

# FUTURE CENTRAL FIRE STATION

PRESENTATION MAY 29, 2018

UPDATE SEPTEMBER 5, 2019

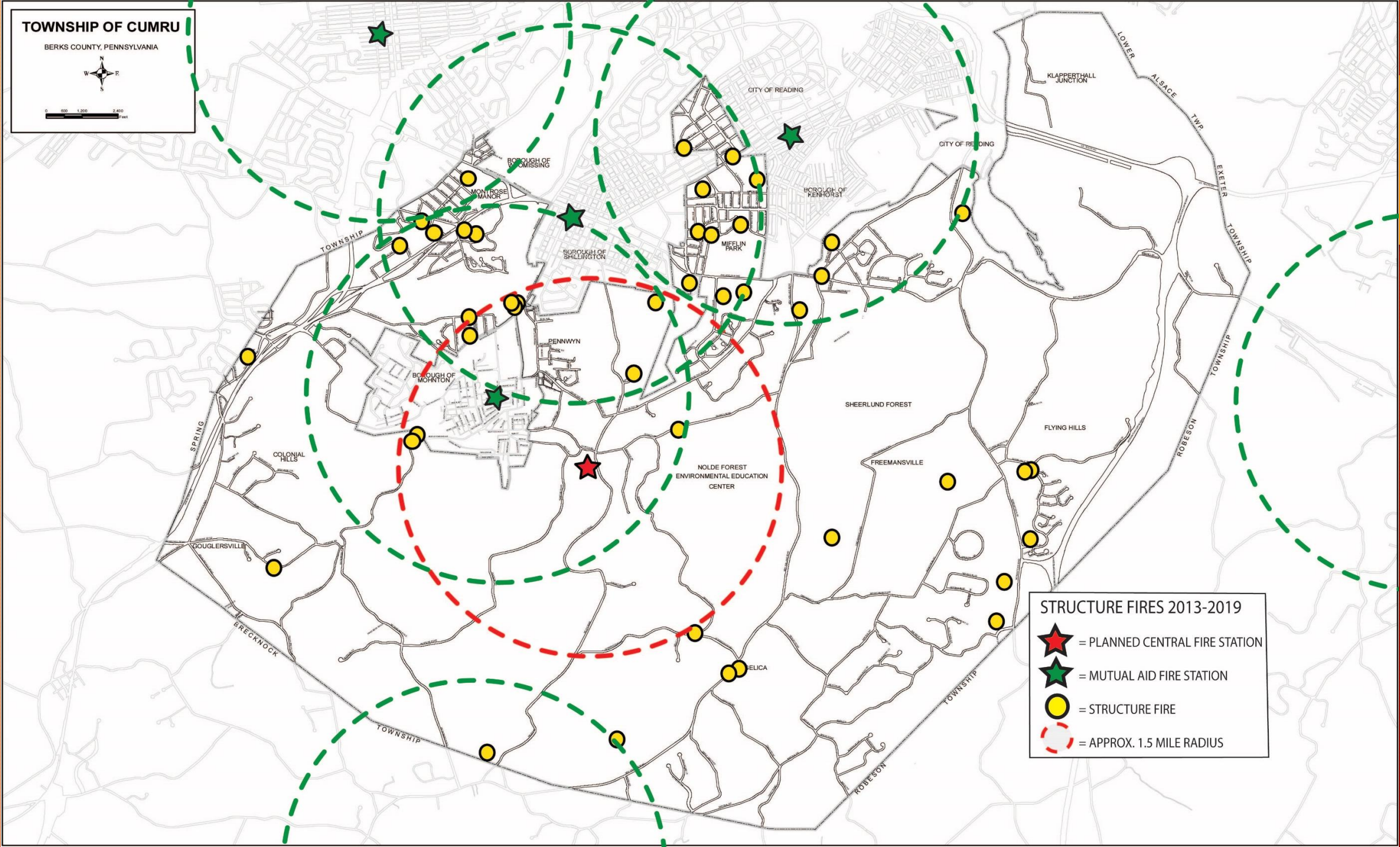
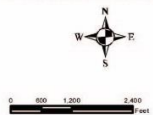
# DEMONSTRATING THE NEED FOR FIRE PROTECTION IN CUMRU TOWNSHIP

MAP ON NEXT SLIDE:

- STRUCTURE FIRES ONLY
- PAST 6 YEARS
- USES 1.5 MILE RADIUS WITHOUT ANALYSIS OF ROADS
- TWO FATALITIES

# TOWNSHIP OF CUMRU

BERKS COUNTY, PENNSYLVANIA



**STRUCTURE FIRES 2013-2019**

- = PLANNED CENTRAL FIRE STATION
- = MUTUAL AID FIRE STATION
- = STRUCTURE FIRE
- = APPROX. 1.5 MILE RADIUS

# ESTABLISHING NEEDS OF THE DEPARTMENT

- FIRE STUDY 2011
- STRATEGIC PLAN 2016-2020
- STATION 2 (CEDAR TOP STATION)

ONLY STATION OWNED BY TOWNSHIP - OTHER STATIONS LEASED  
110+ YEARS OLD, WITH MAINTENANCE CONCERNS  
DOES NOT MEET NEEDS OF VOLUNTEERS  
DOES NOT HAVE DECONTAMINATION FACILITIES  
CANNOT HOUSE ALL APPARATUS

# PROGRAMMING NEEDS INITIALLY IDENTIFIED

- DECONTAMINATION FACILITIES
- BAYS FOR CURRENT AND FUTURE APPARATUS
- STORAGE FOR VARIOUS EQUIPMENT
- TRAINING ROOM
- OFFICES
- BUNK ROOMS
- DAY ROOM
- FITNESS ROOM
- STUDY ROOM

# DETERMINING LOCATION OF STATION

- STUDY OF FOUR LOCATIONS 2016
- DEVELOPED MATRIX OF SITE CHARACTERISTICS - NEXT SLIDE
- CONCLUSION: BEST LOCATION FOR FUTURE FIRE STATION IS ON THE TOWNSHIP CAMPUS



## Cumru Township Fire Station Site Selection Matrix

### Possible Fire Station Sites

	<u>Site Selection Considerations</u>	<u>Impact Type</u>		<u>Reading Health</u>	<u>Township Campus</u>	<u>Christmas Tree Farm</u>	<u>Developer Given</u>	
				<u>Flying Hills</u>	<u>Church/Welsh</u>	<u>Phil/High</u>	<u>Cedar Top Road</u>	
1	CT owns the site	Cost		4	4	1	4	
2	Project could begin now on the site	Time & Cost		4	4	1	4	
3	Location of current CTFD membership pool	Operational & Service Delivery		1	4	1	1	
4	Location based on 3 year historical data provided	Operational & Service Delivery		1	3	3	3	
5	Usable portion of the site	Cost & Operational		3	3	3	2	
6	Parking Spaces: Staff, Hot & Membership	Cost & Operational		3	4	3	1	
7	Two ways in & out of site: Emergency & POV	Life Safety		2	3	2	2	
8	Highway Speed	Life Safety		1	3	2	3	
9	Sightlines: Speed, visible distance & crowning	Life Safety		1	3	2	2	
10	Noise from site to homes across the street	Goodwill		3	4	2	2	
11	Water near the site: Domestic or Well	Cost		4	2	4	4	
12	Sewer near the site	Cost		1	4	4	4	
13	Electrical Service Hazard/Relocation	Cost		2	4	2	2	
14	Site approach: Setback, T42 turning radius, off St.	Cost & Operational		3	4	3	1	
15	Site Prep: Fill, retaining walls, grading	Cost		3	4	2	1	
<b>Scoring Legend</b>		1 = Major Cost and/or Project Negative Impact. 4 = Minimal Cost and/or Project Negative Impact.		<b>Totals</b>	<b>36</b>	<b>53</b>	<b>35</b>	<b>36</b>
<b>Suitability of Sites based on 2015 Conditions and Impacts</b>				<b>60.00%</b>	<b>88.33%</b>	<b>58.33%</b>	<b>60.00%</b>	

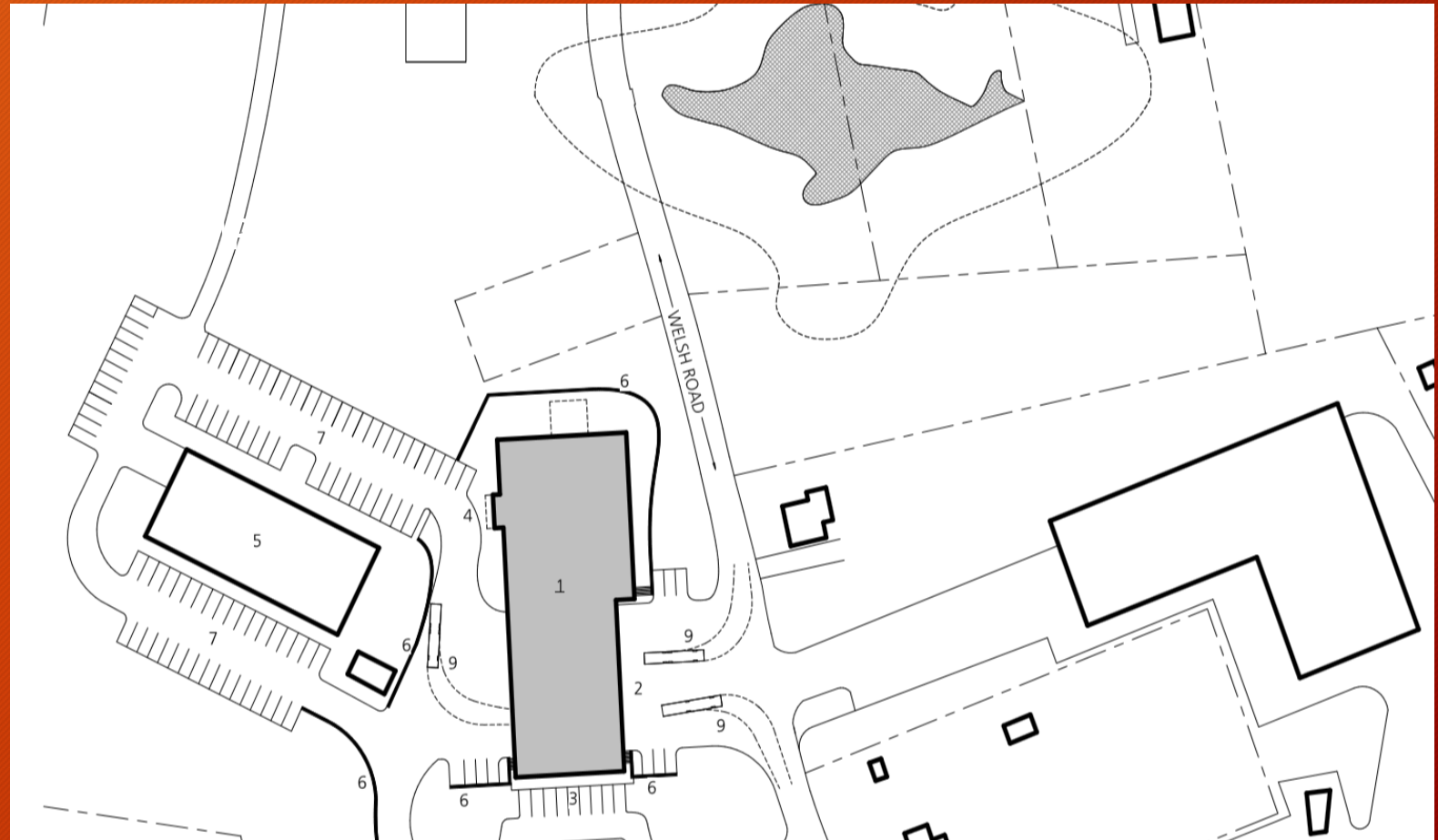
# CONCEPTUALIZING CAMPUS LAYOUT

- WETLAND DELINEATION DONE
- MASTER PLAN / FEASIBILITY STUDY AUTHORIZED 2016
- REQUEST FOR QUALIFICATIONS FOR ARCHITECT TO CONDUCT MASTER PLAN
- DEVELOPMENT OF MASTER PLAN
- DEVELOPMENT OF OPTIONS FOR SPECIFIC SITE OF FIRE STATION ON TOWNSHIP CAMPUS

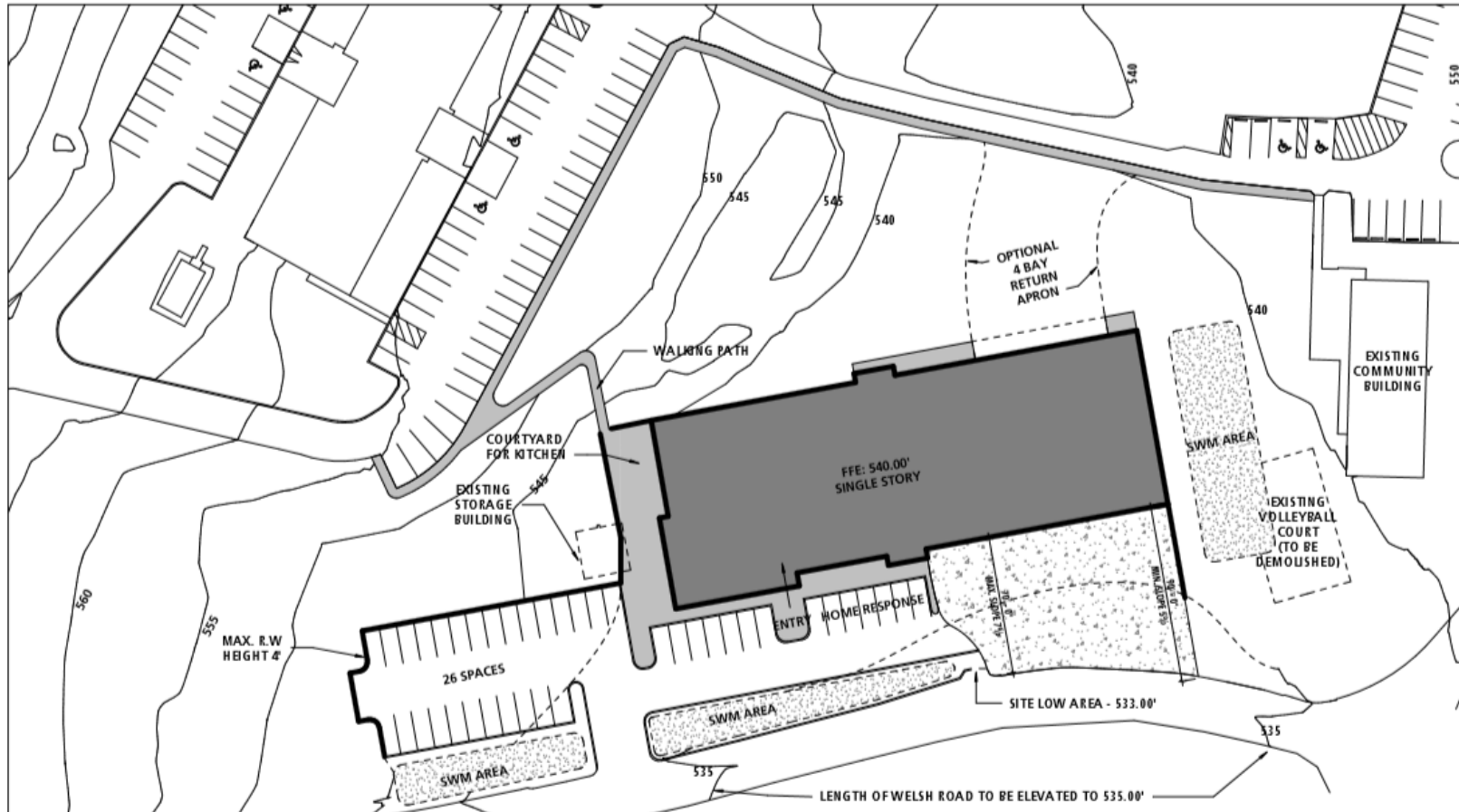


# FIRST CAMPUS LAYOUT CHOSEN

GEOTECHNICAL STUDY  
ON THIS SITE SHOWED  
THAT IT WAS  
UNSUITABLE.



# SECOND CAMPUS LAYOUT CHOSEN



GEOTECHNICAL STUDY  
ON THIS SITE SHOWED  
THAT IT IS SUITABLE,  
WITH CONDITIONS.

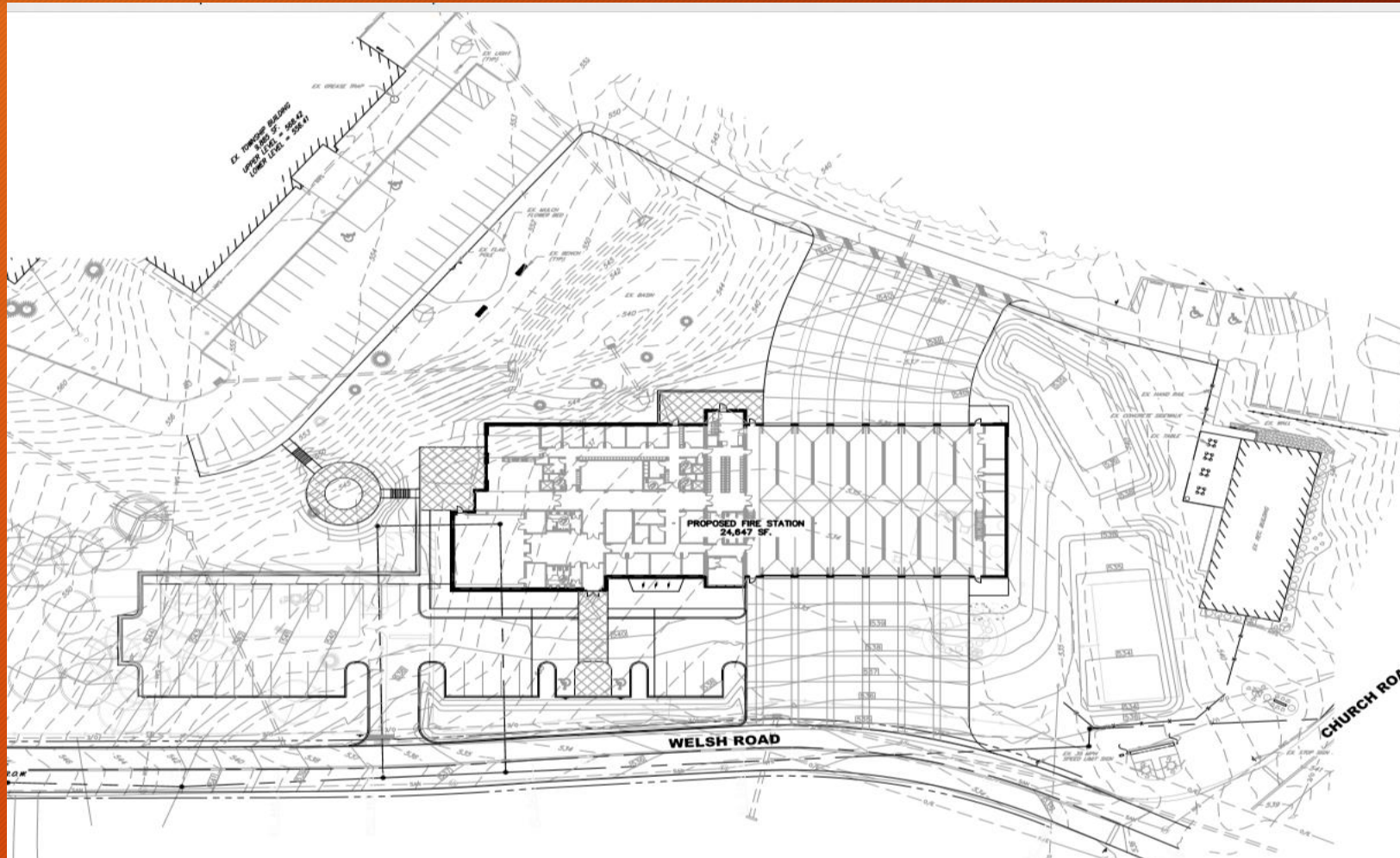
# NOTES ABOUT CAMPUS LAYOUT

- CAN OPERATE OUT OF STATION 2 UNTIL OCCUPANCY (NOT HAVING TO DO PHASED CONSTRUCTION SAVES MONEY)
- ONE-STORY BUILDING (SAVES COST OF ELEVATORS AND STAIRWELLS)
- SUPPORT FROM PUBLIC WORKS AND TOWNSHIP INFRASTRUCTURE READILY AVAILABLE (MORE EFFICIENT)
- DURING CONSTRUCTION, RECREATION BUILDING CAN BE USED AS CONSTRUCTION ADMINISTRATION OFFICE (SAVES MONEY)
- TOWNSHIP-OWNED AREA ON EAST SIDE OF WELSH RD. CAN BE USED FOR CONSTRUCTION NEEDS

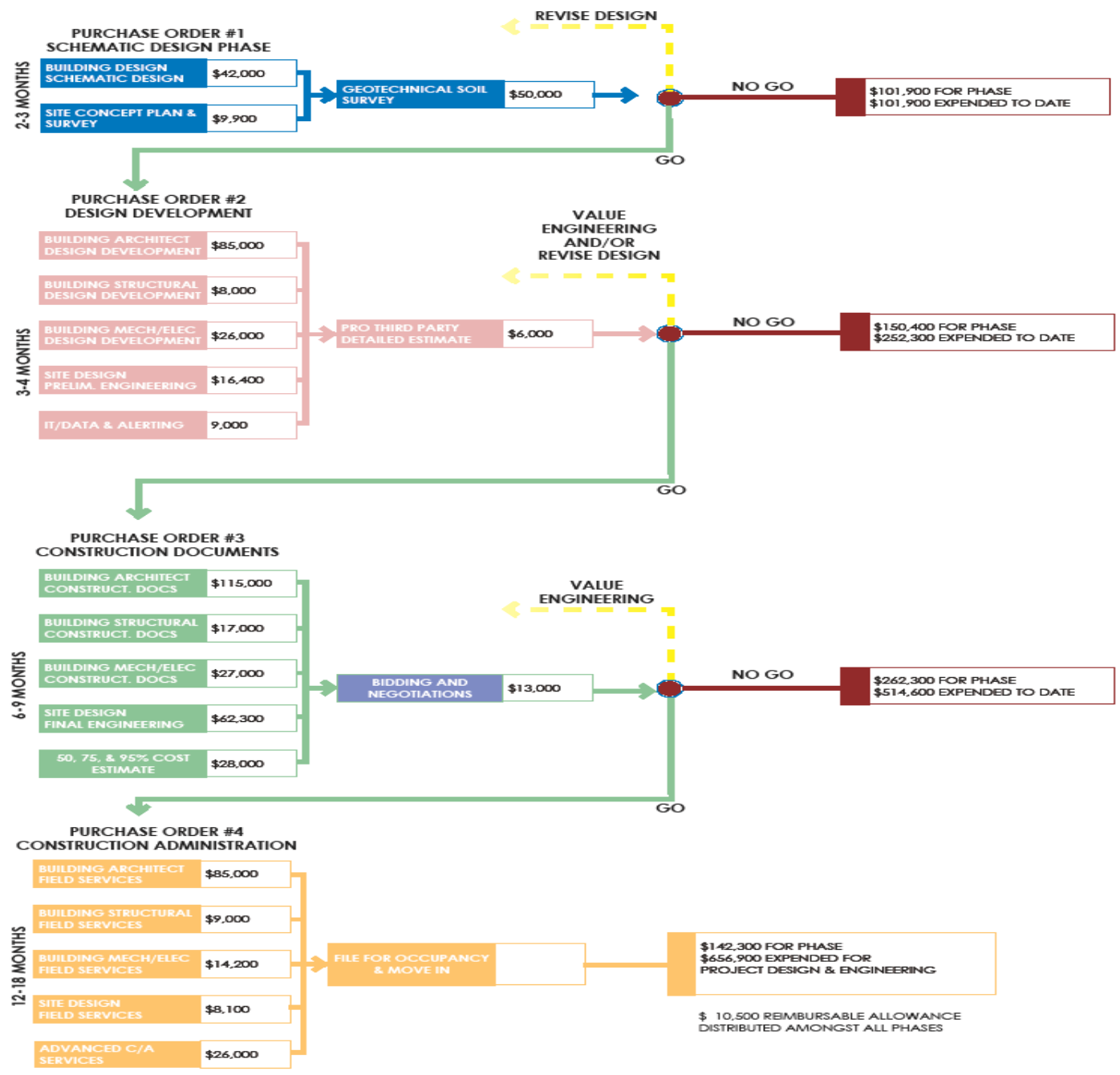
# RELATED PROJECTS

- PARTIAL GRANT AWARDED TO BRING PUBLIC WATER TO TOWNSHIP CAMPUS.
- PARTIAL GRANT AWARDED FOR STORMWATER FACILITY.
- NATURAL GAS TO BE INSTALLED.
- SEWER LINES TO BE REPLACED AS PART OF MANDATED PROGRAM.

# NPDES PERMIT FOR FIRE STATION AND RELATED PROJECTS - MEETING 9/12/2019



# FLOW CHART OF DESIGN PROCESS





- APPARATUS BAY - 5 BAYS (DOUBLE DEEP)
- TURNOUT GEAR - 52 RACKS @ 20" X 20"
- BUNKS - 6 BUNKS @ MAXIMUM OF 4 BEDS PER BUNK = 24 PERSON MAX. SLEEPING CAPACITY
- PERSONAL LOCKERS - 44 UNITS @ 18" X 18"
- TRAINING ROOM - 60 SEATS @ 2 PERSON DESKS/ ROOM CAN BE DIVIDED W/ OPERABLE PARTITION

SCALE:

CONSULTANT:

CUMRU FIRE DEPARTMENT  
CUMRU FIRE DEPARTMENT  
1775 WELSH ROAD  
MOHNTON, PA 19540

NO. DESCRIPTION DATE

1 FLOOR PLAN  
1" = 10'-0"