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# BROOKINGS COUNTY DETENTION CENTER EXPANSION PROJECT

## COUNTY BOARD UPDATE

September 3, 2019



# INSULATED ARCHITECTURAL PRECAST CONCRETE EXTERIOR

## EXAMPLES



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## MASONRY VENEER VS. PRECAST CONCRETE COMPARISON

### COST

Masonry pricing could be anywhere from equal in price to pre-cast, up to 25% more. If I had to put a number on it for what I expect for this project I would say that masonry would likely be 8.5% more than pre-cast. This doesn't account for savings due to schedule which could be significant (10-15%), definitely enough to give pre-cast the expectantly clear edge over masonry.

### DURABILITY

Masonry and Pre-cast are very similar in durability. Pre-cast has a slight edge up as the face material is integral to the concrete panel so there is less chance of chipping/spalling due to impact, water infiltration, etc..

### LIFE EXPECTANCY

Both products could easily last the life span on the building. There is increased regular maintenance in masonry with tuck pointing, joint caulking, possibly cleaning, flashing repairs, etc. Pre-cast maintenance is mostly confined to joint sealant replacement and possible flashing repairs.

### CONSTRUCTION SCHEDULE

Precast is far superior for expediting construction schedule. The exterior shell can be closed much faster and allows for other trades to work in an enclosed environment. Depending on the time of year, masonry would need weather protection while precast does not.

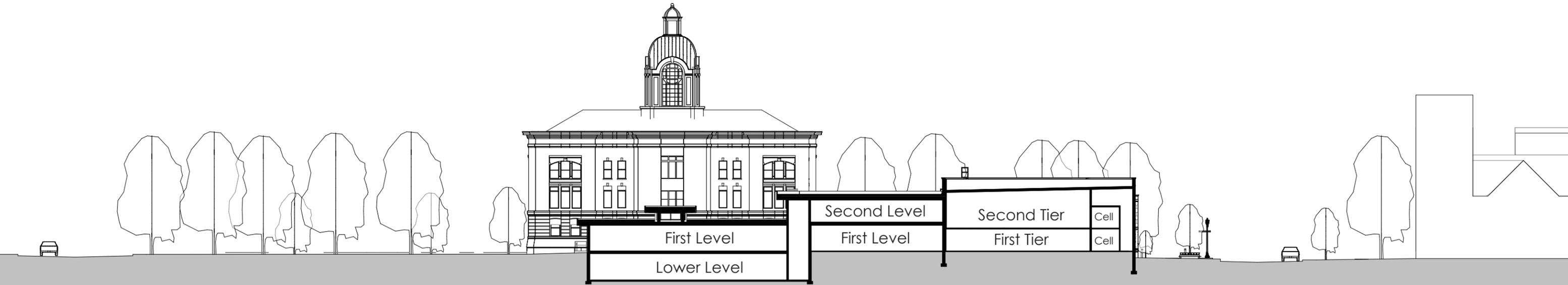
### AESTHETIC

Precast design has greatly improved in the last couple of decades. Precast is fully customizable and can incorporate thin brick, stone and reveal patterns.



# EXTERIOR ELEVATION AND BUILDING SECTION - EAST

Option 1



3rd Street

Law Enforcement Center

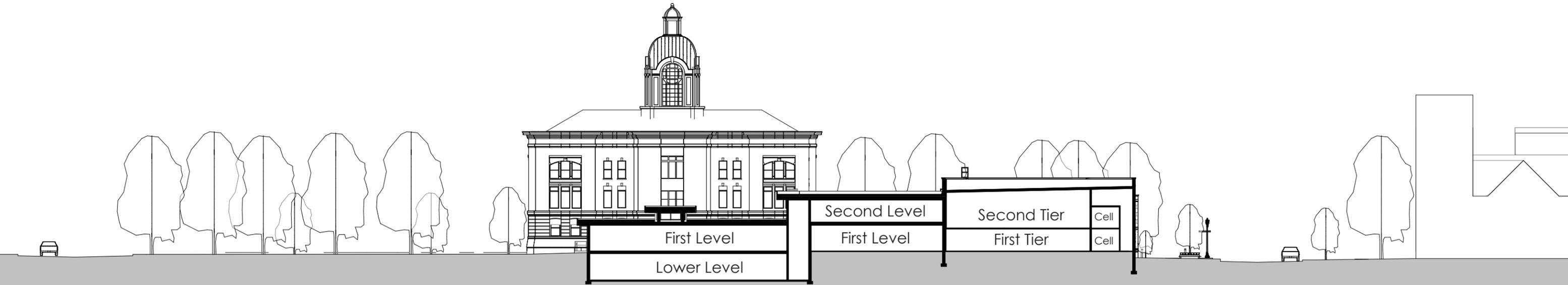
Proposed Detention Center Addition

4th Street

First Presbyterian Church

# EXTERIOR ELEVATION AND BUILDING SECTION - EAST

Option 2



3rd Street

Law Enforcement Center

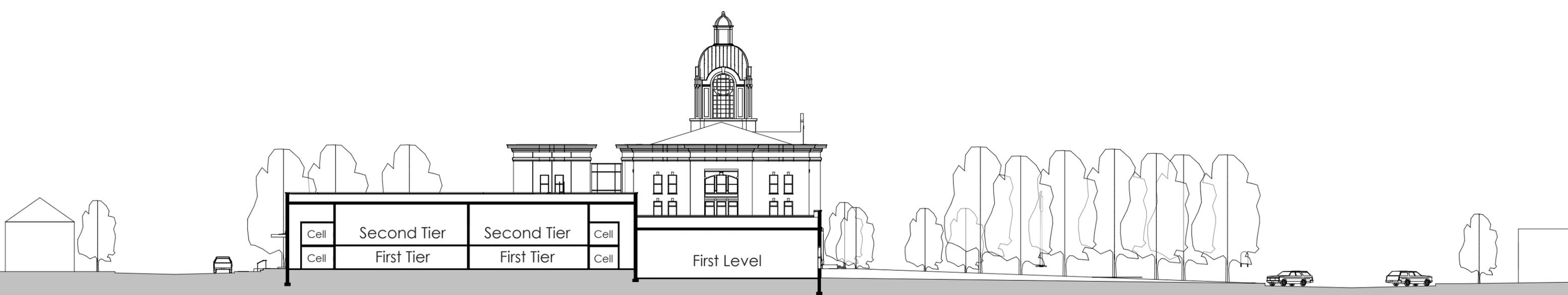
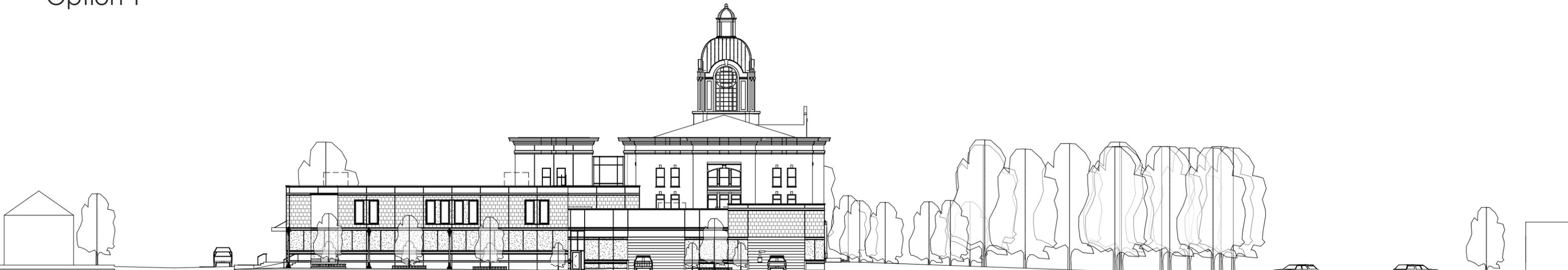
Proposed Detention Center Addition

4th Street

First Presbyterian Church

EXTERIOR ELEVATION AND BUILDING SECTION - NORTH

Option 1



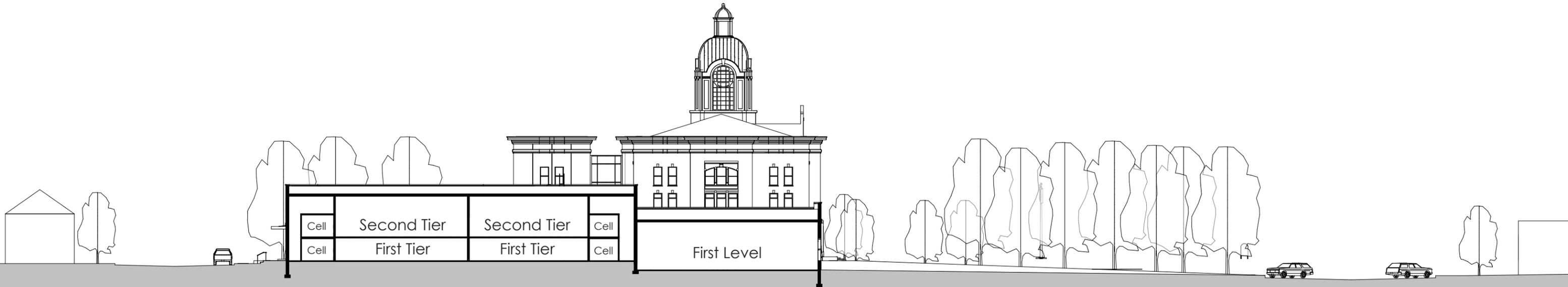
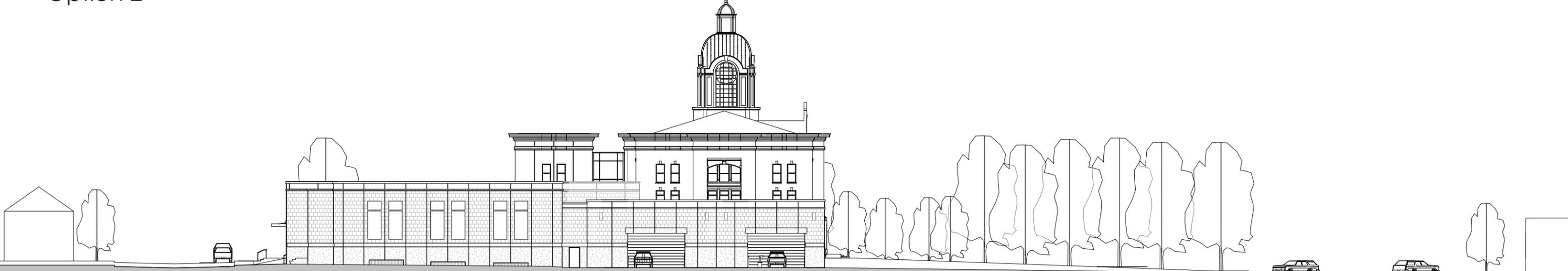
7th Avenue

Proposed Detention  
Center Addition

6th Avenue

EXTERIOR ELEVATION AND BUILDING SECTION - NORTH

Option 2



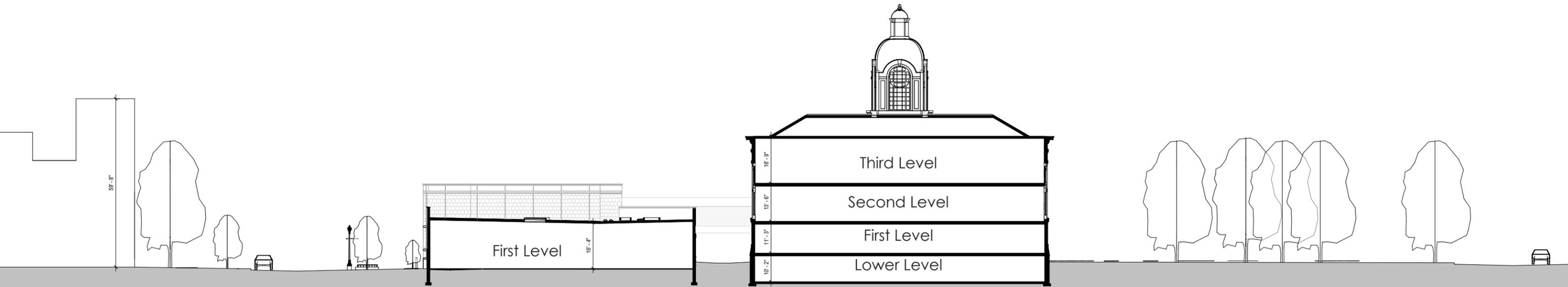
7th Avenue

Proposed Detention  
Center Addition

6th Avenue

# EXTERIOR ELEVATION AND BUILDING SECTION - WEST

Option 1



First Presbyterian Church

4th Street

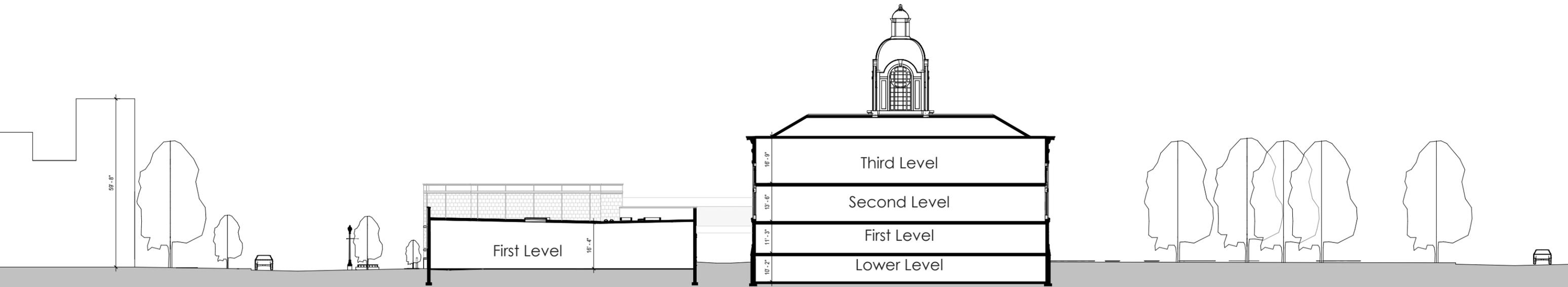
Proposed Detention Center Addition

Historic Courthouse

3rd Street

# EXTERIOR ELEVATION AND BUILDING SECTION - WEST

Option 2



First Presbyterian Church

4th Street

Proposed Detention Center Addition

Historic Courthouse

3rd Street

SITE PLAN



# FLOOR PLAN

