1100 DRESSER COURT RALEIGH, NC 27609
919 828-2301 TEL 919 828-2303 FAX HH-ARCH.COM

HH ARCHITECTURE

~~October 22, 2024; October 25, 2024; December 13, 2024; Revised December 16, 2024~~
Revised April 2, 2025

Dan Nosbusch
Project Manager
Durham County
201 E. Main Street, 5th Floor
Durham, North Carolina 27701

Re: Durham County
Office of Emergency Services/General Services Fleet Maintenance Facility
HH Project Number: 24-066

Dear Dan,

HH Architecture is pleased to present this proposal for Schematic Design through Closeout for the Office of Emergency Services (OES) and General Services (GS) Fleet Maintenance Facility project. This letter and the attached exhibits outline our understanding of the project, scope for professional design services, project schedule, inclusions, exclusions, and fees.

Basic Scope

Durham County has charged HH Architecture with the design of the OES Fleet Maintenance Facility, located at Venture Park, Building G, at 1613 Hamlin Rd, Durham, NC. This existing site is an industrial space for lease and includes an existing 25,200 SF facility. The full project scope includes an interior upfit of this facility dedicated to supporting EMS vehicles, including vehicles bays, office space, break room and support spaces. The intent is for (6) bays to be dedicated to OES and the remainder to be used for County fleet vehicles managed by General Services. Our team will use the "*Fleet Maintenance Facility Programming Evaluation Study"* (dated 7/6/2023) as well as a current site study provided to us by the County as a reference for programming needs, space sizing and layout diagrams. The project will include necessary site improvements to meet the required program.

The total project budget allocated for this project is $5,200,000. The project delivery method will be Construction Manager at Risk (Samet). We understand the current OES Fleet Maintenance Facility is in a leased space that the County needs to vacate in December of 2025, and that this project will be on an expedited timeline.

This is a leased facility, and while we will not be able to fully meet the goals of the Durham County High-Performance Building Policy for LEED Certification with the renovation, we will incorporate sustainable systems wherever possible.

Architectural design scope includes:

- Overall leader of the project and Owner's point of contact.
- Confirmation of programmatic requirements.
- Design of the renovation of the 25,200 square foot OES/GS Fleet Maintenance Facility.
- Attendance at weekly coordination calls during design.
- Code analysis and compliance for the design.
- Coordination of all design disciplines.
- Secure approvals from all Authorities Having Jurisdiction (Durham County).
- Provide opinion of probable cost at each phase.
- Attend pre-bid meeting with CMAR (if required).
- Conduct construction administration services.
- Administer project closeout.
- Attend (1) MWBE outreach session to present the project scope.

Mechanical, Electrical, Plumbing, and Fire Protection Engineering design scope includes:

- Plumbing & Fire Protection Engineering
    - The plumbing system shall consist of sanitary, storm, and domestic water piping utilizing new systems. Design stops at 5 feet outside the building, site utility design by others. Coordination with Civil engineer for utilities and oil separator if required is included. Excludes booster pumps. Flow test shall be provided by others.
    - The design should include adequate space planning for automotive fluid storage and handling, including space to accommodate delivery and storage space of new automotive fluids, and space for waste fluids (i.e. above-ground storage tanks for a waste fluid disposal service, etc.). If required, automotive fluid distribution systems (e.g. piped distribution of motor oil throughout the service bays, etc.) will be provided by a vendor under a separate contract. We will coordinate as needed. Fire safety analysis by others.
    - Coordination for utilities and oil separator if required is included. Excludes booster pumps.
    - Fire Sprinkler will be basic performance specifications that indicate head types, hazard occupancy classifications and coordination for incoming utility service and backflow. Fire pump design is excluded.
- Mechanical Engineering
    - Mechanical design will explore various HVAC equipment options to provide required heating and cooling performance and accommodate sustainability goals for the facility. For a facility of this size we anticipate this will most likely be achieved using packaged rooftop units, either ground-mounted or roof-mounted pending structural engineering analysis, but other HVAC equipment options will be explored.
    - Vehicle shop areas to be heated and cooled.
    - Compressed Air systems design included.
    - Vehicular Exhaust System design included.
    - Minor welding in the vehicle shop areas is assumed.
    - Mechanical design will include a supplemental HVAC unit for an IT/Security closet. Additional supplemental HVAC units are excluded.
- Electrical Engineering
    - The electrical system shall consist of interior lighting, power, fire alarm, and emergency generator. Power will also be specified as required for Specialty Systems (see Exclusions) designed by others. Raceway can be stubbed to above ceilings based on Specialty System consultant's design layout. Space lighting is assumed to consist of standard office/garage lighting.
    - Fire alarm design has been included. Fire alarm shop drawings shall be prepared by the contractor for engineer review. This review is part of C/A submittal review.
    - EV Charging (EV charging equipment selected by owner).

    - Generator to backup a minimum of several ambulance bays.
- Construction administration services, including:
    - Answering RFIs as required.
    - Shop drawing review is included.
    - Weekly virtual coordination meetings (up to 22).
    - Allowance for four (4) site observation visits. This includes in-wall rough-in, above-ceiling rough-in, pre-final, and final site observations and reports.
- Preparation of record drawings.

Security System and Telecommunication infrastructure design includes:

- Coordination with Durham County staff on equipment needs.
- Security systems that will be fully designed for the project include:
    - Card-Based Access Control systems throughout the building, as directed by the Owner.
    - Integration with existing security and access control systems and standards previously adopted by the Owner.
    - Intrusion Detection Systems for the building perimeter and higher security spaces, as directed by the Owner. This would include the requirement for numerous types of sensors including, but not limited to, door position switches, door alarm sounders, motion detectors, etc.
    - Video Surveillance Systems distributed throughout the interior and exterior of the building. The video surveillance system shall incorporate video motion detection and analytics to also serve as an intrusion detection system.
    - Security communication systems throughout the interior and exterior of the building. All systems will be coordinated with the requirements of the existing campus standards.
    - All electric door hardware requirements will be coordinated and reconciled with the door hardware consultant and the owner.
- Telecom infrastructure design for the project includes:
    - Programming and design of the low voltage cabling plant for the new building.
    - The cabling infrastructure system shall be designed for all spaces throughout the new building. Engineer shall coordinate with all furniture plans.
    - Engineer shall design all low voltage systems to meet existing owner standards.
    - Design services will encompass the design of a connection to existing utility services that exist in close proximity to the new building.
    - The expectation is that a Category grade cabling system will be designed from the field outlet to the closest telecom room with both copper and fiber backbone systems designed between the Main Telecom Room and secondary telecom rooms throughout the building.
    - Engineer shall locate Wi-Fi access point outlets based on access point capabilities with the expectation that Wi-Fi heat mapping shall be required from the owner.
    - Engineer shall be responsible for coordination with all owner-provided network equipment.
    - Engineer shall design the project's telecommunication grounding system.
- Assistance during bidding, including attending a pre-bid conference, responding to bidder RFIs, preparing addenda approved by Owner, and assisting with evaluation of bids from low voltage contractors.
- Construction administration services, including:
    - Review all submittals, shop drawings, and brochures, by low voltage contractors to verify compliance with the Low Voltage Contract Documents.
    - Review re-submittals of above requirements that have been returned for corrections until all have been accepted in compliance with the Contract Documents.
    - Attend up to two (2) site visits as follows:
        - One (1) visit for pre-Final inspection.
        - One (1) visit for Final Punch list generation.

- Site Construction Coordination Visits to include construction meetings. All site visits shall be documented with a project report or construction observation report.
- Review all close-out documents submitted by low voltage contractors to verify compliance with the Low Voltage Contract Documents.

Structural design scope includes:

- Design of new steel canopy.
- Analysis of the existing roof framing for new sprinkler system.
- Analysis of the existing roof framing for new roof top mechanical units.
- Construction administration services, including:
  - Attendance at preconstruction meetings for primary structural items.
  - Review of shop drawing review and submittals
  - RFI responses
  - Up to (3) site visits and field reports during the extent of major structural construction.
- Preparation of record drawings.

Assumptions and Clarifications:

In providing this proposal, we have made the following assumptions:

1. Fire flow tests will be provided by Durham County.
2. Durham County to provide existing drawings and any applicable as-builts and CAD drawings of the existing building.
3. It is assumed the receiving sewer has capacity for the anticipated project flows. If a downstream capacity analysis is needed, additional fee may be required.
4. Durham County will provide all Geotechnical services, Construction Materials Testing, Building Envelope/HVAC Commissioning via third-party firms.
5. Telecomm and AV design shall be based on equipment layout and equipment consumption/use data provided by Durham County.
6. We understand that the facility will not utilize chemicals requiring special designs. e.g.: hazardous areas, exhausting, etc. (MSDS). Determination of hazardous/explosive material requirements shall be by others.
7. The design will include adequate space planning for automotive fluid storage and handling but no piping systems, including space to accommodate delivery and storage space of new automotive fluids, and space for waste fluids (i.e. above-ground storage tanks for a waste fluid disposal service, etc.).
   a. If required, automotive fluid distribution systems (e.g. piped distribution of motor oil throughout the service bays, etc.) will be provided by a vendor under a separate contract. We will coordinate as needed. Fire safety analysis by others
8. Requirements for a generator will only be to backup several ambulance bays. This space is not an operations center and is limited to maintenance only.
9. No wash bays, external car washing or dedicated carwash (by vendor, we will coordinate)
10. Fire Sprinkler Design by others (design-build).
11. Vehicle lifts and other vehicle maintenance equipment will not require recessed floors. All lifts, tire balancers and other vehicle maintenance equipment will be provided by a third-party vendor by Durham County. We will coordinate to provide power needed.
12. The design of off-site and/or the relocation of on-site extensions such as storm sewer, sanitary sewer mains, and domestic water mains are not proposed as a part of this scope of services.
13. Site lighting design by Duke Energy.

Consultants

For Structural Engineering, we propose:

Lynch Mykins Structural Engineers, PC
Raleigh, NC
Contact: Diana Artero, PE
dartero@lynchmykins.com
Phone: 919.782.1833

For Plumbing, Mechanical, Electrical Engineering, we propose:

Bass, Nixon & Kennedy, Inc.
Raleigh, NC
Contact: Eric Baucom, PE
Eric.baucom@bnkinc.com
Phone: 919.851.4422

For Security System and Telecommunications Infrastructure Design, we propose:

J&A Engineering Consultants
Marietta, GA
Contact: Jorge Gomez, PE, RCDD
jgomez@jaengineering.net
Phone: 770.817.4220

Phases

Schematic Design & Design Development (combined): Perform preliminary code analysis. Provide outline specifications, code summary sheet, life safety plans, floor plans, and reflected ceiling plan. Provide room finish and door schedules. Provide engineering drawings as required. Attend up to eight (8) weekly virtual coordination meetings with the CMAR & Owner. Submit to Owner and coordinate for approval.

Construction Documents: Respond to all SD/DD Owner-review comments. Provide full working drawings and specifications. Submit to Owner and AHJ and coordinate for approval. Attend up to (12) weekly virtual coordination meetings with the CMAR & Owner.

Bidding: Attend pre-bid meeting lead by CMAR. Respond to all RFIs as required.

Construction Administration: Basic fee includes construction administration for an estimated duration of (7) months (5 months on site). Perform architectural coordination, submittal review, and related Construction Administration. Attend the pre-construction meeting lead by the CMAR. Provide weekly jobsite visits (up to 22), including monthly OAC construction meetings lead by the CMAR, a punch list walkthrough, and a final inspection walkthrough.

Closeout: Record drawings and closeout of project.

Budget

We understand the total project budget is $5,200,000. We anticipate the construction budget will be as follows:

Construction Budget	$3,952,000
Construction Contingency (5%)	$208,000
Subtotal	**$4,160,000**
Owner Soft Costs (25%)	$1,040,000
Total Project Budget	**$5,200,000**

Schedule

We understand the current OES Fleet Maintenance Facility is in a leased space that the County needs to vacate by December of 2025, and that this project will be on an expedited timeline. As such, we are proposing the durations and milestones provided by Samet on the attached schedule exhibit.

Fee

For the scope detailed above, we propose the following lump sum fees:

Basic Fee	
Schematic Design / Design Development	$144,500
Construction Documents	$143,600
Bidding	$11,600
Construction Administration	$128,600
Closeout	$12,400
Subtotal Basic Fee	**$440,700**

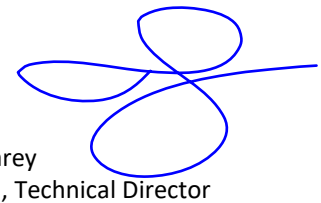
Exclusions

Excluded Services, not anticipated, but to be billed as Additional Services only if required:

- General:
  - Site/Civil Design
  - Cost Estimating
  - Phased Construction
  - Early Design Packages
  - Meetings with the Owner beyond the number included above (if requested)
  - Hazardous materials testing and abatement design
  - Special inspections as defined by Chapter 17 in the NC Building Code.
  - Construction Materials and Compaction Testing.
  - Review and Permitting Fees (to be billed as reimbursable if required)
  - Serving as expert witness
  - Project budget is increased and/or additional scope items are added to the project
  - Any significant redesign effort after approval of the Design Development package
  - Design of audio-visual wiring/equipment
  - Costs associated with advertising

    - Analysis and/or reporting of hazardous materials (chemicals, flammables, dust, carcinogens, etc.) to be used, stored and/or handled by the Owner.
    - CA visits beyond the visits included above
    - CA services beyond the identified construction time frame
    - Furniture design or specifications
    - Life cycle cost analysis
    - LEED Services & energy modeling
    - Any services not listed above will be billed as Additional Services
- Structural:
    - Special Inspections
    - Design of flood protected works as defined in ASCE-24
    - Retaining wall design
    - Pre-engineered metal building systems (PEMB)
- MEP Systems:
    - Fire sprinkler systems design/shop drawings
    - Fire flow tests
    - Landscape lighting design
    - Specialty Systems such as sound design
    - Specialty lighting systems
    - UPS systems
    - Commissioning
    - Smoke modeling / simulation and design.
    - Arc Flash or Coordination study
    - Detailed coordination with utility companies (i.e., electrical load summary sheets)
    - Fire and domestic water booster pumps.
    - Food service design, including kitchen hoods and grease traps.
    - Hazardous location design or classifications
    - DFS approval / color-coded plan / inspections
    - Fueling Station and Internal Car Wash Bays
    - Automotive Painting or paint booths
    - Automotive fluid piping/distribution systems
    - Energy Code statement of compliance form for the HVAC system

Please let me know if you need additional information. We are excited to continue this project!

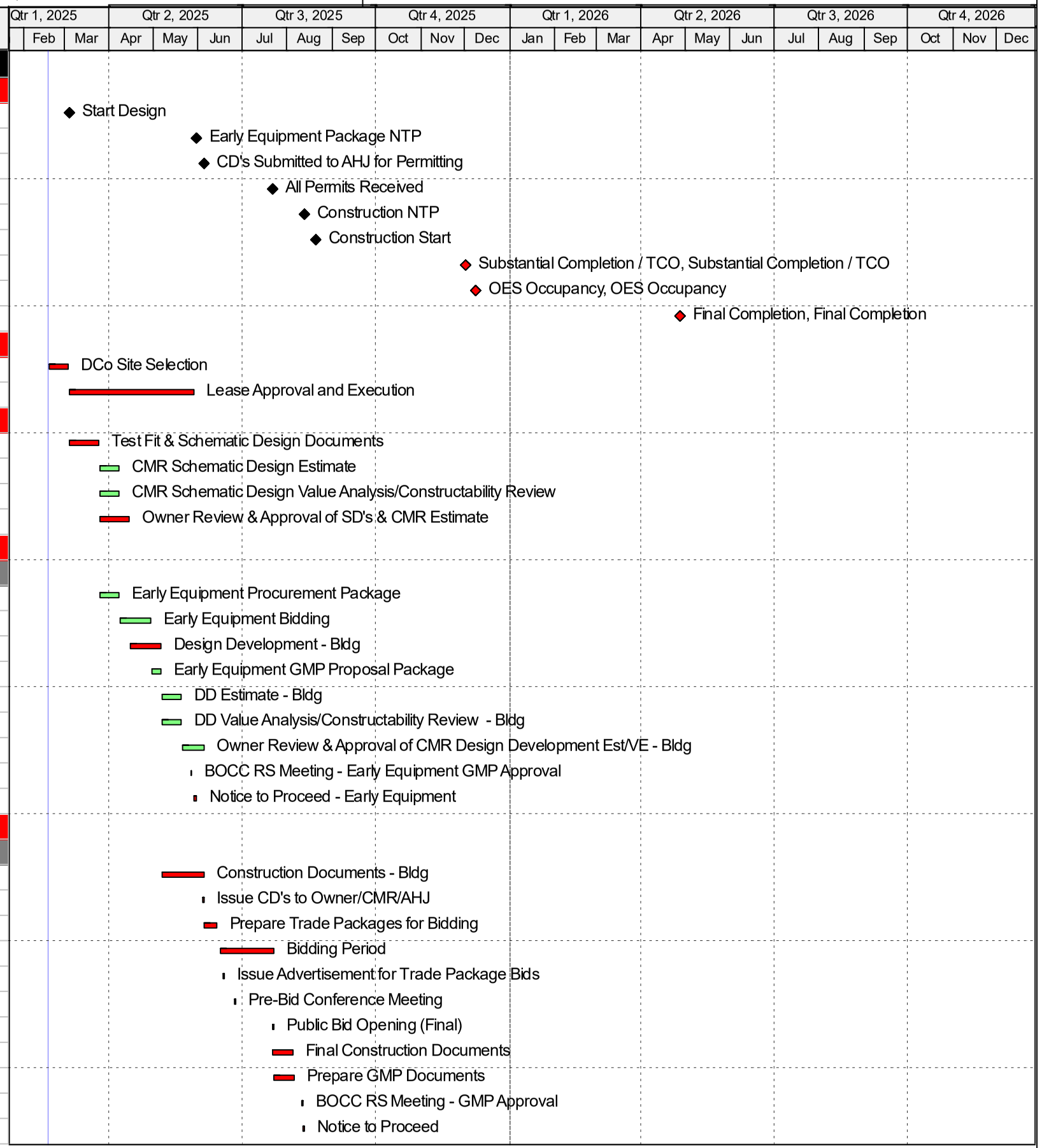


David Carey
Principal, Technical Director

Attachments: Proposed Project Schedule

This proposal may be accepted and become a binding agreement only by this proposal being incorporated as an exhibit to a formal, written design contract executed by HH Architecture and the client. Prior to this proposal being incorporated as an exhibit to a formal, written design contract executed by HH Architecture and the client, HH Architecture may modify or withdraw this proposal in part or in whole.

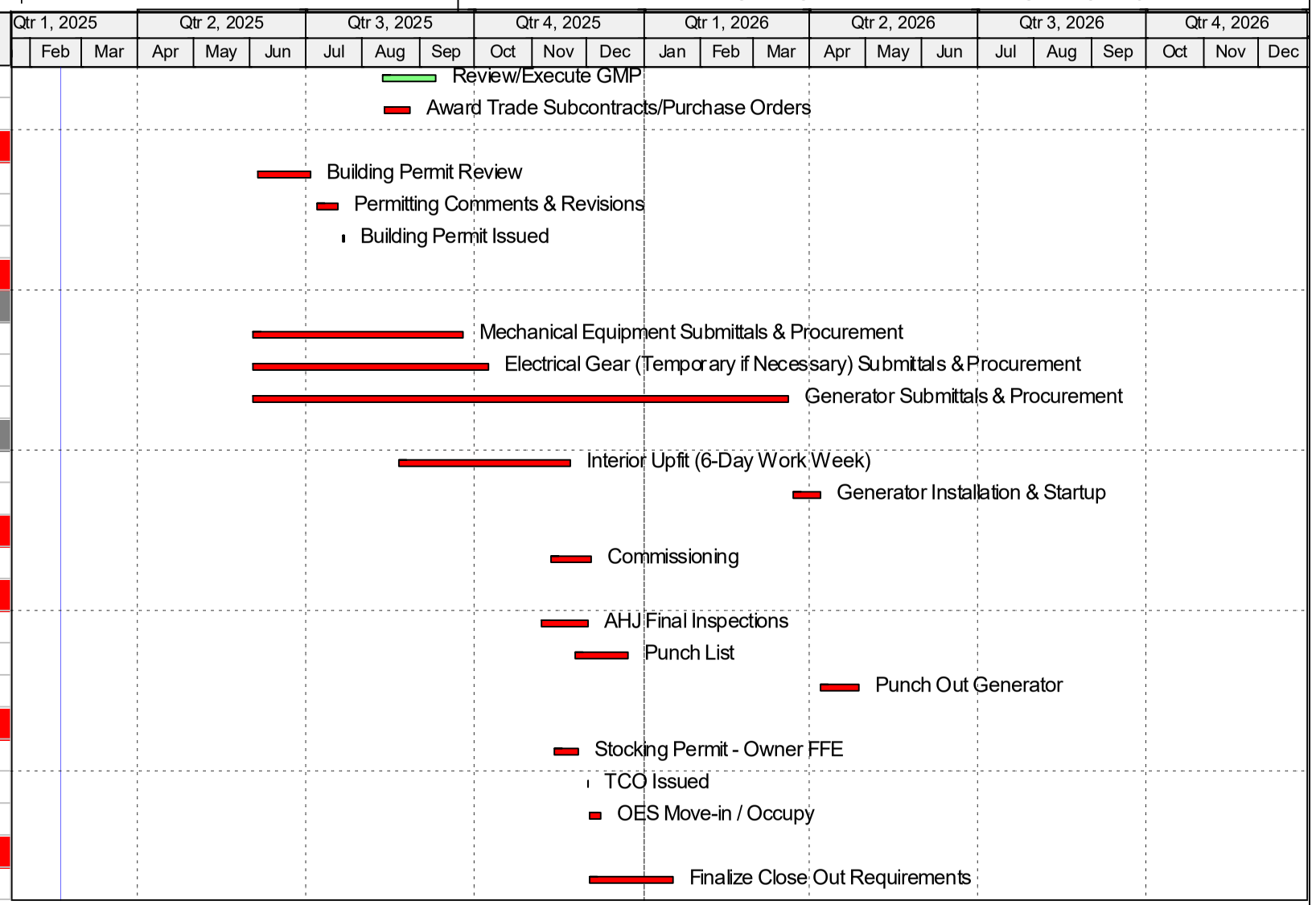
Activity ID	Activity Name	Original Duration	Start	Finish
DCo OES Fleet - Venture Park Prelim Schedule 02.13.25		297	18-Feb-25	27-Apr-26
MILESTONES		287	04-Mar-25	27-Apr-26
A2090	Start Design	0	04-Mar-25	
A1990	Early Equipment Package NTP	0		30-May-25
A2010	CD's Submitted to AHJ for Permitting	0		04-Jun-25
A2020	All Permits Received	0		21-Jul-25
A2000	Construction NTP	0		12-Aug-25
A2030	Construction Start	0	20-Aug-25	
A1980	Substantial Completion / TCO	0		01-Dec-25
A2040	OES Occupancy	0		08-Dec-25
A2070	Final Completion	0		27-Apr-26
ADVANCE PLANNING		70	18-Feb-25	28-May-25
A1050	DCo Site Selection	10	18-Feb-25	03-Mar-25
A1060	Lease Approval and Execution	60	04-Mar-25	28-May-25
SCHEMATIC DESIGN		30	04-Mar-25	14-Apr-25
A1070	Test Fit & Schematic Design Documents	15	04-Mar-25	24-Mar-25
A1080	CMR Schematic Design Estimate	10	25-Mar-25	07-Apr-25
A1090	CMR Schematic Design Value Analysis/Constructability Review	10	25-Mar-25	07-Apr-25
A1110	Owner Review & Approval of SD's & CMR Estimate	15	25-Mar-25	14-Apr-25
DESIGN DEVELOPMENT		50	25-Mar-25	04-Jun-25
BUILDING PACKAGE		50	25-Mar-25	04-Jun-25
A1130	Early Equipment Procurement Package	10	25-Mar-25	07-Apr-25
A1140	Early Equipment Bidding	15	08-Apr-25	29-Apr-25
A1180	Design Development - Bldg	15	15-Apr-25	06-May-25
A1150	Early Equipment GMP Proposal Package	5	30-Apr-25	06-May-25
A1210	DD Estimate - Bldg	10	07-May-25	20-May-25
A1220	DD Value Analysis/Constructability Review - Bldg	10	07-May-25	20-May-25
A1230	Owner Review & Approval of CMR Design Development Est/VE - Bldg	10	21-May-25	04-Jun-25
A1860	BOCC RS Meeting - Early Equipment GMP Approval	1	27-May-25*	27-May-25
A1870	Notice to Proceed - Early Equipment	2	29-May-25	30-May-25
CONSTRUCTION DOCUMENTS		86	07-May-25	09-Sep-25
BUILDING PACKAGE		86	07-May-25	09-Sep-25
A1630	Construction Documents - Bldg	20	07-May-25	04-Jun-25
A1640	Issue CD's to Owner/CMR/AHJ	1	04-Jun-25	04-Jun-25
A1690	Prepare Trade Packages for Bidding	7	05-Jun-25	13-Jun-25
A1830	Bidding Period	25	16-Jun-25	22-Jul-25
A1730	Issue Advertisement for Trade Package Bids	1	18-Jun-25	18-Jun-25
A1740	Pre-Bid Conference Meeting	1	26-Jun-25	26-Jun-25
A1750	Public Bid Opening (Final)	1	22-Jul-25	22-Jul-25
A1160	Final Construction Documents	10	22-Jul-25	04-Aug-25
A1760	Prepare GMP Documents	10	23-Jul-25	05-Aug-25
A1840	BOCC RS Meeting - GMP Approval	1	11-Aug-25*	11-Aug-25
A1850	Notice to Proceed	1	12-Aug-25	12-Aug-25



Actual Work
Remaining Work
Near-Critical Rem Work
Critical Remaining Work
Milestone
Critical Milestone

DCo OES Fleet Maintenance - Preliminary Schedule 02.13.25
Venture Park, Building G

Activity ID	Activity Name	Original Duration	Start	Finish
A1770	Review/Execute GMP	20	12-Aug-25	09-Sep-25
A1790	Award Trade Subcontracts/Purchase Orders	10	13-Aug-25	26-Aug-25
PERMITTING		31	05-Jun-25	21-Jul-25
A1120	Building Permit Review	20	05-Jun-25	03-Jul-25
A1170	Permitting Comments & Revisions	10	07-Jul-25	18-Jul-25
A1190	Building Permit Issued	1	21-Jul-25	21-Jul-25
BUILDING CONSTRUCTION		210	02-Jun-25	06-Apr-26
SUBMITTALS (LONG LEAD)		200	02-Jun-25	20-Mar-26
A1970	Mechanical Equipment Submittals & Procurement	80	02-Jun-25	24-Sep-25
A2080	Electrical Gear (Temporary if Necessary) Submittals & Procurement	90	02-Jun-25	08-Oct-25
A1960	Generator Submittals & Procurement	200	02-Jun-25	20-Mar-26
CONSTRUCTION		155	20-Aug-25	06-Apr-26
A1800	Interior Upfit (6-Day Work Week)	80	20-Aug-25	21-Nov-25
A2050	Generator Installation & Startup	10	23-Mar-26	06-Apr-26
COMMISSION		15	11-Nov-25	03-Dec-25
A1940	Commissioning	15	11-Nov-25	03-Dec-25
FINAL INSPECTIONS		115	06-Nov-25	27-Apr-26
A1820	AHJ Final Inspections	15	06-Nov-25	01-Dec-25
A1900	Punch List	20	24-Nov-25	23-Dec-25
A2060	Punch Out Generator	15	07-Apr-26	27-Apr-26
SUBSTANTIAL COMPLETION		16	13-Nov-25	08-Dec-25
A1880	Stocking Permit - Owner FFE	10	13-Nov-25	26-Nov-25
A1810	TCO Issued	1	01-Dec-25	01-Dec-25
A1890	OES Move-in / Occupy	5	02-Dec-25	08-Dec-25
CLOSEOUT		30	02-Dec-25	16-Jan-26
A1950	Finalize Close Out Requirements	30	02-Dec-25	16-Jan-26



Actual Work
Remaining Work
Near-Critical Rem Work
Critical Remaining Work
Milestone
Critical Milestone

DCo OES Fleet Maintenance - Preliminary Schedule 02.13.25
Venture Park, Building G