

# Greenfield Park Stormwater Improvements





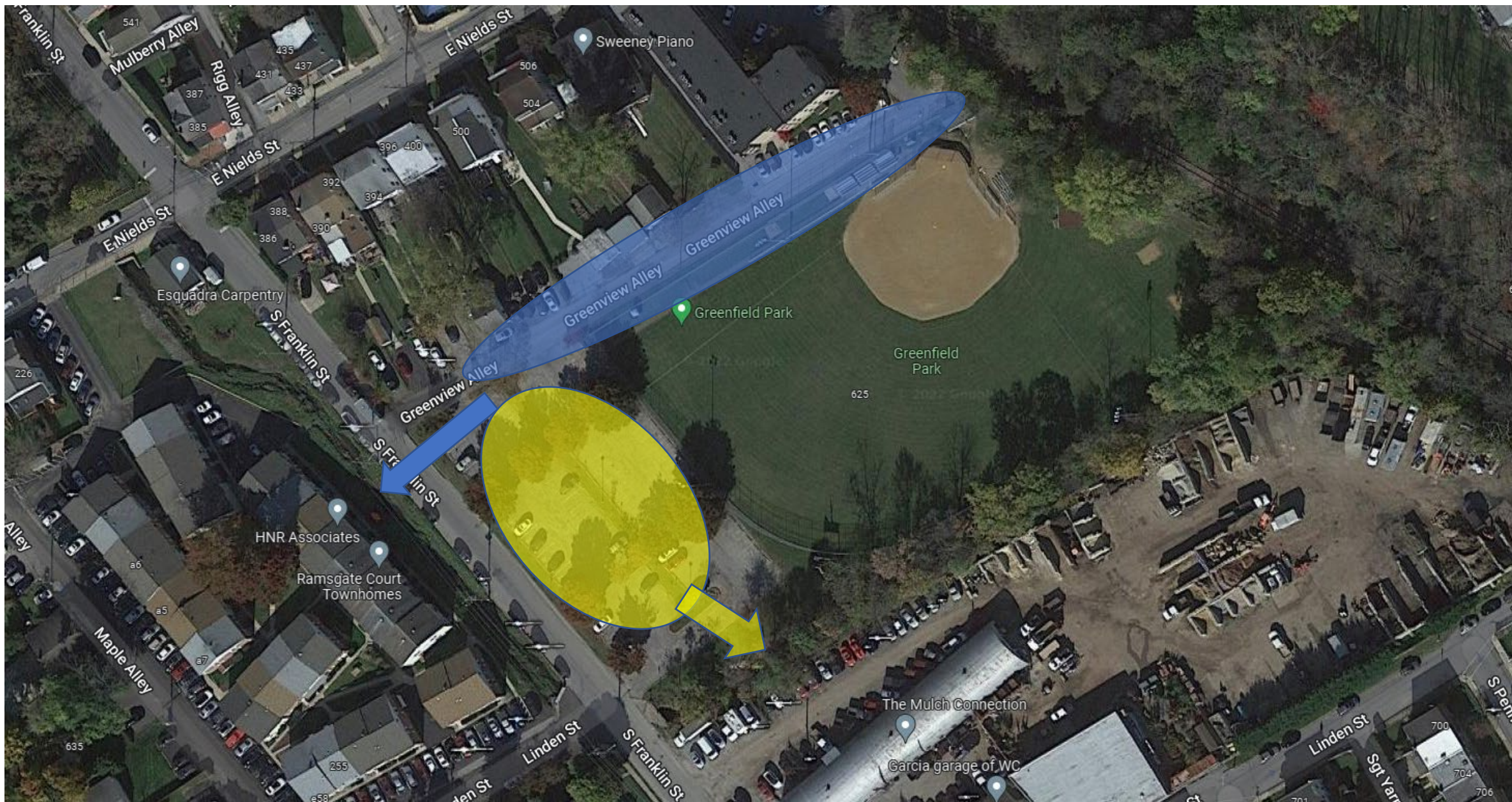


February 2017 – sketch plan for Greenview Alley improvements - ~ \$148,000 improvements

April 2019 – Chester County Conservation District grant \$127,270

2020 – 2021 plan and scope modifications to treat more stormwater and address flooding

Monday June 6, 2022 bid opening

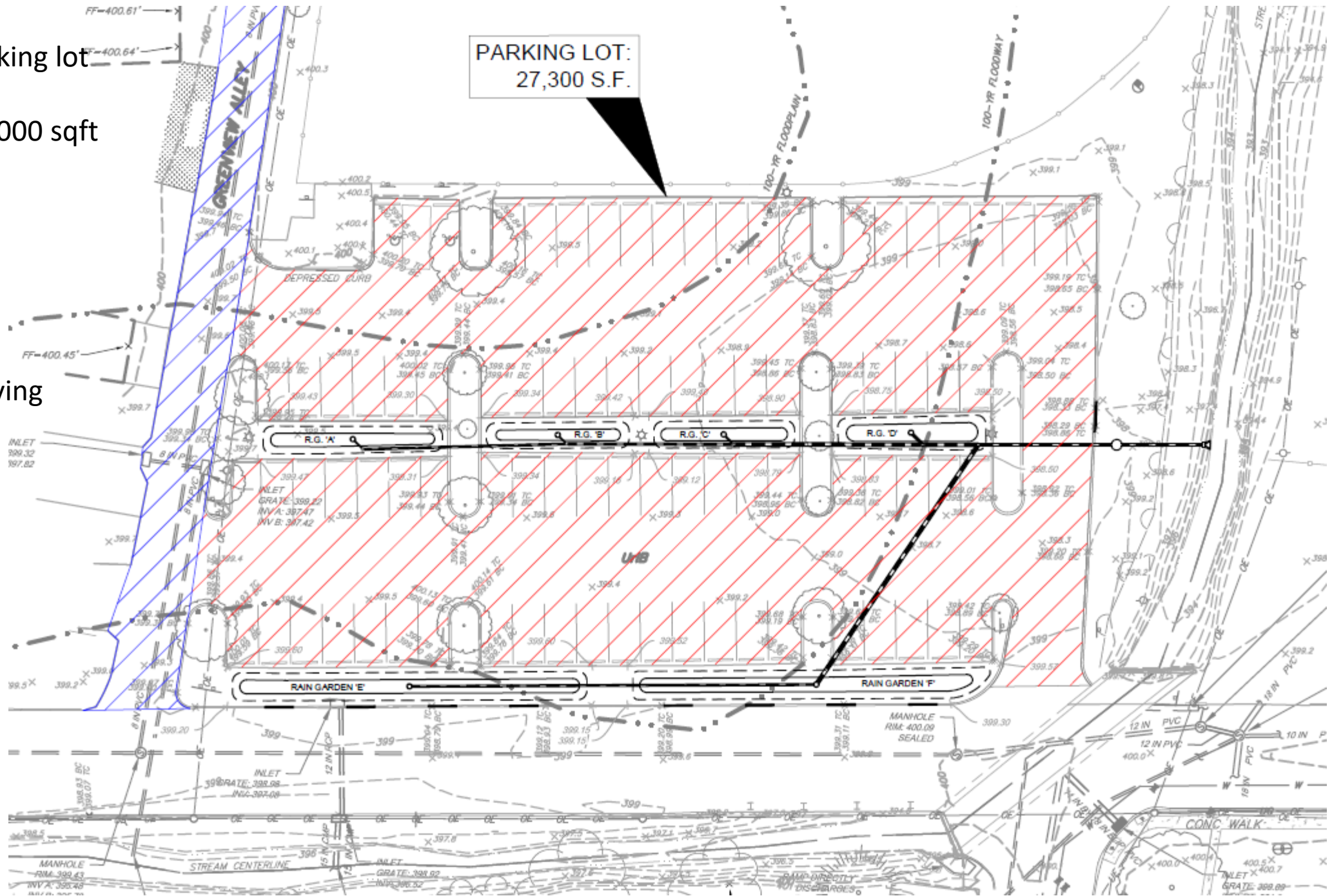




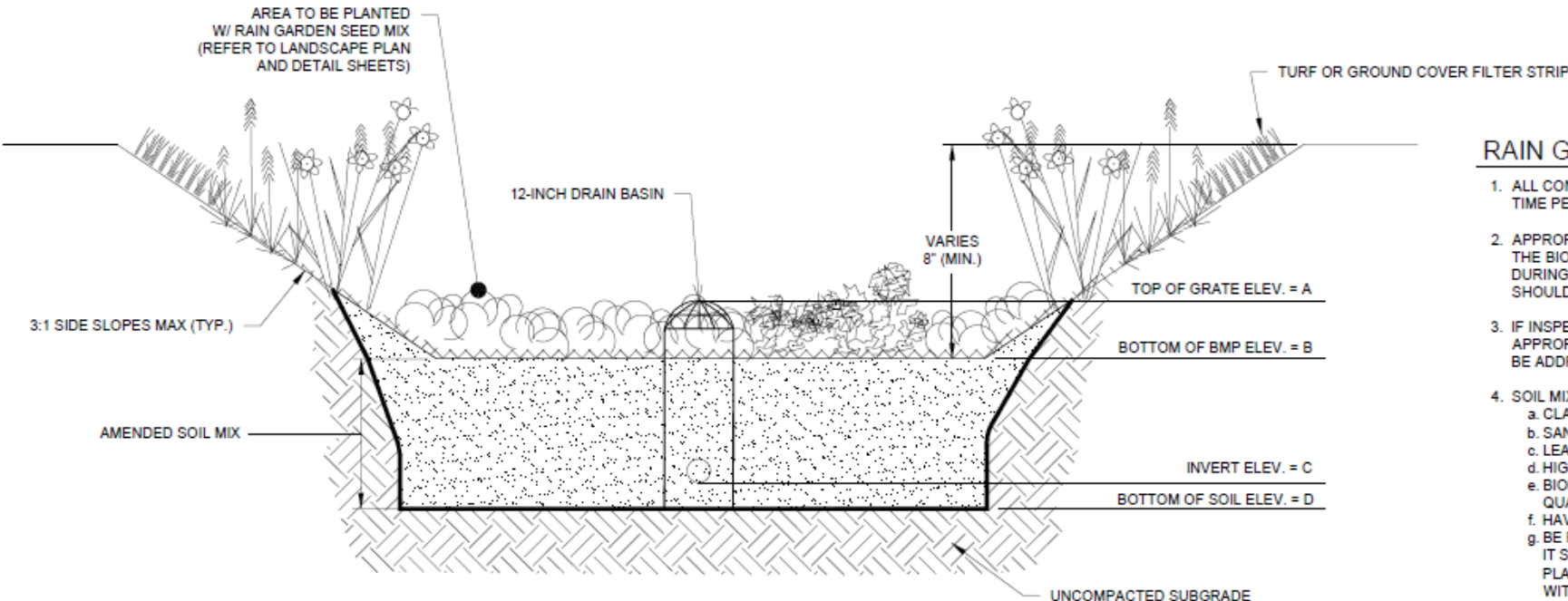
Rain Gardens in parking lot  
Base bid  
Drainage Area = 37,000 sqft

Parking Lot paving  
Alternate

Greenview Alley paving  
Alternate



# Rain Gardens in parking lot



## RAIN GARDEN AREA CONSTRUCTION NOTES:

1. ALL CONSTRUCTION ACTIVITIES FOR THE BIO-RETENTION AREA SHOULD OCCUR WITHIN A SHORT TIME PERIOD TO ENSURE THAT SILT AND SEDIMENT DO NOT ENTER THE TRENCH.
2. APPROPRIATE MEASURES ARE TO BE TAKEN IN THE EVENT OF SEDIMENT ENTERING AND CLOGGING THE BIO-RETENTION AREA. SHOULD UNFAVORABLE CONDITIONS (BEDROCK, ETC.) BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS OF THE BIO RETENTION AREA, THE DESIGN ENGINEER SHOULD BE CONTACTED TO ADDRESS SUCH ISSUES.
3. IF INSPECTION INDICATES THAT SOIL OR SEDIMENT HAS ENTERED ANY OF THE BIO RETENTION AREA, APPROPRIATE MEASURES (I.E. CLEARING THE SOIL SEDIMENT FROM BIO RETENTION AREAS) SHOULD BE ADDRESSED.
4. SOIL MIX SPECIFICATIONS:
  - a. CLAY CONTENT: LESS THAN 5%
  - b. SAND CONTENT: 50-60%
  - c. LEAF COMPOST OF AGED LEAF MULCH: 20-30%
  - d. HIGH QUALITY TOPSOIL: 20-30%
  - e. BIORETENTION SOIL CAN BE CREATED BY AMENDING EXISTING SOIL. DEPENDING ON THE QUALITY OF THE SOIL, COMBINE 20-30% NATIVE SOIL WITH 20-30% COMPOST AND 50% SAND.
  - f. HAVE A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5 INCHES PER HOUR).
  - g. BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1.0 INCH IN DIAMETER. IT SHOULD ALSO BE FREE OF BRUSH OR SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF 12-18 INCHES, LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).

RAIN GARDEN	A	B	C	D
A	398.96	398.63	397.13	396.63
B	398.82	398.49	396.42	396.42
C	398.45	398.12	395.82	395.82
D	398.16	397.83	395.14	395.14
E	398.81	398.48	396.98	396.48
F	398.86	398.63	395.85	395.85

## RAIN GARDEN DETAIL & NOTES

NOT TO SCALE

## RAIN GARDEN AREA CONSTRUCTION SEQUENCE:

A LICENSED PROFESSIONAL KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMP'S, PREFERABLY THE DESIGN ENGINEER, SHALL BE ON-SITE TO MONITOR THE CRITICAL STAGES OF CONSTRUCTION IDENTIFIED BELOW. THE LICENSED PROFESSIONAL SHALL BE NOTIFIED A MINIMUM OF 3 DAYS IN ADVANCE OF THE BEGINNING OF CONSTRUCTION.

1. EXCAVATE SOIL TO THE DEPTH SPECIFIED, PLACING SOIL IN STOCKPILE.
2. CRITICAL STAGE: EXCAVATIONS SHALL BE INSPECTED BY DESIGN ENGINEER.
3. CRITICAL STAGE: SOIL MIX SHALL BE INSPECTED BY DESIGN ENGINEER PRIOR TO PLACEMENT.
4. BEGIN PLACEMENT OF AMENDED SOIL MIXTURE AND GRADE AREA AS SHOWN ON PLAN.
5. INSTALL PERMANENT VEGETATION AND IMMEDIATELY STABILIZE WITH TEMPORARY STABILIZATION.

Bid Opening June 6, 2022

	DiRocco Brothers	Berg
Base Bid	\$ 151,955	\$ 157,315
Alt 1 Parking lot paving	\$ 125,790	\$ 151,668
Alt 2 Greenview Alley paving	\$ 44,959	\$ 55,908

Bids valid for 60 days

	Allocation Exp	Costs
reallocate SPF projects	\$ 50,912	
reconciliation 2022 budget	\$ 60,135	
2022 budget	\$ 70,500	
construction		\$ 151,955
engineering		\$ 29,592
total	\$ 181,547	\$ 181,547
grant	\$ 120,270	66%
match	\$ 61,277	34%

Staff Recommendation:

Award base bid to DiRocco Brothers and pursue continued SWM improvements in the area.  
 Repair and maintain parking lot.