



# CHATHAM COUNTY'S DETENTION CENTER EXPANSION

## Using Unique Rear-Chase Precast Concrete Modules Communication Shelter Sites

Savannah, Georgia

The Chatham County Detention Center expansion project added 400,000 square feet to the detention center, bringing the total number of inmate beds to 2,300, nearly double the capacity. The project includes load bearing monolithically cast five sided precast prison cells to accommodate 852 new inmate beds in two and four level housing. It also includes a free standing Video Visitation building (which replaces in person visitation), Courtrooms, Court Holding, Pre-Booking, Medical Clinic and Infirmary, Laundry, Plating Kitchen, Street Operations, Warehouse and Commissary.

Oldcastle Infrastructure, working with Hunt/Mills, a Joint Venture, provided unique rear-chase precast concrete prison cells and modular building components for the new \$71 million detention center expansion in Georgia.

### PRECAST SOLUTION

The facility owner preferred a rear chase option for the prison cells, allowing maintenance personal to have access to the mechanical systems without having to disrupt the prison population's daily routines.

### DESIGN & CONSTRUCTION TEAM

#### General Contractor

Hunt/Mills, a Joint Venture  
(Hunt Construction Group and WG Mills)

#### Owner

Chatham County

#### Architect

L. Robert Kimball & Associates  
based out of Pennsylvania

#### Precast Manufacturing Plant

Oldcastle Infrastructure - JACKSONVILLE, FL  
Oldcastle Infrastructure Modular - Precast  
Concrete Cell / building components  
contract award and Project Management



**A maintenance corridor along the outer perimeter of the cell-block will allow maintenance workers to repair plumbing and other systems without entering the cells. A maintenance corridor along the outer perimeter of the cell-block will allow maintenance workers to repair plumbing and other systems without entering the cells.**

Oldcastle Infrastructure offered a unique rear-chase precast concrete prison cell module that has the electrical and plumbing fixtures on the back wall and monolithic balconies on the front and rear of the module. The precast cells came fully out-fitted with electrical fixtures, detention furniture, plumbing fixtures and interior walls painted.

Each concrete unit weighs in excess of 50,000 pounds and contains two cells and front and rear balcony. The cells are stacked four stories high.

Oldcastle Precast designed, manufactured and out-fitted 432 precast concrete modules. There are 176 Double Modules, 24 Single Modules, 144 Dorm Modules, 40 Double Plenums, 4 Single Plenums, and 44 Dorm Plenums. The 176 Double and Single modules account for 280 two-man cells. Of the 280 cells 32 are handicap accessible. The remaining rooms modules are set aside for Triage, Laundry, Video Visitation, and Janitorial rooms.

The precast modules for two housing facilities are made up of 4 pods each. Each Building is 4 stories with a Plenum Module separating the 1st and 2nd levels and at the roof for mechanical, electrical, and plumbing access.

In all, 628 lineal feet of cell plenums and 466 lineal feet of dorm plenums – all precast concrete – were manufactured and erected at the project site.

11,136 sq. ft. of day room balconies and 7,352 sq. ft. of chase corridor was created when installation of the front and rear balconied cell modules was complete.



## OLDCASTLE INFRASTRUCTURE PRODUCTS USED

- (280) two-man rear-chase cells
- (144) four-man cells
- (16) multipurpose rooms
- (16) janitorial rooms
- (16) triage rooms
- (16) laundry rooms
- (16) video visitation rooms
- (628) lineal feet of cell plenums
- (466) lineal feet of dorm plenums

## USE OF PRODUCTS

Construction of 380,000 square feet of detention housing units.  
(approximately 1,136 beds).

## WHY SELECTED

Fully out-fitted, load bearing mono-lithically cast five sided, precast concrete prison cells reduced environmental impact, provided rapid construction, improved constructability, increased quality, lowered life-cycle costs and provided a sustainable solution towards achieving LEED Certification. Constructing the facility in this manner provided the most efficient and durable solution for Chatham County.

The project finished ahead of schedule and Chatham County was very pleased.

**You can depend on the name and quality of Oldcastle Infrastructure.**

## About Oldcastle Infrastructure

Oldcastle Infrastructure, A CRH Company, is the leading provider of building materials, products and services for infrastructure projects to several market sectors nationwide, including: Building Structures, Communications, Energy, Transportation and Water.

## For More Information Contact:

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