Project Start-Up Checklist

Project Name: ____________________________________________________  Project #:_____________________________________________
Representative: ____________________________________________________  Telephone #:__________________________________________
Inspector: ________________________________________________________  Telephone #:__________________________________________
Check Items:  

APPROVED DRAWINGS:             PERMITS:             LICENSE #:            NDOT   Y / N

- **SCHEDULING:**
  - Next business day inspections must be scheduled using the web-based inspection scheduling system
    (https://www.lvwwd.com/engineering-resources/dps/) or by calling 258-7171. Inspections scheduled by telephone must be scheduled prior to 3:00 p.m.
  - **Project Number must be provided when scheduling inspections.**
  - Fixed times for Inspections are available only for the following: field meetings, wet taps, pressure tests, valve operations, water sampling, and final walk-through. A Contractor /Developer representative must be present for all scheduled inspections.
  - District inspections occur between 6:00 a.m. and 4:30 p.m., Monday through Thursday. Additional fees apply for inspections performed outside of these business hours. (Water Samples delivered Thursday-Saturday for Water Quality Lab Services)
  - What are the agency approved work hours for this project? ____________________________________________________________

- **SURVEYING:**
  - Inspector must see all survey staking and survey elevations. Station numbers must be included on staking.
  - If a fire hydrant is adjacent to a curb return, back-of-curb staking with elevations must be present.
  - When water main is shown on profile, cut sheets, and Engineer wet stamped for approval before installation begins. Survey shots will be taken.
  - Survey staking must be placed at 50-foot intervals with elevations at each stake.
  - All staking must be protected and maintained during construction.
  - All easements must be staked by a surveyor with finish grade elevations.

- **WET TAPS:**
  - Prior to performing a wet tap, verify with Inspector that it is located correctly. Survey staking must be visible with station numbers.
  - Prior to performing a wet tap and in the presence of Inspector, pressure-test any installed tapping sleeve.
  - In the presence of the Inspector, materials used for wet tap, including outside of pipe being tapped, service connections, and all tubing must be disinfected (swabbed with 200 ppm chlorine solution, then rinsed).
  - Valve must be properly supported per UDACS requirements.
  - Provide Inspector with visual evidence that coupon was recovered. If coupon is ACP, provide Inspector with the required hazard material tracking documentation.
• GPS:
  __ GPS must be done on all piping prior to backfilling; therefore, center-loading only is allowed prior to GPS.
  __ Inspector will schedule GPS such that delays are minimized for the Contractor/Developer. In most instances, GPS will be scheduled for the same day of the scheduled inspection for thrust and anchor block pre-pour inspection.
  __ Notify Inspector if GPS needs to be expedited.

• MARKER BALLS:
  __ Contractor is required to place marker balls over all pipe and fittings per UDACS, 3rd Edition, Plate #15.
  __ Contractor must verify proper marker ball placement and verify marker balls can be located using marker ball locating equipment. All marker balls must be traceable after pavement has been placed.

• UNDERGROUND:
  __ All pipe must be inspected prior to backfill. Pipe deflection must not exceed requirements of LVVWD UDACS 3.11.
  __ Like piping material must be used throughout the project unless specified by drawings, i.e., PVC cannot be changed to DIP; likewise, DIP cannot be changed to PVC. Manufacturer of pipe should be the same in the continuous run of main. (Refer to drawings and details.)
  __ All thrust/anchor block sizes MUST be inspected prior to and after placement to verify size. (See UDACS 3rd Edition, Plate #30 and #31.)
  __ Backflow assemblies must be installed so that inlet and outlet piping are at the same elevation. (See UDACS 3rd Edition, Plate #8, #9 and #56-60 for required assembly.) Backflows must be tested prior to being in use and will be locked until a passing backflow test has been completed.
  __ All buried ferrous materials must be coated and wrapped with two layers of 8-mil visqueen. Wrappings MUST cover all metal edges to pipe; concrete shall come in contact with wrapped fittings and valves only, not piping.
  __ All copper must be reamed and verified and any adjustments to any copper must be scheduled. When adjustments are made, a new compression gasket maybe required upon inspection.
  __ Inspection of all copper water service laterals is required after installation of other utilities such as power conduits. (Dry Utility Inspection)
  __ Any and all utility crossings must be scheduled in order to confirm appropriate vertical and horizontal separations and appropriate use of joint sealants required in order to meet acceptable potable / non-potable requirements. Schedule an inspection for placement of approved joint sealant. This inspection should be made when placing joint sealants in attempt to avoid confined space safety entry requirements.
  __ Any damaged facilities must be re-inspected prior to backfilling.
  __ Sewer/Water separations will be enforced and verification is required. If water quality sewer is called out on the approved plans a LVVWD inspection will be required. Sewer lateral locations must be identified at final and all water service laterals must be at the location or detail shown on the approved plans.

• DISINFECTION:
  __ The chlorine start will be taken ONLY AFTER the area has a passing pressure test.
  __ A chlorine solution must be injected into all new mains and appurtenances, including wet taps
  __ Chlorine solution shall remain in water lines for 24 hours. (See UDACS 3.27.02.)
  __ Contact time STARTS with Inspector verification of 50 ppm. Residual must not be greater than 50 ppm at the start of the contact time.
  __ Contact time ENDS the next working day with Inspector verification of no less than 10 ppm. Any failure will require a restart of Cl₂ contact for an additional 24 hours.
• BACKFILL:
  _ Trench over-excavation requires an Engineer-approved backfill plan.
  _ All soils must be on the Inter-Agency Quality Assurance Committee list (IQAC).
  _ If native material is to be used, Inspector must be present when representative samples are obtained. If screened, the samples must be from the screened pile.
  _ Native soils meeting the UDACS requirements of 3.13 can be reviewed and accepted by the District Inspector. Engineers wet stamp copy of soils report shall be submitted to Inspector for review and acceptance.
  _ Pipe bedding must be inspected and approved 4” Type II.
  _ Inspector must see bedding below all services prior to placement of sand over the services. (See UDACS 3rd edition, Plates # 1-4.)
  _ Compaction/density testing will be done in pipe and trench zones.
  _ Two feet of cover must be maintained over water lines during construction. (See UDACS, 3rd edition, Plates #16-18.)

• PRESSURE TESTS:
  _ Pressure test shall include the backflow device and setter to the onsite valve or cap.
  _ Contractor shall maintain 195–205 psi on the piping for the entire pressure test.
  _ A pressure gauge reading psi and a meter registering gallons must be used throughout the test.
  _ DCDAs need an MVR-30 meter installed prior to any pressure test or chlorine contact.

• WATER SAMPLING:
  _ All control valves shall remain off during the disinfection period and prior to a passing water sample. Valves are to be operated ONLY in the presence of the Inspector.
  _ Water samples will be obtained after a successful pressure test and chlorination have been completed and flushed until the chlorine residual is 1.5 ppm or less.
  _ All blow-offs and valves must be accessible at all times.
  _ Inspector will choose the sampling points.
  _ Results take approximately 48 hours. Contractor’s office will be called with notification of results.
  _ Regardless of passing or failing test results, Contractor may ONLY operate control valves in the presence of Inspector.
  _ Two water sample failures from the same sampling points will require a new 24-hour disinfection start and end, to be verified by the Inspector.
  _ Prior to backfilling other utilities behind the curb, copper water service laterals must be re-inspected.

• CONCRETE WORK:
  _ Prior to replacement of any concrete (thrust blocks, collars, shear pads, vaults, etc.), the excavation and reinforcing steel must be inspected.
  _ A hard-time inspection must be scheduled for Inspector to witness the concrete placement.
  _ Provisions must be made to allow Inspector to take concrete samples for slump tests and form concrete cylinders. (See UDACS 3.17 for acceptance criteria.)
  _ Thrust and anchor blocks are to be installed per UDACS (3rd edition) requirements 3.22 and, Plates #30, #31 & 35.
• **SHUTDOWNS:**  
  __ A minimum of four working days prior to a shutdown of a portion of the District’s system, Contractor shall provide the Inspector with a copy of the shutdown plan identifying which valves are to be operated. A temporary shutdown is required prior to the working shut down. Shutdowns may be required to be performed at night or during other specified times to minimize impacts to the District’s customers. All required parts for the work to be performed must be inspected prior to sending shutdown notifications.

• **FINAL WATER PROJECT ACCEPTANCE:**  
  __ Prior to scheduling the final inspection, Contractor should verify that all deficient items have been corrected and the project is ready for final walk-through. Contractor shall operate all valves, leaving them in the proper operating position, in the presence of Inspector. All fire hydrants and blow-offs associated with the project must be flushed and flowed in the presence of Inspector.  
  __ All valve box lids must have 4-inch skirts.  
  __ The Developer /Contractor is responsible for the restoration of all impacted existing District facilities such as valves, blow-offs, vault access covers and rings, air vacuum/air release assemblies, anode test stations, and pressure sampling and/or monitoring stations.  
  __ Any outside entity issues associated with the project MUST be resolved prior to final acceptance.

  *This list is to be used only as a minimal guideline of District-required inspections. The actual number/type of inspections may vary.*

I acknowledge that I have read a received a copy of this document.

**BY:** ____________________________  
**DATE:** ____________________________

**PRINT:** ____________________________