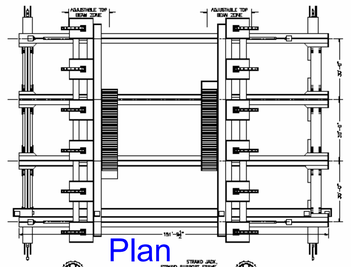
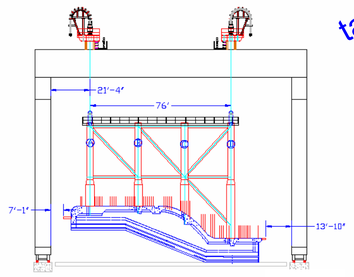
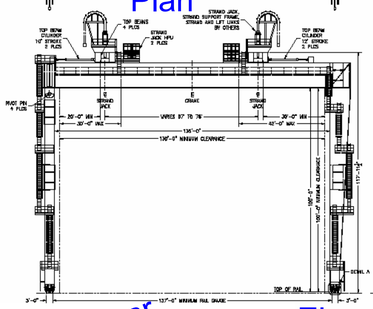
Olmsted Dam Construction Sequence

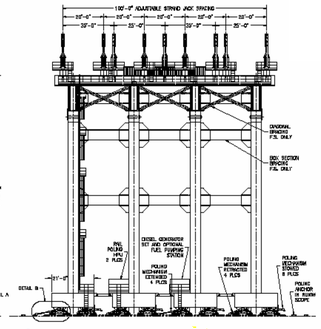
5000 Ton Super Gantry Crane
Lifts shells and carries them to cradle at position zero



Plan

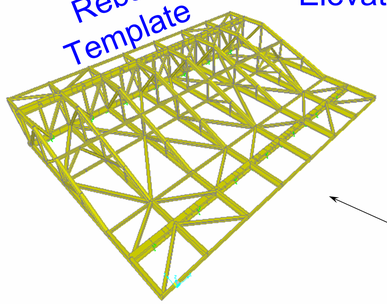




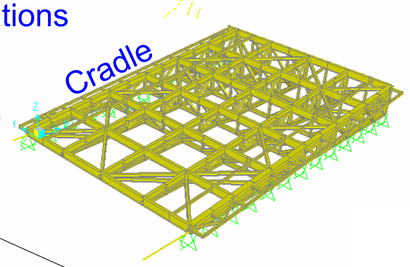


Elevations

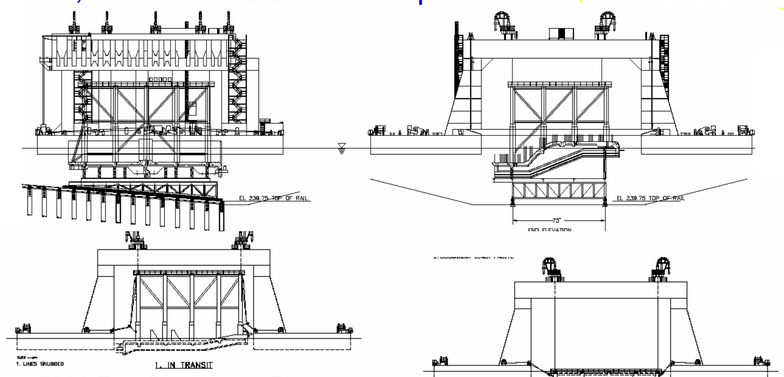
Rebar Template



Cradle

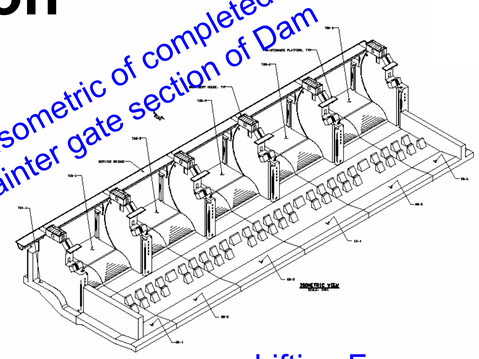


At position zero, rebar is assembled on the template, set onto the cradle, then shell is set on template and rebar connected to shell.

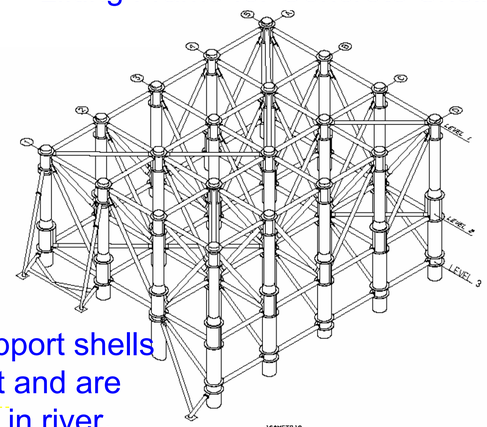


5000 Ton Catamaran Barge
Lifts Shells & Rebar from cradle/template and carries them to Dam Foundation for setting on the river bottom pile foundation.

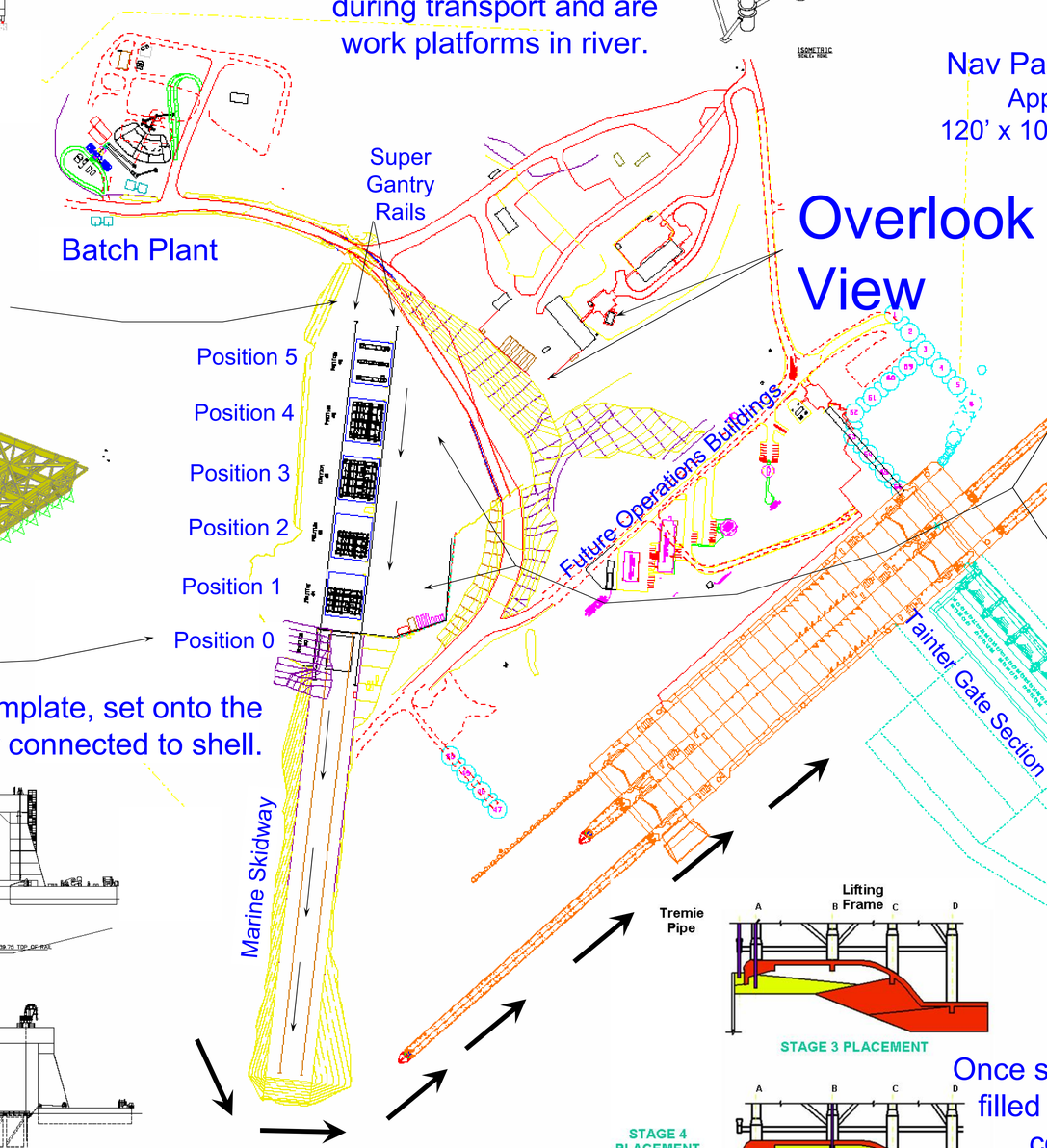
Isometric of completed tainter gate section of Dam



Lifting Frame for Concrete Shells

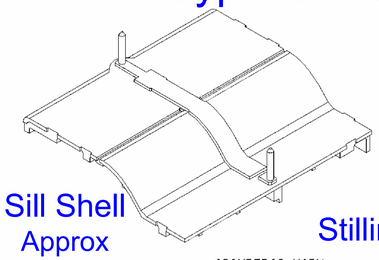


Lifting Frames support shells during transport and are work platforms in river.



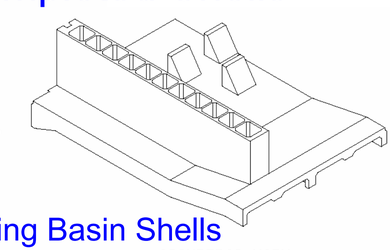
Overlook View

Typical Completed Shells



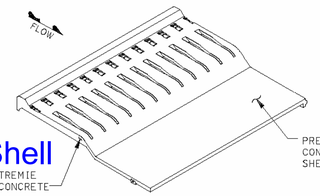
Sill Shell
Approx
125' x 102' x 30' H

ISOMETRIC VIEW

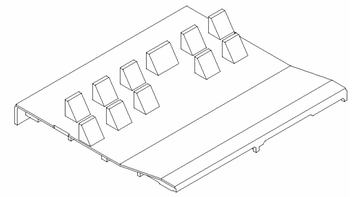


Stilling Basin Shells
Approx
125' x 102' x 30' H

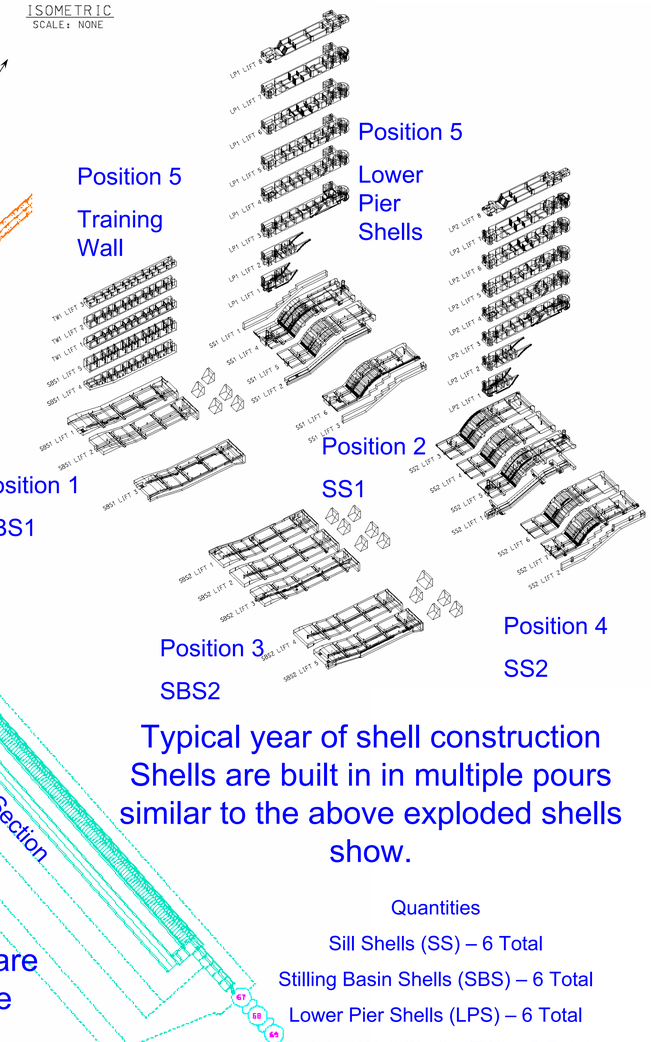
ISOMETRIC VIEW



Nav Pass Shell
Approx
120' x 104' x 14' H



ISOMETRIC VIEW



Typical year of shell construction
Shells are built in in multiple pours similar to the above exploded shells show.

Quantities
Sill Shells (SS) – 6 Total
Stilling Basin Shells (SBS) – 6 Total
Lower Pier Shells (LPS) – 6 Total
Training Wall Shells (TW) – 2 Total
Navigable Pass Shells – 12 Total

Once set, shells are filled with tremie concrete