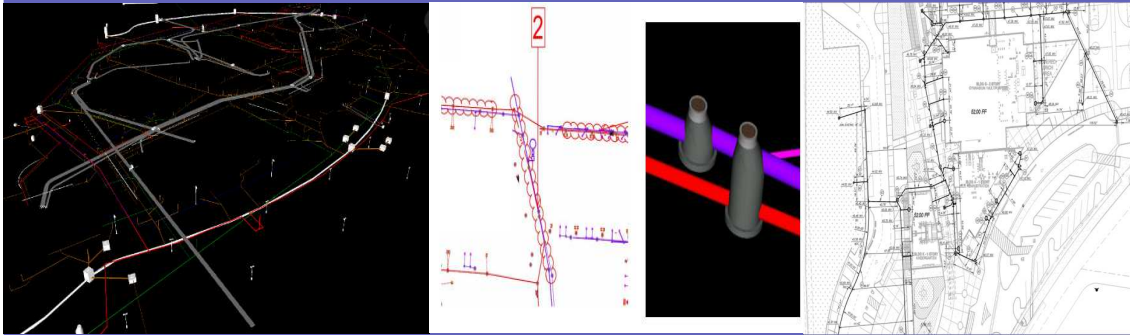


# BIM Services for Site Utility Systems

- 3D Modelling
- Clash Detection & Resolution
- Shop Drawing
- As Built Drawing



D&D team is passionate to BIM services and committed to following goals for the customers:

- Maximize client value by adopting the latest technologies and innovations.
- Improve project efficiency by our best internationally tested workflow to provide high quality services.
- Save time by using team effort with skilled team members.
- Reduce client costs up to 25 % to 40% by harnessing a highly experienced work force.

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- Process we follow
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## Site Utility Systems

Site Utilities means improvements and infrastructure that facilitate the distribution and collection of public utility services, including water facilities, fire hydrants, sanitary sewer facilities and stormwater facilities (including catchment, conveyance, treatment and storage facilities such as tanks and ponds. .

Basic site utilities covers with the following networks .

**Storm water Network** :Storm water system covers Storm external building UG drain piping , chambers with roadways gutters, chambers upto final drain collection point .

**Sewer Network** : City network covers Storm external building UG sewer piping , chambers with roadways chambers upto treatment plan

**Water Network** :City Water system covers the main water treatment plant or reservoir to piping , fitting and accessories like valves etc. network to zonal reservoir and than up to each building tapping or distribution .

**Gas Network** :Gas network covers the main source supply through piping with fitting with accessories like regulator and valves to control.

**Electrical Network** : Electrical system covers substation, Generator, main LV panel, Cable tray, Underground conduit with all underground chambers



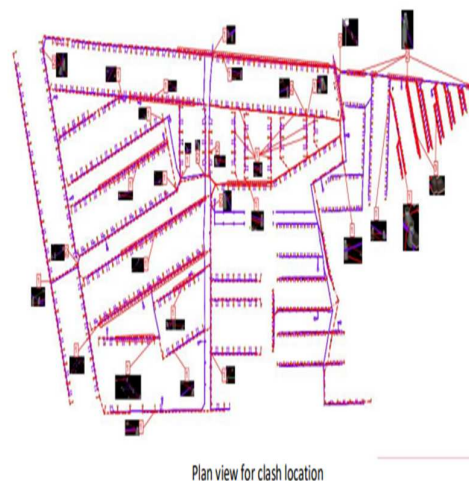
## Clash Detection and Resolution

The 3D model would be integrated in the Autodesk Navisworks Platform and checked for interference and conflicts. The installation, service/maintenance space required for all the services would be taken in to consideration during the clash detection. Navisworks Clash Detection facility will enable to establish batch tests between disciplines and allow the ability to set specified tolerances between building systems for identifying and flagging conflicts. Once clash detection has been run, it will be reviewed for all the conflicts by batch, and determine what clashes are active, and which ones have been resolved. This report will be posted as. nwd (Navisworks) format file on the shared FTP site prior to every coordination meeting so that the team members can review the conflicts to resolve the same .

## Services We do

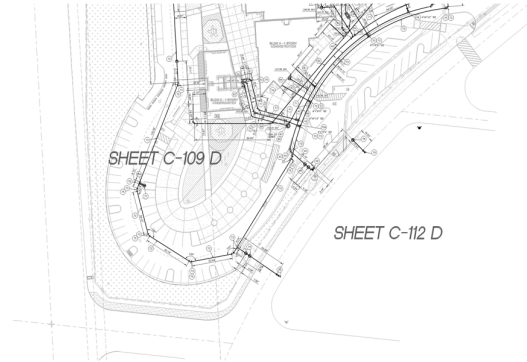
### 3D Modelling

We create 3D models of storm water , sewer , water , gas piping, chambers , channels , gutters and electrical systems conduit , chambers in order to make designed building more detailed an accurate and minimize design errors and unnecessary delays during construction. Our MEP Modeler having good experience in external utilities and can execute the all the models with the help BIM co-ordination process accurately .



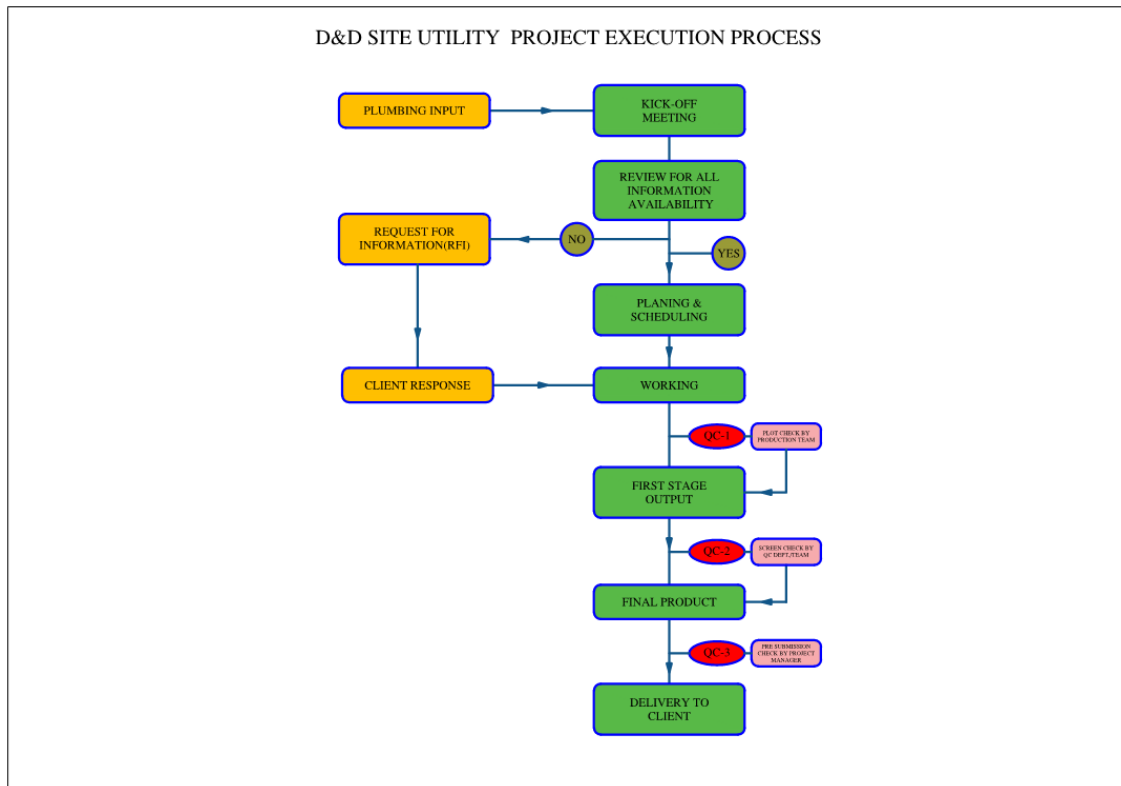
## Shop Drawing

Shop Drawings are created based on project standards and are useful to contractors, construction. BIM is highly useful for construction of any irregular or complex structures. We generate accurate locations of all utility piping and accessories from the BIM model and provide necessary dimensions before start of construction. These drawings are generated directly from coordinated BIM models and are detailed enough for workshop fabrication and/or on-site construction. Advanced BIM tools help in revisions management

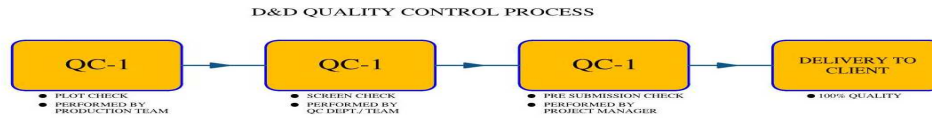


## Process we follow

We have a standard BIM Process, which has been prepared, based on our experience & expertise, which we follow for all the Site Utilities projects, unless the project has other requirements. Below is a simple flow chart, which explains the process in detail.



## Quality control



The main objective of the quality control (QC) process is to detect errors and rectify it. Ensuring quality is a team effort which is led by a highly qualified and experienced MEP manager for Coordination and Quality Control. The entire QC process is handled in three phases

### Quality Check – 1

The model check is done by comparing with the original contract documents through Team Member.

following Clashes (Old/New), Elevation, Routing, Fittings, etc.

### Quality Check – 2

Team performs a more detailed comparison of Specific Checklist is prepared to review/check the deliverables and main objective check the

### Quality Check – 3

The Project Manager conducts the pre-shipment check before sending them to the client

## Why Design and Drawing Solution

### Communication

Our team is available to clients through a number of communication channels including:

3. **Email** for reports and interactions.
2. **Telephonic/WhatsApp** communication
4. **ZOOM Meeting** for online meetings, presentations and conversations.
5. **Dropbox** storage for FTP process.

### Delivery in Time

Our skilled team of professionals can provide quick turnarounds on complex projects. D & D has successfully completed several large-scale commercial projects across multiple verticals including. Health Care, Airports, University Centers, Data Centers, Retail Centers, Convention Centers, Commercial, Industrial and Residential Projects

### Skilled and Efficient Team Members

All team members are specialize in the latest BIM software's Revit Software Suite (Revit, Revit MEP, Revit Architecture and Revit Structure), NavisWorks, Autodesk Fabrication ,AutoCAD MEP .

### Knowledge in US and World Standard BIM execution process.

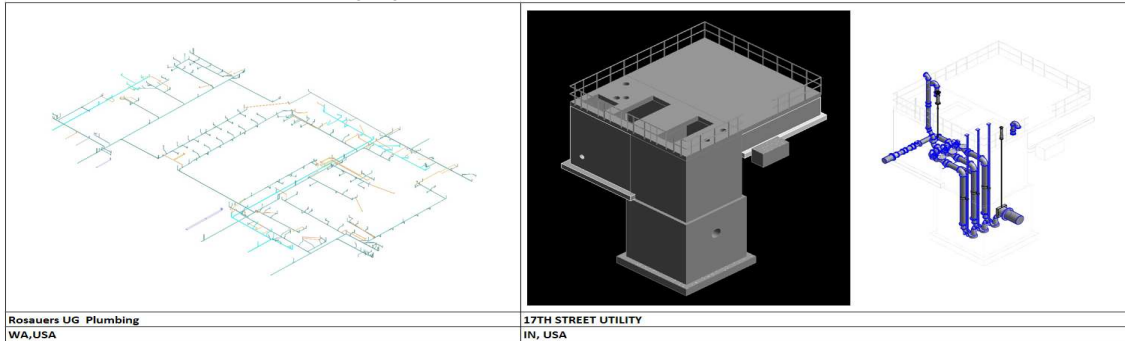
Our top management is having more than 10 years of experience in BIM execution US process and standards which leads the timely completion of complex projects.

### Project Cost Optimization

D&D delivered a high quality product within a short timeline and provided coordination support. This allowed for a faster and more cost effective project completion.

## Project Snaps

We have already delivered more than 100 BIM/CAD projects throughout the world basically in countries like USA, UK, Australia and New Zealand & India. Below are latest project details of BIM/CAD services for Site Utility System.



Rosauers UG Plumbing  
WA, USA

17TH STREET UTILITY  
IN, USA

## Contact us

### Registered Office, Mumbai

### DESIGN AND DRAWING SOLUTION



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- 421203, Thane, MH, INDIA

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### Channel Partner-USA

### Engineering Enviorement



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### Barker Blue Inc



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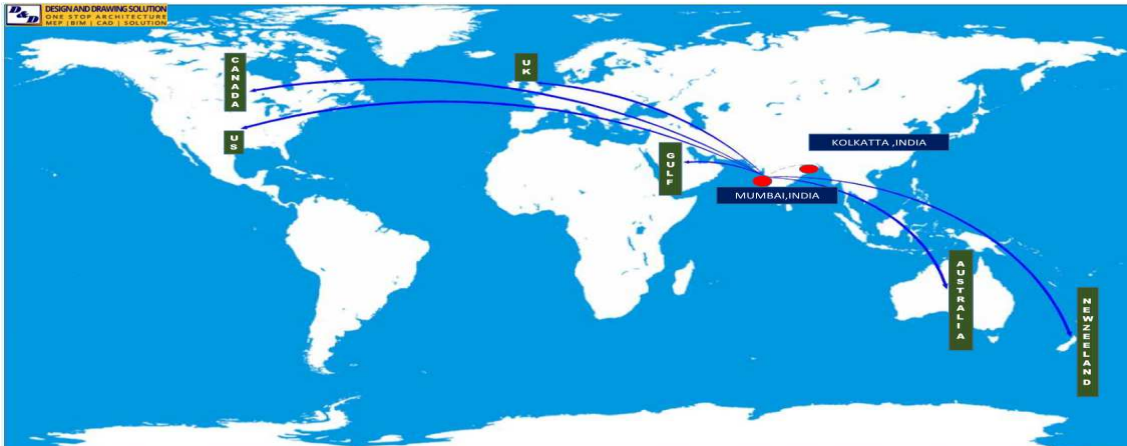
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