REVIT BIM MODELING SAVES TIMES, DELIVERS EFFICIENCY FOR MFSS II/ VA COMMUNITY BASED OUTPATIENT

CASE STUDY
Revit BIM Modeling Saves Times, Delivers Efficiency for MFSS II/VA Community Based Outpatient

Intelligent Revit BIM (Building Information Modeling) brings efficiency to Medical Facilities Support Services (MFSS II) by the US Army Corporation of Engineers.

About the Project:
NIKA is a global facility lifecycle solution provider, revolutionizing the way businesses, governments design, buildings, and property management in the USA. NIKA has been awarded $25 Million IDIQ (Indefinite Delivery/Indefinite Quantity) Contract for OCONUS MFSS II by the United States Army Corporation of Engineers (August 5, 2019). NIKA is providing the facilities operation, maintenance, project development support, commissioning, and occupancy support for Department of Defense (DoD) medical facilities, situated outside the continental U.S. (OCONUS), especially Japan, Korea, Italy, Germany & Hawaii.

Drive of the Project for NIKA:
Retired Lt. Col. Pete Peterson, Executive Vice President of Facilities Operations Management at NIKA stated that by earning a spot on the MFSS II contract, NIKA is expanding its ability to provide diverse facility life cycle services to federal agencies.

Role of BIM in this Project:
NIKA is providing services in a wide array of operational areas, encompassing inpatient facilities support, clinical areas, and ancillary support in warehousing, power plants, transition, and space planning. Building Information Modeling (BIM) is facilitating NIKA to save time and deliver efficiency for the Medical Facilities Support Services by the United States Army Corporation of Engineers.

Tejjy Inc.'s BIM Support to NIKA Projects
Tejjy Inc. – a Construction Management, BIM, Engineering, Architectural & Permit Expediting Service Provider in the USA is delivering Intelligent 3D BIM Modeling Solutions in Revit for NIKA’s projects. Earlier, NIKA used to work in CAD but now working in Revit BIM, thus saving time for revisions by using the 3D models for coordination while working amongst different trades.
Work Process between Tejjy Inc. & NIKA:

**Information Sharing:** NIKA provides information drawn by hands-on sheets or Blue beam for design.

How does Tejjy work? Engineers at Tejjy Inc. use the PDF information to create the 3D model in the Revit which can be further used for redesigning and coordination between trades and for Pre-Fabrication.

**MEPFP BIM Modeling for the Medical Facilities**

**Challenges Involved in the Project:** Information provided in 2D format

**Solution:** Engineers of Tejjy Inc. used their BIM expertise to create an accurate 3D BIM model (LOD 350) for MEPFP trades with the available information from NIKA.

**Testimonial from Tejjy Inc. Team Member -** Benefits of Working in Revit BIM “Revit is a 3D BIM Platform software and it helps our BIM team to make changes to the building easily. The best part of working in the Revit software platform is that our BIM Modelers don’t have to worry about the changes in all sheets, as once they update the 3D model, it gets automatically updated in all of them. Revit BIM facilitated complete coordination amongst the various MEPFP (Mechanical, Electrical, Plumbing, & Fire Protection) trades in 3D.” – Sukh Singh, Vice President, Tejjy Inc.
Benefits to Client (NIKA) from Revit BIM Implementation:

- Flawless Collaboration among stakeholders, reducing errors, improving building performance
- Quality output with less effort
- Enhanced Production at lesser time
- Ease of access for maintenance provisions & facility management

Final Thought

Revit BIM helped flawless collaboration among project stakeholders, reducing errors, and improving building performance. Tejy Inc. has streamlined project information management processes like document control, resolution of design problems through RFI management & clash coordination/ conflict resolution among various MEPFP trades through BIM technology. Revit integrated BIM provided effective project solutions & collaborations for the medical facility project.

Roads Ahead

Revit will simplify BIM adoption by streamlining project operations in public, private & federal government sectors. The next generation will work with cloud technology (Model Sharing). Revit integrated BIM will continue to provide effective project solutions & collaborations, streamlining project information management, document control, clash coordination, and design problem resolution through RFI management.
### Project Facts at a Glance:

<table>
<thead>
<tr>
<th><strong>Project Name</strong></th>
<th>MFSS II (Medical Facilities Support Services) by US Army Corporation of Engineers/VA Community Based Outpatient</th>
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<tbody>
<tr>
<td><strong>Project Location</strong></td>
<td>Ocala, FL. Orangeburg, SC. Terra Haute, IN.</td>
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<tr>
<td><strong>Client Company</strong></td>
<td>NIKA (Owner)</td>
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<td><strong>Project Type</strong></td>
<td>Medical Facilities/Hospital/Healthcare</td>
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<td><strong>Trades Covered</strong></td>
<td>MEPFP (Mechanical, Electrical, Plumbing, Fire Protection)</td>
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<td><strong>Scope of Work</strong></td>
<td>3D BIM Model Creation, Clash Coordination</td>
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<td><strong>LOD</strong></td>
<td>350</td>
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<td><strong>Average BIM Team Size</strong></td>
<td>3 BIM Engineers from Tejfy Inc.</td>
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<td><strong>Project Issue Date</strong></td>
<td>03/06/2020</td>
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<tr>
<td><strong>Project Status</strong></td>
<td>Design Intent Drawings 3</td>
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<tr>
<td><strong>Role of Client</strong></td>
<td>Facility Lifecycle Solution Provider</td>
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<td><strong>Software Applications Used for the Project</strong></td>
<td>Revit BIM, Navisworks</td>
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Project Snapshots

BIM Modeling – An Art of Building Structure
Ocala – Bird’s Eye View of the Project

Orangeburg – Bird’s Eye View of the Structure
Orangeburg – MEPF Modeling

Terre Haute Bird’s Eye View

Terre Haute - MEPFP