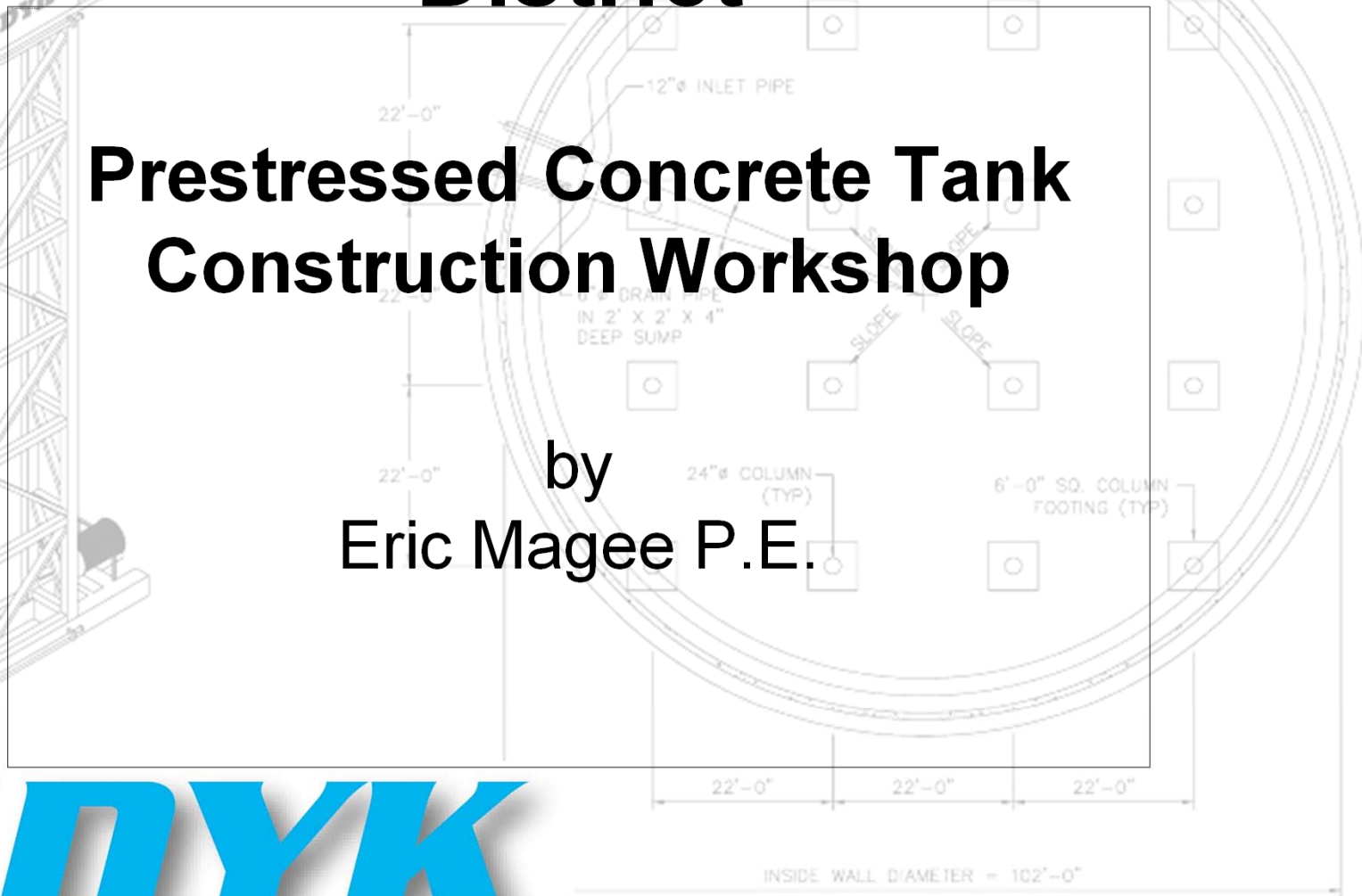
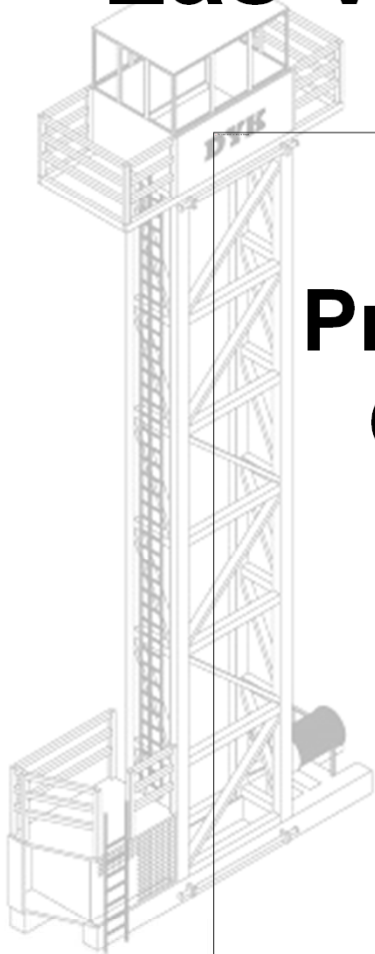


Las Virgenes Municipal Water District

Prestressed Concrete Tank Construction Workshop

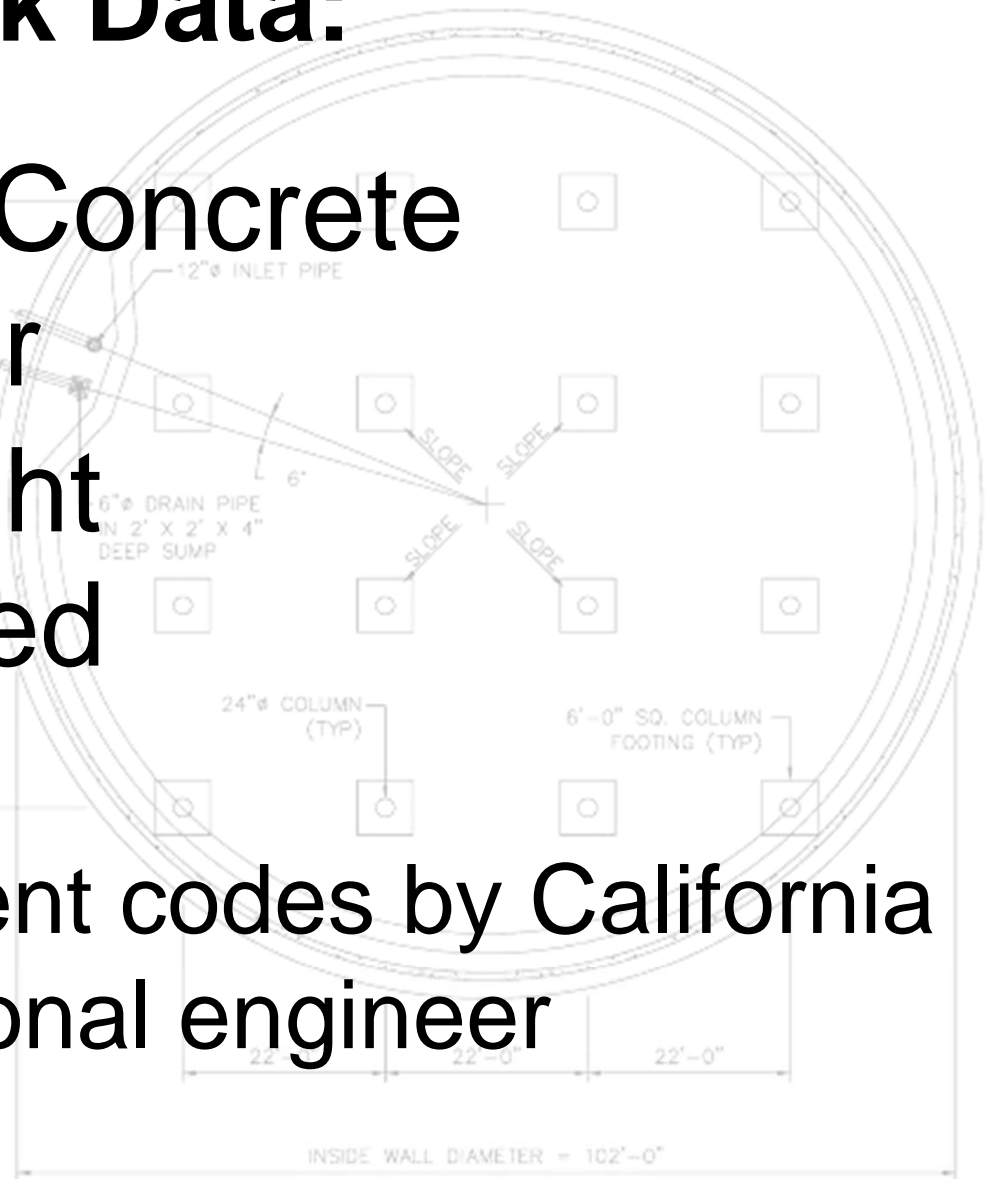
by
Eric Magee P.E.



Tank Data:

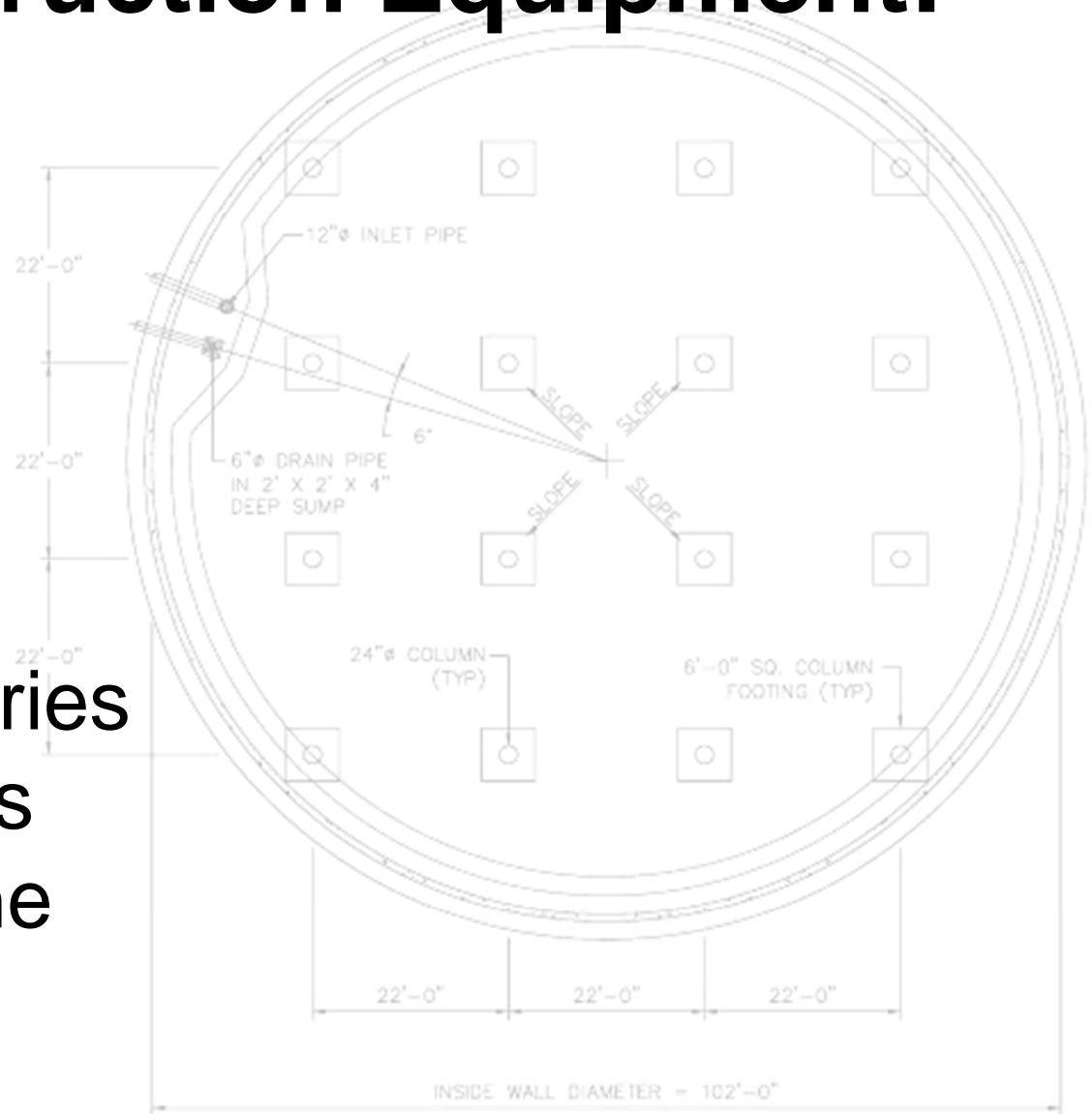
- Prestressed Concrete
- 170' diameter
- 30' Wall height
- Partially buried

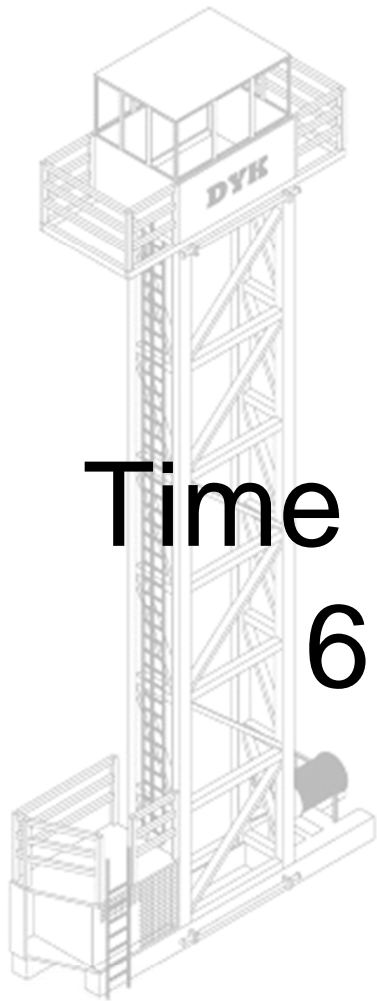
Designed to current codes by California licensed professional engineer



Tank Construction Equipment:

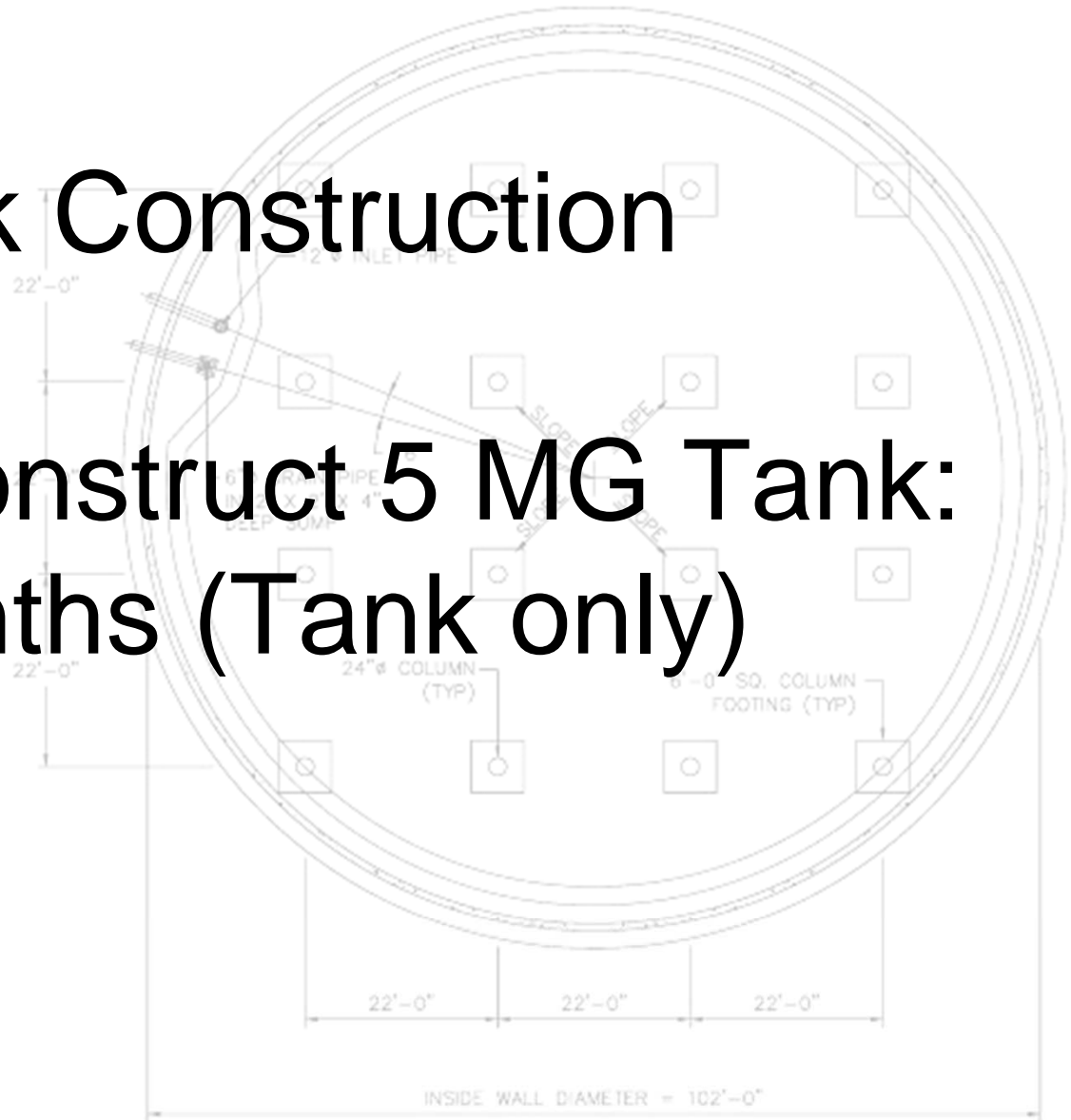
50 ton crane
Forklift
Personnel lifts
Compressor
Concrete pump
Ready mix deliveries
Material deliveries
Prestress Machine



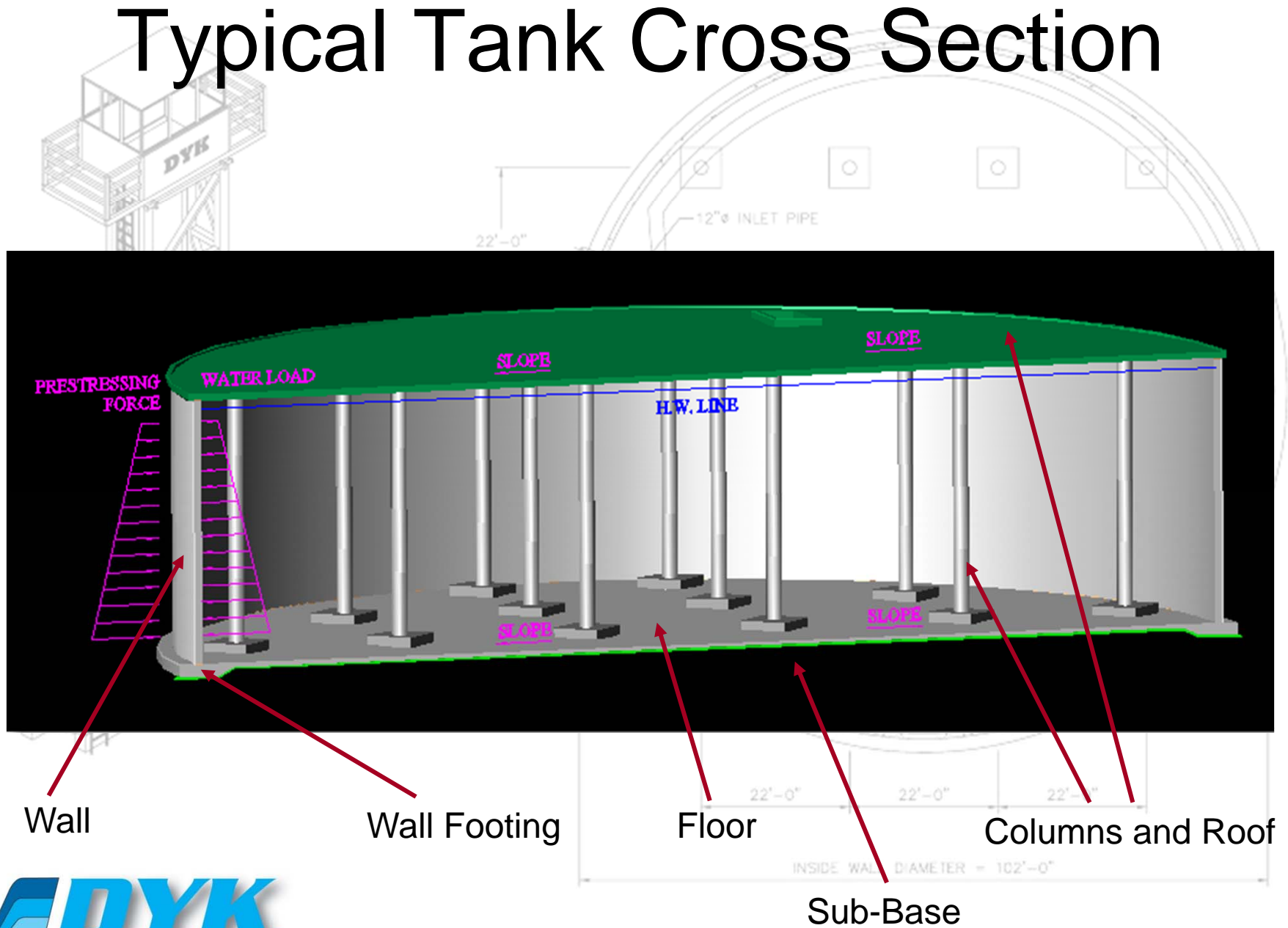


Tank Construction

Time to construct 5 MG Tank:
6 months (Tank only)



Typical Tank Cross Section

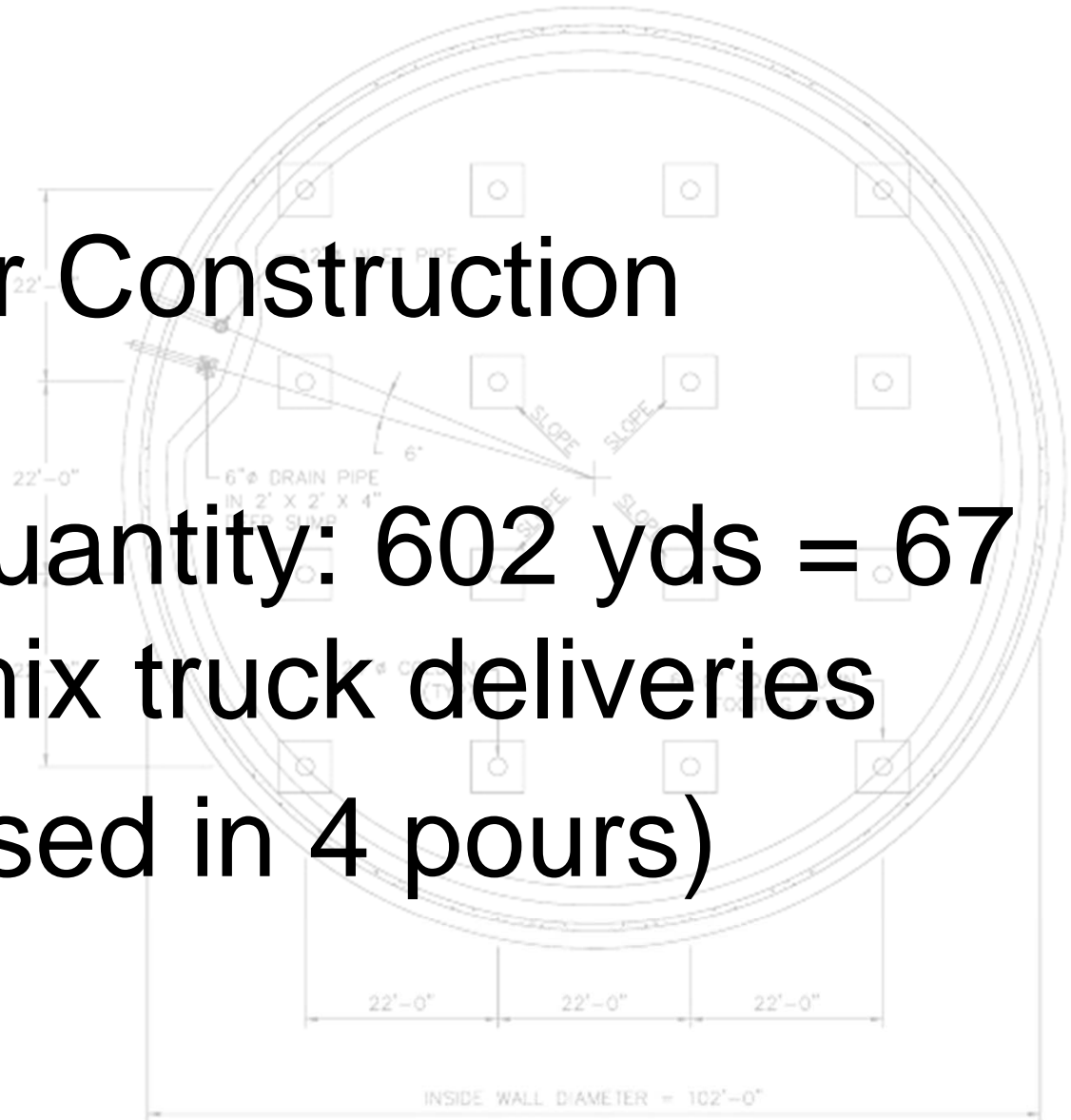
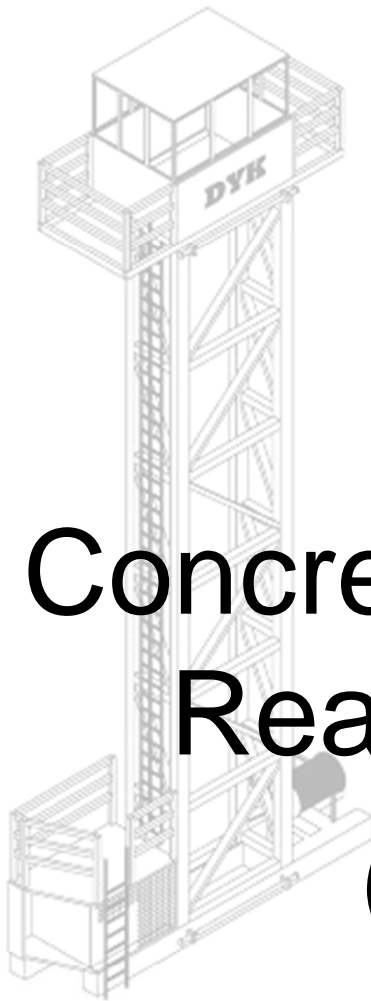




INSIDE WALL DIAMETER = 102'-0"

Floor Construction

Concrete quantity: 602 yds = 67
Ready mix truck deliveries
(phased in 4 pours)



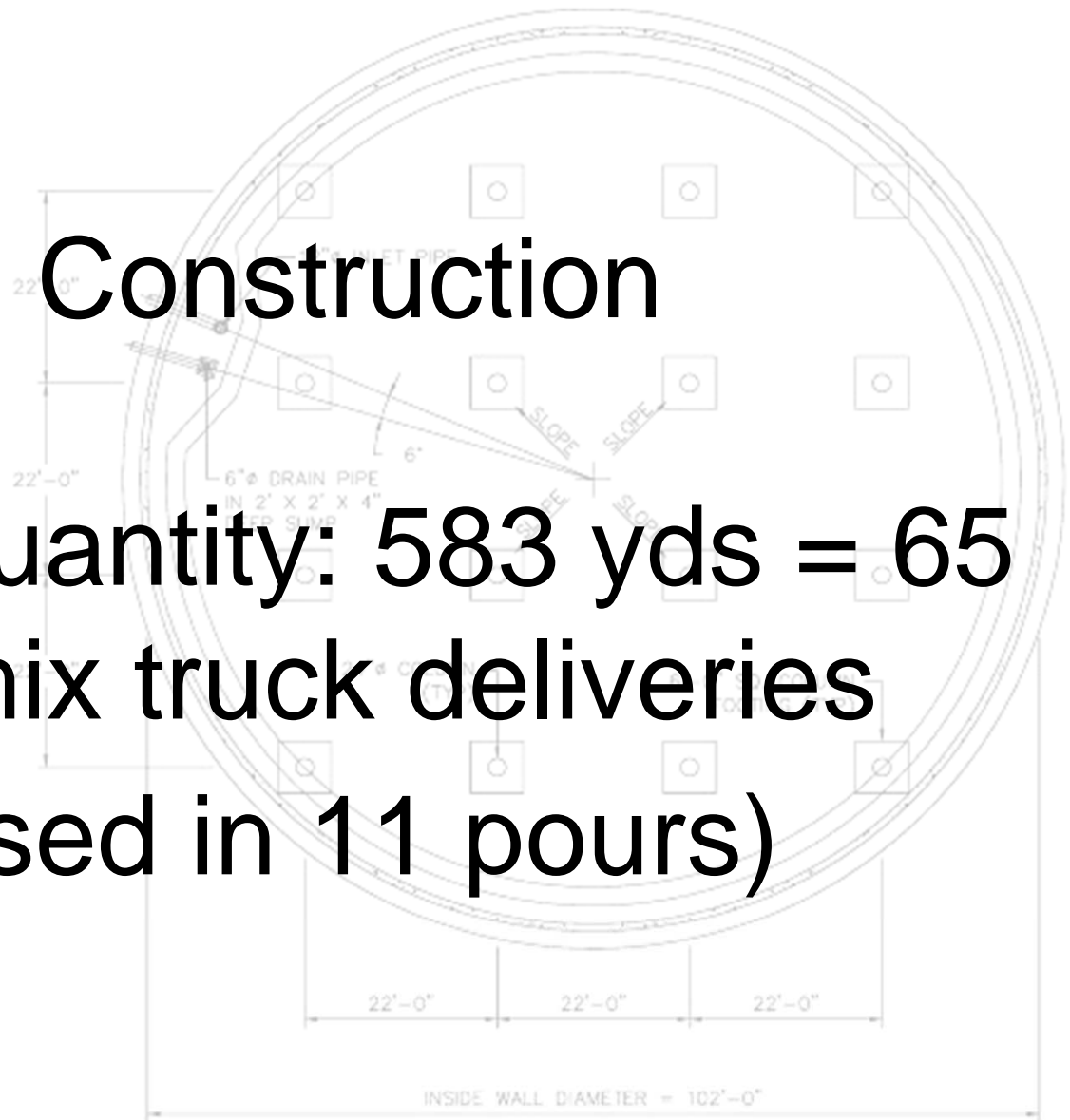
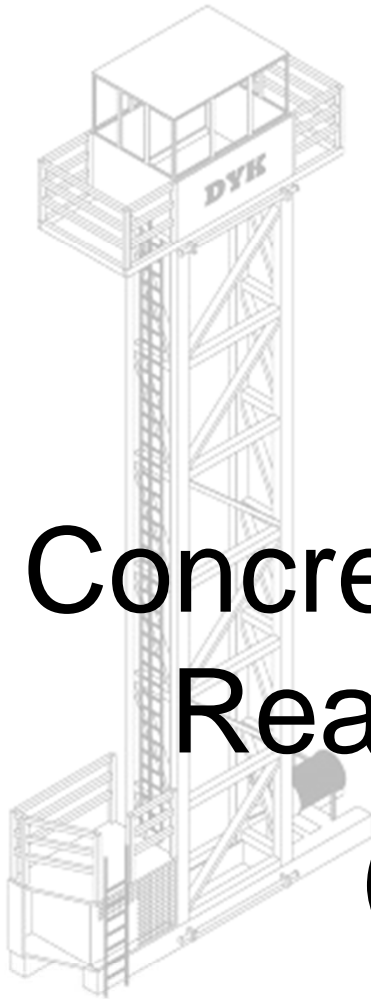
Cast-In-Place Construction



INSIDE WALL DIAMETER = 102'-0"

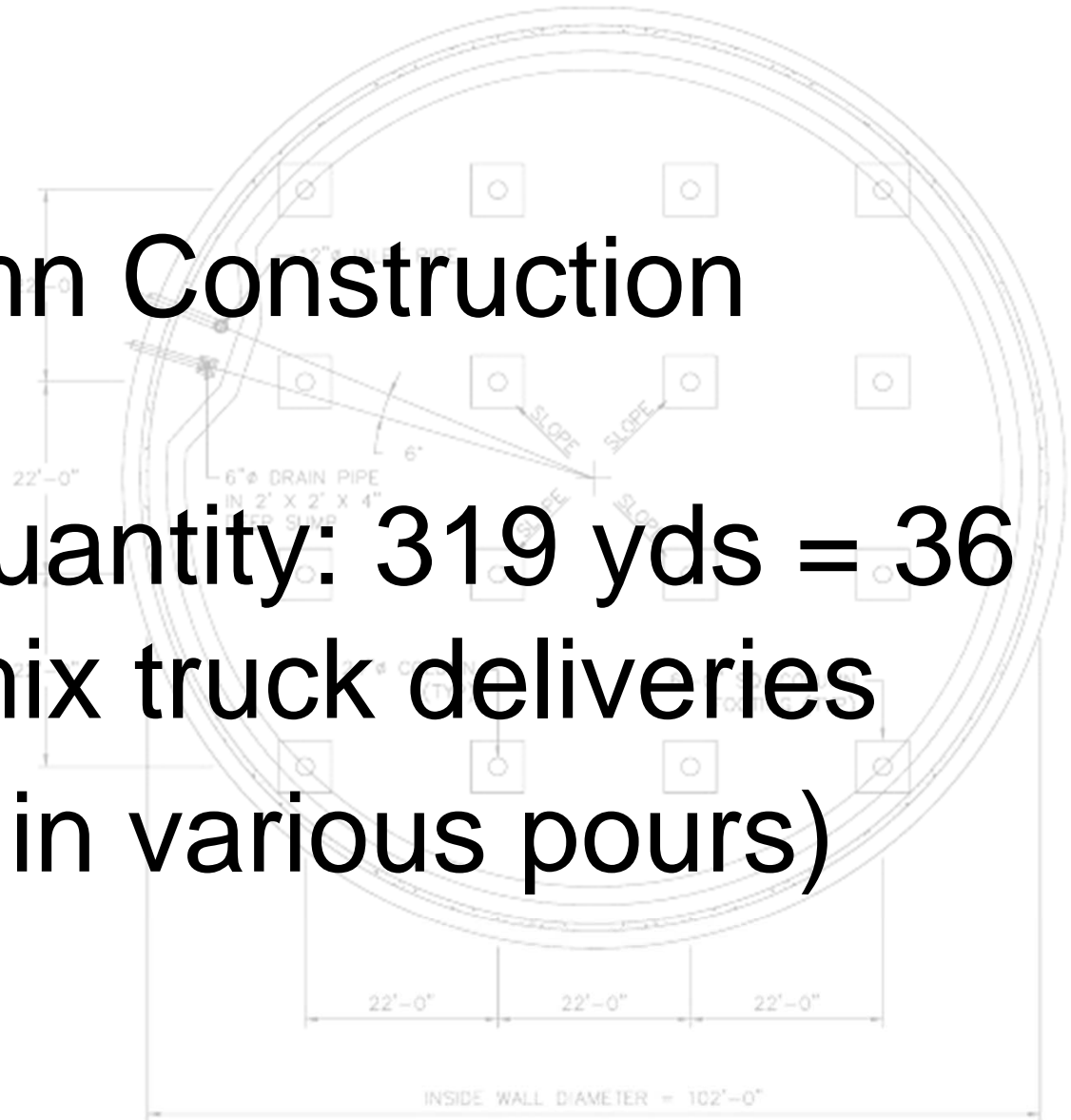
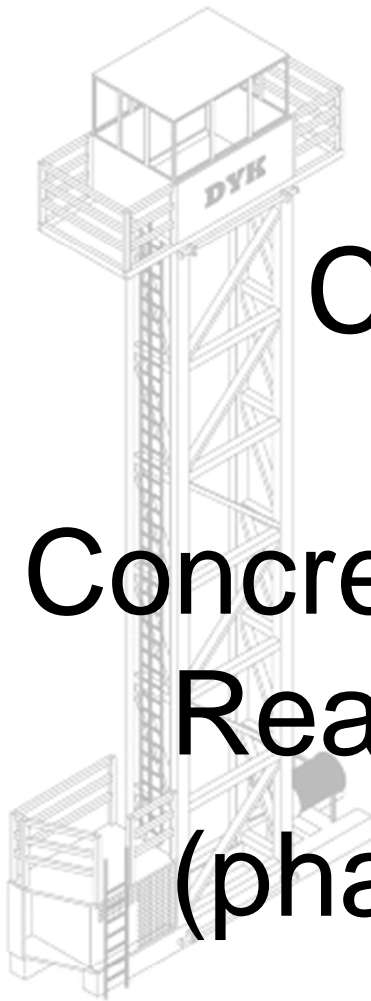
Wall Construction

Concrete quantity: 583 yds = 65
Ready mix truck deliveries
(phased in 11 pours)



Column Construction

Concrete quantity: 319 yds = 36
Ready mix truck deliveries
(phased in various pours)



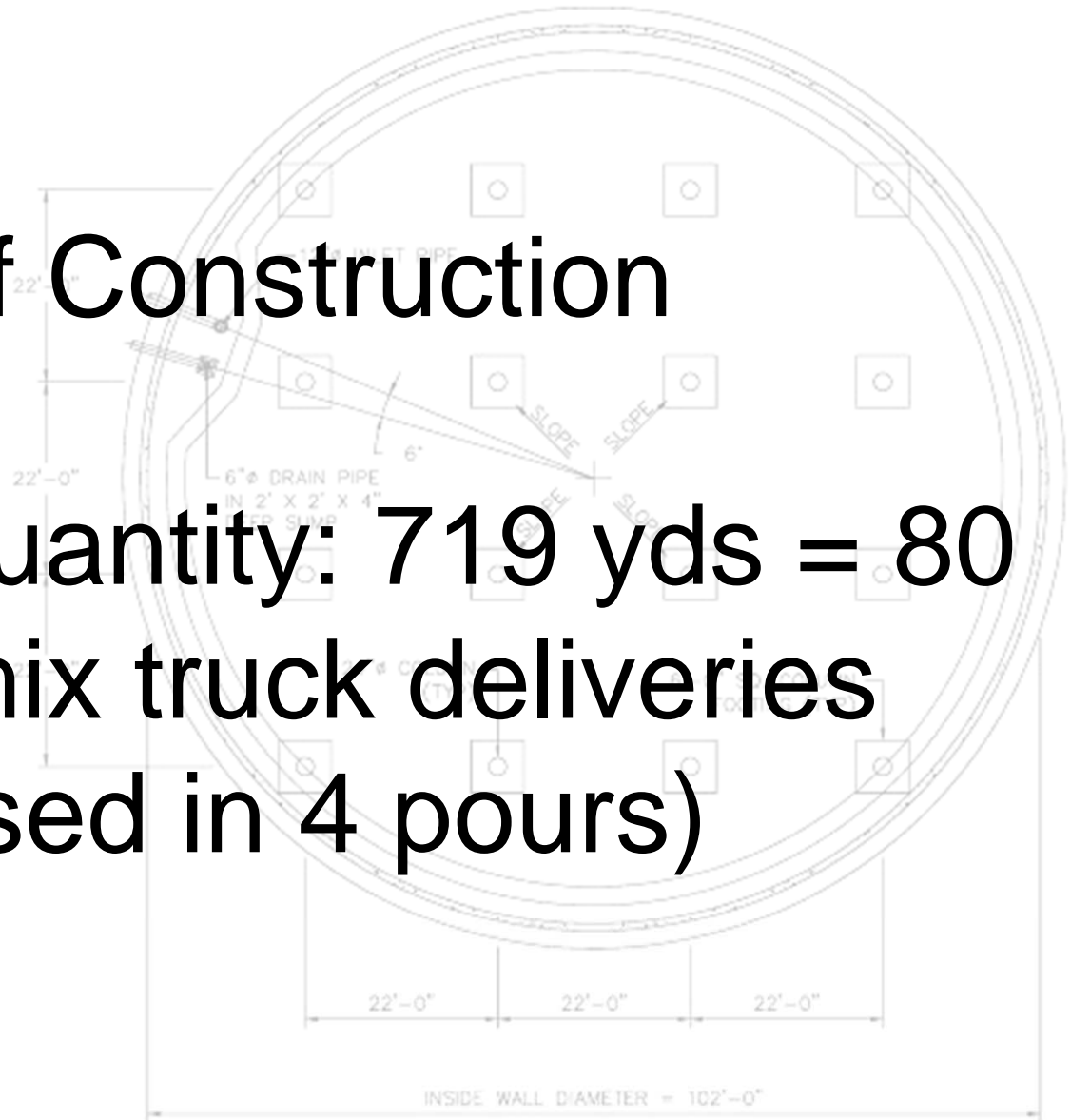
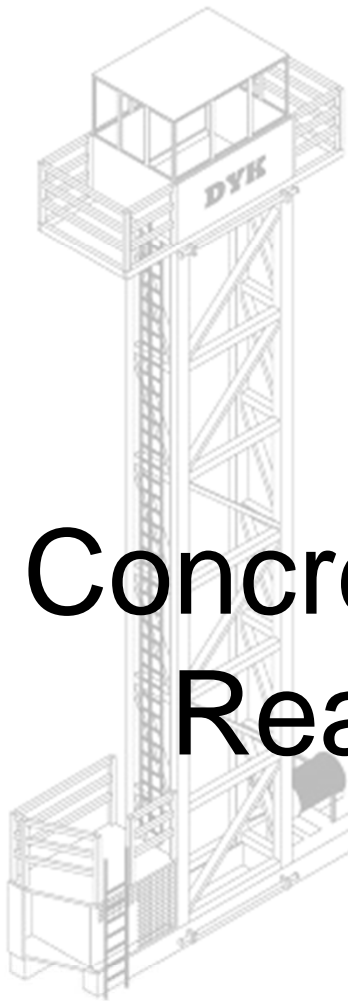
Cast in Place Roof



INSIDE WALL DIAMETER = 102'-0"

Roof Construction

Concrete quantity: 719 yds = 80
Ready mix truck deliveries
(phased in 4 pours)



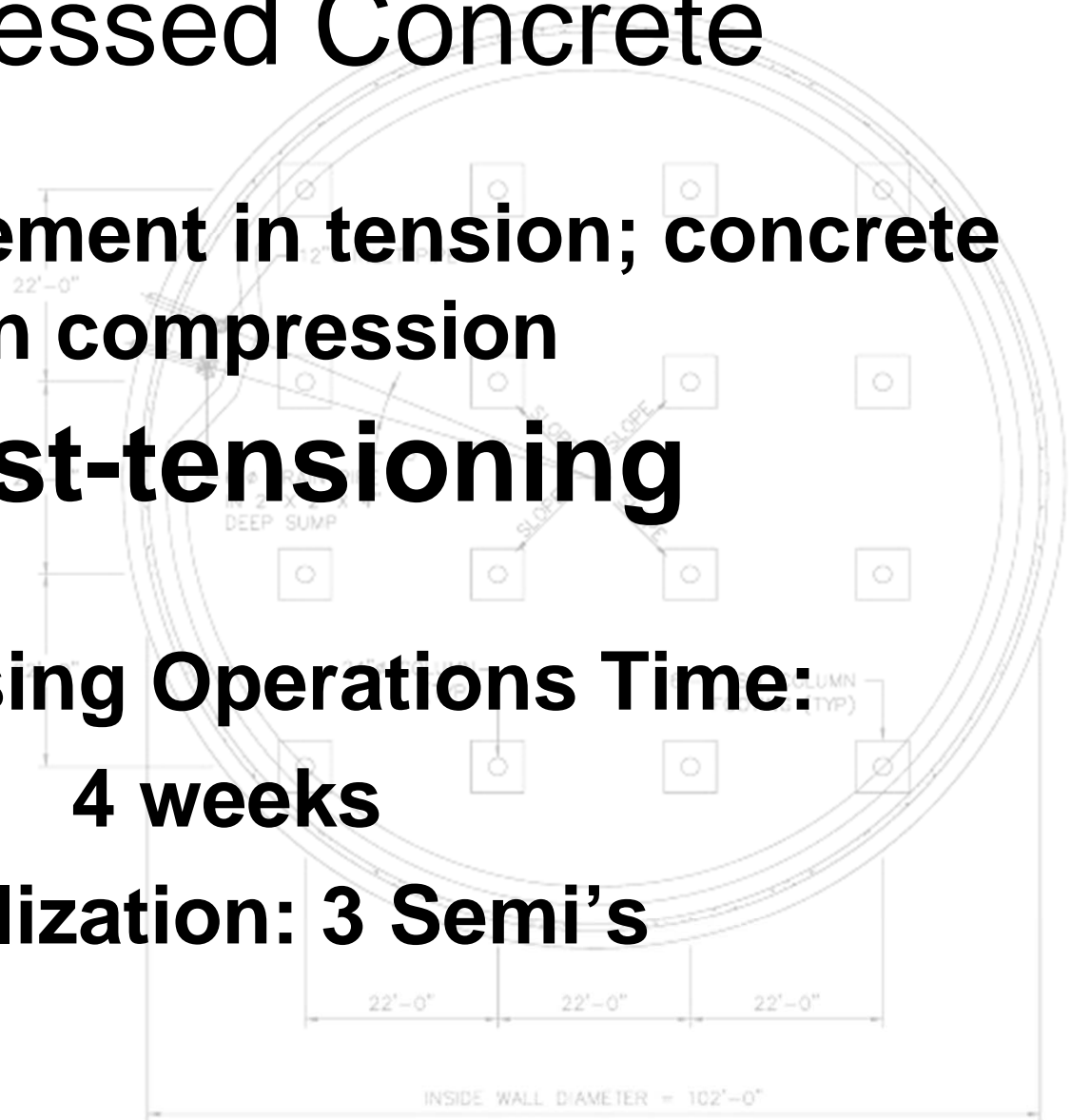
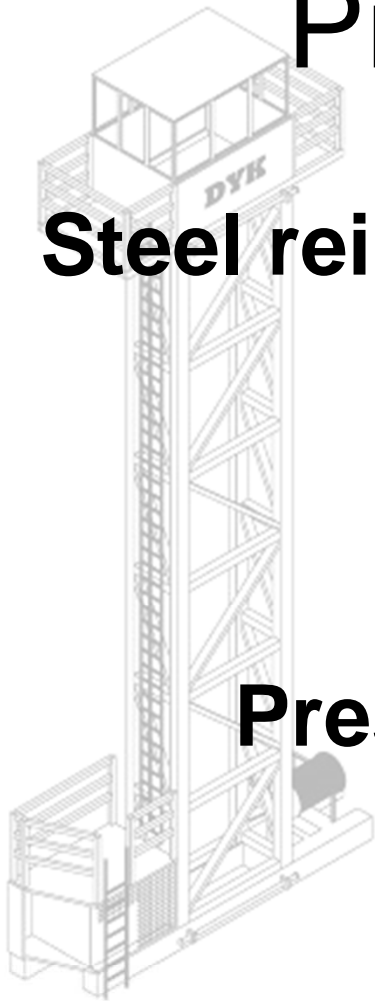
Prestressed Concrete

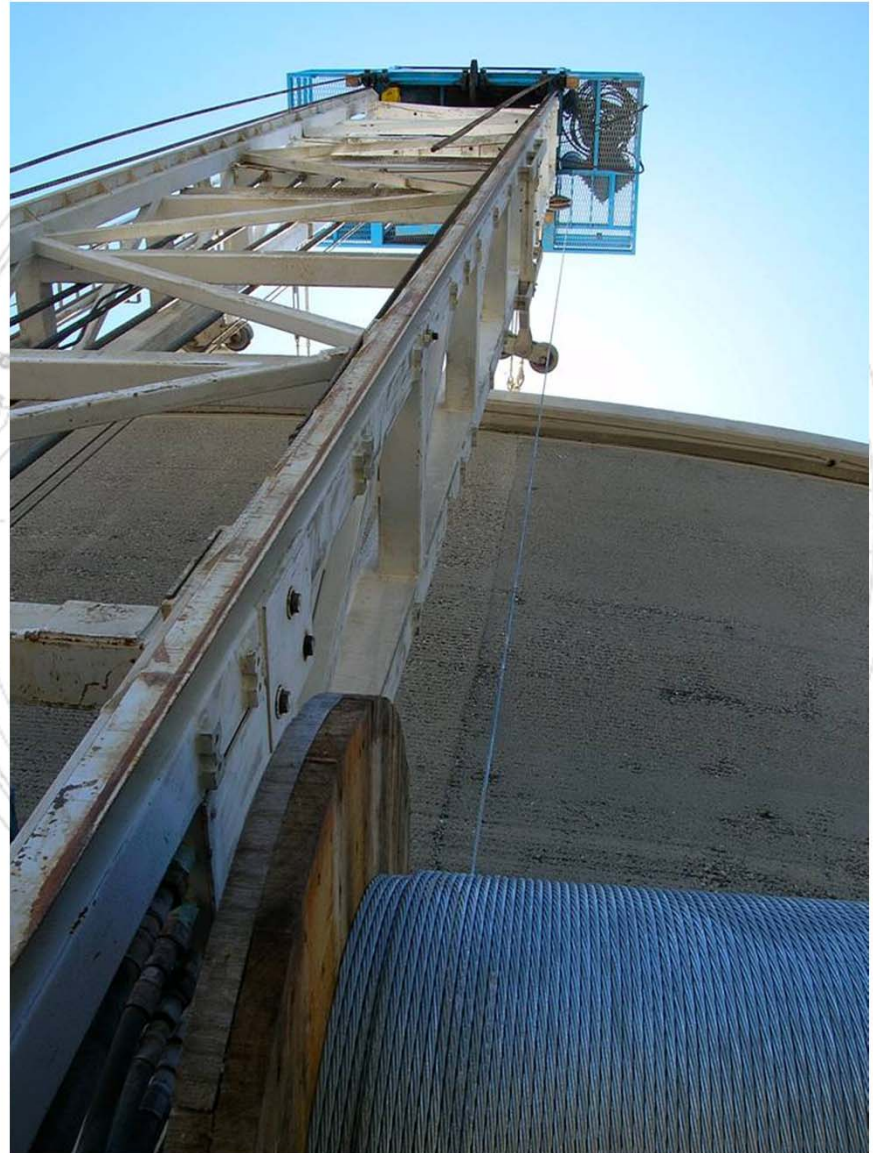
**Steel reinforcement in tension; concrete
in compression**

- **Post-tensioning**

**Prestressing Operations Time:
4 weeks**

Mobilization: 3 Semi's





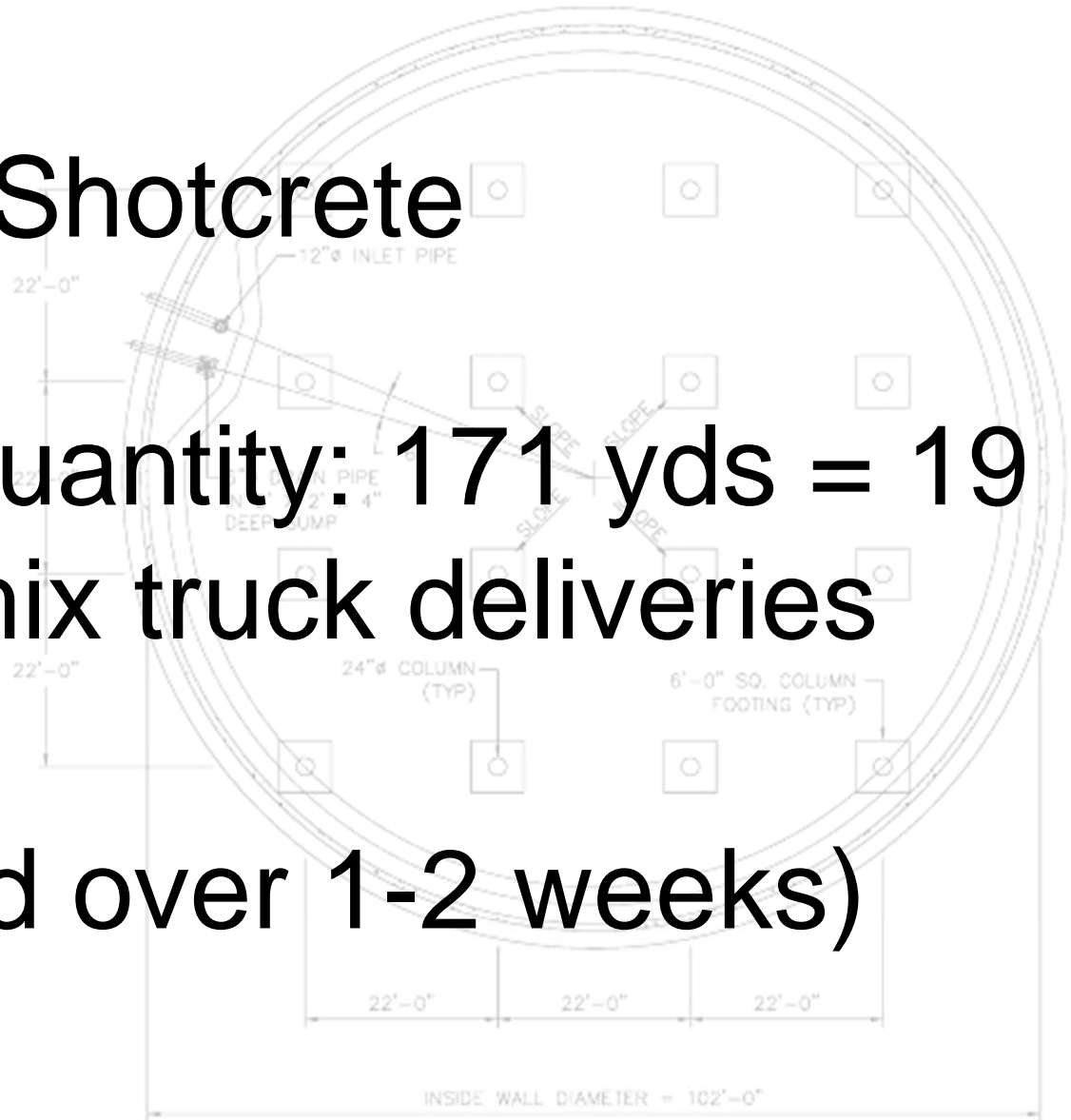
INSIDE WALL DIAMETER = 102'-0"



Shotcrete

Shotcrete quantity: 171 yds = 19
Ready mix truck deliveries

(phased over 1-2 weeks)





10 MG Nohl Canyon Reservoir, Anaheim, CA



INSIDE WALL DIAMETER = 102'-0"

1.5 MG Banning, CA





ADYK
INCORPORATED

22'-0"

INSIDE