





































- b. In no case will the wheel or track of a backhoe or loader be utilized to compact trench backfill.
- c. Detailed backfilling procedures are separated into three (3) zones:
  - i. The Pipe Zone, which begins at a minimum depth of six (6") inches below the bottom of the pipe and ends at a point twelve inches (12") above the crown of the pipe;
  - ii. The Intermediate Zone, which begins at a point twelve inches (12") above the crown of the pipe and ends at a point eighteen inches (18") below finish grade; and
  - iii. A Final Zone that includes the top eighteen inches (18") of trench area.
- d. **Pipe Zone Preparation and Backfill:** The trench shall be excavated to a depth as to provide a uniform and continuous bearing and support for the pipe, as required by the approved plans. Pipelines shall be supported on and bedded by AASHTO No. 57 stone (no slag). The bedding material shall be placed to a minimum depth of 0.5 feet below the bottom of the pipe and for the full width of the trench. The bedding material shall be installed to a point 12 inches above the top of the pipe.
- e. **Intermediate Zone Backfill:** The select material excavated during trenching and other construction operations, shall be used as backfill in the intermediate zone as defined herein under all unimproved (e.g. lawn areas) surfaces. The backfill shall contain no stones more than six inches (6") in the largest dimension, or frozen, excessively wet, or otherwise unsuitable material. Where the open-cut trench is located under improved areas (e.g. roadways, streets, state highways, berms, or other improved areas), the entire (full depth) intermediate zone shall be backfilled with 2A (no slag). The entire depth of the intermediate zone, regardless of material shall be placed in layers and compacted to maximum density using suitable vibratory compaction equipment. Maximum lift shall be eight inches (8").
- f. **Final Zone Backfill:** Backfill of the final zone of the trenches occurring in roadways, streets and the shoulder of a road shall be accomplished with No. 2A modified stone or gravel (no slag) per Form 408 Section 703 (Quality Table B Type B, or better; Gradation per Table C), aggregate compacted in four inch (4") layers.

#### 4. Structure Installation

- a. **Structure Inverts:** Manhole/inlet inverts, including sewer intersections, shall in all cases be formed with Class C concrete. The finished product shall be clean and smooth offering no obstruction to flow. The prevailing

sewer grade shall be carried through the manhole. Wherever sewers enter manholes/inlets such that the invert of the sewer is less than two feet (2') above the structure bottom, a channeled concrete fillet shall be constructed to prevent the flow from splashing into the structure. The channeled concrete fillet shall be steel trowel finished.

- b. Finished Grade at Structures: Manhole tops in lawn or paved areas will be level or flush with the finished surface, unless specifically otherwise noted on the approved plans. Inlets will either be flush or sumped, as noted on the approved plans.
- c. Backfill Material for Structure Excavation: Where structures are installed in paved streets, alleys, roads, berms, parking areas, or other **improved** surface areas, the entire excavated area around the structure shall be backfilled with AASHTO No. 57 or 2A (no slag), or material approved by the Owner's Representative. The stone shall be installed completely around the structure from its base to the bottom of the **improved** surface area. The stone shall continue out of the structure excavated area through and around the inlet and outlet pipe trench area so that its surface forms an approximate 45 degree angle with the top of the manhole. Where structures are installed in **unimproved** areas, the entire excavated area around the structure shall be backfilled with a stone or material from the base to a point twelve inches (12") above the top of the highest pipe entering the structure and with select material to the surface as defined herein.

5. Alignment, Grade and Layout of The Work

- a. Verify all existing utilities in the field prior to start of excavation work. Comply with One Call (Act 38) requirements. Contact all utility companies that may have facilities within the work area.
- b. Field check and verify benchmark elevations for all work before start of construction. Set/adjust final grades for proposed storm sewer lines after all existing utilities and other obstructions have been located by test holes. Dig all necessary test holes to locate any existing utilities that may be in conflict with the alignment and grade of the proposed storm sewer. Meet all existing conditions and grades along the route of the proposed sewer lines.
- c. The sewer line shall be laid and maintained to the required lines, grades, and minimum depths as shown on the approved plans. Any realignment must first be approved by the Township.
- d. All storm sewers proposed for dedication as public infrastructure must have a minimum diameter of 15" and a minimum grade of 1%.

- e. The use of a laser is required for all storm sewer installation. Pipeline acceptance testing shall include mandrel and full moon spot light. All storm sewer must be installed to line and grade. Curved pipe will not be accepted. Changes in vertical or horizontal alignment must occur at a suitable junction box (i.e. inlet or manhole).
- f. Maintain and protect traffic during construction. Coordinate all work with local emergency response and transportation agencies. Provide all required signage for temporary traffic control. Maintain all roads, sidewalks, steps and traveled ways clean, free of mud or dust, and in a condition usable by residents in the area during construction. Maintain access to all driveways during construction.
- g. Maintain all existing storm sewers and sanitary sewers in service during construction. Contain sanitary sewage to sanitary sewers. Do not discharge to the ground surface or to groundwaters.
- h. Maintain daily as-built record information including wye stationing. Give Township's Representative copies of all delivery slips for all materials delivered to the project.
- i. Coordinate and schedule all work as required with utility companies, other contractors, and local, municipal or state government agencies. Notify Township and Township Engineer 48 hours in advance of starting the project.
- j. Pipeline acceptance testing shall include mandrel and full moon spot light. All storm sewer must be installed to line and grade. Curved pipe will not be accepted. Changes in vertical or horizontal alignment must occur at a suitable junction box (i.e. inlet or manhole)

**Section 303 PROJECT COMPLETION CHECKLIST FOR DEDICATION OF ROADWAYS AND STORM SEWERS**

- A. Install storm sewers and roadways per the approved plans and per North Fayette Township Regulations.
- B. Complete and submit Record Drawings (As-Builts) of storm sewers and roadways for review and approval by North Fayette Township. Record Drawings must be accepted prior to Performance Bond being released.
- C. Provide 8½" x 11" exhibit drawing and metes and bounds legal description of roadway rights of way to be dedicated. All rights-of-way must be recorded and conveyed to North Fayette Township prior to release of Performance Bond.

- D. After the storm sewer line has been installed for 30 days, testing will need completed per North Fayette Township Regulations. Pipeline acceptance testing shall include mandrel and full moon spot light.
- E. Submit Maintenance Bond for 18 months from the date of the Township's acceptance of storm sewers and roads for an amount of 15% the cost of construction.
- F. At month 16 of the Maintenance Bond period, CCTV all storm sewer lines and submit videos and data to the Township for review.
- G. Escrow Deposit shall remain in place until the expiration date as set forth in any agreements entered into between the Township of North Fayette and the Developer or unless otherwise agreed to by the Township of North Fayette, but at a minimum until the 18-month Maintenance Bond expires.

### **Section 304 SANITARY SEWERS**

#### **A. Sanitary Sewer Materials**

##### **1. PVC Sewer Pipe**

- a. Polyvinyl chloride (PVC) sewer pipe and fittings shall conform to ASTM Specifications D-3034, of latest revision. Pipe shall be SDR 35 with a minimum pipe stiffness of 46 psi. For installation of sewer pipe in excess of 18 feet in depth SDR 26 shall be required. Additional wall thickness will be required for additional depth, as required by the Township. PVC sewer pipe shall be supplied in minimum 12.5 feet lengths except where connections to manholes or main line wye branches require a shorter length to be installed. Joints shall be either solvent cement or elastomeric gasket type shall be watertight and shall comply with ASTM 3212. The PVC plastic used in the pipe shall have a cell classification of 12454-B, 12454-C, or 13364-B with a minimum tensile modulus of 500,000 psi as defined in ASTM D-1784. The PVC plastic used in the fittings shall have a cell classification of 12454-B, 12454-C or 13343-C as defined in ASTM D-1784. Rubber gaskets shall comply in all respects with the physical requirements of ASTM-F-477, D-1869, C-361 or C-433.
- b. PVC pipe shall be tested for pipe dimensions, fitting dimensions, pipe flattening, impact resistance, pipe stiffness, joint tightness and extrusion quality in accordance with ASTM D-3034.
- c. An approved manhole coupling or waterstop shall be installed around the pipe when it enters and leaves each manhole, concrete encasement or anchor.

##### **2. Ductile Iron Pipe and Fittings**

- a. Ductile iron pipe shall be designed in accordance with ANSI Standard A-21.50 and manufactured in accordance with ANSI Standard A-21.51. Fittings shall conform to the requirements of ANSI Standard A-21.10. All buried pipe shall be furnished with push-on or mechanical joints conforming with ANSI Standard A-21.11.
  - b. Pipe and fittings shall be furnished in ASTM thickness Class 50 unless otherwise specifically noted on the plans or described herein.
  - c. Ductile iron pipe fittings (D.I. or C.I.) used for the sanitary sewers shall have a standard thickness cement lining and shall be lined and coated with a standard thickness bituminous material inside and outside. Lining and coatings shall be in accordance with ANSI A21.4.
  - d. All ductile iron pipe and fittings, including valves, shall be installed with a single layer of two ply cross laminated high density polyethylene encasement per AWWA C105, meeting the following nominal specifications; AWWA C105-93, Section 4.1.2, High Density Cross Laminated Polyethylene Film, Type III, Class C (black), Grade 33, tensile strength, 5,000 psi minimum elongation 100 percent, thickness nominal 0.004 inch (4 mil).
3. Steel Casing Pipe
- a. Steel casing pipe shall be welded steel pipe, manufactured and tested in accordance with ASTM A-120, Grade B, with a minimum yield strength of 35,000 psi. The pipe shall be new, visibly sound, and round. Minimum casing wall thickness shall be as specific on SS-11 of the Township Minimum Construction Standards and Standard Details.
4. Wye Branches For Gravity Main Sewers
- a. Main line wye branches shall be 6 inch diameter PVC-SDR 26-ASTM-3034 pipe. One wye branch shall be installed at each dwelling's service lateral and at those locations identified on the approved plan.
5. Service Sewers For Gravity Main Lines
- a. The service sewers shall be 6 inches and of the same material as the main line sewer. Class of pipe shall be: PVC - SDR 26 ASTM D-3034
  - b. The service sewers shall be at a class or strength to suit the construction installation condition as recommended by the manufacturer.
6. Precast Concrete Manholes, Frames, Cover and Ladder Bars

- a. Precast manholes shall be 4'-0" in diameter at the barrel, unless specified otherwise on the approved plans, and reinforced throughout with reinforcing mesh. Cone sections shall be straight side type and shall be cast of heavier section than barrel sections. Barrel sections shall conform to ASTM Specification C-478-72a. Precast sections shall have bell and spigot ends. Manhole steps shall be as specified herein, poured in place when fabricated. Concrete strength shall be not less than 4,500 psi. Top cone sections shall accommodate a standard cast iron frame and cover as specified, and shall be provided with 2¾" anchor bolts.
- b. Openings in the manhole base section shall be equipped with a pipe to manhole rubber gasket seal. The rubber gasket shall be cast integrally into the pipe openings in the manhole base at the time of manufacture. The rubber gasket shall be watertight and manufactured in accordance with ASTM C-923. The rubber gasket shall be approved by the Engineer.
- c. Manholes shall conform to the Detail SS-2 as shown in the Township Minimum Construction Standards and Standard Details.
- d. All manholes shall be constructed watertight and leak proof. To insure watertightness and longevity an approved bitumastic coating shall be applied to the entire exterior.
- e. Manhole cone sections and barrel sections shall not have more than two (2) lifting holes per section for handling and installation purposes. After installation, the holes shall be sealed to the Owner's satisfaction.
- f. Manhole inverts, including sewer intersections unless otherwise shall in all cases be formed with Class C concrete. The finished product shall be clean and smooth offering no obstruction to flow. The prevailing sewer grade shall be carried through the manhole unless otherwise directed by the Owner's Representative. Wherever sewers enter manholes such that the invert of the sewer is less than two feet (2') above the manhole bottom, a channeled concrete fillet shall be constructed to prevent the flow from splashing into the manhole. The channeled concrete fillet shall be steel trowel finished.
- g. Manhole frames and covers shall be of good quality cast iron and of such character as will make the metal of the casting strong, tough, durable, and of even grain. The metal shall conform in all respects to the Standard Specifications for Gray Iron Castings as set forth by ASTM 48 Class 30, or better. The castings shall be smooth, free from scale, lumps, blisters, sand holes, or other defects of every nature. All castings shall be manufactured true to pattern. Frames and covers shall have machined bearing surfaces to prevent rocking and rattling.
- h. All manholes shall be nominal 27 inch diameter opening.

- i. All covers shall be stamped "NFT Sanitary Sewer" with two inch (2") high capital letters. Frames shall be provided with two (2) holes in the base flange for anchoring.
- j. The final setting of manhole castings shall be such that they conform with the existing ground slopes and shall be set to exclude surface water.
- k. Ladder bars shall be fabricated of gray iron construction (minimum tensile strength of 40,000 psi) similar to Pattern No. 1487 as manufactured by Allegheny Foundry Company, Pittsburgh, Pennsylvania, or a (minimum) three-eighths inch (3/8") round steel step encapsulated with copolymer polypropylene plastics. The ladder bars shall be capable of withstanding the design loading required in ASTM C-478 specifications at a temperature of 0 degrees F with no structural failure.
- l. Manhole steps shall be evenly spaced vertically on twelve inch (12") centers. Manhole steps shall be poured in place when the manhole is fabricated. Loose and/or poorly aligned manhole steps shall be a cause for rejecting manholes.
- m. All sanitary sewer materials including precast concrete products, frames, lids, castings, steps, and pipe must come from a supplier listed in Bulletin 15.

### **Section 305 MAINLINE SANITARY SEWER INSTALLATION REQUIREMENTS**

#### **A. Pipe Installation**

1. All pipe shall be stored, handled and installed in strict accordance with the manufacturers' recommendations. All pipe shall be inspected for damage before installation in the trench. No damaged pipe will be installed in the trench. All dirt and other foreign materials shall be removed from the interior of the pipe prior to placement.
2. No pipe shall be placed in trenches with pooled or flowing water. All open ends shall be plugged to prevent the entrance of water, dirt, and other foreign objects.
3. Pipe shall be laid with bell ends facing the direction of laying, unless otherwise specified by the Township. Laying of pipe shall start at the lowest elevation and shall proceed towards the highest elevation with the bell ends of the pipe upgrade.
4. All sanitary sewer mains shall have a minimum diameter of eight inches with a minimum grade of 0.5%.
5. The use of blocks for supporting pipe and fittings will not be permitted.

6. All pipe and fittings shall be carefully examined for cracks and other defects while suspended above the trench immediately before installation in final position. Defective pipe and fittings shall be rejected.
7. The interior of all pipe shall be free of dirt and foreign material at all times.

B. Trench excavation

1. The trench shall be excavated so that the pipe can be laid to the alignment, and grade required. All excavation left open overnight shall be covered with suitable steel plates. The trench shall be provided with sheeting or shall be properly braced where necessary to protect the lines, the labor employed on the work and property adjoining the trench. The Developer shall be responsible for sheeting and bracing in accordance with all prevailing, applicable Federal, State and Local regulations.
2. The clear space between wall of trench and barrel of the pipe shall not be less than six inches (6") or more than twelve inches (12") on each side to a height of not less than twelve inches (12") above the top of the pipe. If sheeting is required, the foregoing dimensions shall be applicable to the inside faces of the sheeting.
3. Ledge rock, boulders and large stones shall be removed to provide a clearance of not less than six inches (6") below the subgrade and on each side of the pipe. Trenches excavated for rock clearance shall be backfilled as specified herein, with six inches (6") of AASHTO No. 57 stone. These materials shall be furnished and installed at no extra compensation to the Contractor. For ductile iron and reinforced concrete pipe, select backfill shall be used to fill from the centerline of the pipe, to at least twelve inches (12") above the top of the pipe.
4. If the bottom of the trench is found to be of unsuitable material, including but not limited to muck, quicksand, soft clay, ashes, cinders, refuse, vegetable, or other organic material that is not suitable for pipe foundation subgrade or backfill, the Contractor shall excavate and remove such unsuitable material to the width and depth as approved by the Township.

C. Backfill

1. Submit certifications verifying that materials comply with specification requirements of PennDOT 408 and that the source is PennDOT approved per Publication 34 – Aggregate Producers: Bulletin 14.
2. In no case will the wheel or track of a backhoe or loader be utilized to compact trench backfill.
3. Detailed backfilling procedures are separated into three (3) zones:



- a. The Pipe Zone, which begins at a minimum depth of six (6") inches below the bottom of the pipe and ends at a point twelve inches (12") above the crown of the pipe;
  - b. The Intermediate Zone, which begins at a point twelve inches (12") above the crown of the pipe and ends at a point eighteen inches (18") below finish grade; and
  - c. A Final Zone that includes the top eighteen inches (18") of trench area.
4. **Pipe Zone Preparation and Backfill:** The trench shall be excavated to a depth as to provide a uniform and continuous bearing and support for the pipe, as required by the approved plans. Pipelines shall be supported on and bedded by AASHTO No. 57 stone (no slag). The bedding material shall be placed to a minimum depth of 0.5 feet below the bottom of the pipe and for the full width of the trench. The bedding material shall be installed to a point 12 inches above the top of the pipe.
  5. **Intermediate Zone Backfill:** The select material excavated during trenching and other construction operations, shall be used as backfill in the intermediate zone as defined herein under all unimproved (e.g. lawn areas) surfaces. The backfill shall contain no stones more than six inches (6") in the largest dimension, or frozen, excessively wet, or otherwise unsuitable material. Where the open-cut trench is located under improved areas (e.g. roadways, streets, state highways, berms, or other improved areas), the entire (full depth) intermediate zone shall be backfilled with 2A (no slag). The entire depth of the intermediate zone, regardless of material shall be placed in layers and compacted to maximum density using suitable vibratory compaction equipment. Maximum lift shall be eight inches (8").
  6. **Final Zone Backfill:** Backfill of the final zone of the trenches occurring in roadways, streets and the shoulder of a road shall be accomplished with No. 2A modified stone or gravel (no slag) per Form 408 Section 703 (Quality Table B Type B, or better; Gradation per Table C), aggregate compacted in four inch (4") layers.

#### D. Structure Installation

1. **Structure Inverts:** Manhole/inlet inverts, including sewer intersections, shall in all cases be formed with Class C concrete. The finished product shall be clean and smooth offering no obstruction to flow. The prevailing sewer grade shall be carried through the manhole. Wherever sewers enter manholes/inlets such that the invert of the sewer is less than two feet (2') above the structure bottom, a channeled concrete fillet shall be constructed to prevent the flow from splashing into the structure. The channeled concrete fillet shall be steel trowel finished.
2. **Finished Grade at Structures:** Manhole tops in lawn or paved areas will be level or flush with the finished surface, unless specifically otherwise noted on the approved plans. Inlets will either be flush or sumped, as noted on the approved plans.

3. Backfill Material for Structure Excavation: Where structures are installed in paved streets, alleys, roads, berms, parking areas, or other **improved** surface areas, the entire excavated area around the structure shall be backfilled with AASHTO No. 57 or 2A (no slag), or material approved by the Owner's Representative. The stone shall be installed completely around the structure from its base to the bottom of the **improved** surface area. The stone shall continue out of the structure excavated area through and around the inlet and outlet pipe trench area so that its surface forms an approximate 45 degree angle with the top of the manhole. Where structures are installed in **unimproved** areas, the entire excavated area around the structure shall be backfilled with a stone or material from the base to a point twelve inches (12") above the top of the highest pipe entering the structure and with select material to the surface as defined herein.

E. Alignment, Grade and Layout Of The Work

1. All sanitary sewer installations must comply with the Township of North Fayette Sewer System Rules and Regulations, all other Township codes and requirements, the Allegheny County Health Department Plumbing Code, and all other local, county, state, and federal codes and regulations.
2. Verify all existing utilities in the field prior to start of excavation work. Comply with One Call (Act 38) requirements. Contact all utility companies that may have facilities within the work area.
3. Field check and verify benchmark elevations for all work before start of construction. Set/adjust final grades for proposed storm sewer lines after all existing utilities and other obstructions have been located by test holes. Dig all necessary test holes to locate any existing utilities that may be in conflict with the alignment and grade of the proposed storm sewer. Meet all existing conditions and grades along the route of the proposed sewer lines.
4. The sewer line shall be laid and maintained to the required lines, grades, and minimum depths as shown on the approved plans. Any realignment must first be approved by the Township.
5. The use of a laser is required for all sanitary sewer installation. Pipeline acceptance testing shall include mandrel and full moon spot light. All sewers must be installed to line and grade. Curved pipe will not be accepted. Changes in vertical or horizontal alignment must occur at a suitable junction box (manhole).
6. Maintain and protect traffic during construction. Coordinate all work with local emergency response and transportation agencies. Provide all required signage for temporary traffic control. Maintain all roads, sidewalks, steps and traveled ways clean, free of mud or dust, and in a condition usable by residents in the area during construction. Maintain access to all driveways during construction.

7. Maintain all existing storm sewers and sanitary sewers in service during construction. Contain sanitary sewage to sanitary sewers. Do not discharge to the ground surface or to groundwaters.
8. Maintain daily as-built record information including wye stationing. Give Township's Representative copies of all delivery slips for all materials delivered to the project.
9. Coordinate and schedule all work as required with utility companies, other contractors, and local, municipal or state government agencies. Notify Township and Township Engineer 48 hours in advance of starting the project.
10. Cut and plug all existing sanitary sewer lines to be taken out of service. Plug with suitable waterproof non-shrink grout at least one foot (1') into pipe. Remove manholes to minimum three foot (3') below grade plug inlet and outlet pipes as directed. Backfill to grade with suitable material. Return castings to North Fayette Township. Grout all abandoned sewers solidly in place.

### **Section 306 SANITARY SEWER TESTING**

- A. Pressure Air Test: All sewers (mains and service lines) shall be air tested for leakage and any section of sewer showing leakage in excess of the amount hereinafter set forth shall be rejected.

The air test shall be conducted by the Contractor under the observation of the North Fayette Township's Representative and shall be performed with AIR-LOC equipment manufactured by Cherne Industrial, Inc., Hopkins, Minnesota or approved equal.

The Contractor may desire to perform an air test for his own purposes prior to backfilling; however, the "acceptance air test" shall be performed after backfilling has been completed.

Each section of sewer being tested shall be temporarily sealed off by means of suitable plugs. All ends of lateral stubs shall be sealed with suitable removable caps securely fastened to withstand internal test pressures.

The procedure and criteria to be used for air testing shall conform to that described by the National Clay Pipe Institute.

All gauge test pressures in the test shall be increased by the amount of groundwater pressure at the crown of the pipe.

Plugs shall be properly secured and care shall be exercised in their removal. All plugs shall be blocked and carefully braced to prevent sudden release of compressed air, slippage, or blowout due to internal pressure.

No personnel shall be permitted in the manholes or at the end of the pipe test section during testing.

The pressurizing equipment shall have a safety gauge which shall limit the loading on the sewer line to 10 psi. The calibrations on all pressure gauges shall be no greater than 0.10 psi.

If the pipe installation fails to meet test requirements, the Developer shall determine, at his own expense the source or sources of leakage, and he shall repair or replace all defective materials and workmanship.

Immediately following the testing, the entire interior of the pipe shall be inspected by a North Fayette Township Representative, and in the event any joints are found to be leaking, they shall be properly repaired, regardless of whether or not the pipe meets the air/pressure test requirements. Under no circumstances shall infiltration in any section of pipe between two adjacent manholes exceed 200 gallon/mile/ inch diameter/day.

All sewer pipes shall be tested by inducing low pressure air, internally, into the pipe. The air shall be slowly introduced into the pipe and the pressures shall gradually be increased within the test section to 5.0 psi. The test section shall be required to **sustain that 5.0 psi minimum without loss or drop in pressure for a time period of 5 minutes.** In the event pressure loss does occur, appropriate repairs or reconstruction shall be made, the test procedure shall be made, and the test procedure shall be repeated until the test criteria (5.0 psi for 5 minutes) are successfully accomplished.

Where groundwater elevations prevail higher than the top of the sewer pipe being tested, 0.5 psi per foot of hydrostatic head above the top of the sewer pipe shall be added to the test pressure.

- B. Mandrel/Deflection Test: All PVC pipes shall also be tested for pipe deflection. Said tests shall not be performed until the backfill has been in place for at least thirty (30) days; maximum acceptable deflection shall be 5% of the internal diameter. Said testing may be performed with a deflectometer, calibrated internal TV equipment or a mandrel similar or equal to that manufactured by Cherne Industries, Inc. Deflection testing equipment and procedures shall be submitted for approval by the Engineer.
- C. Vacuum Testing of Manholes: After erection of the manholes, connection of the sewers, and placement of the backfill to approximately the finished ground elevation, each manhole shall be vacuum-tested for water tightness. Connecting pipes shall be securely plugged and a vacuum testing device similar to that manufactured by P.A. Glazier, Inc., or equal, shall be placed and sealed within the top of the precast manhole section. A vacuum of ten inches (10") of Hg shall be drawn after which the vacuum pump shall be shut off. If the indicated vacuum pressure drops to nine inches (9") in less than one minute, the test apparatus shall be removed and appropriate repairs shall be performed. The test shall be repeated, as necessary, until a time period of a minimum of one minute occurs before the vacuum pressure drops one inch (1").

**Section 307 PROJECT COMPLETION CHECKLIST DEDICATION OF SANITARY SEWERS**

- A. Install sanitary sewers per the approved plans and per North Fayette Township Regulations.
- B. Complete and submit Record Drawings (As-Builts) of sanitary sewers for review and approval by North Fayette Township. Record Drawings must be accepted before any sewage permits will be issued for a development and all sewer rights-of-way must be recorded and conveyed to North Fayette Township.
- C. After the sewer line has been installed for 30 days, complete testing per North Fayette Township Regulations. Tests shall include:
  - 1. Manhole Vacuum Test for each manhole
  - 2. Pressure Air test of the entire sewer line
  - 3. Mandrel(Deflection) Test of the entire sewer line
- D. Submit Maintenance Bond for 18 months from the date of the Certificate of Completion of sanitary sewers for an amount of 15% the cost of construction.
- E. At month 16 of the Maintenance Bond period, CCTV all sewer lines and submit videos and data to the Township.
- F. Escrow Deposit shall remain in place until the expiration date as set forth in any agreements entered into between the Township of North Fayette and the Developer or unless otherwise agreed to by the Township of North Fayette.
- G. All sanitary sewers must be accepted by the Township as public infrastructure prior to issuance of any building permits.

**Section 308 STORMWATER MANAGEMENT FACILITIES**

- A. Refer to Township Code Chapter 23 for information regarding Stormwater Management Design requirements.
- B. Refer to Details SW15-SW18 of the Township Minimum Construction Standards and Standard Details.

**Section 309 DRIVEWAYS, ACCESS ONTO TOWNSHIP STREETS**

- A. General Requirements: All driveways shall be located designed, constructed, and maintained in such a manner as not to interfere or be inconsistent with the design, maintenance and drainage of the street.
- B. General Location Restrictions: All driveways shall be permitted at locations in which:
  - 1. Sight distance is adequate to safely allow each permitted movement to be made into or out of the access driveway;

2. The driveway will not create a hazard; and
  3. Adequate sight distance at all driveways shall conform to PENNDOT latest Publication 282 (Highway Occupancy Permit Handbook) and Pennsylvania Code Title 76 Transportation, Chapter 441 (Access to Occupancy of Highways by Driveways and Local Roads).
- C. Residential Driveway: Within the right-of-way of Township streets, residential driveways shall be constructed in accordance with Details RD-18 and RD-19 of the Township Minimum Construction Standards and Details.
- D. Grade: Driveways shall be constructed to conform to the grade of the finished shoulders. All descending or ascending grades of driveways shall begin at the street right-of-way. No stormwater shall be permitted to drain onto Township streets.

### **Section 310 FIRE HYDRANTS**

Where fire hydrants are required, they shall be installed pursuant to specifications of the Western Allegheny County Municipal Authority, or other entity having jurisdiction. Location within a proposed public right-of-way shall be in accordance with Detail RD-8 of the Township Minimum Construction Standards and Details.

### **Section 311 GUIDERAIL**

Guiderail shall be installed in accordance with PennDOT Roadway Construction Standards RC-51, current edition, PennDOT Publication 13M, current edition and the AASHTO Roadside Design Guide, current edition.

### **Section 312 COMMUNICATION SERVICE**

Where communication service (data/telephone/cable) is to be installed, it shall be installed pursuant to the specifications of the service provider having jurisdiction. Utility location within a proposed public right-of-way shall be in accordance with Detail RD-7 of the Township Minimum Construction Standards and Details.

### **Section 313 ELECTRIC**

Where electric service is to be installed, it shall be installed pursuant to the specifications of the service provider having jurisdiction. Utility location within a proposed public right-of-way shall be in accordance with Detail RD-7 of the Township Minimum Construction Standards and Details.

### **Section 314 GAS**

Where gas service is to be installed, it shall be installed pursuant to the specifications of the service provider having jurisdiction. Utility location within a proposed public right-of-way shall be in accordance with Detail RD-7 of the Township Minimum Construction Standards and Details.

## **Section 315 WATER**

Where potable water service is required, it shall be installed pursuant to specifications of the Western Allegheny County Municipal Authority, or other entity having jurisdiction. Utility location within a proposed public right-of-way shall be in accordance with Detail RD-7 of the Township Minimum Construction Standards and Details.

## **Section 316 MONUMENTS AND MARKERS**

### **A. Type, Material and Size**

#### **1. Monuments**

- a. Monuments shall be constructed in accordance with requirements of Detail RD-22 of the Township Minimum Construction Standards and Standard Details. Location of monumentation shall be in accordance with the requirements of the Township Subdivision and Land Development Ordinance (Chapter 22).

#### **2. Iron Pins**

- a. Capped iron pins identifying the professional responsible for their placement of least one-half inch in diameter and not less than 30 inches in length or other material acceptable to the Engineer shall be installed at locations as identified in the Township Subdivision and Land Development Ordinance (Chapter 22).

### **B. Detection**

Monuments and markers shall be detectable with conventional ferrous metal or magnetic locators.

## **Section 317 RECORD (AS-BUILT) DRAWINGS**

### **1. Storm and Sanitary Sewer Infrastructure**

#### **a. Submittals**

- i. A record drawing set shall be kept by the Developer separate from other construction drawings and shall not be used for other purposes. Upon completion of construction the Developer shall provide:

- (a) One neatly and legibly marked set of full-size record drawings, sealed by the professional responsible for their preparation.

- (b) As-Built CAD drawings. Electronic format shall be AutoCAD, latest version.
- ii. Record drawings must be received and accepted prior to the Township's consideration of acceptance of dedication of infrastructure.
- b. Drawing Requirements
  - i. Provide additional drawings or mark on the Drawings to show the following:
    - (a) Underground utilities and other items including the location of lines and appurtenances. Show the actual size and types of material used. Show locations by facility coordinates or dimensioned to permanent surface structures. Minimum requirements for accuracy as specified in the following table:

Description	Location	Elevation	Notes
Temporary Facilities and Construction Materials left at end of Project	CL ± 1 ft	CL ±1 ft	Includes shoring, all underground items, and concrete.
Pressurized piping.	CL ± 1 ft	CL ±0.50 ft	Includes water and process lines.
Storm drains, sewer lines inverts and cleanouts.	CL ± 1 ft	CL ±0.01 ft	Recalculate slope if shown on the Drawings.
Sewer interceptors and trunks.	Coordinates, stations, and offsets. CL ± 1 ft.	IE ±0.01 ft.	Recalculate actual slopes.
Laterals and Side Sewers	CL ± 1 ft	CL ±0.50 ft	Include measurements based on fixed objects (i.e. house corners)
Stormwater Connection	Cross CL ± 1 ft	CL ±0.50 ft	Include measurements based on fixed objects (i.e. house corners)

CL = Centerline  
 IE = Invert Elevation  
 FT = Feet

- (b) The actual arrangement and routing of embedded conduit and piping is relative to its location and proportion to other work. The location does not need to be dimensioned or drawn to scale.



- (c) Other Drawings as may be required by the Township or the Township Engineer.
  - (d) Provide dimensions from more than one permanent structure where required for accurate location.
- 2. Mass Grading Record Drawings and Certification: Prior to request for bond release for earthwork items or application for building permits, the Developer shall submit an as-built grading plan, prepared and sealed by a qualified professional registered in the Commonwealth of Pennsylvania confirming that the as-built grading conforms to that proposed on the approved plan. The as-built grading plan shall be prepared in accordance with applicable requirements of this Code, the Township Subdivision and Land Development Ordinance and specifically include the following:
  - a. Contours, at intervals of two feet, as depicted on the approved grading plan.
  - b. As-built contours, at intervals of two feet, as determined by field survey following completion of mass grading. This includes swales, berms or other stormwater conveyance facilities when constructed. As-built contour line types should be depicted such that they are clearly distinguishable from the originally proposed contours.
  - c. Certification, signed and sealed by a qualified design professional registered in the Commonwealth of Pennsylvania that the as-built grading conforms to the approved plan and has not modified the stormwater management plan for the development.

**Section 318 RESIDENTIAL HOME SITE DEVELOPMENT**

- A. Prior to application for building permit for any residential home site within the Township, the property owner or developer must submit a plot plan to demonstrate conformance with Zoning, Grading and Stormwater Management parameters proposed in the approved Subdivision Plan, Land Development Plan and/or Planned Residential Development Plan, as applicable. No building permit shall be approved without submission of a plot plan, prepared and sealed by a qualified professional, depicting the following:
  - 1. A title block containing:
    - a. The name, plan book volume and page number of the plan in which the lot is located.
    - b. The lot number from the reference recorded plan.
    - c. The location of lot as North Fayette Township, Allegheny County, Pennsylvania.
    - d. The date of plan preparation.
    - e. The scale of the plan.
    - f. The name and address of the applicant and/or property owner.



deviations in grading, runoff patterns or other site conditions be observed, the Township shall require an as-built plot plan be submitted prior to issuance of the occupancy permit. The as-built submission must contain certification from a qualified professional licensed in the Commonwealth of Pennsylvania to the Township and to the developer's engineer that the final lot grading and elevations comply with the requirements of the approved mass grading and the stormwater management plans.

### **Section 319 TRAFFIC REGULATORY AND GUIDANCE SIGNS**

- A. All installations, locations and materials shall comply with Township, MUTCD and PennDOT standards.
- B. Traffic regulatory signage plan be prepared by qualified professional and contain signage including but not limited to the following:
  - 1. Traffic Signal Supports shall be Mast Arms constructed in accordance with MUTCD PA DOT Pub 148 detail TC-8801 and shall be black powder coated.
  - 2. Stop Signs.
  - 3. Speed limit signs (25 mph, unless noted).
  - 4. No outlet signs.
  - 5. Yield signs.
  - 6. Weight, size and load restrictions.
  - 7. Turning restrictions.
  - 8. Stopping, standing and parking restrictions.
  - 9. Hazardous grade speed limits.
  - 10. No-passing zones.
  - 11. No turns on red restrictions.
  - 12. Removal of traffic hazards.
  - 13. School zones and school zone speed limits.
  - 14. Special speeds on bridges or elevated structures.
  - 15. Creation of one-way streets.
  - 16. In development where roadway segments are proposes such that no mid-block signage exist for a distance of 750 feet for greater, the Developer shall install a sign post as specified below for the Township's use in installation of temporary signage.
- C. All traffic control signs (other than street names signs) must use the following specifications:
  - 1. One sign per post, unless otherwise approved by the Township.
  - 2. 2-inch square powder coated galvanized steel post.
  - 3. Three-foot counter sink posts.
  - 4. Break-away hardware.
  - 5. Theft proof nuts and bolts.
  - 6. All traffic control signs must be at least seven feet to the bottom of the sign, and two feet to five feet behind the curb or in accordance with the current MUTCD standards.
  - 7. Signs, when not at an intersection should be placed between lots, on lot lines.

8. Arrows indicate flow of traffic.

D. Street Name Signs

1. Developers shall order signage from an approved Township vendor.
2. The standard North Fayette Township street sign will have the following specifications:
  - a. The street name shall appear on street name signs in capital letters six inches high or as required by MUTCD, whichever greater.
  - b. Prefixes such as "North" shall be abbreviated to N.
  - c. Suffixes such as "Drive" shall be abbreviated to DR.
  - d. Prefixes and suffixes shall be four inches high or as required by MUTCD, whichever greater.
  - e. Signs shall be mounted on nine-inch-wide extruded aluminum blanks predrilled to accept vandal-proof hardware.
  - f. Required length of sign shall be determined by the road name.
  - g. Post brackets and cross brackets for mounting the signs must have a twelve-inch long slot for securing the signs and also be drilled to accept vandal-proof hardware.
  - h. The vandal-proof hardware shall consist of bolts with a 12 part socket head.
  - i. Sign posts shall be 2-inch square powder coated galvanized steel post.
  - j. All street signs shall be in accordance with the PA DOT Pub 236.
3. Location.
  - a. All street name signs should be located to share a post with stop signs, where applicable, as shown on Detail RD-30 of the Township Minimum Construction Standards and Standard Details.
  - b. Post must be embedded in 24 inches to 30 inches of concrete and two feet to five feet behind the curbs.

E. Final Approval.

1. All identification and traffic warning and regulatory signage must be installed prior to the Township issuing any building permits.
2. Bonds shall not be released for the streets until all signage installations receive final approval from the Township Engineer.
3. When all signs have been installed, the Developer must request the Township to review the installations.
4. All developers must purchase and install all signs on their own. The Township will not order, pay for, receive, store or install any signs, posts, etc., for the developer.

## **Section 320 STREET AND PEDESTRIAN LIGHTING**

- A. The Township shall require developers to install lighting along those streets in the development to be dedicated to public use. All street and pedestrian lighting shall be installed in compliance with Township standards for work in Township rights-of-way. (See Details SD-18 – SD-20 of the Township Minimum Construction Standards and Details.)
- B. The following fixture shall be used for street lighting within the Township:
  - 1. Cooper Lighting Solutions Streetworks Galleonaire – GAA-AF-08-LED-U-T2R-BK (See Detail SD-18), or approved equal
- C. The following fixtures shall be used for pedestrian lighting within the Township:
  - 1. Cooper Lighting Solutions Luxescape LXS Decorative Luminaire – LXS-VA3-LED-740-U-ASC-BK-S (See Detail SD-19), or approved equal
- D. Payment for the energizing and maintenance of the street lights shall be the responsibility of the developer and/or the homeowners or business association. Operation and maintenance plan and agreements should be provided to the Township by the party responsible for lighting.

## **Section 321 LANDSCAPING**

- A. Street tree planting specifications. Trees shall be placed spaced every 35 feet on center per side of the roadway with a minimum diameter at breast height (dbh) of 2" at the time of planting. See Detail RD-6 of the Township Minimum Construction Standards and Details. Trees shall be of substantially uniform size and shape and have straight trunks. Trees shall be properly planted and staked and provisions made by the Developer for regular watering and maintenance until the development is complete and Township acceptance of streets. Dead and dying trees shall be replaced by the developer during the next planting season after the initial planting.
- B. The following trees shall be used as street trees within the Township or as otherwise permitted by the Township.
  - 1. For trees in locations where there are no utility lines, i.e. tall trees.
    - a. Ginkgo Biloba – Princeton Sentry
    - b. Ostrya virginiana – American Hophornbeam
    - c. Tilia tomentosa – Silver Linden
    - d. Ulmus (disease resistant hybrids) Homestead, Pioneer, Urban
    - e. Liquidambar styraciflua – Sweet Gum

- f. Platanus acerfolia – Sycamore
  - g. Nyssa sylvatica – Black Gum
  - h. Zelkova Serrata – Zelkova
2. For trees in locations with utility lines, i.e. short trees.
- a. Cercis Canadensis – Eastern Redbud
  - b. Crataegus crus-galli var ‘Inermis’ (thornless) Hawthorn
  - c. Syringa reticulata “Ivory Silk’ – Tree Lilac
  - d. Sorbus americana - American Mountain Ash
- C. The following standards shall be used during planting as approved by the Engineer.
- 1. (SD-12) Shrub planting detail: See Detail SD-12 of the Township Minimum Construction Standards and Details.
  - 2. (SD-13) Evergreen/deciduous tree planting detail: See Detail SD-13 of the Township Minimum Construction Standards and Details.
- D. No more than 50% of plantings located at a site in total, or for and individual planting requirement (i.e. street trees, bufferyard trees, etc.) shall be of a single species.

### **Section 322 TRAFFIC SIGNALS**

All traffic signal shall comply with Detail SD-17 of the Township Minimum Construction Standards and Standard Details and PennDOT Publication TC-8801.

## **ARTICLE IV: LEGAL RESPONSIBILITIES AND REMEDIES**

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### **Section 400 CONTROL OF CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS BY DEVELOPERS**

All construction of public and private improvements in the Township must comply with Chapter 22 Subdivision and Land Development of this Code and shall be conducted in accordance with this Chapter of the Code.

- A. Notice prior to start of work. In order that the Township may provide inspection and emergency services during construction, the developer shall file with the Township a notice of commencement not less than two days (48 hours) prior to start of work and shall also submit the following:
1. Names, addresses and telephone numbers of the superintendent, contractor and subcontractors and other responsible persons to be contacted in case of emergencies.
  2. A general schedule of construction which is to be updated during construction if changes are made.
- B. Supervision and Superintendence.
1. The Developer shall supervise and direct the work and be solely responsible to see that the work is done in accordance with the construction standards and specifications.
  2. The Developer shall have available at all times while construction is continuing a competent superintendent, who may be contacted during an emergency. The superintendent will be the developer's representative at the site and shall have authority to act on behalf of the developer. All communications given to the superintendent shall be as binding as if given to the developer. If the superintendent is replaced, the developer shall give written notice thereof to the Township immediately.
  3. The Developer shall be fully responsible for the acts and omissions of the contractors, the subcontractors, persons and organizations directly or indirectly in his employ.
- C. Site Appearance. The Developer shall keep the site free from accumulation of waste materials, rubbish and other debris resulting from the work. At the completion of the work, the developer shall remove all waste materials, rubbish and debris from and about the site as well as all tools, construction equipment and machinery, and surplus materials and shall leave the site clean.

- D. Parking. No construction vehicles, vehicles of construction employees, equipment, materials or supplies shall encroach onto a public street. In the case where there is a private street or proposed public street, not yet accepted by the Township, the developer shall maintain an eighteen-foot unobstructed clear path on such street for emergency vehicle purposes.
- E. Hours of Construction. The operation of heavy construction or excavation machinery, including but not limited to bulldozers, high-lifts, backhoes, trucks, power shovels, pumps and jackhammers, and the operation of equipment such as saws and drills or any other type of machinery in conjunction with the construction of public and private improvements which causes noise sufficient to disturb the peace and general tranquility of the general public, shall be prohibited in the entire Township between the hours of 9:00 p.m. and 7:00 a.m., Monday through Saturday, and all day Sunday and holidays.
- F. Dust Control. The Developer shall maintain the site so as to control the dust. The developer shall employ measures necessary to control dust. At the Township's direction the Township may require routine maintenance of the site for dust control should, in the opinion of the Township, the Developer is not maintaining the site in a reasonable manner.
- G. Responsibility for compliance. The developer shall have the sole responsibility to comply with all federal, state, and local laws, and the Township disclaims any duty to enforce any violation of such laws or inform the developer of noncompliance.

**Section 401 VIOLATIONS; ENFORCEMENT NOTICE**

- A. It shall be unlawful for any developer, owner or public utility company to construct public or private improvements regulated by this Code, or cause the same to be done, in conflict with or in violation of any of the provisions of this Code.
- B. Enforcement Notice
  - 1. If any violation of this Public and Private Improvement Code has occurred, the Township shall initiate enforcement proceedings by sending an enforcement notice as provided in this section.
  - 2. The enforcement notice shall be sent to the owner of record of the parcel on which the violation has occurred, to any person who has filed a written request to receive enforcement notices regarding that parcel, and to any other person requested in writing by the owner of record.
  - 3. An enforcement notice shall state at least the following:
    - a. The name of the owner of record and any other person against whom the Township intends to take action.
    - b. The location of the property in violation.



- c. The specific violation with a description of the requirements which have not been met, citing in each instance the applicable provisions of this public and private improvement Code.
  - d. The date before which the steps for compliance must be commenced and the date before which the steps must be completed.
  - e. That the recipient of the notice has the right to appear to the Township Board of Supervisors within a prescribed period of time in accordance with procedures set forth in this Public and Private Improvement Code.
  - f. That failure to comply with the notice within the time specified, unless extended by appeal to the Township Board of Supervisors, constitutes a violation with possible sanctions clearly described.
- C. Any person who shall violate a provision of this Code or who shall fail to comply with any requirement thereof shall be subject to the penalties of the Township Code. Each day that a violation continues shall be a separate offense.
- D. Abatement of Violation. The imposition of the penalties herein prescribed shall not preclude the Township from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation or to stop an illegal act.

**Section 402 ENFORCEMENT; VIOLATIONS AND PENALTIES**

- A. Any person, partnership or corporation who or which has violated or permitted the violation of the provisions of this Code shall, upon being found liable therefor in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than \$500, plus all court costs, including reasonable attorney fees incurred by the Township as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the District Justice. If the defendant neither pays nor timely appeals the judgment, the municipality may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the District Justice determining that there has been a violation further determines that there was a good-faith basis for the person, partnership or corporation violating the Code to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the District Justice and thereafter each day that a violation continues shall constitute a separate violation. All judgments, costs and reasonable attorney fees collected for the violation of this Code shall be paid over to the Township.
- B. Nothing contained in this section shall be construed or interpreted to grant to any person or entity other than the Township the right to commence any action for enforcement pursuant to this section.

### **Section 403 LEGAL REMEDIES; CAUSES OF ACTION**

In case any building, structure, landscaping or land is or is proposed to be, erected, constructed, reconstructed, altered, converted, maintained or used in violation of any ordinance enacted by the Township, the Board of Supervisors, or with the approval of the Board, an officer of the Township may institute any appropriate action or proceeding to prevent, restrain, correct or abate such building, structure, landscaping or land, or to prevent, in or about such premises, any act, conduct, business or use constituting a violation.

### **Section 404 SEVERABILITY**

- A. Should any section, clause, provision or portion of this Code be declared by a court of competent jurisdiction to be invalid or unconstitutional, such decision shall not affect or impair the validity of any other section, clause, provision or portion of this Code.
- B. It is hereby declared to be the intent of the Board of Supervisors of the Township, that this Code would have been adopted by the Township had such invalid or unconstitutional provision not been included herein, and the remaining portion declared invalid or unconstitutional had never been a part hereof.

### **Section 405 STOP-WORK ORDER**

- A. Notice to Stop Work. Upon notice from the Township that work on the installation of public or private improvements is being prosecuted contrary to the provisions of this Code, such work shall be immediately stopped. The stop-work order shall be in writing and shall be given to the developer, or to the person doing the work. The stop-work order shall state the conditions under which the work may be resumed.
- B. Unlawful Continuance. Any person who shall continue any work in or about a work site having been served with a stop-work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be liable for the violations and penalties set forth herein.

### **Section 406 PROCEDURE FOR ACCEPTANCE OF PUBLIC IMPROVEMENTS**

The procedure for acceptance of public improvements shall be in accordance with the Subdivision and Land Development Code of the Township.

### **Section 407 ENACTMENT OF AMENDMENTS TO THE CODE**

This Code may be amended by action of the Supervisors in accordance with the Township Code; however, the construction standards of this Code as they pertain to any particular public improvement may be amended by resolution of the Supervisors upon recommendation of the Engineer and Township Manager.

## Section 408 MEDIATION OF DISPUTES

- A. Should there arise any dispute between the developer and the Township with regard to any provisions of this Code, the developer and Township may elect to use the provisions of this section to mediate such dispute. Participation in mediation shall be wholly voluntary. The appropriateness of mediation shall be determined by the particulars of each case and the willingness of the parties to negotiate.
- B. Parties may agree to enter into mediation agreement provided it contains at least the following minimum provisions.
  - a. Identification of the selected mediator who, at a minimum, shall have a working knowledge of municipal zoning and subdivision procedures and engineering practices. The mediator shall have demonstrated skills in mediation.
  - b. Time frame in which the mediation will be conducted and completed.
  - c. Provisions for suspension of time limits if necessary, for applications subject to the same in regards to subdivision, land development, PRD or other application or procedures pursuant to the Pennsylvania Municipalities Planning Code.
  - d. Identification of all parties and affording them the opportunity to participate.
  - e. Subject to legal restraints determining whether the mediation sessions or parts thereof shall be open to the public.
  - f. Identification as to whether the results of such mediation shall be binding upon the parties.
- C. Funding for mediation shall be born equally between the Township and the Developer.
- D. Mediated solutions shall be in writing and signed by the parties, and become subject to review and approval by the appropriate decision-making body when necessary.
- E. No offers or statements made in the mediation sessions, excluding the final written mediated agreement, shall be admissible as evidence in any subsequent judicial or administrative proceedings.