

Feature	Traditional Gravel	BaseCore Geocell System
<b>Load Distribution</b>	Load is concentrated on surface; can rut or pothole under tires	Load is spread across a wide area through cell walls, minimizing deformation
<b>Thickness Required</b>	Requires 12–18"+ of gravel for durability on soft soils	Achieves equivalent strength with only 4–8" of gravel, saving material
<b>Frost Heave Resistance</b>	Poor; freeze/thaw easily disrupts thick, loose gravel	Better; cells confine material and reduce vertical movement from frost
<b>Soil Stabilization</b>	Minimal; gravel can migrate into soft or wet subsoil	Geotextile + geocell = strong reinforcement, even on low CBR soils
<b>Rutting / Potholes</b>	Very likely after 1–2 winters of church traffic	Greatly reduced or eliminated due to cell confinement and load transfer
<b>Maintenance Costs</b>	High – frequent regrading, topping, dust control	Low – cells reduce movement, washout, and maintenance cycles
<b>Drainage Control</b>	Variable; can trap water if not well-graded	Enhanced; gravel inside cells remains porous and well-draining
<b>Installation Time</b>	Straightforward, but high volume of material	Slightly longer install (unfolding & staking BaseCore), but less material to place
<b>Material Cost</b>	Low up front, high in long-term maintenance and replacement	Slightly higher up front, significant long-term savings on material and repairs
<b>Environmental Impact</b>	High material consumption, higher runoff	Reduced gravel use, promotes infiltration, erosion-resistant

## How BaseCore Adds Value

### 1. Material Savings

- Achieves same or better load capacity with 50–70% less gravel
- Less excavation, hauling, and fill means lower overall project cost

### 2. Longer Lifespan & Lower Maintenance

- No rutting, washout, or potholes — even after wet springs or winter freeze-thaw
- Reduces need to regrade or replenish gravel yearly (a common issue for churches)

### 3. Better Performance on Poor Soils

- BaseCore allows you to build directly on weak or moist subgrades
- Traditional gravel-only builds often fail prematurely without deep, expensive subbase

### 4. Environmentally Friendly

- Less gravel = lower carbon footprint from mining and trucking
- Promotes better stormwater management through natural infiltration

### Final Recommendation

BaseCore is the superior choice for a church parking lot in Michigan if you want:

- Long-term durability
- Reduced maintenance
- Stable surface through freeze/thaw cycles
- Efficient use of gravel and site prep budget

Even if upfront installation is slightly more complex, the payback comes quickly in year 1–2 through reduced upkeep and improved user experience (no muddy shoes or rutted spots for Sunday services).

Let me know if you'd like a cost comparison calculator or a visual cross-section to present this to Frigerio or church stakeholders.