Wilson High School is an educational project in Arlington, Virginia, United States spread over a project area of 216,487 sq ft. The BIM model of “Wilson High School” of “Shapiro & Duncan” is a new construction at Level of Development 300. The one building consisted of 6 floors along with 1 basement & has been divided into two separate zones (north and south).

- **Trades Covered:** Plumbing, Mechanical Piping,
- **LOD:** 300
- **Software Used:** Autodesk Fab 2017, Newforma

**Scope of Work**

Our scope of work for the project included:

1. 3D Model Creation of Plumbing (Level B2, G1-South, G1-North, 1, 2, 3, 4 & 5) & Mechanical Piping (Level B2, G1-South, 1, 2, 3, 4 & 5) for the entire building including Sanitary, Rain Water & Water Supply with associated fittings, accessories and hangers
2. Coordination as per the clash report provided by the client - Performed clash detection within MEP services along with Architecture & Structural models, resolving possible clashes

**Challenges & Solutions**

1. **Challenge - Inadequate Space** - Not enough space to place WC carrier in this shaft **Solution** - Raised RFIs to the client to review the problem
2. **Challenge - Coordination Problem** - Sanitary pipe going below ceiling, Pipe clashing with ceiling, Due to low ceiling space, mechanical pipes were clashing with ceiling, Vent pipes running below the ceiling **Solution** - Requested client to review and used our expertise to resolve the problem
3. Created “viewpoints” to identify individual clashes by running clashes in Naviswork
4. Updated the model & rerouted pipes to resolve clashes
5. Checked mismatch with input drawing, detailing & section problem (wrong connection, full length not matched, concentric reducer), wrong material selection (pipe was in steel), fixtures connected correctly to supply, waste and vent piping

**Pinnacle’s Value Addition**

1. Created “viewpoints” to identify individual clashes by running clashes in Naviswork
2. Updated the model & rerouted pipes to resolve clashes
3. Checked mismatch with input drawing, detailing & section problem (wrong connection, full length not matched, concentric reducer), wrong material selection (pipe was in steel), fixtures connected correctly to supply, waste and vent piping