LOCAL CONDITIONS

The construction site is located in the town of Warrenton, Virginia, across the street from the Fauquier High School.

Typically in the local area concrete is used to for the structural systems, however the owner and architect decided for the majority of the structural system to be steel with a



composite deck floor system.

TOWN OF WARRENTON

Construction congestion around the project should not be an issue at all due to the fact of it being located in a large field with no close neighbors. Contractors have the



PROJECT LOCATION

option of using sea containers for storage around the large open site and there is a variety of areas available for steel staging. The mobile crane that is used for the erection of the steel will have no problem navigating through the site also as a result of the open space. With regards to site traffic and parking, one of the parking lots and access roads were paved early to provide parking for the construction workers and will also allow for a clear route for site deliveries. Pedestrian traffic

is not an issue because of the remoteness of the site. In the final months of the project the remaining parking lot will be paved along with an access road connecting route 211 to the Warrenton Aquatic parking lots and Old Waterloo Road. Waste from the project is being removed via dumpsters provided by Waste Management Inc. who is contracted through the general contractor

The soil at the site consists of three primary types. The first type is the top soil which is an average of 12 inches deep and will be removed and used later for grading. The second type of soil is silty/sandy clay and fine sandy silt. Because this soil has low plasticity it is considered to be suitable for structural fill. The last type of soil is "Greenstone" bedrock. This soil can be excavated easily in the top layers but may produce difficulties when excavating the competition pool areas because of the increased depth. This stone can be crushed and processed to 3" and mixed with soil fines in order to be considered suitable for structural fill and backfill.

SITE LAYOUT PLAN

The site plans will show that the site for the Warrenton Aquatic and Recreation Facility is favorable for all phases of construction. This is because the site is located in the middle of former recreational fields which provide the project with large amounts of open space for layout and storage. To illustrate this, the structural erection plan was highlighted to show how the project will be erected, which can be seen in Appendix A. As you can see in the plans, as well as the schedule, the construction is broken into zones, and then starting with the east of zone A, the structure will be set into place. It is important to note that while the erection of the last two zones do not appear to have total crane coverage, it is still possible for the steel to be set properly. This can be explained because the only major steel members that will need to be set in these two phases are the steel trusses that span the width of each building.

The structural erection drawings along with the schedule can be used as a tool to visualize how the building will be erected, not only structurally but through all phases of construction.