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PREFACE

The Albemarle County Project Manager (PM) Handbook delineates the policies and procedures employed by Albemarle County for the planning, renovation and/or construction of County and School Division facilities. This PM Handbook describes the typical project lifecycle, the role of the PM and team, and contains policies, procedures and guidance that the members of the Office of Facilities Development (OFD) must follow in the planning, design, and execution of Capital Improvement Projects (CIP). At its core, the purpose of the handbook is to provide a defined and repeatable process to enable the project team and organization to consistently meet its goals of project delivery on time, within budget and meeting the desired requirements.

The PM Handbook serves as both a communication tool and as a working document to aid in the planning, designing and constructing of new buildings and renovations, as well as non-construction projects (i.e. systems and software implementation). The intended audience for this document is anyone serving on or impacted by such projects ranging from the Project Owner, to the PM and project team members. The handbook serves as a communication tool that defines the process and clarifies how the many project participants are organized. With a common language established, the PM Handbook then guides all project stakeholders through the process and controls implemented to ensure the proper execution of all CIP projects.

The Manager of OFD has general responsibility for the development and implementation of these policies and procedures for Local Government projects and will provide assistance to the Director of Building Services in the completion of School Division projects. The day-to-day responsibility for these policies and procedures are assigned to the Project Managers and Inspectors.

In the event of an inconsistency or conflict, applicable law, the Board of Supervisors’ and the School Board’s policies supersede the PM Handbook. If a conflict should arise the Manager of OFD should be promptly notified. As circumstances or the good of the County and the School Division may require, the Manager of OFD reserves the right to add, amend or revoke any of the contained rules, policies, regulations, and instructions or incorporate additional ones, with or without notice for Local Government projects and in conjunction with the Building Services Department for School Division CIP projects. Corrections, changes, or suggestions should be communicated to the Manager of OFD, (434) 872-4501.
What is Project Management

Project management is the discipline of planning, organizing, securing and managing resources to bring about the successful completion of specific project goals and objectives.

A project is a temporary organized effort, having a defined beginning and end (usually constrained by date, funding or deliverables), undertaken to meet unique goals and objectives. The temporary nature of projects stands in contrast to business as usual (or operations), which are repetitive, permanent or semi-permanent functional work to produce products or services. In practice, the management of these two systems is often found to be quite different, and as such requires the development of distinct technical skills and the adoption of separate management. A project brings together people from a variety of disciplines and provides them the opportunity to collaborate in a unique way.

At its root, Project Management processes and tools help the project manager and team to organize, document, track and report on project tasks and progress while trying to achieve a defined outcome by delivering the following:

- A defined and sponsored project scope
- A roadmap for deliverables
- Documented roles and responsibilities
- A common language for communication relative to project phases, tracking and reporting
- Processes to enable communication, accomplish the work, facilitate issue resolution and mitigate risk

The Project Management Triangle

Projects need to be performed and delivered under certain constraints. Traditionally, these constraints have been listed as "scope," "time," and "cost." These factors are also referred to as the "Project Management Triangle," where each side represents a constraint. One side of the triangle cannot be changed without affecting the others. A further refinement of the constraints separates product "quality" or "performance" from scope, and turns quality into a fourth constraint.

The time constraint refers to the amount of time available to complete a project. The cost constraint refers to the budgeted amount available for the project. The scope constraint refers to what must be done to produce the project's end result. These three constraints are often competing constraints: increased scope typically means increased time and increased cost, a tight time constraint could mean increased costs and reduced scope, and a tight budget could mean increased time and reduced scope. The discipline of Project Management is about providing the tools and techniques that enable the project team (not just the project manager) to organize their work to meet these constraints. It is important during the initiation phase to have clear delineation as to priority of decision making that affects any of these constraints.
The purpose of this section is to provide information that is relevant to all subsequent parts of this handbook. It provides a foundation of language, persons, and policy that should be understood and applied at all phases of a project. The section is divided into the following subsections:

1.1 Roles & Responsibilities: Local Government Projects
1.2 Roles & Responsibilities: School Division Projects
1.3 Policies
1.4 Contract Documents
1.5 Project Lifecycle
1.6 Filing System
1.1 ROLES AND RESPONSIBILITIES: LOCAL GOVERNMENT PROJECTS

There are many groups of people involved in both the project and project management lifecycles. This section describes at a high level the typical roles on County projects. As part of the initiation process the project will identify specific roles and responsibilities by name including approval processes and constraints (i.e. fiscal authority/approval process, design approval, etc.).

The **Project Team** is the group responsible for planning and executing the project. It consists of a Project Manager and a variable number of Project Team members, who are brought in to deliver their tasks according to the Project Charter. The Project Team is responsible for executing tasks and producing deliverables as outlined in the Project Charter and coordinated by the Project Manager, at whatever level of effort or participation has been defined for them.

**Project Manager**

The Project Manager is the person responsible for ensuring the Project Team completes the project. The Project Manager in conjunction with the Project Owner develops the Project Charter with the team and manages the team’s performance of project tasks. It is also the responsibility of the Project Manager to secure acceptance and approval of deliverables from the Project Owner. The Project Manager is responsible for communication, including status reporting, risk management, escalation of issues that cannot be resolved in the team, and, in general, making sure the project is delivered in budget, on schedule, and within scope.

**Team Leads**

On larger projects, some Project Team members may serve as Team Leads, providing task and technical leadership, and sometimes maintaining a portion of the project plan.

**Project Owner**

The Project Owner is typically a Director or Manager with demonstrable responsibility in the outcome of the project and is responsible for securing spending authority and resources for the project. The Project Owner acts as a vocal and visible champion, legitimizes the project’s goals and objectives, keeps abreast of major project activities, and is a decision-maker for the project. The Project Owner will participate in and/or lead the project initiation, including the development of the Project Charter, and will participate in project planning. The Project Owner provides support for the Project Manager; assists with major issues, problems, and policy conflicts; removes obstacles; is active in planning the scope; approves scope changes; signs off on major deliverables; and signs off on approvals to proceed to each succeeding project phase. The Project Owner generally chairs the steering committee on large projects. The Project Owner may elect to delegate any of the above responsibilities to other personnel.

**Steering Committee**

The Steering Committee generally includes management representatives from the key organizations involved in the project oversight and control, and any other key stakeholder groups that have
special interest in the outcome of the project. The Steering committee acts individually and collectively as a vocal and visible project champion throughout their representative organizations; generally they approve project deliverables, help resolve issues and policy decisions, approve scope changes, and provide direction and guidance to the project. Depending on how the project is organized, the steering committee can be involved in providing resources, assist in securing funding, act as liaisons to executive groups and sponsors, and fill other roles as defined by the project. Note: not all projects will have a Steering Committee.

**Design Team**

The Design Team are those members who have been designated to advise the project on decisions on behalf of the user groups they represent that will use, or be affected by, the product or service the project will deliver. Design team members are responsible for achieving consensus on project issues and outputs, and communicating it to the Project Manager. They attend project meetings as requested by the Project Manager, review and approve process deliverables, and provide subject matter expertise to the Project Team. On some projects they may also serve as Customer Representatives or be part of the Steering Committee. Examples of representatives that would serve on a project in this capacity would be General Services representatives for maintenance/sustainability input, Information Technology (IT) representatives, etc.

**Stakeholders**

Stakeholders are all those groups, units, individuals, or organizations, internal or external to our organization, which are impacted by, or can impact, the outcomes of the project.

### 1.2 ROLES AND RESPONSIBILITIES: SCHOOL DIVISION PROJECTS

Local government projects and school division projects require distinct project management processes since the former are governed by the Albemarle County Board of Supervisors, and the latter are governed by the Albemarle County School Board. However, Albemarle County is unique in that its facilities departments share responsibilities in executing a School CIP project. This collaboration presents an opportunity for both the Office of Facilities Development (OFD) and the Building Services Department (BSD) to optimize their individual strengths with the mutual goal of delivering a quality school facility that is completed on schedule and within budget.

Per Code of Virginia §22.1-79 Powers and Duties, the School Board shall: “Care for, manage and control the property of the school division and provide for the erecting, furnishing, equipping, and noninstructional operating of necessary school buildings and appurtenances and the maintenance thereof by purchase, lease, or other contracts.” The Director of Building Services (or Designee, i.e. BSD Project Manager) represents the School Board to ensure the finished project meets the needs and intentions of this Board; he/she has adequate authority to form and manage a team for the support of School Division projects. In support of this, OFD shall provide complete services for project tasks as
required by the School Division. The Building Service Department is fiscally responsible for the funds and is the ultimate decision maker.

To ensure an efficient & effective collaboration, however, the responsibilities of each department must be clearly defined. The most logical delineation of responsibilities is between the design and construction phases of a project. On School Division projects, the Building Services Department is best informed to accept and therefore has the responsibilities of the pre-design and design phases. As the design phase is completed, OFD will manage the construction of the project. This distribution of tasks is consistent with the notion of the School Division being the Project Owner. It is in keeping with the spirit of cooperation between the respective Boards and is supported by several School Board Polices (see Section 1.3).

The duties of the OFD Project Manager as outlined throughout this handbook apply to school division projects with the exception of the responsibilities in the Procurement and Design Phases. The following unique delineation of responsibilities should be followed for school projects:

<table>
<thead>
<tr>
<th>A/E Selection &amp; Contract</th>
<th>BSD to manage the selection and procurement of Architectural/Engineering (A/E) services; OFD shall assist as requested by BSD.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFD Manager/Designee to serve on Selection Committee (if applicable)</td>
</tr>
<tr>
<td></td>
<td>BSD to develop A/E Scope of Work for RFP and Contract. BSD to negotiate &amp; draft A/E Contract (or Project Order). OFD to review and advise.</td>
</tr>
</tbody>
</table>

Design

<table>
<thead>
<tr>
<th>BSD is responsible for and is to communicate with the A/E. OFD to advise, as necessary, on A/E work (contracts, estimates, schedules, programs, plans and specs).</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSD to form Design Committee (per School Board Policy) and invite OFD to participate as a non-voting member.</td>
</tr>
<tr>
<td>BSD to obtain School Board Approvals for Schematic and DD, with assistance from OFD as appropriate.</td>
</tr>
<tr>
<td>OFD to coordinate &amp; submit project permitting and County approvals; including participation in Site Plan Review, Board of Architectural Review, Planning Commission, and any other regulatory meetings, as needed; as well as Building Code review with Inspections.</td>
</tr>
<tr>
<td>OFD to review A/E construction cost estimates for completeness, accuracy, and suitability to Charlottesville market conditions; and make recommendation to BSD.</td>
</tr>
<tr>
<td>OFD &amp; BSD to review construction documents for constructability, completeness and suitability for bidding; BSD to summarize necessary changes for the A/E to make.</td>
</tr>
</tbody>
</table>
OFD to recommend to BSD the arrangement, content, and scheduling of bid packages.

A/E contract typically includes furniture and color selections determined via school committee with the BSD; OFD may assist/participate. When outside the A/E contract, the OFD PM will recommend furnishing based on the estimate and review with BSD prior to bidding.

Construction Bidding and Award of Contract

OFD to work with BSD to identify and contact suitable bidders in advance of bid; and to assist in stimulating competitive market interest and monitoring bidder activity.

OFD to draft Advertisement and Bidding Schedule for review with BSD; then oversee the advertising and distribution of bidding documents.

OFD to coordinate specifications, scheduling of bid packages, procurement, delivery, and installation for any required owner-provided material or equipment related to a project that falls outside of the project construction contractor’s scope.

A/E, with assistance by OFD, to schedule, conduct, and document pre-bid conferences.

OFD will review and analyze bids, and send BSD bid tab with recommendation to award for BSD to authorize contract to proceed.

OFD to draft construction Contract for review by BSD & County Attorney, and process the award of construction contracts and issuance of notices to proceed (copies of all letters to BDS).

1.3 POLICIES

There are specific codes and policies adopted by the Board of Supervisors (BOS) or the School Board (SB) which directly relate to the planning, design and construction of capital projects and thus are relevant to the procedures outlined in this handbook. This section will identify these relevant policies as well as highlight key aspects of each.

CIP Guiding Principles

The following principals have been identified by the BOS as identified goals for all CIP projects:

1. Maintain public safety as a key component of Albemarle’s livability;
2. Provide and maintain education facilities and technologies that enhance teaching and learning;
3. Support and enhance Albemarle County’s overall quality of life and community desirability and livability, including projects that contribute to the arts, education, community events, outdoor recreation, historic and cultural heritage, and social opportunities;
4. Improve and maintain critical County facilities to a 40-year useful life to improve functionality of buildings and preserve assets;
5. Provide well-located, safe and efficient facilities that offer quality customer service and increase employee productivity;
6. Incorporate environmentally sensitive and energy efficient systems into County facilities;
7. Respond to technological innovations and incorporate technological rather than spatial solutions when appropriate;
8. Pursue innovative arrangements for financing approaches including, but not limited to, public/private partnerships; ground lease of County properties in high value areas; leaseback and lease-purchase options, and intergovernmental cooperation;
9. Assist departments in preserving and maintaining the County's investment in buildings, land, infrastructure, and equipment;
10. Recommend projects based on a prioritized ranking system and the effective utilization of available outside funding sources (Federal, State, other) in addition to appropriate County funding levels;
11. Pursue opportunities for collaboration between general government and schools: working together to advance opportunities for different generations to come together in any publically financed facility;
12. Support working with our community non-profits (especially those receiving county funds) to seek opportunities to benefit ALL county residents by sharing spaces.

**SCHOOL BOARD POLICIES**

*The current board policies can be found at* [http://esb.k12albemarle.org/](http://esb.k12albemarle.org/).

**FB-Facility Planning**

The School Board is responsible for the regular operation and orderly development of its physical plant.

**FB-Facility Planning (AP)**

- The superintendent assigns facility planning and the development of CIP recommendations to school administration staff.
- The Long Range Planning Advisory Committee, appointed by the School Board and the Superintendent, makes recommendations for long term facility needs with input from the public and staff.

**FA-Building & Naming Facilities**

The Board’s facilities development goals are to:

1. Construct buildings and renovations that will accommodate and facilitate those organizational and instructional patterns that support the division’s educational philosophy and instructional goals.
2. Meet all safety requirements through the remodeling of older structures.
3. Provide the renovations needed to make public school facilities accessible to disabled persons in accordance with federal and state laws.
4. Approve design and construction that will lend itself to low maintenance costs and the conservation of buildings.

5. Consider the viewpoints of staff, students and the community when determining the educational specifications for new buildings and projects involving major additions or renovations.

FA-R: Building & Naming Facilities
- SB identifies key elements of a project
- Design Committee
  - Formed by the superintendent or appointed designee.
  - Members are representative of the community which will likely be served by the new school and will also include representatives of teachers, principals, and support services staff that can advise on the best instructional design for the building.
  - The Superintendent will establish with the Board its expectations for involvement in the approval of the design for the facility
- The School Board will approve the schematic design for the facility and the design development before approval to proceed to the construction document phase.

FEA-Facility Design
The Superintendent provides the development of educational specifications including specific architectural characteristics.

FEA-R: Facility Design
- If 100K+, the A/E Selection Committee is appointed by the SB & Superintendent, otherwise the committee is appointed by school staff.
- RFP Process & Contract
  - Responses will be reviewed by Director of Building Services and Capital Project Coordinator
  - Process will include identifying scope for design fee
  - Negotiations are completed by selection committee and staff
  - Contracts are approved by School attorney
  - School Board authorization is required before a firm is hired.

FEG-Supervision of Construction
- The SB assures adequate supervision of construction
- Project Manager duties include:
  - Daily surveillance and construction diary outlining the various disciplines of work being accomplished, weather conditions, numbers and types of mechanics on the job, materials delivered, delaying factors (if any),
  - Identifying estimated weekly percent of completion,
  - Interpreting plans and specifications
  - Interfacing with the architect/engineer and the project contractor
  - Report any and all matters requiring contract action to the purchasing agent
- Reviewing all partial payments received from the architect engineer and signs for payment
- Coordinating punch list with architect/engineer for transmittal to contractor
- Approving final completion payment

*Note: The policy does not clearly identify who the “project manager” is - this handbook clarifies the actual procedure and execution.

### 1.4 CONTRACT DOCUMENTS

There are two significant contractual relationships that are established in the course of a CIP project: between Owner & A/E and Owner & Contractor. Each contract references a specific document which governs in the relationship in detail. The Project Manager should know these documents well and rely on them where appropriate. The documents establish a contractual vocabulary which should be used for the utmost clarity between all parties.

(also called the Manual, CPSM)

This manual is a standard document that is referenced in every contract between the County of Albemarle and an Architect/Engineer. As its preface indicates, its technical standards “establish the levels of design, quality, energy efficiency, and performance required for projects on state properties in addition to the minimum standards required by applicable codes and standards for the project.” The **A/E Manual** is Chapters 1-10 and the appendices of the CPSM. Albemarle County’s contract specifically references only the A/E Manual. As a result, any architect or the engineer the County works with shall be held to the standards outlined in this manual.


**General Conditions & Supplemental General Conditions**

In addition to the project’s drawings, specifications, and addenda, the Contract between the County of Albemarle and a Contractor always reference two documents: the General Conditions and the Supplemental General Conditions. The **General Conditions** are a published standard document that includes administrative provisions common to most construction contracts. **Supplemental General Conditions** are specifically prepared to modify and expand the general conditions a needed to accommodate the unique requirements of a specific project. These conditions define basic rights, responsibilities and the relationships between the parties involved in the performance of the contract. While the contract is between the contractor and owner (County of Albemarle), the General and Supplemental General Conditions do describe duties and responsibilities of other parties as well (i.e. the Architect/Engineer). The County of Albemarle publishes its own set of General Conditions. The latest version can be found [here](http://bcom.dgs.virginia.gov).
1.5 PROJECT LIFECYCLE

The illustration below depicts a typical lifecycle of a project. Depending on the complexity of the project and the needs of the project owner, OFD’s role may be initiated at any of the phases. The subsequent chapters of this handbook further explain the role of the Project Manager in these outlined phases. It should be noted that the Program Development Phase is not explicitly covered in this handbook as a unique or separate phase. At times, it may occur earlier in the CIP process or sometimes in parallel with conceptual design. Furthermore, the CIP process is not discussed in the scope of this handbook; all processes discussed in this document generally assume that a project is adopted into the CIP program.
1.6 **FILING SYSTEM**

The project manager should employ the numeric filing system outlined below throughout the life of a project. This provides a uniform organization system that makes information accessible and easy to find for all project team members.

**CIP Project File List**

**PROJECT MANAGEMENT**

- 100 CIP Request
- 101 Project Scope and Budget
  - 101.1 Memorandum of Understandings (MOU)
  - 101.2 Grants / Application
  - 101.2a Grants / Administration
  - 101.2b Grants / Reimbursements
- 102 Project Schedule
- 103 Pre-Existing Documentation
- 104 Owner/User Meetings
- 105 State Required Documents
- 108 Status Reports
- 109 LEED
  - 109.1 Design
  - 109.2 Construction Submission
  - 109.3 Commissioning Report
  - 109.4 Certification
- 110 Project Action Items

**DESIGN PHASE**

- 200 Project Studies / Calculations
- 201 A/E Selection (RFP)
- 202 Design & Consultant Contracts
  - 202.1 A/E Contract & Change Orders – Design
  - 202.1a A/E Invoices
  - 202.2 Special Inspection & Testing Contracts w/ Invoices
  - 202.3 Misc. Consultant Contracts w/ Invoices
- 203 Miscellaneous Invoices (Design)
- 204 Design Review Comments/Response
  - 204.1 Preliminary Documents (Programming, Conceptual)
  - 204.2 Albemarle County Community Development Department (Preliminary/Final Site Plan, Zoning, etc.)
  - 204.3 School Board / Department of Education
  - 204.4 State Agencies (VDOT, Health Dept., SERP, etc.)
  - 204.5 Federal Agencies (US Army Corps of Engineers, etc.)
  - 204.5 ACSA & RWSA (Water & Sewer)
  - 204.6 Utility Relocation (Electric, Cable, Telephone, etc.)
  - 204.6 Value Engineering
- 205 General Correspondence
- 206 Project Meetings (Design)
- 207 Land/Site Acquisition (purchase, easements & right-of-ways)

**CONSTRUCTION PHASE**

- 300 Bidding
  - 300.1 Pre-Qualification
  - 300.2 Advertising
  - 300.3 Bid Documents (Plans, Specs, Addendums)
  - 300.4 Pre-Bid Meeting, Questions & Answers
  - 300.5 Tabulation Sheet
301 Executed Construction Contract, Bonds & Insurance-Sublist
302 Change Orders
  302.1 Work Directives
  302.2 Requests for Information from Contractor
  302.3 Requests for Proposals from A/E
  302.4 PCO from Contractor
303 Contractor Payment Requests/Schedule of Values
304 Miscellaneous Project Costs
  304.1 Miscellaneous Construction Contracts/Invoices
  304.2 Owner Initiated Purchases
  304.3 Furnishings/Fixtures/Equipment
  304.4 Underground Storage Tank
305 Construction Schedule
306 Submittal Log / Shop Drawings
307 Job Meetings (A/E visitation reports)
308 Development Agencies
  308.1 Permits (Building, Health Dept., Erosion Control, Stream Crossing)
  308.2 Correspondence w/County Development Departments
  308.3 Utilities/ACSA, Virginia Power
  308.4 VDOT
309 Inspection Reports
  309.1 Daily Reports
  309.2 Test Reports
  309.3 Asbestos Abatement Report
  309.4 Special Inspection Reports
  309.5 Punch Lists
  309.6 Final Inspection Report
310 General Correspondence
311 Photographs
312 Close Out Items (Certificate of Completion by Contractor, Affidavit of Payment of Claims)
313 O & M Manuals & Warranties
314 Warranty Letters
315 Occupancy Certificate
The initiation process determines the nature and scope of the project, defines who will execute it and develops the budget and schedule which will be the baseline for project controls and planning. The initiation is one of the most important steps in the project management process; if this step is not performed well, it is unlikely that the project will be successful in meeting the Customer’s needs. This step should occur at any phase that the OFD or Project Manager (PM) is introduced and be revisited for accuracy when transitioning from one major phase to the next and if handing off to a new PM.

2.1 Project Charter
2.2 Budget Development
2.3 Schedule Development
2.4 Project Communications & Information Management

Utilize the Project Initiation Checklist found at the OFD SharePoint Site as a tool in completing the Initiation phase.
2.1 PROJECT CHARTER

When a Project Owner proposes a project, the Owner needs to draft a Project Charter with the help of the Project Manager (PM). This formal initiation step needs to occur at any phase a PM is introduced into the project. The PM needs to review, accept, and get all the necessary signatures. The document should be repeatedly reviewed and reassessed as the project evolves. The Project Charter needs to addresses the following:

- Describes the project need;
- Describes the proposed building, renovation or service;
- Identifies the customers of the project and why they will benefit from the project;
- Ties the project to the County’s strategic plan;
- Provides a list of any known constraints and major alternatives considered;
- Includes the budget, resource requirements, and governance for completing the Project Initiation Plan; and
- Describes authority on the project and specific review and approval requirements from the Owner.

Utilize the Project Charter Form template found at the OFD SharePoint Site as a tool in completing the Charter development.

2.2 BUDGET DEVELOPMENT

While the Project Charter will include budget information, a more detailed budget needs to be developed to organize the financial information of a project as the information becomes available. This information is organized in a standardized Project Workbook.

General Responsibilities

**Project Team**

Develop a baseline budget identifying Soft Costs (i.e. Design), Hard Costs (i.e. Construction) and Contingency that ties back to the approved CIP or funding authorization. The PM should spearhead this effort.

**OFD Management Analyst**

Develop the initial Project Workbook utilizing OFD’s standard budgeting process.

**Project Manager (PM)**

Coordinate with Management Analyst to create a project specific budget utilizing the Project Workbook template.
Project Workbook

The Project Workbook template includes worksheets (tabs) that cover all potential cost codes. Below are the key steps in using the Project Workbook:

1. Complete the Project Coversheet information which can be obtained from the project charter (i.e. scope, etc) and then delete or hide those cost codes/tabs not planned to be used for the project.

2. Complete the Baseline Budget Column B.

3. Update the project funding worksheet and expenditure worksheets (straight expense and Purchase Orders) and assure appropriated balance is accurate – reconcile with AADR at least monthly.

4. Update Future Costs in the expenditure worksheets as the information becomes available.

Once the Baseline estimate is established it remains the same for the duration of the project unless a significant re-baseling event occurs (i.e. Scope change requiring School Board and/or BOS approval). Once the budget has been baselined, the PM will work with the Management Analyst to update PO’s, actuals and future costs on at least a monthly basis. The summary budget information on the Project Coversheet will be the source for the Project Budget on SharePoint; the PM should manually update the SharePoint budget to match the summary data on the worksheet.

2.3 SCHEDULE DEVELOPMENT

Similar to the Project Budget, a Baseline Schedule needs to be completed as part of the project initiation and handoff process. The Schedule will be an evolving process, in that the further the design matures the better and more accurate the schedule will be. The PM can utilize the MS Project Construction project template and/or develop a high level Milestone schedule utilizing the templates from the OFD SharePoint site. The Project schedule should include key milestones specific to the nature of the project as agreed to by the Project Owner (i.e. Schematic Design, Design Development, etc). The PM should review the schedule with the Manager of OFD in order to get approval to complete the initiation phase of the project. Once the Project has been baselined, the PM will maintain the schedule and share with the project team on at least a monthly basis.
2.4 PROJECT COMMUNICATIONS AND INFORMATION MANAGEMENT

Communications are key to successful management and control during the project life. The PM should create a plan that the project team agrees to on how the team will communicate important information during the project—status, meetings, issues, access to deliverables, and design and document reviews.

SharePoint (Collaboration and data repository space)
Contact the OFD Manager or OFD’s Management Analyst to establish a unique SharePoint site for use by the project team. Each project will utilize a collaboration space as a sub-site to url: https://ia.albemarle.org/FacilitiesDevelopment/prj/default.aspx

This space will be accessible through the County’s intranet. It will also be accessible to the identified stakeholders, and can be extended to project team members outside of the county if a user id and network password is established for the county. See the IT department if additional access is needed for the project team.

The site will be used to store:

- Project Status summaries
- Action item lists
- Any project review documents that the core team needs access to
- Design documents (i.e. Site and Building plans)
- Project Schedule
- Project Budget
- Other information as determined by the project manager
This section provides an overview of the applicable policies and procedures for the procurement of goods and services as outlined in the *Albemarle County Purchasing Manual*. The manual provides guidance on *what* must be done during the procurement process and explains *how* those acts should be performed. This process may occur at various stages of the project (i.e. to acquire an architect in a design phase, procure a contractor, purchase furniture, etc.). This section is divided into these two parts:

3.1 Goods or Non-Professional/Construction Services  
3.2 Professional Services

*Note: If your project is funded with grant proceeds, please ensure you understand any unique procurement requirements of the grant as they may differ from those in the County Purchasing Manual.*

The Project Manager (PM) responsibilities as discussed in this section refer to Local Government projects only. See ‘Roles and Responsibilities’ section in the Introduction for additional details and requirements on School Projects, especially related to phases and fiscal authority. All procedures & regulations in this chapter still apply to school projects regardless of who is acting in the PM role and regardless of phase.
3.1 GOODS OR NON-PROFESSIONAL/CONSTRUCTION SERVICES

This procurement is used for all goods (supplies, equipment, etc.) and non-professional services (construction, carpentry, landscaping, etc.).

3.1.1 Small Purchases ($0-$50,000)

Expected Cost Between:

$0 - $1,000  
PM may independently procure goods or services within this limit.

No need to obtain quotes but try to be competitive at all times.

Do NOT circumvent the procurement thresholds by splitting the purchase into multiple quotes.

PM signs off on invoice, OFD Manager and Project Owner (Owner) approve invoice for payment. Owner may delegate invoice approval solely to OFD Manager (clarified in Project Charter if applicable).

$1,001 - $5,000  
PURCHASE ORDER REQUIRED

PM discusses with Owner and prepares scope document (statement of work, specs and/or plans as necessary) clearly describing goods or services desired and expected delivery and/or completion date.

Normally, within this limit, preparation of the necessary scope document does not require the need to seek outside professional assistance.

PM forwards scope document to at least three (3) vendors and requests written “Not to Exceed” quotes be provided by a certain date.

Quotes should include: name of vendor, name of person submitting quote, date of quote, detailed description of goods and/or services to be provided, payment terms, and delivery and/or completion date.

PM reviews quotes received and determines low responsible bidder.

PM forwards copy of scope document, summary of procurement, and quotes received to OFD Management Analyst to prepare purchase requisition for vendor providing lowest price quotation. Depending on profiles set up in BuySpeed Online (BSO), information may have to be forwarded to Owner to prepare requisition. Purchase requisition and backup documentation then forwarded to OFD Manager and Owner for approval and then forwarded to Purchasing.
Purchasing issues Purchase Order - vendor selection always subject to Purchasing Agent approval.

Once Purchase Order is issued, invoice approval path will be as defined in initiation phase or approval path set by BSO.

**$5,001 - $50,000**

**PURCHASE ORDER REQUIRED**

*Process is the same as above level except as noted below:*

Depending on scope, PM may require professional assistance with preparation of plan and spec documents. The PM and Owner jointly determine if outside assistance is necessary. (Refer to procurement of Professional Services section if such assistance is needed.)

The PM, Owner and/or Purchasing Agent may advise it is in the County's best interest to have a formal contract for the work being performed, particularly if for construction services. The team should address need for formal contract, including form of contract and other requirements, prior to getting quotes (if using hourly contractor, contract is already in place).

Three (3) written quotes required for goods or services not expected to exceed $30,000.

Four (4) written quotes required for goods or services expected to exceed $30,000. Also requires the posting of a public notice by the Purchasing Agent. PM contacts Purchasing Agent about posting this notice and provides the information requested/required to accomplish the posting.

PM and Owner review and/or discuss quotes received to determine low responsible bidder.

Depending on the nature and scope of the goods or services, the Owner, PM and Purchasing Agent, may decide to use the competitive sealed bidding process (described below) for the procurement.

**Hourly Contractors**

The Purchasing Office maintains hourly contracts with various contractors. The PM should work with the Owner to determine if this procurement method is appropriate for the project as opposed to obtaining quotes or publicly bidding.

Use of hourly contractors eliminates the need to seek multiple quotes for the above procurement limits for non-professional/construction
services; however, the remaining provisions described above apply to the various limits.

The County has hourly contracts for the following trades (contact Purchasing to obtain current list).

- Carpentry
- Electrical
- Painting
- Excavation
- Fencing
- Landscaping
- Movers
- Plumbing
- Roofing

When using hourly contractors, obtain a “not to exceed” quote.

3.1.2 **Competitive Sealed Bidding** – Cost Expected to Exceed $50,000

There are five key procedural steps in the competitive bidding procedure:

1. Preparation of Invitation for Bid (IFB)
2. Issuance and Public Notice of Invitation for Bids
3. Public Opening of Bids
4. Evaluation of Bids; and
5. Award to lowest responsive and responsible bidder.

1. **Preparation of Invitation for Bid (IFB)**
   *(Note if project is done in-house, A/E below refers to PM)*

- PM, Owner, A/E and Purchasing Agent meet to establish the procurement schedule.
- PM, Owner and A/E collaboratively prepare, for Purchasing Agent review and discussion, the *Invitation for Bid* (IFB) which contains or incorporates by reference the specifications and contractual terms and conditions.
- At a minimum, the IFB must contain:
  a. A description of the goods or services to be procured.
  b. The contractual terms and conditions applicable to the procurement, or incorporate those terms and conditions by reference.
  c. A statement of any requisite qualifications of the potential vendors.
  d. A statement describing the criteria by which each bid will be evaluated.
Chapter 6 of the Purchasing Manual discusses in detail each of the elements of an IFB. The level of detail contained in an IFB depends in part on the nature of the particular procurement.

Issuance of Public Notice of Invitation for Bids

- Purchasing Agent will post public notice of IFB at least ten calendar days prior to the date set for receipt of bids, typically this period is at least 20 calendar days. All bids are received in the Purchasing Office.

PRE-BID CONFERENCE
- The IFB will state if a pre-bid conference will be held, location, date, time, and if the conference is mandatory or optional.
- At the meeting, the PM, A/E and Purchasing Agent review the specifications in detail, explain the scope, objectives and techniques of the procurement, emphasize critical elements of the IFB, and encourage input from vendors. See Sample Pre-bid agenda
- An attendance log will be kept at pre-bid meeting by the PM and/or Purchasing Agent. This will provide a list of contractors to send potential changes to project documents through addendum.
- The PM, A/E and Purchasing Agent will make a written note of all inquiries and points of contention raised by the prospective bidders. Clarification may be provided at the pre-bid conference so long as the specifications or conditions are not altered. All material clarifications of any provision of the invitation for bids, or the amendment of a specification or condition of the invitation for bids, shall be made only in writing as an addendum.
- If attendance is mandatory, only those bids from vendors represented at the pre-bid conference will be accepted by the Purchasing Agent.

ADDENDA, MODIFICATIONS
- If, after the IFB is issued but prior to receipt of bids, the invitation must be amended or clarified, the Purchasing Agent may issue addenda that modify the invitation. See Sample Addenda.
- The Purchasing Agent shall have the sole authority to issue an addendum. All addenda shall be in writing. No oral modification of any provision of the project documents shall be permitted.
- An addendum may be initiated by the Purchasing Agent in his discretion, upon his own determination of the need, upon request of the PM or Owner, or upon request of a prospective bidder who requests clarification of a provision of the IFB.
- The A/E typically prepares the addendum for review and approval by the PM, Owner and Purchasing Agent. Once approved, the Purchasing Agent issues the addenda to prospective bidders and bidders must note receipt of the addenda on their bid form.
- Timing of issuance of addendum: If an addendum is necessary, it shall be issued by the Purchasing Agent no later than five (5) calendar days prior to the date bids must be received. An addendum extending the date for the receipt of bids or withdrawing the IFB may be issued any time prior to the date bids must be received.
3 Public Opening of Bids

All bids timely received are publicly opened by the Purchasing Agent at the time, date and location stated in the IFB. The Purchasing Agent will record the bid results.

4 Evaluation of Bids

- The Purchasing Agent, PM, Owner and A/E examine the bids and qualifications of the bidders for compliance with the IFB requirements and reach consensus as to the low, responsive, responsible bidder.

- Based on available budget, PM and Owner determine which add alternates, if any, are to be awarded. Add alternates must be accepted in the order listed on the bid form.

5 Award to Low Bidder

- NOTICE OF INTENT TO AWARD
  - The PM prepares a Notice of Intent to Award letter for signature by Purchasing Agent.
  - The letter will be sent to low responsive bidder and shall include the following:
    - Insurance requirements;
    - Performance and Payment Bond requirements;
    - Contract (3 copies); and
    - Notice of 10 day return for contract package.

- CONTRACT
  - The contract shall be in a form approved by the County Attorney, and shall contain the terms and conditions required by law. The contract specifies the procurement number, the date of execution, the parties to the contract, the contract time for completion, and the contract amount.
    - SAMPLE CONTRACT Local Government
    - SAMPLE CONTRACT Schools
  - Upon receipt of contract package from the contractor, the PM prepares and circulates the contract for review, approval and signature. This process may take up to 30 days.
    - Reference Contract Checklist before routing
    - The contract being circulated for approval should include a routing cover sheet, procurement summary memo, the bid tabulation, three signed contracts, performance/payment bonds, and certificate of insurance.
  - Owner, Manager of OFD, County Attorney, and Purchasing Department must all sign off on the package.
    - The OFD Management Analyst will prepare the purchase requisition in BuySpeed Online (BSO) once the contract is approved by all parties.
Depending on profiles set up in BSO, information may have to be forwarded to Owner to prepare requisition.

- Once Purchase Order is issued, invoice approval path will be as defined in initiation phase or approval path set by BSO.

- **NOTICE TO PROCEED**
  - Upon approved routing, PM will prepare the [Notice to Proceed](#) for signature by the Purchasing Agent; this letter to include the following:
    - Stated contract start date;
    - Stated contract substantial completion date; and
    - Enclosure of fully executed contract between contractor and owner.

### 3.1.3 Bidding Documents

- The following responsibilities are assigned as related to the bidding documents:

  **A/E**  
  Take lead on assembling bid package (typical). Provide copies of all documents to Purchasing. Purchasing will need one electronic (pdf) copy to post on County web site. If hard copies are required, the number of copies will be determined by the PM and Owner.

  **PM**  
  Ensure that the bid package is complete & accurate. Provide the A/E with current boiler plate construction documents. Verify the Purchasing Department has all the necessary files to advertise.

  **Owner**  
  Review and approve the entire bid package prior to the public issuance of the package.

- Typically, a construction contract will require the following boiler plate construction documents be included in the bid package:
  a. Invitation for Bids (PM works with A/E & Purchasing Agent to complete/modify form for specific project)
  b. Instructions to Bidders
  c. Pre-Bid Question Form
  d. Bid Form (PM works with A/E to complete/modify form for specific project)
  e. Construction Contract General Conditions
  f. Supplemental General Conditions (PM works with A/E & Owner to determine what modifications may be required to the General Conditions for specific project)
    - Liquidated Damages – normally include for construction projects
  g. Form AC-9 – Construction Contact
  h. Form AC-10 – Standard Performance Bond
  i. Form AC-10.1 – Standard Labor and Material Payment Bond
  j. Form AC-11 – Construction Contract Change Order
  k. Form AC-12 – Schedule of Values and Certificate for Payment
  l. Form AC-13 – Affidavit of Payment of Claims
  m. Form AC-13.2 – Contractor Certificate for Completion
n. Form AC-13.2a – Contractor Substantial Completion Certificate

o. Other documents that are more Owner or Project specific:
   o Special Conditions (Schools and perhaps other projects)
   o Certificate of Crimes Against Children (Schools)

- In addition to the boiler plate documents, the bid package includes the construction drawings and specifications. These should be completed in accordance with the Design section of this handbook (Part Four).

- If the goods or non-professional services are not related to construction, the PM, Owner, A/E and Purchasing Agent determine documents necessary for IFB and form of contract. PM and A/E assure necessary documents are properly assembled.

3.2 PROFESSIONAL SERVICES

This procurement is used for all professional services (i.e. engineering, architecture, landscape architecture, land surveying). Procurement of these services is based on qualifications rather than cost.

3.2.1 Small Purchases ($0-$50,000)

Expected cost between:

$0 - $1,000

Same process as stated for small purchase for goods/non-professional services within this limit except based on vendor qualifications.

$1,001 - $15,000

PURCHASE ORDER REQUIRED

PM discusses with Owner and prepares scope of work clearly describing services desired and expected completion date.

If A/E or Civil Engineering services are needed, best to use one of the vendors on Contract with the County (A/E Contracts for Term Services/Project Orders described below).

If the needed professional services are not provided through an existing A/E Contract, the PM, Owner and Purchasing agent may advise it is still in the County’s best interest to have a formal contract for the services being procured. The team should address need for formal contract, including form of contract and other requirements, prior to negotiations with vendors.

If not using an existing A/E Contract for term services, PM contacts and negotiates with one or more vendors once decision is made as to whether formal contract is necessary.
Negotiations may be conducted either in person or by phone and shall consist of identifying services desired, expected completion date, qualities of the vendor, and cost of such service.

PM documents negotiations and obtains written proposal from vendor deemed most qualified to provide service.

PM forwards vendor proposal, or completed Project Order (see section 3.2.4 below) if using existing A/E Contract for term services, to OFD Management Analyst to prepare purchase requisition for selected vendor. Depending on profiles set up in BuySpeed Online (BSO), information may have to be forwarded to Owner to prepare requisition. Purchase requisition and backup documentation then forwarded to OFD Manager and Owner for approval and then forwarded to Purchasing.

Purchasing issues Purchase Order - vendor selection always subject to Purchasing Agent approval.

Once Purchase Order is issued, invoice approval path will be as defined in initiation phase or approval path set by BSO.

$15,001 - $50,000 PURCHASE ORDER REQUIRED

Same as above level except, if PM is not using a professional that has an existing A/E Contract for term services with the County (A/E or Civil), PM must contact and interview at least three vendors.

Depending on the nature and scope of the services desired, the Owner, PM and Purchasing Agent, may decide to use the competitive negotiation process (described below) for the procurement.

3.2.2 Competitive Negotiation - Cost Expected to Exceed $50,000

There are three key procedural steps in the competitive negotiation procedure:

1. Preparation of Request for Proposal (RFP)
2. Issuance and Public Notice of RFP
3. Negotiation and Award

1. Preparation of Request for Proposal (RFP)

   - PM, Owner, and Purchasing Agent meet to establish the procurement schedule.
   - PM and Owner determine:
     - Scope of Services;
     - Who will be on the selection committee;
     - If a pre-proposal meeting is necessary; and
- Evaluation and award criteria along with weights

- PM, with assistance from Owner, drafts RFP for Purchasing Agent Review (samples available on OFD SharePoint site). See Elements of a RFP in Purchasing Manual

- PM finalizes RFP after review and approval by Purchasing Agent.

2 Issuance of Public Notice

- Purchasing Agent will post public notice of the RFP at least ten days prior to the date set for receipt of proposals. All proposals are received in the Purchasing Office.

- PM, Owner and Purchasing Agent conduct pre-proposal meeting if required by RFP, and answer questions posed by vendors.

3 Negotiation and Award

- PM prepares matrix to use for ranking proposals based on evaluation and award criteria included in RFP.

- Purchasing Agent schedules a meeting of the selection committee and distributes proposals deemed responsive. The ranking/scoring sheet is also distributed at meeting.

- PM sets schedule for selection team to review proposals and then schedules meeting with selection team to review and evaluate ranked proposals.

- Selection team selects at least 2 or more vendors they want to interview.

- OFD Management Analyst works with PM and Purchasing Agent to prepare letters for Purchasing Agent signature to send to vendors not selected for interview and for those selected for interview.

- PM, with assistance from Owner, prepares standard questions to be asked of vendors interviewed.

- Purchasing Agent schedules interviews with vendors.

- Selection team selects top vendor. OFD Management Analyst works with PM to prepare letters for Purchasing Agent signature to send to top ranked vendor and also to other vendors interviewed.

- PM, Owner and Purchasing Agent begin negotiations with top vendor.

- If negotiations with top ranked vendor are not successful, start negotiations with next ranked vendor.
Once negotiations are complete, PM proceeds with preparing contract for vendor to sign.

**CONTRACT**
- Typically would use standard [Contract Between Owner and A/E for Professional Services](#); however, if the services being procured are not applicable to this contract format, work with Purchasing Agent to obtain proper format. Need to obtain three signed contracts and certificate of insurance.
  - Sections 308 and 309 of the A/E Manual provide detailed information about specific insurance requirements and Contract with the County amends Section 308 to require $250,000 in lieu of $100,000 as the minimum amount of professional liability coverage.
  - The Owner (“County of Albemarle, Virginia and/or The County School Board of Albemarle County, Virginia”) must be named as an additional insured for the Broad Form Comprehensive General Liability and Automobile Insurance policies.
- Upon receipt of contracts and certificate of insurance from vendor, the PM prepares and circulates the contract for review, approval and signature. This process may take up to 30 days.
  - Reference Contract checklist before routing (items 1 and 2 applicable)
  - The contract being circulated for approval should include a routing cover sheet, procurement summary memo, three signed contracts, A/E written proposal and estimate (A/E Fee estimate), and certificate of insurance.
- Owner, Manager of OFD, County Attorney, and Purchasing Department must all sign off on the package.
  - The OFD Management Analyst will prepare the purchase requisition in BuySpeed Online (BSO) once the contract is approved by all parties. Depending on profiles set up in BSO, information may have to be forwarded to Owner to prepare requisition.
  - Once Purchase Order is issued, invoice approval path will be as defined in initiation phase or approval path set by BSO.
- Once approval routing is complete, PM provides vendor with fully executed contract and provides notice to proceed with contracted services.

### 3.2.3 A/E Contracts for Term Services

The Purchasing Department maintains several A/E Contracts for professional architectural and/or engineering services for discrete, small projects such as investigations, studies, reports, design of small projects, and related services on an “as needed” basis. To establish these contracts the same Competitive Negotiation process applies as above except:

- Multiple vendors may be selected (number selected depends on number of responses received and County’s anticipated needs).
PM prepares “Contract #(RFP#) Between Owner and A/E for Professional Services”
- One year contract term with option to renew for four additional and consecutive 1 year terms.
- No individual Project Order shall exceed $200,000.
- Aggregate total of all fees for project orders issued during contract term shall not exceed $1,000,000.

PM and Purchasing Agent forward letter notifying vendor of selection, three (3) contracts for signature, and request return of executed contracts. Letters also sent to vendors not selected.

Once executed contracts are received, PM reviews and assures contract is in order, properly executed, and forwards to Purchasing for approval.

Purchasing Agent returns two copies of executed contract to PM (1 OFD office, 1 sent to vendor).

Purchasing and OFD maintain current listings of vendors under these A/E contracts.

### 3.2.4 Project Orders

If PM and Owner determine that it is appropriate to use a vendor under an existing A/Contract for term services, a project order specific to the project must be prepared.

- PM and Owner discuss and prepare scope of work.
- PM contacts A/E, negotiates cost of services, and requests proposal (proposal should include Albemarle County A/E Fee Estimate form).
- PM contacts Purchasing to obtain Project Order Number for vendor selected, along with a list of prior project orders for the vendor, and prepares a Project Order for the work.
- PM forwards three Project Orders to A/E for signature along with request for certificate of insurance (if not currently on file with County for A/E Contract).
  - Sections 308 and 309 of the A/E Manual provide detailed information about specific insurance requirements and Contract with the County amends Section 308 to require $250,000 in lieu of $100,000 as the minimum amount of professional liability coverage.
  - The Owner (“County of Albemarle, Virginia and/or The County School Board of Albemarle County, Virginia”) must be named as an additional insured for the Broad Form Comprehensive General Liability and Automobile Insurance policies.
- A/E returns signed Project Orders to PM along with required certificate of insurance.
- Upon receipt of project order and certificate of insurance from A/E, the PM prepares and circulates the project order for review, approval and signature.
  - Reference Contract checklist before routing (items 1 and 2 applicable)
o The contract being circulated for approval should include a routing cover sheet, project order recommendation memo, three signed project orders, A/E written proposal and estimate (A/E Fee estimate), and certificate of insurance.

o Owner, Manager of OFD, County Attorney, and Purchasing Department must all sign off on the package.
  - The OFD Management Analyst will prepare the purchase requisition in BSO once the project order is approved by all parties. Depending on profiles set up in BSO, information may have to be forwarded to Owner to prepare requisition.
    o Once Purchase Order is issued, invoice approval path will be as defined in initiation phase or approval path set by BSO.

o Once approval routing is complete, PM provides A/E with fully executed project order and provides notice to proceed with contracted services.
The purpose of this chapter is to detail the primary components of a project’s design phase and summarize the Project Manager’s (PM) role within that phase. The design phase typically starts at the procurement of an Architect/Engineer firm and is typically completed when a full set of architectural and/or engineering documents have been reviewed and approved and are ready to be bid for construction. The stages of design outlined in this chapter are based on Chapter 8 of the CPSM manual. The section is subdivided into the following subsections:

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Note: The PM responsibilities as discussed in this section refer to Local Government projects only. The design of School Division projects will be managed by the Building Services Department directly. OFD will provide assistance and guidance as discussed in the ‘Roles and Responsibilities’ section in the Introduction.
4.1 ARCHITECTURAL AND ENGINEER (A/E) SELECTION

The Project Manager will normally lead the process of selecting an appropriate architect or engineer (A/E) for all required design work. Very small projects may not require A/E services; others may utilize “in-house” design. However, most substantial projects will require outside services from an A/E firm. Some projects may require a design team typically consisting of “Lead” firm and subcontractors or “Subs”. Possible subcontractors may consist of civil, structural, or mechanical engineers, landscape architects, and firms specializing in environmental services.

4.1.1. A/E Contracts for Term Services

The first step in soliciting an A/E firm should always be to check which firms currently have an existing A/E Contract with the County for term services. These contracts allow for easy selection of an A/E firm without the need to negotiate with other firms. Check with the Office of Facilities Development or the Purchasing Department for a list of firms on contract. It is important to also confirm the expiration dates on the contract before selection.

4.1.2. Purchase Orders vs. Contracts

If the appropriate A/E firm is not available on an existing A/E contract, a purchase order or individual contract must be established. Refer to Procurement Section for more details in selecting and contracting with an A/E.

Project Manager (PM) Responsibility: It is the PM’s responsibility to work closely with the Project Owner and the County’s Purchasing Agent to solicit and contract with an A/E firm. This may include checking references and ensuring the firm has similar project experience.

4.2 CONCEPTUAL DESIGN

The conceptual design phase consists of preliminary sketches, calculations, and any other documents used to convey the overall project idea to be agreed on by the Project Team. Design concepts may be simple “back of the envelope” sketches or basic computer generated diagrams. Example photographs, artistic renditions, or similar project engineering plans may also be used to help convey conceptual project ideas. The Conceptual Design phase is typically part of the overall A/E contract and is best executed early on in the project timeline.

Project Manager Responsibility: PMs should be very familiar with the agreed upon conceptual designs to ensure that subsequent design phases do not stray too far from the concepts without proper justification and communication to the Project Team. Likewise, the PM needs to pay close attention to scope of work during this phase as additional or excessive concepts can quickly diminish a design budget. A specific number of concepts may be stated in the scope of work if deemed appropriate.

Review Process: There is no formal review for the Conceptual Design; however, concepts should be carefully reviewed by the Project Team to assess any obvious opportunities or constraints that may alter subsequent design phases.
4.3 SCHEMATIC DESIGN

The schematic design phase is where the design concepts are further developed, typically by an A/E firm, using Computer Aided Drafting (CAD) or similar software where appropriate scale, dimensions, and elevations can be applied. Schematic Design Plans typically represent 10% design completion and may include typical plan views, sections, profiles, and elevations. Critical project elements and details are considered and designed, and most key constraints (utilities, easements, wetlands, etc) should be identified at this stage. A preliminary cost estimate should also accompany the Schematic plans to ensure the selected concepts are feasible within the project budget. The schematic design phase is also the time to confirm what approvals/permits are necessary in order to complete the project.

**Project Manager Responsibility:** It is the PM’s responsibility to monitor the A/E’s progress ensuring that schematic iterations are still meeting the project goals and budgets. The PM must maintain ample communication with the Project Team throughout all phases of the design process.

**Review Process:** At this phase, the PM should contact the Community Development Department to schedule a pre-application meeting. Section 32.4.1 of the County Zoning Ordinance provides detail on what is required on the plan to schedule the meeting. Many regulatory agencies (i.e. Architectural Review Board) prefer early project communication and may request, or should be offered, a copy of the Schematic plans.

4.4 DESIGN DEVELOPMENT (30% - 90% PLANS)

During the Design Development phase, plans are developed to the 90% level. Plans may include the following:

- Title Sheets
- Grading Plan
- Erosion and Sediment Control Plan
- Stormwater Management Plan
- Landscaping Plan
- Demolition Plan
- Architectural Drawings
- Structural Drawings
- Fire Suppression Plan
- Plumbing Drawings
- Electrical
- HVAC Drawings
- Asbestos Abatement Plan
This stage of design also includes refined engineer cost estimates, calculations, and design reports. The A/E firm should help to establish contractor pricing (Lump Sum vs. Unit Costs) for key components of the project to assist with bidding and construction oversight/payment.

**Project Manager Responsibility:** The primary role of the PM during this phase is to ensure project schedule is maintained through periodic check-ins and, if necessary, requesting status reports from the A/E. In addition, the PM must ensure that all necessary permits and easements are obtained during this phase. (See Section 7 for more information on acquiring land easements).

**Review Process:** Once plans are at the 90% level, the PM should submit an application to the Community Development Department for preliminary site plan approval. Section 32.4.2 of the Zoning Ordinance provides detail on the preliminary site plan submittal procedure.

### 4.5 CONSTRUCTION DOCUMENTS (90% - 100% PLANS)

Preparation of Construction Documents will include finalizing all plans, specifications, and estimates such that they may be bid for construction. All design documents will require an appropriate seal/stamp from the principal engineer or architect of the A/E firm. All permits and temporary and permanent easements must be obtained prior to construction.

If the project is funded or partially funded by a Grant, all required information must be provided to the Grantor prior to obtaining a contractor, unless otherwise stated in the grant requirements.

All Construction Documents should be provided to the PM and distributed to any agency that reviewed the plans. All documents should be provided in both hard copy and digital format.

**Project Manager Responsibility:** The PM should maintain communication with the A/E, and the A/E should provide periodic status updates. Once complete, it is the PM’s responsibility to distribute the construction documents to all relevant parties (i.e. OFD Manager, Owner, Project Team) for review prior to bidding. The PM reviews the construction documents for constructability, completeness and suitability for bidding.

**Review Process:** Once plans are at the 100% level, application should be made with the Community Development Department for final site plan approval. Section 32.4.3 of the Zoning Ordinance provides detail on the final site plan submittal procedure.

### 4.6 FORMAL REVIEW PROCESS

A formal review process is required for all County projects. Plans shall be submitted to the County’s Community Development Department as described above for each phase of design. Plans should be submitted using the appropriate County forms (fees are currently waived for County Projects).

In addition to County review, plans must be submitted to all necessary review agencies (RWSA, ACSA, DEQ, VDOT, Army Corps Engineers, etc.). Projects on County property may be within the City of
Charlottesville jurisdiction and require review from the City. PM should determine what reviews apply to a specific project and contact applicable agencies to obtain application/review schedules.

Value Engineering and Constructability reviews should occur when drawings are at the ~75% completion stage (during Design Development) for projects in excess of $5Mil per State guidelines or as directed by the Project Team.

The overall review process will likely take 30 days or more and most reviews will require changes to the plans and a re-submittal. This time must be considered and factored into the overall project schedule.
Upon the completion of the Construction Contract and the Notice to Proceed, the Construction phase of a project’s lifecycle begins. This section covers the components of the construction of the project and summarizes the Project Manager’s (PM) role within this phase. Here is a link to the General Conditions that are referenced throughout this section. The section is subdivided into the following subsections:

5.1 Preparation: Review Plans & Specs
5.2 Pre-Construction Meeting
5.3 Permits
5.4 Progress Meetings
5.5 Communication
5.6 Documentation
5.7 Supervision & Inspection
5.8 Owner Coordination
5.1 PREPARATION: REVIEW OF PLANS & SPECS

At the onset of the construction phase, the PM needs to spend ample time reading the specifications and drawings in great detail. The PM should be intimately familiar with all construction documents (if the PM was involved in the construction bidding phase, they should already be familiar with these documents).

The PM needs to maintain a current set of the Plans and Specs, including any updates. If a Project Inspector is assigned to the project, a current set is needed for the Inspector as well. Ensure that any half-size sets for field use are maintained as well.

The PM should post all addenda issued during the bidding process to the working set, including any post-bid modifications that may have been made and any clarifications as to alternate bid items accepted. Call out changes with red ink and “clouds”. The front sheet of the plans and cover sheet of the Project Manual should be noted as to which addenda are posted. Note: If needed, the A/E may need to re-issue a revised drawing set with the changes included.

5.2 PRECONSTRUCTION MEETING

Section 49(b) of the General Conditions requires a preconstruction meeting amongst the main parties involved in the construction phase prior to the start of construction activity, and not later than 15 days after the Notice to Proceed. The details of who should be included and what topics should be covered are spelled out in the section.

The PM is responsible for the following in order to prepare and execute the meeting:

1. Schedule the meeting, including coordination for the meeting location.
2. Run the meeting, delegating portions to the A/E as needed.
3. Create and distribute a meeting agenda.
   A meeting agenda template inclusive of the required and typical agenda items is maintained on the OFD SharePoint site. Prior to the meeting, this template needs to be tailored for the specific project with as much of the details (contact information, dates, etc.) filled in as possible.
4. Prepare & distribute meeting minutes.
   Within five business days after the preconstruction meeting, a summary of the discussion and decisions should be distributed to all meeting parties. Typically, this will simply be a matter of using the meeting agenda document and filling in and/or changing information established in the meeting (the PM is responsible for this unless delegated otherwise - to the A/E, generally). An example of the preconstruction meeting minutes/summary is available on the OFD SharePoint site.

5.3 PERMITS

Most capital projects will require one or more permits. The PM is responsible to determine which permits will be necessary for the construction phase.
**Building Permits:**

- Section 3(e) of the General Conditions notes that the Building Permit is to be obtained by the Contractor and paid for by the Owner.
- Most County projects are not subject to Building Permit fees and/or any performance bonds. However, certain projects which are deemed as Owned by non-County entities, such as the Regional Jail Authority, are typically required to pay such fees.
- Typically, the PM should submit a preliminary set of building plans (approximately 75–90% complete) for a preliminary building permit review by the Building and Zoning officials. This is provided as a courtesy and allows any building code or zoning issues to be addressed prior to the formal building permit review, which would typically slow the project schedule if not addressed beforehand.
- Typically, to maintain the project schedule, the final set of plans will need to be submitted for permit review prior to the determination of which Contractor will perform the work. The application for permit will be accepted without this information, but it is necessary before the permit will be issued.
- The PM is responsible for ensuring the building permit application is submitted, following up on the status of the application, and providing any information required for the permit to be approved. The application and information about supporting documents (number of sets of plans, site plans, etc.) are available on the Community Development Department website, and at the front desk of the Community Development Department. Generally, the building permit process takes approximately 2 weeks. It is helpful to review the schedule necessities with the Building Official prior to making application.
- **County View** is the County’s application tracking program and allows tracking of the permit review process, and monitoring can be important to maintaining a tight project schedule. PM should be able to log in and check current status.
- The sub-permits, such as electrical, mechanical, plumbing are the responsibility of the General Contractor/Sub-Contractors, as noted in the General Conditions.
- Permits are generally required for construction trailers and are typically the responsibility of the General Contractor, but in cases of very tight schedules it can be necessary for the PM to ensure coordination with the permits office and utilities (typically electrical, but possibly water and sewer as well).

### 5.4 PROGRESS MEETINGS

Regular meetings with the Contractor, usually including the A/E, are to be held during the construction phase. Section 36 of the General Conditions requires, at a minimum, a Monthly Pay Meeting.

#### 5.4.1 Schedule

The frequency and schedule of these meetings is normally set at the preconstruction meeting and can vary with project intensity and duration. Jobs with consistent activity over several months will typically have twice-a-month meetings.
5.4.2 Agenda
A standard template for meetings is available on the OFD SharePoint site. It is the PM’s responsibility to tailor the template for the applicable topics to the project at hand. Also, the responsibility for leading the meetings should be established ahead of time (generally, the PM will be responsible to lead the meeting with assistance from the A/E).

5.4.2 Minutes/Notes
The PM should establish ahead-of-time who is responsible to take meeting notes. This is often covered by the A/E (and should be included as a Construction Administration phase service in the A/E contract), but quite possibly it may fall to the PM to prepare and distribute minutes.

Much like the Preconstruction Meeting agenda and subsequent minutes, the Progress Meeting minutes can be notes added to each agenda topic, as indicated in the example located on the OFD SharePoint site. The PM should ensure that timely production and distribution of Meeting Minutes occurs, with minutes being distributed within 10 days of a meeting, unless there are extenuating circumstances.

5.5 COMMUNICATION

The PM is responsible to ensure that the Project Owner (Owner) and primary user(s) are appropriately informed of project progress with respect to budget, schedule, and any significant changes to the scope of work. See Section 2.4 of this handbook for additional information on project communication and information management.

5.5.1 SharePoint
The project’s SharePoint site will provide access to the information, and a report to the appropriate parties should be provided at least monthly during the project. The PM is responsible for ensuring that the project’s SharePoint site is appropriately maintained.

5.5.2 Communication with Owner
The level of communication with the Owner should be identified in the Project Charter. Generally, the PM should ensure the Owner is regularly updated on the project milestones, delays, budget, issues, and decisions that need to be made. The Owner, unless noted otherwise in the Project Charter, should be copied on all correspondence related to the project.

5.5.3 Memorandum of Understanding (MOU)
In preparation for Construction Phase activities, a MOU (a written document) identifying understandings and responsibilities for project activities may be necessary. This is particularly important for school projects where various parties will be impacted and have particular responsibilities at particular times during the construction phase. Most often it is used for summer projects. The timing for completion of the MOU can vary, but may need to be done 2 or 3 months prior to construction start for projects with considerable preparation by the Owner/user(s).
5.5.4 Occupants/Neighbors Alerts
When a project is expected to disrupt or inconvenience normal activities, appropriate communication ahead-of-time (as well as signage on-site) is necessary.

Examples of activities that may require a level of communication beyond just informing building occupants include road impacts, such as utility work within a right-of-way, and noise impacts (particularly outside of regular work hours), such as roofing work that might be done at night. Information hand-outs/alerts to neighbors likely to be impacted are sometimes necessary to help minimize complaints.

Further public communication may be advisable, and should generally be coordinated through the OFD Manager and the County’s public information office.

5.6 DOCUMENTATION

There is various documentation required throughout the construction phase. The responsible party depends on the type of the paperwork, but regardless it is the PM’s role to coordinate and oversee the expeditious transmittal of all documentation to appropriate parties.

5.6.1 Submittals
The specifications outline what submittals are required by the contractor. The PM should coordinate and expedite submittal reviews. The PM needs to maintain a complete set of submittal/shop drawing files to be delivered to the Owner at closeout.

5.6.2 Change Orders
- When project, site, or other conditions warrant a change of project scope a Change Order is needed.
- The PM shall, in coordination with the A/E, expeditiously obtain a written Proposed Change Order (PCO) from the contractor. Each PCO shall be complete with all necessary supporting documents.
- The PM shall evaluate the PCO ensuring fairness, reasonableness, and compliance with the contract documents. The PM shall consult with the A/E and advise the Owner on a course of action.
- Only the Owner has the authority to approve any Change Order unless agreed otherwise in the Project Charter and/or MOU.
- If accepted, the PM is responsible for assuring the Change Order (Form AC-11) is in order, acquiring required signatures, and routing the change order for approval.

5.6.3 Payment Applications
- Payment Applications will be completed by the contractor and reviewed in monthly pay meetings to be scheduled on an agreed upon date and time by all parties.
- Any discrepancies in payment will be discussed and reconciled in this meeting and back up documentation may be requested by the PM and/or Owner to justify payment of the amount requested.
- Payment Applications/Schedule of Values must be submitted to the PM and Architect no less than 2 days in advance of the monthly meeting to allow time for review.
The PM needs to review all Payment Applications/Schedule of Values with the A/E and receive recommendations related to percentage of project completed vs. amount billed, line item amount billed vs. percentage of work completed, quality of work being billed, off site materials billed, appropriate billing backup, markup, accuracy for total amount billed and appropriate retainage.

- All Pay Applications must be signed by the Architect and Contractor.
- PM is responsible for making sure that all Payment Applications coincide with previous amounts billed and are reconciled with project budget. Any discrepancy must be reconciled prior to Payment.
- All Payment Applications must be submitted on Form AC-12 (Schedule of Values and Certificate for Payment) unless agreed upon otherwise. An AC-12 is required for projects lasting longer than 60 days and/or have a Purchase Order of $30,000 or more.
- All Payment Applications are submitted to the OFD Management Analyst for processing for payment. The PM must sign off on all Pay Applications. Approval will be based on the approval path set by BuySpeed Online (BSO) and/or as specified in the Project Charter.
- All materials stored off site included in the Payment Application must have a Certificate of Insurance and may require a site material inspection by PM. If a site visit is necessary, appropriate reimbursement for this site visit can be billed to the contractor.

Refer to General Conditions; Sec. 20. Schedule of Values and Certificate for Payment, paragraphs (a) through (e); Sec. 36. Payment to Contractor, paragraphs (a) through (d) and Sec. 49, Project Meetings, paragraph (c) for additional information on Payment Application procedures.

5.7 SUPERVISION & INSPECTION

Throughout the course of construction the work needs to be thoroughly supervised. Depending on the complexity of the job, a project inspector may be used to assist the PM. The PM and Project Inspector are responsible for familiarizing themselves with the Albemarle General Conditions (including any Supplemental General Conditions), Special Conditions, CPSM, and the Albemarle County School Board’s Policy on construction supervision. The PM and/or Project Inspector will attend all site meetings and progress meetings and make every attempt to visit the job site on a daily basis or as needed based on the work being performed.

Refer to General Conditions: section 16, paragraph e, numbers 1 through 10 for additional information. Additionally, refer to CPSM sections on Inspector Duties (Section 1017 and App. N). Also refer to School Board Policy FEG Supervision of Construction

5.7.1 On-Site Supervision Duties

- Monitor and inspect materials and equipment for compliance with the project construction contract documents and all approved submittals and shops drawings.
- Monitor and inspect workmanship and installation for compliance with the project contract documents.
- Identify any work or safety procedure not in compliance with the project contract documents and advise the Owner, contractor, and A/E thereof.
Working with the contractor, schedule, observe, and document all on-site testing that is specified in the project contract documents.

Act as the eyes and ears of the Owner on-site and vigilantly represent the Owner’s interest.

Employ the right and responsibility to stop any activity that could cause imminent danger to anyone on the site.

5.7.2 Daily Logs
The PM/Project Inspector is responsible for keeping a daily log which records the items below. Copies should be made available to the Owner on a regular basis (identified in Project Charter).

- Disciplines of work being performed
- Daily weather conditions & temperature
- Work performed
- Numbers and types of mechanics on the job
- Materials delivered
- Delaying factors (if any)
- Estimated weekly percentage of completion

5.8 OWNER COORDINATION

5.8.1 Asbestos/ Hazmat Abatement & Monitoring
- If hazardous materials are suspected, an investigation by an independent, licensed, environmental inspection agency is required. The PM is responsible for scheduling testing and reviewing test results if any hazardous materials are suspected.
- If hazardous materials are suspected, contact Building Services or Local Government Environmental specialist for investigation and assistance. Include Specialist on any subsequent conversations, decisions and coordination related to remediation of hazardous materials.
- Contract with an environmental inspection agency to conduct initial test, establish scope of work, monitor and oversee removal, containment procedures, reporting requirements and appropriate disposal of all materials thought to be hazardous.
- Any removal of hazardous materials must be completed by a licensed abatement contractor. Note: some abatement resources are available via term contracts.

Refer to General Conditions: Sec. 6, paragraphs (g) and (h); Sec. 7. paragraph (c); Sec. 47. paragraph (a) through (c) for additional information.

5.8.2 Testing/Special Inspections
- The need for special inspections, soil testing, structural steel, concrete, etc., should be established by the A/E and included as part of the project scope of work.
- Any special inspection required prior to construction start date, i.e. soil borings, is the sole responsibility of the Owner and typically contracted by the PM.
- The scheduling of the special inspectors is the responsibility of the General Contractor, however, the PM and Project Inspector shall ensure the inspection was satisfactorily completed.
- Any re-inspection of remedial work is the responsibility of the General Contractor, including its cost.
- Additional Inspections, over and above the contracted scope of work, may result in additional cost to the owner.
- On matters of building and life safety not delineated in the contract documents (i.e. changing alarm system, modifying fire suppression systems, etc.), the building inspector or Fire Marshal should be contacted for their recommendation/approval.

Refer to Supplemental General Conditions: Number 6., Section 16, paragraph (b) for additional information.

### 5.8.3 Utilities
- The contractor is responsible for locating all underground public utilities.
- Consult with Building Services or General Services regarding knowledge of underground private utilities and request Work Order to locate lines that are not the responsibility of “Miss Utility”.
- The location of existing underground utilities indicated on the drawings is approximate only.
- The contractor shall field locate all existing underground utilities in the area of work regardless of whether or not they are indicated. Call “Miss Utility” prior to the start of demolition work for assistance in locating existing underground utilities.
- Hand digging by the contractor may be necessary to locate lines. For in-house managed projects, make sure that all utilities, Embarq, Comcast, ACSA, Dominion Va. Power and City of Charlottesville (gas lines), are contacted prior to commencement of any underground work.
- Should uncharted or incorrectly charted utilities be encountered during demolition, contact the Owner and A/E immediately for instructions. Cooperate with Owner and utility companies to keep services and facilities in operation.

### 5.8.4 Virginia Department of Transportation (VDOT)
- Establish need for VDOT participation with A/E as part of site plan process.
- The contractor is responsible for obtaining VDOT permits.
- Existing bus loops are controlled by VDOT; all changes must be approved by them (identified in site plan).
- All sign heights in bus loops must be installed to VDOT standard.
- Contact the VDOT Inspector for questions and to schedule site inspections.
- PM needs to establish responsibility for storm pipe inspection, including video documentation, which may be required by VDOT.

Refer to the current version of the VDOT Specifications for additional information.

### 5.8.6 Keying/Alarm Accessibility
- The School’s Building Services (BS) department uses only Best Locks cores and will provide and install cores upon request.
- The County’s General Services (GS) department requires lever handles be installed on all doors (ADA requirement).
- GS uses Corbin lock cores for all doors at COB Main and Court Square Buildings. Schlage cores at COB South.
- All PM’s should have keys to schools and alarm codes.
- Alarm/fire system codes should be accessible to all PM’s.
- PM to establish responsibility for contacting alarm monitoring companies and fire department (County or City) prior to power shutdowns, phone interruptions, sprinkler work and alarm work.

5.8.6 After-hours staffing
- Requests for assistance with evening or weekend staffing must be coordinated with BS and/or GS and is subject to reimbursement from project budget.
- Coordinate all weekend and after hours work with BS and/or GS.
- BS discourages work during hours not regularly staffed by their employees.
The purpose of this chapter is to detail the primary components of the closeout phase of a project and summarize the Project Manager's (PM) role in that phase. The closeout phase typically starts at substantial completion of the project and continues until completion of the warranty period(s). The section is subdivided into the following subsections:

6.1 Substantial Completion
6.2 Final Completion
6.3 Project Closeout Documents / Procedures
6.4 Warranties / Warranty Period
6.5 OFD Closeout
6.1 **SUBSTANTIAL COMPLETION**

Substantial completion is defined as the condition when the Owner agrees that the work, or a specific portion thereof, is sufficiently complete, in accordance with the Contract Documents, so that it can be utilized by the Owner for the purposes for which it was intended.

6.1.1. “Certificate of Partial or Substantial Completion by Contractor” *(Form AC-13.2a)*

- The Contractor shall submit Form AC-13.2a to the Architect/Engineer (A/E) notifying of the date when the work or designated portion thereof will be substantially complete and ready for inspection and testing. This notice is to be given at least 10 days in advance of said date.
- The A/E will forward the form to the PM along with a written endorsement as to whether or not he concurs with the Contractor’s statement that the Work will be ready for inspection and testing on the date given.
- The PM will forward a copy of the information to the Project Owner (Owner) providing any additional comments or observations regarding the date given.
- If the date given by the Contractor is after the substantial completion date in the Contract, the PM and Owner, with assistance from the A/E, will evaluate and determine, based on the Contract Substantial Completion date, if liquidated damages (if included in Contract Documents) should be applied to the project.

6.1.2. **Inspection and Testing**

- Inspection and testing shall take place at dates/times mutually agreeable to the PM, Owner, A/E and Contractor.
- The inspection shall include a demonstration by the Contractor that all equipment, systems and operable components of the project function properly and in accordance with the Contract Documents.
- If the project involved obtaining a County building permit, the Contractor should also call for final building and zoning inspections.
- The inspection and testing shall determine whether Substantial Completion has been accomplished and shall result in a punch list of unfinished work and/or defective work which must be finished and corrected to obtain Final Completion.
  - Contractor prepares punch list which must be reviewed and approved by PM, Owner and A/E.
  - Possible input from other agencies to determine punch list outcome include Virginia Department of Transportation, Albemarle County Service Authority, etc.
  - Punch list shall be deemed complete when all items on the list are marked complete and signed by the Contractor, and approved by the PM, Owner and A/E.

6.1.3. **Certificate of Partial or Substantial Completion by Architect/Engineer** *(Form AC-13.1a)*

- After successful completion of the testing and the A/E determines that the work, either in whole or in part, is substantially complete, the A/E shall submit form AC-13.1a to the PM recommending that the work, or specified portion thereof, be declared substantially complete.
- The PM shall forward a copy of this information to the Owner.
6.1.4. **Acceptance by Owner**

- The PM, after consultation with the Owner, shall notify the Contractor, in writing, of the date the work, or specified portion thereof, is accepted as substantially complete.
- If the work is not accepted as substantially complete, the PM shall notify the Contractor of the deficiencies to be corrected or completed before such work will be accepted as substantially complete.
- The Owner at its sole discretion, may, after the necessary approvals and certificates (i.e., Certificate of Occupancy) are obtained, take Beneficial Occupancy at Substantial Completion or choose to wait to occupy until after Final Completion is achieved.
  - Prior to beneficial occupancy for schools, the PM should use the “Schools Checklist for New Spaces”.

6.2. **FINAL COMPLETION**

Final Completion is defined as the date of the Owner’s acceptance of the work from the Contractor upon confirmation from the A/E and the Contractor that the Work is totally complete.

6.2.1. “Certificate of Completion by Contractor” (**Form AC-13.2**)

- The contractor shall submit Form AC-13.2 to the Architect/Engineer (A/E) notifying of the date when the work has reached or will reach final completion and will be ready for final inspection and testing. This notice is to be given at least 5 days in advance of said date.
- The A/E will forward the form to the PM along with a written endorsement as to whether or not he concurs with the Contractor’s statement that the Work will be ready for inspection and testing on the date given.
- The PM will forward the information to the Project Owner (Owner) providing any additional comments or observations regarding the date given.
- If Final Completion is not achieved on or before the calendar days after Substantial Completion provided in the Contract (usually 30 days), the PM and Owner, with assistance from the A/E, will evaluate and determine if liquidated damages (if included in Contract Documents) should be applied to the project.
- The inspection and any necessary testing shall be conducted in the same manner as the inspection for Substantial Completion.

6.2.2. **Certificate of Completion by Architect/Engineer** (**Form AC-13.1**)

- Upon successful completion of the final inspection and all Work required by the Contract, including but not limited to the delivery of As-Built drawings, equipment manuals, written warranties, acceptance of the Work by the Owner, and Certificate of Completion by Contractor and Affidavit of Payment of Claims forms (**Form AC-13**), the A/E shall deliver Form AC-13.1 to the PM.
- The PM will forward a copy of this information to the Owner.

6.2.3. **Acceptance by Owner**

- When the Work is finally and totally complete, including the elimination of all defects, the Work shall be finally accepted by the Owner and final payment shall be made to the
Contractor. Section 36(e) of the General Conditions provides additional information regarding final payment.

6.3. PROJECT CLOSEOUT DOCUMENTS / PROCEDURES

6.3.1. Documents to be turned over to Owner
- Record Documents (As Builts) to show actual installation where installation varies from original plan. Particular attention to be paid to concealed areas.
- Operation and Maintenance Manuals (O&M’s)
  - Bind and index in heavy duty 3 ring binder.
  - O&M manuals to contain data indicating operation and maintenance of each system and piece of equipment.
  - Electronic versions preferred if required in project manual.
- Project files using the Filing System as described in section 1.6 of the Introduction chapter of this handbook.

6.3.2. Closeout Procedures
- PM to coordinate Factory start up and testing of all new systems.
- PM to coordinate Demonstrations and Training
- Contractor to provide Instructors experienced in operations and maintenance procedures.
- Spare parts and extra materials to be delivered to location designated by owner.
- Complete adjusted Final Testing and Balancing Report, including winter time balancing.

6.4. WARRANTIES / WARRANTY PERIOD

6.4.1. Warranties
- Submit written warranties for designated portions of the Work where commencement of warranties other than substantial completion is indicated and where designated portions are indicated per specifications.
- Bind warranties in heavy duty 3 ring binder.

6.4.2. Warranty Period
- The Project Charter should identify who is responsible for responding to warranty issues.
- Before one year anniversary of project substantial completion date, PM to coordinate “one year walk through” with Contractor and project stakeholders to investigate areas of work that need repair and/or correction.

6.5. OFD CLOSEOUT

6.5.1. Lessons Learned
- PM and OFD Manager to coordinate lessons learned after closeout of projects.
6.5.2. Public Relations Outreach

- PM to initiate survey requesting feedback from project stakeholders to evaluate areas needing improvement.
The dedication or granting of easements and/or public rights-of-way may be a necessary element of any of the projects managed by OFD. The purpose of this section is to provide the Project Manager (PM) with a general knowledge of easements and right-of-way dedications, and a guideline for how they are obtained.

7.1 General Information
7.2 County or School Board Ownership of Property
7.3 Donate or Acquired Land
7.4 Community Development Department Review
7.5 Plats & Deeds: General Info
7.6 Plat & Deed: Preparation
7.7 Plat Review
7.8 Plat & Deed Signatures
7.9 Plat & Deed Recordation
7.1 GENERAL INFORMATION

A public right-of-way is land or property for which the absolute title to the land, free of any other claims against the title (i.e. “fee simple”), is transferred to a public entity for public use. Generally this would be a dedication to “public use” for use as a public street. Such a dedication would be necessary for the construction of a new street; the extending, widening or improvement of an existing street (including bike lanes, sidewalks, etc.); and/or to install a turn lane into an entrance.

An easement is a grant by a property owner for the use of a defined portion of their land parcel in a particular manner for a specific purpose or purposes, and legal title to the underlying land is retained by the original owner for all other purposes. A variety of easement types the project manager will likely encounter are described below.

- **Public Water and Sanitary Sewer**: Typically dedicated to the Albemarle County Service Authority (ACSA) for the installation and maintenance of public water distribution and sanitary sewer collection systems.
- **Drainage**: Typically provided over public stormwater systems (pipes & channels) or over private systems that must cross adjacent private property to connect to a public system or to reach an adequate outfall location. They allow for construction and maintenance of the system. As part of the County review of a site plan or subdivision submittal, these easements may also be required over existing natural streams.
- **Private Utility (Telephone, Electric or Cable)**: These allow utility companies to install and maintain wires, conduits, poles and other items necessary to provide their services.
- **Sight Distance**: May be required across the corners of a street intersection or an entrance onto a street to assure the area is kept clear of vegetation and other objects that would obstruct a drivers view of other oncoming vehicles.
- **Temporary Construction**: These allow for the temporary access and disturbance of private property during construction activities associated with a project.

7.2 COUNTY OR SCHOOL BOARD OWNERSHIP OF PROPERTY

County or School Board ownership of the property influences the documents that are prepared, as well as the process for obtaining the easement or right-of-way dedications. Therefore, the PM needs to check the County tax records to verify which entity owns the property. This information can be found online at the County “GIS-Web” web site. Regardless of the ownership, the PM should check with Legal to confirm that a public hearing is not required.

**County of Albemarle - Owner:**

**Public Hearing Required:**

Pursuant to Virginia Code § 15.2-1800(B), the sale, exchange, lease or disposal of County owned property requires the Board of Supervisors to advertise and conduct a “public hearing”. So if land is being exchanged (ex. boundary adjustment) or conveyed to another owner/entity (ex. right-of-way dedicated to VDOT), a public hearing must be advertised and then conducted by the Board. The PM will need to coordinate the preparation and submittal of the “executive summary” in accordance...
with the deadlines and procedures provided in the “Board Reports” web site. The executive summary must indicate that it is for a “public hearing” and an “action” item, as well as request the Board authorize the County Executive to sign the Deed and Plat as the owner.

Public Hearing Not Required:
The granting of site development easements across County property, including but not limited to easements for ingress, egress, utilities, cable, telecommunications, stormwater management, and other similar conveyances, that are a necessary part of a capital improvement project on that property, do not require a public hearing. However, the County Executive must still have authority to sign the Deed of Dedication and Plat as the owner. If this authority has not already been granted through a “standing” resolution or previous Board action, then the PM will need to coordinate the preparation and submittal of the “executive summary” requesting this authority. This executive summary must follow the deadlines and procedures provided in the “Board Reports” web site, indicate that this matter is a “consent agenda” item, and include a copy of the Plat and Deed of Dedication.

Albemarle County School Board - Owner:
The disposal of land by the School Board must adhere to the provisions of the Code of Virginia §22.1-129; but generally does not require a public hearing. However, the School Board must review and approve all easement and/or right-of-way dedications and grant the Chairperson authority to sign the Deed of Dedication and Plat as the owner.

To get a request for an easement or right-of-way dedication on the School Board agenda, the PM must first have the Plat and Deed of Dedication prepared (as described later in this chapter). Then the PM is responsible to coordinate with Building Services staff who will: review the Plat and Deed; request a place on a School Board meeting agenda (usually consent agenda); and prepare a summary of the requested “agenda item”. The final Plat, Deed of Dedication and any supporting documentation will then be submitted by the PM to the Building Services staff at least 10 days before the School Board meeting date. Building Services staff will provide the information to the Clerk of the Board who distributes the agenda packets to the School Board members.

7.3 DONATED OR ACQUIRED
The PM needs a general idea for how many parcels and/or owners may be impacted, as well as if the project scope and budget expects the easement and/or right-of-way dedications to be voluntary or purchased. This is a critical decision that can impact the schedule and/or budget and needs consideration early in the project.

Voluntary dedications typically take significantly more time to establish a partnership with owners and work through design issues. It may be decided that the services of an easement and right-of-way acquisition firm are necessary, and if voluntary dedications are expected the firm should participate in the partnering meetings. Dedications that are to be purchased will require the coordination of appraisals and negotiations with the County Attorney Office and may require environmental site assessments. Lastly, if the project is VDOT or grant funded the County would need to adhere to additional acquisition requirements and processes.
7.4 COMMUNITY DEVELOPMENT DEPARTMENT REVIEW

There are certain plats for dedications that must be formally submitted for review and approval by the Community Development Department (CDD) to assure compliance with the requirements of the County Code. There are also some plats that do not require CDD review and approval, but under certain circumstances are required to be approved by CDD. Since this can impact the project schedule, it is important that the PM understand when CDD approval is required.

CDD Review and Approval Required

For Plats prepared to:
- Acquire (purchase or donation) land or public right-of-way from private owners;
- Dedicate right-of-way from County owned property;
- Adjust parcel boundaries (i.e. land swap);
- Combine two or more parcels into one parcel;
- Provide any easements and/or right-of-way dedications that are required to address the requirements or conditions of approval for a site development plan.

PM and County Attorney Review and Approval

For Plats prepared to:
- Provide easements for public water and sewer (ACSA), private utilities (cable, telephone, electric), stormwater drainage, intersection sight distance, VDOT traffic signal equipment, bicycle and/or pedestrian trails, temporary construction, or other site improvements as part of a capital improvement project across County or privately owned property. This also applies to County School Board property, but requires review and approval by the Building Services staff and the School Board.

Note: The standard “agent” signature block is not needed on these plats, but they must adhere to the County’s “final plat checklist” and the Clerk’s recordation standards. The County Attorney may request CDD to provide an informal review of the plat.

7.5 PLATS AND DEEDS – GENERAL INFO

Why Required: Land and/or rights to the land can only be transferred through a legally binding instrument of conveyance. The Plat and Deed of Dedication serve this purpose. A “Plat” is a map or graphic representation of a land parcel (or parcels) including the marked courses and distances of the land parcel and any associated rights-of-way and easements. A “Deed of Dedication” is a legal written document that identifies the Grantor (owner) and Grantee (recipient); provides a description of the specific property; words of conveyance for that property; rights of the Grantee and Grantor (in the case of an easement); and it must be signed and acknowledged (notarized) by the Grantor and Grantee.

Who Prepares: Plats must be prepared by a professional Land Surveyor and licensed in the
State of Virginia. These services may procured separately by the Project Manager or they may be included in the scope of services for the A/E contract. Deeds of Dedication are prepared by the County Attorney Office to assure consistency in the content and format of the documents. Private utility companies (electric, telephone, cable) typically provide their own deeds. However, if these easements cross County or School Board property they are forwarded to the County Attorney Office where they are reviewed and then re-written in their approved form.

Who Reviews: The PM should always be the first level of review. As mentioned in the previous section some plats must be reviewed and approved by the Community Development Department, others by the County Attorney, and some by the County School Board.

Who Obtains Signatures: The PM is responsible to coordinate the required signatures on the Plat and on the Deed of Dedication.

Who Records: Legal policy mandates that a deed to real property be a matter of public record; therefore, subsequent to signature and approval, a deed must be properly recorded. The rule-of-thumb is the party or agency requesting the dedication is responsible for the recordation. So for any dedications required as part of a capital improvement project, the plat and deed are recorded by the County Attorney Office. The only exception is private utility companies (electric, telephone, cable) record their own easements that cross private property.

7.6 PLAT & DEED PREPARATION

Owner Information
If the easement or right-of-way dedication is coming from private property, then the first step is to gather owner information, including the owner(s) name, owner’s address, property address, tax map parcel number, and deed book references. If the owner is a corporation, partnership, limited liability company, etc. the PM will also need to obtain (from the SCC web site) the names and addresses of the agent and officers who have signature authority. Sources of this information are listed below.

- Physical Survey or base map provided by the A/E or Surveyor
- County “Web-GIS” web site
- State Corporation Commission web site

Title Insurance Policy
Title insurance is required when property is being dedicated to public use, or to another public agency, to assure the Title to the property is “clear” and properly in the name of the Title owner (no liens or other ownership issues). The Title Report that is generated also identifies the owner(s) as well as any liens, deeds of trust, or other financial obligations for which the property
was used as collateral. This information is used by the County Attorney in the preparation of the Deed of Dedication.

All Title Policies are procured by the County Attorney Office and the costs are charged to the project account. The PM must make the request in writing (e-mail is acceptable) and identify the project name and all the parcels involved. Include with the request a map of the parcel(s) or copy of a draft plat (if available). There may be circumstances whereby the County Attorney Office will want a Title Policy for other dedications, so it’s important to consult them.

The PM must account for the impact that Title Policies have on the project schedule. The reports can take 30 days or more to complete, depending on the work load of the title company. If numerous reports are requested, they’re often received randomly over a period of several months.

**Plat Preparation**

When the PM is satisfied that the project design has progressed to where the limits of the easements and right-of-way dedications have been firmly established (typically 90% Plans), then the Surveyor can generate the necessary Plats and submit drafts to the PM for review and comment.

**State Standards:** The State Licensing Board has specific content and accuracy standards to which Surveyors must adhere. Assurance that these standards have been met is provided by the Surveyor’s professional seal on the Plat.

**County Standards:** The County’s content requirements for Plats are specified in the County Code. For convenience the Community Development has put these requirements into a “Checklist” format. The applicable checklists are available on CDD’s web site in their forms center. All plats must adhere to these requirements except as provided below.

- Plats that only require PM and County Attorney review and approval do not need to provide the “Approval” signature block for the “Agent to the Board of Supervisors”.
- Plats for private utility company easements (electric, telephone, cable) across private property are prepared by the utility company and are not required to comply with the above standards.

**Deed Preparation**

As mentioned earlier, Deeds of Dedication are prepared by the County Attorney Office to assure consistency in the content and form, this includes ACSA easements. The time needed to prepare these documents is dependent on their workload and if a Title Policy is necessary. The PM will need to account for this time in the project schedule.

To have the Deed prepared the PM will need to make a request to the County Attorney Office and provide a copy of the final Plat. This can be done by email to the Attorney with the plat attached as a PDF, but be sure to copy the Legal Services Assistant. Be aware that if Title
Insurance is necessary (see previous section) the Attorney cannot prepare the Deed until they receive the report from the title company.

Private utility companies (electric, telephone, cable) typically provide their own deeds. However, if these easements cross County or School Board property the PM will forward it to the County Attorney Office where it is reviewed and then re-written in their approved form. The PM is responsible for coordinating the utility company review of the revised easement and relay of comments to the County Attorney until agreement is reached. In some cases the utility company’s attorney may chose to communicate directly with the County Attorney.

7.7 PLAT REVIEW

Project Manager Review

The PM should always be the first level of review. As mentioned in 7.4 above, “some plats must be reviewed and approved by the Community Development Department and others by the County Attorney (and School Board when applicable). However, to make this process as efficient as possible, the PM should not submit the plat to CDD or the County Attorney until the PM is satisfied that it is consistent with the construction or as-built plans, and meets the County standards described in the “Plat Preparation” section above.

Community Development Department Review and Approval

When CDD review and approval of the Plat is required, the PM will need to submit the appropriate review application (completed and signed by the PM), the appropriate “Checklist” (completed and signed by the PM), and copies of the Plat to the CDD front desk. The application can then be logged in their review tracking system.

Right-of-way dedications require a “Subdivision Plat” application. Easements require an “Easement Plat” application. If both are being dedicated from a parcel, the “Subdivision Plat” application is used. If easements and/or right-of-way dedications from multiple parcels are required for the project, then an application must be provided for each parcel. For each Plat, the appropriate “Checklist” must be completed and signed by the PM. The applications and checklists are all available on the CDD web site.

The PM should coordinate the address of any review comments, review the revised Plat to assure the comments have been addressed, and then submit the revised Plats to the CDD front desk. When CDD review has been completed, they’ll issue a “conditional” final approval pending completion of the Plat and Deed of Dedication signatures.

County Attorney Review and Approval

When County Attorney review and approval of the Plat is required, the PM will submit the completed Plat to the County Attorney Office. The PM will coordinate the address of any review comments and submittal of revised Plats until the Attorney is satisfied with the Plat. The PM must then work with Building Services staff to obtain School Board approval as discussed in “7.2 - County or School Board Ownership of Property”
Building Services and School Board Review and Approval

When the project entails the dedication of easements and/or right-of-way on property owned by the Albemarle County School Board, the PM must also coordinate (in addition to County Attorney approval) review and approval of the Plat by Building Services staff. The PM will coordinate the address of any review comments and submittal of revised Plats until the Building Services staff is satisfied with the Plat.

7.8 PLAT & DEED SIGNATURES

Dedications fall into one of four categories and each has a different process for obtaining the necessary signatures on the Plat and Deed of Dedication. These are: the County as Owner; County School Board as Owner; Private Owner and County Acceptance of the Dedication; and ACSA Dedications.

Please be aware that the Plat “Mylar” must be signed with a “black” permanent marker (i.e. ultra fine-point Sharpie). The Notary must use an ink-stamp seal only – an embossed or raised type seal will damage the Mylar. The ink-stamp seal on the Mylar takes a long time to dry, so use care when handling because it can be easily smudged.

County as Owner

1. Public Hearing Required?: The PM must check with the County Attorney to determine if a public hearing is necessary for the easement/right-of-way dedication. Refer to “7.2 - County or School Board Ownership of Property”.

2. Signature Authority Granted?: Determine if the County Executive has been granted the authority to sign the Plat and Deed as the owner. If not, this will need to be addressed as provided in “7.2 - County or School Board Ownership of Property”.

3. “Approved to Form”: Deliver a copy of the approved Plat and the final Deed of Dedication (original) to the County Attorney Office for a final check and their signature as “Approved to Form”.

4. County Executive Signature: Bring the approved Deed of Dedication (original) and the Plat (Mylar original) to the County Executive Office to be signed and notarized.

5. “Agent Approval Signature”: If CDD approval of the Plat was required, then the signed Plat Mylar and a copy of the fully signed Deed of Dedication must be submitted to the CDD Planner (who approved the plat) for a final check and signature as the “Agent to the Board of Supervisors”.

County School Board as Owner

1. School Board Approval: The School Board must review and approve all easement and right-of-way dedications, and then grant the Chairperson authority to sign the Plat and Deed of Dedication as the owner. Refer to “7.2 - County or School Board Ownership of Property”.

2. “Approved to Form”: Deliver a copy of the approved Plat and the final Deed of Dedication (original) to the County Attorney Office for a final check and their signature as “Approved to Form”.

Easements & Public Right of Way
3. Chairperson Signature: Deliver the Plat (Mylar original) and Deed of Dedication (original) to the Building Services staff to coordinate the School Board Chairperson’s notarized signatures.

4. “Agent Approval Signature”: If CDD approval of the Plat was required, then the signed Plat Mylar and a copy of the fully signed Deed of Dedication must be submitted to the CDD Planner (who approved the plat) for a final check and signature as the “Agent to the Board of Supervisors”

Private Owner and County Acceptance of Dedication

1. Verify Owner Name(s): Check Title Report to confirm the name of the owner(s), the spelling of the name(s), and that they’re spelled correctly in the Deed of Dedication. If the owner is a corporation, partnership, or limited liability company check the SCC web site and verify that the person signing as the owner is a registered agent or an officer.

2. Owner Signature: Deliver the Plat (Mylar original) and the Deed of Dedication (original) to the owner to be signed and notarized.

3. Deed of Trust Signatures: If there is a Deed of Trust or other financial obligation against the property, it will be listed in the Title Report and the signatures of the Note Holder (usually a Bank) and the Trustee(s) will be included on the Deed of Dedication. These signatures also need to be obtained.

4. Signature Authority Granted? : Determine if the County Executive has been granted the authority to sign the Plat and Deed as the owner. If not, this will need to be addressed as provided in “B - County or School Board Ownership of Property”.

5. “Approved to Form”: Deliver a copy of the approved Plat and the final Deed of Dedication (original) to the County Attorney Office for a final check and their signature as “Approved to Form”.

6. County Executive Signature: Bring the approved Deed of Dedication (original) and the Plat (Mylar original) to the County Executive Office to be signed and notarized.

7. “Agent Approval Signature”: If CDD approval of the Plat was required, then the signed Plat Mylar and a copy of the fully signed Deed of Dedication must be submitted to the CDD Planner (who approved the plat) for a final check and signature as the “Agent to the Board of Supervisors”

ACSA Dedications

County or School Board as Owner:

1. The process for obtaining the signature of the owner would be as described above for “County as Owner” (steps 1 - 4) and for “School Board as Owner” (steps 1 - 3).

2. ACSA Signature: Deliver the Deed of Dedication (original signed by owner) to the ACSA where it is signed by the Executive Director and returned.

Private Owner:
1. The process for obtaining the signature of the owner would be as described above for "Private Owner and County Acceptance" (steps 1 - 3).

2. ACSA Signature: Deliver the Deed of Dedication (original signed by owner) to the ACSA where it is signed by the Executive Director, notarized, and returned.

7.9 PLAT & DEED RECORDATION

The recordation of the Plat and Deed of Dedication at the County Courthouse is the final step in this process with the actual recordation handled by the County Attorney Office. The steps involved with this process are provided below.

1. Once the Plat (Mylar) signatures have been completed, take it to the Surveyor who prepared the Plat. The Surveyor will make paper copies of the Plat and then provide his signature and the date across his professional seal.

   Due to the additional cost per page for recording a Plat that measures 11” x 17”, the County Attorney Office prefers to have one reduced size (8-1/2” x 14”) made with the Surveyor’s original seal, signature and date for recordation.

   It’s not uncommon for the Surveyor to want to keep the Mylar for their records. Should this occur, then the PM should request a Mylar copy for our records.

2. Deliver the fully executed Deed of Dedication (original) along with one full-sized and the reduced size Plat (with original surveyor signature & date) to the County Attorney Office. Periodically one of their staff goes to the County Courthouse to address recordings and other transactions. Include in the transmittal a request that they provide a copy of the recording receipt for the project file.

3. Send a copy of the fully executed Plat and Deed of Dedication to the Owner(s) and Building Services staff (when applicable).