

Virtual Buildings 82,500 SF

Date May 3, 2012 Construct a 82,500 SF Pre-Engineered Metal Building with 6,011 SF of office space and **Project Scope** 76,489 SF of warehouse space. Owner: Location: Arkansas **Project Cost:** \$3,799,153 **Description:** Length: 300'-0" Floor to Eve Ht: 25'-00" Building #1 Size: Width: 275'-0" Wind Velocity: 90 m.p.h. Exposure "B" Roof type: Standing Seam Metal Roof Panels Wall type: Metal Wall Panel Municipality: Arkansas Building Code: Verify Fire Suppression Design: TBD Est. project start date TBD Est. project completion date TBD

Design/Construction duration: 6 months



Insurance:

The following are the minimum insurance limits carried by the Builder:

 A. Comprehensive General Liability Umbrella: 		\$ 5,000,000	each occurrence
		\$ 10,000,000	aggregate, per proj.
1.	Personal Injury	\$ 1,000,000	each occurrence
		\$ 2,000,000	aggregate
			(compl. oper.)
2.	Property Damage	\$ 1,000,000	each occurrence
		\$ 2,000,000	aggregate
B. Comprehens	ive Automobile Liability		
1.	Bodily Injury	\$ 500,000	each person
		\$ 500,000	each occurrence
2.	Property Damage	\$ 500,000	each occurrence

Note: The Owner shall be responsible for purchasing and maintaining, pursuant to Article 7.3.1 of this Agreement, his own liability insurance, Builders Risk, and property insurance and naming the contractor as an additionally insured entity. Such insurance shall cover areas including but not limited to fire, theft, vandalism, transit, collapse, flood, earthquake, and damage resulting from defective design, workmanship or material.

Legal/Accounting:

The standard subcontract agreement used in the industry has been modified by Wieland-Davco to provide additional protection to the Owner. When dealing with various subcontractors, we will make every attempt to include these provisions in their subcontracts, but cannot guarantee it in all circumstances. The following changes include:

- A. Article X "The acceptance date to begin the warranty period will be the date the Owner takes occupancy of the facility." Note: This gives the Owner a common warranty date in which all subcontracts will be the same.
- B. Article XI Insurance and Bonds, "Subcontractor agrees to furnish certificates of insurance listing Wieland-Davco and the Owner as additionally insured and other parties if so specified before beginning the work."
- C. Article XV "Subcontractor agrees to indemnify and hold harmless Wieland-Davco and Owner and any other party indemnified by contractor under its contracts for their work from and against all liabilities, claims or demands for injury or damage to any person or property."

DIVISION ONE - GENERAL CONDITIONS

<u>Permits</u>

All permits associated with the trade work are included in this Proposal. **Building permit and site plan approval fees are not** included and will be billed as per local requirements. Performance and Payment Bond is not included.

MANAGEMENT OF PROJECT - GENERAL CONDITIONS

Wieland-Davco will staff this project with a fully trained on-site project superintendent. Project Superintendent will be available to go over any details or drawings that may require Owner input as the project progresses. Included in the proposal are the salaries for the Project Manager, Site Superintendent, Temporary Labor, Clerical and the General Liability Insurance on the same. Costs included in the proposal for the above positions include all payroll burden and applicable taxes.

Wieland-Davco has included as part of this proposal the temporary items, which will be needed during construction to keep the project in a safe, clean and orderly manner.

Job Trailer Computer Porta-Johns Water Cooler Final Clean-Up Silt Fencing Dumpsters Project Sign Safety Board Barricades

As construction proceeds, the Owner's Representative is free to call the Project Manager or onsite Project Superintendent to



discuss any questions that he/she might have.

The Owner's Representative may request (at any time) a revised schedule showing the progress to date, what the remaining portion of the job entails, and/or a critical path schedule showing all of the stages of the project and when the particular phases will be implemented. This schedule will be updated and can be forwarded to the Owner's Representative as requested.

The Project Manager will keep the Owner's Representative updated on submittals that need to be approved and when they are required to be approved in order to meet the project schedule.

All sub-contractors will be required to carry the appropriate amount of insurance before they will be allowed to perform work on the project. Wieland-Davco will ensure that all subcontractors certificate of insurance is received and on file prior to performing work.

Wieland-Davco will assist the Owner (who is responsible) with the filing of a Notice of Commencement with the local authority (Register of Deeds), putting the subcontractors on notice that any work done on the project must be registered if they intend to protect their lien rights.

WARRANTIES

- A. Wieland-Davco shall provide warranties as specified:
 - -Generally one year on workmanship and materials.
 - -Weather tight warranty on the roof system.
 - -Any manufacture warranties related to the Building equipment.

PROJECT CLOSE-OUT

- A. Wieland-Davco will provide the following prerequisites for project close-out.
 - 1. Punchlist
 - 2. Supporting documentation, final billings, as well as any miscellaneous insurance for lien waiver documentation
 - 3. Warranties as discussed previously
 - 4. O & M manuals for all mechanical / electrical equipment related to the building
 - 5. Occupancy Permit
- B. The Owner will comply with all aspects of the contract. This is to include authorizing change orders via a signed change order form, as well as agreeing to sign the Delivery Reception Report, (which enumerates prior to the time of move in of any outstanding items that need to be completed as well as agreeing to pay without challenge of the remaining amounts due to contractor per this contract. All outstanding items will be quantified for cost and an amount equaling 150% of the value of these items will be withheld until complete).

DRAWINGS AND SPECIFICATION

Wieland-Davco will provide all necessary architectural, civil, structural, mechanical, and electrical drawings and specifications based on the architectural drawings to obtain the required Building Permits and perform the construction of the project. The scope of these drawings and specifications will be limited to the Contractor's portion of the project and would not include items that are performed by outside contractors or directly by the Owner. This set of drawings and specifications will generally include the following:

- Architectural Plans
- HVAC, Plumbing and Electrical Plans
- Foundation design

- Construction details
- Structural plans
 - Civil Plans

Wieland-Davco will supply the necessary soil and concrete testing data through an independent testing lab.

DIVISION THREE - CONCRETE

Foundations

The building foundation design shall be compatible with soil investigations and the required building performance. The foundation design shall be consistent with the area's geological profile, construction practices, equipment availability, and material supply. Foundation minimum depth shall comply with applicable Codes and be design based on 3000 psf soil bearing.

Floor Concrete

Wieland-Davco shall design the floor slab on grade to meet the requirements of ACI 318. The concrete Subcontractor shall refer to ACI 302.1R-89, "Guide to Concrete Floor and Slab Construction."



The sub-grade preparation will follow the recommendations prescribed by the geotechnical report.

Reinforcing shall consist of 6" x 6" x 10 gauge wire mesh. Form or saw-cut control joints to 1/4 the thickness of the slab. Floor construction and control joints should be located on column lines with intermediate joints to provide for shear load transfer via dowels or keyway. Joint spacing should be no greater than 12'-6" x 12'-6" area or as structural engineer indicates.

- 82,500 s.f. of 6" concrete floors @ 3000 psi slab on grade.

Protect freshly placed concrete from destructive cold and hot temperatures and dehydration for at least 7 days. Floor slab-on-grade concrete shall have a minimum 28 day compressive strength of 3000 psi.

DIVISION SIX - CARPENTRY

Cabinets

Plastic laminate cabinets and counter tops

DIVISION SEVEN - WATERPROOFING

Roof System

- 24 gauge galvalume standing steam metal roof.

Roof insulation to be vinyl faced 3" fiberglass rolled blanket on the interior of the metal roof panel.

Wall Insulation

Perimeter wall insulation will be vinyl faced 3" fiberglass blanket on the interior of the perimeter walls.

DIVISION EIGHT - DOORS & WINDOWS

Doors and Frames

Exterior shall be hollow metal flush type, 1-3/4 inch thick, with seamless edges and foam-filled cores, provided with hollow metal frames

All interior doors to be 1 3/4" architectural grade solid core flush with paint grade birch veneer.

Hardware

All doors to receive commercial grade locksets, hinges and closures. No card access equipment included.

Overhead doors

- Provide (8) 16'-0 x 10'-0 non insulated overhead coiling doors with motor operators.

Glass and Aluminum

- Furnish and install single hung windows..
- Provide mirrors for all restrooms.

DIVISION NINE - FINISHES

Office Area

- Metal stud walls for office area
- Drywall is to be taped and floated
- 2'x2' acoustical ceiling tile in office area

Painting

- Paint to be Sherwin Williams.
- Doors and frames, etc., shall receive painting where required to provide a complete finished appearance.
- Approved factory finishes need not be field painted. Provide touch-up as required.
- Prep and apply two coats exterior enamel to new HM doors and frames.
- All drywall surfaces are to be primed and painted with a semi-gloss latex paint.

Flooring

- Office areas to receive commercial grade VCT and rubber base.



- Restrooms are to receive ceramic tile flooring and ceramic tile walls.

- Drywall areas in the shop shall receive rubber base.

DIVISION TEN - SPECIALTIES

Fire Extinguishers

- Provide and install ABC fire extinguishers with cabinets around interior of the office area as per code.
- Provide and install ABC fire extinguishers with hooks for warehouse area as per code.

Toilet Accessories

- Provide and install toilet accessories and grab bars for all restrooms.

Signage

All handicap and restroom signs required.

- All office door signs installed

DIVISION THIRTEEN - SPECIAL CONSTRUCTION

Structural Steel - Pre-Engineered Metal Building

The structural steel framing system shall be designed for the following code requirements for live, wind, seismic, and dead loads as required by occupancy and Code. Provide sufficient capacity in the framing to support the proposed mechanical and electrical equipment and services for the building only. If the Owner needs to place additional loads on the roof, these loads will be added to this proposal and the scope accordingly.

Wind load - 90 MPH - exposure B

Collateral load –5lbs.

The Structural Steel Building shall consist of:

- A. The structural framing system for the building area shall consist of multi-span tapered rafter frames with no interior columns. Column spacing shall be per drawing and an overall eave height varies per building. Proposal includes all canopies over exterior doors and overhead coiling doors.
- B. All columns shall be set flush with finished floor level.
 - All bolts for field assembly of primary frame members shall be high strength bolts as indicated on the erection drawings.

Shop/Primer

All structural steel members are cleaned of dirt or loose scale, and foreign matter prior to receiving one shop coat of the Metal Building Manufacturer's standard primer paint.

Roof System

Provide and install 24 gauge Galvalume standing seam roof panels with gutters and downspouts as required.

Wall System

Provide and install 26 gauge metal panels multi-rib siding in standard colors.

Provide and install translucent accent panels as indicated, in standard manufacturer configurations.

Flashings and Trim

- A. Flashing and/or trim are supplied at rakes, including peak and corner assemblies, high and low eaves, corners, bases, framed openings and as required or specified to provide weather tightness and/or a finished appearance.
- B. Standard trim configurations and/or finishes for given conditions are determined by the specific roof and wall panel system and finish combinations.
- C. Gutter and downspouts to be 26 gauge in standard colors.

Closures, Mastics and Sealants

A. Closures, formed to match roof and wall panel. Profiles are weather tightness. Closures are of closed cell material, normally E.P.D.M. (Ethylene - Propolyene - Duene - Monomer) in gray or neutral.



- B. Preformed tape mastics and/or non-skinning tube sealants are supplied for side laps and end laps on all roof coverings.
- C. Tape mastic is preformed Butyl rubber-based compound. The compound is non-hardening, non-corrosive to metal and has excellent adhesion properties. Tape mastic is white or light gray in color.

Framed Openings

Framed wall openings are cold formed gauge material designed to meet specified loads. Openings are flashed so that no primed steel is exposed to the exterior.

DIVISION FOURTEEN - CONVEYING EQUIPMENT

Overhead Bridge Crane

Design and manufacture (1) 5-Ton capacity overhead bridge crane.

DIVISION FIFTEEN - MECHANICAL

PLUMBING

- Complete sanitary system for standard plumbing fixtures
- Complete domestic water system for plumbing fixtures
- Furnish and Install Plumbing Fixtures for bathrooms and break room are included.

Office HVAC

- Office HVAC will include:
- HVAC will be split systems
- HVAC equipment for office area will be located in a mechanical room. Power and data conduits will be routed to the main electrical / data room.
- Heating for the warehouse area will be radiant heaters with exhaust fans and louvers for summertime air movement.
- HVAC equipment will be Trane or equal.
- HVAC ductwork will be insulated supply and return.
- HVAC equipment will be provided with all controls and wiring for their use. All power and control wiring shall comply with SAE Standards.
- The office design temperatures will be 68 degrees F for heating in winter and 74 degrees F for cooling in summer.
- Restrooms, break room, and conference room will receive necessary ventilation.
- Gas piping system sized and installed per NFPA and local utility company requirements.
- Testing and Balancing

Fire Protection (If Needed)

- One automatic "wet-pipe" fire sprinkler system installed in accordance with the drawings, specifications, and NFPA 13
 Installation of Sprinkler Systems 2007 Edition.
- Criteria to be Light and Ordinary Hazard Occupancy.
- Water pressure must be adequate to meet design pressure.
- Office sprinkler heads will be concealed in the center of the ceiling tiles.
- Warehouse area sprinkler heads will be brass uprights.

DIVISION SIXTEEN - ELECTRICAL

ELECTRICAL WORK

Standards

Install all materials and equipment in strict accordance with the latest edition of the National Electrical Code, National Safety Code, National Fire Protection Association, American Disabilities Act, American National Standards Institute, Institute of Electrical and Electronics Engineering, National Electrical Manufacturers Association, Underwriters Laboratories, American Society of Testing Materials, International Power Cable Engineers Association, and all governing national and local codes and ordinances.

GENERAL REQUIREMENTS

It is the intent of these requirements to cover all electrical work for the facility.



All electrical work for the facility shall be complete including, but not limited to, secondary service, panel boards. Distribution systems shall be included for power, interior lighting, controls, and receptacles. All systems shall be tested when complete.

Basic Design Requirements

Wieland-Davco shall provide the electrical engineering required to design a complete working electrical system using the best engineering practices. Wieland-Davco's electrical engineer shall prepare a set of electrical drawings and/or sketches showing a one-line and a plan view of the electrical systems. Submit documents for approval prior to commencing construction. Permanent "as-built" drawings shall be provided to the owner after the completion of the work.

The electrical system shall be tested prior to turnover of the facility to the Owner. Testing shall be for voltage drop, ground faults, short circuit and D.C. voltage "metered" to determine leakage and continuity at splices and taps.

Equipment and materials of the same general type shall be of the same make throughout the work to provide uniform appearance, operation, and maintenance.

At the completion of the project and prior to turnover of the facility to the Owner, the electrical system shall be rung out and tagged. Every circuit in all panel boards shall have a typewritten schedule for every distribution switch and/or breaker. In addition, the Contractor will submit three complete sets of all shop drawings, maintenance manuals, operating instructions, recommended parts lists, etc. for all electrical systems and equipment installed at the facility.

Related Work Specified Elsewhere

Wieland-Davco will provide and comply to all related work as specified in other sections such as excavating, trenching, backfill, furnishing, mounting, and connecting of electrical service, electrical motors, starters, disconnect switches, and controls for mechanical systems such as HVAC, exhaust fans, etc.

ELECTRICAL SERVICE AND DISTRIBUTION

Grounding

Ground all service/entrance equipment, conduit systems, supports, transformers, receptacles, fixtures, etc. in accordance with the latest issue of the NEC and authorities having jurisdiction.

Power Distribution

- 1 Main electrical service
- 2 Lighting Panels
- 3 Receptacle panels

All wiring shall be in conduit. PVC conduit will be allowed where permitted by code. Metallic conduit shall be manufactured of galvanized steel. All conduit fittings, outlet boxes, junction boxes, etc. shall be zinc coated or cadmium plated steel.

Power panels shall be surface mounted in non-finished areas.

All disconnects shall be quick-make quick-break type. Locate disconnects within close proximity of equipment being served. Provide weatherproof or rain tight disconnects for all exterior mounted equipment. All fusible disconnects shall have fuse clips and UL listing suitable for Class R and J fuses.

Wires and Cables

All building wire and feeders shall consist of copper conductors insulated with Underwriters' listed 600 volt insulation. Feeders shall be type THW or XHHW and ranch wiring shall be type THHN or THWN.

Conductors of size #12 AWG and smaller may be solid or stranded and conductors of size #10 AWG and larger shall be stranded. Minimum size of conductors for the power and lighting distribution shall be #12 AWG. Control wiring may be #14 AWG.

Multiple feeders will be allowed in one conduit with the proper de-rating factors applied.

Make all connections, splices, taps, and joints with mechanically and electrically secure solder-less devices.

Convenience Receptacles

Receptacles shall be duplex, 15A or 20A, 125V rating, single phase, grounded type. Voltage shall be 120 volts. Install in surface mounted boxes in unfinished areas. Provide stainless steel covers. All receptacles shall be 18 inches above finished floor unless otherwise noted or required.

Power

Exterior ground fault receptacle as per code



Wall mounted 120-volt duplex receptacle (max. 6 per circuit) as per code

LIGHTING SYSTEMS

Lighting

Office lighting to be 2 x 4 light fixtures used for both floors LED exit light fixtures with emergency heads for egress doors Emergency egress light fixture as per code 1 x 4 fluorescent lights in storage and mechanical areas Warehouse area will receive T-5 fixtures

Site Lighting

- Exterior wall pack fixtures
- (2) Parking lot and (2) lay-down yard area light poles

SIGNAL SYSTEMS

Fire Alarm System

The main sprinkler riser(s) shall be monitored for water flow and annunciated locally Furnish and install all pull stations and horn/strobe devices per code requirements.

This Proposal Excludes:

- Site Work
- Site Concrete
- Security System
- Card access system
- Phone System
- IT / Data cabling or equipment (Conduit from the street to inside the building is Included)
- Furnishings, Fixtures, or Equipment (FFE)

END OF PROPOSAL





