
PROJECT MANUAL AND SPECIFICATIONS

IMCO OFFICE, SHOP ONE AND SHOP TWO

2116 Buchanan Loop
Ferndale, WA 98248

JUNE 11, 2009

Owner:
Imhof Squared LLC.
4509 Guide Meridian
Bellingham, WA 98226

General Contractor / Architect:
Axiom Design Build
5424 Ballard Ave NW
Suite 204
Seattle, WA 98107

PHONE: (206) 283-9535
FAX: (206) 283-2082

TABLE OF CONTENTS

I. CONDITIONS

Division 0 Conditions of the Contract

II. SPECIFICATIONS

Division 1 General Requirements

Division 2 Site Construction

Division 3 Concrete

Division 4 Masonry

Division 5 Metals

Division 6 Wood and Plastics

Division 7 Thermal and Moisture Protection

Division 8 Doors and Windows

Division 9 Finishes

Division 10 Specialties

Division 11 Equipment

Division 12 Furnishings

Division 13 Special Construction

Division 14 Conveying Systems

Division 15 Mechanical

Division 16 Electrical

I. CONDITIONS

00500 AGREEMENT

Form of agreement acceptable to both parties.

00700 GENERAL CONDITIONS

Copyright Notice: Documents prepared by Axiom Design Build are instruments of service for use solely with respect to this project. Axiom Design Build shall retain all common law, statutory and other reserved rights, including the copyright. Neither the Owner nor the Contractor shall reuse or permit the reuse of the Architect's documents except by mutual agreement in writing.

Definitions: "Provide" means "furnish and install". "Approved" means the Architect will approve and be the sole judge of quality and suitability of proposed selection or substitution.

Prior Use: Owner has the right to use or occupy building or any part thereof, or to use equipment installed under Contract, prior to final acceptance. A certificate for Payment, a progress payment, or partial or entire use or occupancy shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents.

Drawings: Includes both architectural drawings and engineering drawings and any drawings attached to the Project Manual.

Contract Documents: The Contract Documents consist of the Drawings, Project Manual, Addenda issued prior to execution of the Contract, the Agreement between Owner and Contractor (hereinafter the Agreement) and other documents listed in the Agreement, and Modifications issued after execution of the Contract.

Order of Precedence: In the event of a conflict between the Contract Documents, the Project Manual shall have precedence over Drawings unless stated otherwise in the Project Manual.

Number of Specified Items Required: Whenever an article, device or piece of equipment is referred to in singular number, such reference shall include as many items as are shown on Drawings or required to complete the installation.

Execution, Correlation and Intent: The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended result.

Site Information: Information concerning conditions at site was considered suitable for preparation of drawings and is given for the convenience of the Contractor. Owner and Architect do not guarantee accuracy of such information. It is the responsibility of the Contractor to self inform as to conditions affecting the work and

no increase in contract price will be made because of discrepancies and uncertainties or Contractor's neglect to verify conditions bearing upon his cost.

Schedule of Values: Before the first Application for Payment, the Contractor shall submit to the Owner a schedule of values allocated to the various portions of the Work.

Payments to Contractor: Payments shall be made as described in the Contract for construction. Retainage shall be as stated in the contract. State sales tax shall be listed as a separate item with each payment. The Contractor warrants that title to all Work and release of all applicable liens covered by an Application for Payment will pass to the Owner no later than the time of payment. Final payment shall not become due until the Contractor submits to the Architect OR Owner releases and waivers of all liens, and data establishing payment or satisfaction of obligations.

Damaged or Defective Work: Damaged or defective work caused by contractor shall be repaired or replaced to the approval of the Architect and Owner at no additional cost to the Owner.

Dimensions and Field Conditions: Contractor shall verify all dimensions and field conditions before proceeding and notify Architect/Engineer of any discrepancies, and shall notify the Architect and Owner of proposed field changes prior to construction of modification.

Supervision and Construction Procedures: The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention, and shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions. The Architect and Engineers have not been retained or compensated to provide design and/or construction review services related to the contractor's safety precautions or to means, methods, techniques, sequences or procedures for the contractor to perform his/ her work. The undertaking of periodic site visits by the Architect or Engineers shall not be construed as supervision of actual construction nor make either responsible for providing a safe place for the performance of work by the Contractor or the Contractor's employees or employees of suppliers or subcontractors, or for access, visits, use, work, travel, or occupancy by any person.

Safety and Protection: Contractor shall take all precautions and effect all measures required by federal and local statutes for the safety of employees and other affected persons. This shall include, but not be limited to, fences, guardrails, approved safety ropes and equipment, and tie-off points engineered and installed to withstand the appropriate loads. Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

1. Employees and all other affected persons.
2. All work, materials, and equipment.
3. Other property at the site or adjacent thereto.

Notification: In the course of the Work, the Contractor shall notify the Owner, Architect, Engineers, Consultants, and the local building official at critical construction milestones established by the local jurisdiction in order to obtain necessary approvals prior to commencement and continuation of work.

Materials: The Contractor shall deliver, handle, store and install materials in accordance with manufacturers' instructions.

The Architect shall not have control over or charge of and shall not be responsible for: construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility; the Contractor's schedules or failure to carry out the Work in Accordance with the construction documents; the acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

Taxes: Sales tax is not included in the contract sum. For all portions of the Work provided by the Contractor, the Contractor shall collect from the Owner and pay sales, consumer, use and similar taxes which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

00800 SUPPLEMENTARY CONDITIONS

II. SPECIFICATIONS

Division 1

General Requirements

01100 SUMMARY:

01110 SUMMARY OF THE WORK

Work shall include all work described in the following documents:

Drawings	Office set dated: xx/xx, 2009 Shop One set dated: xx/xx, 2009 Shop Two set dated: xx/xx, 2009
Project Manual	Dated: 06/11, 2009

Unless specifically excluded herein. All material shall be as specified. All work shall be completed in a workmanlike manner according to standard practices. In case of discrepancy between Drawings and Specifications, the Specifications shall take precedence. The materials and workmanship required by these Contract Documents or applicable codes and standards establish a minimum requirement which the Contractor's work shall meet or exceed.

The scope of work in the BASE BID and alternates shall be as follows:

BASE BID: Construction of new office and 2 shop buildings as described in the Contract Documents.

01130 ITEMS NOT IN CONTRACT (N.I.C.):

The following N.I.C. items shall be provided by Owner and installed by Contractor:

Utility hookup fees

The following N.I.C. items are to be provided and installed by Owner under separate contract:

01150 CONSTRUCTION TIME:

Unless delay is caused by circumstances deemed by the Architect to be beyond the Contractor's control, the project shall be completed before permit expiration OR in 275 calendar days from the date of contract award.

01200 PRICES AND PAYMENT PROCEDURES

01210 ALLOWANCES:

All Allowances stated in the Contract Documents shall be included in the Contract Sum. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection. Unless otherwise provided in the Contract Documents:

1. Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes (except WSST).
2. Handling at the site, labor, installation costs, overhead, profit and other expenses associated with allowance items shall be included in the Contract Sum and not in the allowances, unless otherwise provided in the Contract Documents
3. Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted by Change Order to reflect: (1) the difference between the actual costs and the allowances and, (2) resulting changes in the Contractor's associated costs and expenses.

Installation of the following allowance items shall be included in the Contract Sum:

<u>Allowance Item</u>	<u>Allowance Amount</u>
Surface mounted light fixtures (interior and exterior)	\$225/fixture
Cabinet pulls	\$10/item
Bath accessories (including shower doors)	\$5,500
Entry door hardware	\$600

The following allowances include installation:

<u>Allowance Item</u>	<u>Allowance Amount</u>
Tile	\$35/sq. ft.
Carpet and pad	\$45/sq. yd.
Resilient flooring	\$35/sq. yd.

01220 PERMITS AND FEES:

The Building Permit will be obtained and paid for by the Owner. The Contractor shall obtain all other permits required for the Work, and the cost of these permits shall be included in the Contract Sum. Special inspections, if required, shall be obtained by the Contractor and paid for by the Owner.

01300 ADMINISTRATIVE REQUIREMENTS

The following items shall be submitted to the Architect/Owner for review and approval prior to fabrication and installation:

01320 CONSTRUCTION PROGRESS DOCUMENTATION:

01330 SUBMITTAL PROCEDURES:

The following items shall be submitted to the Architect/Owner for review and approval prior to fabrication and installation:

1. Concrete Form plans
2. Metal Fabrication shop drawings
3. All others specified below.

01500 TEMPORARY FACILITIES AND CONTROLS

01520 CONSTRUCTION FACILITIES:

Provide necessary wiring and piping for temporary power and water. Cost of power and water during construction shall be included in contract. Provide phone and fax machine at job site.

01560 PROTECTION OF WORK AND PROPERTY AND TEMPORARY BARRIERS AND ENCLOSURES:

Contractor shall protect Owner's property during construction, including vegetation, and restore or replace same if damage or loss occurs through the fault of the Contractor, his workers, or his Subcontractors. Any repair to damaged property shall match existing work in all respects. Debris from construction shall be removed from the site promptly.

01570 TEMPORARY CONTROLS:

See ALL CIVIL DRAWINGS for erosion and sediment control measures

01700 EXECUTION REQUIREMENTS

01740 CLEANING:

Keep premises free from accumulation of waste and debris. At the completion of the Work, Contractor shall remove all tools, surplus materials and debris from the job site, and clean all new work.

01770 CLOSEOUT PROCEDURES:

Punch list will be made by Architect or Owner and may be added to regardless of whether Owner has occupied the project. Final inspection will be made when all punch list items have been corrected.

01780 CLOSEOUT SUBMITTALS:

All subcontractors shall provide an organized 3 ring binder with all owner and operating manuals for all components associated with their subcontract.

01790 GUARANTEE:

Guarantee all Work under this Contract free from defective materials and workmanship for a period of one year after final acceptance. The Contractor shall correct all defects discovered within the guarantee period at no cost to the Owner. Occupancy does not constitute final acceptance.

02100 SITE REMEDIATION:

Property shall be surveyed to identify hazardous materials. The removal of any hazardous material is the responsibility of the Owner under a separate contract. The work must be done and certified by qualified personnel. The contractor shall provide the EPA's pamphlet "Protect your family from lead in your home" if the existing structure is pre 1978 and involves disturbing more than two square feet of paint.

02200 SITE PREPARATION**02210 SUBSURFACE INVESTIGATION:****02220 SITE DEMOLITION:****02230 SITE CLEARING:**

Remove trees, vegetation, and debris from excavated or filled areas and dispose of off site to approved location. Acquire all necessary permits.

02250 SHORING AND UNDERPINNING:**02300 EARTHWORK****02310 GRADING:**

See Drawings for existing and final grades.

02315 EXCAVATION AND FILL:

Excavate for structures to elevations and dimensions shown, or continue as directed by the Architect if unsatisfactory conditions are encountered at design elevations. Estimates of earthwork shown on Drawings are for building permit purposes only and shall not be used for bidding. Footing excavations for exterior walls shall extend at least eighteen inches below finish grade. Excess excavation material to be removed from site.

Excavations shall be back-filled as promptly as work permits. The backfill shall be clean granular material usable as concrete aggregate, or shall be accomplished in layers not to exceed 8", with each layer thoroughly compacted before the application of the next layer. The moisture content of soil used as backfill shall be such as to allow proper compaction. No compacted fill shall be used where installation would exceed design loads of retaining walls or compromise function of drainage systems or utilities.

Where concrete foundation walls retain more than four feet of earth, backfilling shall not be completed before floor diaphragm (joists and plywood) is in place.

See Structural drawings and Soils Engineer's Report for specific information and details.

02450 FOUNDATION AND LOAD-BEARING ELEMENTS

02455 DRIVEN PILES:

NA

02470 AUGER-CAST PILES:

NA

02480 FOUNDATION WALLS:

Verify locations with Architect before work begins.

02500 UTILITY SERVICES

Owner will pay hookup fees for sewer, gas, water and electrical.

02510 WATER DISTRIBUTION

Provide site water distribution systems for domestic consumption, and irrigation per civil Mechanical and plumbing drawings.

02530 SANITARY SEWERAGE:

Provide side sewer connection to Association drain field stub.

2550 NATURAL GAS /PROPANE

Provide underground supply lines.

02580 ELECTRICAL AND COMMUNICATION:

Per Electrical Drawings

02600 DRAINAGE AND CONTAINMENT

02620 SUBDRAINAGE SYSTEMS:

Unless noted on the civil drawings:

Provide 6" rigid **ASTM D 3035** perforated S footing drain surrounded by 6" of 3/4-inch-minus washed rock and then wrapped in geotextile filter fabric (Mirafi 140N, Supac 4NP, or similar) with 12" of well-graded granular backfill over footings to finish grade. Pipe shall be installed with perforations down and sloped at one inch in ten feet minimum to approved disposal point. **No surface water drains shall be connected to footing drains.**

02630 STORM DRAINAGE:

Unless noted on the civil drawings:

Water collected from all down spouts and area drains shall be tight-lined with rigid **ASTM D 3035** to an approved disposal point, independent of subdrainage system. Pipe shall be sloped at one inch in ten feet minimum.

CATCH BASNS GRATES AND FRAMES:

Per Civil Drawings.

02700 BASES, BALLASTS, PAVEMENTS:

Per Civil drawings

02800 SITE IMPROVEMENTS AND AMENITIES

02830 RETAINING WALLS:

Retaining walls and rockeries over 4 feet high must conform to the Structural Engineer's design. Verify location of all walls with Architect before work begins.

2900 PLANTING:

Comply with local regulations for planting removal and replacement of trees. See Site plan and Landscape Architect's Drawings if applicable.

*****NOTE: ALL CONCRETE for the OFFICE BUILDING shall contain as much FLY ASH as possible to meet the minimum structural requirements of the specified mix. Said mix shall be approved in writing by the building official AND Architect prior to install *** (LEED requirement).**

0300 CONCRETE FORMS AND ACCESSORIES**03120 CONCRETE FORMS:**

Form exterior face of exposed concrete with **smooth faced** plywood panels and snap-off form ties. All non exposed concrete shall be formed with smooth panels free of chips, cracks and broken corners. Spreaders at formwork for footings shall be appropriately sized steel hardware; wood spreaders are not permitted.

Form tie layout shop drawings needs to be signed off by Architect.

Exposed concrete to be finished per 09980.

3150 CONCRETE CONTROL JOINTS:

Joints shall be spaced at a maximum of 20' with concrete panels being as close to square as possible.

3155 WATER STOPS:

Provide Vinylex R4-316 water stop or approved alternate at all new foundation perimeter.

03200 CONCRETE REINFORCEMENT:

See structural drawings for reinforcement information.

03310 STRUCTURAL CONCRETE:

Concrete work shall conform to all requirements of Chapter 19 of the Uniform Building Code. Provide for all openings and features required by other trades.

Do not place concrete without approval of Architect and local building authority. Place no concrete in freezing weather.

03330 ARCHITECTURAL CONCRETE:

Integral color concrete slabs shall have expansion joints and scoring patterns per Architect's specification. Color to be approved by Architect.

03350 CONCRETE FINISHING:

Joints shall be spaced at a maximum of 20', with concrete panels being as close to square as possible unless otherwise indicated in Drawings.

Interior Concrete slabs: Consolidate surface of exposed interior concrete slabs by HARD SMOOTH finish troweling. Surface shall be free of trowel marks, uniform in elevation, texture and appearance.

Exterior Concrete slabs: Consolidate surface of exposed interior concrete slabs by finish troweling and a LIGHT BROOM FINISH. Surface shall be free of trowel marks, uniform in elevation, texture and appearance sloped to drain per drawings.

04050 BASIC MASONRY MATERIALS AND METHODS

04080 MASONRY ANCHORAGE AND REINFORCEMENT:

NA

04090 MASONRY ACCESSORIES:

NA

04200 MASONRY UNITS

04220 CONCRETE MASONRY UNIT:

NA

STONE: Mortar shall be Type S in accordance with UBC; one part (by vol.) Portland cement, one quarter to one half part (by vol.) hydrated lime and mortar sand not less than two and one quarter nor more than three times the sum of the volumes of the cements and lime used. Construct wall with masonry veneer ties per UBC sec.

4410 STONE MATERIALS:

Countertop materials and colors to be verified by Owner/Architect before ordering as follows:

See FINISH SCHEDULE dated: XXXX

05050 BASIC METAL MATERIALS AND METHODS

Grind all weld joints at all metal fabrications.

05080 FACTORY APPLIED METAL COATINGS :

Exterior Metals shall be HOT DIPED GALVANIZED

Interior Metals to be finished with a hand rubbed mixture 1 part boiled LINSEED OIL and 5 parts BEESWAX melted together. Apply to all surfaces of metal, let dry and harden then buff smooth.

05100 STRUCTURAL METAL FRAMING

Provide all required shop drawings to Architect for approval prior to fabrication. Obtain special inspections as required prior to cover cover.

05500 METAL FABRICATIONS:

05520 HANDRAILS AND RAILING:

See drawings for locations and assemblage.

Exterior Metal fabrications shall be HOT DIPED GALVANIZED

Interior Metal Fabrication Shall be RAW STEEL with finish per (5080)

06090 FASTENERS:

Use galvanized fasteners (unless indicated otherwise on drawings) where exposed to weather. Use cut washers under bolt heads and nuts bearing on wood. Unless otherwise shown on Drawings, nailing shall conform to Table 23-II-B-1 of UBC-1997 Edition.

06100 ROUGH CARPENTRY

06110 WOOD FRAMING:

*****NO UREA FORMALDEHYDE RESINS ALLOWED IN ANY FRAMING OR SHEATHING IN OFFICE BUILDING. (PER LEED REQUIREMENTS) *****

Provide all wood, nails, bolts, screws, framing accessories, rough hardware and other items required for completion of the Work. Install all framing indicated, in accordance with Drawings and pertinent codes. All materials, unless otherwise indicated in Construction Notes on Drawings or approved, shall meet or exceed the following grades:

Item	Description
Sills	Pressure treated hem-fir
Studs	Stud grade hem-fir
Posts and beams	Structural #1 fir
Exposed posts and beams	#1 fir appearance grade
Joists and rafters	Construction #2 hem-fir
Glue laminated beams	24F-V4 w/ mfg. certificate
Manufactured trusses	Manufacturer's engineering and certificate
Plywood floor sheathing	3/4" T&G underlayment (formaldehyde free)
Plywood wall, roof sheathing	1/2" APA Exp 1 plywood (formaldehyde free)
Wood contacting earth	Hem-fir PT
Exterior deck structure	Hem-fir PT
Wood Decking	2x6 IPE
Interior Bridge car decking	3x T&G decking

Do not notch, bore or cut members in such a way as to impair their structural integrity. Install all backing required for other trades. Provide solid blocking at lines of support and cross bridging or solid blocking where span exceeds 10 feet. Locate bridging at center of span or equally spaced between supports.

Before beginning framing, Contractor shall note toilet waste line and recessed light fixture locations in order to prevent conflict during subsequent rough-in.

Framing contractor to provide minimum 1½" thick solid backing/blocking at all grab bar, shower seat, mirror, TP holder locations and as indicated on plans.

06140 TREATED WOOD:

All treated wood shall be arsenic and chromium free and conform to AWPA Standard reference C2,C16 and all local codes.

06160 SHEATHING:

*****NO UREA FORMALDEHYDE RESINS ALLOWED IN ANY FRAMING OR SHEATHING. (PER LEED REQUIREMENTS) *****

Place plywood on floor and roof with face grain perpendicular to supports and continuous over at least two supports. Floor sheathing shall be installed with a continuous bead of waterproof construction adhesive on all framing members. Add layers of subfloor as required to make various finish floor materials flush at transitions.

06190 PREFABRICATED STRUCTURAL WOOD:

Truss joists and laminated veneer lumber are to be engineered by the manufacturer and installed per manufactures instructions as indicated on the Drawings.

06200 FINISH CARPENTRY

06220 MILLWORK:

Provide exterior millwork as shown on Drawings. All exterior millwork to be kiln dried CLEAR smooth cedar unless otherwise noted.

Provide interior millwork as shown on Drawings, otherwise per below:

Item	Description
Office Base:	1/2 x 6" VG FIR
Office Case:	1x3 VG FIR
Office Window Trim:	GWB wrapped

Item	Description
Shop 1&2 Base:	1/2 x 6" Finger jointed Poplar
Shop 1&2 Case:	1x3 finger jointed wood Poplar
Shop 1&2 Window Trim:	GWB wrapped

06400 ARCHITECTURAL WOODWORK

06410 CUSTOM CABINETS:

*****NO UREA FORMALDEHYDE RESINS ALLOWED IN ANY FRAMING OR SHEATHING. (PER LEED REQUIREMENTS) *****

Construct to details in drawings by an approved cabinet maker. Drawers shall have appropriately sized side mounted full extension ball bearing guides. All shelves shall be 3/4" thick plywood and adjustable. Shelves behind glass doors to

match cabinet interior finish. All adjustable shelves shall be installed with multiple holes and 5mm spacers. Provide scribe stile 1 inch minimum where cabinet meets wall in perpendicular to ensure tight fit.

Cabinet construction shall meet or exceed the following standards:

Flush frame construction.

Body Members

Face Frames and rails

Shelves

Backs

Mounting strips

Drawer sides and Backs

Drawer fronts

Drawer bottoms

Glass doors

Doors and Panels

Hinges: Blum, European (125 ° where doors can swing past 90°) or approved alternate

Guides: Accuride #4035 , 1 inch overtravel, 100# capacity or approved alternate

Pullouts: Must operate with doors open 90 degrees. Same construction as drawers.

Kitchen cabinetry shall include: Final configuration of cabinets shall be approved by Architect prior to fabrication.

06415 COUNTERTOPS:

Countertop materials and colors to be verified by Owner/Architect before ordering as follows:

See FINISH SCHEDULE dated: XXX

06420 PANELING:

06430 WOOD STAIR AND RAILING:

06440 WOOD ORNAMENTS:

06460 WOOD FRAMES:

06500 STRUCTURAL PLASTICS

9380 PLASTIC FABRICATIONS

7100 DAMPPROOFING AND WATERPROOFING

Provide and apply Rub-R-wall CG commercial grade Waterproofing per manufactures specifications at **all foundation wall and footing below finished grade.**

07110 DAMPPROOFING:

07200 THERMAL PROTECTION

07210 BUILDING INSULATION:

*****NO UREA FORMALDEHYDE RESINS ALLOWED IN ANY INSULATION IN OFFICE. (PER LEED REQUIREMENTS)*****

Provide thermal insulation on all exterior walls, floors and ceilings as follows:

Location	Insulation
Floor slabs	R-10 rigid
Floors, framed over non cond.	R-19
Walls	R-21
Ceilings/roofs/roof decks	R-30—use baffles to ensure 1 1/2" min. air space
Ceilings under attics	R-38 batt

In conjunction with radiant heating system, slabs on grade shall be insulated entirely with R-10 minimum rigid insulation.

07260 VAPOR RETARDERS:

Provide vapor retarder on all exterior walls, floors and ceilings as follows:

Location	Vapor Retarder
Under slab	see drawings
Walls and ceilings	GWB w/ Vapor Barrier Primer Sealer

07300 SHINGLES, ROOF TILES, AND ROOF COVERINGS

Low slope roof membrane to be: Firestone Ultra Ply TPO Roofing Systems. Installed per manufacturers specifications. Or alternate approved by Architect.

07400 ROOFING AND SIDING PANELS

07410 METAL ROOF AND WALL PANELS:

Metal roof Installed in locations as indicated in Drawings shall be AEP Span Design Span hp 17" panel coverage (22 Gauge). <http://www.aepspan.com>

Color: (Zincalume) to be approved by architect. Roof vapor barrier under Metal roof shall be 30# building paper.

Metal wall panels Installed in locations as indicated in Drawings shall be AEP Span Box Rib Wall 36" panel (22 Gauge). <http://www.aepspan.com> Color: (Weathered Copper) to be approved by architect. Wall vapor barrier under Metal wall panels shall be Vaproshield brand Wall shield (black color) installed per manufacturers specifications. <http://www.vaproshield.com>

7460 WOOD SIDING:

Wood siding to be RECLAIMED CEDAR preferably reclaimed barn siding. To be planed smooth. Board to net out at 3/4" thickness and 9 1/2:" in width. Fasten to 1x3 cedar battons (painted black) with (3) 1/4 x 3" galvanized lag screws with galvanized washers. Leave a 1/2" space between boards and at outside corners. Battons to be installed with 10d ring shank nails over Vaproshield Wall shield (black color) over sheathing per Structural.

For siding finishes see division 9 FINISHES.

07600 FLASHING AND SHEET METAL

Unless otherwise indicated, flashing shall be 24 gauge, galvanized / finish to match the adjacent metal or approved by architect prior to install.

07700 ROOF SPECIALTIES AND ACCESSORIES

07710 MANUFACTURED ROOF SPECIALTIES:

Gutters to be BEGER BUILDING PRODUCTS 6" 1/2 round (22 guage) Zincalume in color. 4" inch round Zincalum (22 guage) down spouts. Verify shape, sizes, connections, and placement of all down spouts and gutters with Architect prior to install. <http://www.bergerbuildingproducts.com/index.html>

07720 ROOF ACCESSORIES:

07900 JOINT SEALERS:

*****All sealants and adhesives need to meet GREEN SEAL Commercial Adhesives (GS-36)*****

Throughout the work, caulk and seal all joints to provide a positive barrier against passage of air and moisture.

08100 METAL DOORS AND FRAMES

Provide and install the following, or alternate approved by Architect:

Shop 1: Amweld Building products 16 gage steel door and 16 gage steel jamb set up for mortise hinges and mortise hardware primed.

Shop 2: Amweld Building products 16 gage steel door and 16 gage steel jamb set up for mortise hinges and mortise hardware primed.

08200 WOOD AND PLASTIC DOORS

*****NO UREA FORMALDEHYDE RESINS ALLOWED IN ANY DOOR CORES OR VENEERS IN OFFICE. (PER LEED REQUIREMENTS) *****

Provide and install the following, or alternate approved by Architect:

Office: Interior doors to be # 1 Fir veneer on solid core pre hung in double rabbet jamb.

08300 SPECIAL DOORS

Provide and install the following, or alternate approved by Architect:

Office: Single glazed Curtain wall to match store front look of Windows and Exterior doors per plan.

Shop 1: Exterior roll up doors. Amarr Model 3500 per plan w/ electric garage door openers and key pads. Interior roll up doors. Amarr Model 5601 w/ chain hoist per plan.

Shop 2: Exterior roll up doors. Amarr Model 3500 per plan w/ electric garage door openers and key pads. Interior roll up doors Amarr Model 5601 w/ chain hoist per plan.

08400 ENTRANCES AND STOREFRONTS

Office: Main entry door (1) location. Old Castle Glass ALL glass entry door pair. 3/4" thick fully tempered glass with aluminum bottom rail. Handles, pivots, door closers, locks to be approved by architect.

Other exterior doors locations. Kawneer 500 entrance door. Mill finish aluminum. Handles, pivots, door closers, locks to be approved by architect.

Shop 1: Main entry doors (2) locations. Kawneer 500 entrance door. Mill finish aluminum. Handles, pivots, door closers, locks to be approved by architect.

Shop 2: Main entry doors (2) locations. Kawneer 500 entrance door. Mill finish aluminum. Handles, pivots, door closers, locks to be approved by architect.

08500 WINDOWS

Kawneer AA900 ISO WEB Windows. (Max u value .55, Min SHGC .45) Finish to be mill finish aluminum. Operations per drawings.

08600 SKYLIGHTS

Crystallite 3962 Aluminum Frame Fixed. (Max U value , Min SHGC .45) Finish to be mill finish aluminum. Or approved alternate.

08700 HARDWARE

08710 DOOR HARDWARE:

Provide following to be approved by architect prior to order.

OFFICE:

Hinges Typical: Stanley 4 ½" x 4 ½" ball bearing brushed stainless finish.

Exterior Doors:

Lockset: FSB 8801 Function H Entrance EB trim (verify compatibility with Panic Hardware).

Handle: FSB 1076 Stainless



Interior Doors:

Lockset: FSB 8801 Function E Privacy EB trim.

Handle: FSB 1064 aluminum anodized



SHOP ONE:

Exterior Doors:

Lockset: FSB 8801 Function H Entrance EB trim

Handle: FSB 1076 Stainless

Interior Doors:

Bathroom lockset: FSB 8801 Function E Privacy EB trim

Handle: FSB 1076 Stainless

SHOP TWO:

Exterior Doors:

Lockset: FSB 8801 Function H Entrance EB trim

Handle: FSB 1076 Stainless

Interior Doors:

Lockset: FSB 8801 Function TBD

Handle: FSB 1076 Stainless

08720 WEATHERSTRIPPING AND SEALS:

Door bottom shall sit one inch above finish floor for rug clearance.

All other exterior doors shall be supplied with high impact polymer weather stripping and interlock threshold set one inch above finish floor for rug clearance.

08750 WINDOW HARDWARE:

Verify w/architect.

09200 PLASTER AND GYPSUM BOARD**09250 PORTLAND CEMENT AND PLASTER:****09250 GYPSUM BOARD:**

Framing members to receive gypsum wall board (GWB) shall be plumb and level to within 1/8" in 8'. Framing alignment should allow corner bead and casing bead installation to require no more than 1/8" of joint compound.

Use 1/2" board material on framing at 16" on center, and 5/8" board material on framing at 24" on center. Fasten with self-driving flat head screws. Heat building to 55 degrees one day prior to taping and maintain temperature until finish has dried. Finishing treatment for GWB shall be as follows; refer to FINISH SCHEDULE for locations of different finishes.

Unless noted in finish schedule the minimum for the following area shall be performed:

Office: Level 4

Shop 1&2: Level 3 light orange peel texture

Wrap all windows in sheet rock plane with 4 sided wrap.

Type 0- Non rated - to receive paneling.

No taping, joint compound, or corner beads required.

Type 1- Fire taping - appearance unimportant.

All joints and angles shall have tape bedded in joint compound.

Surface shall be free of excess compound. Tool marks and ridges are acceptable.

Type 2- Gypsum tile backer board to receive ceramic tile.

All joints and angles shall have tape bedded in water-resistant compound and have one separate coat of compound over the tape and fastener heads. Accessories, if required, shall be covered by one coat of compound. Surface shall be free of excess compound. Tool marks and ridges are acceptable.

Type 3- Texture.

All joints and angles shall have tape bedded in joint compound and two separate applications of compound over all joints, angles, fastener heads and accessories. All compound shall be smooth and free of tool marks and ridges. Desired texture to be applied evenly.

Type 4- Smooth finish.

All joints and angles shall have tape bedded in joint compound and three separate applications of compound over all joints, angles, fastener heads and accessories. All compound shall be smooth and free of tool marks and ridges.

Type 5- Smooth finish for critical light or dark color or gloss finish.

Shall be equal to Type 4, with the addition of a skim coat of joint compound over the entire surface. The surface shall be smooth and free of tool marks and ridges.

09300 TILE

Thin-set all tile on Georgia Pacific "Dens-Shield" glass reinforced mortar units. Or approved alternate.

Provide Laticrete 9235 waterproof membrane with reinforcing fabric under all floor tile and under shower walls and shower pans. Or alternate approved by Architect.

09310 CERAMIC TILE:

After grouting, seal with Miracle Sealants 511 Impregnator to manufactures instructions.

09350 GLASS TILE:

09370 METAL TILE:

9380 NATURAL STONE TILE:

Seal with Miracle Sealants 511 Porous Plus to manufactures instructions.

09600 FLOORING

For locations see FINISH SCHEDULE dated:

09630 MASONRY FLOORING:

09640 WOOD FLOORING:

Reclaimed hardwood wood floor to be used verify with architect prior to order and install.

09650 RESILIENT FLOORING:

09680 CARPET:

09900 PAINTS AND COATINGS

*****All INTERIOR** paints, primers and coatings in OFFICE to meet or exceed Green seal Standard GS-11***

For locations and colors see attached **FINISH SCHEDULE.**

09910 PAINTS:

INTERIOR:

Paint shall be Benjamin Moore Aura or approved alternate. Verify colors and sheen with Architect.

<u>Location</u>	<u>Finish</u>
Gypsum drywall	1 coat Benjamin Moore Eco Spec ® Interior Latex Primer Sealer 231 2 coats latex
Doors, windows & smooth wood	1 coat primer 2 coats Latex
Cabinetry	1 coat primer 2 coats Latex

EXTERIOR:

Paint shall be Benjamin Moore or approved alternate. Verify colors and sheen with Architect.

<u>Location</u>	<u>Finish</u>
Trim	1 coat primer 2 coats exterior latex
Soffits	1 coat primer 2 coats exterior latex
Body/tilt ups	1 coat primer 2 coats exterior latex

09930 STAINS AND TRANSPARENT FINISHES:

INTERIOR:

<u>Location</u>	<u>Finish</u>
Wood floors	2 coats Benjamin Moore Benwood® Stays Clear® Acrylic Polyurethane High Gloss 422
Wood trim/interior doors	2 coats Benjamin Moore Benwood® Stays Clear® Acrylic Polyurethane High Gloss 422
TecCrete floors	2 coats L&M Chemical Lumiseal WB plus http://lmcc.cyberlaunch.net/products/lumiseal_wb_and_lumiseal_wb_plus.asp
Interior exposed concrete	1 coat L&M Chemical Lumiseal WB http://lmcc.cyberlaunch.net/products/lumiseal_wb_and_lumiseal_wb_plus.asp

EXTERIOR:

<u>Location</u>	<u>Finish</u>
Exterior wood siding	1 coat Sikkens- Cetol 1 RE (LOW VOC) 1 coat Sikkens –Cetol 23 Plus (Low VOC) (color – Natural unless specified in finish schedule)
Exterior Beams at entry	1 coat Sikkens- Cetol 1 RE (LOW VOC) 1 coat Sikkens –Cetol 23 Plus (Low VOC) (color – Natural unless specified in finish schedule)

Exterior Concrete Office

Exterior exposed vertical concrete surfaces shall be sealed with L&M Chemical Aquapel® per manufacturers specifications. Or approved alternate.

http://lmcc.cyberlaunch.net/products/aquapel_and_aquapel_plus.asp

(1)

10300 FIREPLACES AND STOVES

10310 FIREPLACE SPECIALTIES AND ACCESSORIES:

NA

10400 SIGNAGE

ADA Signage:

Exterior Signage:

10800 TOILET, BATH AND LAUNDRY ACCESSORIES

10820 BATH ACCESSORIES:

Provide all bathroom accessories, complete, in place, and solidly anchored:

	<u>Item</u>	<u>Description</u>
	Office:	
R109	Bobrick- B-3944	Large Recessed Classic towel dispenser and can http://www.bobrick.com/Bobrick/TechnicalData/B-3944.pdf
	Bobrick B-69997	Surf Mt. Double TP dispenser http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf
	Bobrick- B165 2436	Mirror stainless frame http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf
R117	Bobrick- B-369	Small Recsd Classic towel dispenser and can http://www.bobrick.com/Bobrick/TechnicalData/B-369.pdf
	Bobrick B-69997	Surf Mt. Double TP dispenser http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf
	Bobrick- B165 2436	Mirror stainless frame http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf
R118	Bobrick- B-369	Small Recsd Classic towel dispenser and can http://www.bobrick.com/Bobrick/TechnicalData/B-369.pdf
	Bobrick B-69997	Surf Mt. Double TP dispenser http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf
	Bobrick- B165 2436	Mirror stainless frame

- R210 <http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>
- Bobrick- B-3944 Large Recessed Classic towel dispenser and can
<http://www.bobrick.com/Bobrick/TechnicalData/B-3944.pdf>
- Bobrick B-69997 Surf Mt. Double TP dispenser
<http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf>
- Bobrick- B165 2436 Mirror stainless frame
<http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>

- R211
- Bobrick- B-3944 Large Recessed Classic towel dispenser and can
<http://www.bobrick.com/Bobrick/TechnicalData/B-3944.pdf>
- Bobrick B-69997 Surf Mt. Double TP dispenser
<http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf>
- Bobrick- B165 2436 Mirror stainless frame
<http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>

Item	Description
------	-------------

Shop One

- R103
- Bobrick- B-3944 Large Recessed Classic towel dispenser and can
<http://www.bobrick.com/Bobrick/TechnicalData/B-3944.pdf>
- Bobrick B-69997 Surf Mt. Double TP dispenser
<http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf>
- Bobrick- B165 2436 Mirror stainless frame
<http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>

Shop Two:

- R103
- Bobrick- B-3944 Large Recessed Classic towel dispenser and can
<http://www.bobrick.com/Bobrick/TechnicalData/B-3944.pdf>
- Bobrick B-69997 Surf Mt. Double TP dispenser
<http://www.bobrick.com/Bobrick/TechnicalData/B-6999.pdf>
- Bobrick- B165 2436 Mirror stainless frame
<http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>
- R107
- Bobrick- B165 6036 Mirror stainless frame
<http://www.bobrick.com/Bobrick/TechnicalData/B-165.pdf>

Seachrome SSB-240150-PW shower seat 24x15 surf mt.
<http://www.seachrome.com/pdfs/SSB-240150-NW.pdf>

R112

Bobrick B-69997 Surf Mt. single TP dispenser
<http://www.bobrick.com/Bobrick/TechnicalData/B-6699.pdf>

Bobrick B-5837 36 x 546 grab bar toilet combo
<http://www.bobrick.com/Bobrick/TechnicalData/B-5806.pdf>

Bobrick B-5806 x 18 18" vertical grab bar toilet
<http://www.bobrick.com/Bobrick/TechnicalData/B-5806.pdf>

Bobrick B-58616 24 x 36 grab bar shower combo
<http://www.bobrick.com/Bobrick/TechnicalData/B-5806.pdf>

Seachrome SSB-240150-PW shower seat 24x15 surf mt.
<http://www.seachrome.com/pdfs/SSB-240150-NW.pdf>

10900 WARDROBE AND CLOSET SPECIALTIES:

NA

11010 MAINTENANCE EQUIPMENT

11070 DOOR CHIMES

13850 DETECTION AND ALARM:

Provide and install 110v hardwire smoke detection system with battery back-up as shown on Drawings. System is to include an alarm that rings in and outside of all sleeping areas.

14200 ELEVATOR:

Provide and install the elevator per plan in office.

14400 CRANES:

Provide and install (2) 10 ton overhead cranes in shop one and (1) in shop two per plan.

15400 PLUMBING FIXTURES AND EQUIPMENT

See mechanical Drawings

15410 PLUMBING FIXTURES:

Provide and install the following plumbing fixtures and fittings:

See PLUMBING SCHEDULE List dated: XXX

15470 DOMESTIC WATER FILTRATING EQUIPMENT:

Provide and install all necessary fixtures and fittings for whole building water filter. Locate first off of municipal feed, before any other water conditioning device. Specs to be approved by architect prior to install.

15480 DOMESTIC WATER HEATERS:

See mechanical drawings

15500 HEAT-GENERATION EQUIPMENT

15510 HEATING BOILERS AND ACCESSORIES:

See Mechanical drawings

15700 HEATING, VENTILATION, AND AIR CONDITIONING EQUIPMENT

15720 AIR HANDLING UNITS:

See Mechanical drawings

Provide and install exhaust fans as shown per mechanical plans.

The electrical work required shall include, but not be limited to that which is described in this division and/or shown on Drawings. All electrical work shall comply with the National Electrical Code, latest edition, and local utility company regulations.

16100 WIRING METHODS**16130 RACEWAY AND BOXES:**

Per electrical drawings/specs

16140 WIRING DEVICES:

Per Electrical drawings/specs

16200 ELECTRICAL POWER:**16270 TRANSFORMERS:**

16500 LIGHTING

Per Electrical and Lighting Drawings

16510 INTERIOR LUMINAIRES:

Per Electrical and Lighting Drawings

16520 EXTERIOR LUMINAIRES:

Per Electrical and Lighting Drawings

16570 DIMMING CONTROL:

Per Electrical and Lighting Drawings

16700 COMMUNICATIONS

Per electrical drawings / specs.

16800 SOUND AND VIDEO

16850 TELEVISION EQUIPMENT:

16880 MULTIMEDIA EQUIPMENT:

END OF DOCUMENT.