



Guidelines for Utility Coring and Hydro-Excavating

January 31, 2023

Street Cores:

- Allowed sizes 4" to 8" diameter
- Maintain 12" of separation for core holes from all pavement control joint
 - Option 1 – Place the cut core into the core hole with concrete epoxy applied to the outside surfaces of the core
 - Option 2 – Fill the core hole with C-4 Mix and finish level with existing pavement
- If more than two core holes exist then panel replacement will be required. Follow the City standards to determine the size of the pavement replacement
- All replacement work shall be inspected by West Des Moines Engineering Services. Please contact our office at 515-222-3475 to schedule an inspection
- All traffic control must meet the MUTCD minimum recommendations
- Any work performed on a public street shall require a WDM Street/Lane Closure Permit 48 hours prior to beginning work. Street/Lane closure permits can be obtained from the Traffic Division at 515-222-3480

Hydro-Excavated Hole in Pavement:

- Use flowable fill not exceeding 50psi mix design to fill the void to the top of the slab
- Consolidate the flowable fill to remove all voids under the pavement

Hydro-Excavated Hole in Parking Area:

- Use flowable fill not exceeding 50psi mix design to fill the void to within 12" of the top of finish grade
- Consolidate the flowable fill to remove all voids under the pavement
- Fill the remaining 12" of the excavation with black compost dirt and restore the turf to like conditions

Sidewalk/Trail Cores:

- Will be allowed to determine utility line location and depth
- One core per 10' trail panel will be allowed. The second core hole would require full panel replacement
- All sidewalk panels cored shall be removed and replaced to the City's sidewalk standards
- Any core holes cut in the pedestrian walkways must be protected
- All traffic control must meet the MUTCD minimum recommendations

- All replacement work shall be inspected by West Des Moines Engineering Services. Please contact our office at 515-222-3475 to schedule an inspection

Pedestrian Sidewalk Ramp Cores:

- Will be allowed to determine utility line location and depth
- Any pedestrian sidewalk ramps that are cored shall be removed and replaced
- The replacement pedestrian sidewalk ramp will have to be surveyed and designed by a professional engineer and constructed to meet the current ADA requirements
- The design engineer shall certify the ramp(s) has been constructed to the design and provide documentation to the City
- All traffic control must meet the MUTCD minimum recommendations
- All replacement work shall be inspected by West Des Moines Engineering Services. Please contact our office at 515-222-3475 to schedule an inspection

**Concrete Mix Description:
50psi Flowable Fill**

	Specific Gravity	1 Cubic Yard	Abs. Volume
Cement		SSD	
Cement	3.14	60	.31
Fly Ash	2.62	275	1.68
Fine Agg	2.65	3053	18.48
Coarse Agg	2.68	0	0
Water	1.00	375	6.01
Air Volume			.54
Total		3763	27.00

Water Cement Ratio	1.12
Maximum Slump	10"
Minimum Slump	4"