



City of Tempe
P. O. Box 5002
31 East Fifth Street
Tempe, AZ 85280
480-350-8413

Directional and Hog Drilling - Bore

Welcome to the City of Tempe. The City of Tempe Engineering Department is committed to providing the highest quality infrastructure planning and inspection to meet the present and future needs of the City of Tempe in an efficient and effective manner.

The purpose of this agenda is to facilitate the efficient and timely development, design, and construction of projects constructed within the Tempe Rights away by ensuring that all agencies and utilities work together for a common goal; an aesthetically, safe and final project.

Phases of Construction

Preliminary Construction Conference

Preconstruction meetings are mandatory when working within the public rights away. The precon should cover the following;

1. Verification that each agency has a copy of the approved plan and permit. All approved plans are stamped "approved, with date".
2. Traffic control plans can be discussed, but TCP are approved by the City of Tempe Transportation Division at 480-350-8860. Keep in mind that sidewalks shall remain open at all times. In the event that sidewalks need to be closed, please discuss the situation with Transportation and they will indicate the sidewalk closure on the TCP.
3. Verification that a utility survey was conducted and complete. "The utility survey is conducted to accurately locate all existing (active or abandoned) utilities within the area of interest that could conflict with the planned installation. Manhole locations (elevations and tie-downs), diameter and depth should be confirmed, along with type, diameter and depth of services entering each manhole (4-15, HDD)". Be advised, "that possible migration of the back reamer of the pilot bore towards utility, due to excessive steering or tight radius, must be carefully considered when establishing clearances (5-4)". Verification of survey will be the submittal of an "actual" bore profile which indicates manhole inverts and clearances. Refer to Tempe Supplement T-455.
4. After the verification of the utility survey, the profile will be compared to Bluestake and approved plans to recognize consistencies and to discuss any discrepancies.
5. Inspection of noticeable and obvious existing conditions before construction. "Existing site conditions along and adjacent to the alignment should be carefully documented to support defense against frivolous claims of abutting property owners (4-15)" and inspectors.

City Notification

The City of Tempe Engineering Department requires notification forms be faxed to the City 24 hours before commencement of work at 480-350-8591. **Do not** leave notification on the inspector's cellular telephone. The notification form can be found in the "Utility Permit Manual", downloaded from the City website at www.tempe.gov or picked up at the engineering counter. Do not ask the inspector to fax you a copy. The constructing agency should fax the following in packet form:

Notification form, Approved-signed TCP, Schedule of Work, Notification of Work to Residence/Business and a copy of the Bore Profile

Construction Process

During the Constuction process;

- ❖ The constructing agency should retain a copy of the packet on the jobsite at all times.
- ❖ All sidewalks shall remain open and reflective vests worn at all times.
- ❖ Drilling rig stake system should be utilized.
- ❖ Confirmation of utility locations by potholing (vacuum excavation or other non-destructive means) must always be performed before drilling. Review bore profile.
 - Permits will be suspended and a complaint with the Corporation Commision will be filed if blind boring is determined.
- ❖ Two foot clearance is required from installation to existing City facility. Inspection required.
- ❖ Minimum coverage is required. Inspection required.
- ❖ Small plates prohibited - No 1x1
- ❖ All trench plates shall be recessed on streets where the posting speed limit is 30mph or greater. Steel plates must be able to withstand heavy traffic without any movement. Steel plates must recess on top of milled surface a minimum of 18" on all sides of the trench. Refer to MAG 211 for details.
- ❖ Plates shall be removed within 7 calender days.
- ❖ Trenches must be cleared of excess debris, cans, etc. before slurry.
- ❖ One sack ABC slurry is required. Refer to Tempe Supplement T-450.
- ❖ Slurry must aerate (air dry) a minimum of two days.
- ❖ Excess barricades shall be picked up or "bundled" and placed in a conspicuous location daily.

Emergency Situations - Notify Engineering at 480-350-8413;

Police Department - Anything (Traffic signals and streetlight outages)	480-350-8311
Fire Department - ("Out of Service" Hydrant Notification - 24 Hours)	480-967-7511
Water Department 24-Hour Emergency Hotline	480-350-2669
Southwest Gas Emergency	602-271-4277
El Paso Gas 24-Hour	602-438-4200

Restoration - Restore to current code;

- ❖ Pavement replacement shall conform to T-450. All patches shall be tee topped. Laydown machine required, unless inspector overrides requirement.
- ❖ Concrete curb, gutter, sidewalk, sidewalk ramps, driveway and alley entrance restoration shall conform to MAG Section 340 and Tempe Supplement to the MAG;
 - ✓ Damaged concrete shall be removed joint to joint. Existing concrete sidewalks and driveways which abut the new sidewalks and driveway entrances shall be removed to a distance required to maintain a correct slope.
 - ✓ Expansion full depth and shall match joint.
 - ✓ Contractor shall stamp his name and year.
 - ✓ **Gutter flow will be maintained...**
 - ✓ The face, top back, and **flow line** of the curb and gutter shall be tested with a 10-foot straightedge or curve template, longitudinally along the surface.

REMOVE ALL BARRICADES, BAGS AND LITTER, YOURS OR NOT



Directional Drilling Checklist

Before construction;

<input type="checkbox"/>	<i>Schedule Preconstruction Meeting</i>		480-350-8413
<input type="checkbox"/>	<i>Traffic Control Plan</i>		480-350-8860
<input type="checkbox"/>	<i>Verify Trash Pick up Dates</i>		480-350-8265
<input type="checkbox"/>	<i>Bluestake, Bluestake, Bluestake</i>		602-263-1100
<input type="checkbox"/>	<i>Review Bluestake, Bore Profile and approved construction plans to field conditions</i>		
<input type="checkbox"/>	<i>Fax Notification Packet - 5;</i> <i>✓ Notification Form</i> <i>✓ "Actual" Bore Profile</i> <i>✓ Approved and Signed Traffic Control Plan</i> <i>✓ Schedule of Work</i> <i>✓ Citizen Notification Information</i>		480-350-8591

After Construction;

<input type="checkbox"/>	<i>Asphalt and concrete restored to current code and within MAG and Tempe Supplement Requirements</i>		
<input type="checkbox"/>	<i>Potholes Restored Correctly (Tamped-Landscaped or Slurried-Street/S/W)</i>		
<input type="checkbox"/>	<i>Spoil Piles Removed (No Back Dragging Dirt)</i>		
<input type="checkbox"/>	<i>Private Property, PUE and City Rights Away Restored to Like or Better Condition</i>		
<input type="checkbox"/>	<i>Sidewalk, Curb and Gutter Cleaned and Litter Removed</i>		
<input type="checkbox"/>	<i>Barricades Removed (Do Not Depend on Barricading Company)</i>		
<input type="checkbox"/>	<i>Ask Inspector for Final Report</i>		480-350-8413