



Proven: Project Success

Josh Beakley

American Concrete Pipe Association

Precast Drainage Products

Deep

Shallow

Quick

Jacking

Shapes

Configurations

Unique



Deep

Benefits:

The most important element of the design is the pipe.

Class V is the highest strength, but you can go higher with special designs

Special designs

- More reinforcing steel
- Higher strength concrete
- Thicker walls



Deep



Michigan – 72 RCP @ 40'



Pennsylvania – 72" RCP @ 60 ft.



Pennsylvania @ 50 to 100 ft.

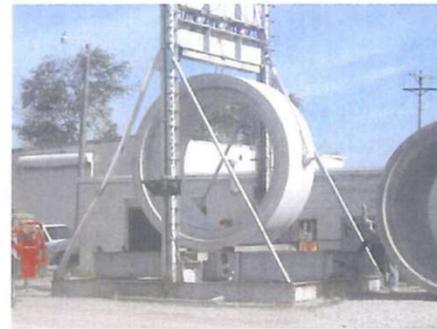


California 120" RCP @ 60 ft.



Concrete Pipe Division

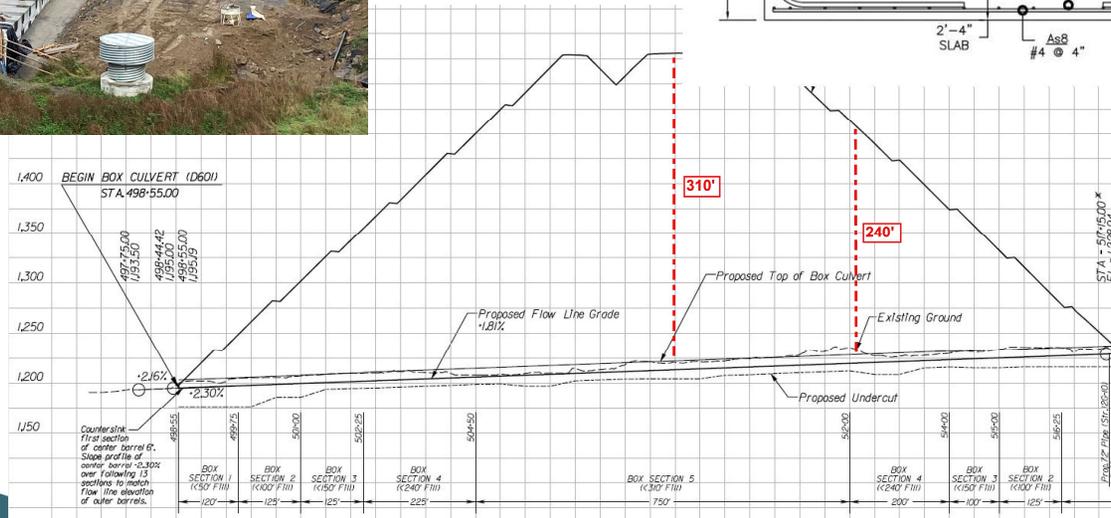
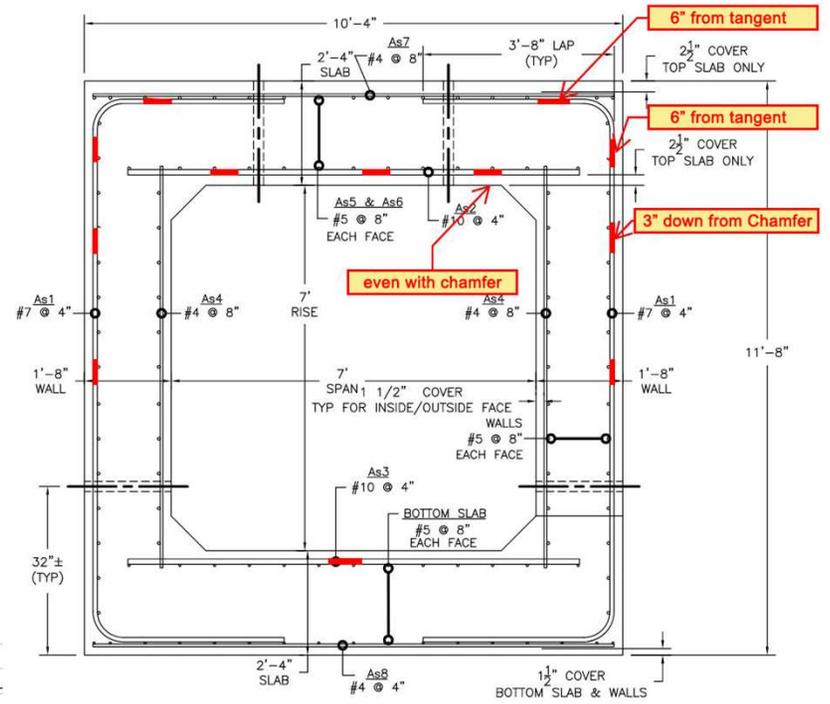
ODOT Nelsonville By-Pass 120" x 20" Wall D-Load Testing



Ohio – 120" @ 70 ft.



Virginia DOT Box Culvert



Shallow

Benefits

- Strength (same as deep fills)
- No Flotation
- Less Worry about changing soil properties
- No worrying about fatigue



Shallow



Minnesota – 96" RCP



Florida 2023



Utah - 24' x 6.5' RCB



Pennsylvania – 48 x 76 HEP
(11 connections)



Shallow



North Dakota – 23 x 10 RCB



New Jersey – 68" x 91" - HEP



Shallow and Deep



Indiana – 24" to 60" RCP, @ 1' – 57' Cover

APC – Accelerated Precast Construction

Benefits

FHWA Every Day Counts (EDC) Initiative

- Reduce Project Delivery Time
- Enhance Safety
- Protect the Environment
- Reduce Social Costs

APC – Accelerated Precast Construction



Michigan – 24 x 12 RCB



Iowa – 14 x 14 RCB



APC – Accelerated Precast Construction



Indiana – 12 x 6 RCB



Accelerated Precast Construction



Alabama – 12 x 10 RCB



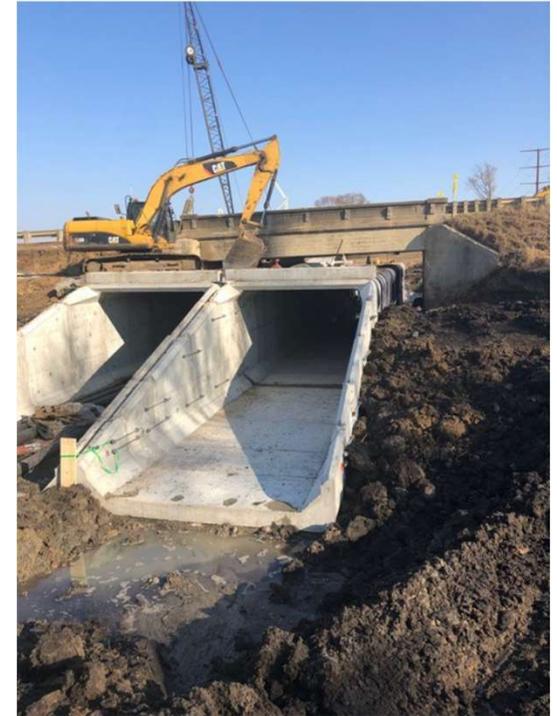
Quick/Convenient



Iowa – 12 x 12 RCB



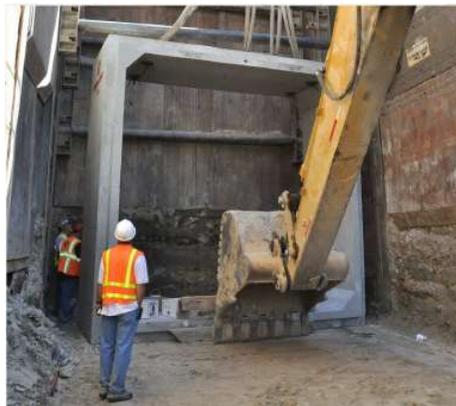
Michigan



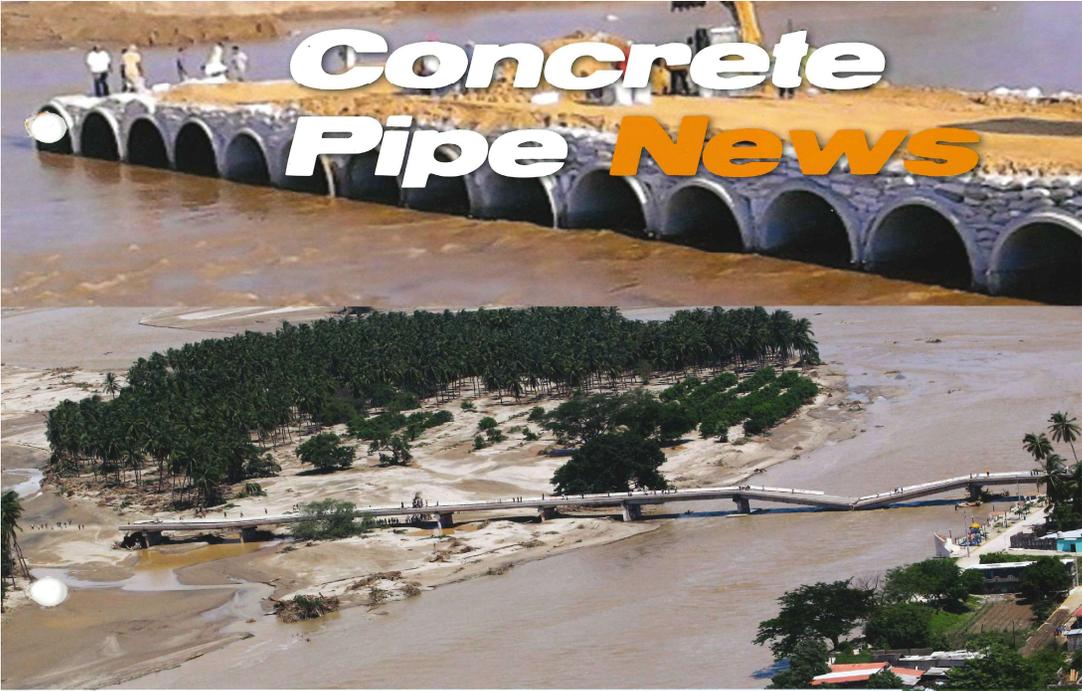
Iowa – 12 x 9 RCB



Michigan – 20 x 14 RCB



Utah – 14 x 14 RCB



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Jacking Culverts

Benefits:

- Speed of Installation
- Reduced Environmental and Residential Disturbance
- Avoidance of Utilities and Diversions
- **Reduce Social Costs**



Jacking



New York - 96" RCP



Nebraska - 108' RCP



Utah - 18" RCP



Jacking



Utah – 72” RCP



Doha



Jacking



Delaware



Delaware – 54" RCP



Jacking Boxes



Texas – 9 x 5 RCB



Jacking Boxes



Jacking – Elliptical Pipe



California – 77" x 120"



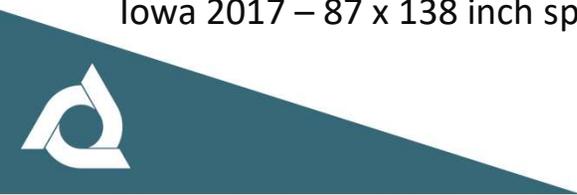
Shapes



Wisconsin 2021 – 68 x 106 HEP



Iowa 2017 – 87 x 138 inch span



Shapes



Georgia – 84” Prebed Pipe



Calgary – 60” Prebed
(Reused)



Shapes



Pennsylvania – 90" Baffles



Pennsylvania – 34" x 53"



Configurations

Radius Bends

Elbows

Tees

Y's

Manifolds



Configurations



South Dakota – 12 x 7 RCB



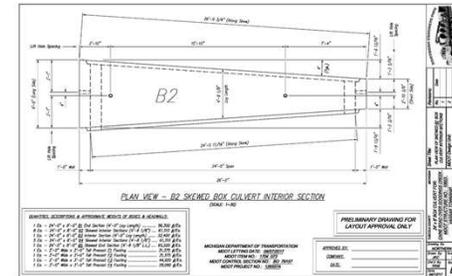
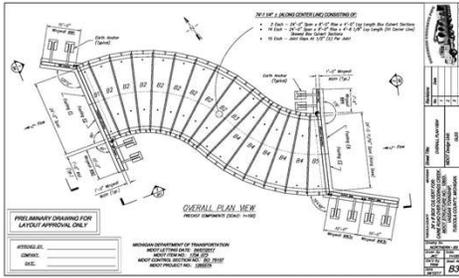
Nevada



Iowa – 12 x 8 RCB



Configurations – Michigan



Michigan – 24 x 8 RCB

Configurations



Michigan – 12 x 6 RCB



New Jersey – 96" RCP



Configurations



Pennsylvania – 84” x 54” RCP

ings. Although the bid documents for an underground stormwater detention system were originally issued for corrugated metal products, value engineering convinced the consulting engineer that precast concrete was the best choice. Known locally as the Midland Manor Detention and Overflow Structure, it is located in the Metro Sewer District jurisdiction of St. Louis. Construction began on the

inch x 66-inch diameter tees. The combined



A special 66-inch x 66-inch diameter precast concrete manhole structure with a 30' elbow was fabricated for the Midland Manor Detention and Overflow System.

Missouri – 66” x 66”



Minnesota – 14 x 7, 12 x 10, 60” RCP



Virginia – 84” Manhole T

Wildlife Passage



Wyoming – 20 x 12 RCB



Rhode Island – 42" RCP

Unique

Heavy Loads – Permit Vehicles

Special Hydraulic Conditions

Conveyance other than fluid or life



Unique



Pennsylvania – 48” RCP, Class IV



Unique



Minnesota – 16 x 10 RCB



Unique



Indiana – 11 x 6.5 RCB



Unique – Energy Dissipators



New York – 60" to 84" RCP



South Dakota – 72" Arch
(54" x 88")



Underground Utility Chamber



The precast concrete box sections were installed on a "mud slab." Sand bedding was placed over the



Ontario – 3000 mm x 1800 mm

Detention System



New Jersey – 72” RCP



Missouri – 66” RCP



Detention System



New Brunswick – 1220 mm RCP





Michigan



New Jersey – 15" Perforated



New York – 72" RCP with Tideflex Check Valve

Thank You



Jbeakley@concretepipe.org

