**General Program Information**

Northeast Isometric View

**Technical Program Outline**

**local** - \texttt{Layer.new} creates a new light purple layer, "baffle."
local <- layer_new("baffle",ltpurple)

**for loop** - To draw the correct number of baffles into the flocculation tank Floctankscript2 enters a loop for the range 1 to baffletank1_num. In total baffletank1_num baffles will be drawn. Baffle origins and lengths are drawn from the 3*22 matrix located in the Inputs Program.

**baffle1_origin** - Determines the x, y and z coordinates of where the baffle "i" will be drawn from.

\[
baffle1\_origin <- baffletank1\_origin + p1
\]

\[
baffletank1\_origin =
\]
\[
\begin{align*}
\text{x: tank}\_\text{origin0} - \text{tank}\_\text{dim0} \\
\text{y: tank}\_\text{origin1} + \text{num}\_\text{tanks} \times (\text{tank}\_\text{dim1} + \text{tank}\_\text{thick}) + \text{floc}\_\text{dim1} + \text{wall}\_\text{dim1} \\
\text{z: tank}\_\text{origin2}
\end{align*}
\]

\[
p1 =
\]
\[
\begin{align*}
\text{x: baffletank1}\_\text{location}_i - 1,0 \\
\text{y: 0} \\
\text{z: baffletank1}\_\text{location}_i - 1,1
\end{align*}
\]

**baffletank1\_length** - Determines the length of baffle "i" from the 3*22 matrix located in the Inputs Program.

\[
baffletank1\_length <- baffletank1\_location_i-1,2
\]

**local** - Compiles the origin and baffle lengths calculated in the for loop to draw the correct number of baffles using the Lamina Program.

\[
local <- stack(local, lamina(baffle1\_origin, baffle\_amp, baffle\_width, baffletank1\_length, baffle\_thick, baffle\_period, baffle\_slope, baffle\_num, baffle\_col,
\]

\]

\]

\]

\]