

## FACILITIES PROJECT PROCESS - OVERVIEW

This document is intended to provide broad guidance for planning, design, and delivery of design and construction projects for St. Paul Public Schools. There are a broad range of project types and sizes that fall within Facilities, and while this overview may apply to many, it does not cover all instances.

### Introduction to Saint Paul Public Schools

With over 35,000 students, Saint Paul Public Schools (SPPS) is one of Minnesota's largest school districts. Through highly trained and deeply dedicated staff, innovative education programs, and the support of our community, we offer students and families a world of opportunities.

Our urban location provides students with the opportunity to learn through partnerships and collaborations with many community organizations. Our student population is diverse. Students hail from countries throughout the world, speak more than 70 languages and dialects, and come to the District with an array of educational experiences and skills.

The students' experiences help us create a multicultural educational energy that supplements classroom lessons and helps all students and staff develop a better understanding of the world in which we live.

### Vision and Mission

#### Saint Paul Public Schools Vision Statement

Imagine every student inspired, challenged, and cared for by exceptional educators.  
Imagine your family welcomed, respected and valued by exceptional schools.  
Imagine our community united, strengthened, and prepared for an exceptional future.

#### Mission Statement

Inspire students to think critically, pursue their dreams and change the world.

### The Design & Construction Process

#### Design Principles

- **Students are the first priority.** To support the entire District equitably, in a timely fashion, and with a high regard for the mission of our educators to provide a premier education for all students.
- **Design inspirational, responsible learning environments** that are reflective of sound stewardship and are sustainably designed; that utilize materials and systems which are durable, attractive, and efficient to operate; that are sensitive to the community; and that advance the District's academic programs and mission.
- Design to **allow for future adaptability** to changes in academic programs, technologies and space requirements.

- **Design energy-efficient, low maintenance buildings** to maximize the funding dedicated to our primary mission of educating the students of SPPS.
- Provide a design that **responds appropriately to the scope and budget** provided by Facility Planning during the project initiation phase.
- Saint Paul’s 150 year legacy of leadership in educational practice is reflected in its architectural expression. A guiding principle in the design of new learning spaces within older buildings is to **consider the preservation and enhancement of interior and exterior historic building features**. Many schools are regarded as a community centerpiece and a source of pride for their neighborhoods. Accordingly, SPPS has the opportunity and responsibility to maintain and enhance our historic resources and be good stewards of our buildings as part of the historical fabric of the City of Saint Paul.
  - SPPS encourages the integration of old and new that celebrates the existing structure while providing new life and vitality to the spaces. SPPS may recommend or require a feasibility plan to retain, restore or enhance such features where possible. A Historic Context Study completed in 2019 will eventually lead to a Preservation Management Plan for properties that may be deemed historically significant.
  - In State or National Register historic districts and sites, the State of Minnesota has mandated that demolition in whole or in part must be reviewed prior to commencement of work. While SPPS has no buildings currently on the National Register, some are located within locally designated historic districts. In Saint Paul, the city’s Planning and Economic Development department will perform an initial review to determine if further preservation steps are required. These future reviews may involve the St. Paul Heritage Preservation Commission, various District Councils, and the State Historic Preservation Office. (Minnesota Statutes 116D.04 and MN Rule 4410.4300 Subp.31). More information is available at [www.stpaul.gov/HPC](http://www.stpaul.gov/HPC)
- The **safety and security** of our students and staff is paramount. Provide a design that responds thoughtfully and specifically to concerns over school security.
  - Incorporate principles of Crime Prevention Through Environmental Design (CPTED) into the overall site planning of the school facility. These principles provide a framework for deterring criminal behavior through strategies such as natural surveillance, strict access control, and territorial reinforcement.
  - Incorporate established security controls into the building design. Examples include such items as providing an intercom and video phone at the main entry; a secure main entry vestibule requiring all visitors to enter the main office prior to gaining access to the rest of the building; security cameras; and designated safe locations within the building which might also double as designated or required storm shelter spaces.
  - Secure entries are defined within SPPS Space Standards (design guideline for specific spaces).

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| <b>Design Goals</b> |
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SPPS Facilities’ goals in design are:

- To establish a respectful, collaborative process for all stakeholders that engenders creative and responsible solutions to support the vision and mission of SPPS in our facilities; and

- To identify, design and implement meaningful improvements to the built environment of our learners.

### Facilities Master Planning Background

In 2014 Saint Paul Public Schools (SPPS) began an extensive planning process to develop a 10-year [Facilities Master Plan \(FMP\)](#) to ensure our school buildings are able to meet the 21st century learning needs of students. With over 70 facilities, 7.3 million square feet of space, and 465 acres of land, a key component of proactively managing these assets is through the development of a Facilities Master Plan.

A District-wide Facilities Master Plan Committee developed a **Facilities Vision Statement, Facility Principles, and Facility Standards**. These documents are the guiding principles for the Facilities Master Plan and provide the district's criteria to prioritize facility improvement projects.

#### FMP Vision Statement:

We envision versatile, equitable, healthy environments that balance the factors creating authentic, engaging, and personalized learning experiences to sustain our academic mission and deepen connections to our communities and world.

#### FMP Principles:

Goal One: **ACHIEVEMENT**. Provide an outstanding and equitable education for all students through strong leadership, well-rounded curriculum and data-driven decisions

SPPS is committed to creating environments which:

- foster personalized learning and collaboration
- support college and career readiness
- support authentic and experiential learning
- provide flexible, adaptable learning environments
- provide facilities that are adaptable to respond to future technologies

Goal Two: **ALIGNMENT**. Coordinate school programs and supports to reinforce student learning

SPPS is committed to providing facilities which:

- support access for all
- promote equity for all
- can be used by, reflect and connect to the community and neighborhoods
- foster partnerships and community connections
- support connectivity to the natural environment and the outdoors

Goal Three: **SUSTAINABILITY**. Continue to be efficient and effective with our budget decisions to maximize classroom resources and create an academic plan focused on results

SPPS is committed to:

- excellence in the design and construction of facilities and grounds
- utilizing sustainable principles in the siting, design and operations of our facilities
- understanding and minimizing the impact our facilities have on the environment
- environments that support and promote health and safety for all
- environments that balance emergency preparedness with all other FMP Principles

FMP Facility Standards:

The 47 **Facility Standards** are criteria that describe the physical characteristics required of all Saint Paul Public School facilities. Standards define consistency, value and quality across SPPS facilities as they are maintained, improved or built. The 47 Standards, along with the Facility Vision and Principles, are published in more detail on the [SPPS website](#). They are listed below.

1. General Learning Space
2. Varied Space
3. Student Gathering Space
4. Assembly Space
5. Interdisciplinary Learning
6. Specialized Lab/Studio Space
7. Shared Space
8. Specialized Services Space
9. Pre-K, K and Early Childhood Space
10. Personalized Learning Space
11. Space for Enriching Activities
12. Staff Resource Space
13. Adult Learning Space
14. Daylighting and Views
15. Accessibility
16. Wrap Around Services
17. Safety
18. Clear Main Entry
19. Welcoming and Respectful Main Office
20. Health Services Space
21. Media Centers/Learning Commons
22. Food Service and Dining
23. Technology Space
24. Storage Space
25. Plumbing Core
26. Building and Energy Codes
27. District Administration and Services
28. Flexible Adaptable Space
29. Appropriately Scaled Space
30. Signage and Display
31. Experiential Interiors
32. Furniture/Finishes for Learning
33. Quality HVAC/Plumbing
34. Ample Electrical Service/Lighting Systems
35. Technology Infrastructure/Hardware
36. Safe/Accessible Site
37. Traffic Control
38. Parking and Service Areas
39. Landscape Character
40. Safe/Accessible Outdoor Play
41. Community/Outdoor Learning Settings
42. Planned Expansion
43. Permanent Facilities
44. Off-Site Learning Spaces
45. Joint-Use Facilities
46. Connections Between School Sites
47. Transportation

## Design and Construction Process Overview

The capital project implementation program to carry out the Facility Master Plan is called *SPPS Builds*. This program uses criteria for prioritization which were developed with the master plan to establish a set of projects and funding within a five-year plan. This implementation plan identifies projects that are moved forward to the design process. The outline below is a conceptual and operational tool to guide the design process from inception to completion.

In partnership with our various architectural and engineering consultants, the District will incorporate stakeholder voices through a thorough and thoughtful engagement process. The steps between the points in this process can be viewed as a dynamic process. Approvals by SPPS and stakeholder groups are obtained at each stage or decision point before proceeding to the next stage of project development. Each step below is explained in greater detail later in this document.

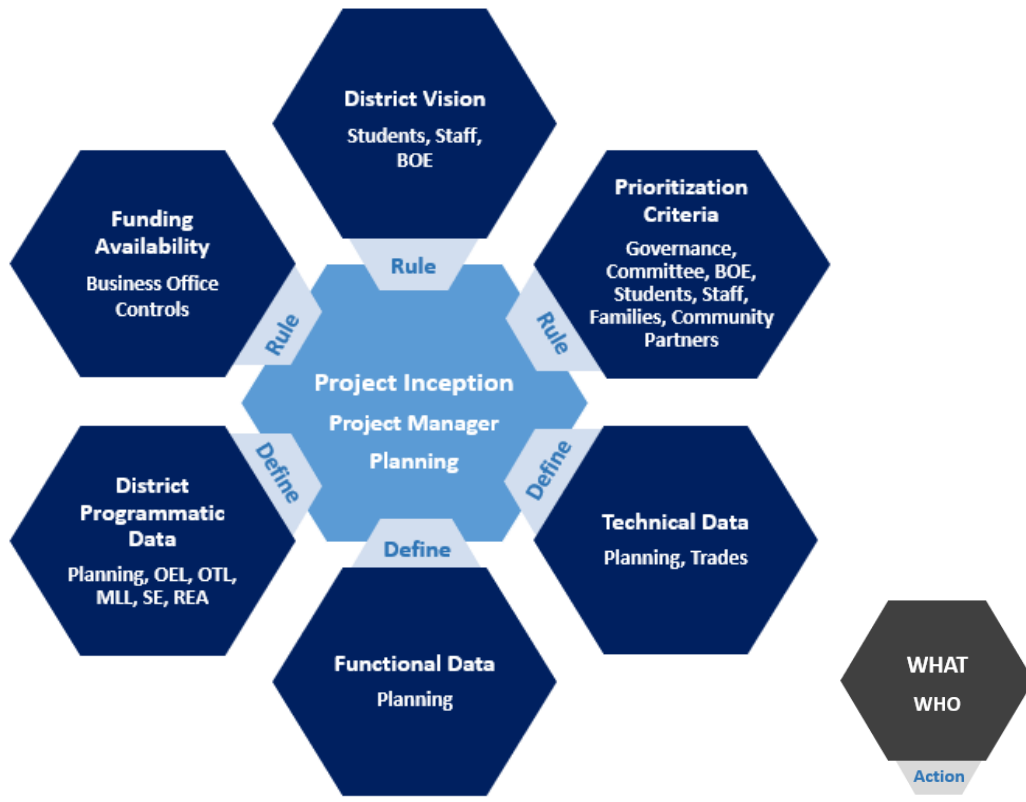
- Step 1 Planning and Chartering
- Step 2 Engagement / Schematic Design
- Step 3 Design Development
- Step 4 Construction Documents
- Step 5 Bidding
- Step 6 Construction Administration
- Step 7 Project Completion / Post Occupancy / Commissioning

## The Project Team

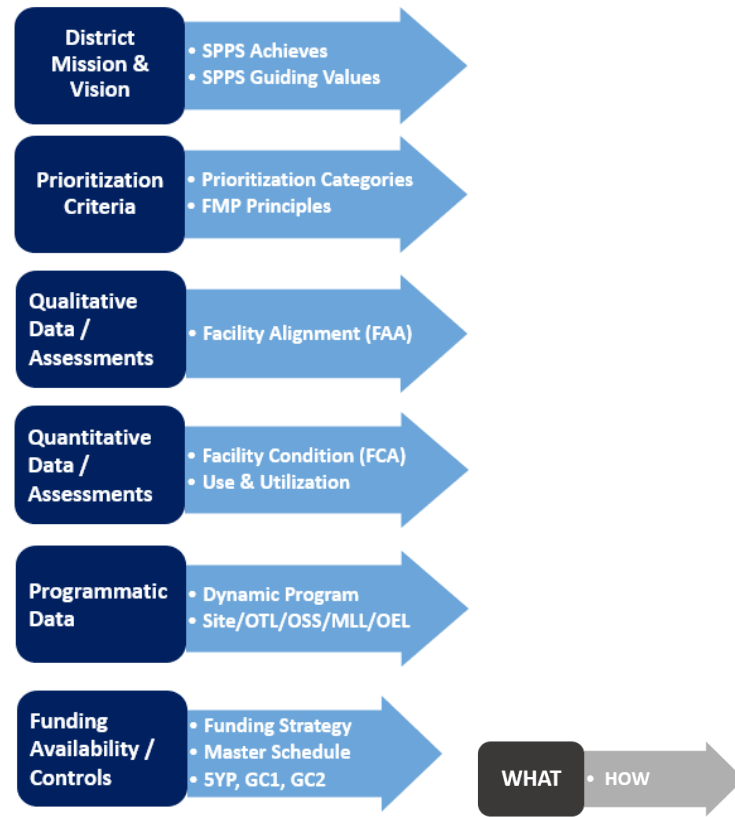
Design and construction projects throughout Saint Paul Public Schools are the responsibility of the Facility Planning and the Capital Project Delivery work groups, both within the Facilities Department. The Facilities Project Manager assigned to each project is the central advocate for the interests of the school district and the central point of communication for the Owner. (Most projects have both a Project Manager and a Project Coordinator who work closely with the Team throughout the project. The term “Project Manager” throughout this document references the Project Coordinator as well.) Saint Paul Public Schools’ internal project team members also include the following:

- Facilities / Maintenance and Operations / Trades Foremen
- Facilities / Environmental Services Group (ESG)
- Security and Emergency Management (SEM)
- Technology Services (TS)
- Nutrition Services (NS)
- Transportation
- Academic Supports / School User Groups
- Community Education

The Project Team is understood broadly as those working together during the design and delivery process, and will include SPPS staff as well as the prime consultants for the project. See following diagram.



**Diagram A - Roles During Project Inception**



**Diagram B - Activities During Project Inception**

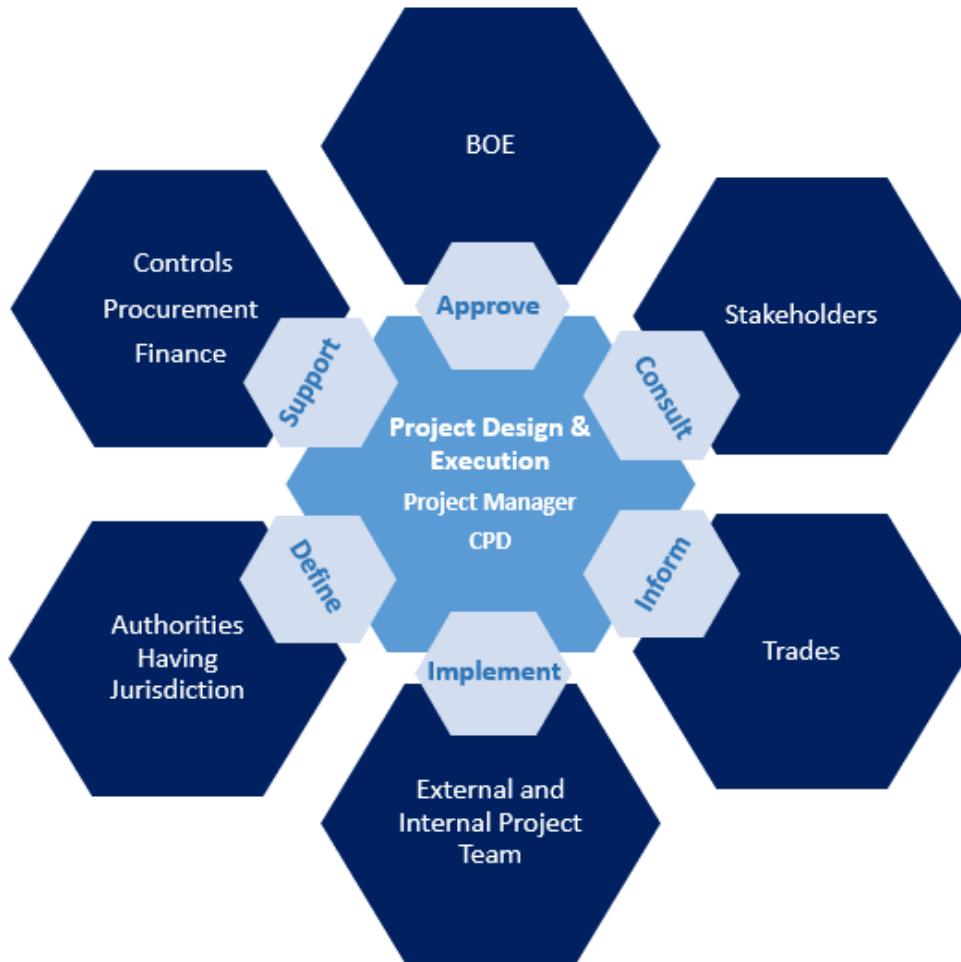
### Owner (SPPS) and Architect/Engineer Consultant (Consultant)

Consultants are an active and invaluable member of the Project Team. The Facility Planning/CPD department endeavors to create collaborative, long-lasting partnerships with Consultants that understand and support the academic mission of the school District and that mission's impact on the built environment. The Board of Education (BOE) approves a slate of Consultants and Construction Managers (Adviser) every several years to provide services to SPPS. Typically, Consultants are recommended for the BOE's consideration by the Facilities Department.

### The Owner / Contractor Relationship

SPPS Facility Planning/CPD department endeavors to partner with responsible, qualified Contractors in a transparent, defensible and equitable relationship. Different types of contracting relationships include direct contracts for limited services (up to the limits set by existing State and Joint Powers Purchasing Agreements); informal bidding for smaller projects (per Purchasing Department guidelines and below \$175k in value); and formal bidding (open, public bidding subject to SPPS Board of Education review and approval, with or without a Construction Manager Adviser).

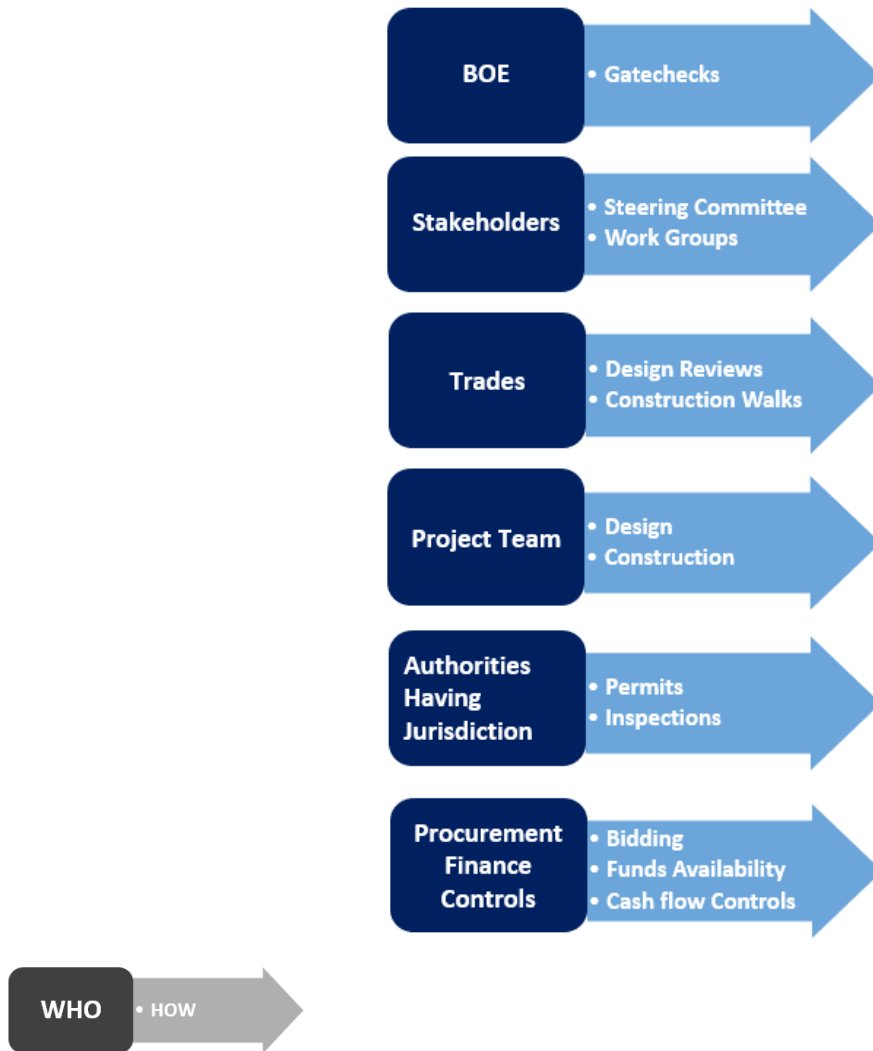
At the direction of the BOE, SPPS may solicit recommendations for entering into a Project Labor Agreement (PLA). Based upon those recommendations and internal deliberations, the BOE may choose to execute a PLA with the Trades Council and associated unions. The Consultant will be informed at the project Initiation stage if the project will be subject to a recommendation for a PLA. See following diagram.



Project Manager from Planning is the lead until completion of Chartering; then Project Manager from CPD is the lead through construction.

***Diagram C - Roles During Project Design and Execution***





**Diagram D - Activities During Project Design and Execution**

General Consultant project management tasks:

- Perform regular coordination meetings with sub-consultants, Construction Manager, and SPPS project team. Meetings will be held regularly at a frequency necessary to support the work, beginning in the Schematic Design phase.
- Perform regular document review with sub-consultants and SPPS internal groups (Trades, SEM, etc) during each phase: Schematic Design (1 meeting), Design Development (2 meetings), Construction Documents (3 meetings). Additional meetings may be held as identified by the Project Team.
- Collaborate with Construction Manager in developing project phasing, construction schedule and cost estimates, and analysis of constructability. Implement Construction Manager suggestions accepted by Project Team.
- Assist and work with organizations engaged by SPPS as part of energy incentive programs chosen by the Project Team towards energy saving goals.
- Responsibilities as defined by SPPS-modified AIA Contract.

### Owner -- Audio Visual Role

The SPPS goal is to provide a Classroom Audio Visual System that includes but is not limited to video displays, mixer/amplifiers, wireless microphones, system controllers and display processor/computers. (More detail is provided in 27 41 00 – Classroom Audio Visual Systems; see related sections for network and security design.) SPPS typically provides most AV and tech equipment.

- The SPPS Technology Coordinator as part of CPD enters the process during Design Development in order to ensure that data and electrical access align with equipment locations.
- The SPPS Project Manager (PM) will provide a material list of any Owner provided equipment, as developed by the Technology Coordinator.
- The contractor installs Owner provided equipment and all other necessary cabling required to ensure a fully functional system.
- SPPS Facilities is responsible for initial procurement and licensing of devices and coordinating Crestron programming.
- SPPS Technology Services is responsible for ensuring network readiness for devices and to provide owner-side programming of network / devices.
- Owner provided equipment generally includes:

|                             |                       |
|-----------------------------|-----------------------|
| Projector                   | Speakers              |
| Television and bracket      | A/V Controls          |
| Apple TVs                   | Security Box          |
| Display processor & bracket | Crestron Power Supply |
| Sound Amplification         |                       |

### Owner -- Furniture Selection Role

SPPS's goal is to provide functional, durable, attractive furniture for classrooms, administrative offices and specialty spaces that includes but is not limited to desks, chairs, tables, soft seating according to [SPPS furniture standards available on the Furniture and Moves page](#). Furniture is important both in how it functions and how its design complements the spaces where it is installed and intended to be used. SPPS provides most furniture.

- SPPS Furniture and Moves Coordinator enters the design process during Design Development in order to ensure that data and electrical access align with furniture locations.
- SPPS has many standard pieces and specific suppliers but will collaborate with the Design Consultant on colors, use of spaces and other recommendations. The Design Consultant provides design services for any millwork or built-ins.
- Working with an SPPS-selected furniture supplier, the Furniture and Moves Coordinator develops a list of Owner-provided furniture for each room and space. The list is based on District furniture standards. The SPPS Project Manager provides the list of Owner-provided furniture to be included with the project plans.
- The Owner's external furniture consultant is responsible for installing Owner-provided furniture. **The contractor providing electrical is responsible for installing power within furniture after furniture installation** (workstations, conference tables, and library shelving for example).

## Steps in the Design and Construction Process

### Step 1: PLANNING and CHARTERING

A project will go through two approvals before moving into design in partnership with architectural and engineering consultants. The first approval is Gate Check 1 which marks inclusion of the project in the *SPPS Builds* Five-Year Maintenance and Capital Implementation Plan (5YP), and requires Board of Education approval of prioritization of work as shown in the plan. The second approval is Gate Check 2 which follows completion of the Project Charter and represents approval to solicit design services.

**Planning:** During the Planning stage, SPPS Facilities Planning maintains and updates the assessments that originated in the Facilities Master plan. This is a continuous process that allows for the realignment of priorities based on both internal and external factors to the District. This process determines which plans are mobilized into projects within the 5YP. The assessments and what they address are:

- Facility Condition Assessment: current and projected condition
- Educational Adequacy Assessment: alignment with Facility Standards
- Use and Utilization Study: fit between enrollment and capacity.

The site priorities listed above are also considered in conjunction with initiatives from the District's strategic plan. In the Planning stage, any site and/or community engagement is limited to the assessments. Any resulting project may be either major modernization (remodeling/additions) or smaller remodeling and repair improvements (individual or bundled). Cost estimating at this stage is a preliminary rough order of magnitude and is published in the 5YP only in its aggregate.

Overall, the goal for the 5YP is a set of large and small projects, balanced with available funding sources and scheduled out roughly over a 5-year horizon.

**Chartering/Pre-Design:** The goal of chartering is exploration of a project's scope, schedule and cost through multi-departmental review and discovery, resulting in the Project Charter.

The SPPS Facility Planning work group reviews the Concept Plans developed during the initial 2015 Facility Master Plan (FMP) workshops. Planning reviews program requirements and identifies changes that may have occurred in the interim, e.g. to enrollment, academic programs, technology and/or space needs.

This stage of Planning includes:

- verification of planning and design goals from the FMP
- initial study of site constraints, zoning and building code limitations
- preliminary building condition assessment including existing building systems
- approaches to construction phasing
- review of SPPS Design Standards and guidelines
- review and update of the previously established space program and a new description of overall project scope

Where conditions warrant further study, SPPS may carry out a site survey, soil borings, environmental site assessment and/or early engineering studies to identify possible solutions and scope/cost implications. The Project Team will identify project contingencies, modify the project's order of magnitude estimate as necessary, and lay out an overall project schedule.

For projects over \$2M, the collected information is assembled into a Project Charter which provides the baseline for project scope, schedule, and cost. It is submitted to the Board of Education for Gate Check 2. Approval indicates acceptance of the charter and authorization to procure design services.

The SPPS Project Manager facilitates an internal kick-off meeting with the school to confirm project parameters prior to consultants coming on board. RFPs for Architectural, Engineering and Construction Management consultants are sent out at the end of this phase of planning.

### OWNER TASKS (Planning)

- Review overall project goals, priorities and concept plans established in the 2015 Facilities Master Plan; validate building programming; review and define project scope
- Review constraints of building code, zoning and site.
- Identify need and obtain external support for investigative studies
- Identify potential Sustainability programs
- Identify and engage internal District stakeholder groups to review preliminary project scope, budget and schedule
- Review and update initial space utilization study
- Work with a school-site based steering committee (3-5 people) that would include program administrator and school representation.
- Create preliminary project budget, including hard and soft costs; identify budget constraints/risks
- Identify preliminary baseline schedule and project milestones
- Identify funding sources - single or multiple; Capital, LTFM, Certificates of Participation, and coordinate applications to MDE with Business office
- Initiate and maintain internal Project Journal which summarizes major decisions and milestones
- Lead Gate Check #2 authorization process
- Prepare and solicit RFP for design services, and construction management services, if applicable

### DELIVERABLES

1. Project Charter with project goals and overall project scope; site program and quantified and defined space needs for the site; and project schedule outline. Include potential issues and logistics concerns. Confirm that concept plans meet the overall project goals.
2. Project Journal.
3. Investigative studies: soil borings, site survey, environmental assessment

### TIME FRAME FOR THIS PHASE

Approximately 6-12 weeks, depending on scope

### APPROVALS

- Facilities Planning and CPD Project Managers, Controls, Facilities Department Director, Business Office

- ❑ **Board of Education: Gate Check 1/Planning.** Occurs when a project is included in the board-approved 5YP.
- ❑ **Board of Education: Gate Check 2/Chartering.** For large projects (over \$2M), approval of charter is required to move forward to solicitation of design services. For smaller projects under \$2M, Gate Check 2 is not required.

## **Step 2: ENGAGEMENT / SCHEMATIC DESIGN (SD)**

The Schematic Design phase includes written general descriptions of the project which indicate how the design responds to SPPS Builds, the programmatic requirements, and the determinations of internal and external stakeholders and the Project Team. The Design Consultant prepares SD documents with sufficient detail to define scope, design intent, and schedule, allowing construction cost estimate and budget to be set. The Project Budget will be established based on Schematic Design cost estimate (Gate Check 3); thus exploration of all areas, including project phasing, is essential.

### **CONSULTANT TASKS (A/E and CM Services)**

- Review program, revise as needed per discoveries during SD with site administrator and steering committee, and summarize requirements in a Program Document
- Work with a site based steering committee (6-8 people) that would include program administrator, and representation from the school, community, parents and students. Review work done with any similar group carried out during Chartering.
- Identify potential phasing of project and internal construction-phase relocation needs with Owner (and CM if applicable)
- Review site logistics concerns, i.e. neighborhood, site access, playgrounds, traffic, parking, student drop-off and pick up, busing, signage; develop site logistics plan with stakeholder and site input
- Conduct zoning and building code analyses
- Conduct preliminary reviews with authorities having jurisdiction (AHJs), e.g. City planning and zoning officials, building official, fire marshal, local watershed, storm-water management, site plan review, heritage preservation, and others as required
- Develop SD plans as required for City reviews/approvals
- Prepare and conduct stakeholder reviews with internal project team members; conduct preliminary review with SPPS Trades/other SPPS groups
- Initiate and coordinate review with the external Energy Design Agency
- Select and define MEP building systems; include Owner-contracted commissioning agent in MEP planning process
- Select and define specific Life Safety/Accessibility systems
- Coordinate locations of soil borings for Owner's geotechnical report
- Prepare and review preliminary construction cost estimate (prepared by CM if applicable) reconciled to project estimate with Owner (and CM if applicable).
- Review Owner-provided project funding plan and strategies
- Establish project baseline schedule and construction-phase occupancy requirements

### **OWNER TASKS (CPD)**

- Project onboarding with selected Design Consultant and Construction Manager (if applicable)
- Confirm funding availability and its alignment with project budget

- Reactivate and expand school site-based steering committee
- Engage and work with Design Consultant to schedule internal stakeholder reviews as required (Trades and others)
- Manage stakeholders' expectations and project goal achievement
- Maintain outreach and schedule periodic meetings with neighborhood council
- Confirm alignment of Project and District goals with internal stakeholders' expectations
- Identify and engage commissioning agent
- Introduce Design Consultant and Construction Manager to Procore (SPPS's project management software) for file sharing and communication
- Maintain Project Journal

## DELIVERABLES

1. Program Document, to include an overview of the project, a space summary and program chart, and space descriptions including adjacencies and square foot requirements of all proposed components.
2. 100% SD documents to include:
  - a. Preliminary site and building plans; preliminary building sections
  - b. Preliminary outline of MEP systems including energy conservation strategies
  - c. Approximate dimensions and areas of major building components
  - d. Perspective sketches to explain the design concept
  - e. A master time schedule for all project activities
  - f. A preliminary construction cost estimate in conjunction with CM and Owner
3. Project Journal (SPPS)

## TIME FRAME FOR THIS PHASE

From 4 to 20 weeks, depending on scope

## APPROVALS

- CPD Project Manager, Department Managers, Department Director
- Board of Education: Gate Check 3** - Approval of final project budget. Approval indicates the Board's direction to proceed to construction bidding so long as the project remains within the allotted budget.

Upon approvals, proceed to Design Development phase.

## Step 3: DESIGN DEVELOPMENT (DD)

In the DD phase, schematic drawings are developed to a level of detail necessary to prepare a clear, coordinated description as previously defined in Step 2: Engagement / Schematic Design. Major project elements, including equipment, fire protection, mechanical, electrical, structural, communications (including telecom, A/V, security control), and plumbing systems, are designed and coordinated through enlarged scaled drawings and detailed elevations and plans. With the inclusion of the commissioning agent, the Project Team will consider costs and savings in relation to performance standards (value engineering). These decisions will be part of the budget review process.

**The DD phase is not an opportunity to add scope.** The goal is to refine what was designed in schematic design. In the DD phase, design and construction costs should be clarified. If the DD cost estimate is not consistent with the budget set at SD, then scope and budget realignment is required.

#### CONSULTANT TASKS (A/E and CM Services)

- Schedule design progress review meetings with Owner groups, AHJ and external partners as needed
- Conduct a Design Development Kickoff meeting to review and document design decisions to date
- Schedule and present updated project development to District stakeholder groups, site users and community as directed
- Prepare jurisdictional update/review with DD plans
- Coordinate among disciplines to address system-structure conflicts
- Review updated cost estimate at the end of design development, reconciled to project budget with Owner (and CM if applicable), and expand cost estimate to include line item details of costs to align with design development progress
- Review/update baseline schedule and phasing plan to include site logistics and temporary relocation plans as needed

#### OWNER TASKS (CPD)

- Schedule DD drawing reviews with site steering committee, Project Team and SPPS Trades/other SPPS groups
- Manage expectations discussed during review meetings
- Coordinate follow-up of project reviews, such as hazardous materials identification and removal impacts on project and schedule.
- Monitor the project budget and schedule to align with overall project goals
- Begin to engage internal resources for Owner-provided and Owner-managed AV and FFE
- Maintain Project Journal and Procore.

#### DELIVERABLES

1. 100% DD documents to include:
  - a. Site plan, building plans, sections, elevations and typical wall sections developed in sufficient detail to establish the final scope of the project.
  - b. Site plan to indicate site grading, paving plans, roadways, utility connections, stormwater management, and preliminary landscaping plan.
  - c. Structural plans to indicate structural systems, location and general sizes of structural members based on soil conditions, code requirements, and design criteria.
  - d. Mechanical drawings to indicate the HVAC and piping systems.
  - e. Electrical drawings to indicate power, lighting, communication, and alarm systems.
  - f. Typical construction details to indicate methods of construction and structural systems.
  - g. Outline specifications describing final material selections, architectural, structural, mechanical and electrical systems, value engineering and energy conservation reports (typically from Energy Design Assistance program).
2. An updated project schedule, phasing plan, and a construction cost estimate. For projects under CM delivery, this step will be in coordination with Construction Manager-Advisor.

#### TIME FRAME FOR THIS PHASE

Approximately 3-6 months, depending on scope

## APPROVALS

- Facilities Project Manager, Department Managers, Department Director.  
Upon approval, proceed to Construction Documents phase.

## Step 4: CONSTRUCTION DOCUMENTS

The Construction Documents, which are part of the overall contract, are composed of two coordinated components: the Construction Drawings, and the Project Manual which contains Bidding Requirements, Contract Forms, General and Supplementary Conditions of the Contract, and the Specifications for the project.

During the Construction Documents phase, the Owner reviews at the 40% and 85% stage, which shall include both drawings and specifications. Initial applications to authorities for Watershed, City Planning review and Sewer Access charges should take place during this phase or earlier to meet desired construction start.

### CONSULTANT TASKS (A/E and CM Services)

- Submit all necessary applications, including Site Plan Review, Watershed District application, variance application and alternate Compliance to Saint Paul Department of Safety and Inspections
- Prepare final phasing plan(s) and internal relocation plan to include site logistics and temporary relocation plans as needed
- Complete internal and user group reviews at 40% and 85% completion of documents [or as detailed in consultant contract]
- Review updated cost estimate at 40% and 85% completion of documents, and reconcile to project budget with Owner
- Finalize security/access control, telecom, A/V systems
- Consultant includes SPPS Front End in Project Manual which Owner prepares
- Submit 100% construction documents to city for jurisdictional review and approvals, including Exterior/Civil, MEP, Structural

### OWNERTASKS (CPD)

- Schedule internal and user-group reviews (both to be limited and specific)
- Prepare and finalize SPPS Front End documents for 85% internal review
- Furniture & Moves Coordinator and Tech Coordinator prepare initial FFE and AV/technology equipment plans in response to final design and phasing documents
- Maintain Project Journal and Procure

### DELIVERABLES

1. 100% construction documents, complete and coordinated
2. Final project cost estimate and schedule
3. Phasing Plan and Internal Relocation Plan
4. Construction Management Plan, as required

### TIME FRAME FOR THIS PHASE

Approximately 3-6 months, depending on scope

## APPROVALS

- Facilities Project Manager, Department Managers, Department Director, based on alignment with final project budget set at Gate Check 3. Proceed to Bidding phase.



## Step 5: BIDDING AND CONTRACTS

Project Bidding and Construction Contracts are facilitated by the Purchasing Department in collaboration with the SPPS Capital Project Delivery work group. This is part of a procurement process from bidding through approval of construction contracts by the Board of Education. Documents are made available to bidders electronically, linked to the SPPS Purchasing [website](#), as well as being posted at various plan rooms. Bids may be informal, not advertised and issued to a limited number of contractors; or may be formal, advertised, and made broadly available. An expectation of the Design Consultants is that documents are complete at the start of bidding, with minimal need to make changes by Addendum.

### CONSULTANT TASKS (A/E and CM Services)

- Provide full set of pdf documents to Project Manager and Consultant/CM via Owner's document vendor (ARC). Coordinate hard copies for Consultant/CM and SPPS PM.
- Participate in providing information and answering questions at pre-bid conferences.
- Document Pre-bid conference and questions.
- Review requests for substitution for meeting specification and project requirements; forward recommended requests to SPPS Project Manager for final approval
- Prepare Addenda and provide to ARC, Owner's document vendor, for upload. Addenda should be primarily responses to bidder questions and/or requests for substitution.
- Communicate with apparent low bidder to verify that they do not see any errors in their bid and are able to perform the work for the bid amount and within the specified time range. For projects under Construction Manager-Advisor delivery, this step will be carried out by CM.
- Prepare a letter recommending that SPPS contract with verified successful bidder(s). For projects under CM delivery, this step will be carried out by CM.

### OWNER TASKS

- Prepare advertisement for bids, including dates set for pre-bid conference. Verify date with Purchasing to ensure it works for their schedule of other bid openings.
- Coordinate with Purchasing to post documents.
- Coordinate pre-bid meetings and optional open-house with site. Provide pre-bid meeting agenda to Consultants for their additions
- Attend pre-bid meetings and optional open house
- Review requests for substitution following Design Consultant review; notify Project Team of those that are acceptable before final Addendum
- Following electronic receipt of bids, CPD PM and CPD Manager meet with Consultant to agree with which bid Alternates to proceed.
- Communicate format for and timelines for bid recommendation letters to meet BOE deadlines.
- Assist Purchasing as needed to collect documents and information related to construction contracts. Ensure receipt of all fully executed contracts; SPPS PM to upload to Procore.
- SPPS Project Manager coordinates with SPPS Facilities Admin staff to prepare necessary documentation for Board review and approval.
- SPPS Project Manager should be aware and in the communication loop regarding fully executed contracts between Purchasing and contractors, and issuance of Purchase Order for contractors.
- In the Procore Setup, SPPS will input the breakdown for Capital (CI) and Deferred Maintenance (DM) for each Procore commitment.
- Maintain Project Journal and Procore

## DELIVERABLES

1. Bid tabulation(s) and bid recommendation letter(s) recommending that SPPS contract with verified successful bidder(s).
2. Get on Board agenda for Gate Check 4.

## TIME FRAME FOR THIS PHASE

Approximately 3-4 months, including Gate Check 4 and approval of construction contracts by the Board.

## APPROVALS

- CPD Project Manager initials bid recommendation letter to indicate approval by Facilities Department, and coordinates preparation of Board Agenda Item (BAI). Bids are accepted by Board action as Gate Check 4.
- On approval, proceed to contracts and construction.

## Step 6: CONSTRUCTION ADMINISTRATION

Throughout the course of construction, the SPPS Project Manager, Design Consultant, and CM or GC meet weekly (or regularly as agreed) on site to review construction, evaluate/resolve field conflicts and drawing discrepancies, track changes, requests for information, proposal requests, schedule, etc. All of these project components are tracked in Procore. Contractor commitments are also entered into Procore. All contractors and consultants upload invoices and pay apps through this software.

The CM (GC in non-CM projects) leads the construction progress meetings, sets the agenda, and documents decisions and outcomes. Meeting minutes for progress meetings should be recorded in Procore. The CM or GC project superintendent reports on the project's safety program and site logistical concerns and provides weekly updates to the construction schedule.

## CONSULTANT TASKS (A/E and CM Services)

- Pre-Construction Meeting(s). The CM (GC in non-CM projects) schedules and conducts a Pre-Construction Meeting, prepares an agenda, records discussions and distributes the meeting minutes as directed.
- Schedule of Values. Per the Contract Documents, the CM submits a Schedule of Values for the work. The Contractor will be required to separate the scope of each distinct funding source into separate and easily identified sections on the Schedule of Values; this will be similar for projects with multiple prime contractors under a CM. The CM and/Architect's role in CA is to evaluate the work and data on the payment application and SOV to confirm progress to the point indicated.
- Critical System Pre-Installation Meetings. As required, the Consultant schedules and conducts pre-installation meetings on critical systems and assemblies, and is responsible for preparing an agenda, recording discussions and distributing the meeting minutes.
- Commissioning and Balancing Coordination Meetings. SPPS will contract directly for the commissioning agent, but the Consultant and CM will assist in coordinating commissioning activities.
- Site Observations. The Consultant and/or CM will conduct site visits and enter site observations via Procore for any correction or discrepancy discovered.
- Change Orders and Construction Change Directives. In instances where the cost is unknown and/or time is of the essence, and upon acceptance of the Contractor's proposal, the Consultant

prepares a Construction Change Directive (CCD) and submits via Procore. If a CCD is not needed or when the work of the CCD is complete, the Consultant prepares a Change Order via Procore for proper signatures.

- Applications for Payment. The Contractor submits applications for payment on standard AIA documents G702 and G703 via Procore for Project Team review.
- Punch List. The Consultant conducts an inspection of the Work and prepares a Punch List of items in Procore to be completed or corrected by the Contractor prior to final payment.
- Certificate of Occupancy and Substantial Completion. Contractor/CM coordinate Occupancy. When the A/E Consultant and Owner have agreed that Substantial Completion of the Project or a portion thereof has been reached, the A/E Consultant issues a Certificate of Substantial Completion. Its date of issuance initiates requirements for warranties, training and other closeout efforts.

#### OWNER TASKS (CPD)

- Special Inspections and Testing. The Owner will contract directly for all Special Inspections and Testing. At the request of the Facilities Project Manager, the Design Consultant may be asked to facilitate the receipt of three proposals to perform this work from qualified companies.
- Schedule of Values. The SPPS Facilities Project Manager provides the Schedule of Values to the SPPS Purchasing and Accounting departments with correct encumbrances per budget code.
- On-going reviews and approvals. The Facilities Project Manager reviews and approves all change orders, RFIs, payment applications, etc. which is specified in the Procore approval workflows for each item.
- Maintain Project Journal and Procore

#### DELIVERABLES

1. Schedule tracking and updates
2. A&E site observations
3. Punch list
4. Substantial completion
5. Final inspections

#### TIME FRAME FOR THIS PHASE

Schedule as defined by contract documents.

#### APPROVALS

- Board of Education approvals are required for Change Orders over \$175,000, or Change Orders that increase any individual contract to over \$175,000.

#### **Step 7: PROJECT COMPLETION/POST OCCUPANCY/COMMISSIONING**

Upon receipt of a Certificate of Occupancy (CO), the facility (or a portion of it) is occupied, maintenance responsibilities begin and maintenance is transferred to Owner. The Closeout phase lasts through the duration of the project warranties (typically one year), but the project should be financially closed within six months after the project is complete. Financial closure requires that all contract work is completed, permits are closed out, as-built documents have been received and final invoices have been submitted and paid.

## DESIGN CONSULTANT AND CM TASKS

- Record Drawings. The Consultant obtains the as-built Record Drawings from the Contractor and provides a complete set of Record Drawings to the Owner as described in the Owner – Consultant Agreement.
- Close-Out Documents. Prior to certifying the final Application for Payment, the A/E or CM Consultant verifies with the Facility Planning Project Manager that at a minimum, the following documents have been received:
  - All necessary IC-134s and the Consent of Surety for final payment.
  - All required warranties specified in the Contract Documents.
  - All Operating and Maintenance (O&M) Manuals as described in the Contract Documents.
  - All required Owner’s operating personnel training has been provided for the systems and equipment installed as part of the Project.
  - The Contractor has provided the Consultant with all red-lined as-built drawings.
- Warranty Walk-through. Ten (10) months after the date of Substantial Completion, the Consultant and Facilities Project Manager conduct a warranty walkthrough. After the inspection, the Consultant informs the Contractor in writing of the results and appropriate recommendations for corrections covered under the warranty period.

## OWNER TASKS

- Facilitate Trades’ input prior to 10-month review regarding items that are not performing per standards.
- Add any Post-Occupancy notes to Project Journal, as well as back to Material/System and/or Process Standards
- Procure - Download and Archive

## DELIVERABLES

1. Completed punch list
2. Close out documents
3. Record drawings and O&M documentation
4. Commissioning report
5. Gate Check 5 preparation for BOE

## TIME FRAME FOR THIS PHASE

Six months following construction completion for financial close-out; 12 months when including warranty walk-through phase. Some portions may overlap with construction of later phases in a multi-year construction project.

## APPROVALS

Approvals not required but a Gate Check 5 documentation will be prepared by the Controls group for the BOE at an appropriate time.

## **Additional Information**

Please reference [Design Standards](#), for additional guidance, including Space Standards and Material and System Standards.