CIP Delivery Strategy

Design-Build RFPs for
Oakmont Pavement Maintenance,
Martin Luther King Jr. Neighborhood Park, and
Bayer Park Natural Play Area Renovation

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Transportation and Public Works

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Why Design-Build?

Delivery

- Accelerated schedule
- Clear performance specifications

Costs

- Cost certainty earlier in process (Guaranteed Maximum Price)
- Allows phasing if funding requires

Accountability

- Transfers design coordination and constructability risk to one entity
- Reduces change orders due to design gaps,
- Minimizes designer/contractor disputes

MLK Jr. Neighborhood Park

Community Priorities Identified in Master Plan

- Multi-use athletic space
- High durability, year-round playability
- Equity in field access

Planning History

- Evaluated both natural grass and alternative turf
- Reviewed maintenance capacity, expected hours of use, long-term lifecycle costs

Planned Use Intensity

- Community drop-in play
- School use
- Youth soccer leagues and events

Natural Turf

Advantages

- Lower surface temperature
- No synthetic components
- Lower upfront installation cost

Limitations

- Limited playable hours (typically 600 – 800 hours annually)
- Weather vulnerability (rain closures)
- Requires irrigation, potentially fertilizers, pesticides, and/or herbicides
- On-going mowing and maintenance labor
- Can become compacted/uneven with heavy use
- Recovery time after heavy play

Turf Alternatives

Advantages

- 1,500 – 2,000+ playable hours per year
- All-weather reliability
- No irrigation required
- No fertilizers or pesticides
- Predictable, even playing surface
- Lower annual maintenance labor

Limitations

- Higher upfront cost
- Surface temperature higher in hot weather
- Requires eventual replacement (8 – 12 years typical)
- Material selection must address environmental concerns

Costs

Estimated Installation

- Natural Turf: $400,000 – $600,000
- Turf Alternatives: $800,000 – $1,200,000

Annual Maintenance

- Natural Turf: $50,000 – $100,000 annually (labor, irrigation, chemicals, repair)
- Turf Alternatives : $10,000 – $20,000 annually (brushing, sanitizing, infill top-off)

Costs over 10 Years

- Natural Turf: $1,250,000, ~$175 per hour of use
- Turf Alternatives : $1,150,000, ~$65 per hour of use

Financial Implications

Capital Improvements

- Turf alternatives eligible for CIP as a major replacement
- Predictable, planned expense
- Can be reserved/scheduled in advance

On-going Maintenance (General Fund)

- Competes annually with:
  - Police & Fire
  - Parks staffing
  - Streets & utilities
  - Rising personnel costs
- Subject to economic downturns
- Difficult to increase without tax or fee changes

Why This Matters

Natural Turf

- Requires sustained General Fund support annually
- Labor-intensive
- Irrigation, chemicals, equipment
- Maintenance quality directly tied to budget health

Turf Alternatives

- Lower annual General Fund burden
- Major expense occurs predictably every 8 –12 years
- Replacement can be programmed in CIP
- More stable and manageable fiscally

Environmental Considerations

PFAS & Material Safety

- City can require PFAS-free turf systems
- Can prohibit crumb rubber infill
- Require third-party lab certification
- Specify organic or engineered infill
  - Cork, TPE, coated sand

Heat Island Effect

- Turf can be warmer than grass
- Mitigation strategies:
  - Organic infill options
  - Irrigation for cooling (if needed)
  - Shade trees in park design
  - Light-colored backing systems

Water Runoff

- Modern turf systems are permeable
- Engineered stone base allows infiltration
- Can be designed to meet or exceed stormwater standards
- Eliminates fertilizer/pesticide runoff

Water Use Comparison

- Natural turf requires irrigation
- Turf alternatives eliminate annual irrigation demand

Incorporation into Design-Build[9]

Health & Materials
- PFAS-free certification required
- No crumb rubber infill
- Independent third-party safety testing
- Compliance with all state/federal standards

Environmental Performance
- Permeable system meeting stormwater code
- Organic or non-toxic infill options
- Heat mitigation strategies required
- End-of-life recycling plan required

Transparency
- Material submittals reviewed by City
- Public disclosure of system components
- Performance warranty minimum 8 years

Oversight
- City retains approval of final surface selection

Variable	Natural Turf	Turf Alternatives
Installation Cost	Lower upfront	Higher upfront
Annual Maintenance Cost	Higher	Lower
Lifecycle Replacement	On-going rehab	8 – 12 year full replacement
Funding Alignment	On-going General Fund pressure	CIP-programmable replacement
Playable Hours per Year	600 – 800	1,500 – 2,500
Weather Closures	Rain-sensitive	Minimal closures
Surface Consistency	Variable (wear, compaction)	Consistent, even surface
Injury Research	Comparable overall; field condition matters	Comparable overall; certified systems required
Irrigation Required	Yes	No
Fertilizers/Pesticides	Typically required	None
Stormwater Runoff	Can include nutrient runoff	Engineered permeable system
Heat	Cooler	Warmer (mitigation options available)
Maintenance Staffing	Labor-intensive	Lower labor demand
Durability Under Heavy Use	Declines with overuse	Designed for high-intensity use
Equity of Access	Limited by rest periods	High access, year-round use

Questions?