



JERICHO LOGISTICS COMPLEX

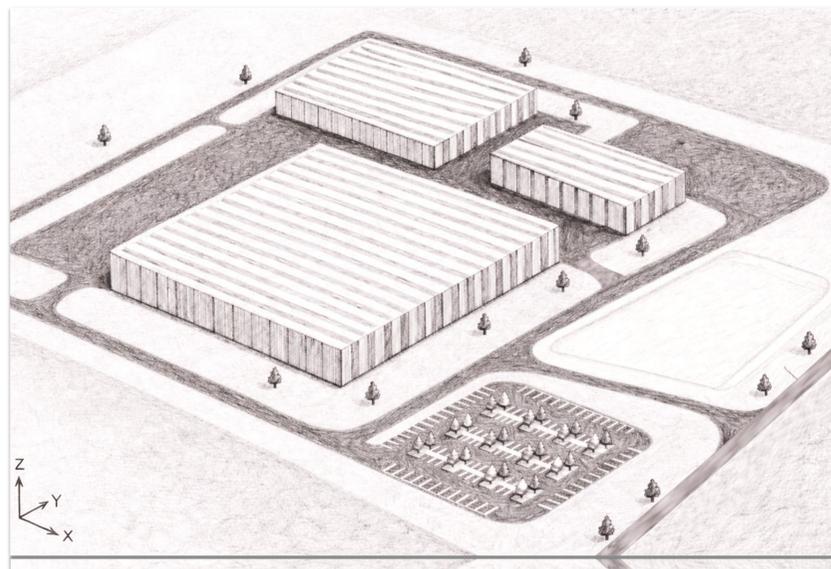
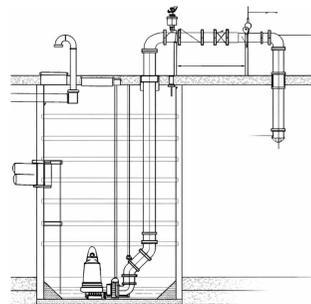
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Abstract

Multidisciplinary civil-engineering design for the Jericho Logistics Complex. Three buildings (~22k, 150k, 50k sf), paved circulation/loading, and a stormwater system. Includes geotechnical, pavement, structural, parking, and hydraulic analyses using Civil 3D, Excel, and StormWise(TR-55). Design to include cost estimate and construction schedule.

Objective

Deliver a complete civil design for a high-volume logistics complex including geotech, structural, pavement, drainage, transportation, utilities and sanitary sewer lift station.

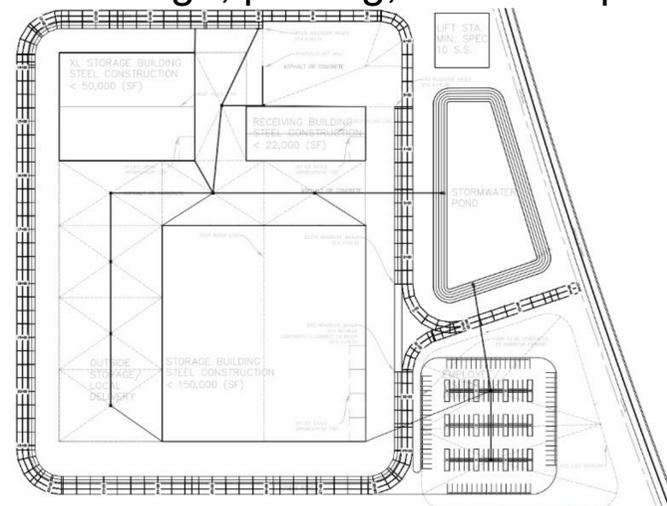


Site & Features

Location: Shoal River Ranch industrial district, Jericho Road, Crestview.

Buildings: (1) Receiving (~22k sf), (2) Primary Storage (~150k sf, 40 ft clear height), (3) Oversized Storage (~50k sf).

Features: Internal circulation, truck bays, outside storage, parking, detention pond



Data & Standards

Site data: Topography, utilities, geotechnical data, economic data.

Tools: Civil 3D, Excel, StormWise (TR-55).

Standards: AASHTO, AISC 360, ACI 318, ITE, FDOT standards, TR-55, Okaloosa County LDC



Methods

Soil borings, groundwater measurement, and lab testing established subsurface conditions. We developed pavement and foundation alternatives, modeled stormwater and sized a dry-detention pond for the 25-year, 24-hour event, and used Civil 3D to produce grading, truck swept paths, and utility and lift station design. ITE trip generation and LDC was used to determine warrant for turnlane on main road and traffic impact fee. Steel buildings were designed per LRFD/AISC and IBC using geotechnical input and LRFD loads to size frames, bracing, and connections. AutoTURN used for roadway.

Conclusions

Site location selection, geotechnical data and detailed analysis and design using applicable standards and tools such as Civil 3D, Excel, and StormWise resulted in a constructible design, that would facilitate industrial growth in Okaloosa County and be eligible for financial incentives for project funding.



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