



Sheehan-Basquil Park Renovation

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Introduction

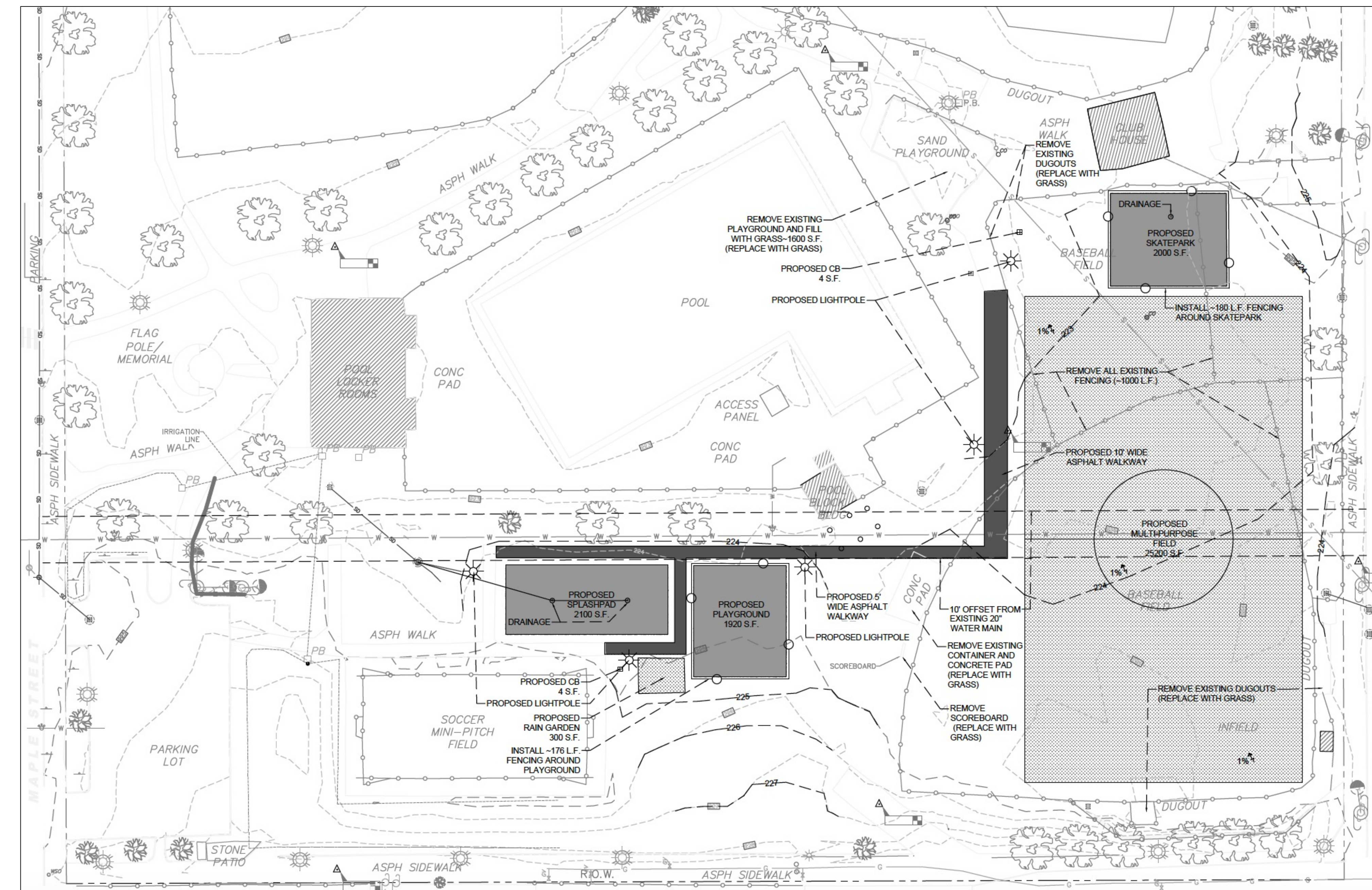
The City of Manchester, NH has awarded Hoyle, Tanner & Associates, Inc. with the renovation of Sheehan-Basquil Park which originally consisted of four baseball fields, a pool, skatepark, and playground. The project has been divided into three phases, the first of which has been completed to remove the previously existing skatepark and install a new soccer mini-pitch and parking lot. Currently, the Phase II renovation has begun with crosswalk improvements, picnic area development, and the installation of a splashpad and new playground. The Phase III renovation is planned to include pool and skatepark renovations, a new bathhouse, and the installation of a multi-purpose field. The capstone project team, through collaboration with the project faculty advisor and sponsor, is tasked with generating a recommendations report, which will include a detailed design for the Phase II renovation, along with a master plan with Phase III renovation recommendations.

Cost Estimate

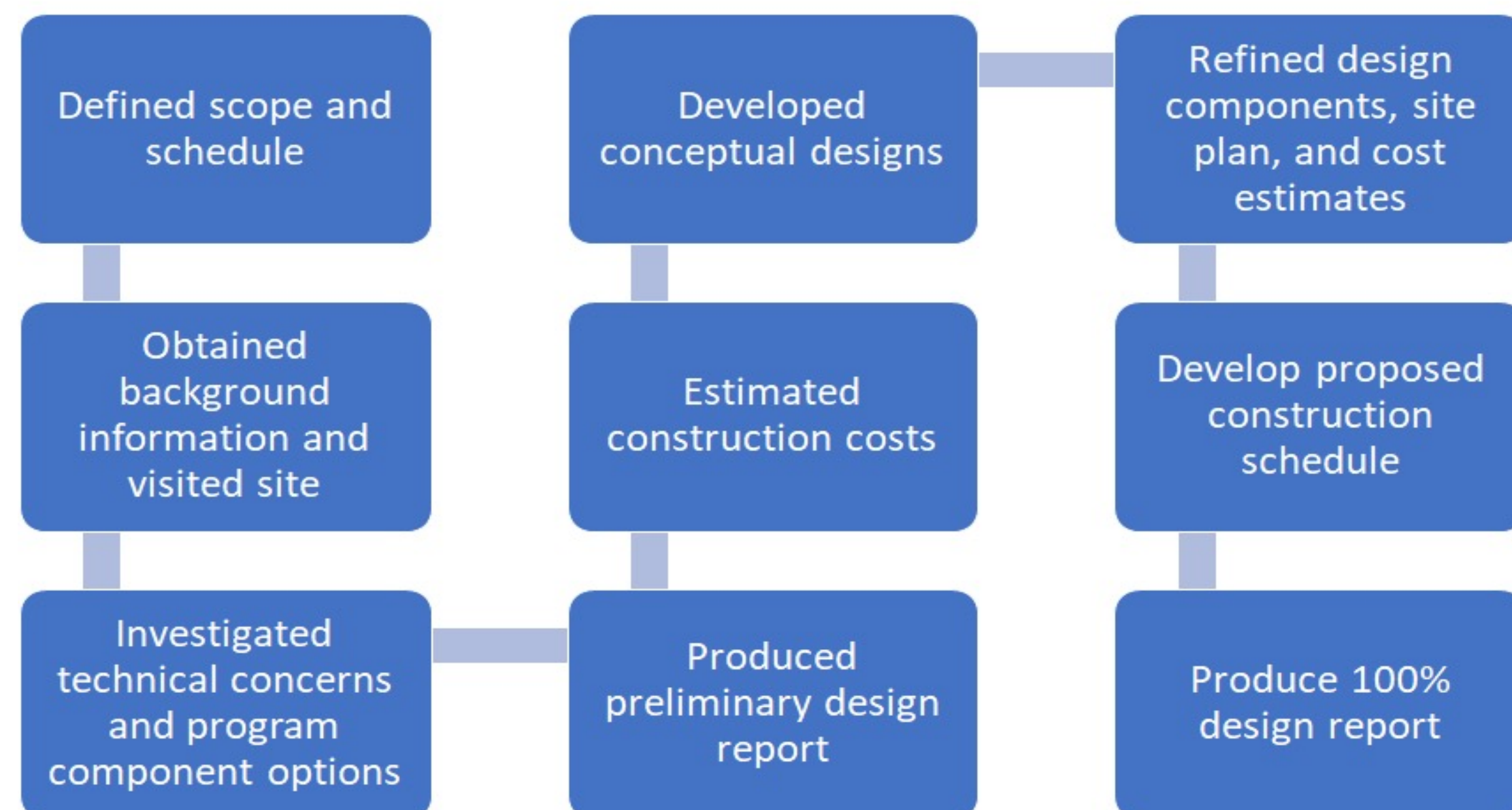
Phase II Budget: \$730,000.00

Recommended Design	
Component	Price
Playground	\$138,000.00
Splashpad	\$178,000.00
Skate Park	\$32,000.00
Rain Garden	\$4,000.00
Multipurpose Field	\$42,000.00
Walking Paths	\$23,100.00
Lighting & Site Amenities	\$15,000.00
Site Improvements/Removals	\$49,000.00
Mobilization/Demobilization - 10%	\$48,000.00
Contingency - 15%	\$96,000.00
Project Construction Subtotal	\$480,000.00
Design/Permitting - 10%	\$48,000.00
Construction Inspection - 10% (Full Time)	\$48,000.00
Project Total:	\$623,600.00

Site Plan



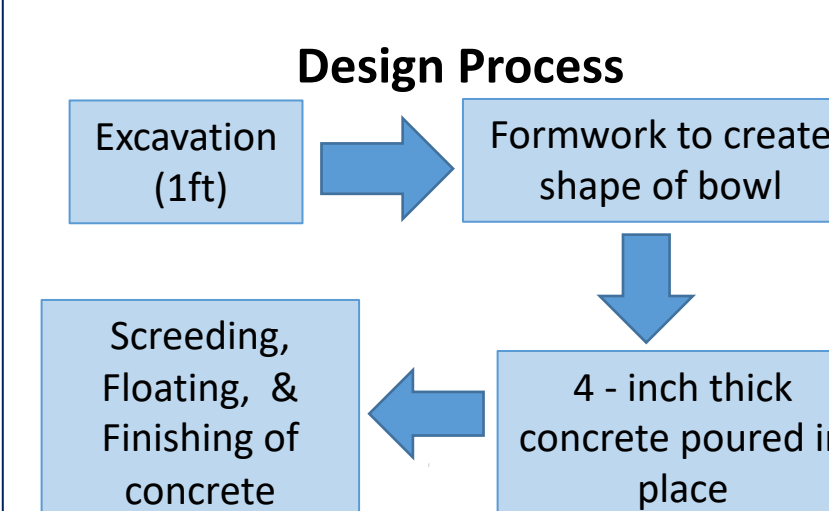
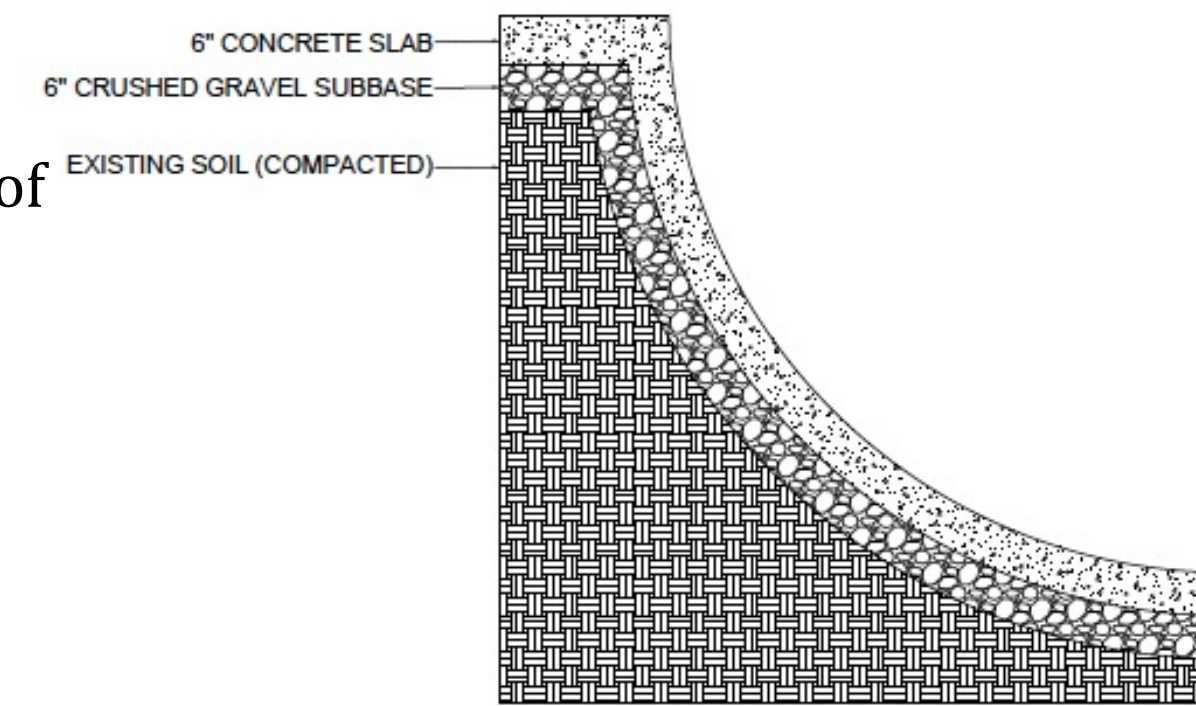
Scope of Work



Component Details

Skate Park

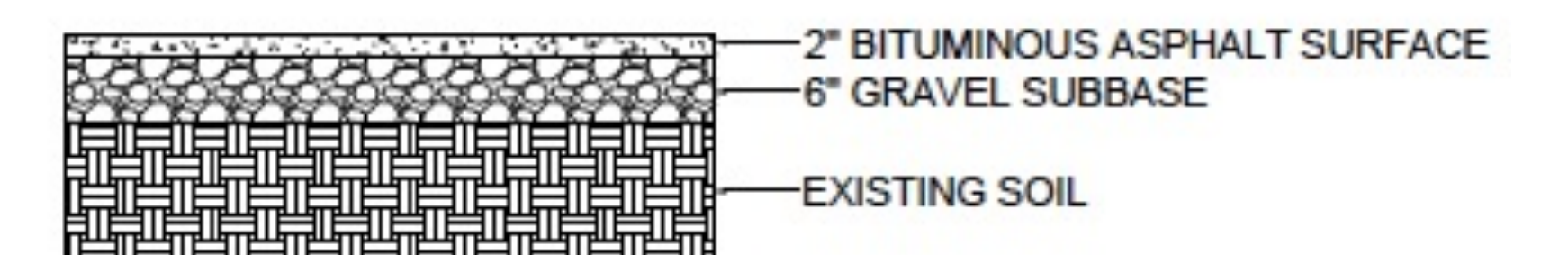
- 40'x50' (2000 S.F) concrete pad with excavated skate bowl area
- Built in drainage at bottom of bowl
- Excavation depth of 11'



Multi-Purpose Field

- Remove existing features from area:
 - 4 dugouts
 - 1000 L.F. of chain link fence
 - 1 concrete pad with container
 - 1 scoreboard
- 120' X 210' (25200 S.F.) grass field
- Constructed by regrading, seeding, and fertilizing existing soil
- 1% slope towards north-west portion of field for drainage
- 2 regulation size soccer nets for U-10 age group

Walkway Paths



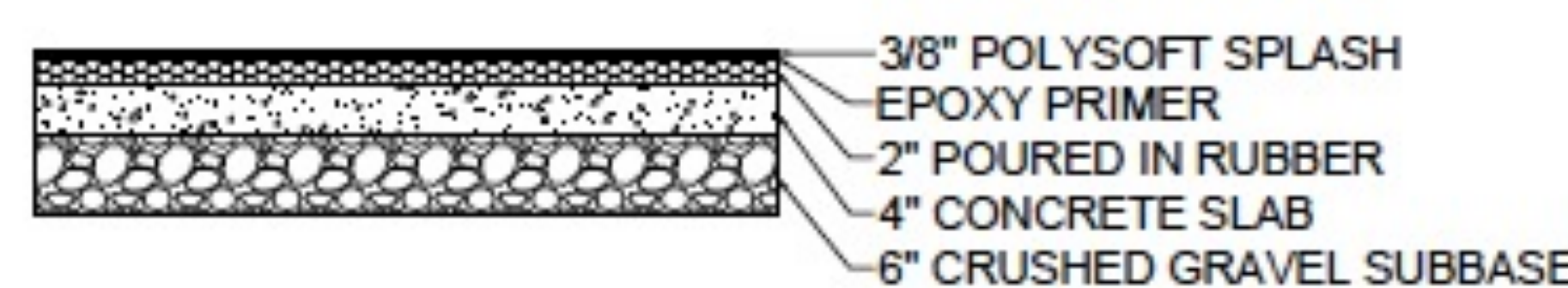
WALKWAY PATH DETAIL

- 2555 S.F. total of asphalt pavement connecting skatepark area to playground, splash pad, mini-pitch area
 - 1150 S.F. of 10' width paths
 - 1405 S.F. of 5' width paths
- 5 new light poles along paths

Technical Concerns

- Stormwater**
 - Mean annual precipitation is 40-50 inches
 - 10 existing catch basins
 - 5-10% of park consists of impervious surfaces
 - City of Manchester regulated by MS4
- Soil Type**
 - 90% urban land, 4% Windsor, 4% Hinckley, 2% unnamed
- Infrastructure**
 - Structures : pool locker-room and baseball clubhouse
 - Underground, high-risk, 20" dia. cast iron water main pipe
 - Transportation: traffic control along Maple St
 - Additional lighting along walking paths
- Functionality**
 - Incorporate community input
 - Consider neighboring park features
 - Include accessibility requirements
 - Enhance safety and visibility throughout park

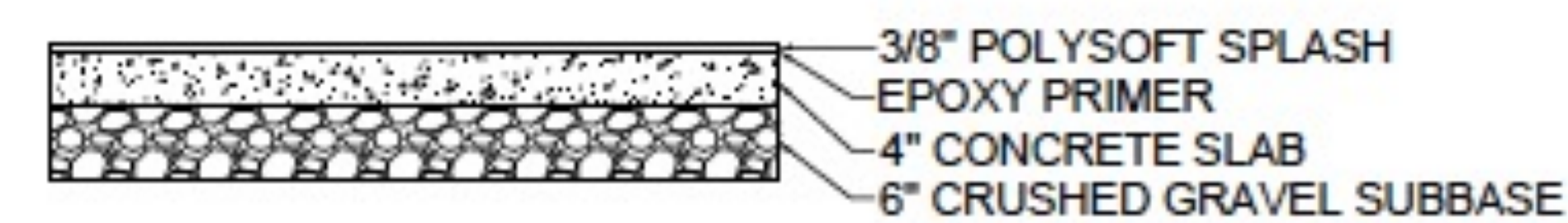
Playground



PLAYGROUND DETAIL

- 48'x40' (1920 S.F) Poly Soft Play Surfacing
- Poly Soft Play: Soft fall, pour in place system made of closed cell polyolefin polymer beads with cool surface temperatures
- Chosen colors: turquoise, jade breeze, viridian, desert tan

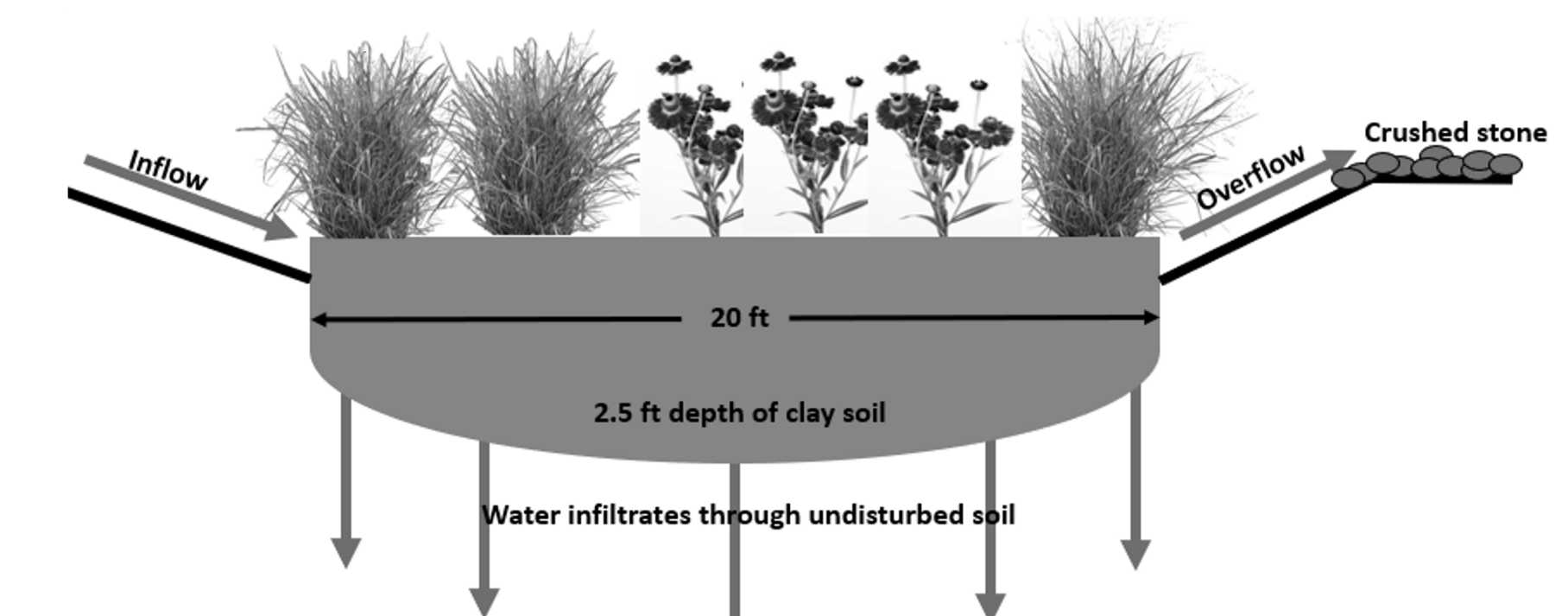
Splash Pad



SPLASH PAD DETAIL

- (2100 S.F) Poly Soft Splash Surfacing
- Poly Soft Splash: Porous, pour in place system and is slip-resistant and resists chemical corrosion from chlorine added to the water
- Made of closed cell polyolefin polymer beads
- Chosen colors: Morning Sky, Crystal Blue, Sunset Fire, Sunrise

Rain Garden



- Flowers: panicum virgatum, silphium, helenium autumnale
- Based on: color, height, bloom season, native species, and light exposure and soil moisture requirements