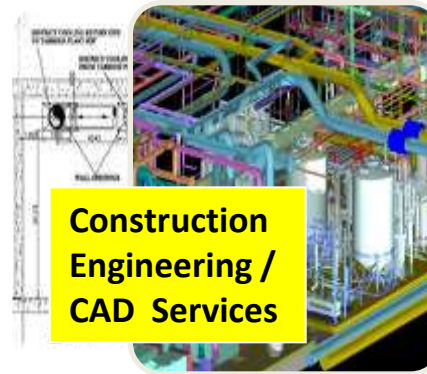


Services Overview



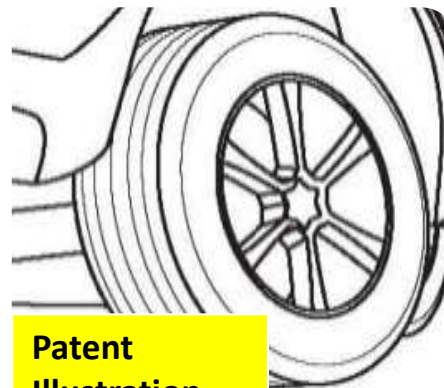
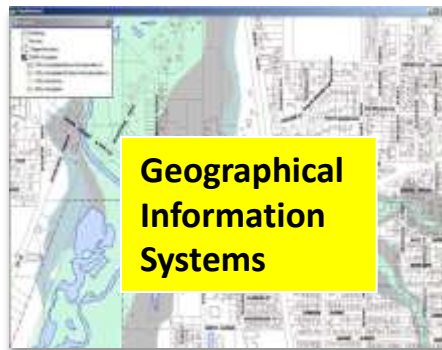
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216-261-7500

**2D CAD Conversions
Paper to CAD**



**Construction Markups
Consultant Drawings
Coordinated Drawings
As -Builts
Steel Structural Detailing
3D Renderings
BIM (Building
information modeling)**

**Land Mapping
Marine Charting
Data Conversion
Data Migration**



**Utility Patents
Design Patents
Chemical Patents
Plant Patents
Trademarks / Logos**

Services offered :

2D CAD conversions / Paper to CAD

Architectural

Structural

Electrical

Plumbing

P&ID's

Marine

Mechanical designs (Machine parts)

All 100% dimensionally accurate Manual AutoCAD Drafting

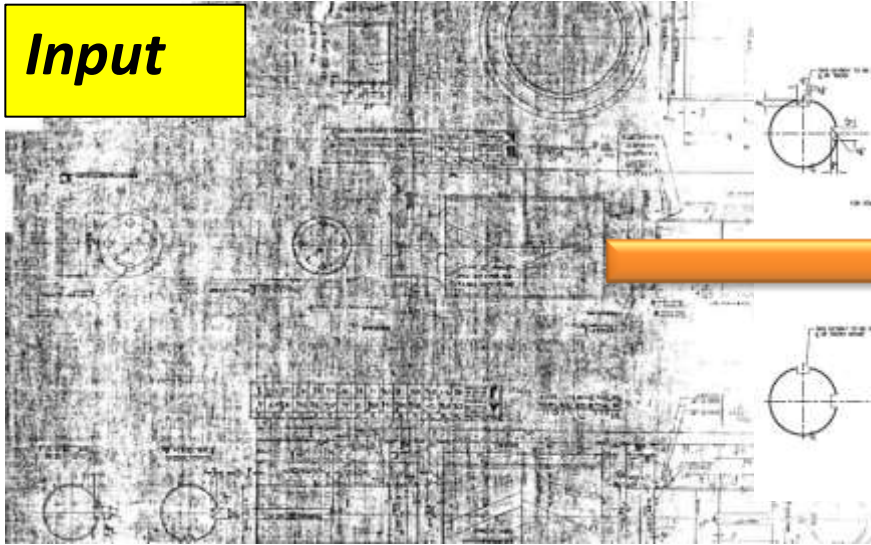


2D CAD – Paper to CAD conversions

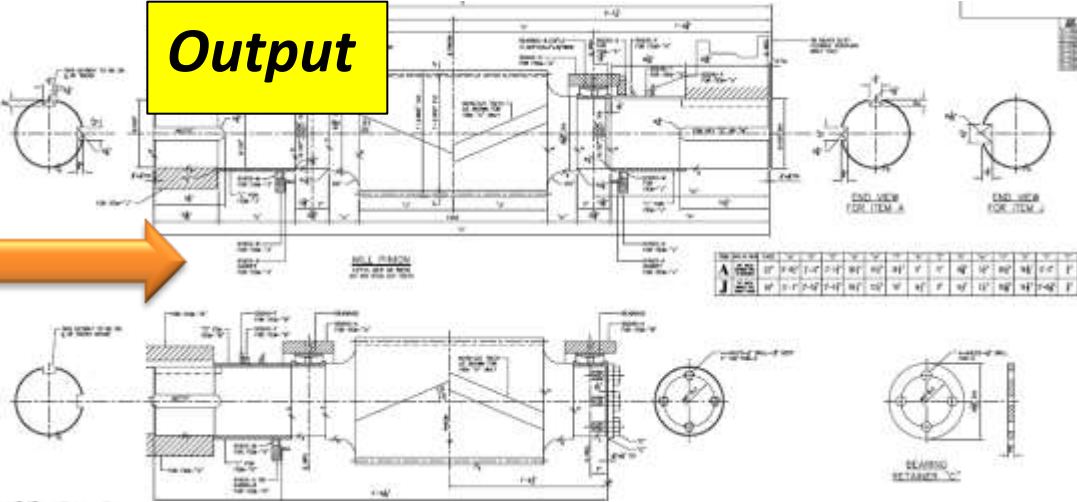


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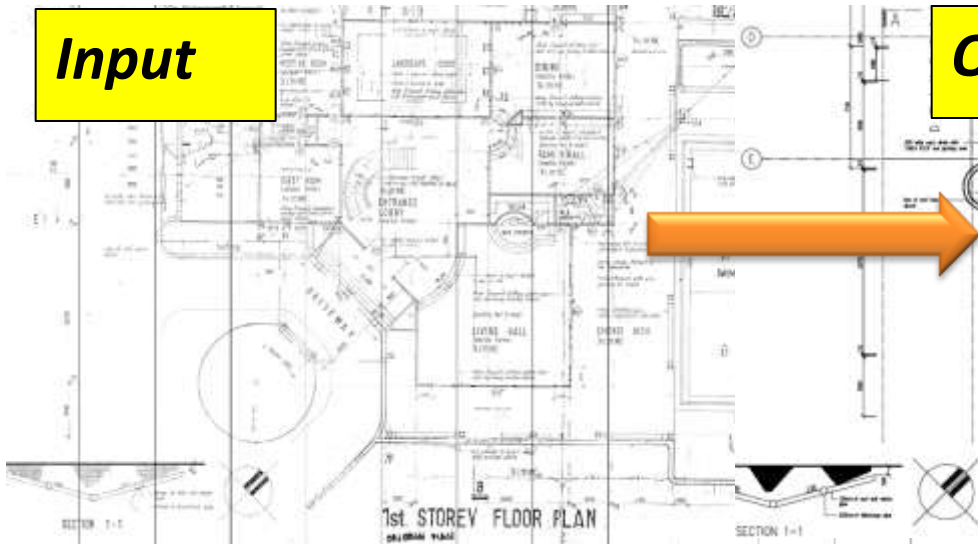
Input



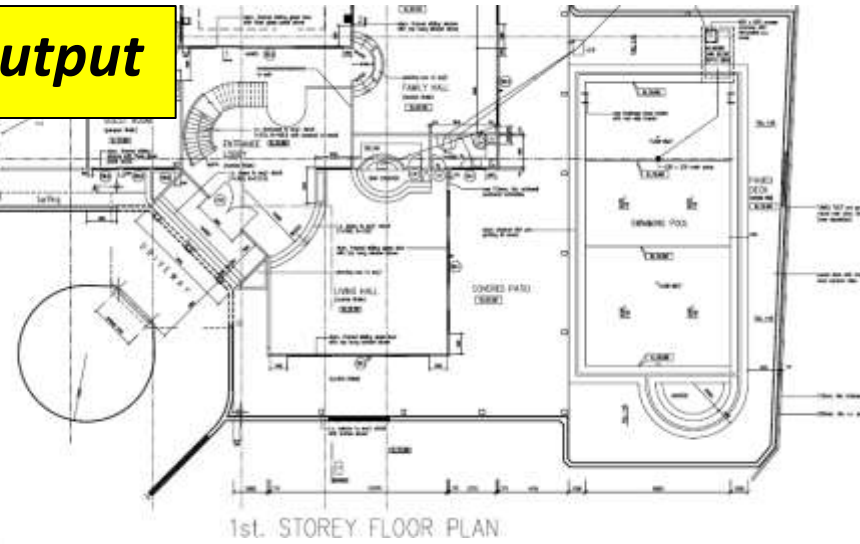
Output



Input



Output



Services offered :

- 2D Construction Markups
- 2D Consultant Drawings / Markups
- 2D Working / Shop Drawings with Markups

HVAC layouts and detailing

Mechanical layouts and detailing

Electrical layouts and detailing

Plumbing layouts and detailing

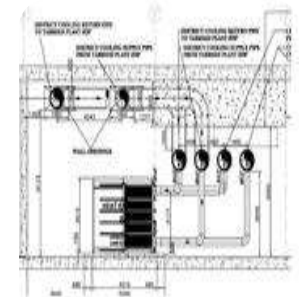
Piping & plumbing coordination drawings

Architectural

Structural

P&ID's

- 2D As Builts / Record Drawings
- 2D xref cleaning / binding
- 2D Layer settings , paper space Layout setup, title block setup ..etc.

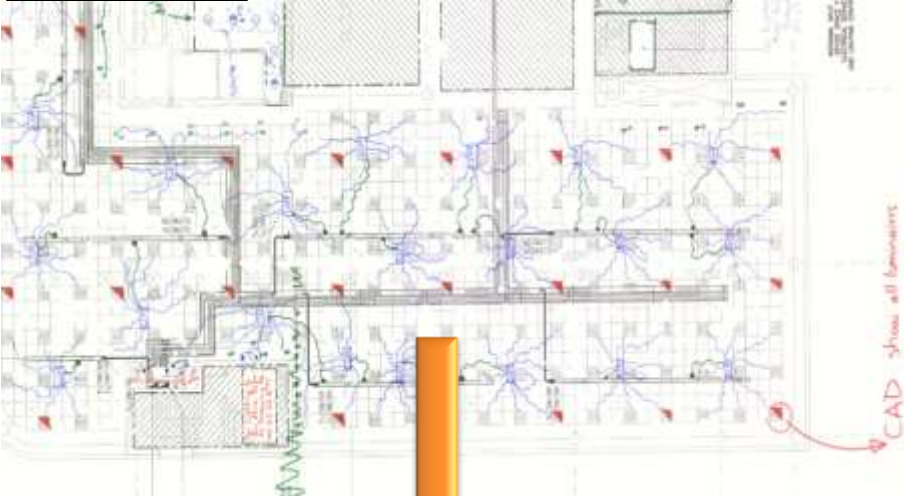


2D CAD – Arch , Structural , MEP Markups and As-Builts

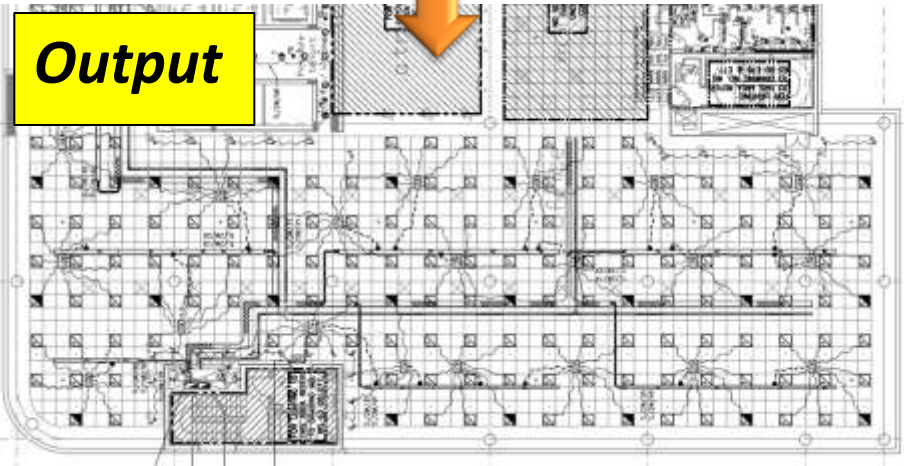


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216-261-7500

Input



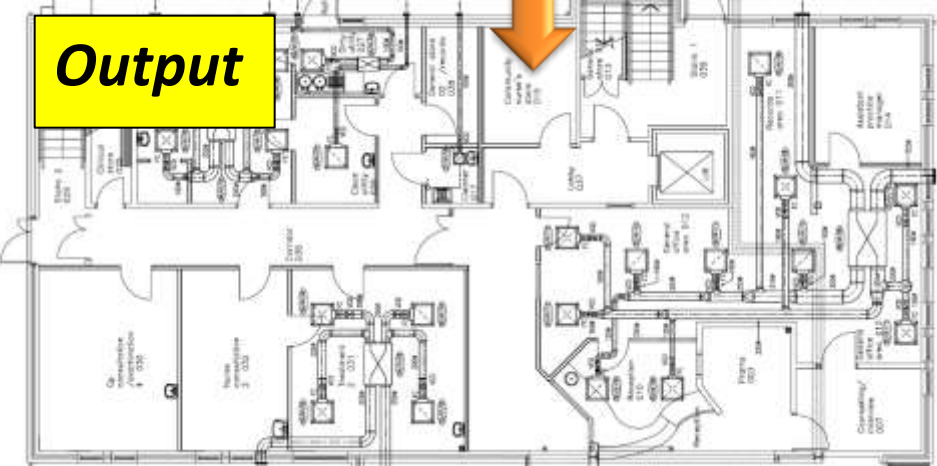
Output



Input



Output



Services offered :

- **B & W floor plans** : Simple sale plans for single/multiple family /site plan in vector based software for easy scalability to suite various print/web sizes.
- **Color floor plans** : Color sale plans for residential/retail using architect/developer's color schemes to suit overall marketing package 2D As Builts / Record Drawings
- **Color Floor plans with furniture & options** : Color sale plans for residential/retail using architects furniture layout for more elaborate explanation of floor plans.
- **Interactive floor plans** : Flash based applets to explain various options for single family homes.



Samples



Building Information Modeling (BIM) support services at Northeast Blue empower your firm, enhancing your "Intelligent" production capabilities in order to reduce project cost, increase profitability, save time, and limit the potential for conflict between the disciplines.

Building Information Modeling: Create an "intelligent" 3D virtual information model of your architecture or interior project using sketches, CAD drawings, photographs, and renderings. This model synchronizes inputs from all participants in the BIM process: architects, engineers, contractors, developers, manufacturers and owners.

Embedding Information and Model Management: Embed and extract project information-including cost estimation, quantities schedules, area charts, material specifications, and phasing schedules-at different stages of the project, ultimately culminating in Building Lifecycle Management through BIM.

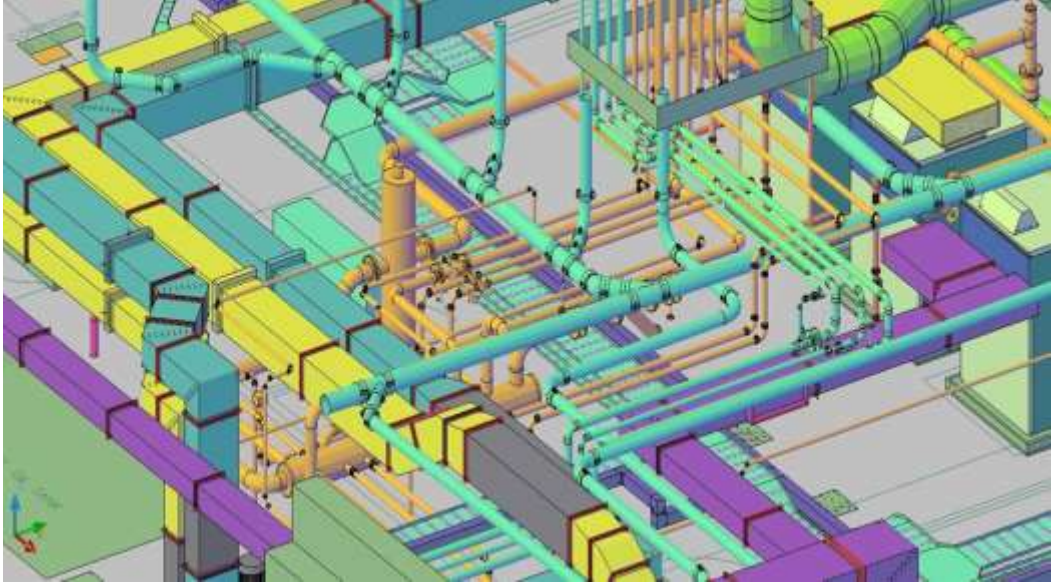
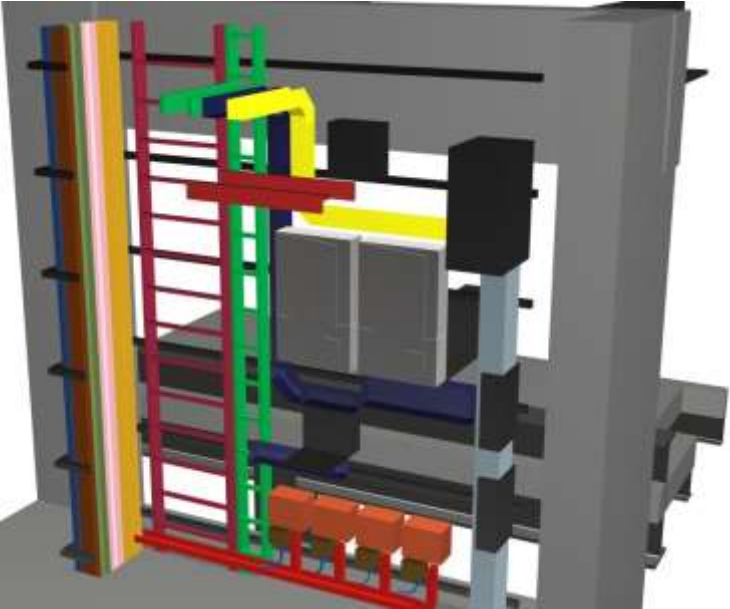
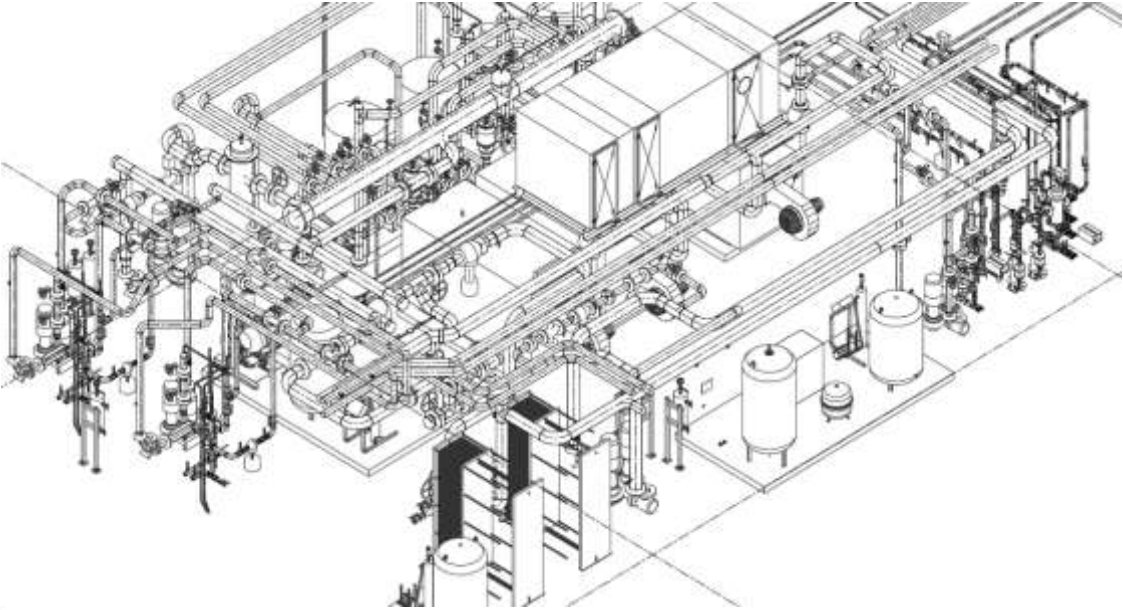
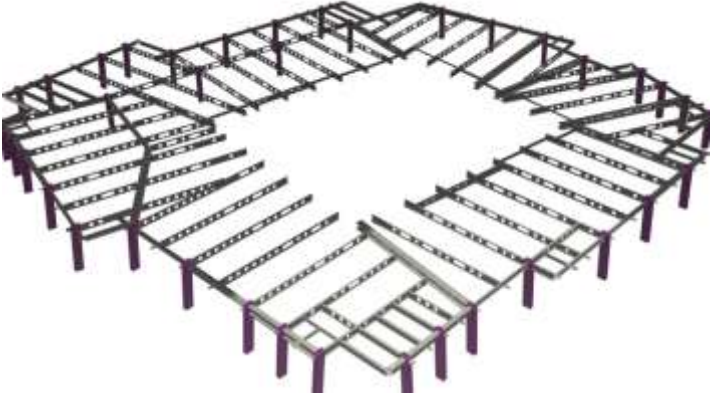
Design Coordination, Conflict Detection and Risk Mitigation: We assist you with the virtual modeling of various building disciplines, helping you to identify conflicts and ensure a fully coordinated project design model. The "intelligent" 3D database is also a sophisticated and "reliable" design change management tool that can reduce change orders and help you save time and money.

3D Visualization Support: Create partial or complete project models for renderings, animation, and energy analysis. Models can also be used to visualize complex building geometry, interior spaces, and construction sequencing.

Content Creation and Interoperability Support: Create "intelligent" parametric libraries for various building products, and providing CAD interoperability support for engineering coordination.



Samples



A point cloud is a set of vertices in a three-dimensional coordinate system and typically are intended to be representative of the external surface of an object.

Point clouds are most often created by 3D scanners. These devices measure in an automatic way a large number of points on the surface of an object, and often output a point cloud as a data file. The point cloud represents the set of points that the device has measured.

While point clouds can be directly rendered and inspected, usually point clouds themselves are generally not directly usable in most 3D applications, and therefore are usually converted to polygon or triangle mesh models, NURBS surface models, or CAD models through a process commonly referred to as surface reconstruction.

Point Cloud/Laser scan is the latest world technology to visualize/analyze the as built and in another way to get BIM information.

Point cloud applications are Civil engineering, Transportation & Surveying, Construction (Architectural & Structural), as built of Industrial Plants & Facilities, Forensic etc

Creation of 3D Plant , equipment models from the point cloud data.

Creation of 2D plans, elevations , sections for space planning and capturing of Historical Buildings.

Capturing of large infrastructures like bridges, old heritage buildings in 3D , which will used for restoration planning and reverse engineering ..etc.

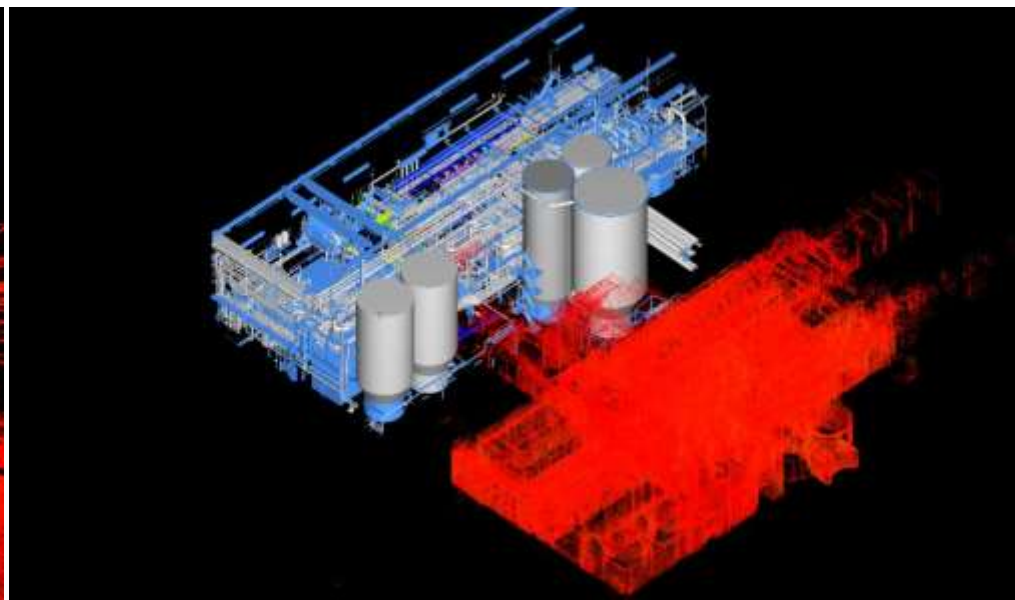
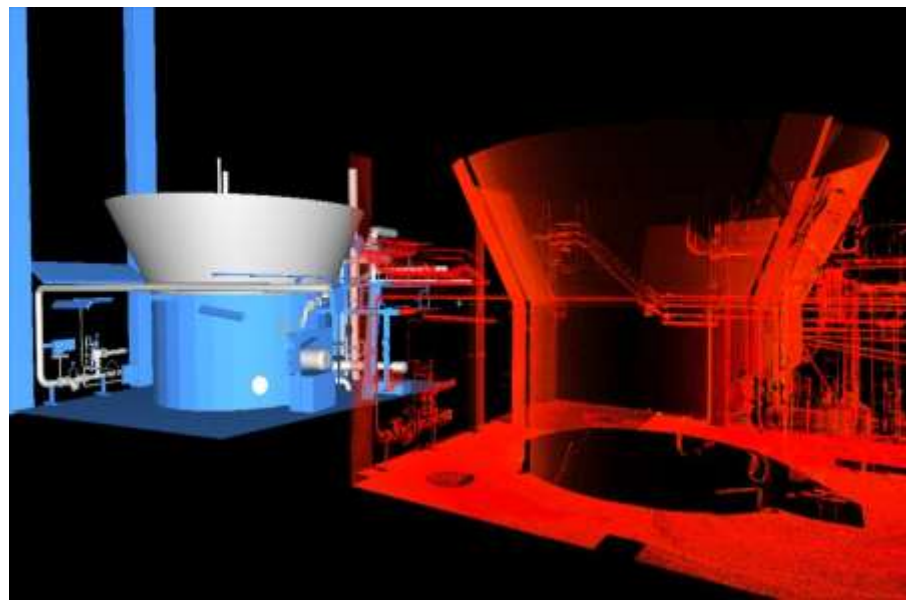
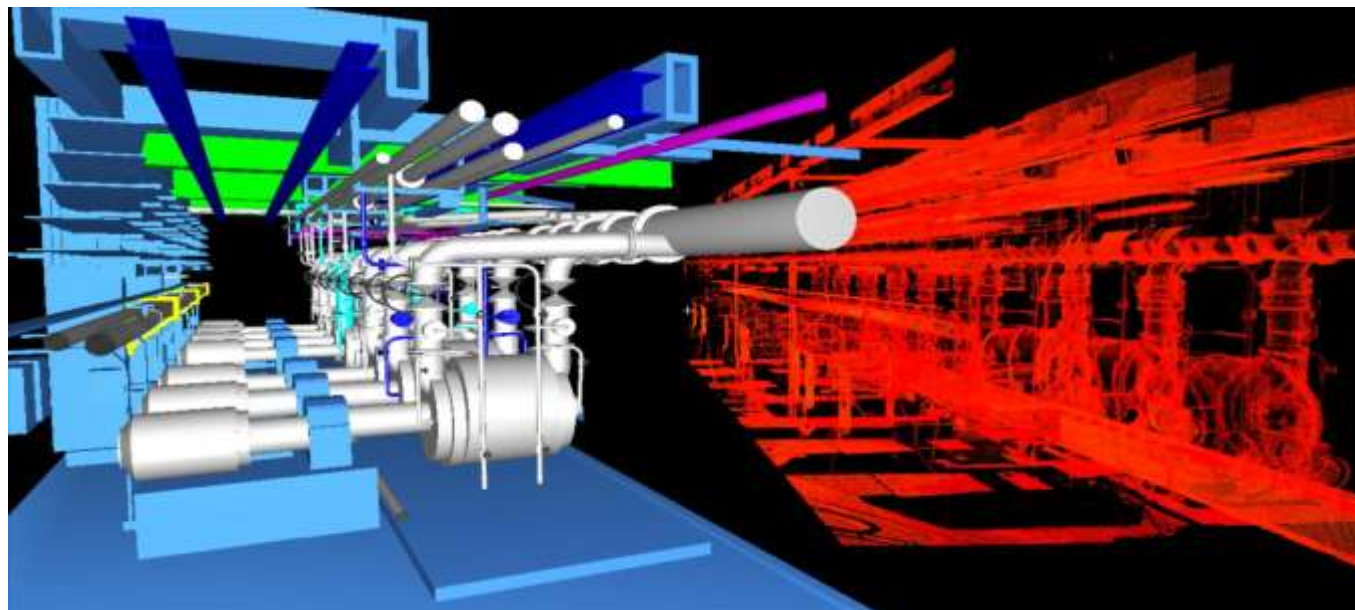


Point Cloud



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Samples



Services offered :

- **Data Capture / Conversion**
- **Data Migration**
- **Utility Mapping**
 - Water**
 - Sewer**
 - Electrical**
 - Storm**
 - Telecom**
 - Gas**

- **Parcel Mapping**
- **Remote Sensing**
- **3D mapping (urban 3D models along with Digital Terrain models)**
- **Marine Charting (Electronic Nautical Charts) for Sea and Lake Navigation**





Northeast Blueprint provides comprehensive GIS services using industry standard GIS products from **Autodesk, ESRI and Microstation.**

Digitization Services

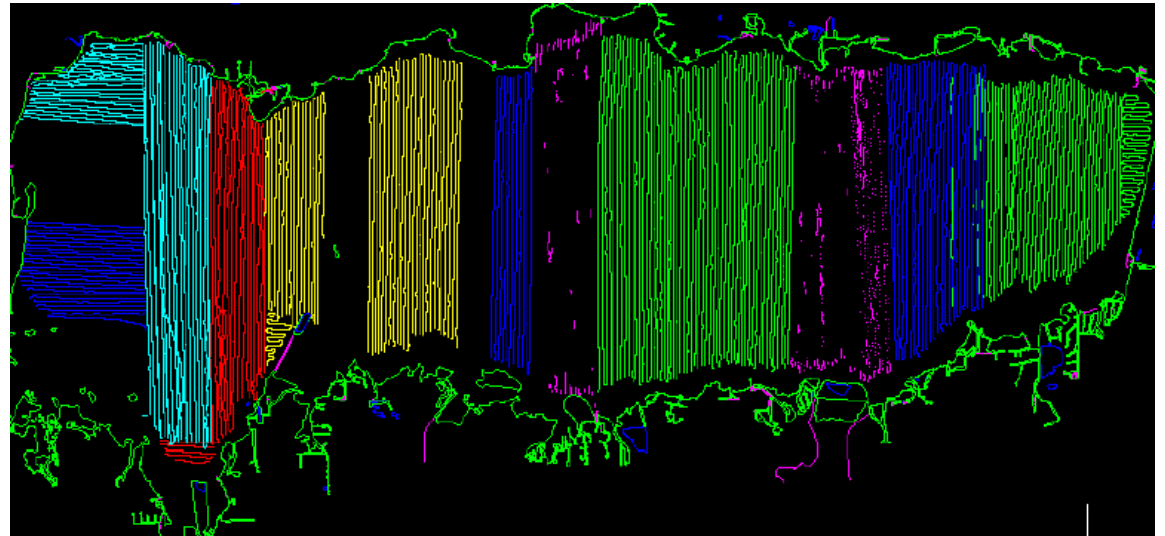
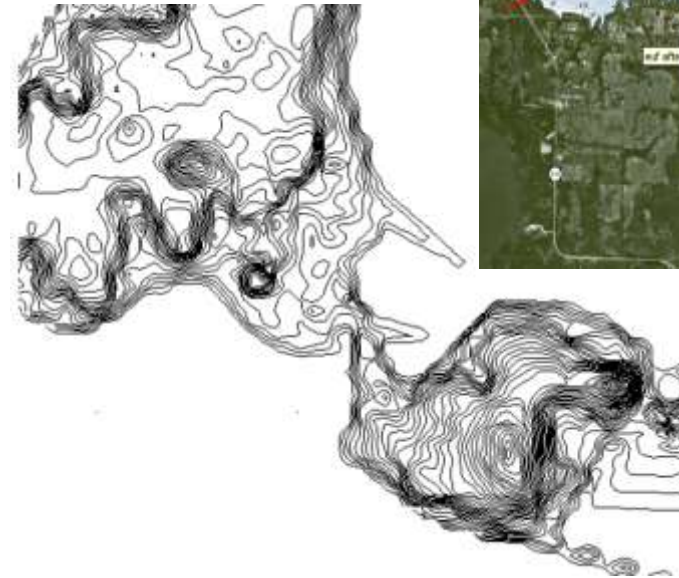
- Raster to Vector Conversion Services
- Automated Mapping / Facility Management (AM/FM)
Water / Sewerage / Gas / Electrical / Telephone -- Utility Mapping
- Raster scanning, archival and document retrieval Systems
- Map Conversion Services
- GIS Database Development & Capture
- Cartography
- Thematic Mapping Services
- Well-log digitization



Northeast Blueprint's can provide services within the Marine environment such as preparation of Bathymetric charts, compilation of Nautical charts, Digital conversion of Nautical charts, and preparation of Electronic Navigation charts (ENCs) conforming to International Hydrographic organization (IHO) S-57 Specifications. Following is the list of some of the services provided in this area.

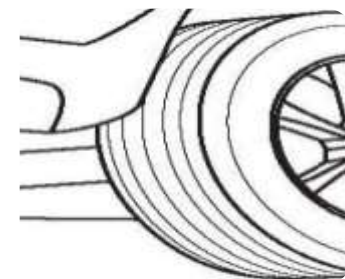
- Digitization and compilation of Nautical charts
- Digital Conversion of paper charts for publication of paper charts
- Digital Conversion of paper charts for production of ENCs
- Updating of ENCs
- Preparation of coastal zone management charts
- Integration of Hydrographic and Topo data
- Customization of ENC data sets
- S-57 ENC Production
- Geospatial Data Conversion
- Integration and Output of Field and Smooth Sheets
- Updating and Maintenance of Chart Portfolios
- Quality Control and Assurance Systems
- Bathymetric Data Processing

Samples



Services offered :

- **Utility Patents**
- **Design Patents**
- **Chemical Patents**
- **Plant Patents**
- **Trademarks / Logos**



Samples

10/14

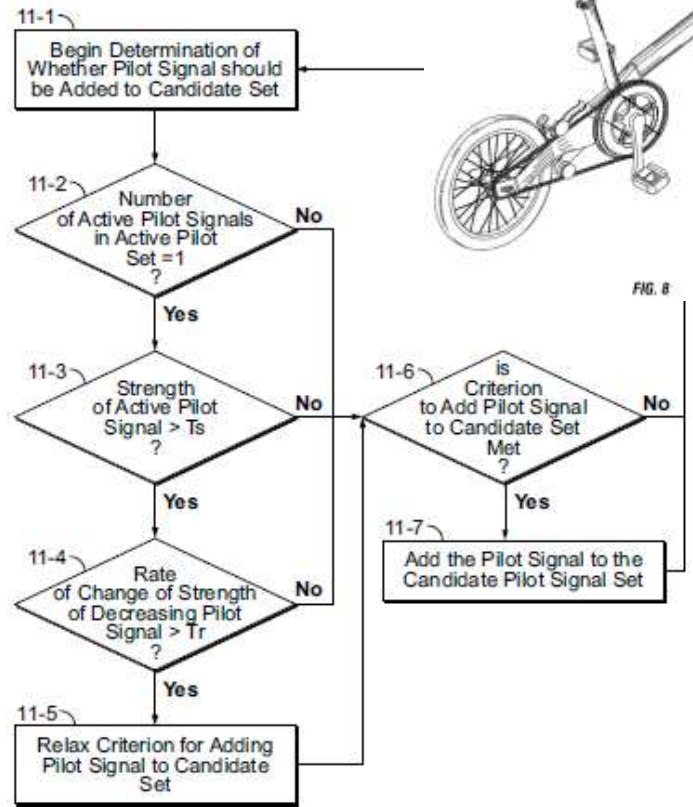
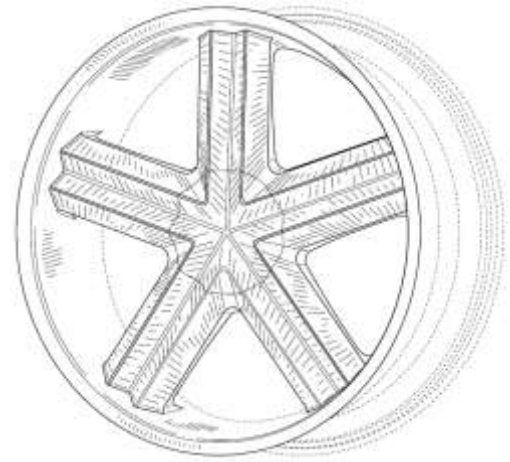
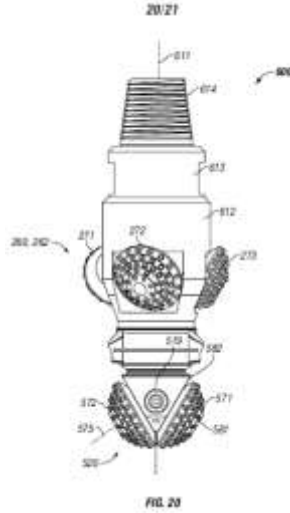


Figure 11

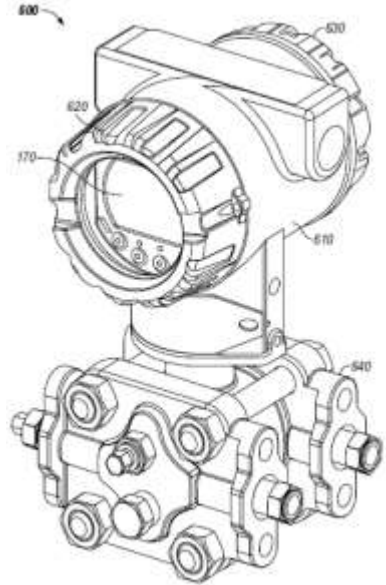


FIG. 8

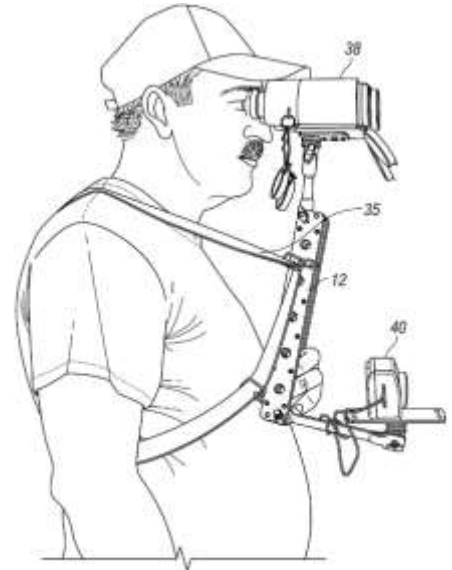


FIG. 9