

## DELIVERABLES EXPECTATIONS

### PART 1 – DRAWING STANDARDS

1. A preferred drawing sheet size is 30" x 42"
2. North should be oriented to the top of the sheet. If not possible due to plan geometry, then north should be to the left.
3. Existing vs. New work should be clearly readable.
4. Proposed Drawing Scales:
  - A. Site Plans: As large as possible and a consistent scale between sheets (except for enlarged plans). Preference is 1" = 20'-0", Next preference is 1" = 50'-0"
  - B. Overall Floor Plans: 1/16" scale
  - C. Floor Plans: 1/8" scale
  - D. Enlarged Plans: ¼" scale and Building Sections: 1/8" scale.
5. For publications and promotions at each design phase:
  - A. Prepare colored floor plans (see BIM standards)
6. Expected drawing arrangement and coding is as follows:
  - A. Description and Lettering System
    1. Title Sheet and index of drawings
    2. (C) Site Survey
    3. (C) Site / Civil
    4. (S) Structural
    5. (A) Architectural
    6. (I) Interior Design
    7. (Q) Consultants (Pool, Theater, Kitchen, Acoustical)
    8. (M) Mechanical
    9. (P) Plumbing
    10. (F) Fire Protection

11. (E) Electrical

12. (T) Telecomm

## PART 2 – DELIVERABLES BY PHASE

### General

1. It is the responsibility of the Ivy Tech Campus, A/E, CM to communicate any and all scope changes to the best of their ability in writing and with an assessment of the cost and/or time impact.

### Schematic Design Phase

1. Deliverable by the Architect/ Engineer

#### A. Design Notebook (provide in PDF format)

1. Introduction: Briefly describe the purpose of this project and the extent of construction.
2. Value Statements for the project: illustrate how the program and design meet project goals.
3. Building Program of Spaces for 10-15 year planning (new, existing, and totals)
4. Space and System Standards with documented deviations highlighted on the standards.
5. Sustainability Compliance
6. Identification of all Building Systems – Narrative
  - a. Foundations (type and special considerations)
  - b. Structural (materials, design information, floor-to-floor heights, special considerations)
  - c. Roofing system
  - d. Exterior walls, doors, and/or aluminum glazing systems
  - e. Interior wall types
  - f. Interior finishes by space types
  - g. Casework and Equipment
  - h. Elevators
  - i. Mechanical, including Effects on the building's energy usage
  - j. Fire Protection

k. Electrical

l. Telecommunications

7. Soils Report

8. Parking standard calculations and the space and staff/faculty counts used.

9. Equipment

a. List of mechanical and electrical equipment with maximum physical size demands.

b. List of all Owner-provided furniture, furnishings, and related equipment

c. "Cut sheets": "Cut sheets" must include any major/ atypical/ proprietary equipment used as a basis of design.

10. Copies of all correspondence

B. Drawings

1. Existing Site Survey (including boundary survey)

2. Site Plan

3. New Floor Plans

4. Demolition Floor Plans (if applicable)

5. Roof Plan

6. Exterior Elevations

7. Preliminary Building Section

8. Preliminary Wall Section

C. Renderings and colored floor plans for promotional activities

2. Deliverables by the Construction Manager

A. Detailed Cost Estimate consistent with the phase and level of detail

B. Projected Project Schedule

C. Value engineering considerations

D. Projected Construction Phasing/Sequencing Plan that considers:

1. Operational hours

2. Parking for all, including contractors
3. Special after-hours program needs
4. Contractor site access points
5. Potential contractor staging areas

## Design Development Phase

### 1. Deliverables by the Architect/Engineer

#### A. Design Notebook (provide in PDF format)

1. Update the Introduction
2. Update Value Statements
3. Update Building Program of Spaces (new, existing, and totals)
  - a. Show comparison with SD and Space Standards
4. Space and System Standards with documented deviations using deviation form included in Exhibits.
5. Code Analysis with narrative
6. Projected Design/Bidding Schedule
  - a. Agency reviews
  - b. Variances (if required)
  - c. Telecommunications
7. Clearly identify any modifications of Building Systems from Schematic Design (see above)
8. Clearly identify any Design Data updates from Schematic Design (see above)
9. Soils Borings Report
10. Equipment
  - a. Updated List of all Owner-provided furniture, furnishings, and related equipment
  - b. "Cut sheets": "Cut sheets" must include any/all equipment used as a basis of design.
11. Detailed Specifications Divisions including manufacturers that will be acceptable where possible

12. Marked up spec sections for Divisions 0-1 (received from the construction manager)
  13. Copies of all correspondence
- B. Color / Interior Finish boards, which should be re-evaluated at the end of CD's.
- C. Drawings
1. Existing Site Survey
  2. Site Plans (erosion control, grading and drainage, utilities, site development, roadwork, pavement, site details, site electrical work, landscaping, etc)
  3. Architecture/ Interiors
    - a. Code Analysis Sheet
    - b. New Floor Plans (all levels – including basement and penthouse, if applicable)
    - c. Demolition Floor Plans (with notes identifying the extent of demolition, if applicable)
    - d. Roof Plan
    - e. Reflected Ceiling Plans indicating ceiling materials, bulkheads and section cuts
    - f. Exterior Elevations
    - g. Major Building sections
    - h. Room finish schedule or room finish floor plans
  4. Structural drawings
    - a. Foundation Plans
    - b. Framing Plans for each floor level and roof
  5. Mechanical / Plumbing
    - a. Plumbing plans for all floor levels
    - b. Plumbing fixture schedule and special details
    - c. HVAC floor plans for all levels
    - d. Enlarged mechanical equipment room plans
    - e. HVAC details
  6. Fire Protection: Floor plans with all zones designated

7. Electrical

- a. Electrical floor plans, including gear and panel locations
- b. Lighting Plan
- c. Power Plan
- d. Light fixture schedule including specific manufacturer information or catalogue cuts
- e. Power riser diagram
- f. Site electrical plan
- g. Enlarged electrical room floor plans
- h. Electrical details

8. Telecommunications

- a. Floor plan for each level indicating all cable trays, data, phone, a/v outlets, security cameras, motion detection, card access, etc.
- b. Enlarged plan of the ER and TR rooms

2. Deliverables by the Construction Manager

A. Updated Detailed Cost Estimate

- 1. Must compare SD to DD
- 2. Must show cost/ GSF for all categories
- 3. Must identify proposed bid categories with a scope description for each category
  - a. Provide a detailed summary of work at the Construction Documents Phase
- 4. Must outline all general conditions
- 5. Must outline any bid alternates with associated costs

B. Detailed Construction Schedule

- 1. Include schedule of bidding and permitting process

C. Detailed specifications for Divisions 0 and 1

D. Marked up spec sections for Specifications Divisions (received from the architect)

E. Updated Construction Phasing/ Sequencing Plan

1. With a description of the project's impact on other operations like parking, access, utilities change-over, restrictions, etc.
  2. Identify temporary partitions
  3. Identify contractor staging
- F. Unit Prices
- G. Procedures Manual
- H. Value engineering considerations
- I. The number of cost estimates required by phase will be determined by contract for each project.

#### Construction Documents Phase

1. Similar to Design Development for deliverables. Design shall be 100% complete.
2. Owner Drawing Sets at Bidding:
  - A. Systems Office – Half Size Set with Specifications
  - B. Campus – Full Size Set with Specifications
3. Review all front end specifications with the campus and Systems Office.
  - A. Utilize AIA documents in front end
  - B. As-built requirements for each contractor should be clearly specified and for the Mechanical Contractor, it should include the following at a minimum:
    1. Record drawings (electronic). Reference BIM Standards.
    2. System schematics with sequences
    3. Programming disk for Owner use
    4. Product Data
    5. Equipment data cut sheets
    6. Valve and damper schedules
4. Infrastructure Reporting Codes
  - A. Provide at bidding to Ivy Tech Systems Office Facilities planning the quantities of utility distribution components and support facility components as indicated in Appendix E Infrastructure reporting.
  - B. Include additional quantities of each category as well as the total quantity including existing. Coordinate with Campus the quantity of existing of each category.

Supplier Diversity Initiative: All construction projects must meet the requirements as described in Indiana State Trustee Resolution 2017-4. Reference Exhibit C Indiana State Trustee Resolution 2017-4.

Design team to submit letter to the Secretary-Treasurer for the Central Indiana Carpenters JAC at bidding in compliance with Resolution 2017-4.