BSD Technical Standard
Division 1: General Requirements

1. PURPOSE

This Technical Standard is a narrative describing the Beaverton School District's (BSD's) guiding general requirements. The information contained herein shall be used by the Architect/Engineer (A/E) to properly prepare Division 1 requirements within the Contract Documents (CDs) so that the contract adheres to the BSD's requirements.

2. GENERAL

2.1. TRIMBLE/E-BUILDER PROJECT MANAGEMENT SYSTEM

2.1.1. The District is now using the Trimble/e-Builder project management system and we are requiring all of our A/Es and Contractors to use this system as well to conduct the normal communication and work process flows that are used in completing the design and construction of our facilities.

2.1.2. Division 1 should reflect that the Contractor use e-Builder to conduct the following work processes:

2.1.2.1. Submission of shop drawings and other submittals and receiving the processed submittals

2.1.2.2. Submission of Requests for Information (RFI) and receiving RFI responses from the Owner and A/E

2.1.2.3. Submission of invoices and approval or rejection of same

2.1.2.4. Distribution of meeting minutes

2.1.2.5. Submission of as-built record drawings

2.1.2.6. Submission of test results and Operation and Maintenance (O&M) manuals (electronic format)

2.1.2.7. Submission of Change Orders (COs) and contract amendment and approval or rejection of same

2.1.2.8. Transmission of formal letters and notices between the District and the Contractor

2.1.3. In the event of occasional operational problems with Trimble/e-Builder, transmission of the above documents may be done for a temporary period of time by hand carrying, email, normal mail or express mail. Prior approval must be obtained from the District before utilizing this backup communication system and a resumption of e-Builder use is to initiate as soon as the operational problems are corrected.

2.2. BUILDING INFORMATION MODELING (BIM)

2.2.1. The District will require that all major projects be designed using BIM. While the Contractor will not be required to use the BIM model for work sequencing during construction, they may do so at their own election.

2.2.2. In Division 1 the A/E needs to indicate the following:

2.2.2.1. The A/E will provide the Contractor with the BIM design model

2.2.2.2. The Contractor, as a minimum, will use the BIM model to coordinate mechanical, electrical, and plumbing routing, given that there will be some changes from the original design due to the submittal approval process.

2.3. CLOSE OUT DELIVERABLES

2.3.1. Close Out Deliverables are the completed, approved documents and drawings that are submitted to the District at project close out.

2.3.2. The Close Out Deliverables will include As-Built Drawings, Permit Drawings, Operations and Maintenance Manuals, and any other items as required on a per project basis.

2.3.3. The A/E will retain responsibility to submit the Close Out Deliverables, to collect all necessary materials from the Contractor, and to consult the District project team to confirm the requirements and format.

2.3.4. Confirmation is typically achieved via the Project Close Out Checklist and through comments made during the Design Review Mitigation Process.

2.4. CONSTRUCTION MANAGER/GENERAL CONTRACTOR (CM/GC) DELIVERY PROJECTS

2.4.1. For projects being delivered under the CM/GC model, the A/E will prepare Division 1 in such a manner as to require communication and the flow of transmitted documents to flow from the Trade Contractor to the CM/GC (prime Contractor) and then in parallel to the A/E and the District.

2.4.2. Communication and document transmission from the A/E and the District to the Trade Contractor is to occur in the same manner, except that the flow will be the reverse of that noted above.

3. SECURITY REQUIREMENTS

3.1. GENERAL

3.1.1. The A/E will require that all personnel under the employment of the Contractor and its Subcontractors that travel to, or spend time at, the project site are to wear photo ID badges while on the work site. Individuals not wearing badges will be removed from the project work site. ID badges are to contain:

3.1.1.1. Individual's full name (no nicknames)

3.1.1.2. Individual's company affiliation

3.1.1.3. Recent photograph of the individual; taken within the last 4 years

3.1.2. All personnel under the employment of the Contractor and its Subcontractors that spend time at the project site, must be run through formal background screening by the

Contractor and pass that screening review, before being allowed on the work site. Background screening is to be done by a professional screening firm meeting the following qualifications:

3.1.2.1. Must have a minimum of five years of screening experience specifically for construction industry clients

3.1.2.2. Must have a minimum of fifteen employees

3.1.2.3. Must be able to provide access to an internet-based screening management software system which has a feature to allow access by the District to view the pass-no pass result for each screened Contractor/Subcontractor employee working on a District project

3.1.2.4. Must be accredited by the National Association of Professional Background Screeners (NAPBS)

3.1.3. Each individual will be screened for having committed any crime as listed in ORS 342.143, most recent edition.

4. COMMISSIONING

4.1. GENERAL

4.1.1. The A/E will prepare the Division 1 requirements to accommodate the following approach; The District will engage the Commissioning Agent through a direct contract instead of including that work scope under the Contractor as a subcontract.

4.1.2. The Commissioning Agent will perform in a Consultant's role providing:

4.1.2.1. A commissioning plan

4.1.2.2. Monitoring, recording, and reporting commissioning test results

4.1.2.3. Adjustments to allow systems being commissioned to meet design performance criteria

4.1.3. The Contractor will retain the following responsibilities:

4.1.3.1. Setup tests, operate equipment and systems, make adjustments to settings and place the systems in final operational mode.

5. ASBESTOS PROCEDURES

5.1. GENERAL

5.1.1. The A/E will prepare the Division 1 requirements to accommodate the following approach; The District will directly retain an accredited Asbestos Consultant for all of its projects that involve adding to or renovating existing facilities.

5.1.1.1. The Consultant will provide oversight and recommendations relating to diagnosing the existence of asbestos materials on the site and to mitigation measures.

5.1.1.2. The Consultant will provide documentation regarding the finding of asbestos and mitigation measures as required by the Asbestos Hazard Emergency Response Act and will update the District's facilities database regarding any asbestos findings.

5.1.2. The Contractor will retain the following responsibilities:

5.1.2.1. Immediately reporting to the District and its Asbestos Consultant the finding of suspected asbestos material

5.1.2.2. Following of any rapid response procedures to isolate District staff, students, facility, visitors, and Contractor staff from the suspected material, while maintaining continued progress on the remainder of the project work

5.1.2.3. Sending a sample of the suspected material to a qualified testing laboratory, receiving test results, and informing the District and their Asbestos Consultant

5.1.2.4. If the material is confirmed to contain asbestos, considering any recommendations from the District and/or its Asbestos Consultant and then implementing asbestos remediation

5.1.2.5. Resuming full scale work activities on the project as soon as the remediation is complete

6. CODES/PERMIT FEES

6.1. GENERAL

6.1.1. It is the Consultant's responsibility to determine current applicable codes, regulations, and permitting processes. The Consultant is responsible for contacting all applicable jurisdictions in order to review during design and submit completed documents, which comply with applicable codes and regulations.

6.1.2. The District is governed by the Oregon Structural Specialty Code which is an adaptation of the International Building Code. Oregon school facilities are considered essential facilities and thus must meet those structural requirements. The District falls within Seismic Zone 3. Unless otherwise permitted by the BSD Facilities Department, Type V construction shall be limited to temporary and small storage buildings.

6.1.3. An analysis of code requirements and ALL required permits for planning, off-site improvements, on-site improvements, structures, and others shall be submitted by the Consultant at the beginning of each project and updated at each phase of design. The permit analysis shall include a processing matrix for each permit.

6.1.4. The A/E will prepare the Division 1 requirements to accommodate the following approach;

6.1.4.1. The Consultant will typically file the applications and the District will directly pay the regulating agency for the following:

6.1.4.1.1. Land use review fees

6.1.4.1.2. Plan review fees

6.1.4.2. The Contractor will pay the following permit fees and will invoice the District who will compensate the Contractor as a direct expense (no markup) item that is **not** included in the contract:

6.1.4.2.1. Grading permit, if any

6.1.4.2.2. Building permit

6.1.4.2.3. Mechanical and plumbing permit

6.1.4.2.4. Electrical permit

6.1.5. All other permits, fees and licenses required of the Contractor to perform the work will be paid by the Contractor and included in contract value.

7. JURISDICTIONS

7.1. LAND USE/BUILDING & SAFETY

7.1.1. District facilities are primarily located within the jurisdiction of the City of Beaverton and Washington County. There is one facility in the City of Portland's jurisdiction and one facility in the City of Hillsboro's jurisdiction.

7.1.2. The District is within the jurisdiction of the Washington County Health Department for food facilities.

7.1.3. The District is within the jurisdiction of Clean Water Services for storm and sanitary sewer regulations.

7.2. FIRE DISTRICT

7.2.1. District facilities are primarily located within the jurisdiction of the Tualatin Valley Fire & Rescue District. There is one facility in Portland Fire's jurisdiction and one facility in the Hillsboro Fire's jurisdiction.

7.3. LOCAL UTILITIES

7.3.1. The District is served by several water/sewer service districts depending on site location.

7.3.2. NW Natural provides gas service.

7.3.3. Portland General Electric (PGE) provides electrical service.

7.3.4. Comcast provides cable TV, PCN (data) service, and telephone.

7.4. STATE AGENCIES

7.4.1. Oregon Department of Transportation

7.4.2. Oregon Department of Energy – Oregon Energy Code

7.4.3. Oregon Department of Environmental Quality

7.4.4. Oregon Department of Fish and Wildlife

7.4.5. Oregon Division of State Lands

7.5. FEDERAL REQUIREMENTS

7.5.1. EPA Regulations

7.5.2. OSHA Regulations

7.5.3. ADA Regulations

7.5.4. Corps of Engineers

8. TESTING AND SPECIAL INSPECTIONS

8.1. GENERAL

8.1.1. Environmental Survey: If required, District will retain an Environmental Consultant directly.

8.1.2. An independent testing laboratory for construction quality control will be retained by the District directly for the following:

8.1.2.1. Soils

8.1.2.2. Concrete

8.1.2.3. Structural steel

8.1.2.4. Welding

8.1.2.5. Brick, block prisms & grout

8.1.2.6. Asphalt paving

9. SURVEY

9.1. GENERAL

9.1.1. Site survey and topographical information will be obtained from an Oregon licensed land surveyor retained directly by the District. The survey shall include:

9.1.1.1. Legal description

9.1.1.2. Meets & bounds description

9.1.1.3. Benchmark

9.1.1.4. Easements

9.1.1.5. Adjacent streets and/or alleys (full width showing all items such as traffic lights, signs, guys, fire hydrants, power and telephone poles, medians, trees, and storm drain inlets)

9.1.1.6. North arrow

9.1.1.7. Topographic information to include contour lines at 2'-0" to at least 10’-0” outside this property

9.1.1.8. On-site items such as signs, buildings, pools, tanks (including underground if detectable) towers, foundations, walls, trees

9.1.1.9. Elevations on a 50'-0" grid and at 50'-0" intervals along the property lines and curbs

9.1.1.10. All off-site utilities, including sewer, gas, water, electric, and telephone (indicate size and inverts of sewer, water and storm)

9.1.1.11. All trees 6’-0”, or greater

9.1.1.12. Provide thickness, material and height elevations of all walls shown

9.1.1.13. Indicate flood plain elevation (if exists)

10. CONSTRUCTION COST ESTIMATES

10.1. GENERAL

10.1.1. Construction cost estimates must be complete with all construction related costs for the project including, but not limited to:

10.1.1.1. Construction related professional fees

10.1.1.2. On- and off-site improvements such as:

10.1.1.3. Grading

10.1.1.4. Paving

10.1.1.5. Sanitary sewer

10.1.1.6. Storm sewer

10.1.1.7. Water

10.1.1.8. Electric and Telephone

10.1.1.9. Landscaping

10.1.1.10. Signage

10.1.1.11. Other

10.1.1.12. Building Construction Cost

10.1.1.13. Contractor overhead and profit

10.1.1.14. Contingency – Owner/Bidding/Contractor

10.1.1.15. Utility fees and charges for gas, electric, water, sanitary and storm sewer, telephone, cable

11. COORDINATION

11.1. GENERAL

11.1.1. Phrases such as “by owner,” “by others,” “N.I.C.,” “or equal,” require written review and consent of the BSD Representative. Submit coordination requirements as a separate document at all reviews.

11.1.2. Coordinate (re) location of DISTRICT temporary buildings with the BSD Representative no later than the Design Development (DD) phase. Show existing and proposed locations on the Construction Document (CD) site plan.

11.1.3. Review traffic and parking signage with the BSD Representative.

11.1.4. Incorporate off-site improvements, including traffic lights and crosswalks, with traffic jurisdiction agency before CD submittal.

11.1.5. Coordinate with Clean Water Services and incorporate drainage, grading, and on- and off-site issues.

11.1.6. Coordinate all governmental entity reviews, as required.

11.1.7. Coordinate and incorporate utility agencies' requirements regarding on- and off-site utilities, pads, enclosures, and facilities.

11.2. REMODEL / RETROFIT PROJECTS

11.2.1. Clearly identify and distinguish between existing, salvaged, relocated, demolished, abandoned, removed, and new construction. Define disposition, delivery, and storage of salvaged items.

11.2.2. Field verify existing conditions and as-built information provided by Owner.

Revision 1, complete re-write, 11/18/14.

12/23/16
Revision 2

Section #	Section Title	Revised Text ¶= paragraph
IV.	CLOSE OUT DELIVERABLES	¶1 New section; add "Close Out Deliverables are the completed, approved documents and drawings that are submitted to the District at project close-out. The Close Out Deliverables will include As-Built Drawings, Permit Drawings, Operations and Maintenance Manuals, and any other items as required on a per project basis. The A/E will retain responsibility to submit the Close Out Deliverables, to collect all necessary materials from the Contractor, and to consult the District project team to confirm the requirements and format. Confirmation is typically achieved via the Project Close Out Checklist and through comments made during the Design Review Mitigation Process."

Rev 3: 3/2025

Section	Section Title	Revision
All	All	Renumbered all sections of the Technical Standard; included other minor formatting and edits for clarity.