

Orcas Island Food Bank

OUTLINE SPECIFICATION

December 02, 2025

EW Project Number: 21-057



Environmental Works
COMMUNITY DESIGN CENTER

402 15th Avenue East
Seattle, Washington 98112
206.329.8300
206.329.5494 Fax

SECTION 010300 ALTERNATES

GENERAL

Provide alternate proposal for deducting materials, construction, or both to the Base Bid. The difference in price shall include adjustments in the work of all trades made necessary by such changes.

ALTERNATE NUMBER 1- DEDUCTIVE – Exterior siding

1. Base Bid: 5/8" shiplap fiber cement siding
2. Deductive Alternate: 5/16" fiber cement panel siding with vertical battens at 16" o.c.

ALTERNATE NUMBER 2 - DEDUCTIVE – Roofing

1. Base Bid: Standing seam metal roofing.
2. Deductive Alternate: Fiberglass shingle in lieu of metal

SECTION 01060 REGULATORY REQUIREMENTS

CODES AND STANDARDS

References to standard codes and specifications shall mean and intend the latest edition of such specifications or codes published and adopted by the local jurisdiction and other agencies having jurisdiction. Where there are discrepancies the more stringent regulations shall govern.

LEED CERTIFICATION

The project received State of Washington funding that will require LEED certification (LEED silver min.)

PERMITS AND FEES

The Contractor shall pay required taxes; secure and pay for, as applicable and necessary, all permits, construction inspections and licenses except for the Building Permit which will be provided by the Owner.

SECTION 012000 PROJECT MEETINGS

MEETINGS

- Pre-construction Meeting
- Bi-weekly Site Meetings at which the following shall be represented:
 - Owner;
 - Project Manager;
 - Architect;
 - Contractor.

SECTION 013400 SUBMITTALS

CONSTRUCTION SCHEDULE

Critical Path Method, within 15 days of contract award. Resubmit periodically as schedule changes.

SCHEDULE OF VALUES

CSI format, within (15) days of contract award.

SHOP DRAWINGS AND PRODUCT DATA

Digital copies for Architect review prior to fabrication. Two-week review time.

INSTRUCTION MANUALS

One bound sets and digital copy.

FINAL INSPECTION

Certified copy of final inspection by permitting agency.

SECTION 01400 QUALITY REQUIREMENTS

TESTING

Testing laboratory services will be provided by an independent firm retained by the Owner. Probable tests include the following:

- Soils bearing
- Concrete
- Window testing (leakage and infiltration)
- Blower-door testing
- Other commissioning requirements to be verified during the design phases.

SUPERINTENDENT

The Contractor will have a full-time superintendent on site during normal working hours during the course of construction.

QUALITY CONTROL

Beginning Work on any section of the construction will imply acceptance of existing conditions as sufficient and satisfactory. Any defects in existing Work should be reported to the Architect in writing. The defective Work shall be corrected before commencing new Work.

WARRANTY

The Contractor shall be responsible for all Work executed under this Contract for a period of one (1) year after Acceptance of the Work, except where longer times are specifically noted in the Specifications. Contractor shall make necessary repairs and replace materials or workmanship which prove defective during that period or other damage caused by such failures without expense to the Owner. This clause shall not be interpreted as to hold the Contractor responsible for making good any deterioration or damage due to use or abuse by the Owner.

ORIENTATION/TRAINING

The contractor shall provide orientation/training for owner of all mechanical, electrical, and sprinkler systems at time of final acceptance. Training to be recorded and digital copy of recording to be provided to the owner with O&M manuals. Contractor shall also provide blow-out or draining of automatic sprinkler system through first cycle (1 year).

SECTION 01500 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

FIELD OFFICE

Furnish and install a temporary field office building adequate in size and accommodation for all Contractor's offices, superintendent's office, and supply and tool room. Provide and maintain telephone, computer (with email and web access), and printer at the site for the duration of construction.

BARRIERS, SAFETY GUARDS AND WARNINGS

The Contractor shall furnish, install, and maintain for the duration of construction all required scaffolds, tarpaulins, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the Work in compliance with all pertinent safety and other regulations.

Preserve and protect existing trees scheduled to remain.

SITE SECURITY

Contractor to provide for site security during the duration of construction. Method of securing the site is to be at the contractor's discretion depending upon the phase of construction and the conditions at the site.

TEMPORARY UTILITIES

The Contractor shall bear the cost of electricity and heat provided for construction. The Contractor shall provide temporary heating and lighting as required for all painting, plaster board, and similar finish work.

PROGRESS CLEANING

Execute periodic cleaning to keep Work, Site and adjacent properties free from accumulations of waste materials, rubbish and wind-blown debris resulting from construction operations. Dispose of in compliance with governing codes, ordinances, regulations and anti-pollution laws. Control dust during painting.

FINAL CLEANUP

Final cleaning shall be in accordance with excellent housekeeping practices. Remove grease, waste, adhesives, dust, dirt, stains, fingerprints, labels and other foreign materials from sight exposed interior and exterior surfaces. Wash and shine glazing and mirrors. Polish glossy surfaces to shine clearly. Clean toilet and plumbing fixtures and trim. Clean lighting fixtures and electrical equipment including lenses inside and out. Broom clean exterior paved surfaces; rake clean other surfaces of grounds. Prior to Final Completion, Contractor shall make inspection and verify entire Work clean.

SECTION 017419 CONSTRUCTION WASTE MANAGEMENT

Salvage and/or recycle at least 50% (by weight) of all construction waste generated. Confirm with LEED, and other programs.

SUBMITTALS:

Waste Management Plan: Submit waste management plan at least 7 days prior to the start of construction.
Waste Management Report: Submit a waste management report concurrent with each Application for Payment.

Final Waste Management Report: At project completion submit a final waste management report documenting the final percentage of CDL waste salvaged and/or recycled.

SECTION 017800 CONTRACT CLOSEOUT

SCOPE

Upon Project Completion, the following are to be provided:

- Project Record Documents (as-built drawings & specifications);
- Operation and Maintenance Data (for all materials, finishes, equipment & systems;
- Warranties & Bonds (product warranties to be executed in the owner's name and submitted by the contractor to the manufacturer).

SECTION 019100 COMMISSIONING

SCOPE

Required for M/E/P systems to comply with LEED.

- Domestic water heating
- VRF system
- Heating/cooling systems
- ERV system

DIVISION 03 CONCRETE

SECTION 033000 CAST IN PLACE CONCRETE

SUBMITTALS

Mix Proportions and Test Reports:

Prior to construction, submit copies of concrete mix proportions of proposed mix.

CERTIFICATE OF COMPLIANCE

Furnish a certificate of compliance from mixing plant stating that materials used and concrete delivered to site conform to requirements specified or called for on Drawings.

APPROVAL

Secure approval on all submittals forty-eight (48) hours prior to start of concrete pours.

FOUNDATIONS

Reinforced concrete spread footings (3,000 psi or as noted on structural drawings whichever is more stringent)

Reinforced concrete perimeter thickened slab edge to support individual wood and/or steel columns as required.

COLOR HARDENER/DENSIFIER

As noted on room finish schedule, color hardener/densifier to be sprayed on top of concrete slab. Basis of design: Consolideck LS/CS and ColorHard

DIVISION 05 METALS

SECTION 051200 STRUCTURAL STEEL FRAMING

SCOPE TO INCLUDE

Steel beams and columns supporting low roof and 2nd floor framing.

FABRICATION

Fabricate all steel indicated as structural in strict accordance with details as indicated or as approved on shop drawings. Identify all steel at mill showing grade and yield point. Fabricate in accordance with standard specifications.

TOLERANCES

Fabricate all steel members to tolerances in accordance with AISC Standards.

CUTTING

Do not flame cutting by hand, unless approved by Architect; if approved, smooth all handcuts by chipping, planing or grinding. Cut and fit all members to specified tolerances; no sharp kinks or bends will be allowed.

Straightened Material:

Examine all material straightened prior to fabrication for signs of distress or other defects before fabricating. No distressed or otherwise defective material will be accepted.

CONNECTIONS

Make shop connections by welding or bolting; types and locations of connections as indicated or approved on shop drawings.

BEARING PLATES

Drill and fabricate to accurate sizes and shapes as indicated; include all fasteners and accessories required for installation.

SECTION 055214 PIPE AND TUBE RAILINGS

SCOPE OF WORK

Painted steel railings both sides of interior stairs.

RAILS

In accordance with referenced ASTM A-53, Type "E" or "S", Grade "A" or "B", standard weight, Schedule 40.

Typical: Painted steel (vertical post spacing: assume 6'-0" max.) face mounted where possible. Double top rail.

Guard Height: 42" typical.

Stair Rail Height: 34" typical.

Stairs: Provide single strand 1-1/2" diameter railing on both sides of stair. Extend 12 inches beyond top and bottom riser. Return to wall of vertical support.

DIVISION 6 WOOD AND PLASTICS

GENERAL NOTES FOR DIVISION 6

LOW/NO VOC ADHESIVES AND SEALANTS (LEED REQUIREMENT)

The VOC content of all adhesives and sealants used in the project must be less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, <http://www.aqmd.gov/rules/html/r1168.html> AND all sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51. <http://www.arb.ca.gov/DRDB/BA/CURHTML/R8-51.HTM>.

Adhesives, caulks and sealants that are used outside of the weather resistive barrier or to seal the weather resistive barrier to itself or to building openings are exempt from this mandatory requirement. The weather resistive barrier includes the roof membrane.

LOW/NO VOC PAINTS AND PRIMERS

All interior paints, varnishes and primers used in the project shall be less than or equal to the following VOC levels, in grams per liter:

<u>Paint Type</u>	<u>Maximum VOC Limit</u>
<u>Flats</u>	<u>50 g/L</u>
<u>Non-Flats</u>	<u>50 g/L</u>
<u>Primer or Undercoat</u>	<u>100 g/L</u>
<u>Floor</u>	<u>100 g/L</u>
<u>Anti-corrosive</u>	<u>250 g/L</u>

If colorant is added at point of Sale, the VOC content shall not exceed the following:

<u>Paint Type</u>	<u>Maximum VOC Limit</u>
<u>Flats w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Non-Flats w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Primer or Undercoat w/ colorant added at point of sale</u>	<u>100 g/L</u>

<u>Floor w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Anti-corrosive w/ colorant added at point of sale</u>	<u>250 g/L</u>

These levels are based on a combination of the MPI and Green Seal Standards (GS-11).

NOTE: These requirements do not apply to finishes that are factory applied or applied off site.

SUBMITTALS

Provide a cut sheet and a Material Safety Data Sheet (MSDS) for each adhesive and sealant used in the building highlighting VOC content and chemical component limits.

SECTION 06100 LUMBER

SCOPE OF WORK

All walls (unless noted otherwise), floors and roofs are wood-framed. 2x8 @ 24" o.c. at exterior walls using advanced framing techniques. 2 x 4 typical interior walls, 2x6 plumbing walls, 2 x 6 at walls with columns and where insulated between warehouse/ staging/sorting and warehouse/kitchen. insulated headers and insulated exterior corners. Assume solid blocking for hardware, toilet accessories and cabinets.

LUMBER

All lumber is to be in accordance with WWPAA Grading Rules. All lumber to be kiln dried.

	<u>Grade</u>	<u>Material</u>
Light Framing	Stud	Hem Fir
All Other Framing	#2	Doug Fir

Construction shall be as follows.

Ext. Columns & Beams	6x_ cedar posts and beams
Exterior walls	2 x 8 at 24" on center
Interior Walls	2 x 4 @ 16 inches on center (except 2 x 6 plumbing, walls with columns and wall separating warehouse from staging/sorting)
2nd Floor	Plywood web joists as indicated on structural drawings
Roof Sheathing	1/2-inch CD plywood with exterior glue (panel index 24/0)
2nd Fl. Sheathing	3/4 inch plywood with exterior glue (panel index 36/16)
Wall Sheathing	1/2 inch CD plywood with exterior glue (panel index 24/0)
Ceilings (where noted)	5/8" BCX plywood

All lumber in contact with concrete or exposed to weather shall be pressure treated (unless noted otherwise).

SECTION 061753 PREFABRICATED WOOD TRUSSES

ROOF TRUSSES

Pre-manufactured open web trusses shall be designed for loads and conditions in accordance with the specifications of the manufacturer. Design, fabrication and erection shall conform to the latest standards of the manufacturer and the Building Code Standard no. 25-17, Part V. Design shall be stamped and signed by a professional structural engineer licensed in the State of Washington.

Provide 17" high raised heel minimum above heated spaces.

Two sets of stamped drawings are to be submitted to the reviewing agency Quality Control for review prior to fabrication and erection.

FLOOR JOISTS

Prefabricated plywood web joists by Trus Joist, Truss Span or equal shall be designed for loads and conditions in accordance with the specifications of the manufacturer.

SECTION 06200 FINISH CARPENTRY (EXTERIOR)

EXTERIOR FASCIAS/TRIM

Preprimed fiber cement trim, unless noted otherwise.

5/4x12 @ rakes; 5/4x6 at eaves

5/4x4 @ exterior corner trim.

SECTION 06300 FINISH CARPENTRY (INTERIOR)

GENERAL REQUIREMENTS

LOW VOC ADHESIVES ARE REQUIRED FOR ALL INTERIOR FINISH CARPENTRY ITEMS

INTERIOR TRIM

5/4 window sills - douglas fir S4S

1 x 3 wood skirt trim- douglas fir S4S

Wood jamb/head material at Door 108A

INTERIOR STAIRS

3/4-inch plywood treads and risers. Dimensional wood stringers to be spaced 16" o.c. maximum (stringers not attached to side walls to be stiffened as required with 2x6 wood nailers at each side).

SECTION 06400 ARCHITECTURAL WOODWORK

GENERAL REQUIREMENTS

LOW VOC ADHESIVES ARE REQUIRED FOR ALL INTERIOR FINISH CARPENTRY ITEMS

RECEPTION DESK

Lobby 100- 1" thick fir plywood counters with solid stock edges, fir plywood front, sides and kick

SECTION 06415 COUNTERTOPS

COUNTERTOPS

Solid surface material (**HiMacs**- Classic collection: www.lxhausys.com/us/index.html#/) 12 mm (1/2") thick, 1 1/2" solid surface edge- 1/2 bullnose, 4" integral backsplash at all countertops

Locations: Coffee Station (Lobby 100), Breakroom 105, Hallway/Volunteer 107

DIVISION 7 THERMAL AND MOISTURE PROTECTION

GENERAL NOTES FOR DIVISION 7

LOW VOC ADHESIVES AND SEALANTS

The VOC content of all adhesives and sealants (including all caulking) used in the project must be less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, <http://www.aqmd.gov/rules/html/r1168.html> AND all sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51. <http://www.arb.ca.gov/DRDB/BA/CURHTML/R8-51.HTM>.

SUBMITTALS

Provide a cut sheet and a Material Safety Data Sheet (MSDS) for each adhesive and sealant used in the building highlighting VOC limits.

Provide a cut sheet, as indicated in the relevant sections below, for each product highlighting recycled content. Recycled content should indicate the percentages of both post-consumer and post-industrial content.

SECTION 072100 INSULATION

SUBMITTALS

Formaldehyde free batt insulation required

GENERAL

Insulation, including facings, shall have maximum flame-spread rating of 25 and a maximum smoke density of 450, except in concealed spaces when installed in substantial contact with the unexposed surface of ceiling, floor or wall finish.

THERMAL INSULATION

Minimum R values (exceed 2021 Washington State Energy Code, Prescriptive Path) as follows:

BUILDING ELEMENT	MINIMUM INSULATION R-VALUE
Roof trusses	R-60 Blown in cellulose
Lower roof framing	R-30 mineral wool batt, R22.5 rigid GPS on top of deck
Wood Framed Exterior walls	R-30 BIBs in stud cavity, R-8.4 rigid stone wool on outside
Slab on Grade	R-30 under entire slab, rigid XPS
Walk-in Freezer slab	R-20, rigid XPS insulation

Mineral Wool Batt- Rockwool Comfortbatt

Exterior rigid stone wool insulation board- Rockwool Comfortboard 80

Blown in cellulose(attic)- GreenFiber www.greenfiber.com

Exterior rigid under slab- XPS insulation- Dupont "Styrofoam Square edge"

Exterior rigid under roofing- GPS insulation- Sto Corp: Sto GPS Board

Blown in Blanket fiberglass Insulation- Johns Manville: JM Spider Plus

ACOUSTICAL INSULATION

Provide minimum 3-inch-thick acoustic insulation in designated interior walls, bathrooms and private offices.

SECTION 072600 WEATHER-RESISTIVE BARRIER / AIR BARRIER (WRB / AB)

MANUFACTURER

Tyvek Commercial or approved equal.

TYPE

Tyvek Commercial weather resistive barrier and air barrier. Install as recommended by manufacturer, lap and tape all seams. Use on exterior walls under continuous rigid insulation.

ACCESSORIES

Self-adhering 20-millimeter-thick rubber membrane: Blueskin by Monsey Bakor or approved equal. Primer: As recommended by Weather Barrier manufacturer. Sealant: Butyl or Urethane.

VAPOR RETARDER SHEET

Polymide film, 2 mil thickness, CertainTeed MemBrain Smart Vapor Retarder/Air Barrier or approved equal. On inside face of exterior studs, at bottom face of rafters/trusses where not exposed

BELOW SLAB VAPOR RETARDER SHEET – Stego wrap, fully taped and inspected.

SECTION 07610 METAL ROOFING (BASE BID)

AEP Span “Span-Seam 180-degree seam (SPS-216 system); Standing Seam Roof Panels: 2” Seam Height; Panel Width: 24”; Minimum steel thickness: 24 Gauge. Protective coating: Kynar 500 finish or equal. Color: selected from the manufacturer’s standards.

UNDERLAYMENT

Vaproshield RoofShield Underlayment, or equal.

EAVE PROTECTION MEMBRANE

Self-adhering polymer-modified asphalt sheet complying with ASTM D 1970; 40 mil total thickness. Install eave protection membrane from eave edge to minimum 2 feet up-slope beyond interior face of exterior wall, and one ply of 36-inch-wide membrane centered over valleys.

SECTION 07310 ASPHALT SHINGLES (DEDUCTIVE ALTERNATE)

ROOFING SHINGLES

Type 1, Class A three-tab 30-year laminated fiberglass asphalt shingles. Rated for high wind exposure and with the manufacturer’s Scotchgard® Algae Resistance coating by 3M™ (coating to have 20-year warranty).

ACCEPTABLE MANUFACTURERS (PER ESDS ASECTION 6.7a REQUIREMENTS)

1. GAF Materials Corporation, 1361 Alps Rd. Wayne NJ 07470. Tel: 1-973-628-3000.
 - a. Product: Timberline Cool Series.
2. CertainTeed Corporation, Architectural Support Group, P.O. Box 860, Valley Forge, PA 19482. Tel: (800) 233-8990, Fax: (610) 341-7940.
 - a. Product: Landmark SOLARIS™
3. Owens Corning Roofing Products LLC, One Owens Corning Parkway Toledo, OH 43659. Tel: (800) 438-7465, Fax: (800) 824-9472.
 - a. Product: Duration Premium Cool Shingles.

UNDERLAYMENT

SBS modified asphalt, Type II, as recommended by shingle manufacture (two layers required at roof slopes less than 4:12).

EAVE PROTECTION MEMBRANE

Self-adhering polymer-modified asphalt sheet complying with ASTM D 1970; 40 mil total thickness. Install eave protection membrane from eave edge to minimum 2 feet up-slope beyond interior face of exterior wall, and one ply of 36-inch-wide membrane centered over valleys.

SECTION 07460 FIBER-CEMENT SIDING

FIBER CEMENT VERTICAL SIDING (BASE BID)

5/8" fiber cement square channel siding, 10 1/4 "x 12' panels on 20-gauge steel hat channels at 16" o.c. horizontal over 1x4 p.t. wood furring strips mounted vertically at 16" o.c. as a rainscreen system with continuous thru wall flashing at the window head at each floor level. Provide insect screen at top and bottom of furring strips.

Type: HardieArtizan HZ10 with Lock Joint system square channel siding, pre-primed (front, back and edges), smooth.

Assume inclusion of all the manufacturer's accessories, corner and trim pieces as well as matching caulking.

FIBER CEMENT PANEL SIDING (DEDUCTIVE ALTERNATE)

5/16" fiber cement panel siding, 4'x10' panels on 1x4 p.t. wood furring strips mounted vertically at 16" o.c. as a rainscreen system & 1x3 fiber cement battens at 16" o.c. vertical. Provide insect screen at top and bottom of furring strips.

Type: HardiePanel HZ10 siding, pre-primed (front, back and edges), smooth.

Assume inclusion of all the manufacturer's accessories, corner and trim pieces as well as matching caulking.

FIBER-CEMENT TRIM

See Section 06200.

WEATHER RESISTIVE BARRIER AND AIR BARRIER (WRB / AB)

Per Section 07260 (above).

INSECT SCREEN:

Galvanized flexible insect screen.

Accessories: Fiberglass clips (2") attached to studs- Cascadia Clip (cascadiaclip.com), 1" vented hat channel-installed horizontally for siding attachment- Garland (www.garlandco.com)

SECTION 077200 ROOF SPECIALTIES AND ACCESSORIES

FLASHINGS

22 gauge baked enamel aluminum flashings, copings, scuppers, downspouts (3 x 4), and flashings. Standing seam joints at copings.

Assume 300 LF of gutters (rectangular style) and 10 downspout locations(round)

RIDGE VENTS

Continuous Aluminum to match roofing color

Add cistern and pump for roof runoff for irrigation

SECTION 07900 JOINT SEALERS

All caulking and sealants utilized at the building interior shall adhere to the following requirements: The VOC content of all adhesives and sealants used in the project must be less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, <http://www.aqmd.gov/rules/html/r1168.html> AND all sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51. <http://www.arb.ca.gov/DRDB/BA/CURHTML/R8-51.HTM>

THIS IS A MANDATORY REQUIREMENT FOR THE PROJECT.

GENERAL PURPOSE INTERIOR SEALANT

Acrylic emulsion latex, paintable; Sonneborn Sonolac or equivalent.

GENERAL PURPOSE EXTERIOR SEALANT

Silicone-base; Dow 790 or equivalent.

DIVISION 8 DOORS AND WINDOWS

SECTION 08200 DOORS AND FRAMES

EXTERIOR DOORS

Insulated metal door with thermal break metal frame, compressible neoprene weather stripping and aluminum threshold (barrier free). Primed for paint finish. Door panels to be galvanized with tops welded flush and primed for field paint.

INTERIOR DOORS

W Series:

Solid core, flush birch veneer grade with factory clear finish -W1

Solid core, flush birch veneer grade with factory clear finish, thin lite -W2

Solid core, flush birch veneer grade with factory clear finish, half lite -W3

Stile and rail dutch door, tongue and groove panels, birch veneer grade with factory clear finish, upper half lite -W4

Solid core, flush birch veneer grade with factory clear finish, full lite, pocket door -W6

Solid core, custom barn door, stile and rail- cross brace, tongue and groove panels -W7

M Series:

Insulated hollow metal doors M1-M4

T Series:

Double acting traffic doors- Eliason Corp.: HCP 10 ABS impact traffic doors

INTERIOR DOOR FRAMES

Hollow metal door frames and sidelites, fabricated from 16-gauge metallic coated steel sheet, mitred or coped and welded face corners and seamless face joints. Painted

SECTION 083613 SECTIONAL DOORS

Loading dock- 2-inch-thick sectional aluminum door, vertical lift, CHI Corp: Full view aluminum, 3297, insulated rails, dark bronze powder coat, include clear glass vision panels.

SECTION 084229 AUTOMATED ENTRANCES

Lobby entrance- Aluminum power operated doors, Bi-part w. external breakout panels for egress, Duraglide 2000- Stanley Access Technologies

SECTION 085213 FIBERGLASS WINDOWS

WINDOWS

Architectural grade fiberglass frame; nailing fin, with vision glass, related flashings, anchorage and attachment devices. Color: Black. Type: Operation as shown in drawings.

MANUFACTURER/MODEL

Pella Impervia fiberglass windows.

THERMAL PERFORMANCE

Window Assembly Maximum: Meet the following combined U-Factor & Solar Heat Gain Coefficient (SHGC) criteria:

U-0.30 or lower and SHGC 0.38 or higher

GLASS AND GLAZING

Provide the manufacturer's standard clear sealed insulating glazing material that complies with ASTM E 774 - 92 Class A and is at least 25 mm overall in thickness.

Factory inside glazed except where field glazing is required due to large window unit dimensions. Units shall be reglazeable without dismantling sash framing.

INSECT SCREENS

Provide insect screens for each operable exterior sash. Locate screens on inside or outside of window sash, depending on window type. Design windows and hardware to accommodate screens in a tight-fitting removable arrangement with a minimum of exposed fasteners and latches.

WARRANTY

Provide ten (10) year warranty from date of substantial completion for labor and materials including warranty against failure of hermetic glazing seal.

SECTION 08710 FINISH HARDWARE

GENERAL

All hardware to conform to the requirements of ANSI A117.1-2003. Provide extended lip strike plates and dust caps at all doors. Provide stops as required at all doors.

DOOR HARDWARE

Interior Doors:

Commercial grade hardware at interiors, Schlage ND series or equal with lever handles Cylinder, wall stop. Series 4000, Grade 3 minimum. FOB fey access controls at Door 104 and 107. Privacy latchsets with occupancy indicator at 102 and 103. Keyed locks at 108A, 109, 110, 112A, 201, 203 & 206.

Exterior Doors:

Mortise locksets with retractable egress deadbolt integral with latch lever. Entry hardware to conform to the requirements of the International Building Code security section and local CPTED standards. Provide removable key cylinder locks. Series 4000, Grade 1. FOB fey access controls at exterior doors.

DIVISION 9 FINISHES

GENERAL REQUIREMENTS FOR DIVISION 9

FORMALDEHYDE:

Any product purchased with formaldehyde levels above 0.05 ppm must bear a label in accordance with 29 CFR 19010.1048. Pg 8-3.

RECYCLED CONTENT

Use recycled content materials in the project such that the sum of post-consumer recycled content plus one-half of the post-industrial content constitutes at least 10% of the total value of the materials in the project.

SUBMITTALS

Provide a cut sheet, as indicated in the relevant sections below, for each product highlighting recycled content. Recycled content should indicate the percentages of both post-consumer and post-industrial content.

SECTION 092500 GYPSUM BOARD

SUBMITTALS

Provide a cut sheet for each product highlighting recycled content. Recycled content should indicate the percentages of both post-consumer and post-industrial content.

INTERIOR WALLS AND CEILINGS

5/8" wallboard at walls and ceilings, Moisture resistant at Bathrooms, Storage Closets (USG Fiberock Aquatough or equivalent) Smooth texture. Level 4 Finish Typ.

SECTION 095100 SUSPENDED ACOUSTIC CEILINGS

KITCHEN CEILING

ACT-1: Armstrong Kitchen zone (white) 2 x 4 x 5/8."
Suspension system- Armstrong prelude XL 15/16"

SECTION 096500 RESILIENT FLOORING

RESILIENT FLOORING- see finish schedule.

PVC free
Commercial Grade, 2 mm
Product: Armstrong Natralis or approved equal, commercial grade

RESILIENT FLOORING- Kitchen only

Product: Altro Stronghold 30 or approved equal

RUBBER STAIR STRINGERS & RUBBER STAIR SYSTEM

Stringer Height: 10 inches; thickness: 0.100 inches; length: 72 inches.
Treads to include self-illuminating photo-luminescent abrasive glow strips.

RUBBER STAIR NOSING

Assume 2-inch x 2-inch single-flange nosing (Roppe #13 or equivalent).
Nosing to comply with ANSI A117.1 Requirements.

SECTION 096800 CARPET

Commercial Grade carpet tile
Product: Mohawk Group: Sabbatical- GT433 – 12 x 36 tufted
(See finish schedule for locations)

SECTION 09900 PAINTING

GENERAL

All interior paints, varnishes and primers shall meet or exceed GS-11 Green Seal standards limiting VOCs (volatile organic compounds). This requirement applies to all materials applied on site.

THIS IS A MANDATORY REQUIREMENT FOR THE PROJECT

VOC LIMITS

<u>Paint Type</u>	<u>Maximum VOC Limit</u>
<u>Flats</u>	<u>50 g/L</u>
<u>Non-Flats</u>	<u>50 g/L</u>
<u>Primer or Undercoat</u>	<u>100 g/L</u>
<u>Floor</u>	<u>100 g/L</u>
<u>Anti-corrosive</u>	<u>250 g/L</u>

If colorant is added at Point of Sale, the VOC content shall not exceed the following:

<u>Paint Type</u>	<u>Maximum VOC Limit</u>
<u>Flats w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Non-Flats w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Primer or Undercoat w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Floor w/ colorant added at point of sale</u>	<u>100 g/L</u>
<u>Anti-corrosive w/ colorant added at point of sale</u>	<u>250 g/L</u>

Green Seal prohibited chemical components include benzene, toluene, vinyl chloride cadmium, lead, mercury, and formaldehyde.

Potential low-VOC paint products include the following:

Rodda
Sherwin Williams
ICI Lifemaster 2000
Kelly-Moore Enviro-Cote
Benjamin Moore Pristine Eco-Spec

Provide documentation demonstrating recycled content that meets Green Seal standard GS-43 (ESDS 6.4)

EXTERIOR FINISHES

Preprimed fiber cement siding and trim:

(2) coats exterior latex satin enamel

Clear finish wood beams, columns,

(2) coats Cetol Log and Siding Finish

Galvanized Metals:

(1) coat primer

(2) coats exterior alkyd gloss enamel

Paving Stripping

(2) coats white traffic paint

INTERIOR FINISHES

Materials not specifically noted but required for the work, such as linseed oil, shellac, thinners or other materials shall be the product of the approved paint manufacturer.

Gypsum Wallboard (all Walls and Ceilings):

(1) coat interior primer-sealer

(2) coats interior eggshell latex (semigloss at apartment bathrooms, Laundry, Restroom, Janitor Room)

Door Frames

- (1) coat alkyd primer
- (2) coats interior semigloss latex

PAINTING OF MECHANICAL AND ELECTRICAL WORK

Paint the following items (unless provided with factory finish) with 2 coats to match adjacent surfaces where adjacent surfaces are painted or where any painting is scheduled in those spaces.

1. All items that receive prime coat under Mechanical and Electrical specifications.
2. All piping, pipe covering, ducts, grilles, registers, radiators and similar.
3. All conduit, boxes, panelboards and similar.
4. All grilles, registers and similar shall be spray painted.
5. Paint interior surfaces of ductwork that can be seen through grilles, louvers or registers with 1 coat flat black paint.

DIVISION 10 SPECIALTIES

SECTION 101400 IDENTIFYING DEVICES

SCOPE OF WORK

Provide sign at building entrance. All signage to meet or exceed the requirements of the ADA.

All Signage unless otherwise indicated:

Helvetica, Upper and Lower case (title case), color to be selected by architect from full color line, contrasting colors required.

Building Identification Signs:

8" tall individual metal letters (one per building), mount on outside wall in location to be coordinated with Orcas Island Fire and Rescue

Fire Control Room:

Provide at exterior door 111 - "FIRE CONTROL ROOM". Tactile signage with letters raised minimum 1/32" and grade II braille. 3 inch sign height with character height of 1 inch

SECTION 102000 LOUVERS AND VENTS

SCOPE OF WORK

Includes miscellaneous stationary wall louvers, frames and accessories.

STATIONARY LOUVER

Fabrication: Hidden support style.

- Frame:
 - Frame Depth: 4 inches (102 mm).
 - Material: Extruded aluminum, Alloy 6063-T5.
 - Wall Thickness: 0.081 inch (2.1 mm), nominal.
- Blades:
 - Style: Horizontal drainable.
 - Material: Formed aluminum, Alloy 6063-T5.
 - Wall Thickness: 0.081 inch (2.1 mm), nominal.
 - Angle: 45 degrees.

- Centers: 4 inches (102 mm), nominal.
- Gutters: Drain gutter in head frame and each blade.
- Downspouts: Downspouts in jambs to drain water from louver for minimum water cascade from blade to blade.
- Fabrication: Hidden vertical supports to allow continuous line appearance with exposed mullions spaced a maximum of 120 inches (3048 mm).
 - Mullion/Hidden Intermediate Support Style – Design incorporates visible mullions or frames at the perimeter of the louver and at section joints only. Rear-mounted hidden blade supports are utilized where required and do not interrupt the louver blade sightlines. The rear-mounted blade support varies depending on louver height and the design wind load.
- Sill: Steeply angled integral sill eliminating areas of standing or trapped moisture where mold or mildew may thrive and affect indoor air quality.
- Assembly:
 - Factory assembled louver components. Welded construction.

Finishes:

- 70 percent Floropolymer-Based Painted Finishes:
 - Coating shall conform to AAMA 2605. Apply coating following cleaning and pretreatment. Cleaning: AA-C12C42R1X.
 - Manufacturer's standard 2-coat application.
 - Color: Manufacturer's standard in paint system specified.

SECTION 102600 WALL AND DOOR PROTECTION

CORNER GUARDS

Surface mounted, Provide corner guards at outside corners of all corridors.

Manufacturer: LG series -LG 2

Material: Clear polycarbonate- Acrovyn

Size: 2 inches.

Corner: Radiused.

Color: As selected from manufacturer's standard colors.

Length: 48 inches (one piece)

Provide w/ the manufacturer's preformed end caps.

WALL PROTECTION 1

Location: Kitchen 112, Restroom 102 and 103

Height: Kitchen 112- 10'h., Restroom 102 and 103- 48" h.

Manufacturer: Marlite Symmetrix Smartseam- Subway pattern, white

Material: Fiber reinforced plastic

Trim- manufacturer provided white trim

WALL PROTECTION 2

Location: Janitor Rm. 106

Height: 48" h.

Manufacturer: Marlite standard FRP panels- white

Material: Fiber reinforced plastic

Trim- manufacturer provided white trim

SECTION 102800 TOILET AND BATH ACCESSORIES

ACCESSORIES

Bathrooms, Janitor Rm. - Commercial grade, Bobrick or equal, chrome toilet and bath accessories as follows:

- Grab Bars (capable of supporting 200 lb. loads) 6 total

- Toilet Paper Holders (2)
- Towel Hook;(5) hooks
- Mirror (2) above sinks
- Baby changing table- (1) total- horizontal changing station- Fully ADA accessible. Foundations 200-EH or equal
- Soap dispensers (2)
- Paper towel dispenser (2)
- Seat cover dispensers (2)
- Mop and Broom holders- Janitor Room only

SECTION 104400 FIRE EXTINGUISHERS

FIRE EXTINGUISHERS

Class 2A10BC rated fire extinguishers shall be installed per local jurisdictions requirements. One every 75 feet in a locking recessed (ADA) cabinet with glass at access door. Kitchen to have K style fire extinguisher on mounting bracket.

Mounting Height: Per UFAS and ANSI A117.1-2003

DIVISION 11 EQUIPMENT

SECTION 114400 COMMERCIAL KITCHEN EQUIPMENT

GC TO PROVIDE AND INSTALL

See Kitchen Equipment Drawings

SECTION 114520 APPLIANCES

Refrigerator, and clothes washer to be Energy Star rated

Refrigerator:	BreakRoom 105 - 23.3 cf with lower freezer and automatic defrost feature (Energy Star rated)
Microwave:	Breakroom 105 - Owner to provide
Laundry:	Jan. 106 - Washer front load, w/ front controls, (Energy Star rated) Jan. 106 - Dryer front load, w/ front controls, (Energy Star rated)

DIVISION 12 FURNISHINGS

SECTION 123550 CASEWORK

CABINETS

Locations:	Lobby 100 (Coffee Station), Break Room 105, Hallway/Volunteer 107
Manufacturer:	Markay Cabinets.
Type of Construction:	Face frame, standard overlay, 3/4 inch solid hardwood glued and screw doweled.
Case Construction:	Dados, glue and mechanical fasteners.
Case Materials:	1/2" plywood.
Shelves:	Same as case.
Shelf Supports:	Metal pins in drilled system holes.

Interior Finish: White Melamine.
Finished Ends: Wood Veneer - maple.
Drawer Materials: Sides – ½” birch plywood; Bottoms – ¼” birch plywood
Drawer Construction: Butt joint with captive bottom.
Doors: Solid wood frame with veneer recessed panels.

Use Formaldehyde free composite wood for cabinet boxes (i.e. exterior plywood) and/or seal all exposed edges.

CABINET HARDWARE

Provide and install all hardware required for completely operable casework. Including:

- Full extension drawer slides, 2 each per drawer
- Concealed hinges, 2 each per door; euro-style
- 3-inch wire pulls, one each per door and drawer front

SECTION 12505 BLINDS (N.I.C.)

OWNER TO PROVIDE

DIVISION 21 FIRE PROTECTION

DESCRIPTION

SCOPE OF WORK

Engineered drawings for all systems stamped by a NICET class III certified designer. Low VOC adhesives and sealants throughout in conformance with LEED standards

1. NFPA 13 Coverage
2. Wet pipe sprinkler system
3. All required permit submittal documents to local authorities

DIVISION 22 PLUMBING

DESCRIPTION

SCOPE OF WORK

See Sazan Group – Basis of Design

All fixtures and faucets to be low flow/ WaterSense labeled:

- Wall Mount Toilets- 1.28 GPF or less MaP test performance at minimum 500g. – Toto Entrada CST244EF or approved equal
- Showerhead- 1.75 GPM or less- Delta T13491 or approved equal, include slide bar hand shower at ADA units.
- Kitchen faucets – 1.5 GPM or less – Delta 199LF-HDF or approved equal, single level anti-scald accessible controls
- Bathroom faucets – 1.5 GPM or less – Delta 525LF-MPU or approved equal, single level anti-scald accessible controls

Prefabricated acrylic shower stall- 36” square interior dimensions- Freedom Showers- APF3838BF4P
Include grab bars, folding seat, shower curtain rod

Hose bibs (freeze proof, wall type with fixed handle): Provide 8 total, one with hot water

Aboveground Water Storage Tank- -500-gallon Norwesco sphere cistern includes backflow preventer.

DIVISION 23 HVAC

DESCRIPTION

SCOPE OF WORK

See Mechanical Drawings and Sazan Group Basis of Design

DIVISION 26 ELECTRICAL

DESCRIPTION

SCOPE OF WORK

See Electrical Drawings and Sazan Group Basis of Design

DIVISION 31 SITE WORK

DESCRIPTION

See Civil and Landscape Drawings

DIVISION 32 EXTERIOR IMPROVEMENTS

SECTION 321600 PAVING AND SURFACING

Exterior concrete slab at Staff Patio- 4-inch minimum depth concrete slab, broom finish- (See Civil and Landscape Drawings)

SECTION 323119 CHAINLINK FENCES

SCOPE TO INCLUDE

Posts, Rails and Frames
Wire Fabric
Concrete

BASIS OF DESIGN

Master-Halco, Inc: www.masterhalco.com/#sle

COMPONENTS

Steel posts, rails and frames- hot dip zinc coating
Wire fabric- zinc coating
Privacy slats- HDPE strips
Concrete post footings

WARRANTY

15 Year Manufacturer Warranty

LOCATION: Solid Waste Enclosure

SECTION 323223 SEGMENTAL RETAINING WALLS

Concrete block units for retaining walls (east side of site): Mutual Materials-Cornerstone near vertical 100 series

SECTION 323300 SITE FURNISHINGS

Planters- Staff Patio (total of 5)– Planters at Staff Patio- Epic Gardening- 29-inch tall, large modular bed planters

Bike Rack- SportWorks Tofino- 4 bikes (2 racks- bolted into concrete)

Exterior benches (south wall) - Timberform Site Furnishings: Parkway 2016-6 ADA bench- wood slats (total of 4) Black frame

SECTION 328000 IRRIGATION SYSTEM

DESIGN BUILD IRRIGATION SYSTEM

Complete underground PVC, schedule 40 sprinkler system with submeter, automatic sprinkler controller, automatic valves, manual valves, MP-Rotators, drip heads, tree bubblers, rain sensor, back-flow preventer, control panel, and valves for blow-out and winterization. System to be drip type efficient system (per Evergreen Requirements).

WARRANTY

The Contractor shall provide a written guarantee to the Owner covering all materials, installation, workmanship, and against defects for a period of one (1) year after final acceptance.

SCOPE

Assume irrigation shall be provided at all proposed planting locations.

SECTION 329000 LANDSCAPING

(See Landscape Drawings)

DIVISION 33 UTILITIES

SECTION 331000 WATER SYSTEMS

(See Civil Drawings for Water Supply and Fire Flow) Connect to new mains provided for overall Pea Patch site.

SECTION 334000 STORM DRAINAGE AND SANITARY SEWER

(See Civil Drawings for Storm Drainage and Sanitary Sewer) Connect to new mains provided for overall Pea Patch site.

SECTION 334000 FOUNDATION DRAINAGE

FOOTING DRAINS

Provide and install new 4-inch diameter perforated, filter wrapped, PVC footing drains with clean drain rock at perimeter of all new footings and connect to storm drainage system.

END OF OUTLINE SPECIFICATIONS

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A. Mechanical

1. Code Requirements

- a. Mechanical systems will be designed in accordance with all applicable Codes, Standards and Authorities having jurisdiction, the Underwriter's Laboratory and in accordance with current engineering practices.
- b. 2021 Washington State International Building Code
 - 2021 Washington State International Existing Building Code
 - 2023 National Electric Code with Local Amendments
 - 2021 Washington State International Mechanical Code
 - 2021 Washington State Plumbing Code with local Amendments
 - 2021 Washington State Fire Code
 - 2021 International Fuel Gas Code
 - 2022 ASHRAE Standard 90.1
 - National Fire Protection Association Applicable Codes and Local Amendments
 - Underwriters Laboratories (UL)
- c. Electrical energy for the building's HVAC systems will be purchased from Orcas Power & Light Cooperative (OPALCO). Natural gas shall not be used to generate heating hot water to help reduce the on-site carbon emissions from fossil fuels.

2. Design Criteria

- a. Outdoor Design Conditions
 - 1) Summer Cooling: 71°F DB/ 60.6°F WB
 - 2) Peak Monthly cooling temperature of 85°F utilized to size maximum cooling load capacity.
 - 3) Winter Heating: 24°F
- b. Indoor Design Conditions
 - 1) Summer: maximum of 72°F
 - 2) Winter: minimum of 68°F
 - 3) Storage/Utility: 86°F/68°F ± 3°F (no cooling)

3. Building Envelope Criteria

a. Glazing: Prescriptive 2021 WSEC

- 1) Glazing Assembly U-value: 0.34 Btu/h-ft²-°F
- 2) Glazing SHGC: 0.38

b. Opaque Elements: Passive House Guidelines

- 1) Exterior Wall U-value: 0.029 Btu/h-ft²-°F.
 - Wood Framed: R-25 batt + R-10 continuous insulation (ci)
- 2) Roof U-value: 0.018 Btu/h-ft²-°F
 - R-30 loose fill cellulose + R-41 ci entirely above deck
- 3) Floor U-value: 0.033 Btu/h-ft²-°F
 - Cement Slab: R-30 ci under slab
- 4) Slab F-factor: 0.54.

c. Infiltration: AHRAE 90.1 2018

- 0.4 cfm/sf of wall area

4. Internal Heat Gains

a. Occupancy: Office: 140 sf/p; Kitchen: 50sf/p; Retail: 33 sf/p

- Lighting: 0.58 W/sf
- Equipment: Office: 2 W/sf; Kitchen: 2.5 W/sf, Retail: 0.5 W/sf

Note: default occupancy counts will only be used in the absence of furniture layouts. Default equipment loads will only be used in the absence of equipment data from applicable sub-consultants.

5. Ventilation Criteria

a. Spaces will be designed to meet 2021 Washington State Mechanical Code and ASHRAE 62.1.2010

b. Minimum office ventilation: 5 cfm per person

c. All other occupied spaces are assumed to be designed to meet ASHRAE 62.1 + 30%.

d. Operable windows are assumed to be provided in offices for additional ventilation. This ventilation will not supplement DOAS sizing.

6. Air-side Sizing Criteria

a. The following criteria are used to size air-side system components unless otherwise indicated. Velocities are shown in feet per minute (FPM)

b. Duct Sizing Criteria will be based on the following:

Max Pressure Drop (in. w.g.) / 100 ft	Duct Location	NC	Maximum Velocity (fpm)	
			Rectangular Duct	Round Duct
Med. Pressure: 0.20 Low Pressure: 0.10 Return/Exh: 0.10	In Shaft or Above Drywall Ceiling	50	3200	4800
		45	2800	4200
		40	2400	3600
		35	2000	3000
		30	1600	2400
	Above Lay-In Tile (ACT) Ceiling	50	2000	3200
		45	1600	2800
		40	1400	2400
		35	1200	2000
		30	1000	1600
Exposed Duct	50	975	1300	
	45	900	1200	
	40	825	1100	
	35	750	1000	
	30	625	900	

7. Air Register Sizing Criteria

NC Rating of Space	Maximum Airflow Speed (fpm)	
	Supply Air Outlets	Return Air Openings
25	350	450
30	425	500
35	500	600
40	560	675
45	625	750
50	700	830

a. Intake Louvers

- 1) Maximum Velocity: 500 FPM (net free area)
- 2) Maximum Pressure Drop: 0.1 in.w.g

b. Exhaust Louvers

- 1) Maximum Velocity: 800 FPM (net free area)
- 2) Maximum Pressure Drop: 0.15 in w.g.

8. Air Pressure Relationships

- a. Systems will be designed to maintain the following air pressure relationships in spaces:
- 1) Typical Office Spaces: Positive pressure compared to the outdoors
 - 2) Restrooms: Negative to adjacent spaces
 - 3) Kitchen/Servery: Negative to adjacent space
 - 4) Warehouse: Negative to adjacent spaces

B. HVAC System

1. Fresh Air Ventilation:

One DOAS (Dedicated Outdoor Air System) will be provided to serve the entire food bank. DOAS will be installed above the ceiling in Staging/Sorting 109 and will be required to supply outdoor air to all occupied areas. The DOAS will include energy recovery ventilation (ERV) utilizing general building warm exhaust air to preheat incoming outdoor air. ERV systems incorporate high efficiency plate frame heat exchangers to transfer the exhaust air heat to the incoming vent air and meet the code required 60% efficiency rating.

The DOAS will be mounted on isolation springs and connected to supply air ductwork and low pressure combined return/exhaust air ductwork. The units provide 100% outdoor air (i.e., no return recirculation) and recover heat from the combined return/exhaust ductwork.

The DOAS system incorporates a minimum of MERV13 filters to reduce the amount of particulate matter and biological contaminants supplied to the building. Ventilation to all spaces shall be maintained during occupied hours using constant volume air valves.

2. Kitchen Ventilation:

Kitchen exhaust is to be provided by two adjacent Type I grease hoods spanning approximately ten feet each. Hoods will exhaust to the outdoors via one roof mounted exhaust fan located on the northern sloped roof above the warehouse. Type I hoods shall be sized to no less than 400 cfm/ft.

An additional Type II hood shall be provided above the commercial dishwasher spanning approximately six feet. Type II hoods shall be sized to no less than 200 cfm/ft.

Make up air will be provided to the hoods with a dedicated make up air unit (MAU). The MAU will bring in outside air from a louver on the southern exterior wall of the building above the kitchen. Outside air provided by the MAU will be conditioned using electric resistance heat.

3. Space Heating and Cooling:

- a. Heating and cooling throughout the food bank shall be accomplished using fan coils, which shall be supplied via a two-pipe variable refrigerant system (VRF) fed from two outdoor air-source heat pump condensing units (CUs). CUs shall be located to the east of Warehouse 116 outside the building envelope.

- b. The two-pipe refrigerant system shall be used to deliver tempered refrigerant to fan coil units (FCUs) in occupied spaces. FCUs will be a combination of ducted fan coils (concealed above ceilings) and wall mounted units (primarily used in smaller zones). FCUs will recover heat from one another when simultaneous heating and cooling is required in different zones.
- c. FCUs will be connected to multi-port branch controllers in a centralized location. Branch controllers will then be piped to CUs via refrigerant piping. Refrigerant leak detection devices will be provided in all spaces required by ASHRAE 15.
- d. Spaces with specific heating and cooling requirements are:
 - 1) Restrooms will be ventilated indirectly by the DOAS system. A portion of the exhaust DOAS ductwork shall be routed to restrooms, and provide the code required ventilation. Exterior restrooms will include small in-wall electric heaters, size limited by energy code. No cooling to be provided in these spaces.
 - 2) Janitor Closet and Storage Rooms: Spaces required by the Washington Mechanical Code and ASHRAE 62.1 to have ventilation air shall be ventilated indirectly by the DOAS system. A portion of the exhaust DOAS ductwork shall be routed to these rooms, and provide the code required ventilation. Exterior storage rooms and janitor closets shall include small in-wall electric heaters, size limited by energy code. No cooling to be provided in these spaces.
 - 3) Electrical Room: A dedicated wall-mount fan coil will be provided for 24/7 conditioning of the electrical room. This unit will deliver cooling, as controlled by a wall thermostat.

C. Plumbing

1. General

- a. Plumbing system will be designed in accordance with all applicable Codes, Standards and Authorities having jurisdiction, the Underwriter's Laboratory and in accordance with current engineering practices.
- b. The following codes are applicable:
 - 2021 Washington State Building Code
 - 2021 Washington State Mechanical Code
 - 2021 Washington State Fuel Gas Code
 - 2021 Washington State Plumbing Code
 - 2021 Washington State Energy Code

2. Water Supply

a. Overview:

- 1) Water will be supplied from the existing water main in the street.
- 2) Water metering shall be as required by code.
- 3) The food bank will be served by a 2-inch water lateral from the point of connection in MEP 249. Size subject to change during design.
- 4) If needed, water pressure will be reduced to less than 80 PSI as required by code.
- 5) All equipment, i.e. water heaters, pressure reducers, etc. shall be NSF certified for domestic water use.

3. Domestic Hot and Cold Water

- a. Domestic hot water will be supplied from a heat pump hot water heater system. As a means of mitigating water borne illness, hot water will be stored and distributed at 140 deg. F. A thermostatic mixing valve shall be provided downstream of the storage tanks to supply the building with the necessary hot water temperature.
- b. Water tanks (2) and associated recirculation pumps (2) to be located in MEP room.
- c. Domestic hot water will be recirculated to hot water storage located in MEP room.

- d. All pipes, valves, solder, and fittings will comply with lead free requirements. Domestic Type L copper with wrought copper fittings.
- e. A pressure reducing valve manifold will be provided in MEP, if required.
- f. Hose bibbs will be provided at the building exterior and within mechanical rooms. Hot water hose bibbs to be provided as requested by architect at mat cleaning station.
- g. Gleaning sink to be provided at exterior of building. Plumbing to be freeze proof. Sink to be decommissioned during winter months by building owner.

4. Sanitary Sewer and Waste System

- a. A new sewer line will be provided. Actual tie-in location will be coordinated with Civil Engineers.
- b. Sizing to be determined for building drain.
- c. Floor drains will be provided as required by code and Owner requirements.
- d. Floor/wall cleanouts will be placed per code.
- e. Sanitary waste and vent piping will be cast iron no-hub. Grease waste piping will be stainless steel.
- f. Grease waste from the kitchen will be routed to a grease interceptor located in the parking lot outside of the building envelope. This will allow for easy access for grease interceptor maintenance and pumping. Grease interceptor lids will be rated to bare the weight of vehicular traffic.

5. Plumbing Fixtures

- a. Plumbing fixtures will be of the low water demand type.
- b. 1.28 GPF sensor-operated wall mounted water closets will be provided in all restrooms per applicable code. Flush-valve toilets will have a Maximum Performance (MaP) test score of 800 or greater. All water closets will be ADA compliant height.
- c. Lavatory faucets will have sensor operated faucets with 0.35 gpm aerators.
- d. Faucets and flush valves will be battery powered sensor operated.

- e. All sinks will have WaterSaver deck mounted faucets with wrist blade handles.
 - f. All sink faucets will be provided with an anti-siphon vacuum breaker.
 - g. Kitchen fixtures shall be coordinated with kitchen consultant and architect
6. Condensate Piping
- a. Condensate waste from VRF FCUs and other mechanical cooling equipment will discharge as an indirect waste in compliance with UPC. Condensate piping will be sized per Washington State code or per manufacturer requirements and sloped at $\frac{1}{8}$ " per foot. Condensate pumps will be provided where mechanical equipment is too low for piping to reach discharge point by gravity feed.
7. Underground Sanitary, Vent Piping
- a. Underground sanitary and vent piping will require to be wrapped with polyethylene wrap where required to protect against contaminated soil. Piping Material: no-hub cast iron ASTM 888 or CISPI 301, heavyweight couplings.

D. Fire/Life Safety Systems

1. FIRE ALARM

a. General

- 1) The building will have a Fire Alarm system consisting of a local main fire alarm panel reporting back to a central alarm monitoring location to be determined by the Owner. It is assumed this will be a fully sprinklered building. The Fire Alarm system will be based on EST Fire Alarm Systems.
- 2) Initiation devices will consist of smoke detectors in corridors, electric rooms, data rooms, and other sensitive areas where smoke detection warnings would be beneficial to the staff and/or as required by the Fire Marshal.
- 3) Manual pull stations will be provided at staff only accessible areas.
- 4) Duct Smoke Detectors will be provided where required.
- 5) Heat Detectors will be provided in specific areas where having a high heat alarm signal before the sprinkler heads activate is advantageous, such as cooking and workshop areas.
- 6) The sprinkler system will be fully monitored through the Fire Alarm system.
- 7) Alarm notification will be provided using fire alarm horns and ADA compliant visual strobes.
- 8) Off-site monitoring will be accomplished using either cellular connection or AES Intellinet Systems to be determined.

2. FIRE PROTECTION

a. General

The fire protection system will be designed in accordance with all applicable Codes, Standards and authorities having jurisdiction, local ordinances, and sound engineering practices.

- 1) The following Codes are applicable:
 - 2022 NFPA 13
 - 2022 NFPA 20 as applicable

b. Design

Design, calculations, and system approvals for the fire protection system are the responsibility of the Fire Protection Contractor. Buildings are to be fully sprinklered in accordance with the above. An approved complete building fire protection system is to be provided. Coordinate with architect for riser and equipment locations.

- 1) Sprinkler head spacing shall be as required by NFPA 13, except as follows:
 - a) In all locations, sprinkler heads shall be equidistant between lights, between wall and lights, between lights and air diffusers, and between wall, lights, and air diffusers.
 - b) Provide uniform and repetitive patterns for each room.
 - c) Center sprinkler heads on joints in acoustic tile or center in tiles in order to conform to the above.
 - d) Obtain approval from the Architect for the sprinkler head layout and coordinate with other trades.
- 2) Wet-Pipe Sprinkler System
 - a) The hydraulically designed sprinkler system shall be provided with a minimum 10 percent safety margin.
 - b) The actual fire sprinkler system provided is subject to the Fire Marshal's approval.
 - c) Sprinkler piping and head locations shall be coordinated with the Architect prior to submittal to the Fire Marshal for review and approval.
 - d) Each floor shall be provided with its own sprinkler zone control valve, flow switch and drain valve.
- 3) Sprinkler Occupancy Hazard Classifications according to NFPA 13 recommendations.

c. Water Supply

A PIV shall be located on the side of the building. The system/piping is to connect to fire system.

All hydraulic calculations shall be based upon:

- Minimum available water flow and pressure available onsite.
- Static pressure, flow and residual pressure used to calculate the system shall be

indicated on the plans.

- The available static pressure, residual pressure and flow are to be determined by Fire Protection Contractor.
- Fire Protection Contractor shall obtain current water flow and pressure data from a reliable source such as the Fire Department or water purveyor.
- No test older than 6 months should be used.

d. Seismic Criteria

Seismic support of fire protection systems shall adhere to all relevant provisions of the latest version of the applicable Codes. Seismic calculations for support are to be reviewed by a licensed structural engineer.

An acoustic consultant will provide recommendations for any vibration isolation or acoustic treatment of the fire protection systems.

e. Training

Fire Protection Contractor will provide training to personnel on the operation and maintenance and operation requirements for the system. Contractor shall provide a current copy of NFPA 25 to the building maintenance staff.

E. Electrical

General

The Orcas Island Food Bank located on Pea Patch Lane will be an approximately 10,250 square foot two story building serving the local community. The building will consist of offices, a market, commercial kitchen, and warehouse. Founded in 1984, Orcas Island Food Bank has been serving the local community through education, advocacy, and food access with most of the food provided being locally grown or raised.

Electrical Scope

The electrical systems for this building will provide lighting, power distribution, power for kitchen and refrigeration equipment, and miscellaneous receptacle power to enhance the overall use of the building to serve the community.

Electrical Service

Incoming electrical service will be served from an on-site Orcas Power and Light Cooperative pad mount transformer located near the building. From the transformer, underground feeders will bring 120/208 volt, 3 phase, 4 wire service to an estimated 2,500 ampere Main Switchboard (MSB) located on the East side of the building. From the MSB, normal power will be distributed inside to the Main Electrical Room located on Level 2 and then routed throughout the building using sub-panels for lighting, power, electrical vehicle charging and mechanical equipment. Branch circuits will then supply power to all electrical fixtures and devices. A power company meter will be mounted on the building. Each panel will be separately metered, include surge suppression, and be of door-in-door construction.

Emergency Power

Emergency power will be provided via an on-site generator. This generator is planned to provide redundant power to the building with run time to be determined. Emergency egress and exit lighting will be served from a central lighting inverter to allow for code required life safety power and ease of maintenance and testing. The Fire Alarm panel will be battery backed as allowed by NFPA 72.

Lighting

LED light sources will be provided for all lighting fixtures using a mixture of recessed and surface mount linear and round fixtures in wall and ceiling locations as best selected for the purpose and space.

Typical lighting levels for interior spaces will include:

- Vestibule, Reception – 20 foot-candles.
- Market – 50 foot-candles general and displays approximately 3 times more than ambient.
- Restrooms – 5 foot-candles general and 15 foot-candles at vanities.
- Storage – 10 foot-candles.
- Kitchen – 50 foot-candles general to 100 foot-candles for tasks.
- Break Room – 30 foot-candles.
- Work Room – 30 foot-candles.
- Conference Room – 30 foot-candles general and 50 foot-candles over table.
- Office – 30 foot-candles general with 50 foot-candles task.
- Corridor – 10 foot-candles.
- Mechanical/Electrical Room – 20 foot-candles with capability for portable task lighting.

Warehouse Areas – 5 foot-candles.
Staging/Sorting – To be determined when actual tasks are known.
Lobby – 10 foot-candles.

Exterior lighting LED fixtures will be a mix of pedestrian-oriented poles, bollards, and wall sconce fixtures dependent on Owner preference and programming for the area. Parking area lighting will consist of lighting poles.

Typical lighting levels for exterior spaces will be:

Building Entrance – 5 foot-candles.
Security at Building Perimeter – 1 foot-candle with motion sensors to increase light level on demand.
Parking Lot – 0.2 foot-candles.

Lighting controls will vary from fully automatic lighting in public spaces using occupancy sensors and daylighting controls to manual dimming in office areas. All controls will be localized to the area of use. Lighting intensity variation based on occupant sensing may be provided in public spaces. Wireless lighting control will not be provided.

Site lighting controls will use photocells and lighting intensity variation based on motion detection controls.

Power Distribution

All receptacles on the project will be tamper-resistant receptacles. Where requested or required by Owner preference, locking covers or switched receptacles will be provided in publicly accessible areas.

Common Areas will be provided receptacles as determined by Owner preference and programming for the area.

The kitchen will be provided an electrical panel for kitchen loads and electrical devices as determined by Owner preference and programming for the area.

Offices will be provided with two receptacles per office.

Conference and Meeting rooms will be provided receptacles as determined by Owner preference and programming for the area. These areas will be provided floor outlets when required by NEC.

Exterior building areas will be provided weatherproof, locking GFI receptacles on approximately 100 foot centers.

Code minimum number of electric vehicles stations will be provided. Final number to be determined.

Telecommunications

1. Data/Voice:

Cable Internet service for the area is provided by Startouch or Rock Island which is to be determined by Owner. It is anticipated that service will route underground in conduit to the building Demarcation point in the Main Telecommunications Equipment Room (MDF). Telecommunications Infrastructure will route mainly in ceiling areas of

Telecommunications outlet locations will be provided with a 4" x 4" outlet box with a single gang mud ring, and a 1" conduit to an accessible ceiling area. Pull strings will be provided in all conduits. Additional conduits may be required in select areas. If more than two cables are used at an outlet a 5" x 5" outlet box with a single gang mud ring and a 1-1/2" conduit to an accessible ceiling area will be used.

All data/voice cables will be CAT 6A. A typical "outlet" will contain two cables and two jacks that can be used for data or voice depending on patch panel connection at the MDF.

Offices will be provided with one outlet near the desk. Work areas will be provided additional outlets to support equipment such as printers, scanners, etc.

Telecommunications outlets will be provided at each telephone, computer, printer, monitor and every equipment reporting location.

Wireless connectivity will be available to Staff and Visitors over multiple wireless networks.

Television:

Television (TV) and/or Data (D) outlets will be provided in areas where requested, by Owner's preference.

Conference and Break rooms will be provided with TV/D outlets.

TV outlets will be provided with CATV cable. Data outlets will be provided with CAT 6A cable.

Audio/Visual (A/V)

A building ambient A/V system may be provided and is to be determined by Owner.

Alarm notification will be provided using fire alarm horns and ADA compliant visual strobes.

Off-site monitoring will be accomplished using AES Intellinet Systems.