. (For more information, see Appendix D Resources.) Business recognition programs can not only provide distinction in the marketplace, but help promote the concept of environmental stewardship in general.

Issaquah Highlands Contractor's Guide

Best Management Practices

General Practices Checklist

Check off items applicable to your project (some are required, and are already checked). Provide the list and company's goals to the person(s) responsible for coordinating or carrying these practices out. You can also incorporate the checklist in subcontractor agreements. Some *sample* language for a subcontractor agreement is provided below. You will need to make sure the language you use is appropriate in the context of your overall agreement.

SAMPLE:

"Subcontractor will be required to abide by the management practices indicated in the Issaquah Highlands Contractor's Guide as they apply to this site (or project), unless a waiver, approved alternative, regulation, or code specifically excludes it.

In particular, the subcontractor will be required to reduce the amount of hazardous and solid waste generated on the site and recycle materials per the Contractor's job-site recycling plan (or the attached checklist). Subcontractor will follow source-separation recycling requirements for each waste type targeted in the plan and use the appropriate on-site containers for each waste type. Subcontractor will follow pollution prevention practices outlined in the attached checklist. Subcontractors are required to participate in job-site meetings during the course of the project as part of the waste reduction and pollution prevention program. In addition, subcontractors are to use recycled-content products wherever feasible."

For specific ideas about ways to carry out checklist options, see *The Recycling Plus Program Manual* and other resources, available at the Port Blakely Communities Office.

Materials Selection & Purchase Options

Sourcing:

- ☐ Choose suppliers who use reusable, recyclable, or recycled-content packaging. Let your suppliers know that's what you are looking for.
- ☐ As much as possible, arrange for "just in time" deliveries

Selection:

- ☐ When possible, make sure recycled content or resource-efficient building and landscaping materials are specified and installed.
- ☐ Substitute recycled content or resource-efficient building and landscaping products as equivalents when cost-effective. See Appendix D for resources providing specific information on recycled content materials available.

Waste Reduction Options

Signage:

- ☒ Clearly mark material storage areas and post storage recommendations. Post waste reduction goals in material storage area and other central locations, such as the job-site trailer, with illustrations of specific examples of some significant ways to reduce or reuse waste materials generated on the job.

Issaquah Highlands Contractor's Guide Best Management Practices

An example of a goal could be: "To reduce the amount of packaging waste generated on the site" -- a specific example could be a "returning packaging to the supplier." Another example of a waste reduction goal could be: "To reduce the amount of hazardous waste generated on site" -- a specific example could be purchasing non-toxic cleaners.

Training:

- ☒ Use a meeting to educate on-site contractors, subcontractors and laborers as to importance of waste reduction (including reuse) rather than disposing construction materials, and the types of techniques that can be used to reduce waste. This meeting can be combined with meetings to train personnel in recycling and site protection techniques you are planning to put in place on the project. (Reminders at safety or regular meetings, and getting ideas from participants are recommended.)
- ☐ Provide positive incentives (For example: hats, T-shirts, pizza) to crews to encourage waste reduction.
- ☐ Direct crews to make use of scraps and use less materials overall.

Storage:

- ☒ Provide weather protection for stored materials. Store materials in a dry, protected place.
- ☒ Use manufacturers' recommendations for storage.

Operations:

- ☐ Estimate as accurately as possible. Suppliers can often provide tips on estimating specific materials to help you accomplish this and avoid over-ordering.
- ☐ Prepare and use detailed take-offs and provide as a reference for crews.
- ☐ Reuse materials whenever possible.
- ☐ Donate or sell reusable materials from your job.

Job-Site Recycling Options

Signage:

- ☐ Post waste reduction goals in material storage area and other central locations, such as the job-site trailer, with illustrations of specific examples of some significant ways to reduce or reuse waste materials generated on the job. An example of a goal could be: "To reduce the amount of packaging waste generated on the site packaging" -- a specific example could be a "returning packaging to the supplier." Another example of a waste reduction goal could be: "To reduce the amount of hazardous waste generated on site" -- a specific example could be purchasing non-toxic cleaners.
- ☐ Post progress towards recycling goals in a prominent location for both public visibility and to keep site crews updated.

Issaquah Highlands Contractor's Guide

Best Management Practices

Training:

- ☒ Use a meeting to educate on-site contractors, subcontractors and laborers as to importance of recycling rather than disposing construction materials, the types of materials that can be recycled, including materials that could potentially be hazardous waste, and any restrictions; This meeting can be combined with meetings to train personnel in waste and site protection techniques you are planning to put in place on the project. (Reminders at safety or regular meetings, and getting ideas from participants are recommended.)
- ☐ Provide positive incentives to crews to encourage recycling.

Sourcing:

- ☐ Use Directories provided by King County agencies to identify recycling services in King County. (See Resource List.)

Cleanup & Disposal Options

Sourcing:

- ☒ Reduce your liability by using only responsible haulers who will take the materials generated at your site to properly permitted facilities. Verify this by requiring receipts.

Cleanup:

- ☒ Ensure *all* wastes are removed from the site upon completion of the project.
- ☒ Restrict the use of water for cleanup where sweeping is sufficient.

Site Protection Options

Signage:

- ☒ Post on-site signage to promote an awareness of the sensitive nature of the site with respect to ground and surface waters.
- ☒ Clearly mark sensitive areas to prevent contamination.

Training:

- ☒ Use a meeting to educate on-site contractors, subcontractors and laborers as to importance of site protection and to exchange ideas as to how to accomplish this on the project. (Reminders at safety or other regular meetings are recommended.)
- ☐ Provide positive incentives to crews to promote site protection.

Application:

- ☒ Follow requirements as provided in the Stormwater Pollution Prevention Plan (See Resource List) .
- ☒ Regularly clean around storage and recycling bins.
- ☒ Manage bins to minimize leakage or spillage.
- ☒ Use only storage bins that are watertight, rodent-proof, and easily cleaned.
- ☒ Do not burn, bury or otherwise dispose of rubbish and waste materials on project site.

Issaquah Highlands Contractor's Guide

Best Management Practices

Solid Waste Management Checklist

Good waste management goes hand in hand with an effective safety program. With only slight modifications, a clean, safe site can become a "waste-busting" site. In fact, following the safety program model when developing your waste management program is recommended. Signage, education at weekly meetings, and using incentives is a common thread throughout this Guide and are directly based on the safety program model.

Specific options for solid waste management are provided below. Check off items that are applicable to your project (some are required). Provide the list and company's goals to the person(s) responsible for coordinating or carrying these practices out. You can also incorporate the checklist in subcontractor agreements.

Materials Selection & Purchase Options

Selection:

- ☐ Purchase reused building materials. For best results, the use of salvaged materials should be considered during the design phase. As a rule, most used building materials can be installed as long as they are not acting as a structural component, or might compromise safety. Materials purchased at salvage yards are usually priced at 10%-50% of the going price for new materials.
- ☐ If you are involved in building design, use standard dimensions to reduce wasted lumber, drywall, and other materials.

Sourcing:

- ☐ Use suppliers who use less packaging, such as cardboard, plastic shrink wrap, Kraft paper, wood pallets or frames, and metal bands.
- ☐ Use suppliers who take their packaging back after delivery.
- ☐ If the building design calls for a non-standard dimensions (try to avoid), and you have sufficient dry storage, order in bulk from a supplier who will produce the dimension for you.

Waste Reduction

Training and Enforcement:

- ☐ Require or encourage solid waste reduction in subcontractor agreements (see sample language in general practices checklist.)
- ☐ Provide reminders at safety or other regular meetings of the project's waste reduction goals; use these meetings to report progress, discuss problems, and discuss specific actions that can be taken.

Operations:

Issaquah Highlands Contractor's Guide

Best Management Practices

- ☒ Set up a central area for cutting and storage of scraps for reuse. Studies of construction sites with a centralized cutting area show total waste from the sites were reduced by as much as 15%.
- ☐ Use quality tools and clean thoroughly between uses.
- ☐ Avoid throw-away equipment. Clean and maintain properly to get the full life out of the equipment. Examples of reusable equipment include construction fences, tarps, and refillable propane tanks.
- ☐ Set up labeled bins for different sized nails, screws, etc. to reduce wasted fasteners. Provide weather protection for bins.
- ☐ Create a board-by-board take-off from your order list and provide as cut list to framer.
- ☐ Reuse materials used to build temporary structures. To make reuse easier, use assembly methods (fasten with screws, not nails) that make dismantling convenient.
- ☐ Reuse small or warped pieces of dimensional lumber as blocking, bracing, shims, back framing, or form stakes. (Store in central cutting and storage area.)
- ☐ Sell or give away any wood scraps.
- ☐ Donate or sell reusable items from your job.
- ☐ Move materials leftover from job to job.

Application

- ☐ Use wood-saving advanced framing techniques, including one or more of the following:
 - Drywall stops or clips for backing eliminate the need for extra studs, for example, where one wall abuts another, or where two walls intersect at corners. A box of clips cost about \$160 and supplies three average homes.
 - Two-stud corners. With two-stud corners, back-up for interior finish materials can be provided by drywall clips spaced two feet apart.
 - Insulated headers. Insulated headers reduce thermal transfer (bridging) found in standard construction using solid wood headers for exterior window and door openings.
 - 24-inch on-center framing. (Because there's more room for insulation, your customer will also benefit from greater energy-efficiency.) Refer to UBC for stud sizing requirements. When using this method, apply plywood on a horizontal axis (making the system similar to roof assembly) to eliminate "wavy" walls. It has been shown to provide structural integrity while reducing wood use 15%.

(See Resources for more information on "Advanced Framing.")

Issaquah Highlands Contractor's Guide Best Management Practices

Job-Site Recycling Options

Asphalt, brick, cardboard, concrete, CMU, drywall, metals, and wood are materials that can be easily recycled through haulers and recycling businesses operating in King County. Cost-effective options for other materials, such as carpet and roofing materials, may be available for a project of this scope, and are well worth exploring with carpet and roofing contractors and their suppliers.

Some companies, such as scrap metal dealers, will pay for recyclable material. Others, like drywall recyclers, charge to accept or pick up recyclables. Even if a tip fee is charged, it is generally less than fees paid for landfill disposal. Recyclers have specifications for the types and grades of materials they can accept. To make sure you achieve maximum benefit from your efforts, call first and find out what these specifications are.

There are several resources, including the *Recycling Plus Program Manual*, that provide tips and forms you can use to develop a job-site recycling plan. Tips to making a cost-effective plan, include:

- Keep it simple.
- Target only high-potential materials for recycling and reuse.
- Phase recycling based on construction activities -- recycle material when the volume justifies it.
- Specify methods for storing and collecting recycled materials. Methods should be as convenient as disposal, protect materials from damage, and not require more expense (such as container rental) than necessary. For example, you may want to stockpile cardboard in a garage, use a roped-off area for metal, and use containers for wood and drywall.
- Specify methods to communicate plan and benefits to all personnel working on the job, such as signage, safety meetings, contract language, information packets.
- Specify methods to provide recognition to everyone participating in the program.

Planning:

- ☐ Identify materials that can be recycled cost-effectively in King County and target them in your plan.
- ☐ Prepare a job-site recycling plan and post on-site.
- ☐ Set a measurable goal for recycling. For example, "We will attempt to recycle 50% of the waste generated on this job."

Signage:

- ☒ Clearly mark recycling areas and containers to prevent contamination. Make sure the signage provides information on what is acceptable. (For example, "No, wood with paint," "Yes, wood with nails.")

Issaquah Highlands Contractor's Guide

Best Management Practices

Training and Enforcement:

- ☒ Include a requirement to recycle as much as possible in all subcontractor agreements; identify materials that are cost-effectively recycled in the project area.
- ☐ Provide reminders at safety or other regular meetings of the project's waste reduction goals; use these meetings to review where, when, and how materials will be source separated and collected, report progress, discuss problems, and discuss specific actions that can be taken. Also use these meetings to exchange ideas as to how to accomplish this with highest efficiency.

Sourcing:

- ☐ Evaluate your options for transporting recycled materials to appropriate facilities. Local options are provided in the *King County Seattle/King County 1997 Construction Recycling Directory*. These options represent four types of services:
 - Full Service Recycling Contractor: They provide all bins, on-site sorting, and pick up. They can offer other services as well, such as decontaminating and leveling loads for greater savings.
 - Garbage Hauler: Your hauler may provide bins and pick-up for certain materials.
 - In-House Recycling: You work with individual recyclers, arrange bins and pick-up and/or self-haul
 - Subs Recycling: Subs work with individual recycler, arrange bins, pick-up or self-haul.
- ☐ Maintain regular contact with your haulers or recycling service providers to make sure you benefit from cost savings and buy-back opportunities.

Operations:

- ☐ Use your waste disposal bills and recycling receipts to determine your progress towards your recycling goals. Your hauler should be able to provide you with a summary of the results.
- ☐ Recycle wood scrap that can't be reused. On average, about 25% of discarded construction material is dimensional lumber and another 10% is waste from manufactured wood products.
- ☐ Recycle cardboard. Most volume occurs during the finish phase of the project, when electrical and mechanical fixtures are being installed. Depending on the market, cardboard can represent a buy-back opportunity.
- ☐ Recycle metal scraps. In addition to high-value copper, other metals are now being recycled, some representing buy-back opportunities. Separated metals have a higher value than mixed metals.
- ☐ Recycle drywall. Recycling fees for drywall are slightly less than disposal fees at local landfill facilities. Items that could be considered contaminants include paint, joint compound, screws, lath and plaster, or moisture. If your drywall subcontractor handles his or her own waste, work with the sub to develop a recycling program.
- ☐ Recycle asphalt roofing. Asphalt roofing has just recently begun to be collected in the Puget Sound area. Currently, there is a facility in Tacoma where asphalt roofing containing less than 1% asbestos is collected.

Issaquah Highlands Contractor's Guide

Best Management Practices

- ☐ Recycle concrete/asphalt rubble.

Cleanup & Disposal Options

- ☐ See General Practices

Site Protection Options

Your permit will specify what is allowable and what is required on your particular site. Below are requirements and recommendations that may include and go beyond what is specified in your permit. For sediment control, see TECSP; it incorporates structures such as filter fences, sediment ponds and traps, stabilized construction entrances, pipe slope drains, subsurface drains, level spreaders, interceptor dikes/berms, and check dams.

Operations:

- ☒ Minimize overall area of exposed soils.
- ☒ Cover exposed soils; mulch vegetation and/or matting shall be primary method of cover and is preferred; use plastic only on material stockpiles or where other methods are not effective.
- ☒ Stockpile soil removed during grading for use during final landscaping. Cover with an organic mulch such as straw or wood chips.
- ☒ Grade in accordance with your permit; during dry season is preferred.
- ☒ Install silt fences or sediment traps in areas to intercept eroded soil.
- ☐ Preserve existing natural vegetation as landscaping by taking the following precautions during construction:
 - Clear only what you need to to install streets, driveways, parking areas, and building foundations.
 - Clearly mark areas to be graded on plans and field stake or flag on-site.
 - Fence critical areas, such as tree root zones, to avoid damage.
 - Review sites to be graded with excavation crew.
- ☐ Check grading operations frequently.
- ☐ Reuse excavated vegetation on site for grading fill and mulch.

Application:

- ☐ Grade slope to a ratio of less than 2 horizontal to 1 vertical.
- ☐ Reduce impervious surfaces that do not allow the ground and increase surface water runoff. Plan for less paved surfaces overall, and use water-pervious materials for walkways, patios, driveways.
- ☐ Install environmentally-friendly measures for stormwater collection, storage and treatment, such as:
 - rooftop water catchment system

Issaquah Highlands Contractor's Guide

Best Management Practices

- vegetated strips along impervious paved surfaces flush or at grade with paved surface (no curbs)
 - open vegetated swales to carry stormwater
 - check dams in stormwater conveyance swales to slow the velocity and trap sediment
 - infiltration basins or trenches
 - wet or dry detention ponds
 - constructed wetlands
 - clear labeling of stormwater sewers.
- ☐ Seed and/or replant exposed areas as soon as practicable.
- ☐ Restrict use of treated roofing materials.
- ☐ Also, see General Practices

Issaquah Highlands Contractor's Guide

Best Management Practices

Hazardous Waste Management Checklist

Contractors and subcontractors working on the Issaquah Highlands Development project are responsible for determining whether materials or items they use on the site or introduce to the site are considered hazardous, and, if disposed, would be considered hazardous waste.

If introduced to the job site, hazardous materials should be treated with special care to avoid contamination of other non-hazardous materials as well as the site itself. Materials commonly used on residential job sites that can potentially become hazardous waste include: paints and other finishes, solvents, adhesives, and oils. Other items that can potentially end up as hazardous waste on a job site include vehicle batteries and other petroleum products such as gasoline, diesel, or kerosene.

To determine if a material or item is potentially hazardous waste:

- Check label and shipping papers.
- Look for words such as hazardous, danger, caustic or corrosive (dissolves skin, metal or other materials); flammable or ignitable (catches fire easily) carcinogenic (causes cancer); and toxic or poisonous (harms people and animals). A list of hazardous waste and criteria are found in the Dangerous Waste Regulations, Chapter 173-303 WAC.
- Check the material safety data sheet (MSDS) the manufacturer must prepare for the product. Ask your supplier for a copy. For help reading an MSDS, call the Business Waste Line at (206) 296-3976.
- Call the Business Waste Line at (206) 296-3976 for assistance.

Here are some options for reducing and recycling hazardous waste and pollution prevention. Check items that are applicable to your project (some are required). Provide the list and company's goals to the person(s) responsible for coordinating or carrying these practices out. You can also incorporate the checklist in subcontractor agreements.

Material Selection and Purchase Options

Selection:

- ☒ Substitute less or non-toxic materials for toxic product when cost-effective.
- ☒ Use less pesticides and fertilizers and install a landscaping scheme that will require less of these polluting substances. A low-maintenance landscaping scheme will use less of these polluting substances and use less water for maintenance.
- ☐ Use water-based paints instead of oil-based paints.
- ☐ Purchase and use less or non-toxic cleaners for the job.
- ☐ Purchase and use less toxic form releasers.

Issaquah Highlands Contractor's Guide

Best Management Practices

- ☐ Avoid chlorinated solvents. Consider using citrus-based solvents.

Sourcing:

- ☒ Ask suppliers for MSDS as a routine part of purchasing materials that have been identified as potentially hazardous. Inform your suppliers that you prefer cost-effective least-toxic alternatives.
- ☐ Check with your local supplier for low or non-toxic alternatives.

Waste Reduction Options

Signage:

- ☒ Post signage to remind field personnel of the goal to reduce hazardous waste on the project.

Training:

- ☐ Provide reminders at safety or other regular meetings of the project's waste reduction goals; use these meetings to report progress, discuss problems, and discuss specific actions that can be taken.

Operations:

- ☒ Label hazardous waste containers properly to avoid mixing incompatible wastes, or contaminating clean materials.
- ☐ Avoid overstocking hazardous materials.
- ☐ Adopt a "first-in, first-out" policy to prevent raw materials from being obsolete.
- ☐ Store wastes separately, to avoid contamination.
- ☐ Reject vendor samples you don't need.
- ☐ Reuse spent solvent for cleaning.
- ☐ Donate extra paint to someone who can use it. List large quantities with the Industrial Materials Exchange at (206) 296-4899.

Job-Site Recycling Options

Training:

- ☐ Provide reminders at safety or other regular meetings of the potential to recycle hazardous waste; use these meetings to report progress, discuss problems, and suggest specific actions that can be taken.

Operations:

- ☐ Recycle as much as possible. Contact the Business Waste Line (206) 296-3976, or consult the *Hazardous Waste Directory, 1996-1997 Edition* - "The Yellow Book" - for vendors who accept "hazardous" materials for recycling. For large quantities, list with the Industrial Materials Exchange (206) 296-4899.
- ☐ Recycle fluids, such as oil or antifreeze and vehicles removed from vehicles at approved facilities.

Issaquah Highlands Contractor's Guide

Best Management Practices

- ☐ Recycle wood treated with preservatives at facilities permitted to treat or recycle it.
- ☐ Recycle solvents from paint gun washers.

Cleanup and Disposal Options

Operations:

- ☒ Follow manufacturers' recommendations for the disposal of paints, stains, and other controlled materials.
- ☒ Dry latex paint in the can, remove lid, before throwing in covered dumpsters.
- ☒ After reusing solvents as much as possible, dispose as hazardous waste.
- ☒ Keep hazardous waste separate, don't mix different wastes together.
- ☒ Promptly dispose of hazardous items and waste materials not identified to be recycled or reused.

Sourcing:

- ☒ Dispose hazardous waste through a permitted facility (as required). You can deal directly with a TSDF or use a hazardous waste vendor. Be sure to select a reputable company to handle your waste because you are responsible for the ultimate fate of that waste. To reduce your liability use the *Hazardous Waste Directory, 1996-1997 Edition* - "The Yellow Book," to select a vendor or for guidance in selecting a vendor.
- ☒ For disposal of contaminated soil, call Seattle-King County Health Department's Waste Characterization Program (206) 296-4633.

Site Protection Options

Storage:

- ☒ Control access to hazardous material storage areas and routinely inspect containers for signs of deterioration. Store hazardous waste left on site in waste containers in good condition and compatible with waste (as required by law).
- ☒ Clearly identify and label hazardous waste containers.
- ☒ Store volatile liquids, including fuels and solvents, in closed containers.

Operations:

- ☒ Do not clean rollers and brushes in sinks, lawns, catch basins. Painting companies should comply with King County Department of Natural Resource BMPs.
- ☒ All vehicles and equipment used during construction should be fueled off-site or at a designated fueling pad. Any on-site fueling area must be constructed with proper containment and safety features.
- ☒ Properly maintain vehicles and equipment to reduce gaseous pollutant emissions and fluid leakage.

Issaquah Highlands Contractor's Guide

Best Management Practices

- ☒ Promptly respond to spills and know response procedures ahead of time. A good spill response plan will:
 - identify an individual or team responsible for handling spills;
 - identify a procedure for notifying appropriate authorities (police, fire, hospital, publicly owned treatment works) in the event of a spill;
 - identify specific spill containment, diversion, isolation, and cleanup practices;
 - train employees on spill response procedures; and
 - require prompt cleanup.
- ☒ Do not use used oil as a dust or weed suppressant – it's against the law.
- ☒ Prevent oily or other hazardous substances from entering ground, drainage areas, or local bodies of water, by:
 - using substitutes;
 - handling (mixing, etc.) oily or potentially hazardous substances on protected and centrally located surfaces, or at your shop;
 - providing explicit instructions to crews for handling; and
 - storing them in appropriate containers in monitored locations.
- ☒ Inspect containers upon delivery. Reject leaking or damaged containers.
- ☒ During operations limit use and type of fertilizer and pesticide/herbicide. Best Management Practices covering the use of fertilizers and pesticides/herbicides have been developed. The BMPs are available from Port Blakely Communities and must be used during installation of landscapes. They must also be included in any agreements regarding landscaping.
- ☒ Provide for on-site sewage control of temporary facilities to prevent releases to the ground water.

Application:

- ☒ Restrict the use of galvanized and copper materials to reduce copper and zinc loads to aquifer. This restriction refers to galvanized or copper gutters and flashing for houses and drainage culverts used on roads, which are not permitted. It does not refer to plumbing.
- ☒ Restrict the use of moss killers or treated roofing materials. Best Management Practices covering the use of moss killers and treated roofing materials have been developed. The BMPs are available from Port Blakely Communities and must be used during installation.

Issaquah Highlands Contractor's Guide

Best Management Practices

Compliance With Guide

As part of an agreement between King County, the City of Issaquah and the owner/developer of Issaquah Highlands (Grand Ridge Limited Partnership and Glacier Ridge Limited Partnership), and as a condition of permit issuance, the City of Issaquah shall require contractors and subcontractors to agree in writing to abide by this Guide or an alternative judged to provide equivalent or better water resource protection. The alternative must be approved by the City of Issaquah and the Local Hazardous Waste Management Program (LHWMP).

Inspections

The LHWMP, the City of Issaquah, King County and other appropriate regulatory agencies shall visit the construction site periodically to monitor compliance with the Guide or approved alternative practices and may provide technical assistance to assist in their implementation.

Warnings

The LHWMP, the City of Issaquah, King County and other appropriate regulatory agencies shall have the right to warn contractors and/or the owner/developer they may be subject to reimbursement costs or other corrective measures, if they, the contractors, are not complying with the Guide or are requiring an monitoring and technical assistance beyond routine levels to assure compliance.

Reimbursements

The LHWMP and other appropriate regulatory agencies shall have the right to charge contractors and/or the owner/developer who are not complying with the Guide or who are requiring monitoring and technical assistance beyond routine levels to assure compliance. These charges shall act as reimbursements for expenses incurred by agency personnel as part of providing monitoring and technical assistance.

Procedure for Submittal, Review, and Approval of Proposed Contractor Alternatives

A contractor or subcontractor may propose individual alternative actions to those indicated as required in this Guide. If the alternative is judged by the City of Issaquah and the Local Hazardous Waste Management Program (LHWMP) to provide equivalent or better water resource protection it will be approved. A form is provided in Appendix C or this purpose.

Issaquah Highlands Contractor's Guide

Best Management Practices - Appendix A

Definitions

- **Best Management Practices (BMP)** - Defined by the U.S. Environmental Protection Agency as "the use of materials, processes or practices that reduce or eliminate the creation of pollutants or wastes at the source. It includes practices that reduce the use of hazardous materials, energy, water or other resources, and practices that protect natural resources through conservation or more efficient use".
- **Conditionally Exempt Small Quantity Generator (CESQG)** - Any person or business who generates hazardous waste at a rate of less than 220 pounds per month or batch (about 1/2 a 55-gallon drum) and an accumulation that does not exceed 2,200 pounds (about five 55-gallon drums).
- **Construction Waste (Solid Waste)**- The regulatory definition of construction waste includes concrete, drywall, masonry, roofing, siding, structural metal, wire, insulation, and other building material; and plastics, Styrofoam, twine, baling and strapping materials, can, buckets, and other packaging materials and containers. It also includes sand, rocks and dirt, that are used in construction. In no event shall construction waste include dangerous or extremely hazardous waste or any kind, garbage (as defined by 10.08.185) sewerage waste, animal carcasses, or asbestos.
- **Construction, Demolition, Landclearing (CDL) Materials** - Waste materials can be generated by all three types activities and typically include:
 - Construction Material - wood, concrete, drywall, masonry, roofing, siding, structural metal, wire, insulation, and other building materials found at construction sites.
 - Demolition Material - Concrete, asphalt, wood, masonry, roofing, siding, structural metal, wire, insulation, and other materials found in demolished buildings, roads, and other structures.
 - Landclearing Material - Natural vegetation and minerals such as stumps, brush, blackberry vines, tree branches, associated dirt and sand, tree bark, sod and rocks.
- **CDL Receiving Facility** - A transfer station or mixed use facility designated by King County as a receiver for CDL material either for disposal to a permitted landfill or as a conduit to a permitted recycling operation.
- **Emergency Response & Hazardous Material Spill Control Plan** - A plan detailing the procedure to follow to control and report spills or discharge of oil or hazardous substances within the development (Appendix G).
- **Emergency Spill Containment Plan** - A plan of action and map detailing how to shut appropriate gate valves at the wet pond to protect ponds in the event of a hazardous spill (Appendix H).

Issaquah Highlands Contractor's Guide

Best Management Practices - Appendix A

- **Garbage** - Unwanted animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of such a character and proportion as to be capable of attracting or providing food for vectors, except sewage and biosolids.
- **Ground Water** - That part of the subsurface water which is in the zone of saturation.
- **Hazardous Waste** - A waste that is a solid or liquid material with certain properties that could pose dangers to human health, property, or the environment. (1)
- **Landfill** - Disposal facility at which solid waste is permanently placed in or on land as permitted by the jurisdictional health department and other appropriate agencies, accepting non-hazardous waste including non-recycled construction, remodeling, repair, and demolition debris.
- **Pollution Prevention** - "Source reduction" as defined under the Pollution Prevention Act, and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water or other resources or protection of natural resources by conservation.
- **Recycling** - Either source separation or the processing of solid waste mechanically or by hand to segregate materials for sale or reuse. Materials which can be removed through recycling include but are not limited to mixed paper, newsprint, cardboard, aluminum, glass, plastics, chemicals, oil, wood, compostable organics (food and yard/land clearing debris), ferrous metal, and inorganics (rubble and inert material). Recycling does not include combustion of solid waste or preparation of fuel from solid waste.
- **Restricted Materials** - The restricted use of galvanized and copper materials and the use of moss killers on roofs or treated roofing materials as defined in the 2-Party Agreement (Appendix D) between the City of Issaquah and the owners of Issaquah Highlands
- **Solid Waste** - see Construction Waste above.
- **Special Wastes** - Waste that requires special handling (i.e. asbestos).
- **Surface Water** - all lakes, rivers, ponds, wetlands, streams, inland waters, streams, salt waters and all other water and water courses within the jurisdiction of the state of Washington.

Issaquah Highlands Contractor's Guide Best Management Practices - Appendix B

Contractor's Agreement and Assignment to Subcontractors

We/I, the owner(s) or authorized representative of _____ have read the Issaquah Highlands Contractor's Guide and agree to abide by the guide before construction can start in Division _____.

I also agree that it is my responsibility to inform all contractors and subcontractor's working in Division _____ that they read, understand and agree to abide by the applicable guidelines or propose alternative practices to the City of Issaquah.*

*Alternative practices must be approved by the City and King County Local Hazardous Waste Management Program before contractor or subcontractor is allowed to work on site (see Form for Procedure for Submittal, Review, and Approval of Proposed Contractor Alternatives in back of Guide).

Name of Company

By:

Signature

Date

Its:

Print Name of Signature

Issaquah Highlands Contractor's Guide Best Management Practices - Appendix B

Contractor's Agreement and Assignment to Subcontractors

We/I, the owner(s) or authorized representative of _____ have read the Issaquah Highlands Contractor's Guide and agree to abide by the guide before construction can start in Division _____.

I also agree that it is my responsibility to inform all contractors and subcontractor's working in Division _____ that they read, understand and agree to abide by the applicable guidelines or propose alternative practices to the City of Issaquah.*

*Alternative practices must be approved by the City and King County Local Hazardous Waste Management Program before contractor or subcontractor is allowed to work on site (see Form for Procedure for Submittal, Review, and Approval of Proposed Contractor Alternatives in back of Guide).

Name of Company

By:

Signature

Date

Its:

Print Name of Signature

Issaquah Highlands Contractor's Guide Best Management Practices - Appendix C

Contractor's Agreement and Assignment to Subcontractors and Application for Approval of Alternatives

We/I, the owner(s) or authorized representative of _____ have read the Issaquah Highlands Contractor's Guide and agree to abide by the Guide before construction can start in Division/Block _____ Lot(s) _____, with the exception of BMPs required in the Guide and listed below. We/I propose the following substitutions for those BMPs, and hereby submit for approval as alternatives.

BMP in Guide (Ref Page/Section)	Proposed Alternative
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

and

I also agree that it is my responsibility to inform all contractors and subcontractor's working in Division/Block _____ Lot(s) _____ that they read, understand and agree to abide by the applicable guidelines or propose alternative practices to the City of Issaquah.*

*Alternative practices must be approved by the City and King County Local Hazardous Waste Management Program before contractor or subcontractor is allowed to work on site.

Name of Company

By:

Signature

Date

Its:

Print Name of Signature

Issaquah Highlands Contractor's Guide Best Management Practices - Appendix D

Resource List

Published References (arranged in alphabetical order):

Response & Hazardous Material Spill Control Plan.

Environmental Building News - a newsletter providing objective coverage of environmental products and practices.

Environmental Handbook for Washington Construction Contractors - Regulatory Guidance, published by Department of Ecology.

Handbook of Integrated Pest Management for Turfgrass and Ornamentals. CRC Press (Lewis Publishers), Boca Raton, Florida, 1994.

Hazardous Waste Directory, "The Yellow Book," published by the Local Hazardous Waste Management Program in King County.

Industrial Materials Exchange (IMEX) Directory. Published and internet catalog of materials "wanted" and "available" for exchange in the Puget Sound area.

Issaquah Highlands Emergency Spill Containment Plan (wetponds).

"Making Your Program Work," *Designing a Waste Management Plan Fact Sheet* available from the King County CDL Program and the BIRV.

Recycling Plus Program Manual a best management practices guide, published by the Clean Washington Center.

Seattle/King County Construction Recycling Directory: Lists recycling and reuse options for construction debris, available through King County CDL Program and the Business and Industry Recycling Venture (BIRV).

Stormwater Pollution Prevention Plan (SWPPP).

The Contractor's Guide to Preventing Waste and Recycling. Provides recycling and waste prevention how-to's for all builders, prepared by King County Solid Waste Division, and available through King County CDL Program and the BIRV.

"The Harris Directory - Recycled Content Building Materials," a CSI-formatted database of manufacturers and products. E mail: bjharris@igc.apc.org.

Waste Spec: Model Specification for Construction Waste Reduction, Reuse, and Recycling, prepared by Triangle J Council of Governments. Available through King County.

"Water Conservation in Action: Introduction to Low Water Use Landscaping," includes an extensive bibliography of resources on landscaping and design. Available from the Department of Ecology.

EMERGENCY RESPONSE & HAZARDOUS SPILL CONTROL PLAN

1. RESPONSIBILITY

It is paramount that the Project Site owner manages its operations to prevent any release of hazardous materials from its Project Site. At a minimum, the Project Site owner shall prepare a response and reporting plan that is in accordance with its legal obligations under Federal, State, and Local requirements.

Scope: To establish a policy of responsible action in protecting the ground and surface water by preventing, containing, removing, and reporting any hazardous material spill(s) that may occur onsite. A spill is any release or discharge, accidental or intentional, of toxic or hazardous materials. A spill must be reported to appropriate authorities.

2. HAZARDOUS MATERIALS

A. Spill Response, Control & Reporting Plan

As a part of the Project Site Builder's hazardous material management and communication program, it shall develop a written Spill Response, Control, and Reporting Plan ("Plan"). The Plan shall be kept on the Project Site at all times, be clearly labeled, and made accessible during work hours to all individuals who perform work on the Project Site and the Plan shall, at minimum, address the following:

- Spill Evaluation
- Spill Containment
- Personnel safety and accountability
- Emergency Response
- Reporting

B. HAZMAT and HAZCOM Management

As part of its hazardous material (hazmat) management and hazardous communication (hazcom) program, the Project Site Builder shall provide routine communication and information to assure, at minimum, that all personnel adequately understand its Hazardous Material Response, Control, and Reporting Plan. Its HAZMAT Response Plan shall include provisions for spill containment control and containment measures. It shall be the Project Site owner's responsibility to regularly inspect preventative measures, and report and correct deficiencies in accordance with applicable State and Federal regulations. Additionally, the Project Site owner shall:

- Prohibit release of any hazardous materials.
- Prohibit wheel vehicles that may contain a surplus of and/or storage of any or all of the above mentioned substances within project boundaries. Fuel trucks operated by certified or approved operators are allowed onsite for temporary equipment refueling at an appropriate fuel pad site.
- Use approved fuel pads and absorbent materials when fueling any and all vehicles or equipment.
- Prohibit cross fueling between tankers.

- Observe and execute prudent practice when working around existing gas pipelines and above ground facilities.
- Use sound decision making to commensurate best management construction practices.

The Project Site Builder shall continuously check to ensure that all equipment and vehicles under their direction are regularly and properly maintained, and not leaking hazardous fluids or materials; leaking vehicles shall be immediately removed from the site. Project Site Builder shall indemnify and hold Grand-Glacier LLC harmless from any damages, expenses, claims, or liability relating to any release.

C. Spill Response Kit

The Builder shall maintain, on site, adequate spill response materials to respond to a release generated by Project Site Builder's activities. Said materials shall be marked in a container that is made accessible to all individuals potentially needing to respond to a spill within the Builder's Project Site.

Required minimum materials include:

- "pop-up" or containment type basin(s) to catch fuel spills;
- Loose absorbent material;
- Oil absorbent pads and booms;
- Storage capacity for large spills (largest volume onsite times two).

Guidelines if a Spill Does Occur: Immediately take action to safely stop the leak or spill. The following guidelines should be followed:

- Act safely. Check to ensure that all personnel are safe and accounted for.
- Check for potential fire danger and/or equipment roll-over potential.
- Take appropriate measures to stop the source of the spill. Utilize equipment provided in spill containment kits to absorb, confine or contain the spill and prevent further contamination of the area.
- Dike or cover any drains and catch basins the spill may flow to.
- Call 911 to report fire or injury or additional hazards that may be present. Call 911 for large spills.
- Continue to contain large spills by building berms or diversion ponds with absorbent materials. When help arrives, lead them in the effort to contain the spill.
- Appropriately discard all clean-up materials in compliance with Federal regulations and the individual Material Safety Data Sheet (MSDS) relating to the spilled chemicals.
- Immediately notify your foreman or superintendent, who must then communicate the spill to the City of Issaquah and Grand.
- The Department of Ecology requires that any spill of hazardous substances or petroleum that does not immediately evaporate or, has not been sufficiently recovered or contained so that it will not pose a threat to human health or the environment, be reported to the Department of Ecology within 24 hours.

D. Written Notification to Declarant

Within twenty four (24) hours of a release, or sooner if reasonably possible, and following spill response in accordance with its Plan and governing regulations, the Project Site Builder shall provide Declarant with written notification of the incident. Notice to Declarant is in addition to all notices required by law to be given by Project Site Builder to governing authorities. Notification to Declarant shall include:

- The status of any injuries, names, extent, etc.
- Cause of the accident and or spill.
- Exact location of accident or spill.
- Approximate quantity of substance discharged.
- Identification of the substance including name and physical properties.
- Time & duration of spill.
- Action taken for containment.
- List of entities notified, including contact name and numbers.
- Narrative of future preventative measures.

E. Abatement

Following written notification by Project Site Builder, Declarant reserves the right but not obligation to:

- Retain the services of an environmental cleanup and consulting firm to facilitate abatement on behalf of Builder.
- Perform an incident inspection and evaluate need for supplemental abatement.
- Lead abatement efforts or monitor abatement work.
- Prepare final report following conclusion of abatement measures.

The Project Site's Builder has read, fully understands, and agrees to the policies and procedures set forth in the above plan.

PROJECT SITE BUILDER:

Signature / Date

APPENDIX N

OWNER/GENERAL CONTRACTOR'S NOTICE OF COMPLETION/INSPECTION REQUEST

Custom Home Architectural Review Committee
c/o Heartland LLC
1301 First Avenue, Suite 200
Seattle, WA 98101

ISSAQUAH HIGHLANDS OWNER/GENERAL CONTRACTOR'S NOTICE OF COMPLETION/INSPECTION REQUEST

The undersigned Owner or General Contractor certifies and confirms to the Custom Home Architectural Review Committee ("CHARC") that all Work [buildings, landscape, signage, and other improvements] is fully complete in accordance with each of the following "wet-stamped" plans that were approved by the CHARC for this Property:

- ☐ Architectural Plans
- ☐ Landscape Plans

Based on this completion confirmation, the undersigned Owner or General Contractor requests a final inspection of the Work by the CHARC representative(s).

Lot: _____

Owner/General Contractor:

By: _____
Name: _____
Its: _____

APPENDIX O

CONSTRUCTION AND ADMINISTRATIVE PUNCHLIST

Date

Applicant Name

Applicant Address

Re: Custom Home ARC Construction and Administrative Punchlist Letter for *[insert Owner and Lot #]*

Dear Applicant Name:

The Custom Home ARC conducted its site visit of the Architecture and Landscape design for *[insert Owner and Lot #]* on *insert date of site visit* to determine compliance with the approved Architectural and Landscape Plans. This review is based on the following Custom Home ARC approvals:

1. Architecture and Landscape design approval dated *insert date of approval letter*.
2. Owner's/General Contractor's Notice of Completion/Request for Inspection dated *insert date*.

Following are the punch list items required to be completed prior to issuance of the Custom Home ARC Final Completion Letter:

1. Architecture:
 - a. Punchlist item . . .
2. Landscape:
 - a. Punchlist item . . .

The Custom Home ARC completion and close out process includes a series of steps and documents to be completed in order to release the security and other deposits. They are as follows:

1. Custom Home ARC Approval letter for Architecture and Landscape.
2. HFN Acceptance of Cat 5 Cable certification.
3. Sustainable Building Verification.
4. IHCA Accounting clearance.
5. Highlands Council/HFN Accounting clearance.

After all the items listed above have completed, submitted and otherwise found to be in compliance, the Custom Home ARC will issue a Letter of Final Acceptance. Note this approval is for Custom Home ARC purposes only and additional permitted and approval may be necessary from King County. This approval does not replace Federal, State or County Building Codes; or other applicable regulations used by the County in its permit review of projects at Issaquah Highlands.

Please do not hesitate to call should you have any questions.

Sincerely,

Custom Home ARC Coordinator

On Behalf of the Custom Architecture Review Committee

cc: John Shaw, Heartland on behalf of Port Blakely Communities

APPENDIX P

ARC LETTER OF FINAL ACCEPTANCE

Date

Applicant Name

Applicant Address

Re: Custom Home ARC Letter of Final Acceptance [insert *Owner name & Lot #*]

Dear Applicant Name:

The Custom Home ARC re-inspected the conditions per the Custom Home ARC Construction and Administration punchlist letter dated *insert date of previous letter* and have determined the work is in compliance with the approved Architectural and Landscape Plans.

Additionally, the following administrative items are deemed complete. *Insert date of completion and attach any documentation associated with verification items were completed.*

1. Custom Home ARC Approval letter for Architecture and Landscape.
2. HFN Acceptance of Cat 5 Cable certification.
3. Sustainable Building Verification.
4. IHCA Accounting clearance.
5. Highlands Council/HFN Accounting clearance.

If Custom Home ARC is holding an ARC Deposit at the time of final acceptance, then within thirty (30) days after the date of this letter the Custom Home ARC will refund any unused portion of the ARC Deposit (but deducting any amounts owed for fees or other unpaid matters).

Note this approval is for Custom Home ARC purposes only and additional permitting and approval may be necessary from King County. This approval does not replace Federal, State or County Building Codes; or other applicable regulations used by the County in its permit review of projects at Grand Ridge Drive.

It has been a pleasure working with you and your team.

Sincerely,

Custom Home ARC Coordinator

On Behalf of the Custom Architecture Review Committee

cc: John Shaw, Heartland on behalf of Port Blakely Communities
Issaquah Highlands Community Association

APPENDIX Q

GLOSSARY OF TERMS

- A. ARC Fees – Fees for Custom ARC review of projects as set forth in **Appendix A-3**, including a Base Review Fee and Additional Meeting and Inspection Fees.
- B. ARC Orientation – The initial meeting with the Custom ARC and the Owner or its representative to review the Custom ARC Review Procedures and the Architectural Standards, as described in **Appendix A**.
- C. Architectural and Landscape Plans/Approval – Plans required to be approved by the Custom ARC pursuant to the Review Procedures in **Appendix A** as consistent with the Architectural Standards, which Custom ARC approval of Architectural and Landscape Plans follows Conceptual Acceptance by the Custom ARC.
- D. Architectural Standards. The GRD Architectural Standards adopted and amended from time to time pursuant to Article IV of the CC&Rs to govern the Work completed on the Lots in the GRD neighborhood.
- E. Architectural Review Committee or “Custom ARC” or “Custom Home ARC.” The group, or the designated individual to represent the group of people, responsible for approving the Owner’s/General Contractor’s proposed improvements as consistent with the Community’s Architectural Standards and vision.
- F. Association or “IHCA” – The non-profit corporation named the “Issaquah Highlands Community Association” comprised of residential property owners within the Issaquah Highlands Community.
- G. Building Envelope Site Plan – A site plan showing the portion of the Lot that is recommended for setbacks, clearing, septic drainfield, and construction of the home.
- H. CC&Rs or Declaration of Covenants, Conditions and Restrictions – For Issaquah Highlands Residential Properties [King County Recording No. 20120607000111], as they may be amended from time to time.
- I. Common Area – Unless otherwise specified, a Common Area means an area where the IHCA maintains landscape, trails or other improvements. Common Areas may include public right-of-way (e.g. streetscape) maintained by the IHCA, as well as land owned or maintained by the IHCA, including open space and formal parks and trails, and any privately owned improvements that are designated to be maintained by the IHCA.
- J. Community – The group of people who have a common interest in, and reside or conduct business within, the Issaquah Highlands perimeter boundary. The Community establishes and enforces its rules and regulations through the Association.
- K. Compliance – The required corrective actions and compliance required by the ARC set forth in the Notice of Violation, as specified in **Appendix A-4**.
- L. Conceptual Review/Acceptance – The first of two reviews and approvals by the Custom ARC, as defined in the Review Procedures in **Appendix A**.

- M. Contract Documents – The Real Estate Purchase and Sale Agreement (“REPSA”) and all drawings and details, technical specifications, and guidelines, along with any other documents or items that are either attached to the REPSA as Exhibits or incorporated into the REPSA by reference.
- N. Conveyance – The closing and transfer of title to the Owner. From and after the Conveyance, the Owner (including any successor Owner) shall have full responsibility for protecting and repairing any damage to the improvements adjacent to the Owner’s Lot.
- O. County – King County, Washington, and all of its authorized representatives.
- P. Declarant – Declarant, Grand-Glacier LLC, or Port Blakely Communities, are used interchangeably to represent the original master developer of Issaquah Highlands that recorded the CC&Rs and was a party to the Development Agreement.
- Q. Development Agreement – The Grand Ridge Joint Agreement dated June 10, 1996, between King County, the City of Issaquah, and the Declarant (aka “3-Party Agreement”), a Memorandum of which is recorded King County recording #9606180756.
- R. Due Date – The date for Compliance after ARC delivery of a Notice of Violation as set forth in **Appendix A-4**.
- S. Final Acceptance – Final Acceptance is the milestone date where the Custom ARC accepts the Owner’s/General Contractor’s Notice of Completion, pursuant to the letter set forth in **Appendix P**. For original Owners/General Contractors, Final Acceptance is the trigger for release of the Owner’s Security Deposit, if any deposit funds are remaining, under the REPSA.
- T. General Contractor – The licensed general contractor that is approved by the Custom ARC to be part of the Project Team for an Owner and to construct the home and other improvements on a Lot.
- U. Governing Authority – County, state, and federal governments and agencies thereof and all authorized representatives of each having jurisdiction over the Project. Governing Authorities for the GRD neighborhood may include but are not limited to King County, the State Department of Fish and Wildlife, and the State Department of Ecology.
- V. Grand Ridge Drive or “GRD”—The neighborhood within the overall Issaquah Highlands Project consisting of 40 large Lots located within unincorporated King County.
- W. Hazardous Materials – Hazardous Materials means, collectively, (i) flammable explosives, radioactive materials, friable asbestos, urea formaldehyde foam insulation, transformers or other equipment that contain dielectric fluid containing regulated levels of polychlorinated biphenyl’s and petroleum products; and (ii) chemicals, materials, substances or wastes which are now or hereafter become defined as or included in the definition, listing or identification of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “extremely hazardous wastes,” “restricted hazardous wastes,” “toxic substances,” “toxic pollutants,” “dangerous wastes,” “bio-hazardous wastes,” or words of similar import, under any federal, state or local environmental statute, regulation or ordinance presently in effect or that may be promulgated in the future, as they may be amended from time to time.
- X. Lot—The legal parcels created by the Developer within Grand Ridge Drive and conveyed to an Owner.

- Y. Notice of Completion/Request for Inspection – The Notice of Completion/Inspection Request, in the form of **Appendix N**, is a signed and notarized document that the Owner/General Contractor provides to the Custom ARC, pursuant to Section 4.3 of the CC&Rs, to (i) certify that all of the Owner's/General Contractor's obligations under the Architectural Standards and applicable Contract Documents (including construction of units and landscape, cleanup, repair of any damage, and completion of all checklists and certifications) have been fully completed in accordance with all Custom ARC-approved plans and in compliance with all Architectural Standards, and (ii) request final inspection by the Custom ARC.
- Z. Notice of Violations –Notice by the Custom ARC or the IHCA to an Owner specifying a Violation and requiring Compliance as described in **Appendix A-4**.
- AA. Owner—The fee title owner of a Lot, whether by an original purchase from the Declarant or by subsequent Conveyance. A General Contractor may also be an “Owner” if the General Contractor is both the fee title owner and is the general contractor for construction of the home on a Lot.
- BB. Physical Completion – Physical Completion relates to landscape, irrigation and drainage improvements of Common Areas to be accepted by the IHCA. Physical Completion shall be the latter milestone date of Custom ARC or the IHCA acceptance of the Work. To achieve Physical Completion, the Owner/General Contractor will have completed any and all minor or incidental work, punch list items, repairs or other items designated for completion by the Custom ARC or the IHCA. The quality performance and landscape establishment periods commence on the date of Physical Completion.
- CC. Project – Unless the context otherwise denotes, the Project is the entire Issaquah Highlands Community, including the collective structures, improvements and facilities to be constructed in whole or in part through the performance of the Declarant, all Owners/General Contractors, and other land owners.
- DD. Project Team –The Project Team is the Custom ARC-approved architect, landscape architect, and General Contractor) for an Owner.
- EE. Real Estate Purchase Sale Agreement (REPSA) – The contract between the Owner as buyer and a seller for conveyance of title to the Lot.
- FF. Remedial Work – Any work performed by Declarant, by others at the direction of Declarant, or by the IHCA that is required due to the Owner's/General Contractor's failure to timely complete any portion of the Work or required to comply with any portion of the Architectural Standards (including but not limited to these Construction Procedures) or any applicable Contract Documents.
- GG. Review Procedures – As set forth in **Appendix A**, the Custom ARC review and approval process for each home and other improvements to be built on a Lot, including (i) Custom ARC acceptance of Conceptual Plans, and (ii) Custom ARC approval of Architectural and Landscape Plans.
- HH. Sensitive Area – Waterways including ponds and storm water conveyance systems, wetlands and wetland buffers, steep slopes, coal mine hazards, the Project perimeter buffer or other sensitive area defined in the Development Agreement governing the Issaquah Highlands Project or as defined and regulated by Governing Authorities.
- II. Spill – The release, deposit, disposal or leak of any Hazardous Materials into, upon or under any land, water, air or otherwise into the environment, including, without limitation, by

means of burial, disposal, discharge, emission, injection, leakage, seepage, leaching, dumping, pumping, pouring, escaping, emptying, or placement.

- JJ. Stop Work/Stop Work Order – The directive from the Custom ARC or the IHCA to cease work where Compliance with a Violation is not completed fully by the Due Date, as provided in **Appendix A-4**.
- KK. Violation – Violation of the GRD Architectural Standards as defined in **Appendix A-4**.
- LL. Work – All construction, improvements and other activities defined as “Work” in the CC&Rs or covered by the Architectural Standards, including but not limited to the “Buyer’s Work” under the REPSA or other Contract Documents and any other Work specified, implied, shown or contemplated to construct the improvements on or adjacent to the Owner’s/General Contractor’s Lot.

APPENDIX R

INSURANCE REQUIREMENTS

Until an Owner receives a certificate of occupancy or final inspection approval for all buildings on the Property, the Owner's General Contractor (or the Owner if it is building the home) shall maintain, with an insurer acceptable to Port Blakely Communities, commercial general liability insurance, automobile liability and employer liability to the extent provided in this as evidenced by an Acord™ Certificate of Insurance:

- A. Liability.** A commercial general liability insurance policy shall be written on an occurrence basis with bodily injury liability and property damage liability (including coverage for explosion, collapse and underground exposures) on the General Contractor's operations to include work subcontracted to others. The limits of the commercial general liability insurance shall meet or exceed the following:

\$1,000,000 per occurrence and \$2,000,000 annual aggregate for bodily injury, including sickness, disease or death (other than automobile); and for property damage liability (other than automobile), including loss of use thereof.
- B. Automobile.** Automobile liability insurance shall be in the amount of \$1,000,000 per accident for bodily injury and property damage liability, including loss of use thereof, whether owned, non-owned or hired vehicles.
- C. Worker's Compensation.** The insurance for claims under worker's compensation, disability benefit and other similar employee benefit or industrial insurance acts shall be in the amount required by applicable law. The employer's liability or stop-gap liability shall provide coverage of at least \$1,000,000 (per accident or policy limit) for bodily injury, accident or disease.
- D. Additionally Insured.** General Contractor shall name Port Blakely Communities, Inc., Port Blakely Properties LLC and Grand-Glacier LLC (a Washington limited liability company), their affiliates, subsidiaries, agents, employees, and officers as additionally insured prior to construction of homes. The preferred additional insured endorsement is CG 20 10 11 85, however, if the General Contractor's insurance company does not use this form, they may submit a substitute form for approval.

Before commencing work, General Contractor shall furnish Port Blakely Communities an original Certificate of Insurance along with additional insured endorsement form(s) as evidence that the above insurance is in force and will cover all operations under the Agreement. This insurance shall be deemed primary and non-contributory with any other insurance that may be in effect. Neither acknowledgement nor approval of the insurance by the Port Blakely Communities shall relieve or decrease the liability of the General Contractor hereunder.

A copy of a policy's specific endorsement form(s) showing additional insured wording and all of the following provisions shall be submitted along with the Certificate of Insurance.

All such policies shall contain the following provisions:

1. This insurance shall be deemed primary and non-contributory with any other insurance that may be in effect.
2. In the event of payment of any loss or damage, the insurers will have no rights of recovery against any of the insured or additional insured thereunder. Port Blakely Communities, its agents and the General Contractor waive all rights against each other and, in addition, waive all such rights against subcontractors for losses and damages so caused.

If any such insurance is due to expire during the contract period, the General Contractor shall not permit the coverage to lapse and shall furnish evidence to Port Blakely Communities, and shall provide at least 45 days written notice to the Port Blakely Communities of cancellation of any such insurance.