



# Platteville Fire Station

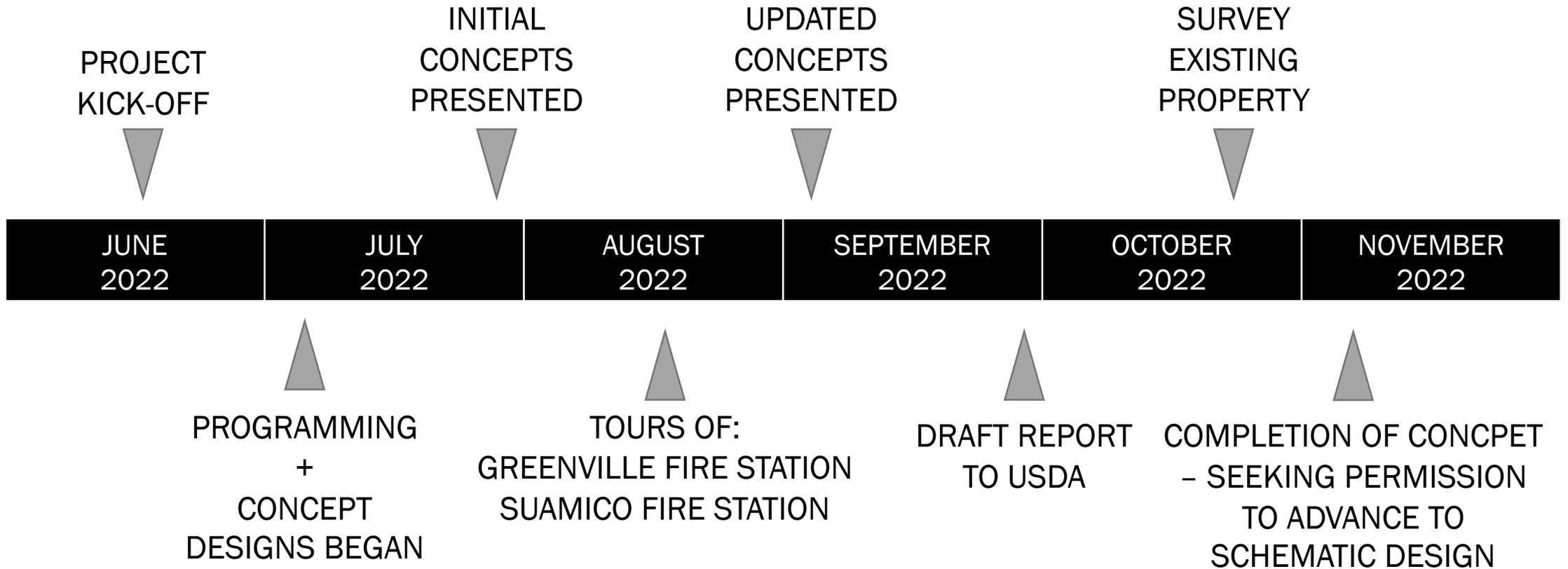
Concept Review  
November 8, 2022



# PRESENTATION OUTLINE:

- Project History
- Programming
- Concept Design
  - Concepts
    - Renovation
    - New Construction
  - Opinion of Probable Costs
- USDA & Other Reporting
- What's next?
  - Construction Delivery Method
  - Potential Schedule

# PROJECT HISTORY:





# PROGRAMMING:

## SPACE NEEDS ANALYSIS

SPACE	PROGRAMMED AREA WINTER OF 2020	PROGRAMMED AREA SUMMER 2022
Apparatus Bays	13,022 SF	13,430 SF
Apparatus Support	4,958 SF	4,625 SF
Training	4,428 SF	3,630 SF
Administration / Office	2,943 SF	3,495 SF
Living Quarters & Support	2,389 SF	3,615 SF
Mechanical / Electrical Spaces	4,161 SF	2,780 SF
<b>TOTAL NEW CONSTRUCTION</b>	<b>31,900 SF</b>	<b>31,640 SF</b>

# CONCEPT DESIGNS:

- Show relationships between spaces / departments
- Represent approximate sizes
- Colors represent each department
- Full-size concept plans are in appendix of report

<u>BUILDING SQUARE FOOTAGE</u>		
	APPARATUS BAY	=
	APPARATUS SUPPORT	=
	ADMINISTRATION	=
	TRAINING	=
	STAFF SUPPORT	=
	CIRCULATION	=
	MECHANICAL	=
	<b>TOTAL</b>	<b>=</b>

# CONCEPT DESIGNS: RENOVATION CONCEPT

## RENOVATION CONCEPT SITE:

- Original facility was not meant to be an emergency response
- Too big... yet not big enough
- Would require significant demolition and reconstruction
- Built very close to property edges
- Challenging site



# CONCEPT DESIGNS: RENOVATION CONCEPT

## RENOVATION CONCEPT SITE:

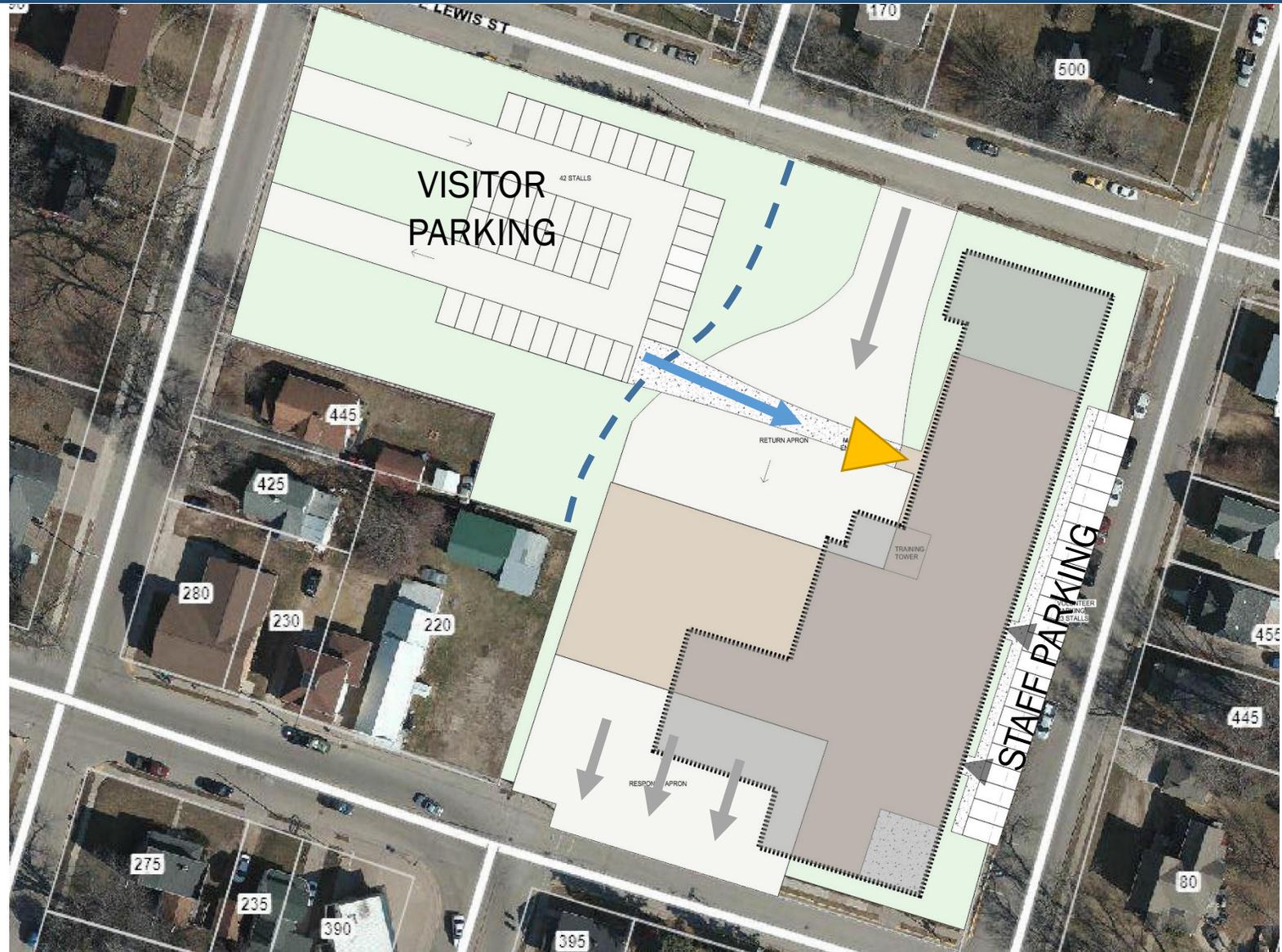
- Visitor parking downhill from entry
  - Retaining wall would divide parking from facility
- Front entry on facility's "back"
- Visitors cross over return apron to access facility
- Front apron shallow – large opening onto Adams Street



# CONCEPT DESIGNS: RENOVATION CONCEPT

## RENOVATION CONCEPT SITE:

- Challenging site for pedestrian circulation
- No room for future expansion
- No room for on-site training
- Will require more demolition than what can be renovated



# CONCEPT DESIGNS: RENOVATION CONCEPT

## RENOVATION CONCEPT:

- Single Story
- Demolition of north end of facility
- Administration and training on north side
- Dorms and living quarters line east
- Demolition of west side of facility
- New apparatus bays on west
- Partial demolition on south side

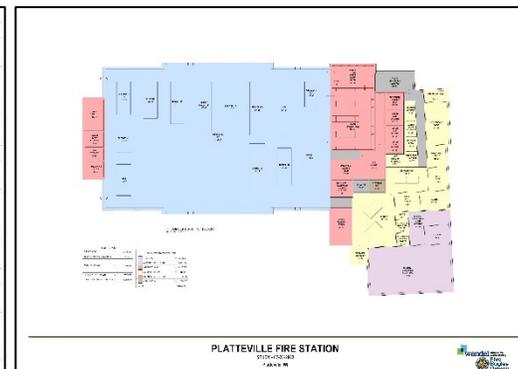
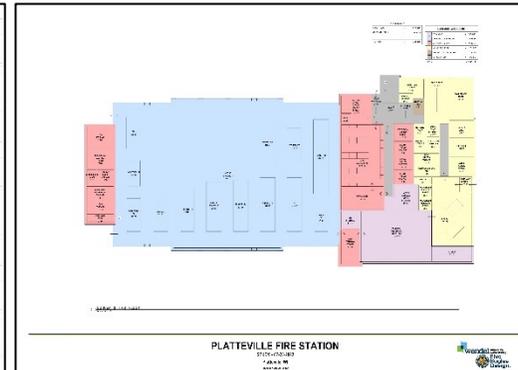
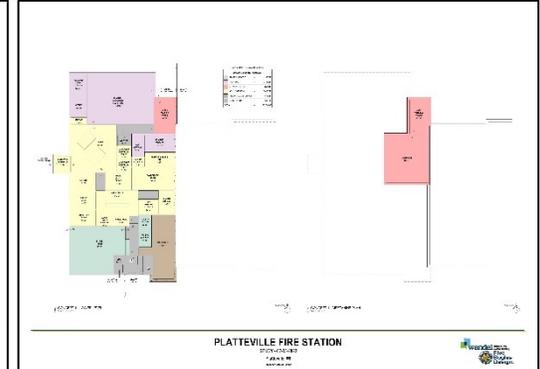
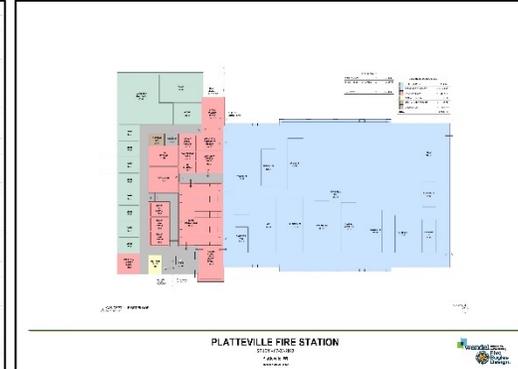




# CONCEPT DESIGNS: NEW CONSTRUCTION CONCEPTS

## NEW CONSTRUCTION CONCEPTS:

- Reviewed three concepts for new construction



### TOURED TWO FACILITIES:

- Greenville, WI Fire Station
- Suamico, WI Fire Station
- Take away:
  - Overall positive experience
  - Helped to understand sizes of spaces
  - Helped to verify program

# CONCEPT DESIGNS:

## PROPOSED CONCEPT

### OVERALL PLAN:

- Two-story facility
  - Basement alternate
- Seven full apparatus bays
- Base bid: 31,640 sf
  - With alternate: 39,320

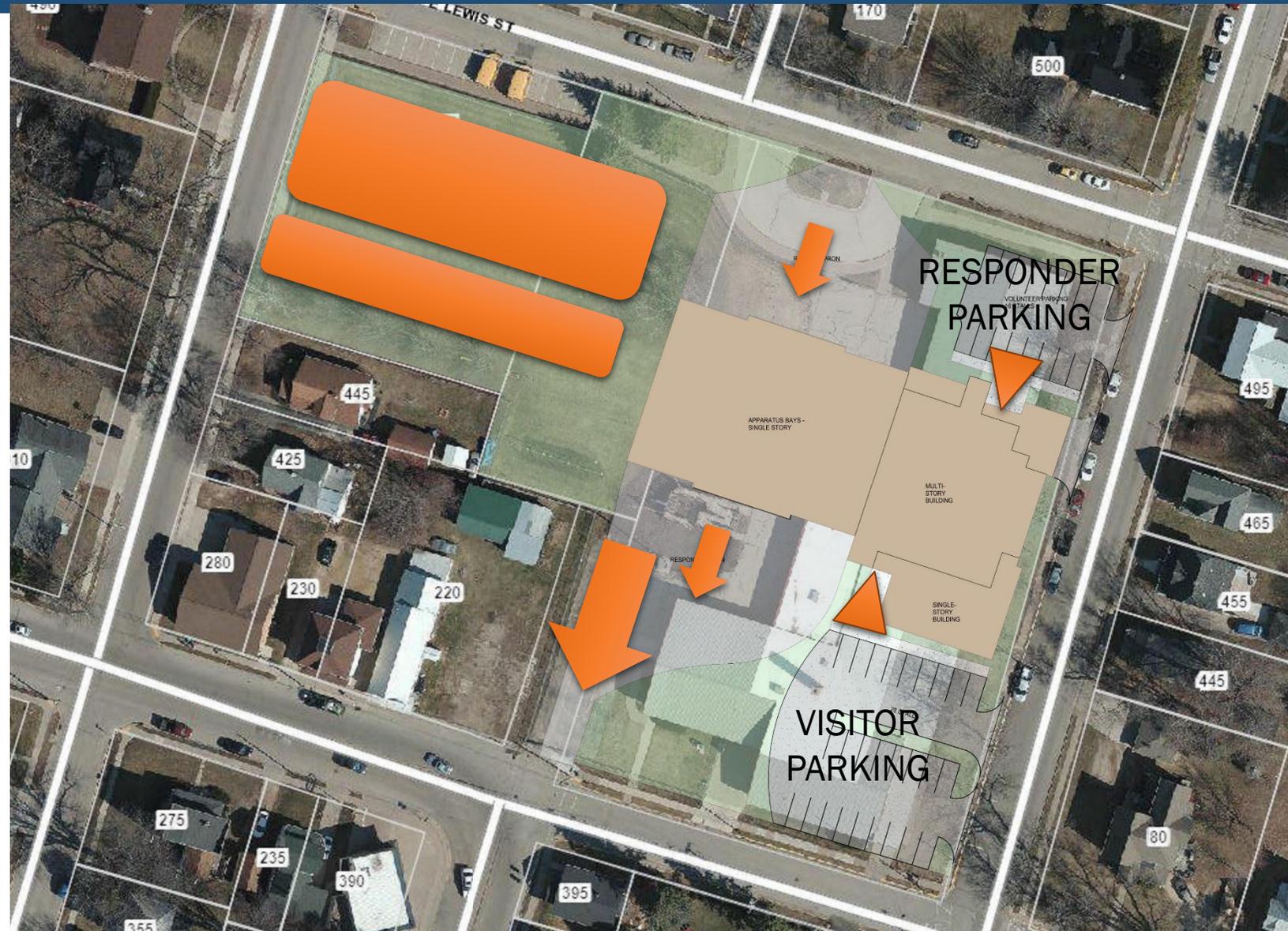
<u>BUILDING SQUARE FOOTAGE</u>		
	TRAINING	= 3,630 SF
	APPARATUS BAY	= 13,430 SF
	APPARATUS SUPPORT	= 4,625 SF
	STAFF SUPPORT	= 3,615 SF
	ADMINISTRATION	= 3,495 SF
	MECHANICAL/STORAGE	= 645 SF
	CIRCULATION	= 2,135 SF

FLOOR TOTALS		
FIRST FLOOR	=	24,095 SF
SECOND FLOOR/ MEZZANINE	=	7,545 SF
TOTAL BUILDING	=	31,640 SF
BASEMENT ALTERNATE	=	7,680 SF
TOTAL INCLUDING ALTERNATE	=	39,320 SF

# CONCEPT DESIGNS: PROPOSED CONCEPT

## SITE PLAN:

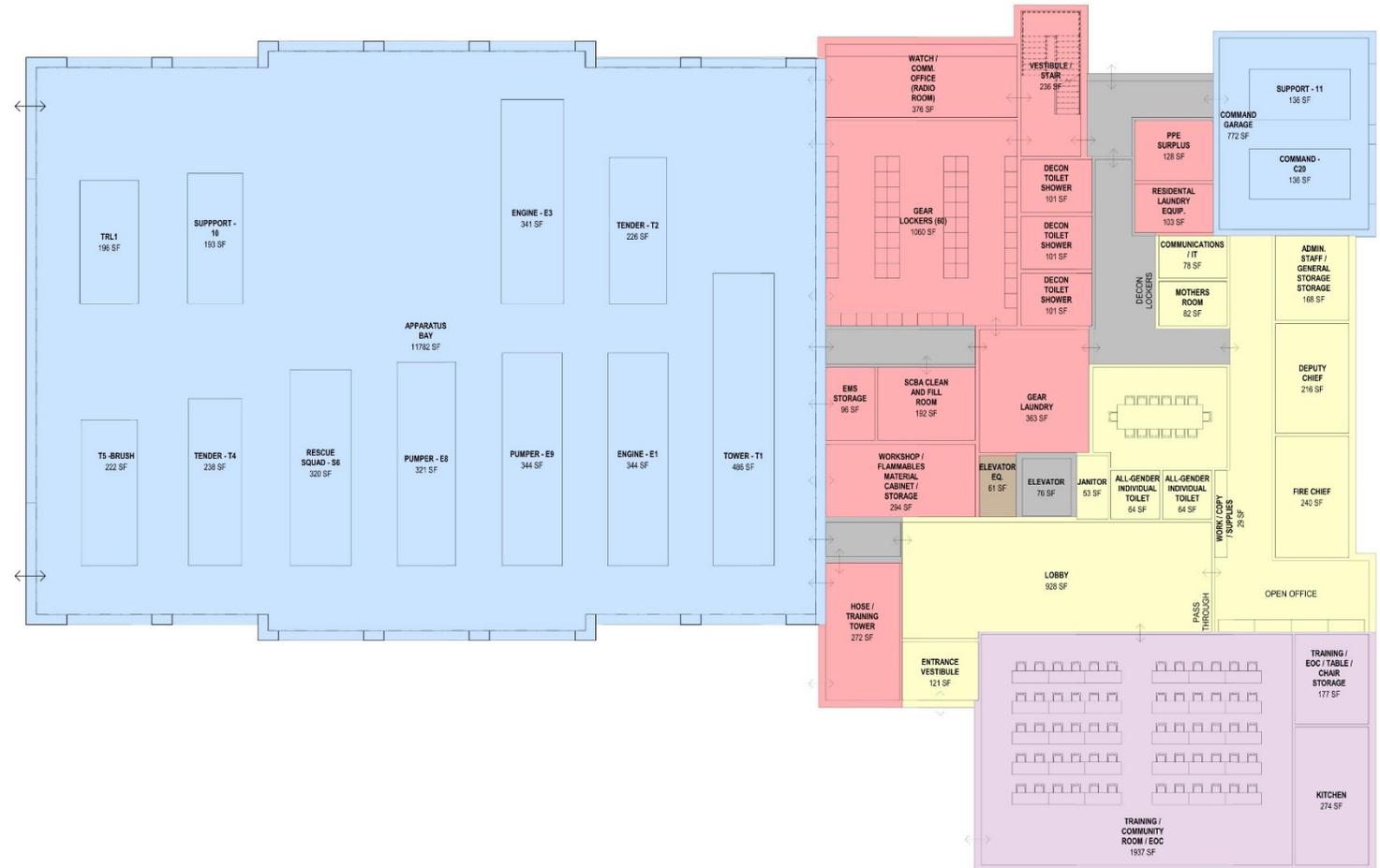
- Visitor Parking
- Visitor Entry
- Responder Parking
- Responder Entry
- Response Apron
- Return Apron
- Water Retention
- On-site Training



# CONCEPT DESIGNS: PROPOSED CONCEPT

## FIRST FLOOR PLAN:

- Seven apparatus bays
- Small garage
  - Support vehicles
- Decontamination & apparatus support
- Administration
- Training, EOC, community room



# CONCEPT DESIGNS: PROPOSED CONCEPT

## SECOND FLOOR PLAN:

- Staff Support:
  - Dorm rooms
  - All-gender toilet/shower facilities
  - Exercise room
  - Kitchen, dining, day room

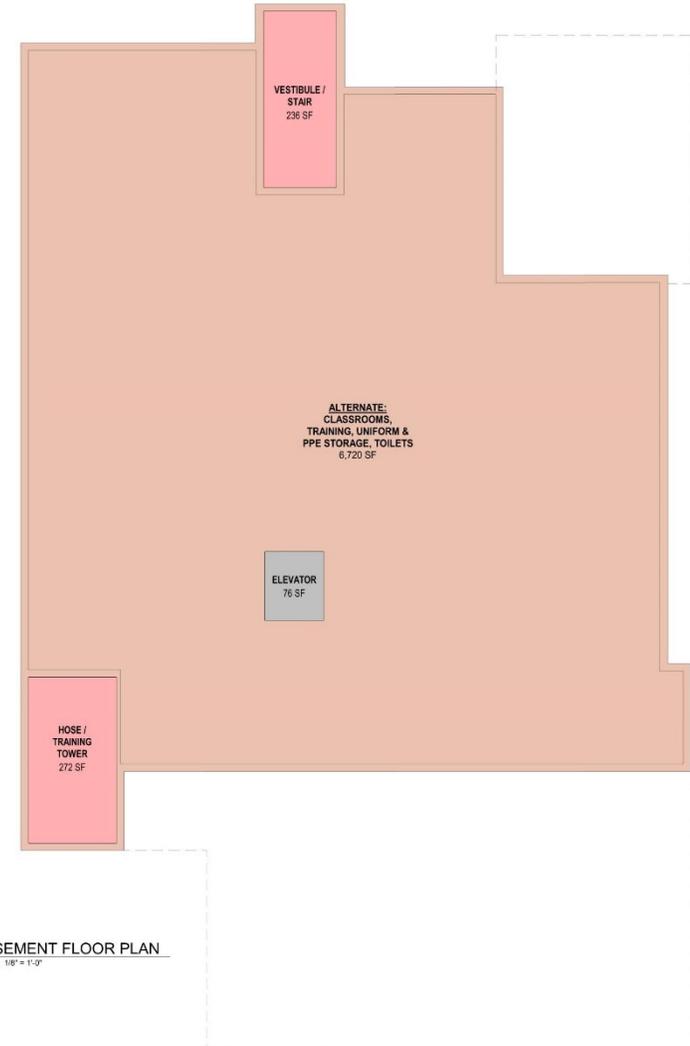


# CONCEPT DESIGNS:

## PROPOSED CONCEPT

### BASEMENT ALTERNATE PLAN:

- Classrooms
- Training
- Uniform storage
- PPE storage
- EOC Support



2 BASEMENT FLOOR PLAN  
SCALE: 1/8" = 1'-0"



# CONCEPT DESIGNS:

## OPINION OF PROBABLE COSTS

	BASE BID	ALTERNATE
Site Acquisition	\$0	\$0
Building Construction Costs	\$10,599,400	\$2,419,200
Furniture, Fixtures & Equipment	\$317,982	\$0
Communications and Technology	\$193,000	\$44,000
Contingencies, Inflation, Other	\$1,589,910	\$241,920
Professional Fees & Legal	\$749,964	\$145,152
TOTAL	\$13,450,256	\$2,850,272
TOTAL W/ ALTERNATE		\$16,300,528

Notes:

1. Does not include site acquisition costs.
2. Estimate includes 10% of contingency for each option.
3. Estimates of probable cost are based on a 2022 construction costs.
4. Geotechnical surveys were not taken at this time.

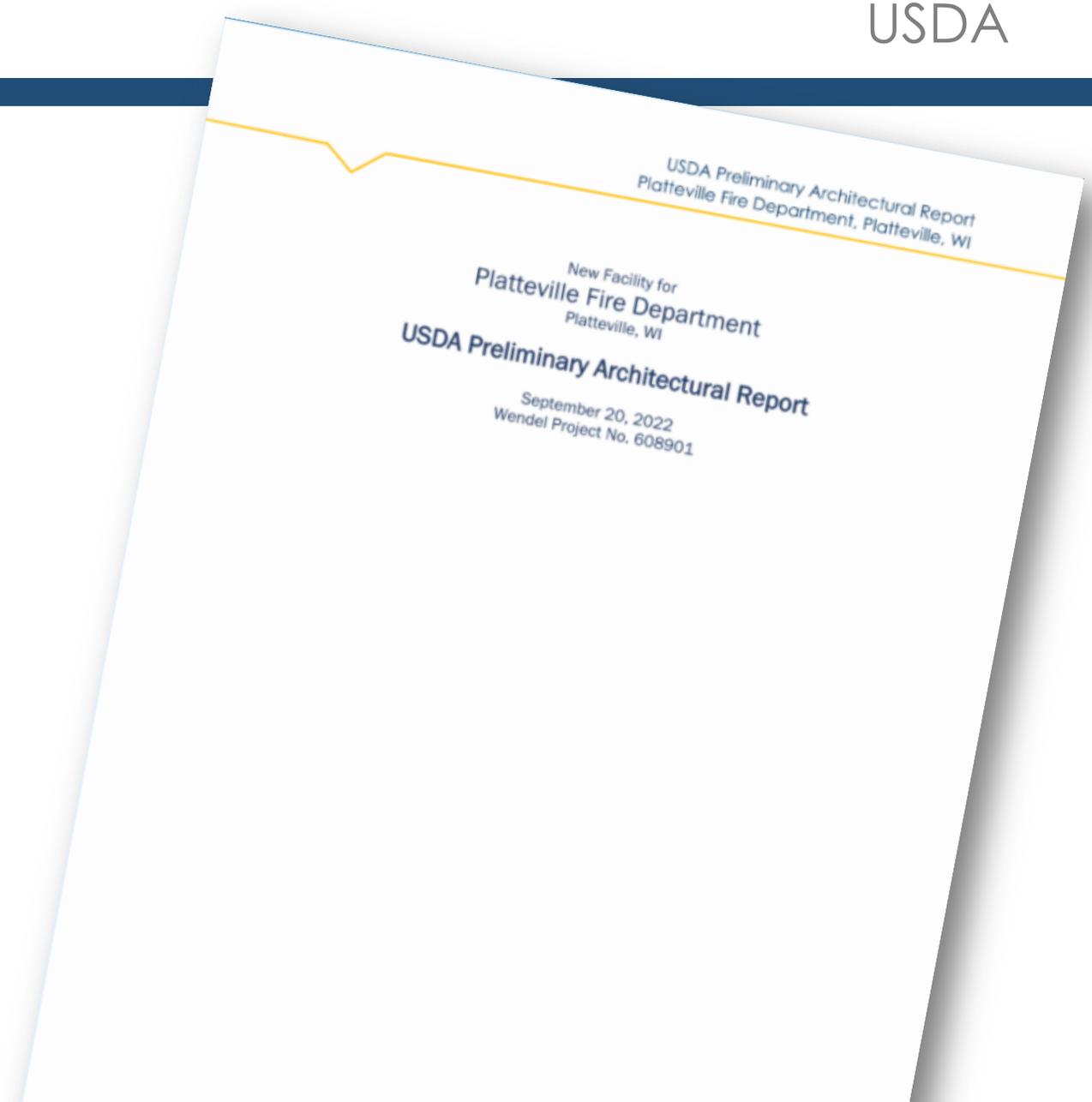


# USDA & OTHER REPORTING:

USDA

## USDA:

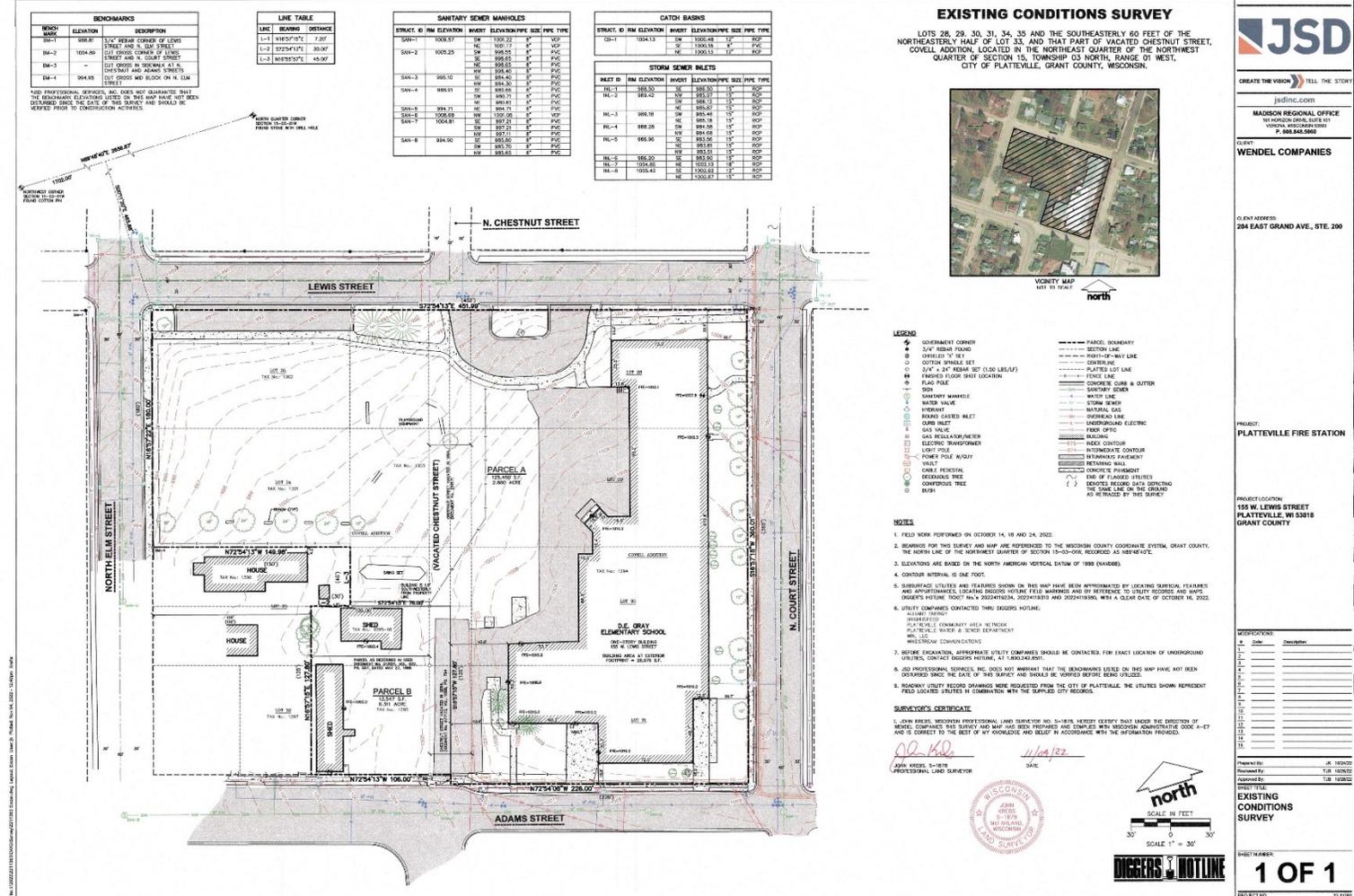
- Report needed final authorization of fund disbursement
- Draft has been submitted
- Environmental Report:
  - Draft submitted
  - Have contacted all necessary native tribes



# USDA & OTHER REPORTING: SITE SURVEY

## SITE SURVEY:

- Official survey is complete
- Creating CSM



# USDA & OTHER REPORTING:

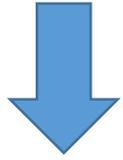
## GEOTECHNICAL

### GEOTECHNICAL REPORT:

- Received proposals from three companies
- Made recommendation to City
- Will proceed once Schematic Design begins

# WHAT'S NEXT?: POTENTIAL SCHEDULE

We Are Here:



Concepts  
(Estimate)

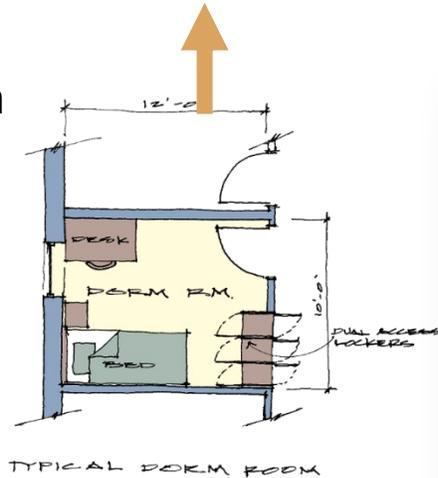
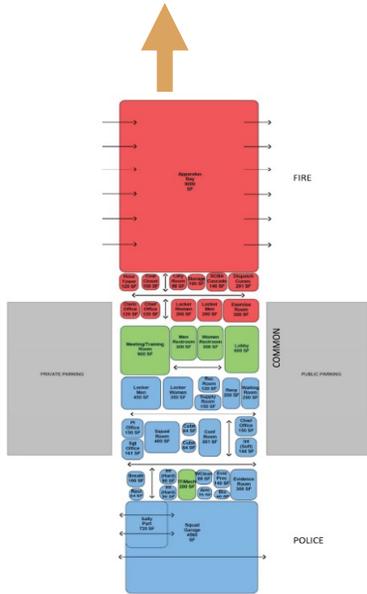
Schematic  
Designs  
(Estimate)

Design  
Development  
(Estimate)

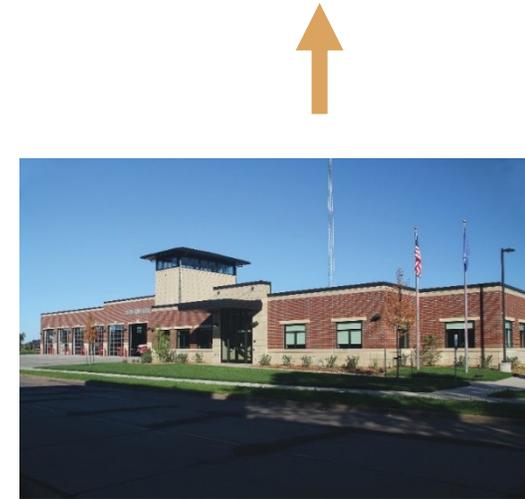
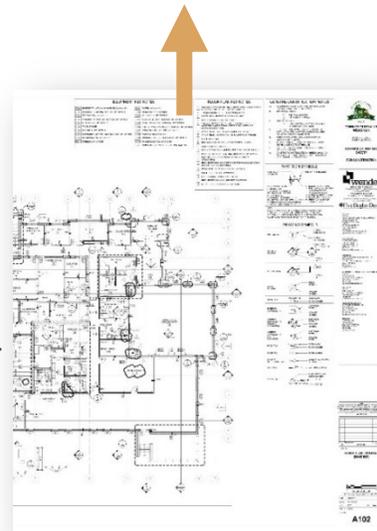
Construction  
Documents  
(Estimate)

Bidding  
Construction  
Occupancy

Select  
Construction  
Delivery  
Method



TYPICAL DORM ROOM



# CONSTRUCTION DELIVERY:

## GENERAL CONTRACTOR VS CONSTRUCTION MANAGER

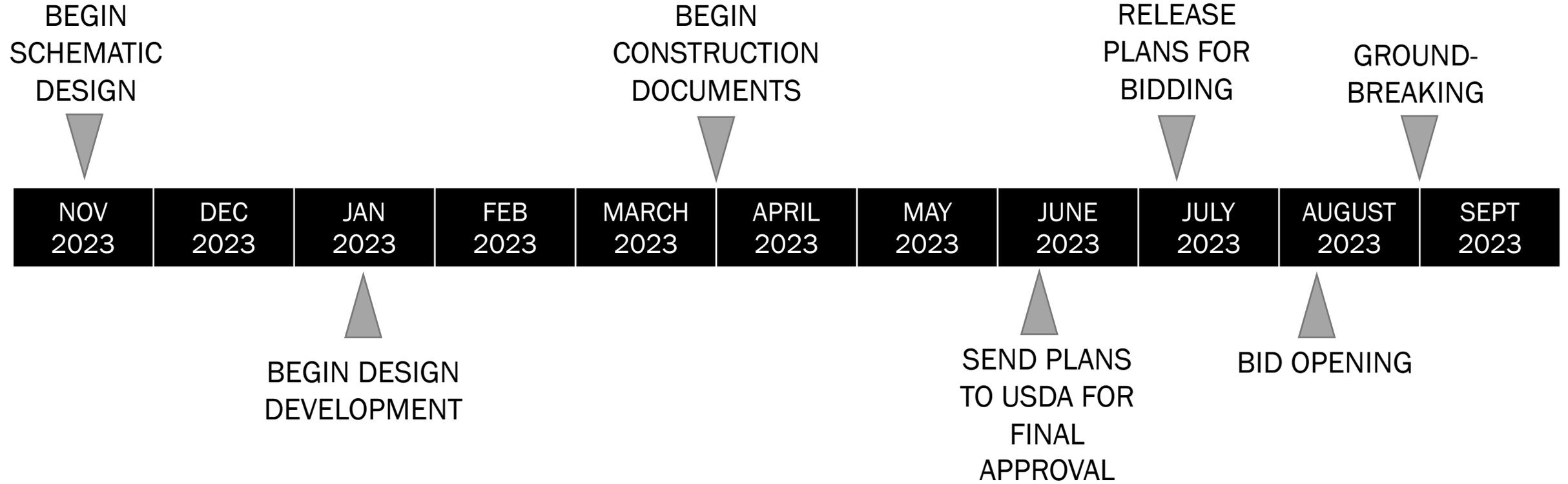
### IF CHOOSING CONSTRUCTION MANAGER (CM):

- Most beneficial if involved throughout the design process:
  - Provide estimates at each phase
  - Provide insight on challenging bidding climate
  - Provide constructability reviews of documents
- Begin CM selection process:
  - RFP
  - Interviews
  - Hire by end of Schematic Design Phase
- Cost:
  - Generally, between 2-3% of the Cost of Work
    - Historically total project cost of CM projects matches GC projects. Overhead and profit are just negotiated before bidding instead of during.



# WHAT'S NEXT?:

## POTENTIAL SCHEDULE



Note:  
Schedule assumes timely approval and permission to advance to next stage of production through out project. Delays in approval will cause delay to overall schedule.



QUESTIONS?

Thank you.



