

# 65 COMMERCE PARK - BUILDING 7

## Site Development and Shell Building Description

### PROJECT SUMMARY

- Location: 5561 E 500 S, Whitestown, IN
- Project Duration: Approx. 9 months
- Site Acreage: Approx. 18.76 Acre Site
- Square Footage: 286,344 Rentable Square Feet
- Building Dimensions: 270' x 1060'
- Bay Sizes: 60' x 54' typ., 48' office bay; 60' dock bay; 50' end bays
- Clear height: 32'
- Auto Parking: +/-293 spaces
- Trailer Storage: +/- 37 stalls
- Truck Court: 190' total depth; 60' concrete apron; 120' heavy duty asphalt; 10' concrete dolly pad
- Exterior Walls: Load Bearing Precast Concrete Wall Panels
- Structural Steel: Gray tube steel columns, beam girders and bar joists supporting white roof deck
- Slab Construction: 7" un-reinforced, 4,000psi concrete on aggregate base
- Dock Doors: Twenty-eight (28), 9' x 10' manual overhead doors; Forty (40) future knock-outs  
Four (4), 14' x 16' drive-in doors w/electric operators
- Dock Equipment: Twenty-eight (28) dock positions incl. dock seals, bumpers and 7'x 8', 40,000 lb. dock levelers
- Roofing: Mechanically attached .45 mil TPO with R-20 insulation
- HVAC: Heat provided via Four (4) ceiling-hung, indirect gas fired air/energy rotation (rack) units
- Fire Protection: ESFR for protection of Class I-IV Commodities
- Electrical Service: Two (2) 1200-amp & two (2) 800-amp, 480/277 V 3-Phase service panels
- Lighting: Linear LED High Bay

## **SITEWORK**

### **Site Grading & Earthwork**

Sedimentation and erosion control measures, tree protection, site clearing/demo and preparation will be provided to accommodate all paving areas, building pad, and landscape areas. An engineered building pad and parking sub-grade shall be provided in compliance with the recommendations of the Geotechnical Engineer regarding existing soils and as designed by the civil engineer to within  $\pm 0.1$  of a foot. The building elevation will be established to allow for drainage, which may be handled by means of catch basins, storm sewers, swales and surface runoff as specific site conditions dictate.

### **Site Utilities**

All utilities shall extend to the building and final connections made for electric, water, gas, sanitary service and telephone/data service (conduits only). All storm water removal shall be provided via a combination of sheet drainage, underground pipe and drainage swales. Underground fire main and hydrants will be provided per municipal requirements.

### **Pavement**

The heavy-duty pavement sections will be provided in truck courts, trailer parking and fire lanes, and light duty pavement sections will be provided in parking areas and vehicle drive lanes within parking areas. All pavement sections shall be provided per the recommendations of the Geotechnical Report and the civil drawings.

A total of +/-293 auto parking spaces will be provided. All paving will be striped to indicate parking stalls, handicapped parking locations, fire lanes and traffic control features in accordance with the site design. Traffic control and handicapped parking signage will be provided in accordance with the site design and code requirements.

A total of +/- 37 trailer staging spaces will be provided. These will be a combination of heavy-duty asphalt paving and a 10' wide, 7" un-reinforced concrete dolly pad. All paving will be striped to indicate trailer staging stalls and will be equipped with heavy-duty wheel stops as indicated.

### **Landscaping and Irrigation**

Landscaping and irrigation including trees, plants, grass, mulch, and soil preparation as needed to meet city minimum zoning requirements and/or landscape plan.

## **CONCRETE**

### **Foundations**

The building foundation system is a combination of shallow spread foundations for interior columns and a continuous perimeter foundation for the exterior walls in order to support the precast concrete wall panels. Foundations will be

constructed with 3,000 psi concrete with depths to be a minimum of 1'-6" below finished floor, assuming an allowable bearing capacity of 2,000 psf or as defined in the Geotech report.

### **Floor Slab**

The warehouse floor shall be seven inches (7") thick un-reinforced concrete slab-on-grade over a 4" aggregate base. The dock bay will be provided with welded wire fabric (WWF) mesh reinforcing (excluding building corners). This concrete will achieve a 28-day compressive strength of 4,000 psi. Floor flatness and levelness tolerances shall meet overall values of FF=55 and FL=35. Control joints shall be saw cut in order to minimize shrinkage cracking. Dowels shall be utilized at construction joints. A 10-mil polyethylene vapor barrier will be provided underneath the slab on grade along the entire first bay in order to accommodate future office buildout.

### **Loading Dock**

The 190' deep loading docks consists of 120' of heavy-duty asphalt; 60' wide, 7" thick, 4,000psi unreinforced concrete apron on a minimum 4" gravel base; and 10' wide, 7" thick, 4000 psi unreinforced concrete dolly pad on a minimum of 4" gravel base.

### **Precast Concrete Wall Panels**

Precast load bearing concrete wall panels shall be utilized for the building exterior. The walls shall utilize appropriate reinforcing for anticipated reactions and insulation R values to meet code, min. R12.0.

Precast concrete wall panels, 12' high, shall also be used to construct the fire sprinkler room and fire control room located inside the warehouse area.

Accommodation via knock-out panels shall be provided for the following features:

- Knockouts for forty (40) future OH doors and dock equipment as indicated on documents
- Knockouts for future windows at office locations

## **STRUCTURAL STEEL AND MISCELLANEOUS METALS**

### **Building Frame**

A structural steel system with steel tube columns, open web joists and beam girders shall be used for the building's structural steel system. Roof decking shall be 22-gauge and will be galvanized and prime painted white. All components shall conform with the Steel Deck Institute and erected to meet code requirements.

Steel structure will conform to these dimensions:

- Clear Height: 32' to the lowest structural member across the entire building
- Overall Dimensions: 270' x 1060'
- Typical Bays: 60' x 54'
- Dock Bay: 60' x 60'
- Office Bay: 60' x 48'

- End Bay: 60' x 50'
- Cross Bracing: "K" brace configuration to be used, keeping braces as high off the floor as poss.

Metal stairs in loading dock will be installed to meet all applicable codes and shall be galvanized.

A single roof access ladder with cage shall be installed in the building.

Provide angle frames for HVAC units.

Concrete filled, 6" diameter pipe bollards provided for protecting drive-in door openings, electrical panels, sprinkler risers, etc.

Framing for three (3) tenant entry canopies.

## **CARPENTRY**

Plywood backboards will be provided for all data systems as required in the fire control room. Rough blocking will be provided as required at parapets, curbs, coping, etc. and shall be fire treated where required by code.

## **THERMAL AND MOISTURE PROTECTION**

### **Roofing**

The roof system shall be a single-ply .45 mil mechanically fastened, TPO membrane roof over rigid cell polyisocyanurate roof insulation mechanically attached to the roof decking. Insulation thickness shall be adequate to provide a roof insulation value of R-20, achieved via 2 layers and staggered joints. Deck closure foam shall be provided to minimize inside air migration to the membrane. The roof shall carry the manufacturer's standard twenty (20) year prorated membrane warranty and a ten (10) year labor and material watertight warranty. The roof shall also have the contractor's two (2) year warranty covering all other roof related items.

Roof flashings at all known roof penetrations are included. No allowances have been made for additional roof penetrations required for undefined Tenant requirements.

Internal roof drains and overflow drains or scuppers will be provided at the dock walls to remove storm water from the roof areas and are to be tied underground to the exterior storm system. The roof will be sloped at 1/4" per foot as indicated on the cross section provided.

All required sheet metal and flashing work shall be provided to ensure a watertight roof system installation. All sheet metal copings and flashings shall be 24-gauge prefinished metal with a factory applied standard finish.

A roof access hatch and walk pads around the hatch is to be provided.

## **Caulking and Sealants**

Joint sealants shall consist of a multi-part non-sag urethane sealant on both the exterior and interior of the concrete wall panel joints as well as where the window system meets the precast. A 5-year warranty is included for all exterior caulking.

One coat of Ashford sealer or equivalent shall be applied to the floor within warehouse area at a rate of 1 gallon per 225sf.

## **DOORS AND WINDOWS**

### **Doors, Frames and Hardware**

Exterior man doors shall be 3'-0" x 7'-0" x 1-3/4", insulated, 18 ga. hollow metal doors and frames as required for egress per code. Doors shall be equipped with closers, weather stripping, sweeps, drip guards, thresholds, and the building shell be keyed with interchangeable cores.

### **Overhead Doors**

Four (4), insulated, 14' x 16' motorized overhead doors shall be provided as shown to provide drive-in access. Bollards as noted previously, shall be provided for the doors. All overhead doors shall be equipped with weather stripping and seals, 24 gauge galvanized flush steel face, single vision panel on the latch side, metal track and hardware.

The building has twenty-eight (28) dock positions available. The dock positions will be equipped with a manual, insulated, 24-gauge flush steel face, 9' x 10' dock door complete with metal track, weather stripping and seals, single vision panel on the latch side, z guards and hardware.

Knockouts will be provided for forty (40) future 9' x 10' dock doors where indicated.

### **Aluminum Storefront and Entrances**

Aluminum storefront is included at Tenant entries as shown on the elevations. This storefront shall have clear anodized, thermally broken, aluminum framing with 1" insulated tinted glass. A manually operated aluminum entrance door will be provided at each entry, with medium stiles, rails and bottoms with manufacturer's standard hardware. Aluminum storefront framing shall be YKK, Vistawall, Kawneer, or equal.

Three (3) tenant entry canopies provided with metal panel skin fascia and soffits.

Clerestory glass units (4' x 6') shall be provided as indicated on the elevations to allow for natural light into the warehouse.

## **FINISHES**

### **Painting**

All hollow metal doors and frames, pipe bollards, roof access ladder and cage, shall receive one (1) coat of primer and two (2) coats of acrylic semi-gloss exterior paint.

Provide painting of the columns to 12' AFF, red for firehose drop locations, safety yellow all others.

The exterior of the precast concrete wall panels shall receive a tinted primer coat and one (1) coat of latex paint, allowing for 3 colors. Prior to painting, the exterior face of the precast concrete wall panels will be power-washed.

The interior of the precast concrete wall panels shall receive a white prime coat and one (1) coat of white latex paint.

## **MISCELLANEOUS**

N/A

## **DOCK EQUIPMENT**

Twenty-eight (28) dock positions shall receive dock bumpers, dock seals and 7'x 8', 40,000 lb. mechanical dock levelers.

## **FIRE PROTECTION**

Fire protection for the building shall be provided by a fully designed and operational ESFR sprinkler system. The fire main shall be extended to the facility and connection made to the building fire protection system. The system shall include a fire pump (if necessary), K-17 or K-22 sprinkler heads and all necessary components to provide a complete system that complies with all governmental and fire department agencies. Warehouse hose valve drops are to be provided based on an open floor plan.

## **HEATING, VENTILATION AND AIR CONDITIONING**

### **Heating**

Design and install a warehouse system of ceiling hung, indirect gas-fired, air/energy rotation (rack) units to provide 55 degrees F throughout the warehouse when outside conditions are at 0 degrees F. Units are to be placed in the speed/dock bay and provide all controls and thermostats (with night set-back capability), exhaust flue and roof flashings, air intake hoods and flashings, and gas piping (black steel) as required.

Provide a ceiling hung, electrical unit heater for the fire pump/equipment room.

Provide gas metering for three (3) potential tenants.

## **PLUMBING**

### **Domestic Water**

Domestic water service shall be provided into the building with connection made to the water main. The domestic water line shall be run overhead the entire length of the building and provide taps/valves to serve any current or future needs. Include a meter, backflow preventer and stub for irrigation tie-in.

One (1) hose bib shall be provided on each end of the building, at grade level.

### **Sanitary Sewer**

Sanitary sewer service shall be provided into the building with connection made to the sewer main. The sanitary line shall extend the entire length of the building at an appropriate depth below grade and provide leads to the future office connections.

### **Roof Drainage**

Internal roof drains and overflow drains or scuppers will be provided at the dock walls to remove storm water from the roof areas and are to be tied underground to the exterior storm system. The roof will be sloped at 1/4" per foot as indicated on the cross section provided.

## **ELECTRICAL**

### **Service and Distribution**

Two (2) 1200-amp and two (2) 800-amp 480/277V services will be provided for power and shall be installed adjacent to the fire control room and on the opposite end of the building. The utility service provider shall provide the primary conductor and ground-mounted transformers. Contractor shall provide secondary to main distribution panels and main distribution panels for HVAC, fire pump, OHD drive-in doors and lighting. A step-down transformer shall be provided along with any 208/120V panels to power base building items (i.e. dock outlets, pump room convenience power, etc.). Provide two (2) 4" conduits for future service upgrades and panels to each potential tenant space, six (6) total. Additional panels, transformation, distribution, etc. for the office area shall be funded out of the Tenant Improvement allowance. Additional panels, transformation, distribution, etc. for the warehouse shall be provided by the Tenant.

### **Site Lighting**

Exterior lighting shall be provided via a combination of pole lights (incl. concrete bases) (if applicable) and building mounted wall pack fixtures. All exterior lighting shall be controlled via time switches with photo control override and will be LED.

The exterior lighting shall be designed to provide an average maintained 1 foot-candle over all parking areas and 0.5 foot-candle in the dock area.

Recessed downlights provided at the tenant entry canopies.

## **Interior Lighting**

Lighting of the warehouse shall be provided with minimum 44,000 lumen linear LED high output high-bay fixtures at a density of one fixture per bay with motion sensors and 10' whips, and fixtures to provide 30 foot-candles average maintained per speed/dock bay with motion sensors (one per bay in the speed bay corners).

Provide LED strip lighting in the fire pump room.

Emergency lighting and exit signage shall be installed as required by code for the warehouse area based on an open floor plan.

## **Telephone and Data**

Six (6) 4" conduits shall be provided; two (2) from electrical/pump room to property line; two (2) at each end of the building for future telephone and data service. Additional conduit with pull strings will be installed to facilitate future office installation. Total quantities of 4" conduit installed will be:

- 2 runs @ 1400' each
- 6 runs @ 460' each
- 4 runs @ 130' each
- 8 runs @ 10' each

## **Power Requirements**

Power shall be provided to all fire protection, H.V.A.C. equipment and all other required building components as outlined in this Building Description.

Provide 110V receptacles at 40" AFF between the dock doors, and a 110V GFCI receptacle in the pump room.

## **Fire Alarm Systems**

A fire alarm system shall be provided for monitoring flow, tamper and pump status only. System shall be sized to handle expansion for future tenant office build out.