

**ARTICLE 8**  
**IMPROVEMENT AND CONSTRUCTION REQUIREMENTS**

**§ 180-801. Intent**

The Applicant shall design and construct all improvements required under the Township's Subdivision and Land Development regulations in accordance with the requirements and specifications as contained herein.

All materials, workmanship and methods of work shall comply with the current edition, as supplemented and amended from time to time, of the Pennsylvania Department of Transportation (PENNDOT) Publication 408, Specifications and the PENNDOT Publication 72M, Standards For Roadway Construction, (RC Drawings) as accepted and commonly used by the Township, and such specifications shall be considered to be incorporated into this Article as if copied in full. In the event a conflict arises between the requirements and specifications of this Article and the above reference specifications, the Township Engineer shall resolve the difference, and his opinion shall be binding.

Where an item of construction is not covered by the above referenced specifications or other specifications contained herein, the Applicant shall be required to submit full design information and construction details in accordance with commonly accepted engineering and construction practices for review and consideration by the Township Engineer.

Excluding emergency situations, when construction inspection by the Township is required as a precedent to other construction activities outlined herein, the Applicant, or their authorized representative, shall provide a minimum of forty-eight (48) hours notice to the Township prior to requesting said inspection.

**§ 180-802. Preconstruction Meeting Requirements**

- A. A minimum of two (2) working days prior to beginning the construction of any improvement under an approved subdivision or land development plan, the Applicant, or their designee, shall, with forty-eight (48) hour notice, arrange a preconstruction meeting with Lower Paxton Township officials, utility companies, contractors, regulatory agencies and other interested parties to review the project schedule; status of permits and approvals; construction and inspection procedures; project submittals; and other relevant information. At the preconstruction meeting, the Applicant shall provide a detailed construction schedule such that the Township can coordinate routine inspections of the work. Any project that begins work without proper notice to the Township shall bear the risk of either the removal of facilities that have been installed without proper inspection or ultimately the Township refusing to accept public facilities which are intended to be dedicated to the Township.

**§ 180-803. Street Construction**

- A. Pavement Construction. Streets shall be designed in accordance with Article 5 - Design Standards herein and shall be surfaced to the grades and dimensions drawn on the plan, profiles, and cross-sections submitted by the Applicant and approved by the Township. Before constructing the pavement structure for streets, the Applicant shall install all required utilities and provide, where necessary, adequate underdrains and stormwater drainage facilities for said streets, as approved by the Township. Unless otherwise required, the pavement subbase, base course, binder course and wearing surface must be constructed according to the following specifications and as outlined in Table 503.1 of Article 5, entitled "Street Widths and Materials" as contained herein.
- B. Private driveways, parking lots and other similar paved surfaces are exempt from the requirements of this section.
  - 1. Site Preparation - Earthwork

- a. Clearing, grubbing, demolition activities, stripping topsoil, excavating and placing fill materials shall be in strict conformance with the requirements with PENNDOT Publication 408.
- b. Roadways in fill areas shall be compacted in not more than eight (8) inch layers in accordance with PENNDOT Publication 408 Specifications. Soil testing for each lift shall be performed and paid for by the Applicant as required by these specifications. The Applicant shall be responsible for documenting the location, number and results of all compaction testing on site and shall provide the same to the Township.

2. Sub grade Preparation

- a. The subgrade soil shall be prepared and tested in strict accordance with PENNDOT Publication 408, Section 210. Field Dynamic Cone Penetration (DCP) tests shall be conducted by the Applicant and observed by the Township on the subgrade soils prior to the placement of stone subbase. The location and number of the tests will be determined by the Township for the specific site conditions. Subgrade conditions that display a California Bearing Ratio (CBR) correlation from DCP testing of less than three (3) shall be deemed unacceptable for street construction and will require removal prior to proceeding with additional fill material or the placement of the subbase material.
- b. Soil cement, geogrids and/or Class 4, Type C geotextile material may be used in lieu of undercutting to stabilize weak subgrade areas, at the Township Engineer's sole discretion.
- c. Subgrade areas that have been disturbed by trenching shall be backfilled and compacted in eight (8) inch soil layers and inspected by the Township Engineer or a designated agent before proceeding with subsequent construction.
- d. Unsuitable material in the subgrade shall be removed and replaced with material acceptable to the Township.
- e. Any springs or wet areas discovered shall be provided with a proper under drain system, which shall be properly daylighted or connected to an approved storm sewer system.
- f. The subgrade shall be sloped to match the pavement cross slope to facilitate subgrade drainage. At inlet locations, the subgrade shall be transitioned for a minimum of four (4) feet on each side of the inlet to accommodate the sumped condition and to achieve the proper pavement thicknesses.
- g. Subgrade conditions shall be inspected by the Township or their designated agent prior to the placement of the subbase material.

3. Subbase Material

- a. Prior to the placement of the subbase, the subgrade shall be prepared and tested in accordance with Section 180-903.B(2)(a) above. A final proof roll with a tri-axle truck fully loaded with stone shall be conducted under the observation of the Township immediately prior to the placement of the subbase. All defects in the subgrade, including pumping, wheel ruts, soft patches and

other defects shall be fully corrected to the satisfaction of the Township. Subbase placed without fully complying with this procedure and without it being witnessed by Township personnel shall be considered defective and it shall be removed and retested at the Applicant's sole expense.

- b. No subbase shall be placed on wet, frozen or unsuitable material. Unsuitable material is defined in the PENNDOT Publication 408, Specifications. Unsuitable material must be completely removed to the satisfaction of the Township.
- c. No subbase shall be placed prior to the installation of curbing, pavement base drain, storm sewers, sanitary sewers and other structures and utilities which are located within the roadway cartway.

4. Hot Mix Asphalt (HMA) Base Course

- a. Prior to the placement of the HMA Base Course, the subbase shall be prepared and tested in accordance with Section 180-903 (B)(3)(a) above. A final proof roll with a tri-axle truck fully loaded with stone shall be conducted under the observation of the Township immediately prior to the placement of the HMA Base Course. All defects in the subbase, including wheel ruts, soft patches, excessive mud or dirt, improper slope and other defects, shall be fully corrected to the satisfaction of the Township. HMA Base Course placed without fully complying with this procedure or without it being witnessed by Township personnel shall be considered defective and shall be removed and retested at the Applicant's sole expense.
- b. PENNDOT Publication 408, Section 309, shall be strictly enforced for base course placement, except as amended by applicable Township ordinances, and shall include all testing requirements to be performed by the Applicant under the supervision of the Township or Township Engineer or designee at the Applicant's sole expense.
- c. Notwithstanding the paving requirements outlined in Section 180-903 (B)(7)(a), following the completion of the base course, the binder course shall be placed without excessive delay. Base course shall not be permitted to remain in place longer than thirty (30) days without placement of the binder course.

5. Surface Preparation and Tack Coat

- a. Tack coat shall be provided between all paving sections, according to PENNDOT Publication 408, Specifications.
- b. Prior to the placement of tack coat, the pavement surface shall be swept and cleaned in order to remove all stones, dirt and other accumulated debris as necessary.

6. HMA Binder and Wearing Courses

- a. Prior to the placement of the binder and/or wearing courses, the base course shall be prepared and tested in accordance with Section 180-903 (B)(4)(a). A final inspection shall be conducted under the observation of the

Township immediately prior to the placement of the binder and/or wearing courses. All defects in the base course or binder course, to include cracking, wheel ruts, soft patches and other deficiencies or deviations shall be fully corrected to the satisfaction of the Township. Prior to the placement of the final wearing course, an inspection by the Township of all curbing, inlets, manholes, valve boxes, and the like shall also occur in order to confirm the ability of these structures to accept the placement of the final paving section. Binder or wearing courses placed without fully complying with these requirements shall be considered defective and shall be removed and replaced at the Applicant's sole expense.

- b. PENNDOT Publication 408, Sections 408 & 409, shall be strictly enforced for binder and wearing course placement, except as amended by applicable Township ordinances, and shall include all testing requirements to be performed by the Applicant under the supervision of the Township or Township Engineer at the Applicant's sole expense. All binder and wearing course placement and compaction shall be observed by the Township or Township Engineer.
- c. PG 64-22 sealant shall be neatly placed to a width of twelve (12) inches wherever the final wearing surface abuts curb, inlets, manholes or other structures. Sealed pavement notches, in accordance with PENNDOT Publication 72M, RC-28M, shall be installed wherever proposed pavement ties into existing pavement. Sealant shall be neatly placed such that it is uniform in appearance and, is not applied to manhole frames and grates, inlets, curbing or other structures.
- d. Longitudinal pavement joints for the proposed HMA Wearing Course that fall within an existing travel lane are not permitted. The Applicant shall extend the wearing course by milling the travel lane to a minimum depth of 1-1/2 inches and installing the wearing course to the edge of the existing travel lane or centerline as required. All longitudinal pavement joints shall be sealed with PG 64-22.

#### Weather Limitations

- a. The placing of HMA base course or HMA binder course shall terminate after October 31 of each year, and shall not be resumed until April 1 of the following year.
- b. When the air temperature falls below 50° F, extra cold weather precautions shall be taken in drying the aggregate, controlling the temperature of the delivered material and compacting the mixture. HMA base course or HMA binder course shall not be placed on wet surfaces, or when the air temperature is 40° F or lower.
- c. The placing of HMA wearing course or surface course shall terminate after October 15 of each year, and shall not be resumed until April 1. of the following year.
- d. When the air temperature falls below 50° F, extra cold weather precautions shall be taken in drying the aggregate, controlling the temperature of the delivered material and compacting the mixture.

HMA wearing course or surface course shall not be placed on wet surfaces, or when the air temperature is 45° F or lower.

Construction Limitations on Wearing Course Placement

- a. Within any phase of a single-family or multi-family residential development, the placement of HMA wearing course on streets intended to be offered for dedication to the Township shall not occur until at least seventy (70) percent of the dwelling units are constructed. For commercial and/or industrial developments which contain streets intended to be offered for dedication to the Township, the placement of HMA wearing course shall not occur until the improvements on the lot or lots are substantially completed.

Pavement Base Drain

- a. Pavement base drain shall be constructed in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408, as amended, and as detailed on the Roadway Construction Standard Drawings (RC-30).
- b. Combination storm sewer and underdrain shall be constructed in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408, as amended, and as detailed on the Roadway Construction Standard Drawings (RC-30),
- c. Base Drain shall be six (6) inch perforated polyethylene pipe unless otherwise specified and approved by the Township.
- d. Pavement base drain shall be provided on both sides of new roadways and existing roadways being widened or reconstructed based upon the following criteria:
  - i. In all locations where the pavement subgrade is in a cut condition as it relates to the existing ground elevations.
  - ii. On each side of the roadway at all low points for a minimum distance of one hundred (100) feet in each direction.
  - iii. At all other wet areas, springs, seeps, or spongy soil materials or at other locations as directed by the Township Engineer based upon good engineering practice.
- e. Base drains shall be properly connected to inlet boxes or other approved drainage structures but shall not be permitted to discharge by overland means.

Utility Construction in Existing Streets

- a. Utility excavations within the legal right-of-way of existing streets shall be constructed and backfilled, in accordance with the following standards:
  - i. Backfilling shall be done as promptly as possible. Trenches shall not be left open where they could create a hazard or unsafe condition.

- ii. Trenches for utilities shall be a minimum width of the largest conduit diameter plus twelve (12) inches unless otherwise regulated herein.
- iii. The trench shall be filled with hand-placed stone (PENNDOT No. IB or 2A material) acceptable to the Township, to a height of at least one (1) foot above the top of the conduit, pipe or pipe bell.
- iv. All utility trenches shall be provided with metallic identification tape placed above the utility line and within 18 inches of the surface of the trench.
- v. The remainder of the trench shall be backfilled with PENNDOT No. 2A stone and properly compacted. The backfill material shall be mechanically tamped in six (6) inch layers.
- vi. Trenches within existing streets shall be restored with a pavement section as outlined in Article 5, Table 503.1 for the street classification. Trench lines shall be cut back one
  - (1) foot on each side of the maximum trench width and sealed with PG 64-22 for a width of twelve (12) inches.
- vii. Where openings are made behind the curb line, work shall be performed as required in these specifications, and the opening covered with good topsoil to a depth of six (6) inches, and seeded or sodded to the satisfaction of the Township.
- viii. Whenever the trenches have not been properly filled, or if settlement occurs, they shall be re-excavated, refilled, re-compacted, smoothed off, and finally made to conform to the surface of the ground. Under no circumstances will the addition of bituminous material patched over existing settled bituminous material be permitted.
- ix. Frozen material shall not be used for backfill, nor shall any backfilling be done when materials already in the trench are frozen.
- x. All utility trenches shall be either perpendicular or parallel to the cartway. No skewed trenches across roadways shall be permitted.
- xi. When an existing roadway is trenched or open cut at more than four (4) perpendicular trenches within a one hundred (100) foot section of roadway, the roadway shall be milled and overlaid as specified herein.
- xii. Longitudinal trenching within the cartway of existing streets shall be prohibited unless the entire lane width is milled for a minimum of one and one half (1<sup>1</sup>/<sub>2</sub>) inches and overlaid.

- xiii. Alternate trenching and backfilling techniques such as directional drilling, boring, narrow trenching with flowable backfill, etc. will be entertained on a case by case basis by the Township only to the extent that the technique results in less disturbance to the Township's roadways.

**§ 180-804. Curb Construction**

- A. Curbs shall be installed on each side of the all new roadways and along widened or reconstructed roadways in accordance with the requirements of the Township.
- B. Curbs shall be constructed in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408, as amended, and as detailed on the PENNDOT RC Drawings (RC-64).
- C. Curb construction shall be either vertical concrete curbing or slant curbing. Rolled curbs shall not be permitted.
- D. Curbs shall be constructed in accordance with the cross section details shown on approved drawings and as referenced herein.
- E. Curbs shall be set and finished to the line and grade as shown on approved drawings.
- F. Backfill shall be placed as soon as the concrete is cured; surface finished and joints are sawn. The backfill shall be compacted in place along the rear face of the curb to within six (6) inches of the top of the curb.
- G. When curbing is to be removed to construct a driveway, the removal shall be done on the complete curb section. The length of curbing to be removed shall be carried to the nearest expansion joint or saw cut if the joint is located more than five (5) feet from the end of the curb removal. Two (2) No. 5 rebar dowels, each having a length of eighteen (18) inches shall be provided between the existing curb and the replaced curb section. Curb replacement shall be formed and shaped to the required driveway width. The driveway shall be depressed to a height of one and one-half (1 W) inches above the finished paving grade.
- H. No grinding or partial sawcutting or breaking out of the curb shall be permitted for the creation of driveway cut areas.
- I. Curb joints shall be caulked prior to backfilling.
- J. Curbs shall be inspected by the Township, Township Engineer or designee just prior to the placing of concrete and after completion of all work.

**§180-805. Sidewalk Construction**

Sidewalks shall be installed on both sides of new streets or along one side of widened or reconstructed streets in accordance with Township requirements and in accordance with the following specifications:

- A. Sidewalks shall be constructed of four (4) inches of plain cement concrete in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408, Specifications, as amended.
- B. Four (4) inches of AASHTO Number 57 coarse aggregate shall be placed under all sidewalks.

- C. Sidewalks shall be located within the right-of-way of the street and shall extend in width from a point no closer than four (4) inches from the right-of-way line toward the curb line.
- D. Sidewalks shall be four (4) feet wide for residential developments and five (5) feet wide for commercial, industrial or all other types of developments unless the Township determines; based upon a special need that the width should be greater. These cases shall be areas which are used for recreation, in proximity to schools or as called for in the Township's Greenway plan.
- E. Where a sidewalk abuts a curb, wall, building or any other structure, a pre-molded expansion joint one-quarter (1/4) inch in thickness, shall be placed between the sidewalk and said structure for the full length of said structure.
- F. Sidewalks shall be boxed out around light standards, fire hydrants, etc., with a pre-molded expansion joint, one-quarter (1/4) inch in thickness.
- G. Sidewalks shall be inspected by the Township, Township Engineer or designee after the forms have been placed, just prior to the placing of the concrete and after the completion of all work.

**§180-806, Traffic Signal Construction**

- A. Technical Specifications 1.

Controller

- a. In accordance with PENNDOT Publication 408 Section 952.
- b. Traffic signal controller assembly shall at minimum meet NEMA TS-2, Type 2 standards and shall accommodate, at minimum, the installation of a NEMA TS-2, Type 2 controller unit.
- c. The traffic signal controller shall be manufactured by Econolite with features enabling the controller to operate within the Township's closed loop system.
- d. The traffic signal controller assembly shall be NEMA 2-8 phase Type M pole mounted or Type P ground mounted. Ground Mounted controllers are preferred.
- e. The traffic signal controller assembly shall also include all load switches and relays for operation, at minimum the controller shall be equipped with a RS-485 serial bus, RS-232C port and fiber optic telemetry port plus the standard A, B, C and D connectors for compatibility with existing NEMA TS-2 equipment.

The controller cabinet shall have adequate shelf space for all control units, with all control units clearly visible through the provided door opening.

The AC power line to the microprocessor traffic signal controller shall have a surge and transient arrestor. This unit shall be in addition to the standard lightning arrestor required on the power panel within the controller cabinet. The surge arrestor shall be 120 VAC single phase and shall be rated for 10 amps. It shall have a peak surge current of 20KA and a maximum clamp voltage of 280 volts at 20KA.

The contractor shall provide the Township with a certification for the controller that the conflict monitor was inspected and bench tested and that all potential conflicts were simulated and that in all cases, the monitors detected the conflict and initiated flashing signal operation.

Traffic signal controller assembly shall include:

- Fluorescent light with in-door on/off switch
- Shelf mounted NEMA PLUS conflict monitor units
- Detector harnesses and amplifiers, as noted
- MUTCD flash operation controlled by TBC
- Diagnostic load switches with input and output displays
- The cabinet wiring shall facilitate the location of all switches, including the controller flash switch and Auto/Manual switch within the police-access portion of the cabinet.
- The cabinet shall be wired with a six (6) foot auto-hand cord for manual control.

Amplifiers shall be of digital design, self-tuning, and shall, where specified, have a built-in digital delay feature with a time range of 0-20 seconds. The amplifiers and harnesses shall utilize MS-type connectors, and where delay is specified, the delay override shall be enabled.

Provide isolation or surge protection for all pedestrian pushbutton circuits.

Load switches shall be the solid state cube type meeting NEMA specifications.

Cabinet shall be natural aluminum.

- n. The controller assembly shall display a drawing showing the intersection, north arrow, and identifying all loops, signal heads, and phase assignments. Drawing shall be 8 1/4" x 11" mounted with plastic cover on the inside door. Drawing material shall be permanent and non-fading.
- o. A four (4) inch LB will be installed into the base of the controller cabinet for pole mounted installations and connected to the pole via a short threaded nipple. The LB will be made of aluminum or steel.
- p. Master Controller shall be an Econolite model and shall be compatible with NEMA TS-2 controller units at minimum. All construction shall be in accordance with PENNDOT Publication 408 Sections 950.2 and 1104.01.
- q. A back up generator outlet shall be provided.
- r. An Uninterrupted Power Supply (Battery Backup) System shall be provided., equipped with an automatic transfer switch and capable of running the intersection for a minimum of 8 hours. The system shall automatically regenerate upon re-activation of the main power supply and shall automatically return to standby mode once fully charged. Locate the battery system so that it will not come in contact with water from rain or melted snow and provide barrier protection

so that any faulty battery will not leak or corrode and affect the integrity of adjacent batterie, equipment, or components.

#### Traffic Signal Poles

- a. In accordance with PENNDOT Publication 408 Section 951.
- b. The traffic signal poles shall be hot dip galvanized tapered steel.
- c. Only mast arm installations shall be provided.
- d. Poles with luminaire attachments shall have shafts with sufficient height to provide for a thirty (30) foot luminaire mounting height. Luminaires shall have a twelve (12) foot arm. A minimum of two (2) luminaires shall be provided for each intersection.
- e. Should a pole mounted cabinet installation be required, the traffic signal pole used to mount controller cabinet will have a four (4) inch coupler welded into the pole to mount LB for wire runs into traffic signal cabinet.

#### Electrical Distribution

- a. In accordance with PENNDOT Publication 408 Section 954, and as follows: Service shall be PENNDOT Type "C", mounted on back of controller assembly. Coordinate installation of electrical service with the Township and PPL Utilities, Inc. (PPL). A three (3) foot clear work area shall be provided in and around the electrical service.
- b. All conflicting utility poles, lines and other facilities shall be adjusted or relocated to allow for the installation of the traffic signal in accordance with utility company requirements.
- c. Provide two electrical disconnect boxes; one for the traffic signal service (metered) and one for service to the street light circuits (unmetered). Conform to all electric company (PPL) standards for the service drop installation.
- d. All signal field wiring shall be done in accordance with PENNDOT Publication 408 Section 954 and PPL specifications.
- e. The conduit and wiring providing electrical service to the luminaries shall be contained in a separate conduit system from the traffic signal wiring. Conduit and wiring for the luminaries shall not enter the controller cabinet.
- f. All conduit crossings in Township streets shall be installed without open cutting or damaging the roadway.
- g. All junction boxes shall conform to PENNDOT Specification and be installed as located on the approved construction plans. All conduits shall terminate within the junction boxes utilizing ninety (90) degree sweeps up.

#### Telemetry

- a. Communications between the central computer and the system master shall be via leased telephone lines. The Applicant shall coordinate connection of leased telephone lines with the Telephone Company. All signal interconnect communications cable shall be fiber optic in accordance with PENNDOT Specifications - Section 957 and installed from intersection to intersection without splices.
- b. The Applicant shall supply a telephone service drop at the pole where the controller will be located. It shall consist of a weather head, conduit, and a communications cabinet keyed with police door key and a separate conduit to the controller cabinet. The communications cabinet shall be a size as directed by the Telephone Company and the Township.

5. Traffic Signals

- a. All pedestrian signals, where applicable, shall be HAND/MAN LED with polycarbonate housing. Signals shall be mounted using stainless steel banding.
- b. All vehicle signal heads will be polycarbonate housings, containing red, yellow and green Gel-Core LED modules or approved equal. All Vehicular heads shall be twelve (12) inch sections. Signals shall be mounted using stainless steel banding.
- c. All overhead vehicle signal heads shall include back plates.
- d. Signal pole foundations shall be sized and installed in accordance with PENNDOT TC-7800 specifications.

6. Miscellaneous

- a. All push buttons and signs that are pole-mounted will be drilled and tapped and be mounted with five-sixteenths (5/16) inch stainless steel bolts. Push Buttons and associated pedestrian signs shall not be mounted using steel banding.
- b. All banding material used will be at least three-quarters (3/4) inch wide and .030" in thickness and be stainless steel.
- c. Each outermost vehicle signal head on each approach shall be wired independently with a seven (7) conductor wire.

- d. All signage and pavement markings indicated on the drawing shall be installed by the contractor in accordance with PENNDOT and Township requirements.
- e. All directional pavement arrows, crosswalks, stop bars, and wording shall be of a thermoplastic design and installed as indicated on the approved PENNDOT Traffic Signal Permit Plan.
- f. Removal of existing pavement markings and legends shall conform to current PENNDOT specifications.

Traffic signal to be equipped with Econolite Autoscope video detection system for vehicle detection along all approaches to the intersection.

- h. Emergency vehicle pre-emption shall be provided on all approaches at all new signals or signal upgrades where preemption does not exist. The manufacturer and type shall be Opticom, as manufactured by Global Traffic Technologies. The Applicant shall provide three (3) emitters to the Township for each signal installed or modified by the Applicant.

**§180-807. Changes Following Plan Approval**

- A. In the event that changes to approved plans are required prior to or during the construction phase of the work due to unforeseen field conditions, final utility design, or other similar changes or conflicts encountered during construction, the Township shall be immediately notified in order to review the proposed changes prior to implementation. Depending upon the severity of the situation encountered, the Township may require the Applicant to submit engineering design information for review and approval prior to construction of the proposed modification. Design changes made without review and approval by the Township shall be considered defective work and shall be subject to removal and reconstruction.
- B. When discrepancies or plan errors are discovered during construction or any time thereafter that relate to property line closure; encroachments; easements; subdivision or other geometric type errors; or similar conditions which effect the conveyance of land or title thereto, the Applicant shall be required to correct the errors to the satisfaction of the Township which may include filing a corrective subdivision or land development plan or other similar efforts. Regarding the dedication of public facilities, the Township will not accept any facilities which knowingly contain defects in closure, title or otherwise.

**§180-808. As-Built Plans**

- A. Following the completion of all required public improvements and prior to final inspections and the offering of facilities for dedication to the Township, the Applicant shall prepare and submit an As-Built Plan prepared to a minimum scale of 1"=60' and on no larger than 24" x 36" plan sheets showing the actual location, dimension, elevation, and related features for all existing improvements as constructed. In addition, the plan shall demonstrate that the existing grading, drainage, and utility improvements are in substantial conformance

with the previously approved drawings and specifications and that all facilities are properly located within planned rights-of-way, easements or property lines. The

plan shall specifically identify, graphically and by note, any and all deviations from the approved drawings. Where As-Built Plans are required by another Township entity or other governmental agency having jurisdiction, the Township may require confirmation by said entity or other governmental agency that the constructed improvements are acceptable and are in conformance with the approved plans and/or permits for the project.

- B. As-built plans shall, at a minimum include all facilities and infrastructure located within rights-of-way or easements to be offered for dedication to the Township and all drainage, stormwater and related facilities as proposed on the approved plan. The As-Built Plan shall include, where applicable, profiles and details to adequately depict the as-constructed condition of said facilities.
- C. The Applicant's Professional Land Surveyor shall sign and seal said plan certifying that the plan reflect all existing conditions as performed by a field survey following the actual construction of said improvements and that the plan as submitted is in strict conformance with the approved plans unless otherwise specifically noted as referenced above.
- D. Prior to the acceptance of dedicated public facilities, the Township may require the Applicant to remedy any material changes discovered during the preparation of the As-Built Plan which are not in strict conformance with the approved plans and specifications.
- E. The Applicant shall file three (3) paper copies, one (1) reproducible Mylar copy, one (1) electronic file copy in (.pdf) format, and one (1) electronic data file on a compact disk (CD) in the format and to the specifications outlined in Article 4, § 180-404.E.16.