**Tap-In Plan - Requirements Checklist**

|  |  |
| --- | --- |
| Project Name: |  |
| PWSA Project No.: |  |
| PWSA Reviewer: |  |

*This checklist shall be completed by the PWSA Reviewer during review of the Tap-in Plan.*

**General Information**

[ ]  Existing PWSA infrastructure is labeled, as follows:

* Sewer Mains: Nominal Diameter, Material, Combined/Sanitary/Storm
	+ Example: 15” RCP Combined Sewer (PWSA); 8” PVC Sanitary Sewer (PWSA)
* Manholes: Manhole I.D.
	+ Example: MH053E011 (PWSA)
* Drainage Structures: Drainage Structure I.D.
	+ Example: CB052P001 (PWSA); IN052N002 (PWSA)
* Water Main: Nominal Diameter, Material, Type
	+ Example: 8” DIP Water (PWSA)
* Fire Hydrant: Fire Hydrant I.D.
	+ Example: FH C188 (PWSA)

[ ]  Existing non-PWSA utilities are labeled with the nominal diameter and material

[ ]  Existing and proposed facilities not owned by a utility company shall be marked as “Private”

[ ]  Construction details with PWSA title block

[ ]  Private services constructed within improved surfaces shall be located within the public frontage of the property, and shall not cross over adjoining property lines

[ ]  Parcel ID, owner, address

[ ]  PWSA Approval Block on every sheet in accordance with the Template Detail

[ ]  PWSA Approval Block should be marked the same way on each sheet and represent the entire plan set

[ ]  Peak Daily Flow Demands Table in accordance with the Template Detail

[ ]  Graphic Scale

[ ]  Pennsylvania One Call Serial Number

[ ]  General Location Map

[ ]  North Arrow

[ ]  Plan Preparer’s Contact Information

[ ]  Non-City Street Owners are clearly defined (e.g. County, PennDOT, Private, etc.)

[ ]  If applicable, the Applicant shall provide the date which the DEP approved the SFPM

[ ]  For revisions to previously approved Tap-in Plans, the Applicant shall provide:

* Revision cloud around every revision
* Revision Triangle
* Date
* Brief Description on the purpose of the revision

**Sewer Connection(s)**

[ ]  *N/A - This Section does not apply to this Project*

[ ]  Connections are at the sewer main, not a manhole

[ ]  Sewer laterals are designed for the use of a single user

[ ]  For single connections, the storm and sanitary laterals shall be combined within 5-feet of sewer main per ST-5

[ ]  Storm lateral shall be straight through, with sanitary wyed in

[ ]  Sewer taps within 6-feet of manhole are prohibited

[ ]  Cored sewer connections shall be limited to PVC, Reinforced Concrete and CIPP sewer mains

[ ]  Confirm the Applicant CCTV’d the sewers discussed at the predevelopment meeting

[ ]  Applicant submitted CCTV and Summary Reports

[ ]  Confirm the CCTV and Summary Report includes the PWSA Manhole ID Numbers

[ ]  The stationing on the Tap-in Plan shall correspond to the CCTV

[ ]  Require the Applicant connect to existing wyes, when available

[ ]  Confirm existing wye is in adequate condition for use

[ ]  Wye locations shall be provided for both sides of sewer main, not just the wyes which face the development

[ ]  Wyes shall be stationed per CCTV and marked as active or capped

[ ]  If required, submit work order in Sprymobile for O&M issues

[ ]  If required, coordinate with the respective PWSA Project Manager for repair work

[ ]  Connections to sewer main which has been lined with a cured-in place pipe (CIPP), the connection shall per the following order of preference:

* Re-use an existing connection point that was re-instated after lining
* Open-cut excavation to identify and re-use existing wye which was not previously re-instated
* Cored connection per ST-3 or ST-4
* Cut-in wye followed by installation of a point liner

**Water Connection(s)**

[ ]  *N/A – This Section does not apply to this Project*

[ ]  Size-on-size tapping is prohibited, and will require cut-in tee

[ ]  For cut-in tees, notify the Applicant that a Waterline Shut Permit shall be separately required

[ ]  Domestic meter crocks shall be located in non-load bearing location

[ ]  Location of existing/proposed meter(s) are indicated

[ ]  Tapping at location of existing service shall be prohibited

[ ]  Service lines shall adhere to the following:

|  |  |  |
| --- | --- | --- |
| Service Line Diameter | Connection Fee | Shut-off Assembly |
| < 1" | 1" | Curb Stop + Curb Box |
| 1.5" | 4" | Gate Valve + MEG Box |
| 2" | 4" | Gate Valve + MEG Box |
| 4" | 4" | Gate Valve + MEG Box |
| 6" | 6" | Gate Valve + MEG Box |
| 8" | 8" | Gate Valve + MEG Box |
| 10" | 10" | Gate Valve + MEG Box |

[ ]  Re-use of existing services up to and including 1-inch diameter shall require the following note: “The PWSA conditionally approves the re-use of existing services, as indicated on the Tap-in Plan, provided the service is either copper or PEX, and the volume-time flow test confirms flows in excess of 5 gallons per minute. Failure to comply with the aforementioned conditions shall require a formal revision to the Tap-in Plan.”

[ ]  Location and account number for existing meter(s)

[ ]  Stationing of waterline per existing landmark (e.g. building line, property line, manhole)

[ ]  Location of existing and proposed valves

[ ]  Minimum 60-inch separation between taps

[ ]  Concrete blocking required for 4-inch taps and larger

[ ]  MEG Box required for all gate valves

[ ]  The curb stop and curb box shall be located per Detail WS-5NT, as follows:

* Street main: Located within 12” from curb face
* Sidewalk main: Located within 12” of sidewalk edge or property line, as directed
* If “sidewalk” is staircase, the curb stop and curb box shall be located in street

[ ]  Confirm that every connection to our water main is metered

[ ]  If applicable, the meter crock shall be located within 36” of property line

[ ]  Fire Hydrant ID (shall be provided by Reviewer in markup)

[ ]  Confirm there is not more than 50-feet of service line between the meter and water main

[ ]  Plan indicates that gate valves are “right-turn to open”

[ ]  Hydrant Flow Test required for connections larger than one-inch AND all fire suppression systems

[ ]  Hydrant Flow Test Results Table per the Template Detail

[ ]  The minimum diameter for a shared fire/domestic service shall be 1.5-inches

[ ]  The proposed meters are tabulated within the Peak Operating Water Demands Table, per the Template Detail

[ ]  Require usage of Meter I.D. symbology for complicated water connections

[ ]  Confirm meter size is adequately sized for the Peak Operating Water Demands, as follows:

|  |
| --- |
| **Positive Displacement Meters** |
| *Neptune - T10* | *Badger - Recordall* |
| Meter Size, inch | Normal Operating Range, gpm | Meter Size, inch | Normal Operating Range, gpm |
| 5/8 | 1/2 to 20 | 1.5 | 2.5 to 120 |
| 5/8 x 3/4 | 1/2 to 20 | 2 | 2.5 to 170 |
| 3/4 | 3/4 to 30 |  |  |
| 1 | 1 to 50 |  |  |
| 1.5 | 2 to 100 |  |  |
| 2 | 2.5 to 160 |  |  |

|  |  |
| --- | --- |
| **Compound Meters** | **Magnetic Meters** |
| *Sensus - OMNI* | *Sensus - iPERL* |
| Meter Size, inch | Normal Operating Range, gpm | Meter Size, inch | Normal Operating Range, gpm |
| 3 | 1 to 500 | 5/8 | 0.18 to 25\* |
| 4 | 1.5 to 1,000 | 3/4 | 0.18 to 35\* |
| 6 | 3 to 2,000 | 1 | 0.4 to 55\* |
| 8 | 4 to 2,700 |  |  |
| 10 | 5 to 4,000 |  |  |

\* Capable of accommodating larger flow rates with decreased accuracy and increased headloss. Refer Applicant to the technical memo from Sensus.

**Fire Connection(s)**

[ ]  *N/A – This Section does not apply to this Project*

[ ]  Sprinkler System Design Information Table per the Template Detail

[ ]  Hydrant Flow Test is required if there is a fire suppression system

[ ]  Hydrant Flow Test Results Table per the Template Detail

[ ]  Information on Hydrant Flow Test Results Table shall match HYD permit form on file

[ ]  Hydrant Flow Test Results shall be less than two (2) years old

[ ]  Sprinkler System Peak Pressure Demand ≤ Static Pressure at Pressure Hydrant

[ ]  Peak Flow Demand ≤ Flow Observed at Flow Hydrant

* For Multi-Purpose Sprinkler Systems: Peak Flow Demand = Sprinkler System Peak Flow Demand + Domestic System Peak Flow Demand
* For Separate Sprinkler Systems: Peak Flow Demand = Sprinkler System Peak Flow Demand

[ ]  Additional requirements for 13d sprinkler systems:

* Sprinkler System Peak Flow Demand ≤ 36 gpm
* Backflow prevention device shall be located in the structure
* Multi-purpose systems shall require magnetic meter (Refer to Technical Memo)

**Construction Details**

[ ]  Notify the Applicant that the Construction Details are available in AutoCAD file format, if required.

*Typical Construction Details (Check all that apply):*

[ ]  WS-CTT - Cut-In Tee and Tapping Tee

[ ]  WS-RDF1 – Residential Domestic and Fire Service Connection for Multi-Purpose System

[ ]  WS-RDF2 – Residential Domestic and Fire Service Connection for Stand Alone System

[ ]  WS-STL – Typical Water Tap Service Termination for 4” and Larger Connection

[ ]  WS-STS – Typical Water Tap Service Termination for 2” and Smaller Connection

[ ]  WVB – Valve Box (Medium Extension Gate Box)

[ ]  LTPC – Pipe Sewer and Lateral Terminations

[ ]  SLT1 – Termination Sewer Lateral

[ ]  SSC-1 – Manhole/Pipe Sewer Cored Wye Connection

[ ]  ST-2 – Sewer Tap to Existing Sewer Wye

[ ]  ST-3 – Sewer Tap Tee Connection to Existing Sewer Main (Inserta Tee)

[ ]  ST-5 – Separated House Lateral One Connection to Main

[ ]  ST-6 – Separated House Lateral Wye Connection to Main

[ ]  ST-7 – Cut-In Wye Pipe Transition

[ ]  WCB-1 – 3” Curb Service Box

[ ]  WMV – Meter Vault for 3” and Larger

[ ]  WMBV – Meter Vault for 3” and Larger with Bypass

[ ]  WS-3 – Concrete Blocking For Pressure Pipe

[ ]  WS-5 – Water Service Line Reconnection to Existing Service

[ ]  WS-5CDI – Domestic Service Internal Meter Setting for Commercial and Multi-Family

[ ]  WS-5FPLH – Typical Plumbing Schematic for Low Hazard Fire Protection Services

[ ]  WS-5MPC – Commercial Service for External Setting 1 ½” to 2” Meter

[ ]  WS-5MPR – Residential Domestic Service for External Setting (5/8” to 1” Meter)

[ ]  WS-5MPRPZ – Domestic Service External Meter Setting for Commercial and Multi-Family

[ ]  WS-5MS – Domestic Meter Setting Specification for Indoor Residential 5/8” to 1” Meter

[ ]  WS-5NT – Water Service Line for 1” and 1 ½” New Installation

[ ]  WS-5NT2 – Water Service Line for 2” New Installation

[ ]  WS-5NT3 – Water Service Line Installation of Tracer Wire on PEX Service Line

[ ]  WS-RDI – Domestic Service Internal Meter Setting for Residential and Low Hazard

[ ]  WS-A – Service Connection 4” Through 8”

[ ]  WS-B – Trench Requirements for 4” Through 8” Live Water Tap

[ ]  WS-C – Trench Requirements for 1” Through 2” Water Service Tap

[ ]  WS-C1 – Single Service Connection (4” and Larger)

[ ]  WS-C1V – Commercial and Multi-Family Water Service Connection for Fire and Domestic with Vault

[ ]  WS-C2 – Separate Domestic and Fire Service Connection (4” and Larger)