

## Village of Bradley Design Guidelines and Standards for Land Improvements

For additional resources and details, please see:

*“Code of Ordinances Village of Bradley, Illinois” with specific attention to Chapter 10 – Buildings and Building Regulations, Chapter 38 - Signs, Chapter 44 - Streets, Sidewalks, Other Public Places, Chapter 46 – Subdivisions, and Chapter 54 – Utilities”*

*“An Ordinance Amending the Village of Bradley’s Zoning Ordinance Regarding the Zoning Classification for Annexed Territory.”*  
Village of Bradley Board of Trustees, adopted November 27, 2006.

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

*“An Ordinance Adopting Landscape Standards for New Developments.”*  
Village of Bradley Board of Trustees, adopted September 25, 2006. (Now *Code of Ordinances Chapter 56: Vegetation*)

### SECTION 1 - Subdivision

#### 1. General standards and required improvements

- a. **Character.** The plan commission shall have the right to agree with the subdivider regarding the type and character of development that will be permitted in the subdivision, and may require that certain regulations ensuring minimum standards of development be properly recorded and enforced. The regulations shall be intended to protect the character and value of the surrounding development and shall tend to secure the most appropriate character of development in the property which is to be subdivided.
- b. **Re-subdivision of lots.** Subdivided residential lots may not be further subdivided unless the intention to do so is recorded by agreement with the village at the time of the original subdivision. Subdivided commercial lots may be further subdivided if consideration has been given to the street and lot arrangement of the original subdivision so that a logical arrangement of smaller lots is achieved.
- c. **Blocks.** No blocks shall be longer than fifteen hundred (1,500) feet between street lines or intersections. The length of blocks, except for special reasons,

should be not less than two hundred twenty (220) feet.

- d. **Lots.** All side lot lines shall be, as near as possible, at right angles to straight street lines, or radial to curved street lines, unless a variation to this guideline will give a better street and lot plan. Lots with double frontage should be avoided. In the case where double frontage lots will give a better street and lot plan, one of the lot frontages shall be considered a rear frontage and be screened from the street by a landscape berm.
- e. **Lot size.** The minimum dimensions for lots located in the village shall be as required by the regulations for the zoning district in which the property is located.
- f. **Easements, general.** Easements shall be as required by the village engineer when land is subdivided.
- g. **Easements, waterways.** Whenever any stream or important surface watercourse is located in an area that is being subdivided, the subdivider shall establish an easement or dedicate lands to the public for the purpose of accommodating the widening, improving or protecting the stream for recreational use. In no case shall the easement be less than the Flood Plain Limits or area inundated by the High Water Level as defined by the village's *Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control*.
- h. **Arrangement of streets in relation to adjoining streets systems and the village's transportation plan.** The arrangement of streets in new subdivisions shall make provisions for the continuation of the adjoining principal existing streets or the proper projection or planned projection where adjoining property is not subdivided.
- i. **Two accesses provided for residential subdivisions.** Each new residential subdivision shall contain two (2) paved ingress and egress street access points to existing streets prior to the approval of any occupancy permit for a building located within. One of the street access points may be temporary.
- j. **Required improvements**

Subdivision improvements, whether public or private shall be constructed in accordance with the applicable ordinances, guidelines, plans, and policies of the Village of Bradley and all other applicable rules, laws, and regulations governing the proposed improvements.

- 1) *Monuments.* Monuments shall be placed in accordance with Illinois Law (commonly referred to as the "Plat Act").

- 2) *Telephone, electric, and gas service.* Telephone, electric, and gas service shall be provided. Preference shall be shown for the telephone and electric service lines being placed in rear yard easements. Preference shall be shown for the gas service lines being placed in the road right-of-way or a front yard easement.
- 3) *Cable TV.* Cable television service may be required. When required preference shall be shown for cable television service lines being placed in rear yard easements.
- 4) *Internal Access.* All lots shall have access to an appropriate public roadway or private drive. Certain roadways, such as state and county highways and collector and neighborhood collector roadways may not provide appropriate access. In this case, access shall be provided by local road or private drive and direct access to the highway or collector shall be prohibited.
- 5) *Adjacent Roadways.* Roads adjacent to a subdivision shall be improved in accordance with the applicable Design Standards found in this ordinance. For example, an adjacent Collector shall be improved to meet the applicable design standards for a Collector where it is adjacent to the subdivision.
- 6) *External Access.* All subdivisions shall be accessed by a roadway that meets or exceeds the Design Standards for local roads found in this ordinance. In many cases this will require improvements to existing roadways that are outside of the subdivision limits.
- 7) *Sidewalks and multi-use paths.* Sidewalks are required in all subdivisions. Required sidewalks and multi-use paths shall be constructed by the subdivider, except that construction of sidewalks adjacent to one unit, single family residential lots may be delayed for up to three (3) years from recording the subdivision or until certificate of occupancy, whichever comes first.

No subdivision shall be approved unless it shall contain a provision set out in full as follows: "*Owner(s), in addition to the provisions set forth on this final plat, hereby declares and imposes an affirmative covenant, the express purpose of which is to benefit all of the lands described herein and which shall be considered a covenant running with the land. Owner(s) or any subsequent owner(s) of any lot or tract of land contained herein, or any contractor placing improvements on such lot or tract shall, at the time of three (3) years from the subdivision of the land or prior to the issuance by the Village of Bradley of any certificate of occupancy, whichever comes first, shall construct sidewalks which shall be placed adjacent to or abutting all*

*lot lines bordered by a street in accordance with the current standards and official plan of the Village of Bradley.”*

- 8) *Public sanitary sewer.* Public sanitary waste collection is required in all subdivisions with the exception that in proposed conservation type subdivisions where lots are greater than 40,000 square feet in area and have a density less than 0.5 lots per acre and public sanitary waste collection is not reasonably accessible the developer may be allowed to install individual sewage disposal systems.
- 9) *Public water supply.* A public water supply is required in all subdivisions with the exception that in proposed conservation type subdivisions where lots are greater than 40,000 square feet in area and have a density less than 0.5 lots per acre and public water supply service is not reasonably accessible the developer may be allowed to install individual water supply wells.
- 10) *Storm sewer, drainage, and detention.* An effective storm water management, sediment, and erosion control system is required in all subdivisions. This system shall be planned, constructed, and maintained in accordance with the village’s *Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control*. This system shall include provisions for discharge from sump pumps.
- 11) *Landscaping.* All subdivisions shall be landscaped in accordance with a landscape plan that is designed, constructed, and maintained in accordance with the village’s *Ordinance Adopting Landscape Standards for New Developments*.

## 2. Residential Districts (R1, R2, R3, R4, R5, & R6)

The R1, R2, R3, R4, R5, & R6 districts are listed in the current zoning code in order to allow administration of existing districts in the Village of Bradley. It is the village’s pattern of practice to not approve zoning amendments which would redistrict any property within its jurisdiction limits to R1, R2, R3, R4, R5, or R6.

- a. **R1 – Single Family Residence District.** Existing R1 – General Residence Districts that have not been subdivided should be designed, subdivided, and improved in accordance with the village’s provisions for the NR1 – Single Family Residence District or Planned Developments.
- b. **R6 – General Residence District.** Existing R6 – General Residence Districts that have not been subdivided should be designed, subdivided, and improved

in accordance with the village's provisions for Planned Developments.

### **3. Estate Residential District (ER)**

Preference shall be shown for ER – Estate Residence district subdivisions that are planned using conservation design principles and improved in accordance with village's provisions for Planned Developments.

- a. **Special Uses.** Special uses that have a commercial character, such as, churches, libraries, and schools, shall be design in accordance with the guidelines for Business Districts below.

### **4. Single Family Residence Districts (NR1, NR2, & NR3)**

Preference shall be shown for Residence District subdivisions that are planned in a manner that provides a separate and distinct neighborhood character. Neighborhood character is often defined by building setbacks, use of landscaping, building materials, traffic calming features, pedestrian ways, and public spaces.

- a. **Special Uses.** Special uses that have a commercial character, such as, churches, libraries, and schools, shall be design in accordance with the guidelines for Business Districts below.

### **5. Multi-Unit Residential Districts (NR4 & NR5)**

- a. **NR4 – Two-Family Residence District.** Preference shall be shown for Residence District subdivisions that are planned in a manner that provides a separate and distinct neighborhood character. Neighborhood character is often defined by building setbacks, use of landscaping, building materials, traffic calming features, pedestrian ways, and public spaces.
- b. **NR5 – Townhome Residence District.** Townhome Residence District subdivisions shall be planned in a manner that provides a separate and distinct neighborhood character. Neighborhood character is often defined by building setbacks, use of landscaping, building materials, traffic calming features, pedestrian ways, and public spaces. Preference shall be shown for developments in this district that are improved in accordance with village's provisions for Planned Developments.
- c. **Special Uses.** Special uses that have a commercial character, such as, churches, libraries, and schools, shall be design in accordance with the guidelines for Business Districts below.

### **6. Business Districts (B1, B2, & B3)**

The village has identified three (3) business districts. These districts distinguish between local or “neighborhood” services (B1), roadside commercial uses (B2), and shopping centers (B3). The village’s plan has identified two “Down Town” areas along Broadway.

- a. **B1 – Local Business District.** The subdivision of land in the B1 district will often be in concert with the subdivision of residence districts. In this case, the character of the neighborhood shall be considered in the planning and development of this commercial district. Similarly, subdivision and development of all business districts adjacent to existing residential subdivisions shall complement and enhance the character of the neighborhood.
- b. **B2 – Commercial District.** Many lands in the B2 district are relatively shallow parcels fronting on arterial or collector roadways. Preference shall be shown for subdivisions that provide shared vehicular access in order to minimize direct access to arterial and collector roadways. Preference shall be shown for commercial subdivision and development that establishes or enhances a distinctive and attractive character for the vicinity.
- c. **B3 – Village Center Shopping District.** Preference shall be shown for shopping center subdivisions that are planned in a manner that provides a separate and distinct shopping center character. This character may be defined by signage, use of landscaping, building materials, traffic calming features, pedestrian ways, and public spaces.
- d. **Downtown Areas.** There are two special “Down Town” areas identified in the village’s comprehensive plan. Preference shall be show for re-subdividing and redeveloping these areas in a manner that preserves and enhances a down town shopping and service character. Utilizing the Planned Development provisions of the village’s zoning code to plan and develop mixed commercial-residential uses in down town areas may be appropriate.
- e. **Vicinity to residential uses.** Subdivision and development of all business districts adjacent to or in the immediate vicinity of existing residential subdivisions shall minimize negative impacts from design features and operations, such as, lighting, parking, loading, and trash. In many cases these impacts may be minimized by platting landscape easements, recording restrictive covenants and conditions, and added building set back requirements.

## 7. Industrial Districts (M)

Subdivision and development of all industrial districts adjacent to or in the immediate vicinity of existing residential subdivisions shall minimize negative impacts from design features and operations, such as, lighting, parking, loading,

and trash. In many cases these impacts may be minimized by platting landscape easements, recording restrictive covenants and conditions, and added building setback requirements.

## 8. Planned Development

- a. **General.** The Planned Development section of the Village of Bradley Zoning Ordinance sets out the policies and procedures whereby the subdivision and development of land may be exempted from the provisions of the subdivision regulations and zoning ordinance. The purpose of these exemptions being to enhance the value and character of the subdivision or development.
- b. **ER – Estate Residence Districts.** Preference shall be shown for developments in these districts that are subdivided and improved in accordance with village’s provisions for Planned Developments. The provisions of the Planned Development should be utilized in order to provide for improved development design, preserve natural resources, provide common spaces and amenities, and define the home owner’s role in managing common spaces and amenities. Development in ER districts may be particularly suited to Conservation Design and Low Impact Design principles.
- c. **R6 – General Residence Districts and NR5 – Townhome Residence Districts.** Preference shall be shown for developments in these districts that are subdivided and improved in accordance with village’s provisions for Planned Developments. The provisions of the Planned Development should be utilized in order to provide for improved development design and provide adequate common recreational space.
- d. **B3 – Village Center Shopping District.** The provisions of the Planned Development may be beneficial when subdividing and developing in the B3 – Village Center Shopping District.
- e. **Multi-Use Development.** The provisions of the Planned Development may be used to encourage harmonious architecture, provide pedestrian access, and buffer residential uses from commercial activity.
- f. **Low Impact Design, Conservation Design, & Best Management Practices for Environmental Design.** The provisions of the Planned Development may be beneficial in order to implement Low Impact Development, Conservation and Best Management Practices for Environmental Design principles.

## 9. Low Impact Development

Preference shall be shown for residential, commercial, and industrial subdivision and site development designs which include the use of Low Impact Development principles. Examples of these principles are cluster housing, use of recycled

materials, re-use and remodeling of existing buildings or developed areas, intentional energy and water conservation, minimizing impervious surfaces, storm water runoff protection and treatment, access to mass transit, and provisions for pedestrian and bicycle traffic.

The Environmental Protection Agency, along with numerous other governmental units and agencies and private organizations have published strategies and practices for implementing Low Impact Design. Developers and builders may contact the Village's Department of Building Standards or the Village Engineer for help in locating and accessing these resources.

In some cases, the provisions of the Planned Development section of the Village of Bradley Zoning Ordinance may be beneficial in order to implement Low Impact Development.

## **SECTION 2 - Multi-family, Commercial & Industrial Site Development Plan**

Approval of a Site Development Plan is required for all multi-family, commercial, and industrial site improvements. For additional resources and details, please see:

*"Code of Ordinances Village of Bradley, Illinois" with specific attention to Chapter 10 – Buildings and Building Regulations, Chapter 38 - Signs, Chapter 44 - Streets, Sidewalks, Other Public Places, Chapter 46 – Subdivisions, and Chapter 54 – Utilities"*

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*"An Ordinance Adopting Landscape Standards for New Developments."*  
Village of Bradley Board of Trustees, adopted September 25, 2006. (Now *Code of Ordinances Chapter 56: Vegetation*)

### **1. General Standards and Required Improvements**

- a. **Character.** The plan commission shall have the right to agree with the developer, owner, or builder regarding the type and character of proposed multi-family, commercial, and industrial buildings and associated site development, and may require that certain regulations ensuring minimum standards of development be properly recorded and enforced. The regulations



shall be intended to protect the character and value of the surrounding development and shall tend to secure the most appropriate character of development in the property which is to be improved.

- b. **Easements, general.** Easements shall be recorded as deemed beneficial by the village when land is developed.
- c. **Easements, waterways.** Whenever any stream or important surface watercourse is located in an area that is being developed, the owner shall establish an easement or dedicate lands to the public for the purpose of accommodating the widening, improving or protecting the stream for recreational use. In no case shall the easement be less than the Flood Plain Limits or area inundated by the High Water Level as defined by the village's *Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control*.
- d. **Required improvements**

Site improvements, whether public or private shall be constructed in accordance with the applicable ordinances, guidelines, plans, and policies of the Village of Bradley and all other applicable rules, laws, and regulations governing the proposed improvements.

- 1) *Monuments.* Monuments shall be placed in accordance with Illinois Law (commonly referred to as the "Plat Act").
- 2) *Subdivided Lot.* Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.
- 3) *Telephone, electric, and gas service.* Telephone, electric, and gas service shall be provided. Preference shall be shown for the telephone and electric service lines being placed in rear yard easements. Preference shall be shown for the gas service lines being placed in the road right-of-way or a front yard easement.
- 4) *Cable TV.* Cable television service may be required. When required preference shall be shown for cable television service lines being placed in rear yard easements.
- 5) *Internal Access.* All sites shall have access to an appropriate public roadway or private drive. Certain roadways, such as state and county highways and collector and neighborhood collector roadways may not provide appropriate access. In this case, access shall be provided by a local road or private drive and direct access to the highway or collector

shall be prohibited.

- 6) *Parking and Loading.* Parking and loading facilities shall be provided in accordance with the applicable provisions of the village's zoning code and landscape standards and guidelines and standards of this chapter. The guidelines and standards of this chapter shall take precedence over the village's zoning code.
- 7) *Adjacent Roadways.* Roads adjacent to a site to be developed shall be improved in accordance with the applicable Design Standards found in this ordinance. For example, an adjacent Collector shall be improved to meet the applicable design standards for a Collector where it is adjacent to the site.
- 8) *External Access.* All sites to be developed shall be accessed by a roadway that meets or exceeds the Design Standards for local roads found in this ordinance. In many cases this will require improvements to existing roadways that are outside of the site limits.
- 9) *Sidewalks and multi-use paths.* Sidewalks are required along all roadways adjacent to a site to be developed. Sidewalks may be required within a lot to be developed to provide adequate pedestrian access. Required sidewalks and multi-use paths shall be constructed when the site is developed unless already completed.
- 10) *Public sanitary sewer.* Public sanitary waste service is required.
- 11) *Public water supply.* A public water service is required.
- 12) *Storm sewer, drainage, and detention.* An effective storm water management, sediment, and erosion control system is required on all sites. This system shall be planned, constructed, and maintained in accordance with the village's *Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.*
- 13) *Landscaping.* All sites shall be landscaped in accordance with a landscape plan that is designed, constructed, and maintained in accordance with the village's *Ordinance Adopting Landscape Standards for New Development.*

## **2. Multi-Unit Residential Districts (NR4 & NR5)**

- a. **NR4 – Two-Family Residence District.** The Site Plan for a two-family residence is typically included in the approved final engineering plans for the subdivision (Neighborhood Drainage Plan). Otherwise, a Site Development Plan is required.

- b. **NR5 – Townhome Residence District.** Preference shall be shown for developments in this district that are improved in accordance with village’s provisions for Planned Developments (Zoning Ordinance). If a Planned Development is not recorded a Site Development Plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.

3. **Business Districts (B1, B2, & B3)**

- a. **B1 – Local Business District.** A site development plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.
- b. **B2 – Commercial District.** A site development plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.
- c. **B3 – Village Center Shopping District.** The provisions of the Planned Development may be beneficial when developing in the B3 – Village Center Shopping District. If a Planned Development is not recorded a site development plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.
- d. **Downtown Areas.** There are two special “Down Town” areas identified in the village’s comprehensive plan. Preference shall be show for re-subdividing and redeveloping these areas in a manner that preserves and enhances a down town shopping and service character. Utilizing the Planned Development provisions of the village’s zoning code to plan and develop mixed commercial-residential uses in down town areas may be appropriate. If a Planned Development is not recorded a site development plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.

4. **Industrial Districts (M)**

A site development plan is required. Proposed primary structures shall be constructed one each on a lot within a recorded subdivision or a building site defined on a Final Plat of Planned Development.

5. **Low Impact Development**

Preference shall be shown for residential, commercial, and industrial subdivision and site development designs which include the use of Low Impact Development principles. Examples of these principles are cluster housing, use of recycled

materials, re-use and remodeling of existing buildings or developed areas, intentional energy and water conservation, minimizing impervious surfaces, storm water runoff protection and treatment, access to mass transit, and provisions for pedestrian and bicycle traffic.

The Environmental Protection Agency, along with numerous other governmental units and agencies and private organizations have published strategies and practices for implementing Low Impact Design. Developers and builders may contact the Village's Department of Building Standards or the Village Engineer for help in locating and accessing these resources.

In some cases, the provisions of the Planned Development section of the Village of Bradley Zoning Ordinance may be beneficial in order to implement Low Impact Development.

## 6. Site Development Plan

- a. **General.** The Site Development Plan shall include adequate information, such as, notes, specifications, plan views, cross sections, profiles, and typical details, in order to reasonably demonstrate the proposed building site improvements shall be constructed in accordance with this chapter and all other applicable codes and ordinances of the Village of Bradley. A Site Development Plan check list is published in the village's *Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control*.
- b. **Single-Family Residences.** In most cases the final plans and specifications for a subdivision in single-family residence districts include adequate information for location of structures to be constructed, grading of the yard area, and the control of storm water. In this case, these plans shall be considered the Site Development Plan. The Superintendent of Building Standards can however, require an individual Site Development Plan for a particular home if it is determined to be beneficial.
- c. **Planned Development.** In many cases the Final Development Plan for a Planned Development includes adequate information for location of structures to be constructed, grading of yard areas, installation of improvements, and the control of storm water. In this case, the Final Development Plan shall be considered the Site Development Plan. The Superintendent of Building Standards can however, require an individual Site Development Plan for each or a particular structure if it is determined to be beneficial.

## SECTION 3 - Design standards

### 1. Streets, alleys, and private drives

For additional resources and details, please see:

*“Standard Specifications for Road and Bridge Construction.”* Illinois Department of Transportation, adopted Jan. 1, 2007.

*“A Policy on Geometric Design of Highways and Streets.”* American Association of State highway and Transportation Officials, current edition.

- a. **Arterial.** Requires detailed design study.
- b. **Collector.** (example: Armour Road, North Street, Cardinal Drive) Collector road standards generally apply to Section Line Roads and some County Highways, and State Highways. The **Collector geometry and cross-section** varies depending on current and projected traffic use and volume. The following minimum standards generally apply to Collector Roads within the Village of Bradley (a detailed study may be required).

- 1) **Minimum Right-of-way:100 feet**
- 2) **Landscape Buffer: 30'**
- 3) **Minimum Structure: 4" Agg/ 7"BAM/ 3 ½ " Bnd & Surf**
- 4) **Roadway Width: Varies - 36' to 60' EOP - EOP**
- 5) **Curb type: Barrier**
- 6) **Access: Minimized/ No residential drives**
- 7) **Traffic Lanes: 3 to 5 Lanes**
- 8) **Parking: Not Allowed**
- 9) **Pedestrian Lanes: PCC sidewalk 5'W & 10' W MUP**
- 10) **Street Lights: Required**

- c. **Neighborhood Collector.** (Example: Christine Drive, Northfield Meadows Drive) The neighborhood collector system provides circulation within residential neighborhoods and commercial and industrial areas. Neighborhood collectors should generally be separated by ¼ to ½ mile. Most new subdivisions should have a neighborhood collector road. The **Neighborhood Collector geometry and cross-section** varies depending on current and projected traffic use. All roads in commercial and industrial areas must be constructed to meet the expected geometric and loading demands. The following minimum standards generally apply to Neighborhood Collector Roads within the Village of Bradley.

- 1) **Minimum Right-of-way:80 feet**
- 2) **Minimum Structure**
  - **Commercial: 4" Agg/ 7"BAM/ 3 ½ "Bnd & Surf**
  - **Residential: 14" Agg/ 3 ½ "Binder & Surface**
- 3) **Roadway Width: 34' to 38' EOP - EOP**
- 4) **Curb type: Varies (Typically Barrier)**
- 5) **Access: Minimized**

- 6) **Traffic Lanes:** 2 to 3
- 7) **Parking:** Varies
- 8) **Pedestrian Lanes:** PCC sidewalk 5' Wide  
(10' Wide Multi-Use Path planned in some locations)
- 9) **Street Lights:** Required

d. **Local Road.** The Village of Bradley's local road system is comprised of all of the village's public roads that are not Collectors or Arterials. These roads provide direct access from the collectors and arterials to individual homes and properties. Local Roads in multifamily, commercial and industrial areas must be constructed to meet the expected geometric, loading, and parking demands. The **Local Road geometry and cross-section** shall generally meet the following minimum standards.

- 1) **Minimum Right-of-way: 60 feet**
- 2) **Minimum Structure:**
  - o **Residential:** 10" Agg/ 3 ½ " Binder & Surface
  - o **Commercial:** 4" Agg/ 7" BAM/ 3 ½ " Bnd & Surf
- 3) **\*Roadway Width:** 26' to 34' EOP - EOP
- 4) **Curb type:**
  - o **Commercial:** Barrier (B6.12/24)
  - o **Residential** Mountable (M3.12)
- 5) **Traffic Lanes:** 2
- 6) **Parking:** Varies
- 7) **Pedestrian Lanes:** PCC sidewalk 5' Wide
- 8) **Street Lights:** Required

\*Typical village streets in residential areas constructed in the past several years have been 32 feet from EOP to EOP of the curb. Roads of lesser width may be appropriate in developments with low density.

e. **Cul-de-sac.** The Village of Bradley's local road system includes cul-de-sacs at various locations. Cul-de-sacs are often desired by land developers. They are frequently proposed to provide reasonable use of the land because of the size and shape of the parcel. Lots on cul-de-sacs may be valued higher because of the limited access and privacy provided. Cul-de-sacs create special conditions for service providers, including schools, emergency responders, and the village. School buses and emergency vehicles can have difficulty negotiating turns in a cul-de-sac. The cost of maintaining, cleaning, and clearing cul-de-sacs is higher on a per lot basis than other local roads. The village's Plan Commission evaluates proposed cul-de-sacs on a case by case basis when Preliminary Plats are considered. Local Roads in multifamily, commercial and industrial areas must be constructed to meet the expected geometric, loading, and parking demands. The **Cul-de-sac geometry and cross-section** shall generally meet the following minimum standards.

- 1) **Minimum Right-of-way: 60 feet radius**
- 2) **Minimum Structure: Match approach roadway**
- 3) **Minimum Paved Area: 50' radius to EOP**
- 4) **Curb type:**
  - o **Commercial Barrier (B6.12 / B6.24)**
  - o **Residential Mountable (M3.12)**
- 5) **Traffic Lanes: 2**
- 6) **Parking: Varies**
- 7) **Pedestrian Lanes: PCC sidewalk 5' Wide**
- 8) **Street Lights: Required**

The maximum cul-de-sac length allowed in residential areas is 750 feet. The maximum cul-de-sac length allowed in all other areas is 1000 feet. The cul-de-sac length shall be measured from the center of the intersection to the center point used to define the cul-de-sac radius.

- f. **Alley.** Although alleys may be required in the rear of commercial and industrial districts, the Village of Bradley no longer recommends alleys in new single family residential districts. However, in the case alleys are constructed, the **Alley geometry and cross section** shall meet the following minimum standards.

- 1) **Minimum Right of Way: 40'**
- 2) **Minimum Structure: 8" Aggregate/ 3" Binder & Surface**
- 3) **Minimum Paved Area: 20', edge to edge**
- 4) **Curb type:**
  - o **Commercial varies**
  - o **Residential varies**
- 5) **Traffic Lanes: varies**
- 6) **Parking: varies**
- 7) **Pedestrian Lanes: varies**
- 8) **Street Lights: varies**

- g. **Private Drive.** Private drives typically share similar requirements as local roads. Although pavement composition and thicknesses are similar, improvements such as curb, pedestrian lanes, and street lights aren't required. Private Drives in multifamily, commercial and industrial areas must be constructed to meet the expected geometric, loading, and parking demands.

- 1) **Minimum Right of Way: not applicable**
- 2) **Minimum Structure: 8" Aggregate/ 3" Binder & Surface or 4" leveling course/5" PCC**
- 3) **Minimum Paved Area: 20', edge to edge**
- 4) **Curb type:**
  - o **Commercial varies**
  - o **Residential varies**

- 5) **Traffic Lanes:** varies
- 6) **Parking:** varies
- 7) **Pedestrian Lanes:** varies
- 8) **Street Lights:** varies

h. **Roadways in conservation and “green” type developments.** Special consideration may be made for **Neighborhood Collector, Local Road** and **Cul-de-sac** design in conservation and “green” type developments. These road designs may be allowed with reduced width and no curb and sidewalk requirements. Curbs may be replaced with alternate drainage schemes that are found to provide water quality benefits and acceptable maintenance procedures. Sidewalks may be replaced with an approved community walk-path plan.

## 2. **Street lighting**

- a. A plan indicating street light locations shall be approved by the Village Engineer and the Village of Bradley Fire Department.
- b. All street light wiring shall be buried.
- c. All street lights shall be installed by the developer in accordance with Village of Bradley standard details for street lighting and wiring.

## 3. **Intersection, entrances & driveways**

All entrances and driveways shall be constructed with a heavy duty depressed curb, except those single family and duplex residential driveways crossing an existing mountable curb. Depressed curb may also be required at intersections where indicated by drainage.

For additional resources and details, please see:

*“Standard Specifications for Road and Bridge Construction.”* Illinois Department of Transportation, adopted Jan. 1, 2007.

*“A Policy on Geometric Design of Highways and Streets.”* American Association of State highway and Transportation Officials, current edition.

### a. **Intersections**

- 1) Roadways within the Village of Bradley shall be laid out as nearly as possible to right angles.
- 2) Off-set intersections shall be avoided.
- 3) Special considerations to sight distance and access shall be taken at intersections less than 90 degrees.
- 4) Intersections less than 75 degrees shall not be acceptable.



**b. Entrances**

- 1) Entrances to residential, commercial, and industrial developments shall be designed to allow maneuverability for delivery and emergency vehicles.
- 2) Entrances shall be constructed in accordance with the applicable Local Road Standard and may require submittal of a Traffic Study and Intersection Design Study.
- 3) Entrances shall be located to provide sufficient sight distance.
- 4) Entrance layouts shall be approved by the Bradley Fire Department as well as the Village Engineer.

**c. Driveways**

- 1) PCC Driveways. All concrete driveways shall consist of a 4” compacted aggregate leveling base and an appropriate portland cement concrete mix surface. The PCC pavement shall be 5” thick for single family and duplex residential driveways and a minimum of 6” thick for multi-family, commercial and other heavy uses.
- 2) Bituminous Concrete Driveways. Bituminous driveways are not allowed for single family residential driveways. Multifamily, commercial and industrial driveways shall be constructed in accordance with the appropriate Local Road or Private Drive Standard.

**4. Off street parking**

For additional resources and details, please see:

*“An Ordinance Amending the Village of Bradley’s Zoning Ordinance Regarding the Zoning Classification for Annexed Territory.”*  
Village of Bradley Board of Trustees, adopted November 27, 2006.

*“An Ordinance Adopting Landscape Standards for New Developments.”*  
Village of Bradley Board of Trustees, adopted September 25, 2006. (Now Code of Ordinances *Chapter 56 – Vegetation*)

- a. Regulations for off street parking are found in the Village of Bradley Zoning Ordinance.
- b. See standards PKG 6010-6050 for typical pavement cross section details matching zoning ordinance requirements.
- c. See standard PKG 6060 for an exhibit of typical parking geometry matching a similar exhibit in the zoning ordinance.
- d. Brick pavers, porous concrete, alternate drainage schemes, and other construction materials and design elements meant to reduce storm

water runoff, improve water quality, and reduce heat absorbance are encouraged and should be presented as a proposed variance to the zoning ordinance.

## 5. Sidewalks & multi-use paths

For additional resources and details, please see:

*“Standard Specifications for Road and Bridge Construction.”* Illinois Department of Transportation, current edition.

*“A Policy on Geometric Design of Highways and Streets.”* American Association of State highway and Transportation Officials, current edition.

### a. Public sidewalks

- 1) All public sidewalks shall be a minimum of 5’ in width.
- 2) All public sidewalks shall consist of a 4” aggregate leveling base and 5” thick appropriate portland cement concrete mix surface.
- 3) ¾” expansion joints material shall be installed between all sidewalks and driveways.
- 4) ST 1150 is an exhibit showing the preferred geometry of sidewalks at roadway intersections.

### b. Private sidewalks

Private sidewalks shall meet or exceed the standards set forth for public sidewalks.

### c. Public multi-use paths

- 1) All public multi-use paths shall be either 8’ or 10’ in width. Path width shall be determined by the Village of Bradley Plan Commission or Village Engineer.
- 2) All PCC concrete paths shall consist of a 4” compacted aggregate leveling base and a 5” thick appropriate portland cement concrete mix surface.
- 3) All bituminous paths shall have a minimum of an 6” compacted aggregate base and 2” bituminous surface.
- 4) The grading along public multi-use paths shall ensure positive drainage away from the path.
- 5) ST 1152 is an exhibit showing the preferred geometry of multi-use paths at roadway intersections.

### d. Private multi-use paths

Private multi-use paths shall meet or exceed the standards set forth for public

multi-use paths.

## 6. **Pavement, sidewalk and curb restoration**

All pavements, sidewalks, and curbs shall be restored in accordance with the attached standards and typical details when disturbed or damaged by utility installation or any other construction activity. This includes pavement structure, cold milling, and patching standards.

## 7. **Sewage collection and treatment**

For additional resources and details, please see:

*“Standard Specifications for Water and Sewer Main Construction in Illinois.”* Illinois Society of Professional Engineers, current edition.

### a. **Private sewage disposal.**

- 1) In proposed conservation type subdivisions where lots are greater than 40,000 square feet in area and have a density less than 0.5 lots per acre and sanitary sewer service is not reasonably accessible the developer may be allowed to install individual sewage disposal systems.
- 2) All individual sewage disposal systems shall be constructed in accordance with regulations and requirements of the state and county health department and approved by the village engineer.

### b. **Public sewage disposal**

- 1) All commercial and multi-family sanitary sewer service laterals shall be connected to the main using a wye type connection with a minimum diameter of six (6) inches and PVC SDR 40 sewer service pipe with solvent welded joints.
- 2) All single-family residential sanitary sewer service laterals shall be connected to the main using a wye type connection and service pipe as directed by the department of building standards.
- 3) All sanitary sewer service laterals shall extend to the relevant property line at a 1% minimum slope.
- 4) Sanitary services installed prior to use shall be terminated with a 90° bend and riser pipe extending minimum 2' above ground and capped with glued PVC caps.
- 5) All sanitary sewer piping shall be gasket joint type and approved by the Village Engineer.
- 6) All sanitary sewers shall be air tested to conform to “Standard Specifications for Water and Sewer Main Construction in Illinois”.
- 7) All sanitary sewers shall be tested for deflection in accordance with the “Standard Specifications for Water and Sewer Main Construction in Illinois”, current edition, and witnessed by the Village of Bradley Department of Utilities.

- 8) All sanitary sewer manholes shall be spaced at a maximum of 400 feet apart.
- 9) All sanitary manholes shall have “A-Lok” type gaskets, waterproof frame and covers as well as chimney seals and MacWrap type external joint bands around the barrel section joints. Chimney seals shall be external type chimney seals.

## 8. **Water supply and distribution**

For additional resources and details, please see:

*“Standard Specifications for Water and Sewer Main Construction in Illinois.”* Illinois Society of Professional Engineers, current edition.

### a. **Private water supply**

In proposed conservation type subdivisions where lots are greater than 40,000 square feet in area and have a density less than 0.5 lots per acre and public water supply service is not reasonably accessible the developer may be allowed to install individual water supply wells.

### b. **Public water supply**

Public water supply and distribution in the Village of Bradley is currently provided by a public utility company. The guidelines and standards for water supply and distribution infrastructure in the Village of Bradley are published by the public utility company.

### c. **Water Services**

Commercial and Industrial water service locations and performance shall be approved by the Village of Bradley Fire Department. Separate potable and fire services are typically required along with a post indicator valve for the fire service.

### d. **Fire hydrants**

- 1) The technical specifications for fire hydrants are published by the public utility company.
- 2) The minimum allowable spacing for fire hydrants is 500 feet. This distance must be measured along a permanently clear route, such as a roadway, alley, or private drive.
- 3) The Village of Bradley Fire Department shall review all final engineering plans and specifications for subdivisions and site development plans and make a recommendation regarding fire hydrant locations.

## 9. Storm sewers and Drain Tiles

For additional resources and details, please see:

*“Standard Specifications for Road and Bridge Construction.”*  
Illinois Department of Transportation, current edition.

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control)

*“Standard Specifications for Water and Sewer Main Construction in Illinois.”* Illinois Society of Professional Engineers, current edition.

Various ordinances adopted and enforced by the Manteno-Bourbonnais Union Drainage District Number 6, Kankakee County, Illinois.

- a. All storm sewers within Village of Bradley road right-of-way shall be an appropriate class reinforced concrete pipe with O-Ring joints.
- b. All public storm sewers shall have a minimum diameter of 12” with the exception of storm sewers servicing a single parcel.
- c. All public storm sewers shall be located in a public road right-of-way or public utility or drainage easement of sufficient size to maintain and re-construct the sewer.
- d. All lots within a proposed residential subdivision shall have a sump pump service connection and public sump pump discharge collection system.
- e. The performance and function of existing field (farm) drain tiles must be protected and maintained. The cross connection of storm sewers and field drain tiles is discouraged and in many cases not allowed.

## 10. Storm water control facilities

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control)

*“An Ordinance Adopting Landscape Standards for New Developments.”*  
Village of Bradley Board of Trustees, adopted September 25, 2006. (Now Code of Ordinances Chapter 56: Vegetation)

Various ordinances adopted and enforced by the Manteno-Bourbonnais Union Drainage District Number 6, Kankakee County, Illinois.

- a. All storm water control facility 100-year design high water levels shall be contained within platted lots, easements, or combination of the two. The normal water level of the facility shall be located a minimum of 20 feet from the lot or easement limits.
- b. Access for maintenance, public safety, and patrol for all storm water control facilities shall be dedicated to the Village of Bradley. The village generally requires a clear view of public storm water control facilities from a public roadway.
- c. Lots, utility easements, and other design features located near storm water control facilities shall be graded at least 1' above the high water level of the detention facility.
- d. Storm water control facility restricted flow outlets shall be constructed of reinforced concrete pipe with a minimum 12" inside diameter. Further restriction of flow may be provided by use of a restrictor plate upstream of the outlet.
- e. Allowable release rates for detention facilities are: 0.04 cfs/acre (2-year) and 0.15 cfs/acre (100-year).
- f. Provisions shall be made to reduce the impact to down stream lands caused by low flow discharges from storm water control facilities that may persist for an extended period of time after a rain fall event or because of sump pump discharge from individual homes.
- g. Provisions shall be made to reduce the impact to down stream lands caused by concentrated flow discharges from storm water control facilities.
- h. Temporary erosion and sedimentation control measures and temporary vegetative cover shall be used as required to ensure protection of the storm water control facility function and protection of down stream lands.

## 11. Overland drainage

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

- a. Overland flow paths shall adequately convey the entire peak runoff from a 100-year flood event, assuming all storm sewers are blocked.
- b. Ponding along overland flow paths shall not exceed 9" before flowing over local highpoints.
- c. As a general rule, drainage easements and detailed design calculations shall be provided for overland drainage paths with a tributary area equivalent to 10 single family rear yards (NR-3 district).
- d. Final grading in accordance to the approved neighborhood drainage plan of all overland flow paths in a residential subdivision, located within a rear or side

yard area and drainage or public utility easement, shall be completed along with all other required public improvements.

## 12. Waterways

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

*“An Ordinance Adopting Landscape Standards for New Developments.”* Village of Bradley Board of Trustees, adopted September 25, 2006. (Now *Code of Ordinances Chapter 56: Vegetation*)

Various ordinances adopted and enforced by the Manteno-Bourbonnais Union Drainage District Number 6, Kankakee County, Illinois.

- a. All erosion and sedimentation control measures shall be properly installed prior to disturbing waterways or constructing waterway improvements.
- b. New and relocated waterways shall be designed, constructed, and landscaped in a manner that balances storm water control and storm water quality function, maintenance cost, recreation, and wildlife habitat.
- c. Improvements to existing waterways within proposed developments may be required to provide a reasonably stable and maintainable condition and meet the village water quality objectives.
- d. A minimum 25 feet wide buffer and 12 feet wide access and maintenance easement is required for all waterways with a tributary of 20 acres or more.

## 13. Floodplains & other areas subject to periodic inundation

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

*“An Ordinance Adopting Landscape Standards for New Developments.”* Village of Bradley Board of Trustees, adopted September 25, 2006. (Now *Code of Ordinances Chapter 56: Vegetation*)

*”Code of Ordinances Village of Bradley, Illinois Chapter 10 – Buildings and Building Regulations”*

- a. Newly developed subdivisions and developments shall not increase flood or drainage hazards to others. Detailed flood elevation and flood limits

calculations are required for all areas subject to periodic inundation, including waterways, with a tributary area of 100 acres or more.

- b. All floodplain areas encroached upon by new development shall have the existing 100-year base flood elevation calculated and mapped before approval of final engineering plans.
- c. Floodplain improvements and channel modifications are prohibited without approval in the form a permit by the Village of Bradley. Permits from the Illinois Department of Natural Resources and Army Corps of Engineers may also be required.
- d. Proposed changes to a Special Flood Hazard Area should be and may be required to be presented to FEMA in the form an application for a conditional letter of map change

#### **14. Wetlands**

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

*“An Ordinance Adopting Landscape Standards for New Developments.”* Village of Bradley Board of Trustees, adopted September 25, 2006. (Now *Code of Ordinances Chapter 56: Vegetation*)

- a. All erosion and sedimentation control measures shall be properly installed prior to wetland improvements or construction in the vicinity of a wetland.
- b. Where permissible, wetland areas within new developments shall be improved in a manner that balances storm water control and storm water quality function, maintenance cost, and wildlife habitat.
- c. The Army Corps of Engineers or a qualified wetland expert should be consulted whenever construction is proposed in or near a wetland or when the presence of a wetland is suspected on or near a construction site. A permit may be required or the proposed activity may be prohibited and subject to penalty and other enforcement actions.

#### **15. Open lands dedicated for public use or shared use by an association of home owners.**

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)



- a. All erosion and sedimentation control measures shall be properly installed prior to open land improvements.
- b. Open lands shall be improved in a manner that balances recreation, storm water quality function, maintenance cost, and wildlife habitat.
- c. Access for maintenance, public safety, and patrol for all open lands dedicated for public use shall be dedicated to the Village of Bradley. The village generally requires a clear view of public lands from a public roadway.

## 16. Erosion and sediment control

For additional resources and details, please see:

*“An Ordinance Adopting Standards for Storm Water Management, Sediment and Erosion Control.”* Village of Bradley Board of Trustees, adopted August 28, 2006. (Now *Code of Ordinances Chapter 42 – Stormwater Management and Erosion Control*)

- a. A Storm Water Pollution Prevention Plan shall be prepared and submitted with improvement plans for work requiring a Class 2 Grading and Drainage Permit.
- b. When applicable, care shall be taken to satisfy all IEPA permit requirements for storm water discharge, including: certification, posting of the permit and SWPPP for public view, maintenance of all control measures, and preparation of required reports.

## SECTION 4 - Format, data, and certification requirements for plats of subdivision, easement, and dedication

### 1. A plat of subdivision shall be prepared in accordance with:

- a. Standard engineering and survey practice.
- b. Policies and guidelines of the Kankakee County Records office.
- c. Applicable statutes of the State of Illinois (esp. the “Plat Act”)
- d. All applicable ordinances, guidelines, and policies of the Village of Bradley.

### 2. Certificates on a plat of subdivision:

- a. **Required Certificates.** Certificates required on a plat of subdivision include the following: Owners, School District, Surveyor, Village Board, Village Plan Commission, Village Engineer, County Clerk, Topography (Flood Hazard)
- b. **Road Authority Certificates.** A plat of subdivision may require certification by a road authority, such as, the Illinois Dept of Transportation, Kankakee

County Highway Department, and Township Highway Commissioner

- c. **Sidewalks.** No subdivision plat shall be recorded unless it contains a certificate set out in full as follows: “Subdivider, in addition to the provisions set forth on this final plat, hereby declares and imposes an affirmative covenant, the express purpose of which is to benefit all of the lands described herein and which shall be considered a covenant running with the land. Subdivider or any subsequent owner of any lot or tract of land contained herein, or any contractor placing improvements on such lot or tract shall, at the time of completion of construction on such lot or tract, and prior to the issuance by the Village of Bradley of any certificate of occupancy or acceptance of drainage or other public facility, construct sidewalks and multi-use paths which shall be placed adjacent to or abutting all lot or tract lines bordered by a street easement and extend a minimum of five (5) feet in width onto the street easement or right-of-way.”

3. **Easements on a plat of subdivision or otherwise granted.**

A plat of subdivision will likely include various easements. Specific easements, such as, “Drainage”, “Waterman”, “Ingress/Egress”, and “Street Lights” may be allowed or required. Specific easements such as these should be accompanied by provisions explaining and defining the easement grantee, purpose, and rights and responsibilities of the grantee.

Public utility easements shall include those provisions required by likely utility providers and the following provision for the Village of Bradley and in general:

**PUBLIC UTILITY EASEMENT**

A perpetual public utility easement is hereby granted to the Village of Bradley, an Illinois municipal corporation, the Public, Commonwealth Edison Company, Illinois Bell Telephone Company (Ameritech), Northern Illinois Gas Company, Aqua Illinois Water Company, and their respective successors and assigns, for the full and free right and authority to install, construct and otherwise establish, relocate, remove, replace, operate, inspect, repair, and maintain (a) sanitary sewer pipes, sanitary force mains, manholes, sewer connections, (b) storm sewer pipes, manholes, inlets, catch basins, connections and appliances, (c) water mains, valves, water service facilities and connections, (d) telephone and cable television lines and wires, (e) natural gas supply lines, connections, and appliances, (f) facilities for underground transmissions and distribution of electricity, sounds and signals, and (g) such other utilities, appurtenances and facilities as may be necessary or conveniently related thereto, in, on, upon, across, and under the property described hereon.

**GENERAL EASEMENT**

A perpetual easement is hereby granted to the Village of Bradley, a Municipal Corporation of Illinois, Its successors and assigns, for the full and free right and authority to install, construct, and otherwise establish, relocate, remove, renew, replace, operate, inspect, repair, and maintain water mains, fire hydrants, valves, and water service facilities, sanitary sewer pipes, manholes, lift stations, and sanitary sewer service connections, storm sewer pipes, manholes, inlets, and storm sewer service connections, surface drainage ways, storm water management facilities, storm water detention, electric transmission and distribution wires, street lights, and such other appurtenances and facilities as may be necessary or conveniently related to said water mains, sanitary sewer pipes, storm sewer pipes, storm water detention, electric transmission and distribution wires, and street lights, in, on, upon, over, through, across, and under all of that real estate hereon described and designated within a public utility, sanitary sewer, storm sewer, street light, water main, drainage, storm water detention, and/or flood plain easements. Said easements being designated by the dashed lines and designations of width. Obstructions and materials shall not be placed over such easements without prior written consent of the Village of Bradley and shall in no case be allowed to interfere with the easements or their use reserved and granted hereby.

4. Easements dedicated to the Village of Bradley shall be recorded within a plat of subdivision or appropriate easement agreement that has been written in a format approved by the Village Attorney and approved and adopted by the Village Board in ordinance form.
5. Road right-of-way dedicated to the Village of Bradley shall be recorded within a plat of subdivision or appropriate road right-of-way dedication agreement that has been written in a form approved by the Village Attorney and approved and adopted by the Village Board in ordinance form.
6. No easements shall be granted within 40 feet of an existing or planned roadway centerline unless approved by the Village Board. This includes public and private utility easements. It is in the Village of Bradley's interest to prevent the construction of utilities within 40 feet of a roadway centerline until a road right-of-way has been dedicated to the Village and a comprehensive road and utility location plan is adopted for the roadway vicinity.
7. All lands dedicated to the Village of Bradley shall be recorded within a plat of subdivision or appropriate agreement that has been written in a format approved by the Village Attorney and approved and adopted by the Village Board in ordinance form. This includes open lands, parks, stormwater management facilities, and lands for other public uses. In addition to dedication by subdivision plat or agreement, these lands shall be deeded to the Village of Bradley.

## **SECTION 5 - Development in Special Flood Hazard Areas**

See:

*"Code of Ordinances Village of Bradley, Illinois Chapter 10 – Buildings and Building Regulations"*

### **SECTION 6 - Permit Required for Construction within Village Roadways, Road Right-of-ways, and easement areas**

1. Construction within roadways and adjacent drainage ditches, dedicated road right-of-ways, and easements benefiting the Village of Bradley or its residents is prohibited without a permit. This includes the installation of public and private utilities.
2. Permission to construct improvements within roadways and adjacent drainage ditches, dedicated road right-of-ways, and easements may be granted in the form of a Building Permit, Grading and Drainage Permit, or upon approval of the final engineering plans and specifications for an approved subdivision as is appropriate for the work proposed.
3. All construction within roadways and adjacent ditches, dedicated road right-of-ways, and easements shall be in accordance with the applicable provisions of this Chapter.

### **SECTION 7 - Review and Approval**

The Village of Bradley, Village Board, reserves the authority to make a comprehensive review of all subdivisions, grading and drainage permit applications, and building permit applications. The Village Board further reserves its authority to make a comprehensive review of all proposed construction within a village roadway and adjacent ditch, dedicated road right-of-way, or easement area benefiting the Village. The Village Board may refer review questions to the Plan Commission, the Village Engineer, the Village Attorney, and other commissions, committees, or individuals that may provide assistance with such review.

### **SECTION 8 - Typical Details**

The Typical Details are available for inspection in the office of the Village clerk.

## **Village of Bradley Index of Standards**

### Detention Standards

DTN-9015-MANHOLE RESTRICTOR  
DTN-9017-CONTROLLED RELEASE RESTRICTOR PIPES  
DTN-9050-REAR-SIDE YARD OVERLAND FLOW  
DTN-9060-EXISTING CHANNEL IMPROVEMENTS  
DTN-9065-PROPOSED NEW CHANNEL  
SWC-9010-STORMWATER CONTROL PLANTING SPECS  
SWC-9020-STORMWATER CONTROL PLANTING SPECS  
SWC-9030-STORMWATER CONTROL PLANTING SPECS  
SWC-9040-STORMWATER WET BOTTOM PLANTINGS  
SWC-9050-STORMWATER WETLAND BOTTOM PLANTINGS  
SWC-9060-STORMWATER DRY BOTTOM PLANTINGS

### Lighting Standards

LGT-1000-METAL LIGHT POLE  
LGT-1020-LIGHT POLE BASE  
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### Parking Lot Standards

PKG-6010-HANDICAP PARKING DETAIL  
PKG-6020-FLEXIBLE PAVEMENT RES. OFF-STREET  
PKG-6030-FLEXIBLE PAVEMENT BUS. OFF-STREET  
PKG-6040-RIGID PAVEMENT RES. OFF-STREET  
PKG-6050-RIGID PAVEMENT BUS. OFF-STREET  
PKG-6060-PARKING GEOMETRY OFF-STREET

### Right of Way Standards

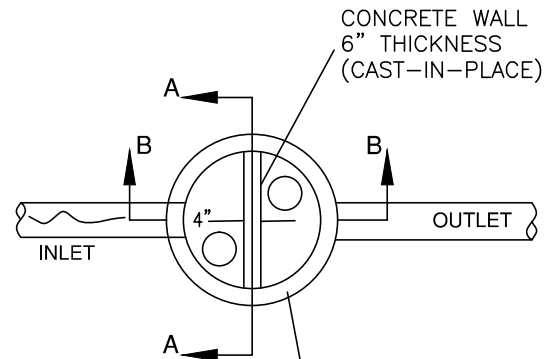
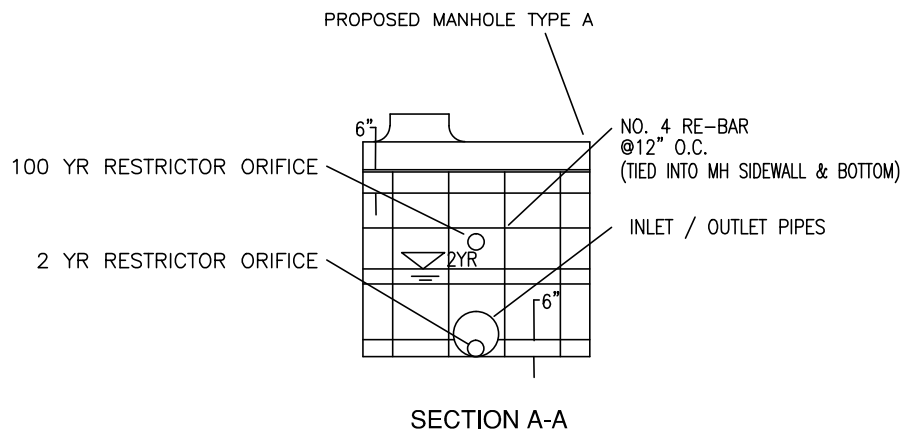
ROW-1010-ALLEY CROSS SECTION  
ROW-1020-LOCAL RD. CROSS SECTION  
ROW-1030-COMMERCIAL RD. CROSS SECTION  
ROW-1040-CUL-DE-SAC DETAIL  
ROW-1050-NEIGHBORHOOD COLLECTOR  
ROW-1060-COLLECTOR STREET  
ROW-1070-M3.12 CURB & GUTTER  
ROW-1075-LOCAL RD. UTILITY LOCATIONS  
ROW-1080-B6.12 CURB & GUTTER  
ROW-1090-B6.24 CURB & GUTTER  
ROW-1091- CURB & GUTTER RESTORATION  
ROW-1092-CURB & GUTTER OVER TRENCH

ROW-1093-CONCRETE CURB AND GUTTER REMOVE AND REPLACE  
ROW-1095-SIDEWALK RESTORATION OVER TRENCH  
ROW-1100-SIDEWALK ADJACENT TO CURB  
ROW-1101-SIDEWALK RESTORATION  
ROW-1102-MONOLITHIC CURB & GUTTER  
ROW-1110-HEAVY DUTY DEPRESSED CURB  
ROW-1115-LIGHT DUTY DEPRESSED CURB  
ROW-1116-LIGHT DUTY DEPRESSED CURB 3 CAR GARAGE  
ROW-1118-LIGHT DUTY DEPRESSED CURB W ADJACENT SIDEWALK  
ROW-1120-SHARED USE PATH  
ROW-1130-LOCAL RD. TRENCH RESTORATION  
ROW-1140-COLLECTOR ST. TRENCH RESTORATION  
ROW-1143-LIGHT DUTY PAVEMENT PATCH  
ROW-1144-MED. DUTY PAVEMENT PATCH  
ROW-1145-HEAVY DUTY PAVEMENT PATCH  
ROW-1146-MINOR PCC PAVEMENT PATCH  
ROW-1150-HMA PATCH FULL DEPTH  
ROW-1160-COLD MILLING BUTT JOINT  
ROW-1161-HMA SURFACE REMOVAL EDGE MILLING  
ROW-1162-HMA SURFACE REMOVAL

Sewer Standards

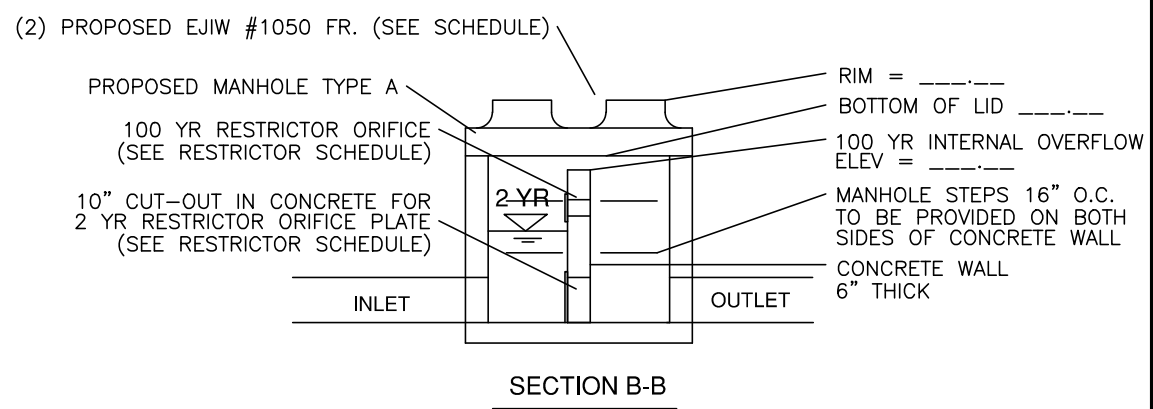
SWR-2010-TRENCH BACKFILL FOR SEWERS  
SWR-2020-CURB INLET ENCASMENT TYPE A  
SWR-2025-PIPE INLET  
SWR-2080-SUMP PUMP CONNECTION  
SWR-3020-SANITARY MANHOLE  
SWR-3030-SANITARY LATERAL INSTALLATION  
SWR-3031-SANITARY SHUT OFF  
SWR-3032-SANITARY TEMPORARY LATERAL INSTALLATION  
SWR-3035-SANITARY REPAIR - CONNECTION TO MAIN  
SWR-3050-EXTERNAL DROP CONNECTION  
SWR-3060-INTERNAL DROP CONNECTION  
SWR-5000 LIST OF FRAME-GRATE

RESTRICTOR SCHEDULE	
<u>POND 1</u>	
2 YEAR RESTRICTOR	
DIAMETER = # " @ EL. _____	
100 YEAR RESTRICTOR	
DIAMETER = # " @ EL. _____	
100 YEAR HW = _____	



PROPOSED MANHOLE TYPE A  
6" DIAMETER W/ STEPS  
PROVIDED ON BOTH SIDES OF  
THE CONCRETE WALL FOR ACCESS.

PLAN VIEW

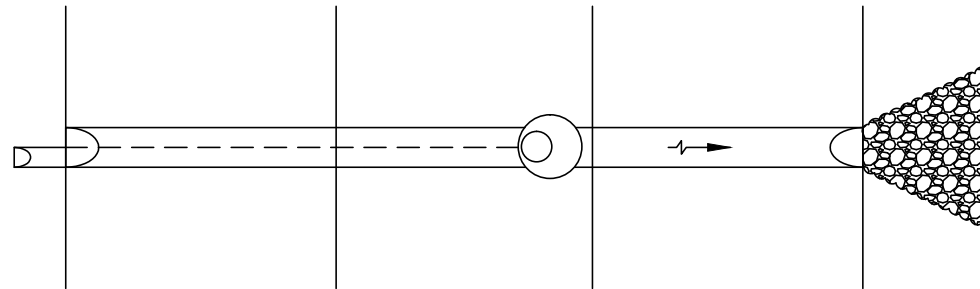
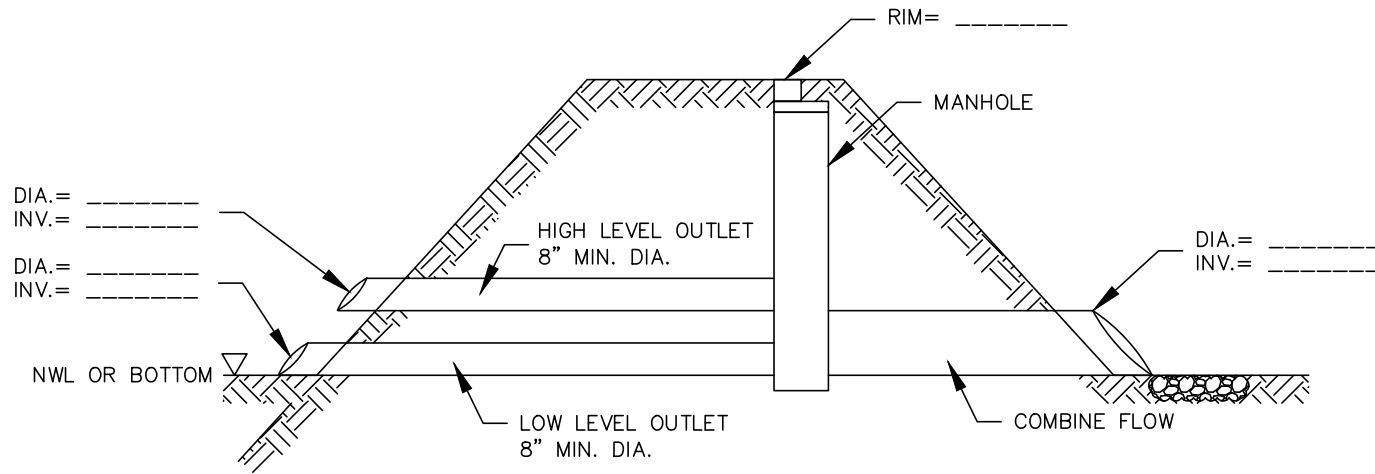


CONTROLLED RELEASE – RESTRICTOR  
PLATES IN MANHOLE TYPICAL DEAL  
N.T.S.

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL MANHOLE  
RESTRICTOR DETAIL

STANDARD# 9015



CONTROLLED RELEASE – RESTRICTOR PIPES  
TYPICAL DETAIL

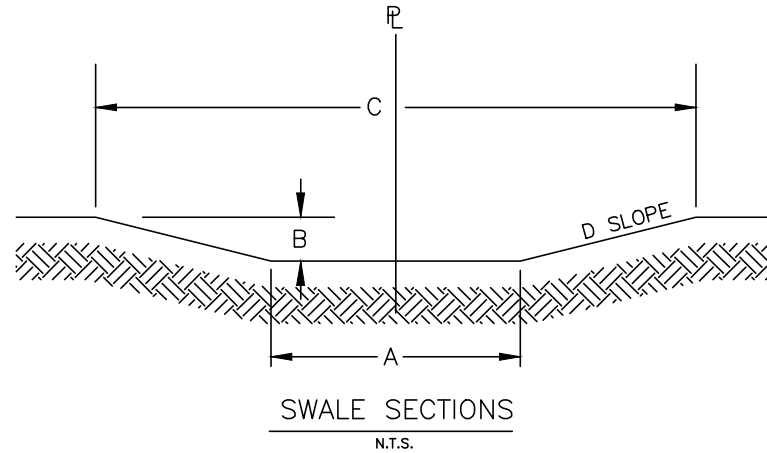
N.T.S.

JAN 2014

VILLAGE OF BRADLEY, IL.  
 CONSTRUCTION STANDARDS  
 FOR  
 CONTROLLED RELEASE –  
 RESTRICTOR PIPES  
 TYPICAL DETAIL

STANDARD# 9017





	0.50% MIN	2' MIN	CALCULATED	12' MIN	5:1 MIN.
SECTION	SWALE SLOPE	A (FEET)	B (FEET)	C (FEET)	D (FT:FT)
AA					
BB					

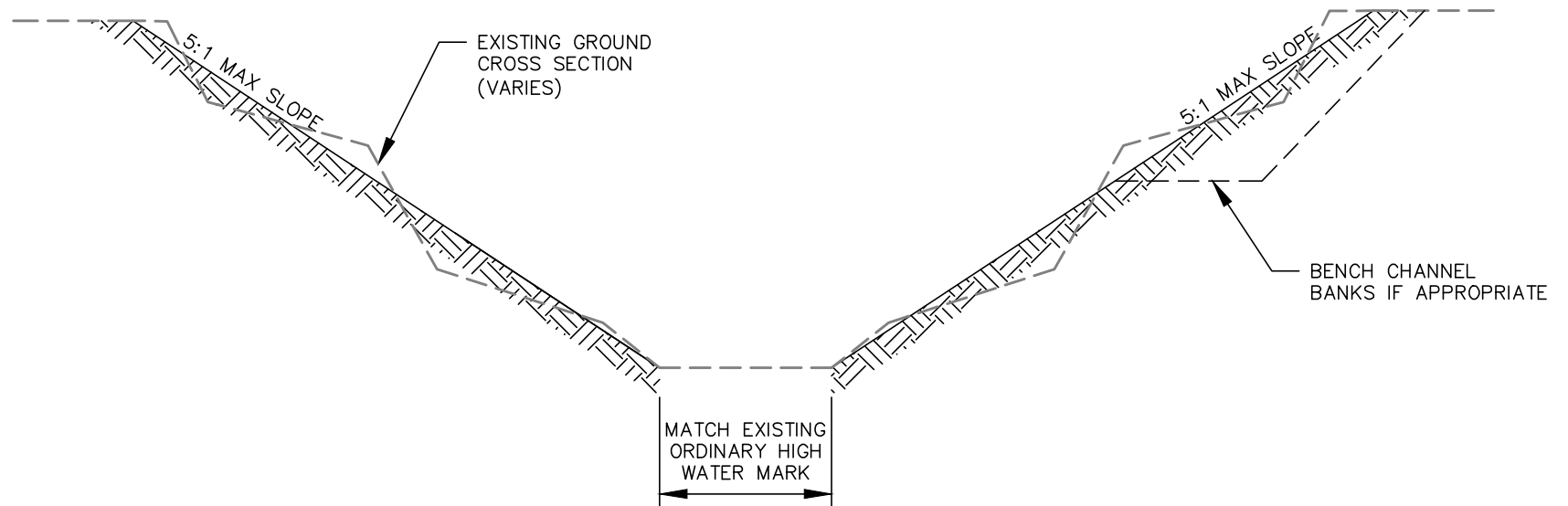
NOTE:  
OVERLAND FLOW PATHS IN EASEMENTS  
SHOULD BE FINAL GRADED PRIOR TO  
UTILITY INSTALLATION.

JAN 2014

TYPICAL REAR YARD / SIDE YARD  
OVERLAND FLOW PATH DETAIL  
N.T.S.

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL REAR YARD / SIDE  
YARD OVERLAND FLOW PATH

STANDARD# 9050



NOTE:

- 1) SEE STANDARDS FOR CHANNEL PLANTINGS
- 2) SEED OR OTHERWISE STABILIZE AS SOON AS POSSIBLE
- 3) PROVIDE EFFECTIVE MEANS TO PREVENT SEDIMENTATION AND DEGRADATION OF DOWNSTREAM AREAS PRIOR TO BEGINNING WORK

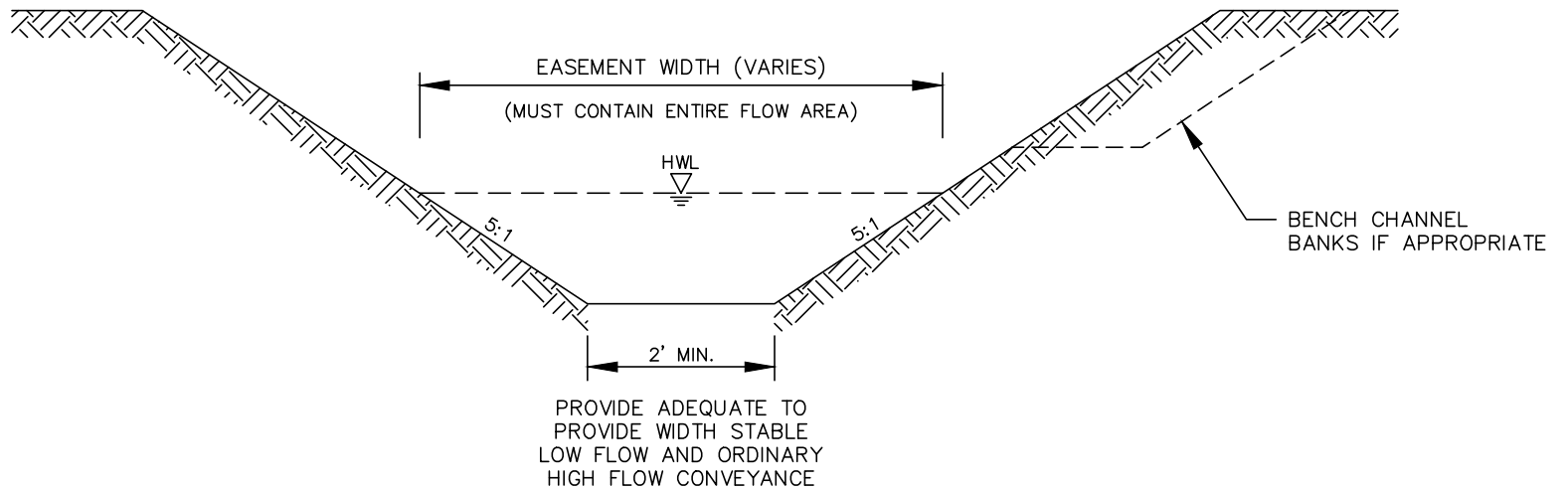
JAN 2014

EXISTING CHANNEL IMPROVEMENT DETAIL

N.T.S.

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
EXISTING CHANNEL  
IMPROVEMENTS

STANDARD# 9060



NOTE:

- 1) SEE STANDARDS FOR CHANNEL PLANTINGS
- 2) BUILD NEW CHANNEL IN THE DRY AND ESTABLISH VEGETATIVE COVER PRIOR TO USE
- 3) PROVIDE EFFECTIVE MEANS TO PREVENT SEDIMENTATION AND DEGRADATION OF DOWNSTREAM AREAS PRIOR TO BEGINNING WORK

NOTE:

CHANNELS THAT HAVE CONSTANT FLOW SHALL BE PLANTED WITH LOW MAINTENANCE AND NATIVE PLANTINGS TO 0.5' ABOVE N.W.L.

JAN 2014

PROPOSED NEW CHANNEL

N.T.S.

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
PROPOSED NEW CHANNEL

STANDARD# 9065

# STORM WATER CONTROL FACILITY PLANTING SPECIFICATIONS

## 1. UPPER SHORELINE ZONE - WET PRAIRIE & UPLAND BUFFER ZONE - MESIC PRAIRIE (SEED AND PLUG)

### A. ZONE BORDERS

The border between the Wet Prairie Zone and the Emergent Zone may be identified as any area below the normal water level but not normally more than 18 inches below water. Areas above the normal water level that remain saturated because of capillary rise may also be part of the Emergent Zone.

The border between the Wet Prairie Zone and Mesic Prairie Zone may be approximated by reviewing the storm water control facility calculations. The approximate border location may be the calculated 2 Year frequency (50% probability) high water level. This border may vary throughout the 3 Year and Long Term Management of the facility base on success experience.

### B. BED PREPARATION

Existing vegetative growth should be removed or killed with an approved herbicide. Till surface of seedbed to 2"-4" and till as close as possible to waterline. Lightly compact soil with roller, culti-packer, or similar implement. Omit tilling if using a no-till seed drill.

### C. SEEDING

The seed must be of wild ecotype. No hybrids or cultivars may be included. Mix seed with an equal volume or coarse sand, vermiculite or oats. Seed mixes shall contain at least 70% of the species listed and no one species shall constitute more than 10% of the total seed mix by weight. Any deviation from the plant list is to be submitted to the Village for review and approval prior to installation.

Broadcast seeds evenly either by hand or no-till drill seeder, cyclone spreader, or shoulder mount spreader. Spread seed in different directions to cover evenly. If not included in seed mix, plant nurse crop of seed oats at 40lbs/acre with seed mix. Roll seed into soil to 1/4" depth with culti-packer or similar implement.

No seeding should occur until N.W.L. is reached and sustained within Detention Pond.

### D. SEEDING DATES

May 15 ----- June 30  
July 1 ----- October 31 (irrigation twice per week for 60 days)  
November 1 ----- December 1 (dormant seeding)

### E. FABRIC INSTALLATION

Install erosion control blanket. Install North American Green DS 75 (or equal) from limits of SC250 installed along shoreline. (See 2.B)

### F. PRODUCT

Plugs shall have a minimum size of 2" diameter and 4" depth and shall be thoroughly rooted through the container. Four 1" diameter plugs may be used in the place of each 2" diameter plug.

### G. PLUG INSTALLATION

Cut through fabric and install plants at 18" o.c., staggered. Evenly distribute each species around pond, planting in groups of 3 to 5 plants of each species.

### H. PLUGGING DATES

May 15 ----- June 30  
July 1 ----- October 31 (irrigation twice per week for 60 days)

## 2. LOWER SHORELINE & SATURATED WETLAND ZONE - EMERGENT

### A. BED PREPARATION

Prior to planting, pump down or drain pond level to facilitate installation of erosion fabric.

### B. FABRIC INSTALLATION

Center of 6.50' erosion control blanket North American Green, SC 250 or equal shall be placed at normal water level and rolled along entire shoreline. Install as per manufacturer's guidelines.

### C. PLUG PRODUCT

### D. PLUG INSTALLATION

Emergent plant plugs shall be installed on the safety ledge of open water facilities and to depths of six (6) to twelve (12) inches on the shoreline. Emergent plants may be planted on the shore line of open water facilities and bottom of wet land type facilities in areas that remain saturated 72 hours after the storm water control facility returns to normal water level after a rainfall event. Cut through fabric and install plants at 18" o.c., staggered. Evenly distribute each species around pond, planting in groups of 3 to 5 plants of each species.

### E. PLUGGING DATES

May 15 ----- June 30  
July 1 ----- October 31 (irrigation twice per week for 60 days)

## 3. TREES AND SHRUBS

### A. QUANTITY

Twenty plant units are required for every 100 linear feet of perimeter as measured at the planned high water level.

### B. PRODUCT

Plants shall be native to Illinois:  
2" caliper shade tree ----- 15 units  
6' height evergreen tree --- 10 units  
6' height deciduous tree --- 5 units  
18" height evergreen shrub - 2 units  
18" height deciduous shrub - 1 unit

## 4. TURF AREA

### A. BED PREPARATION

Existing vegetative growth should be removed or killed with an approved herbicide (Rodeo). Till surface of seedbed to 2"-4" and till as close as possible to waterline. Lightly compact soil with roller, culti-packer, or similar implement. Omit tilling if using a no-till seed drill.

### B. SEEDING

The seed mix should be as is appropriate to establish a Kentucky Bluegrass lawn.

### C. SEEDING DATES

May 15 ----- June 30  
July 1 ----- October 31 (irrigation twice per week for 60 days)  
November 1 ----- December 1 (dormant seeding)

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9010

# STORM WATER CONTROL FACILITY PLANTING SPECIFICATIONS (CONTINUED)

## 5. EXPECTED PROGRESS

### A. SEEDED AREAS

At the beginning of the second growing season, the following conditions are expected:

- COVERAGE: 25% of each plant community shall be covered with vegetation  
PRESENCE: 40% of the species shall be alive and present  
ABUNDANCE: 60% of the vegetation should be native species of the permanent matrix

At the beginning of the third growing season, and from that time forward, the following conditions are expected:

- COVERAGE: 50% of each plant community shall be covered with vegetation  
PRESENCE: 60% of the species shall be alive and present  
ABUNDANCE: 80% of the vegetation should be native species of the permanent matrix

### B. PLUGGED AREAS

At the end of the first growing season, the following conditions are expected:

1. 95% of the plugs shall be alive and thoroughly rooted
2. 50% of the shoreline shall be covered within three (3) years.

### C. PLANT UNITS

75% of plantings shall be alive and thoroughly rooted at end of three (3) years.

### D. REMEDIATION

Seed and plugged areas not meeting the expected coverage, presence, and abundance criteria shall be re-seeded and re-plugged as needed to meet expectations.

## 6. MAINTENANCE

### 1st YEAR:

Mow at 6" when the oats set seed heads. Mow again when competitive weeds are at 8"-12" in height. Cut back to 6" with flail type mower two or three times during the first season.

### 2nd YEAR:

Keep area mowed at 12" to control weed competition. Mow in late May and late June. Maintain goose barrier control for 2 years. Then remove fencing, lath, and monofilament.

### 3rd YEAR:

Prescribed/controlled burn the area in mid-Spring. If burning is not an option, mow again to control weeds but remove the clippings. Do not burn or mow after new plant growth has reached 12" or taller.

### LONG - TERM MANAGEMENT:

Employ the services of a qualified company to manage prairie plantings and control species deemed detrimental such as Purple Loosestrife, Canada Thistle, Reed Canary Grass, Queen Anne's Lace, Sweet Clover, Cattails, Common Teasel, Ragweeds, Buckthorn and Sandbar Willow. Long - term management should include implementing recommended remedies for areas not meeting or exceeding expectations. (See 7. Monitoring and Inspecting)

## 7. MONITORING AND INSPECTING

Storm water control facility should be inspected as specified in the Villages Code regarding "Trees, Shrubs & Landscaping" and "Standards for Storm water Management, Sediment & Erosion Control".

The Village requires submittal of an annual report of monitoring and inspection activities and results. The report should include recommended remedies in the case where landscaping does not meet or exceed expectations (5.C.)

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9020

## TYPICAL PLANTS BY LOCATION

### STREAM BANK STABILIZATION

<u>Scientific Name</u>	<u>Common Name</u>
Carex Vulpinoidea	FOX SEDGE
Glyceria Striata	FOWL MANNA GRASS
Spartina Pectinata	PRAIRIE CORDGRASS
Verbena Hastata	BLUE VERVAIN

### UPLAND BUFFER ZONE - MESIC PRAIRIE

<u>Scientific Name</u>	<u>Common Name</u>
Aster Novae-Angliae	NEW ENGLAND ASTER
Coreopsis Tripteris	TALL COREOPSIS
Monarda Fistulosa	WILD BERGAMOT
Pycnanthemum Virginianum	COMMON MOUNTAIN MINT
Rudbeckia Hirta	BLACK-EYED SUSAN
Silphium Laciniatum	COMPASS PLANT
Silphium Terebinthinaceum	PRAIRIE DOCK
Solidago Rigida	STIFF GOLDENROD
Spartina Pectinata	PRAIRIE CORDGRASS
Tradescantia Ohiensis	SPIDERWORT
Vernonia Fasciculata	COMMON IRON WEED

### UPPER SHORELINE ZONE - MESIC WET PRAIRIE (Saturated)

<u>Scientific Name</u>	<u>Common Name</u>
Aster Novae-Angliae	NEW ENGLAND ASTER
Carex Cristatella	CRESTED OVAL SEDGE
Carex Stipata	AWL-FRUITED SEDGE
Carex Vulpinoidea	FOX SEDGE
Cyperus Esculentus	FIELD NUT SEDGE
Eupatorium Maculatum	SPOTTED JOE PYE WEED
Eupatorium Perfoliatum	COMMON BONESET
Glyceria Striata	FOWL MANNA GRASS
Helianthus Grosseserratus	SAWTOOTH SUNFLOWER
Juncus Effusus	COMMON RUSH
Juncus Torreyi	TORREY'S RUSH
Pycnanthemum Virginianum	COMMON MOUNTAIN MINT
Spartina Pectinata	PRAIRIE CORDGRASS
Verbena Hastata	BLUE VERVAIN
Vernonia Fasciculata	COMMON IRON WEED
Viburnum Lentago	NANNYBERRY

### LOWER SHORELINE ZONE - EMERGENT

<u>Scientific Name</u>	<u>Common Name</u>
Cyperus Esculentus	FIELD NUT SEDGE
Iris Virginica	BLUE FLAG IRIS
Juncus Effusus	COMMON RUSH
Sagittaria Latifolia	BROADLEAF ARROWHEAD

## ACTUAL PROPOSED SEED MIX AND PLUG SCHEDULE BY ZONE

### **NOTE:**

THE TYPICAL PLANTS BY LOCATION LISTS ARE SUGGESTIONS ONLY ("NATIVE PLANT GUIDE FOR STREAMS AND STORM WATER FACILITIES IN NORTHERN ILLINOIS"). ALTERNATE MATERIAL MAY BE PROPOSED.

ALL PLANT MATERIALS SPECIFIED SHOULD BE TOLERANT OF EXPECTED HYDRAULIC CONDITIONS.

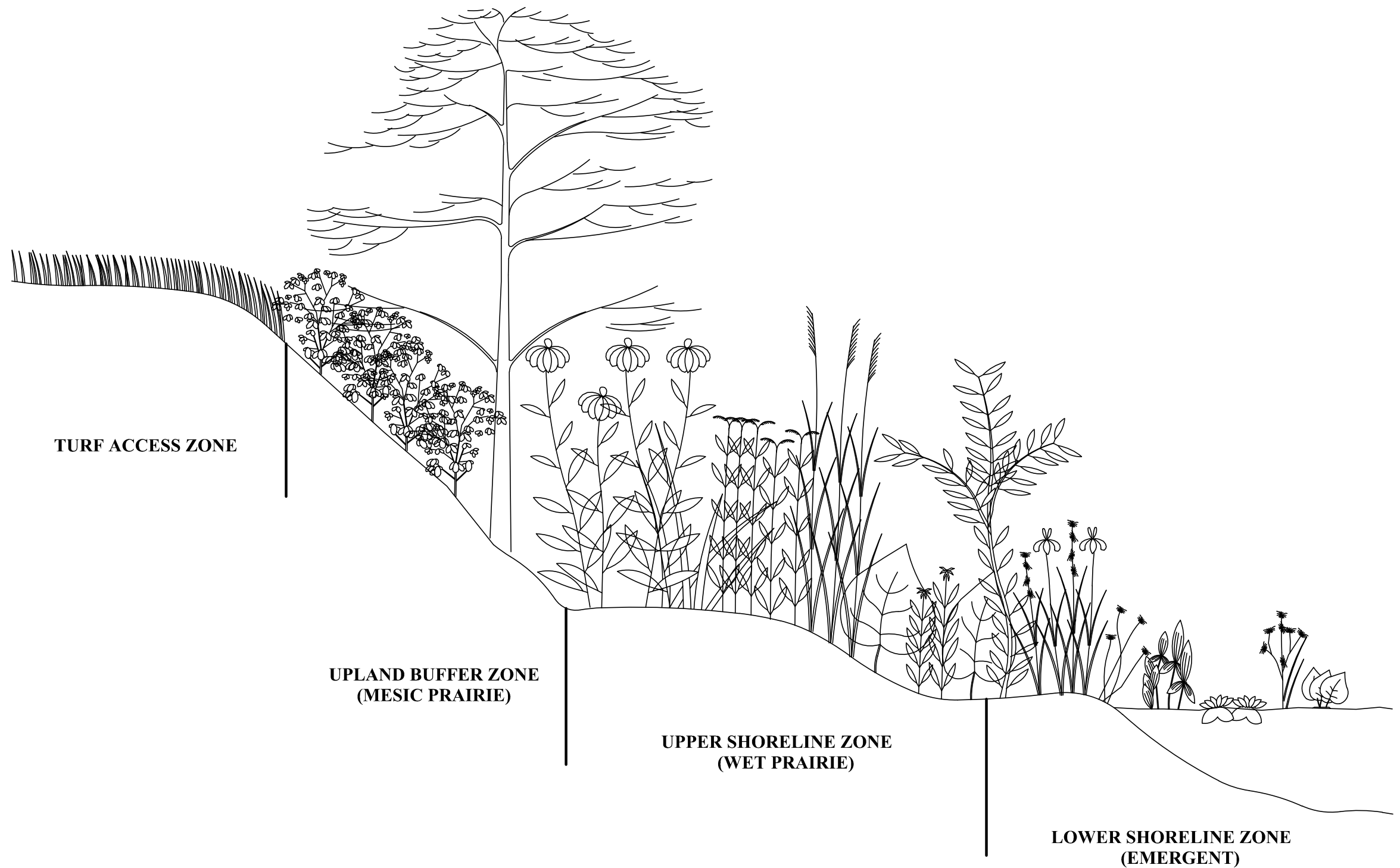
### **NOTE:**

THIS EXHIBIT IS MEANT TO BE A GUIDELINE ONLY AND SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR ANY REQUIREMENTS OF OTHER REGULATING AGENCIES.

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9030

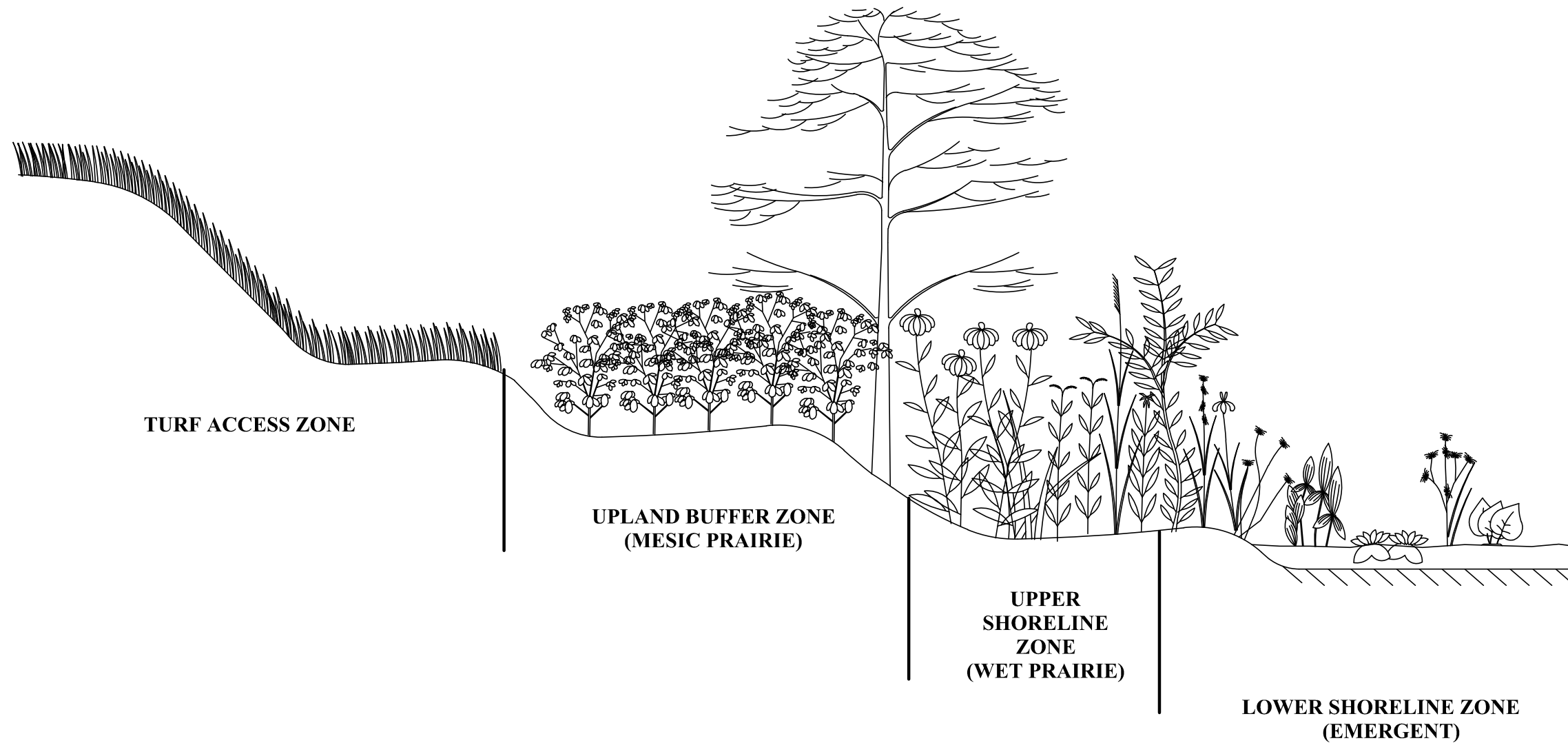


**WET BOTTOM (OPEN WATER)  
STORM WATER CONTROL FACILITY  
SCHEMATIC CROSS-SECTION**

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9040



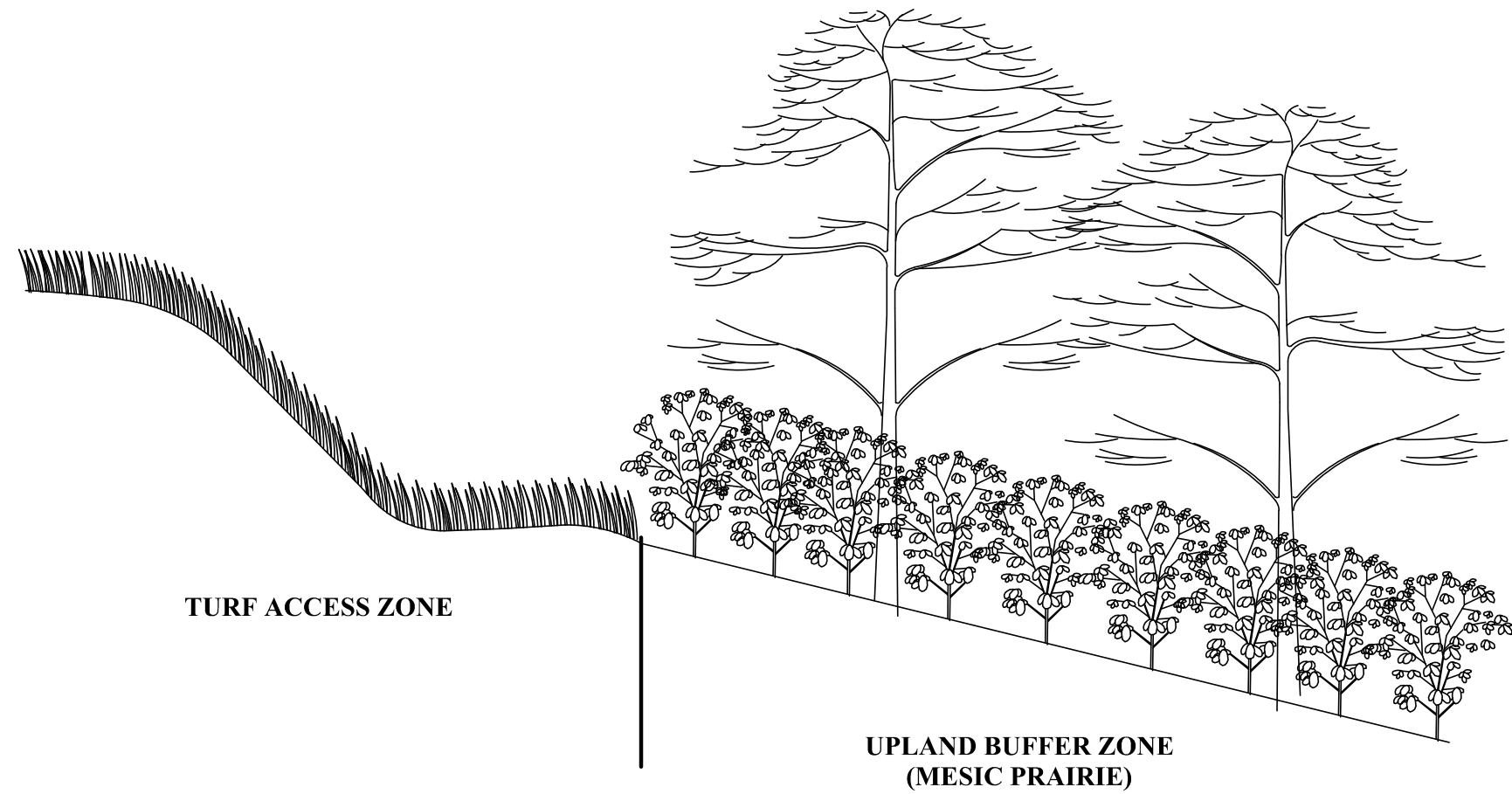
**WETLAND BOTTOM  
STORM WATER CONTROL FACILITY  
SCHEMATIC CROSS-SECTION**

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9050





**TURF ACCESS ZONE**

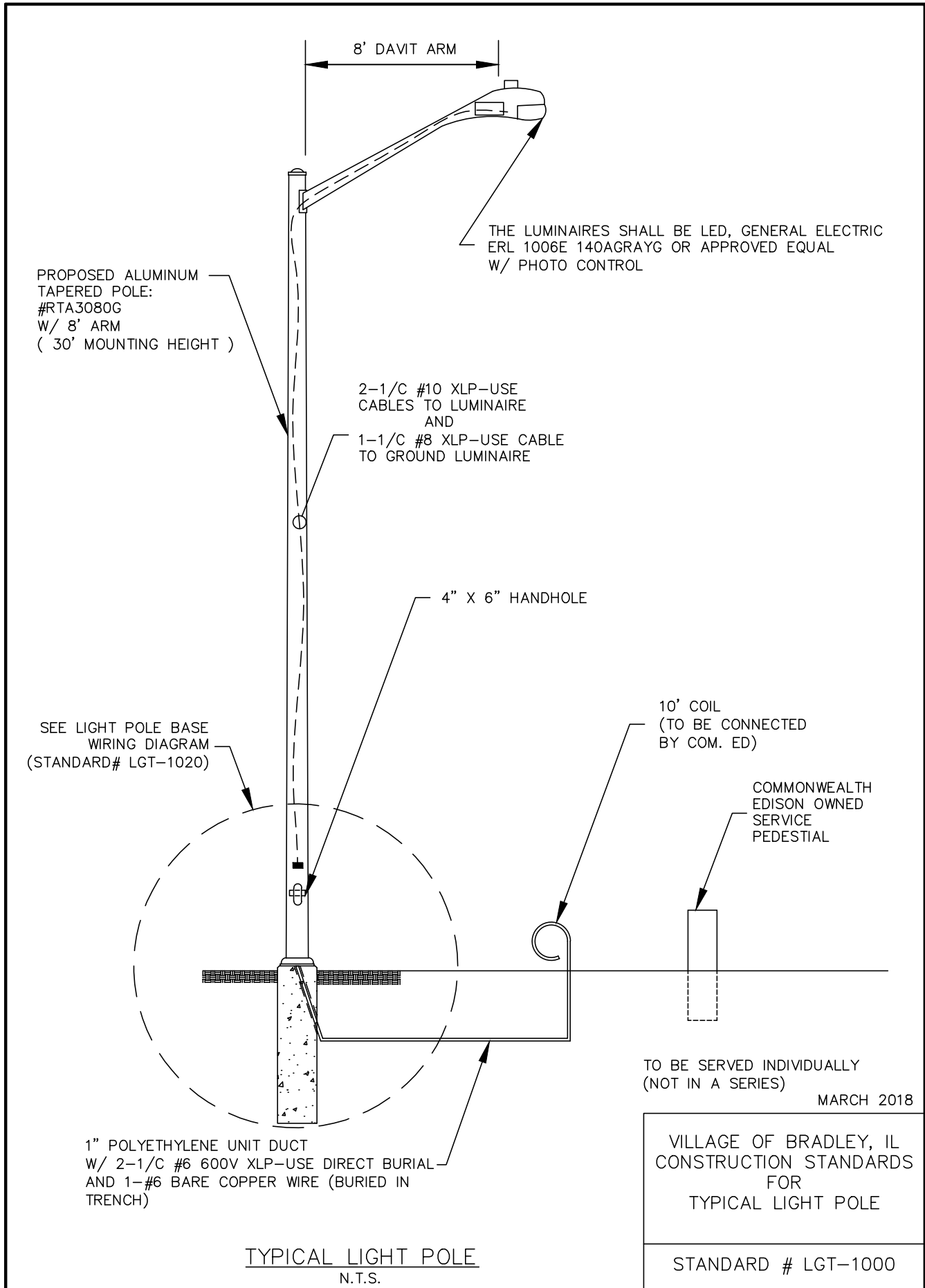
**UPLAND BUFFER ZONE  
(MESIC PRAIRIE)**

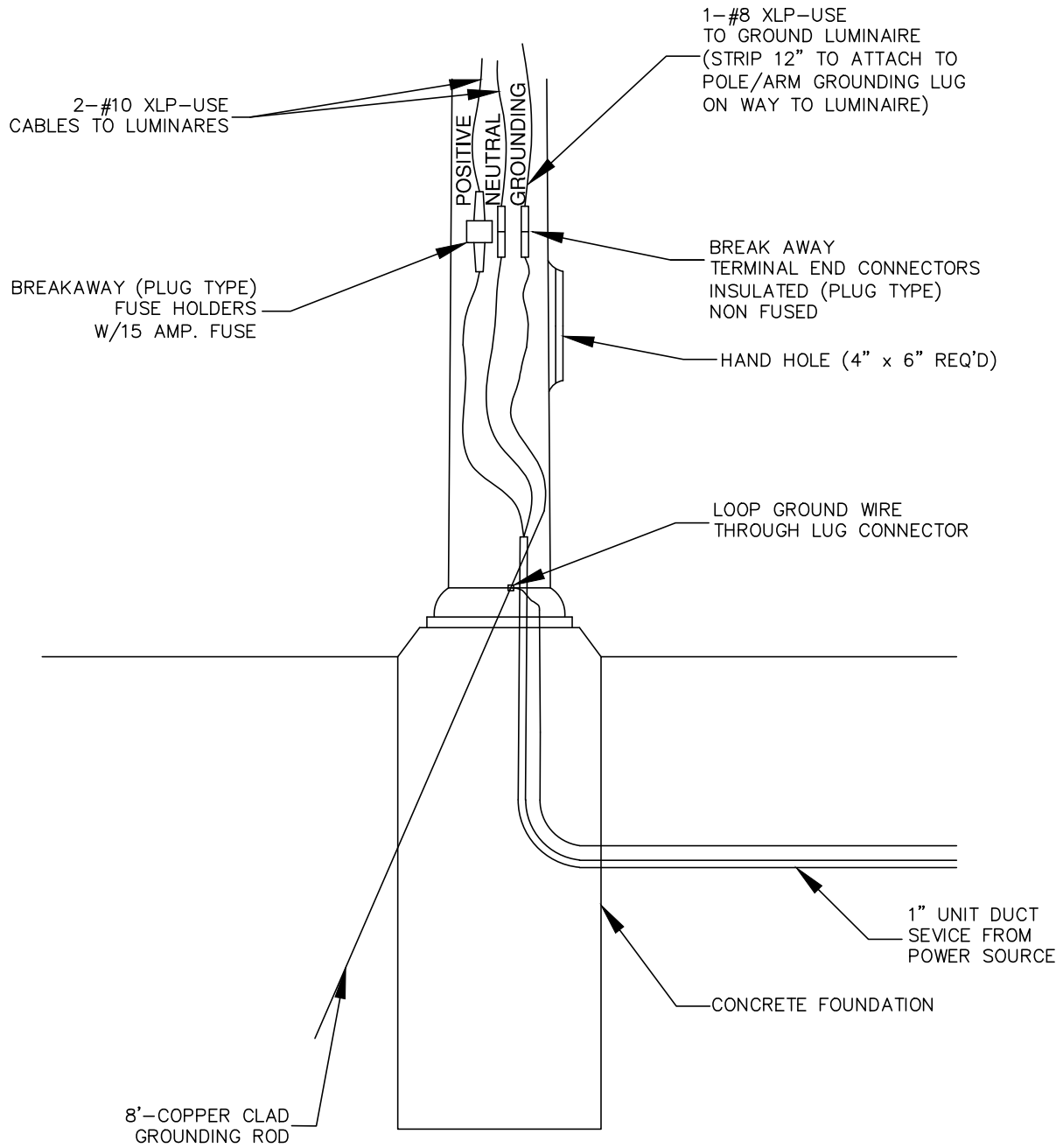
**DRY BOTTOM  
STORM WATER CONTROL FACILITY  
SCHEMATIC CROSS-SECTION**

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
STORM WATER CONTROL  
FACILITY PLANTINGS

STANDARD# SWC-9060



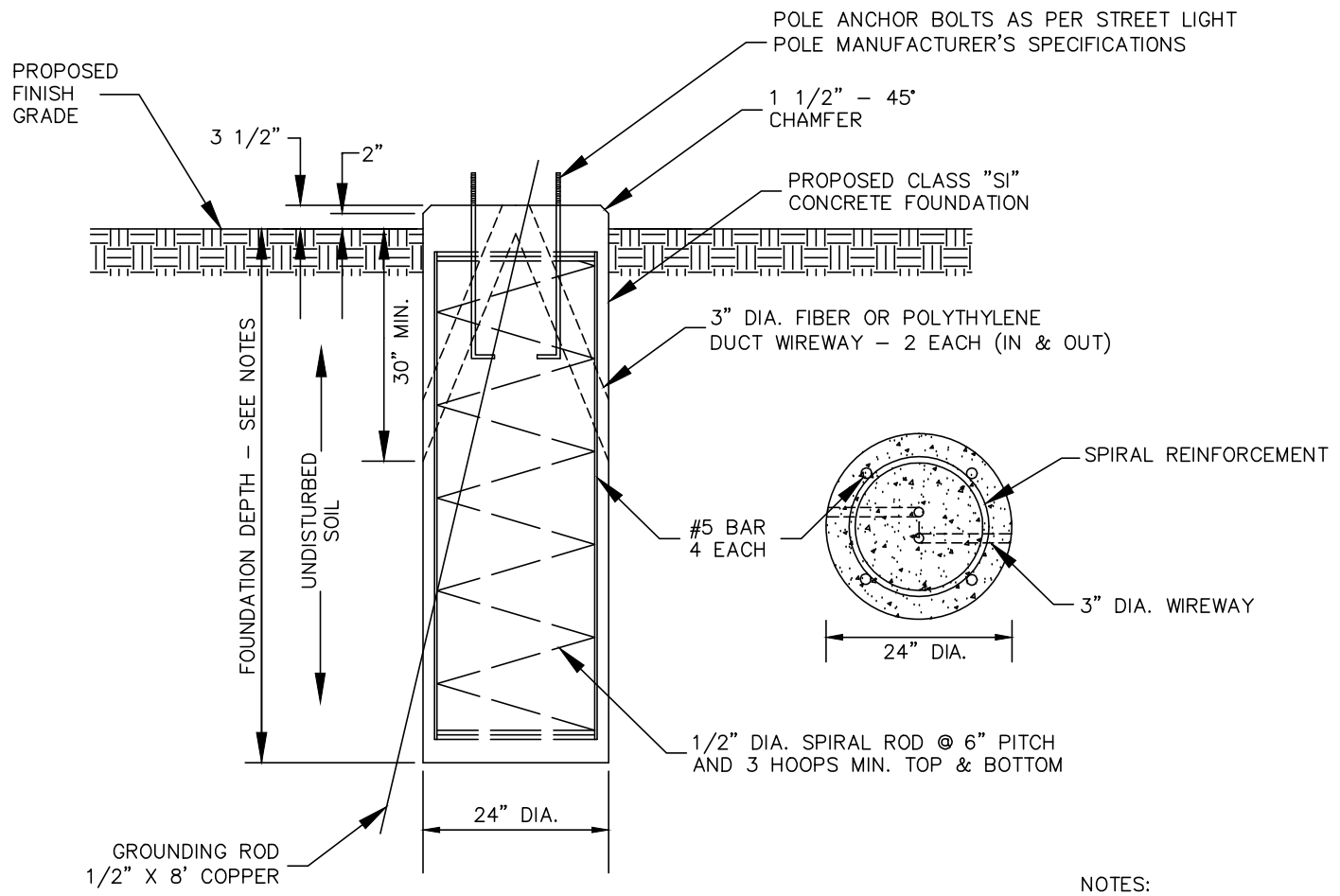


LIGHT POLE BASE WIRING DIAGRAM  
N.T.S.

JUNE 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
LIGHT POLE BASE  
WIRING DIAGRAM

STANDARD # LGT-1020

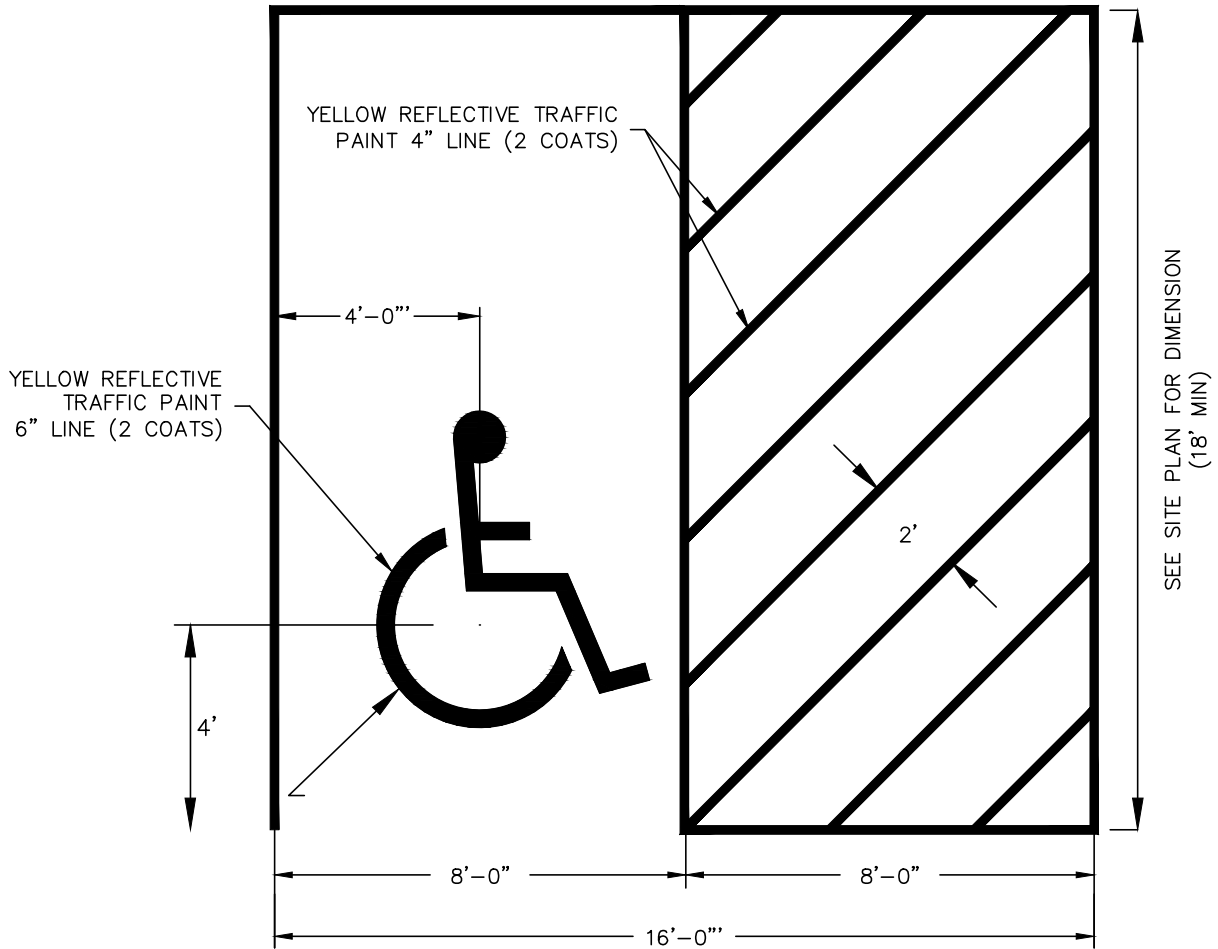


TYPICAL LIGHT POLE FOUNDATION  
N.T.S.

NOTES:  
 6' FOUNDATION DEPTH FOR MOUNTING HEIGHT LESS THAN OR EQUAL TO 30 FEET WITH MAXIMUM 8' ARM LENGTH.  
 8' FOUNDATION DEPTH FOR MOUNTING HEIGHT OF 30 FEET - 40 FEET WITH MAXIMUM 10' ARM LENGTH.

STANDARD # LGT-1030  
 VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL LIGHT POLE  
 FOUNDATION  
 JUNE 2014

HANDICAPPED PARKING  
SIGN LOCATION MOUNTED  
ON 2" SQ. TELESCOPING POST  
SIGNS: R7-8 & R7-1101 (\$250 FINE)  
SEE ILLINOIS ACCESSIBILITY  
CODE FOR SIGN DETAILS



TYPICAL OFF STREET HANDICAPPED PARKING  
N.T.S.

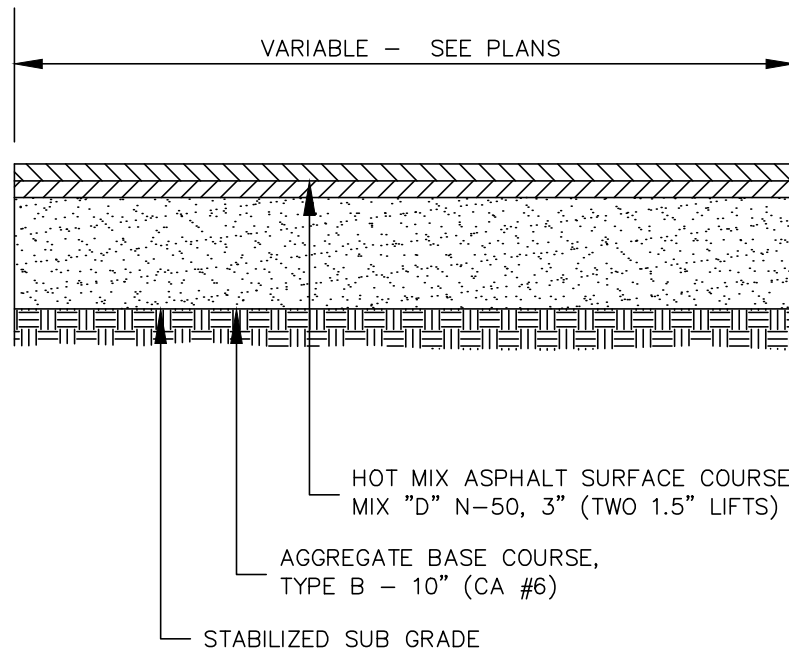
NOTES:

1. ALL PAVEMENT STRIPING TO BE YELLOW REFLECTIVE TRAFFIC PAINT 4" LINE (2 COATS)
2. CURRENT STATE AND FEDERAL POLICIES IMPLEMENTING THE AMERICANS WITH DISABILITIES ACT TAKE PRECEDENCE OVER THIS STANDARD.

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL OFF STREET  
HANDICAPPED PARKING

STANDARD# PKG-6010



TYPICAL FLEXIBLE PAVEMENT – RESIDENTIAL OFF-STREET PARKING  
 CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

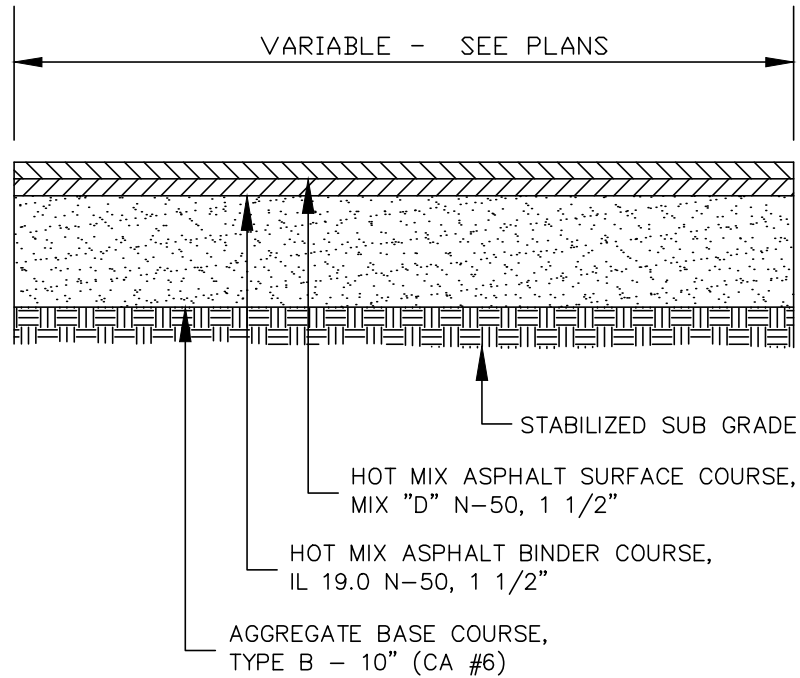
NOTES:

1. SOIL CONDITIONS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED.
2. HMA SURFACE IS NOT ALLOWABLE IN SINGLE FAMILY AND DUPLEX RESIDENTIAL DISTRICTS

JAN 2015

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL FLEXIBLE PAVEMENT  
 RESIDENTIAL OFF-STREET  
 PARKING

STANDARD # PKG-6020



TYPICAL FLEXIBLE PAVEMENT - BUSINESS, COMMERCIAL, INDUSTRIAL  
OFF-STREET PARKING

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

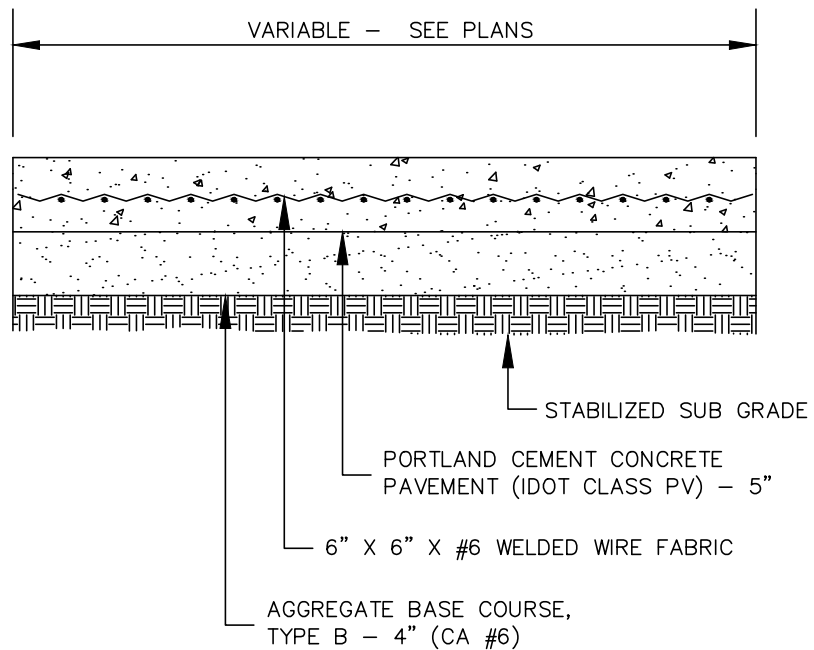
NOTES:

1. SOIL CONDITIONS, EXPECTED USES, OR LOADING REQUIREMENTS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED.

JAN 2015

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL FLEXIBLE PAVEMENT  
BUSINESS, COMMERCIAL,  
INDUSTRIAL OFF-STREET  
PARKING

STANDARD # PKG-6030



NOTES:

1. SOIL CONDITIONS, EXPECTED USES, OR LOADING REQUIREMENTS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED.

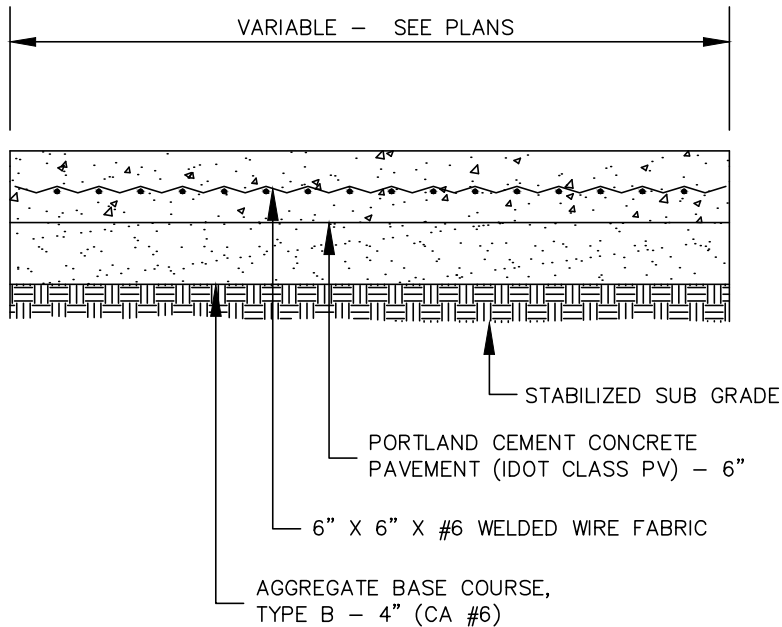
TYPICAL RIGID PAVEMENT - RESIDENTIAL OFF-STREET PARKING  
 CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

JAN 2015

VILLAGE OF BRADLEY, IL.  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL RIGID PAVEMENT  
 RESIDENTIAL OFF STREET  
 PARKING

STANDARD # PKG - 6040





TYPICAL RIGID PAVEMENT - BUSINESS, COMMERCIAL,  
INDUSTRIAL OFF STREET PARKING

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

NOTES:

1. SOIL CONDITIONS, EXPECTED USES, OR LOADING REQUIREMENTS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED.
2. WELDED WIRE FABRIC SHALL BE INSTALLED A MINIMUM OF 2" ABOVE AGGREGATE

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL RIGID PAVEMENT  
BUSINESS, COMMERCIAL AND  
INDUSTRIAL OFF-STREET  
PARKING

STANDARD # PKG-6050

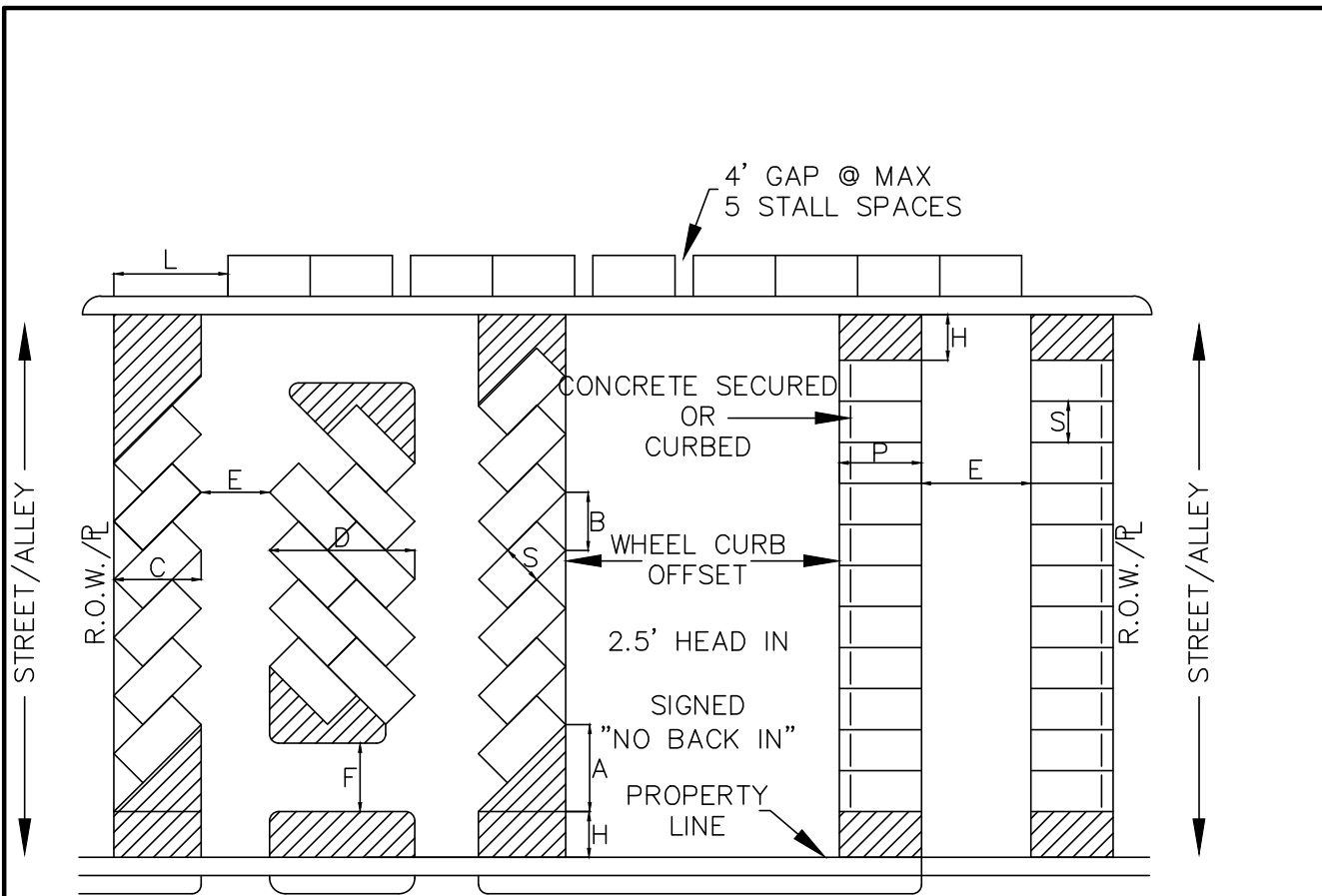


TABLE DIMENSIONS (IN FEET)

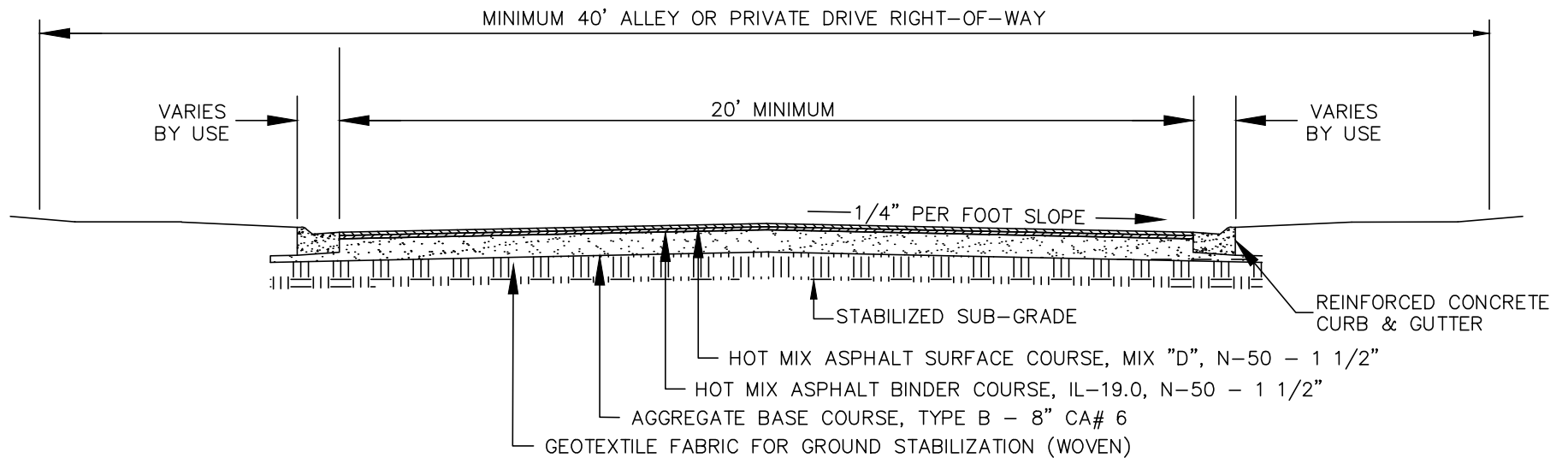
	O	S	P	A	B	C	D	E	F	H	J	K	L
PARALLEL PARKING	0°	9.0	22.0	--	--	--	--	12.0	--	4.0	30.0	60.0	25.0
	30°	9.0	18.0	29.1	18.0	16.8	20.6	12.0	15.0	10.0	45.6	78.2	--
ANGLE PARKING	45°	9.0	18.0	19.1	12.7	19.1	31.8	14.0	15.0	10.0	52.2	98.0	--
	60°	9.0	18.0	11.6	10.4	20.1	44.7	16.0	15.0	10.0	56.2	116.9	--
PERPENDICULAR PARKING	90°	9.0	18.0	--	--	--	18.0	24.0	20.0	10.0	60.0	120.0	--

OFF STREET PARKING GEOMETRY CHART  
N.T.S.

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
OFF-STREET  
PARKING GEOMETRY CHART

STANDARD # PKG-6060



## TYPICAL ALLEY / PRIVATE DRIVE CROSS SECTION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

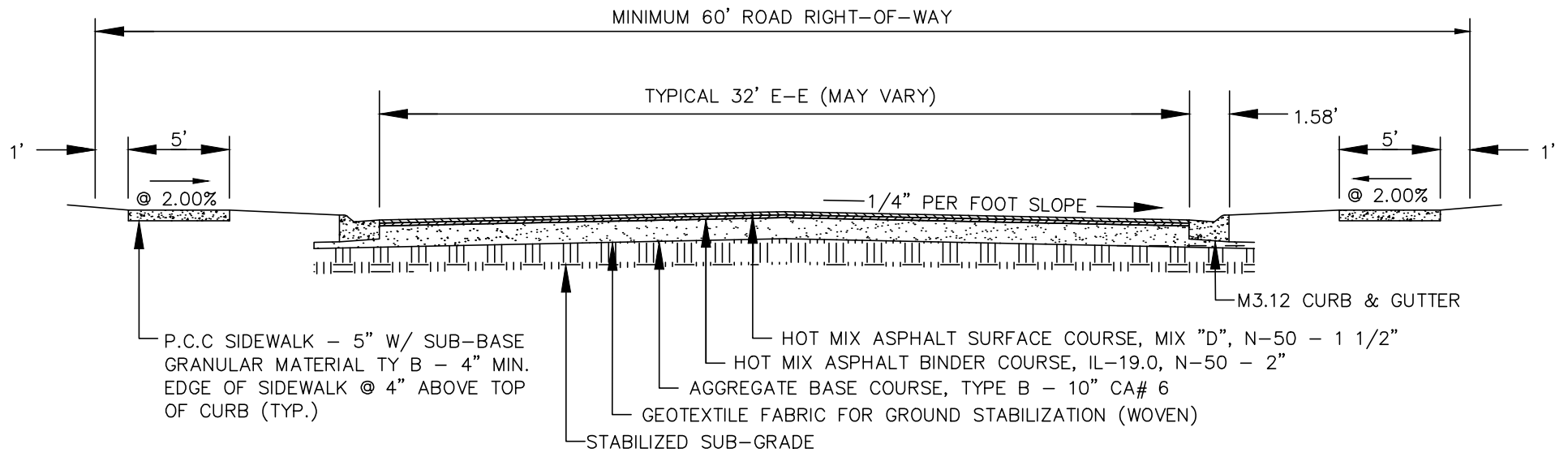
### NOTES:

1. IF SURFACE COURSE IS NOT PLANNED TO BE PLACED WITHIN 60 DAYS AFTER BINDER THEN INCREASE BINDER THICKNESS TO TWO(2) INCHES. (KEEP SURFACE @ 1 1/2 INCHES).
2. SOIL CONDITIONS AND EXPECTED USES AND LOADINGS MAY INDICATED ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED.

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL ALLEY / PRIVATE  
DRIVE CROSS SECTION

STANDARD # ROW-1010



## TYPICAL LOCAL ROAD CROSS SECTION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

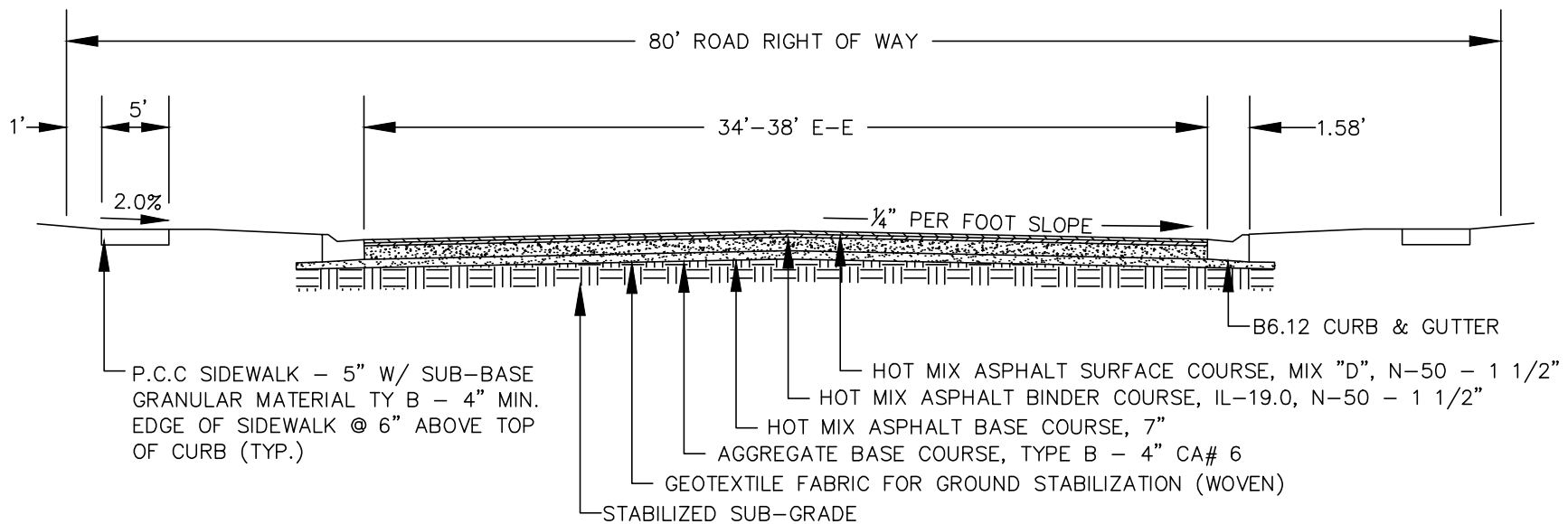
### NOTES:

1. CLEANING AND TACK COAT IS REQUIRED IF SURFACE COURSE IS PLACED MORE THAN ONE WEEK AFTER BINDER COURSE.
2. SOIL CONDITIONS MAY INDICATED ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL LOCAL ROAD  
CROSS SECTION

STANDARD # ROW-1020



## TYPICAL COMMERCIAL ROAD CROSS SECTION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

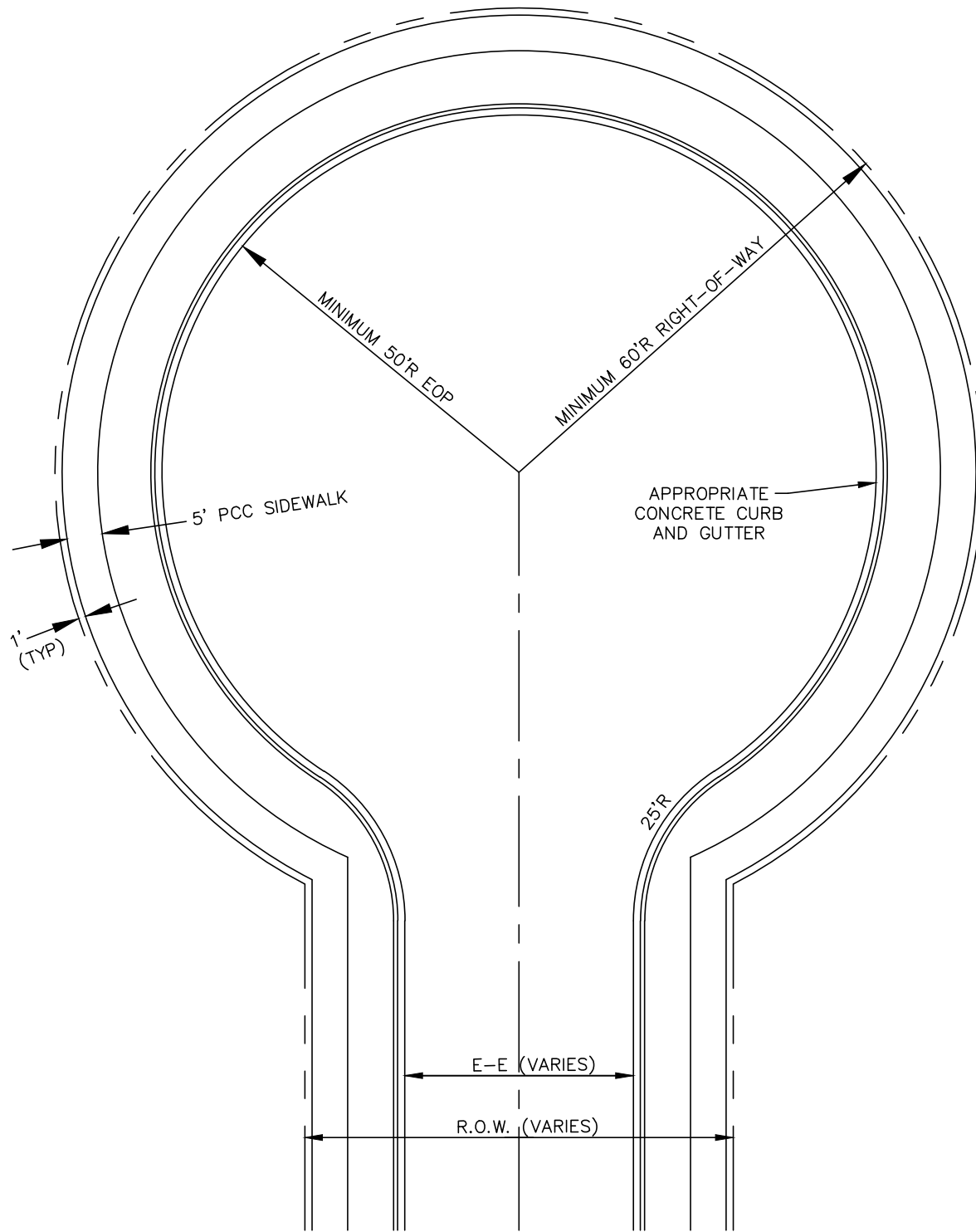
### NOTES:

1. IF SURFACE COURSE IS NOT PLANNED TO BE PLACED WITHIN 60 DAYS AFTER BINDER THEN INCREASE BINDER THICKNESS TO TWO(2) INCHES. (KEEP SURFACE @ 1 1/2 INCHES).
2. SOIL CONDITIONS AND EXPECTED USES AND LOADINGS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL COMMERCIAL ROAD  
CROSS SECTION)

STANDARD # ROW-1030

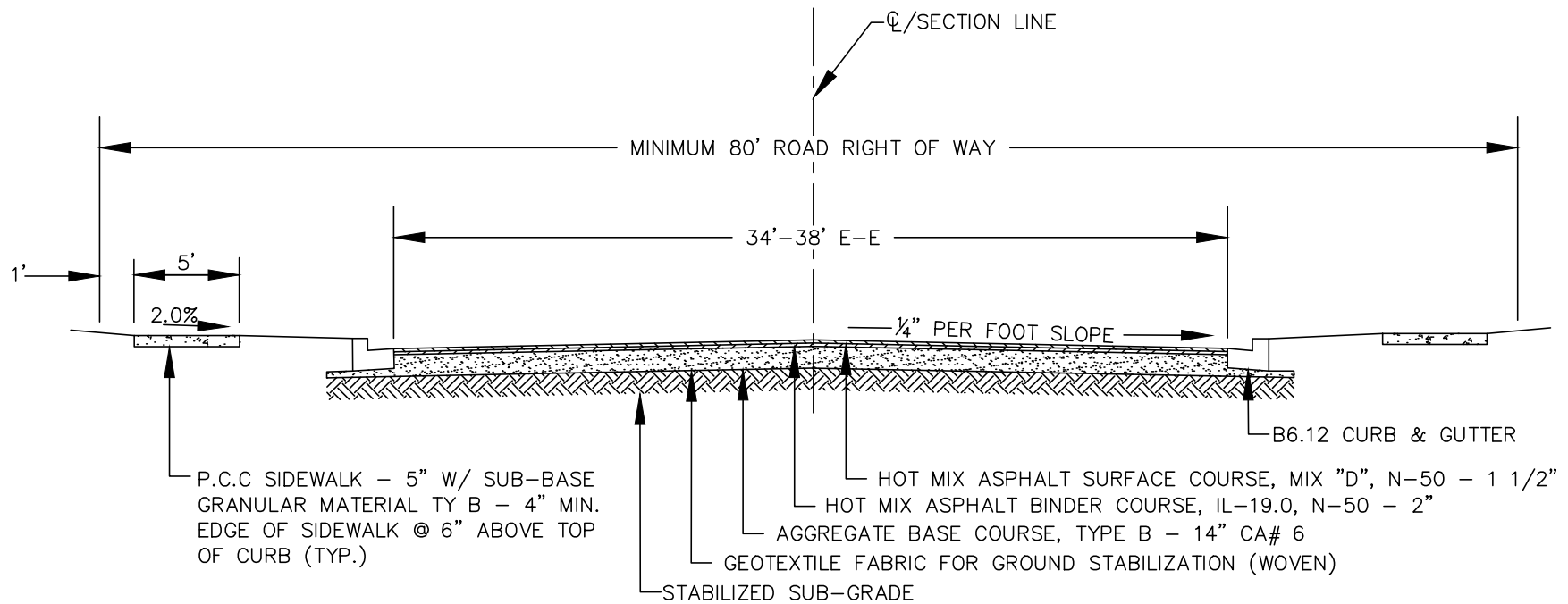


JAN 2014

NOTES:

1. PAVEMENT STRUCTURE SHALL MATCH ROADWAY APPROACH

VILLAGE OF BRADLEY, IL. CONSTRUCTION STANDARDS FOR TYPICAL CUL-DE-SAC
STANDARD # ROW-1040



## TYPICAL NEIGHBORHOOD COLLECTOR CROSS SECTION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATION FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

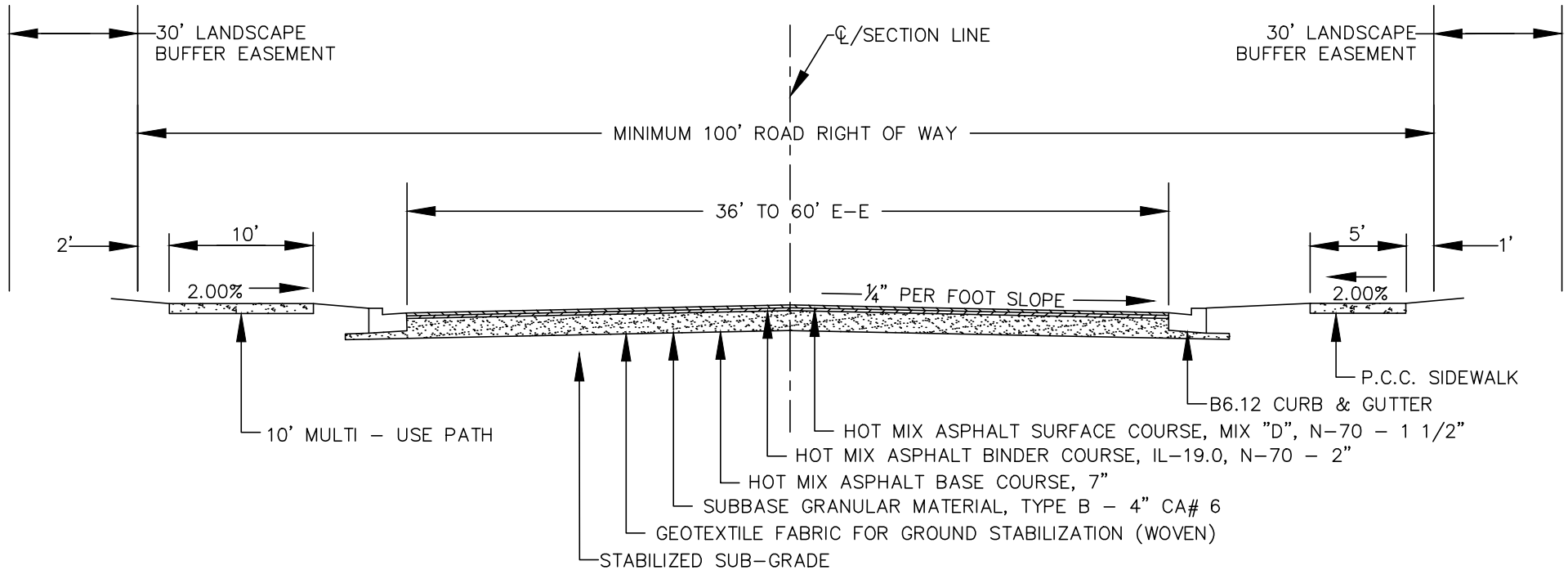
### NOTES:

1. IF SURFACE COURSE IS NOT PLANNED TO BE PLACED WITHIN 60 DAYS AFTER BINDER THEN INCREASE BINDER THICKNESS TO TWO(2) INCHES. (KEEP SURFACE @ 1 1/2 INCHES).
2. SOIL CONDITIONS MAY INDICATE ADDITIONAL PAVEMENT STRUCTURE IS REQUIRED
3. A MULTI-USE PATH MAY BE SUBSTITUTED FOR THE SIDEWALK WHERE PLANNED

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL NEIGHBORHOOD  
COLLECTOR STREET  
CROSS SECTION

STANDARD # ROW-1050



## TYPICAL COLLECTOR STREET CROSS SECTION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

JAN 14

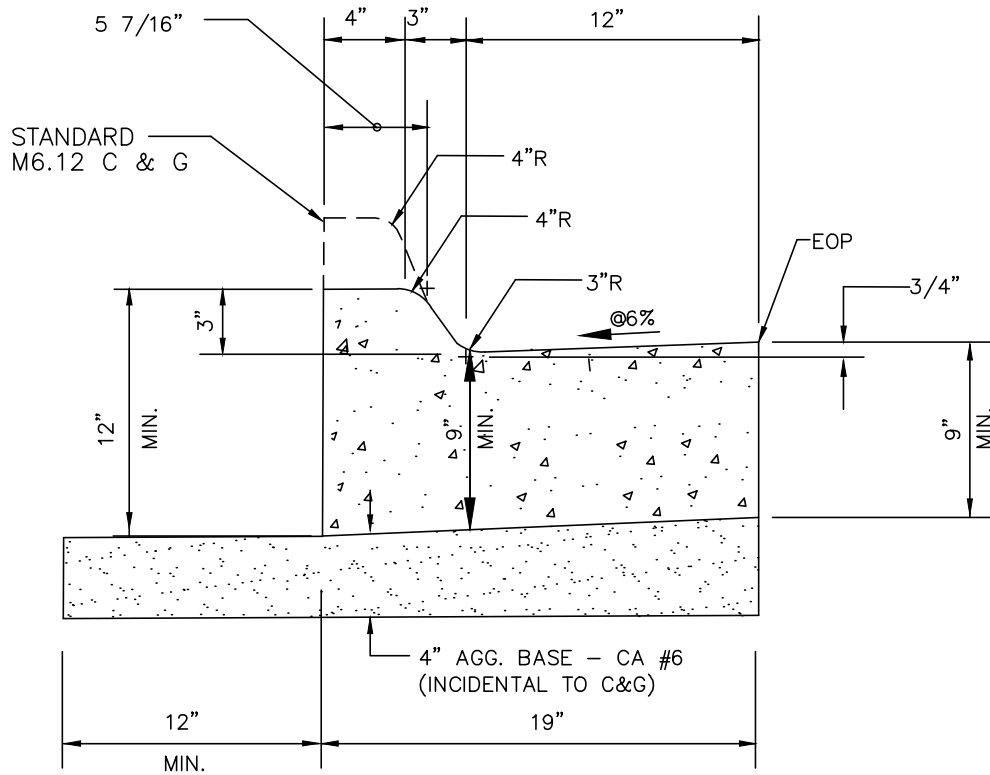
**NOTES:**

1. THE VILLAGE OF BRADLEY MAY REQUEST STUDIES TO DETERMINE APPROPRIATE COLLECTOR STREET GEOMETRY AND STRUCTURE

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL COLLECTOR STREET  
CROSS SECTION

STANDARD # ROW-1060





## COMBINATION CONCRETE CURB & GUTTER – TYPE M3.12

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

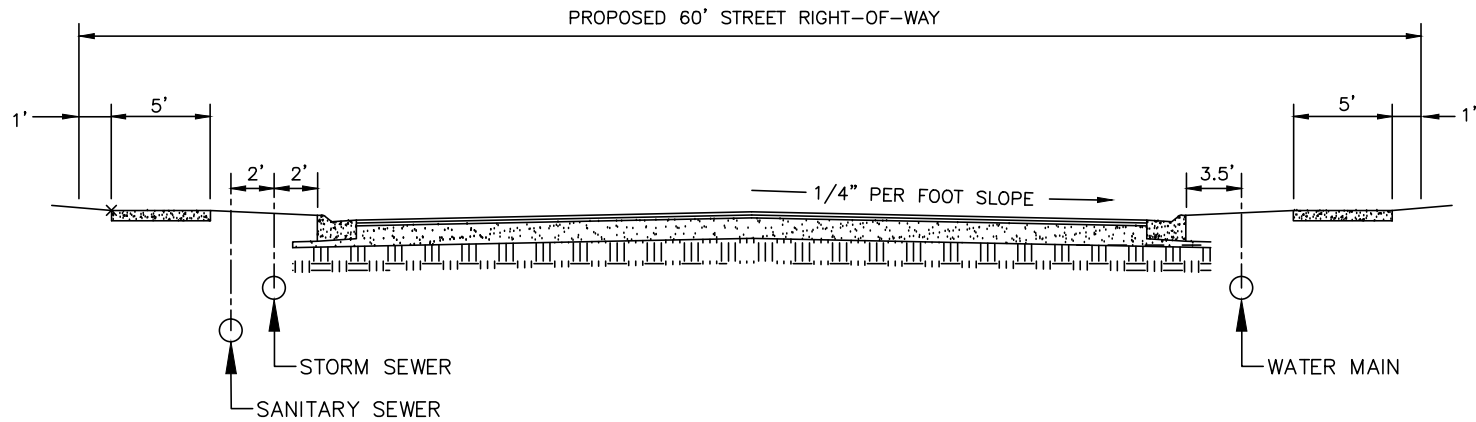
### NOTES:

1. PROVIDE 3" DEEP SAW CUT AT 20' ON CENTER AND 1" THICK FULL DEPTH EXPANSION JOINT AT 200' ON CENTER

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
COMBINATION CONCRETE  
CURB & GUTTER  
TYPE M3.12

STANDARD # ROW-1070



LOCAL ROAD PREFERRED UTILITY LOCATIONS

N.T.S.

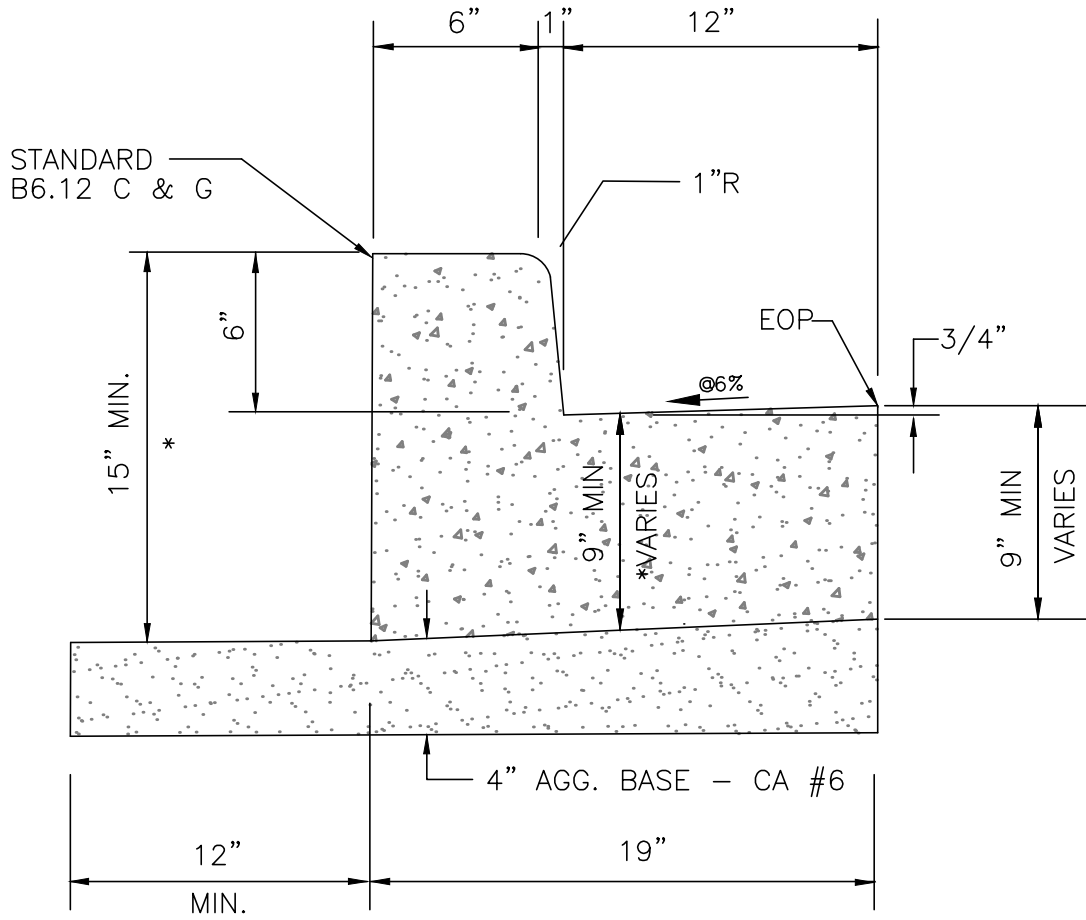
NOTES:

1. PREFERENCE SHALL BE SHOWN FOR TELEPHONE AND ELECTRIC SERVICE LINES BEING PLACED IN REAR YARD PUBLIC UTILITY EASEMENT AREAS

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
LOCAL ROAD PREFERRED  
UTILITY LOCATIONS

STANDARD # ROW-1075



\* GUTTER PAN DEPTH INCREASE TO 12" WHEN ADJACENT TO COLLECTOR & ARTERIAL STREETS

**COMBINATION CONCRETE CURB AND GUTTER – TYPE B6.12**

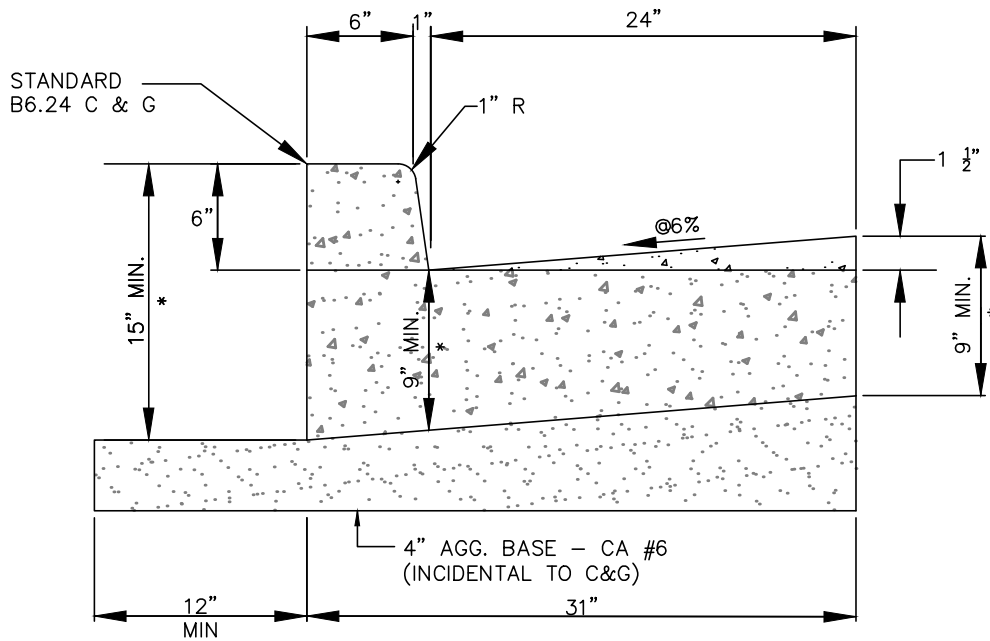
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

- NOTES:
1. THE VILLAGE OF BRADLEY MAY REQUEST STUDIES TO DETERMINE APPROPRIATE COLLECTOR STREET GEOMETRY AND STRUCTURE
  2. PROVIDE 3" DEEP SAW CUT AT 20' ON CENTER AND 1" THICK EXPANSION JOINT AT 200' ON CENTER

VILLAGE OF BRADLEY, IL.  
 CONSTRUCTION STANDARDS  
 FOR  
 COMBINATION CONCRETE  
 CURB & GUTTER  
 TYPE B6.12

STANDARD # ROW-1080



\* GUTTER PAN DEPTH INCREASE TO 12" WHEN  
ADJACENT TO COLLECTOR & ARTERIAL STREETS

## COMBINATION CONCRETE CURB AND GUTTER – TYPE B6.24

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

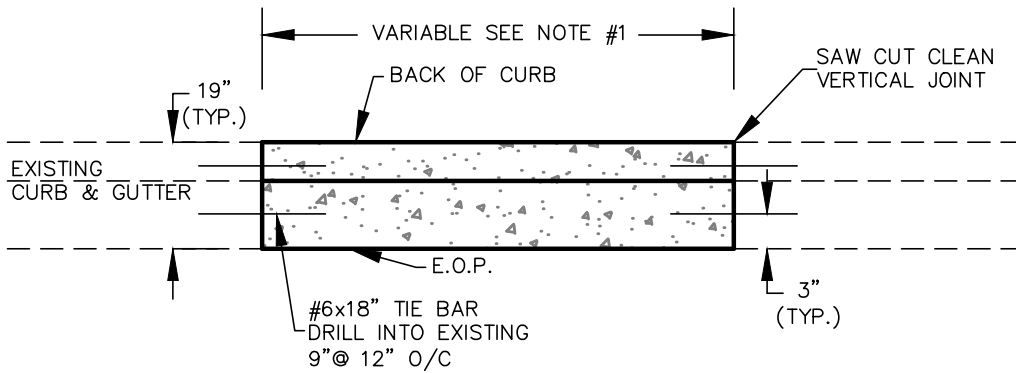
### NOTES:

1. THE VILLAGE OF BRADLEY MAY REQUEST STUDIES TO DETERMINE APPROPRIATE COLLECTOR STREET GEOMETRY AND STRUCTURE.
2. PROVIDE 3" DEEP SAW CUT AT 20' ON CENTER AND 1" THICK EXPANSION JOINT AT 200' ON CENTER

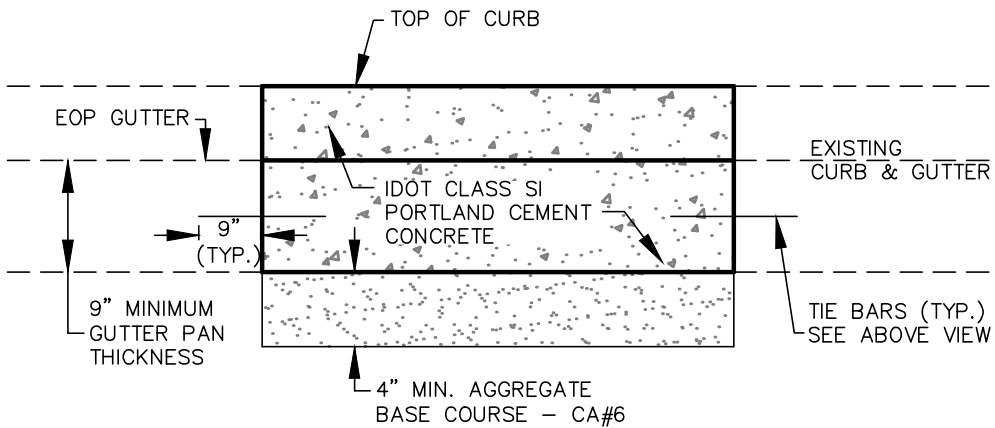
JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
COMBINATION CONCRETE  
CURB & GUTTER  
TYPE B6.24

STANDARD # ROW-1090



TOP VIEW



PROFILE VIEW

## TYPICAL CONCRETE CURB AND GUTTER RESTORATION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

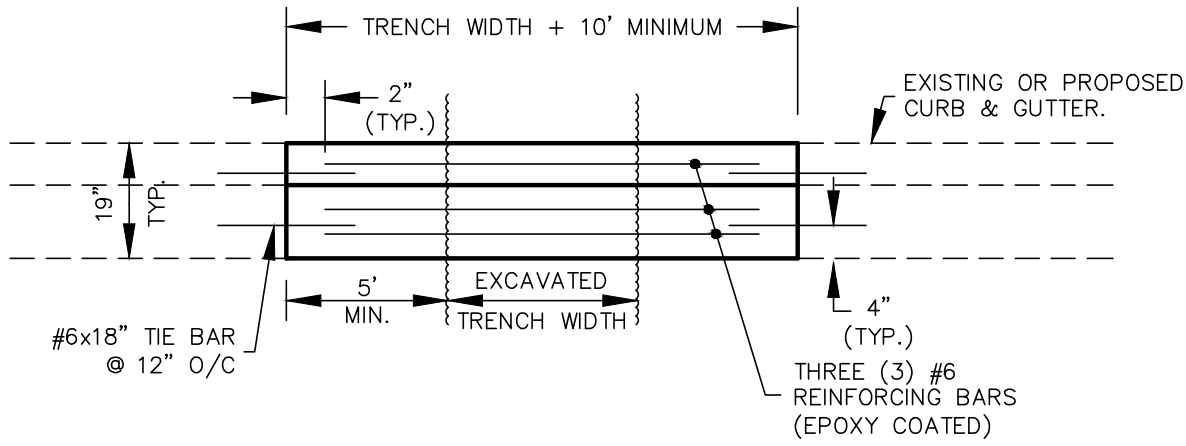
NOTES:

1. SAW CUT CONTRACTION JOINTS IF CURB SECTION IS LONGER THAN 20 FEET AT NO GREATER THAN 20' O/C.
2. NO EXPANSION JOINT REQUIRED UNLESS SECTIONS REMOVED INCLUDED EXISTING EXPANSION JOINT. A MINIMUM 3/4" MATERIAL TO FULL SHAPE OF REQUIRED CURB & GUTTER.
3. SEE VILLAGE OF BRADLEY STANDARD # ST-1092 FOR TYPICAL CONCRETE CURB & GUTTER REINFORCEMENT OVER TRENCH.

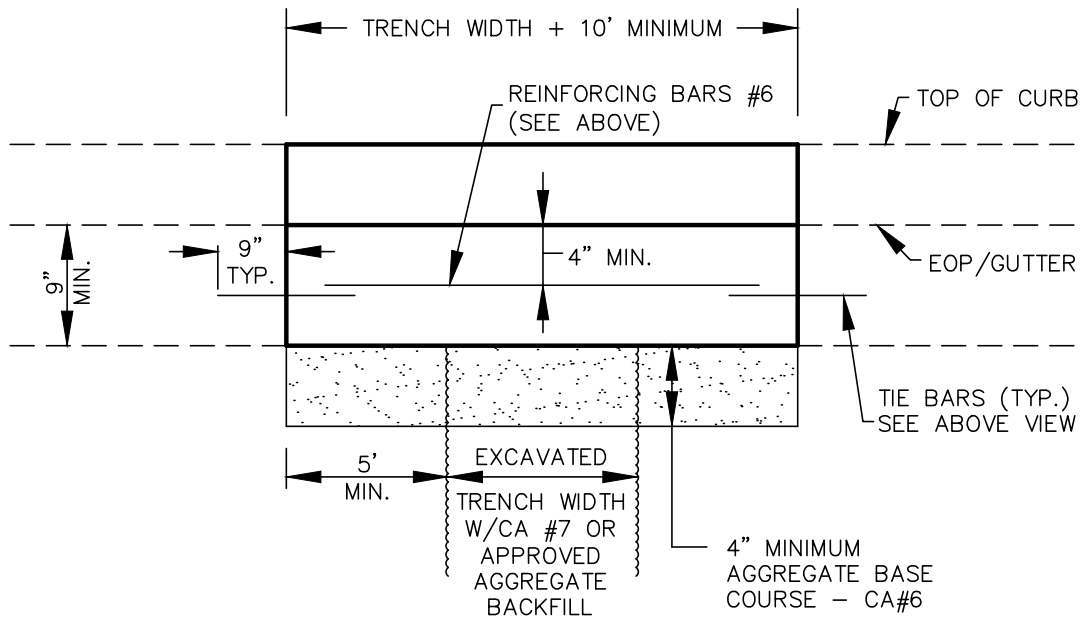
JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL CONCRETE CURB &  
GUTTER RESTORATION

STANDARD # ROW-1091



TOP VIEW



PROFILE VIEW

## TYPICAL CONCRETE CURB AND GUTTER RESTORATION OVER TRENCH

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS  
FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

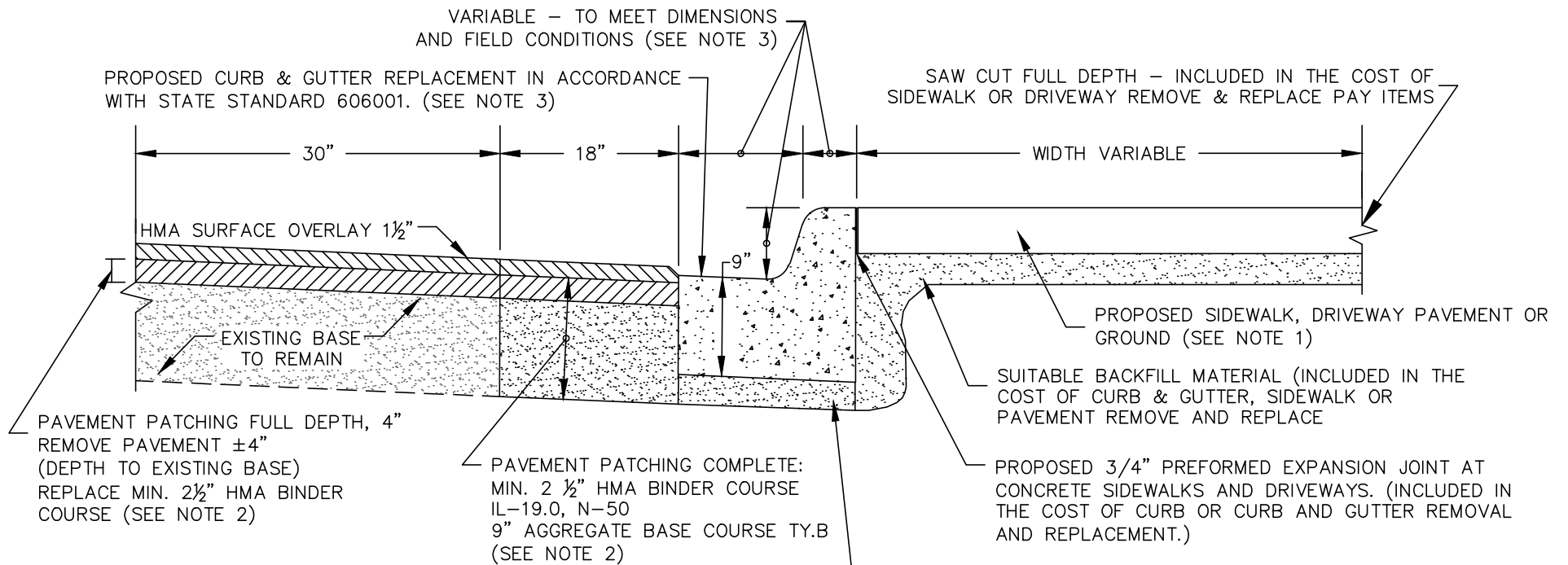
NOTES:

1. SAW CUT CONTRACTION JOINTS IF CURB SECTION IS LONGER THAN 20 FEET AT NO GREATER THAN 20' O/C.
2. NO EXPANSION JOINT REQUIRED UNLESS SECTIONS REMOVED INCLUDED EXISTING EXPANSION JOINT. A MINIMUM 3/4" MATERIAL TO FULL SHAPE OF REQUIRED CURB & GUTTER.

JAN 2015

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL CONCRETE CURB &  
GUTTER RESTORATION  
OVER TRENCH

STANDARD # ROW-1092



NOTES:

1. SIDEWALK OR DRIVEWAY PAVEMENT SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY. TURF RESTORATION SHALL BE INCLUDED IN THE COST OF CONCRETE CURB & GUTTER REMOVE AND REPLACE.
2. HMA SURFACE (OVERLAY), PAVEMENT PATCHING FULL DEPTH 4", AND PAVEMENT PATCHING COMPLETE WILL BE PAID FOR SEPARATELY.
3. CURB & GUTTER SHALL MATCH THE SHAPE OF THE EXISTING CURB & GUTTER UNLESS OTHERWISE SPECIFIED.
4. THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB & GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606.
5. THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB & GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL & REPLACEMENT 4" OR LESS IS INCLUDED IN THE COST OF CURB OR CURB & GUTTER REMOVE & REPLACE.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

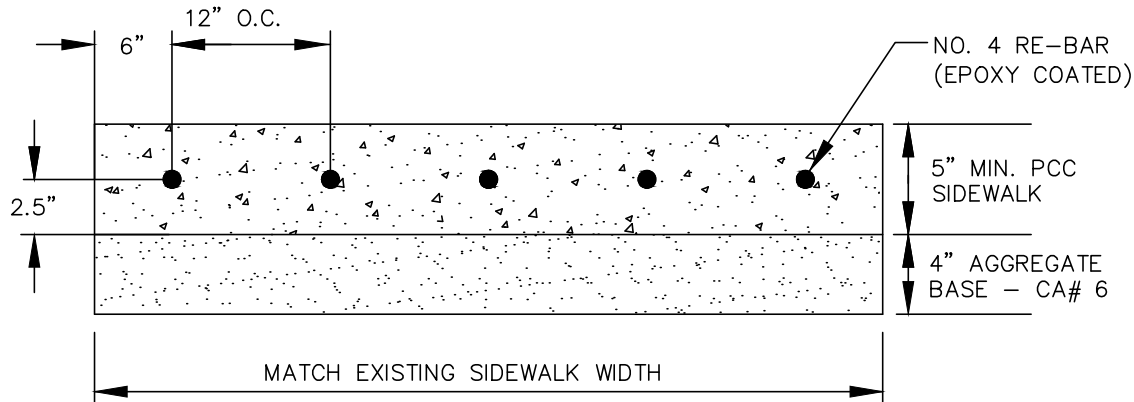
## CONCRETE CURB AND GUTTER REMOVE AND REPLACE

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS  
FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

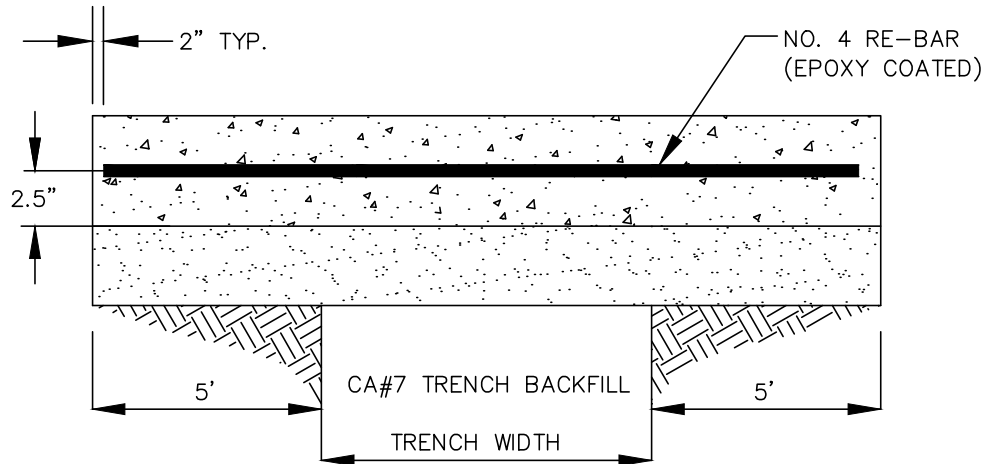
JAN 2017

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL CONCRETE CURB &  
GUTTER REMOVE AND  
REPLACE

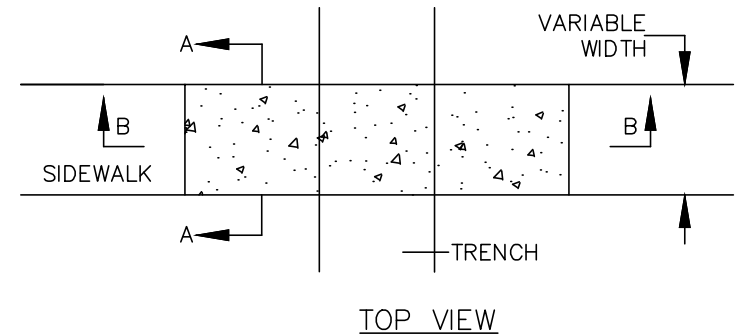
STANDARD # ROW-1093



SECTION A-A



SECTION B-B



NOTES:

1. SEE VILLAGE OF BRADLEY STANDARD # ST-1101 FOR TYPICAL SIDEWALK RESTORATION

## TYPICAL SIDEWALK RESTORATION OVER TRENCH

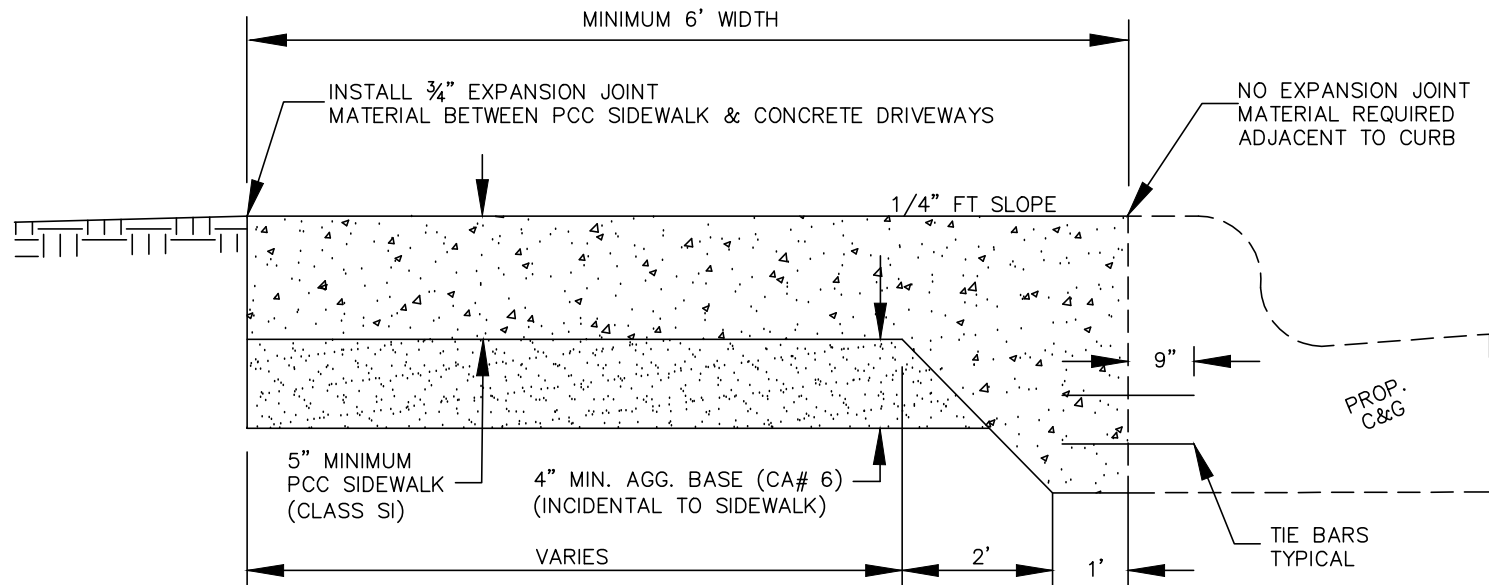
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

JAN 2015

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL SIDEWALK  
RESTORATION OVER TRENCH

STANDARD # ROW-1095





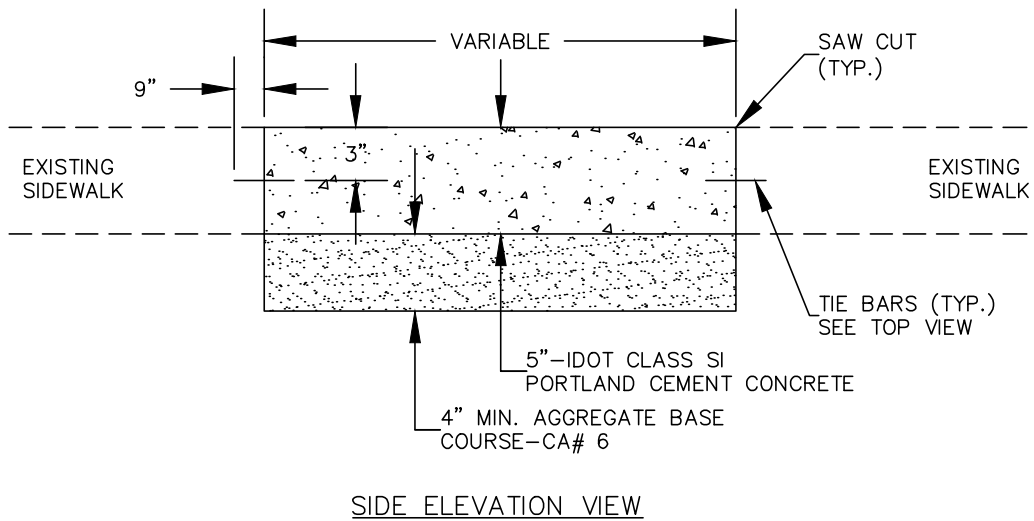
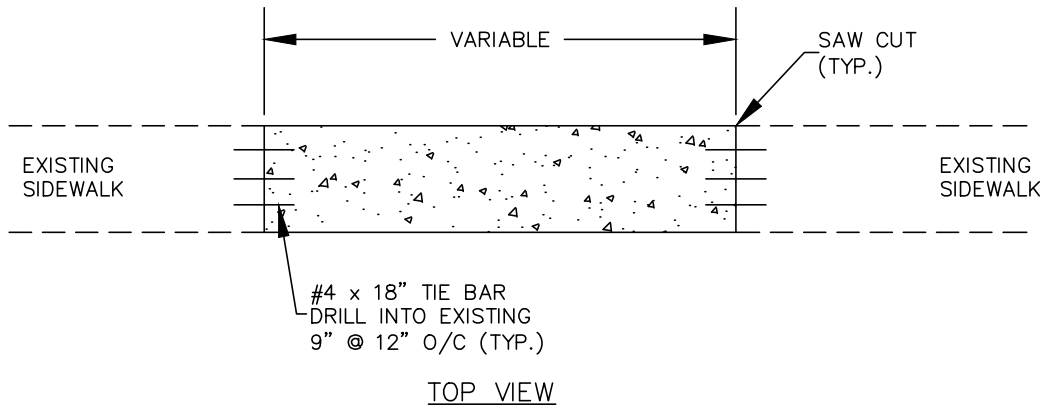
## TYPICAL SIDEWALK ADJACENT TO CURB

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL SIDEWALK  
ADJACENT TO CURB

STANDARD # ROW-1100



## TYPICAL SIDEWALK RESTORATION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

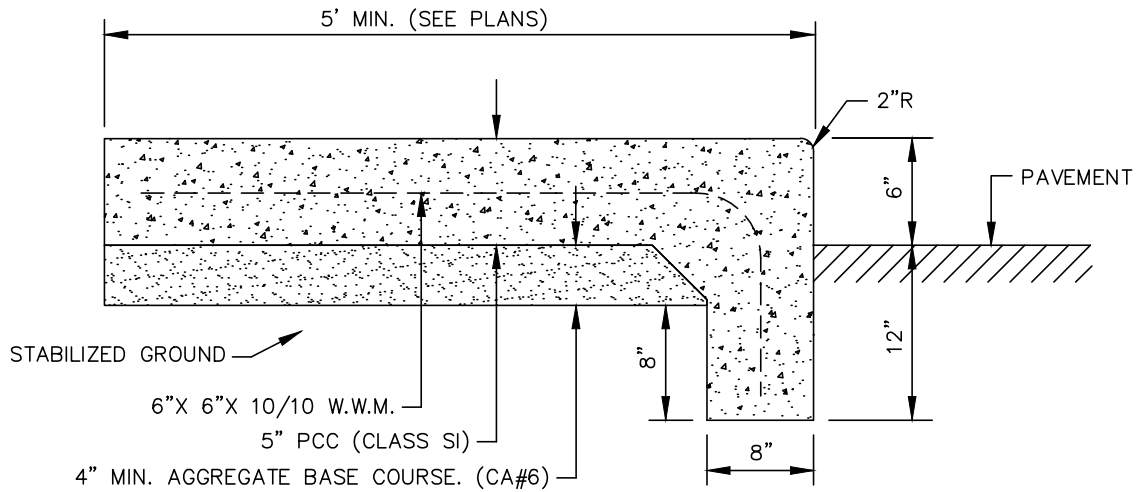
NOTES:

- 1) NO EXPANSION JOINT REQUIRED UNLESS SECTIONS REMOVED INCLUDED EXISTING EXPANSION JOINT.
- 2) SEE DETAIL STANDARD #ST-1095 FOR SIDEWALK REINFORCEMENT OVER TRENCHED CROSSING

JAN 2014

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL SIDEWALK  
RESTORATION

STANDARD # ROW-1101



## TYPICAL MONOLITHIC CURB & SIDEWALK

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

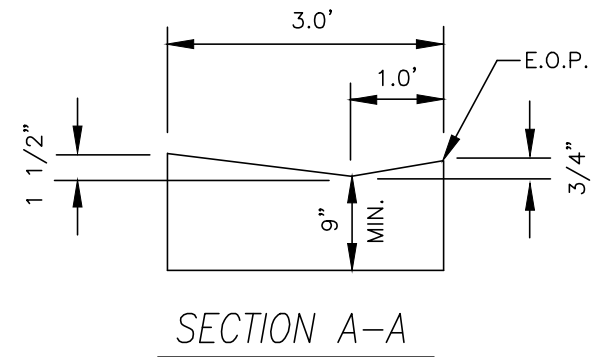
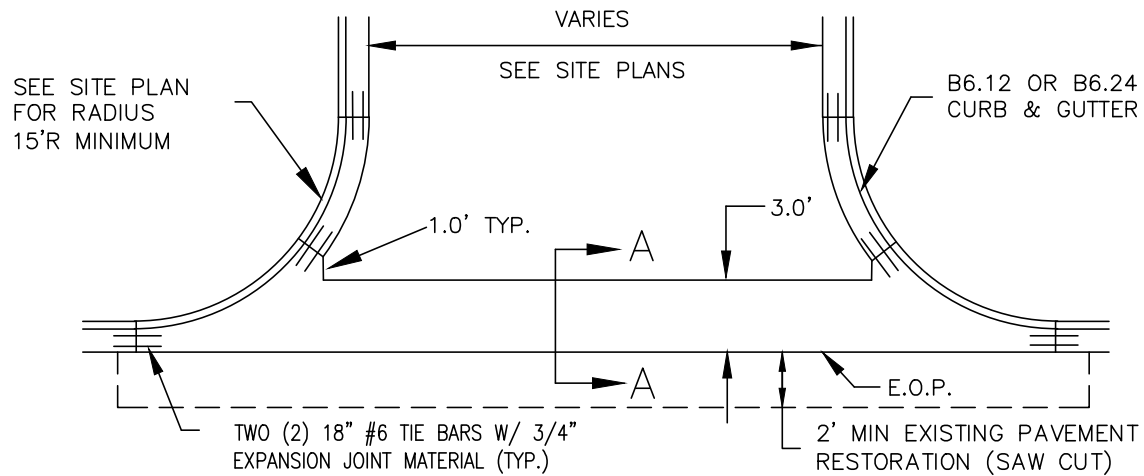
JAN 2014

### NOTES:

1. CONCRETE JOINTS SHALL BE TOOL FORMED & SAW CUT TO A DEPTH NOT LESS THAN 1 ½ INCHES

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL MONOLITHIC  
CURB & SIDEWALK

STANDARD # ROW-1102



## TYPICAL HEAVY DUTY DEPRESSED CURB

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

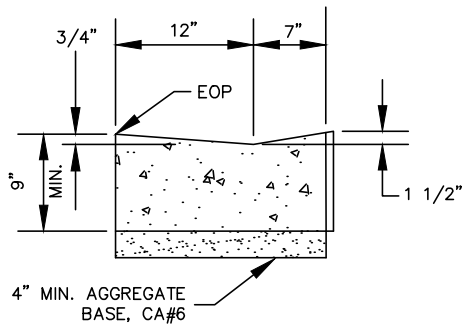
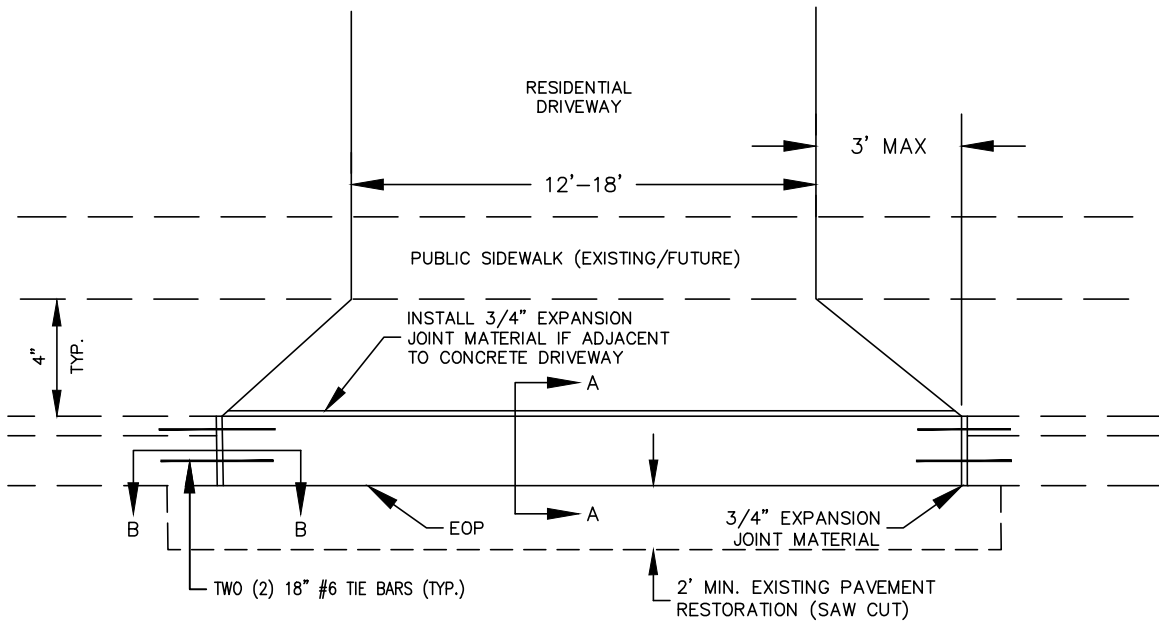
### NOTES:

1. FOR USE AT THRU STREET INTERSECTIONS AND COMMERCIAL OR INDUSTRIAL ENTRANCES.

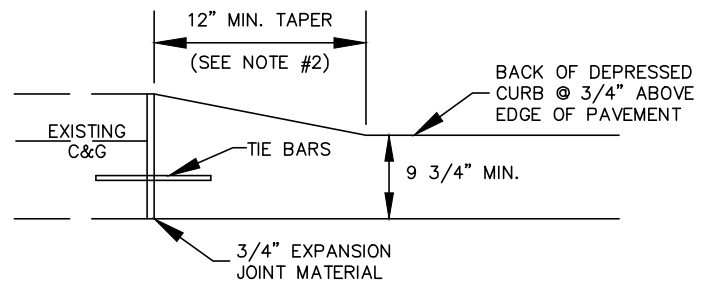
JAN 2015

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL HEAVY DUTY  
DEPRESSED CURB

STANDARD # ROW-1110



SECTION A-A



SECTION B-B

### TYPICAL LIGHT DUTY DEPRESSED CURB

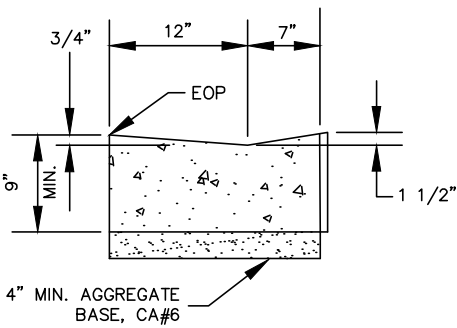
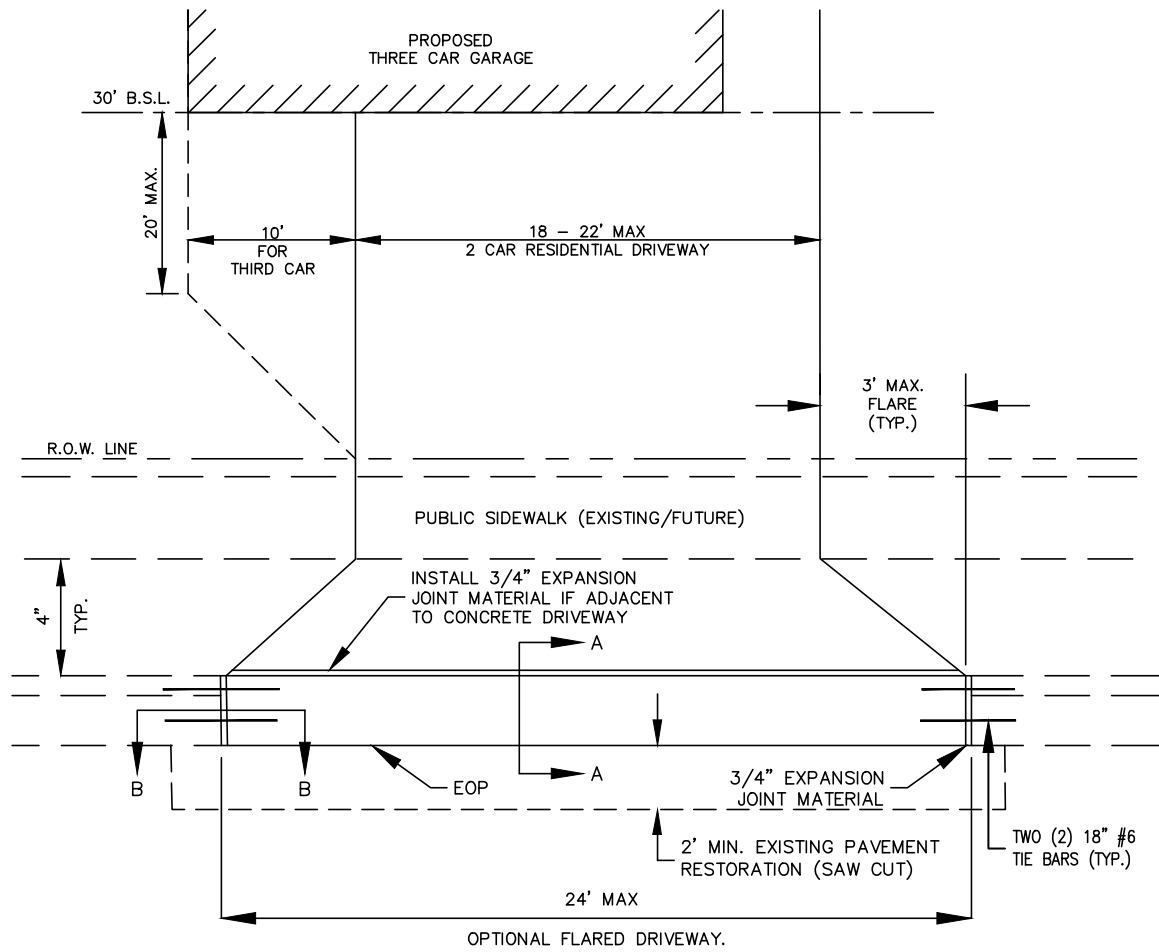
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

NOTES:

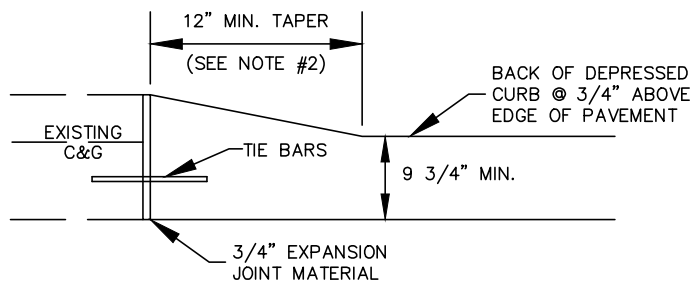
1. EXISTING FULL CURB & GUTTER TO BE REMOVED. SAW CUT ENDS OF REMAINING CURB & GUTTER TO PROVIDE CLEAN SMOOTH VERTICAL ENDS.
2. IF SIDEWALK ADJACENT TO BACK OF CURB, THEN CURB HEIGHT TAPER SHALL BE ADA ACCESSIBLE.
3. ANY DAMAGE TO STREET PAVEMENT SHALL BE SAW CUT 2' WIDE FROM EOP AND REPLACED.
4. CURB SHALL BE PORTLAND CEMENT CONCRETE CLASS SI AND INSTALLED ON A MINIMUM 4 INCH AGGREGATE BASE – CA#6

JAN 2014

<p>VILLAGE OF BRADLEY, IL CONSTRUCTION STANDARDS FOR TYPICAL LIGHT DUTY DEPRESSED CURB</p>
<p>STANDARD # ROW-1115</p>



SECTION A-A



SECTION B-B

## TYPICAL LIGHT DUTY DEPRESSED CURB – 3 CAR GARAGE

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

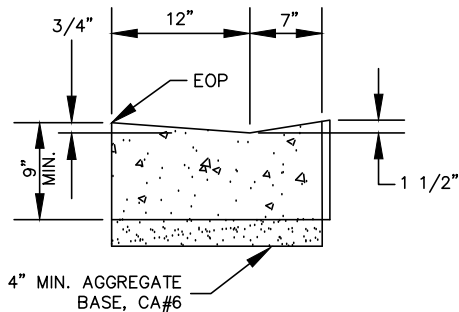
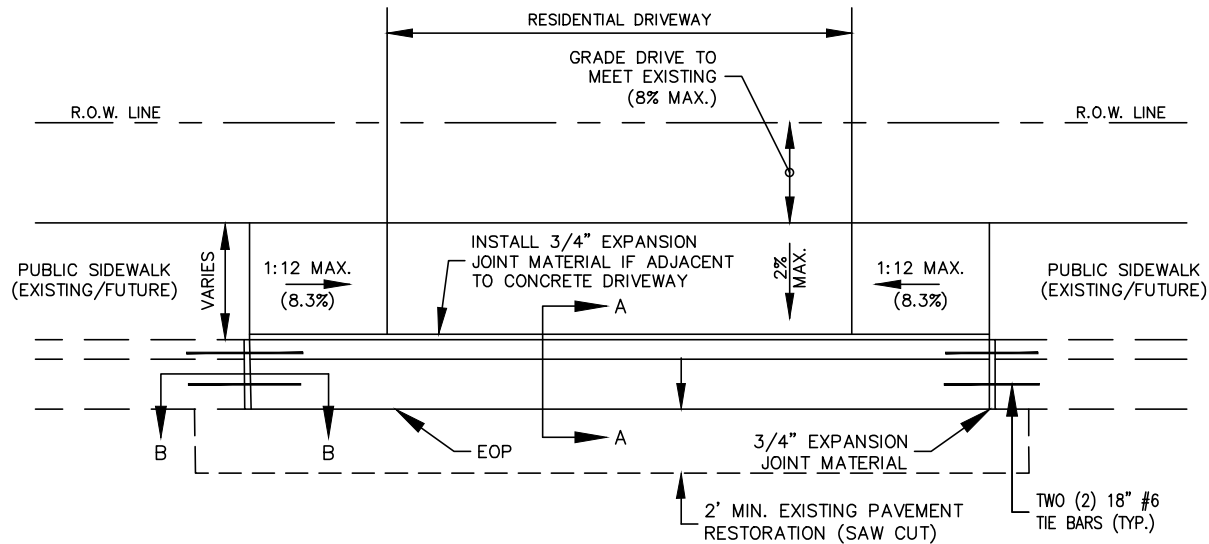
NOTES:

1. EXISTING FULL CURB & GUTTER TO BE REMOVED. SAW CUT ENDS OF REMAINING CURB & GUTTER TO PROVIDE CLEAN SMOOTH VERTICAL ENDS.
2. IF SIDEWALK ADJACENT TO BACK OF CURB, THEN CURB HEIGHT TAPER SHALL BE ADA ACCESSIBLE.
3. ANY DAMAGE TO STREET PAVEMENT SHALL BE SAW CUT 2' WIDE FROM EOP AND REPLACED.
4. CURB SHALL BE PORTLAND CEMENT CONCRETE CLASS SI AND INSTALLED ON A MINIMUM 4 INCH AGGREGATE BASE – CA#6

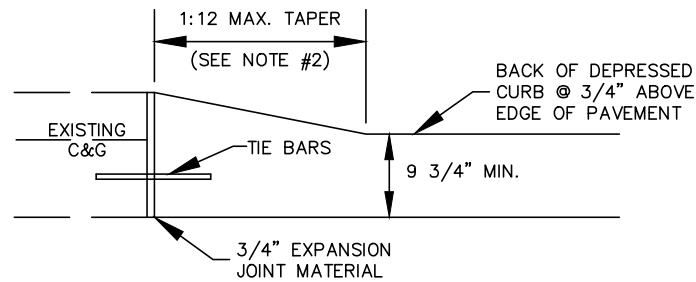
JAN 2014

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL LIGHT DUTY  
 DEPRESSED CURB  
 3 CAR GARAGE

STANDARD # ROW-1116



SECTION A-A



SECTION B-B

NOTES:

- EXISTING FULL CURB & GUTTER TO BE REMOVED. SAW CUT ENDS OF REMAINING CURB & GUTTER TO PROVIDE CLEAN SMOOTH VERTICAL ENDS.
- SIDEWALK SHALL BE ADA ACCESSIBLE.
- STREET PAVEMENT SHALL BE SAW CUT 2' WIDE FROM EOP AND REPLACED TO MATCH EXISTING CROSS SECTION.
- CURB SHALL BE PORTLAND CEMENT CONCRETE CLASS SI AND INSTALLED ON A MINIMUM 4 INCH AGGREGATE BASE - CA#6
- SEE VILLAGE OF BRADLEY STANDARD 'PKG 6040' FOR SIDEWALK CROSS SECTION AT DRIVEWAY

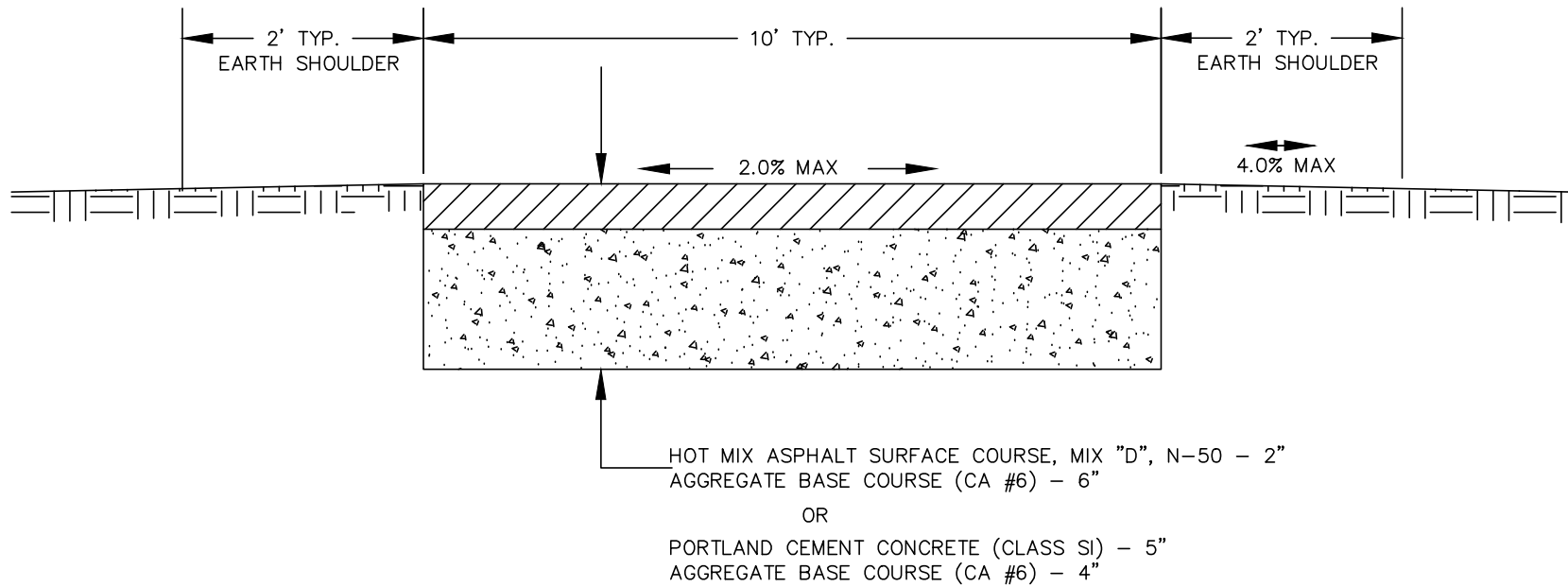
JAN 2015

TYPICAL LIGHT DUTY DEPRESSED CURB WITH ADJACENT SIDEWALK

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL LIGHT DUTY  
DEPRESSED CURB  
W/ ADJACENT SIDEWALK

STANDARD # ROW-1118



## TYPICAL SHARED USE PATH CROSS SECTION

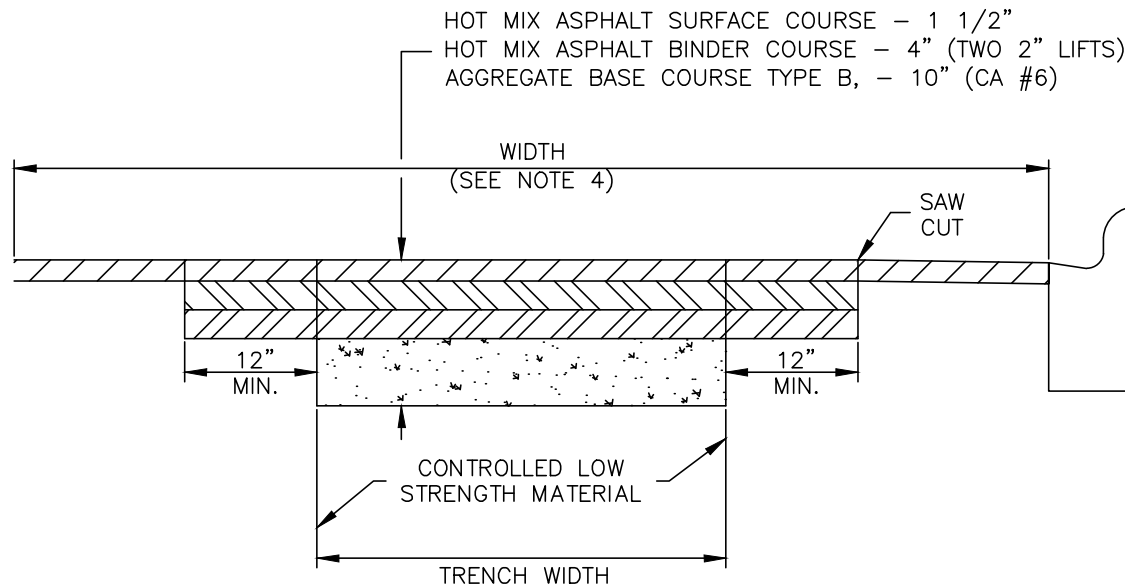
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

VILLAGE OF BRADLEY, IL.  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL SHARED USE  
 CROSS SECTION

JAN 2014

STANDARD # ROW-1120





## TYPICAL LOCAL ROAD TRENCH RESTORATION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

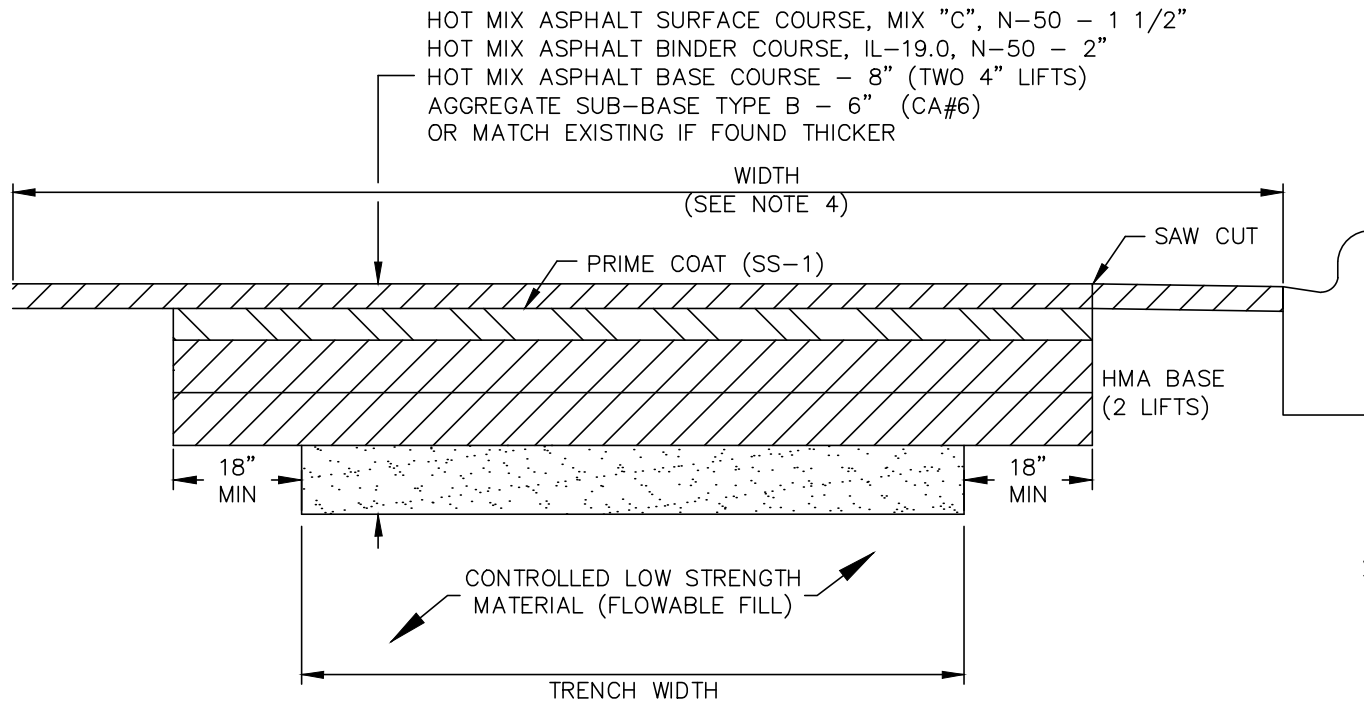
### NOTES:

- 1) SAW CUT AND REPLACE FULL DEPTH OF PAVEMENT 12" OUTSIDE OF TRENCH EDGE.
- 2) BACKFILL TRENCH WITH CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL) UP TO BOTTOM OF PROPOSED PAVEMENT DEPTH.
- 3) MILL OR SAW CUT DAMAGED PAVEMENT EDGES BEFORE PLACING SURFACE COURSE.
- 4) IF EDGE OF TRENCH IS WITHIN 5' OF CURB, REMOVE AND REPLACE FULL DEPTH OF PAVEMENT AND BASE TO CURB LINE. MILL SURFACE TO CENTERLINE OF ROAD OR AS REQUIRED BY VILLAGE. MINIMUM PATCH WIDTH IS 4'.

MARCH 2019

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL LOCAL ROAD  
TRENCH RESTORATION

STANDARD # ROW-1130



## TYPICAL COLLECTOR STREET TRENCH RESTORATION

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

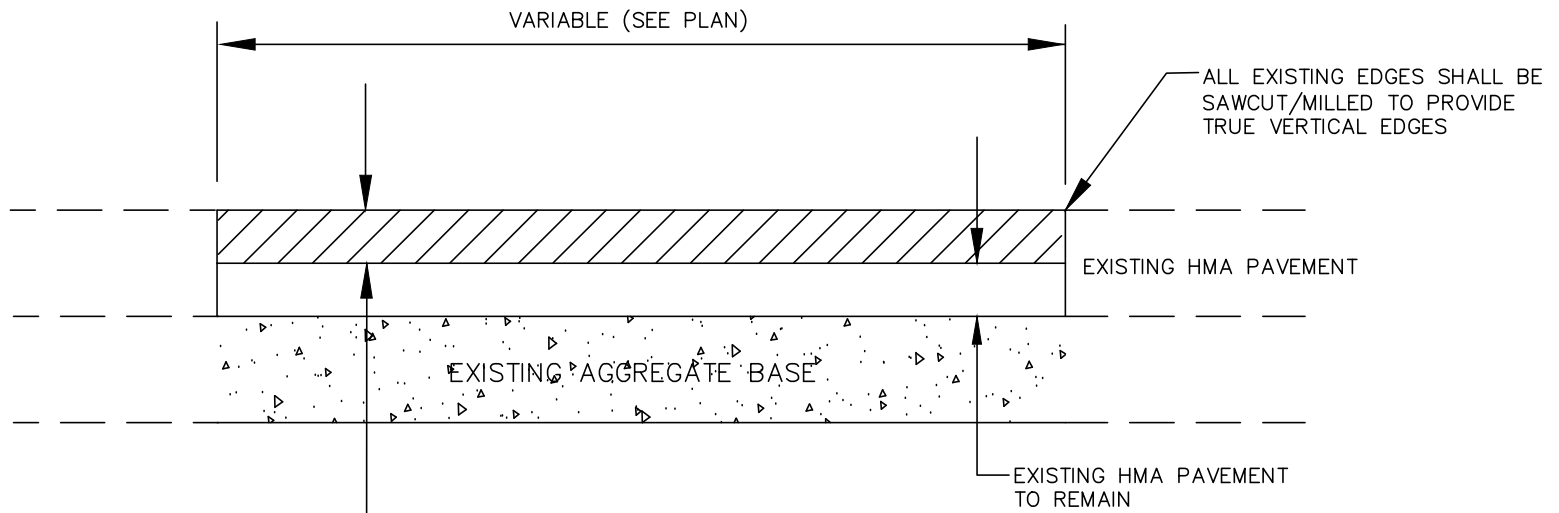
MARCH 2019

### NOTES:

1. HMA BINDER & HMA BASE COURSE SHALL BE INSTALLED SAME DAY IN REQUIRED LIFTS. SURFACE COURSE SHALL BE PLACED ON SEPARATE DAY TO ALLOW BINDER AND BASE COURSE TO COOL. (STEEL PLATE ENTIRE PATCH UNTIL SURFACE COURSE IS PLACED).
2. BACKFILL TRENCH WITH CONTROLLED LOW STRENGTH MATERIAL (FLOWABLE FILL) UP TO BOTTOM OF PROPOSED PAVEMENT DEPTH.
3. MILL OR SAW CUT DAMAGED PAVEMENT EDGES BEFORE PLACING SURFACE COURSE
4. IF EDGE OF TRENCH IS WITHIN 5' OF CURB, REMOVE AND REPLACE FULL DEPTH OF PAVEMENT AND BASE TO CURB LINE. MILL SURFACE TO CENTERLINE OF ROAD OR AS REQUIRED BY VILLAGE. MINIMUM PATCH WIDTH IS 6'.

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL COLLECTOR STREET  
TRENCH RESTORATION

STANDARD # ROW-1140



COLD MILL EXISTING PAVEMENT - 2"  
 CLEAN ALL LOOSE DEBRIS AND APPLY BITUMINOUS MATERIAL (PRIME COAT)  
 RC#70 FOR FULL COVERAGE OF PATCH AREA AND VERTICAL EDGES.  
 REPLACE WITH 2" INCHES OF HOT MIX ASPHALT SURFACE COURSE, MIX "C",  
 N-50 TO MATCH THE EXISTING PAVEMENT SURFACE

### TYPICAL LIGHT DUTY PAVEMENT PATCH

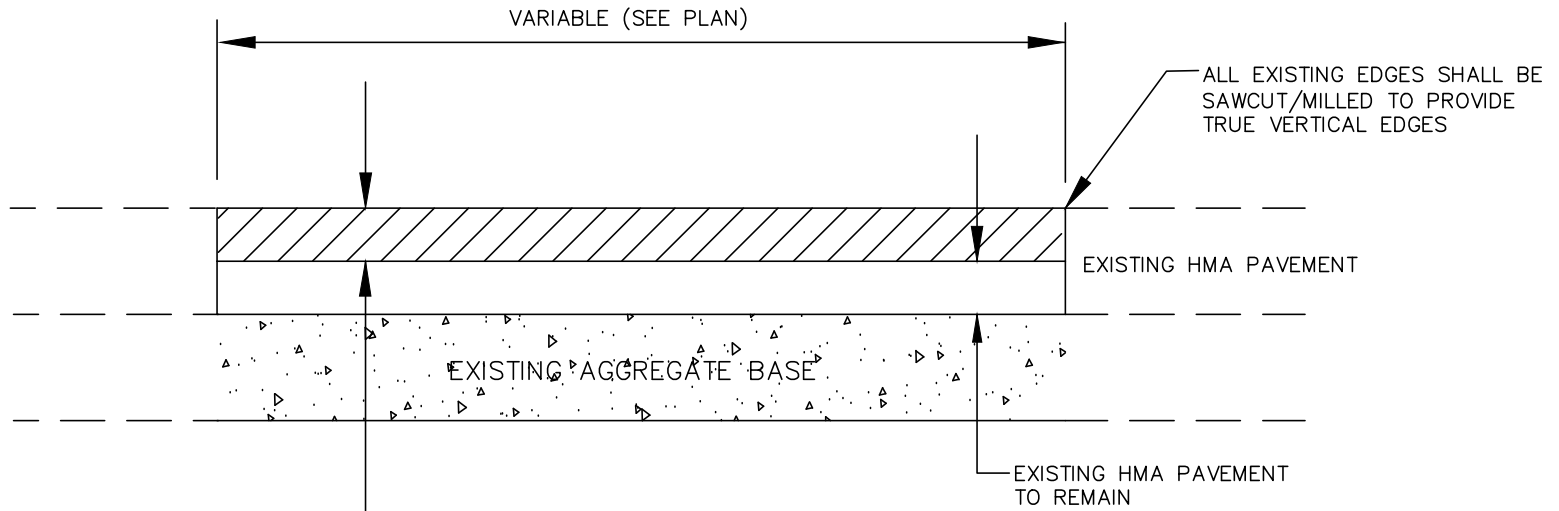
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

NOTE:  
 FOR DESIGNATED VILLAGE COLLECTOR STREETS  
 - SEE STANDARD DETAIL # ROW-1140

JAN 2014

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL LIGHT DUTY  
 PAVEMENT PATCH

STANDARD # ROW-1143



COLD MILL EXISTING PAVEMENT - 2 1/2"  
 CLEAN ALL LOOSE DEBRIS AND APPLY BITUMINOUS MATERIAL  
 (PRIME COAT) RC#70 FOR FULL COVERAGE OF PATCH AREA AND  
 VERTICAL EDGES. THE PAVEMENT SHALL BE REPLACED WITH 2  
 1/2" INCHES OF HOT MIX ASPHALT SURFACE COURSE, MIX "C",  
 N-50 TO MATCH THE EXISTING PAVEMENT SURFACE

### TYPICAL MEDIUM DUTY PAVEMENT PATCH

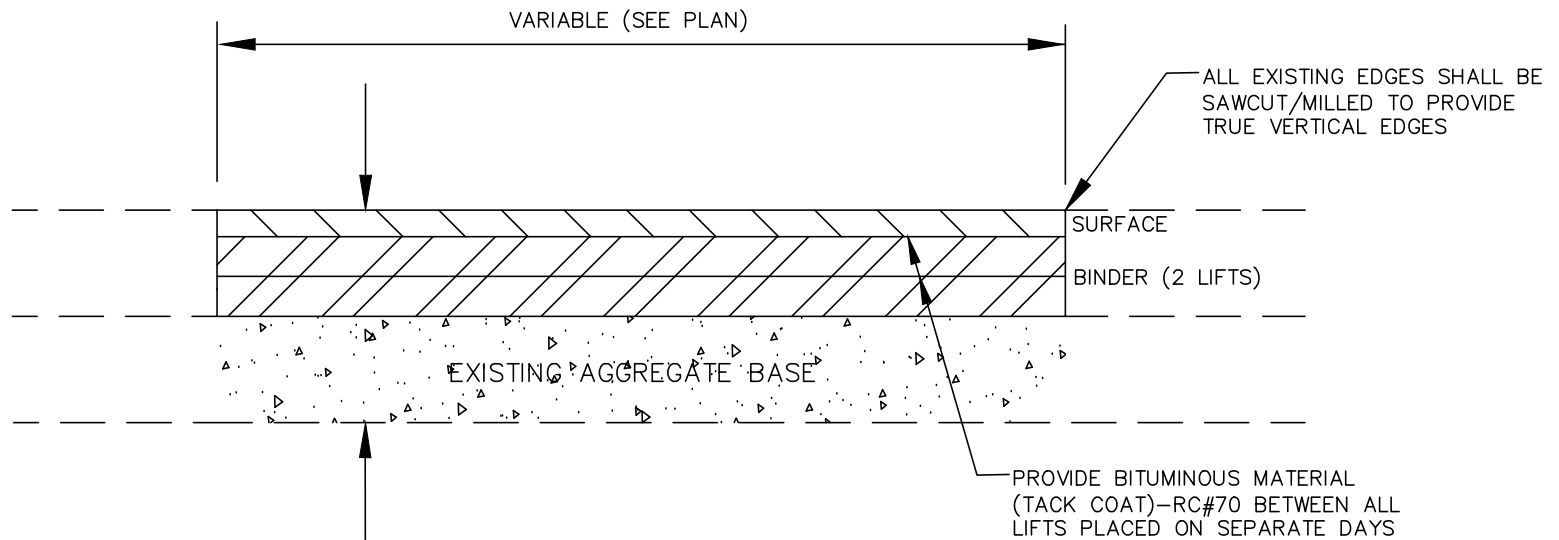
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

NOTE:  
 FOR DESIGNATED VILLAGE COLLECTOR STREETS  
 - SEE STANDARD # ROW-1140

STANDARD # ROW-1144

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL MEDIUM DUTY  
 PAVEMENT PATCH

JAN 2014



REMOVE EXISTING PAVEMENT AND RESHAPE AGGREGATE BASE AS NEEDED. APPLY BITUMINOUS MATERIAL (PRIME COAT) MC#30 FOR FULL COVERAGE OF PATCH AREA AND VERTICAL EDGES. THE PAVEMENT SHALL BE REPLACED WITH FOUR (4) INCHES OF HOT MIX ASPHALT BINDER COURSE, IL-19.0, N-50 IN TWO (2) LIFTS AND 1 1/2 INCHES OF HOT MIX ASPHALT SURFACE COURSE, MIX "C", N-50 TO MATCH THE EXISTING PAVEMENT SURFACE

### TYPICAL HEAVY DUTY PAVEMENT PATCH

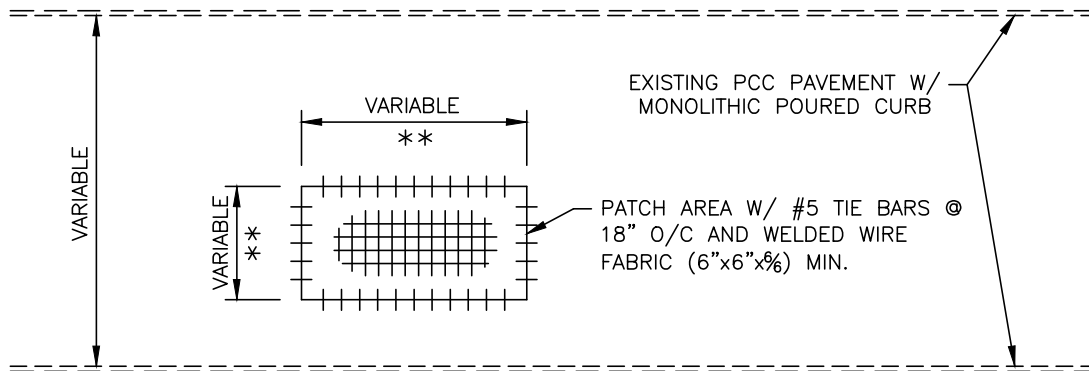
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION - CURRENT EDITION

NOTE:  
FOR DESIGNATED VILLAGE COLLECTOR STREETS  
- SEE STANDARD DETAIL #ST-1140

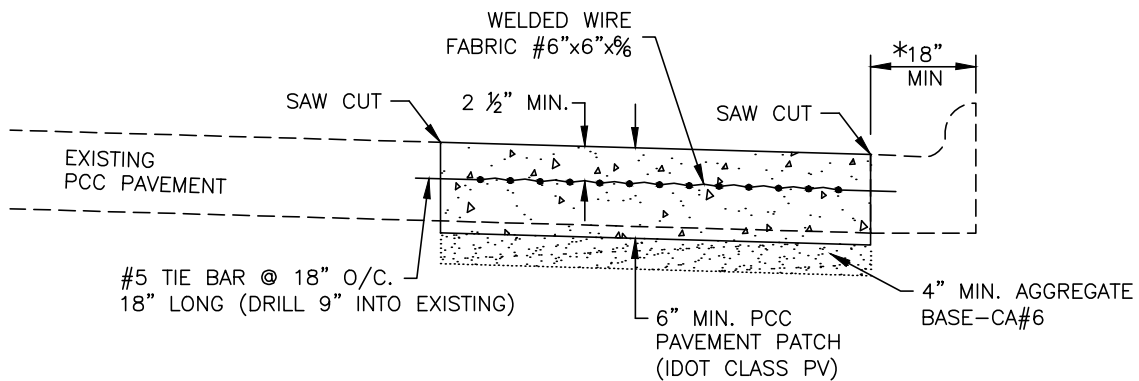
STANDARD # ROW-1145

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL HEAVY DUTY  
PAVEMENT PATCH

JAN 2014



PLAN VIEW



## TYPICAL PORTLAND CEMENT CONCRETE PAVEMENT PATCH

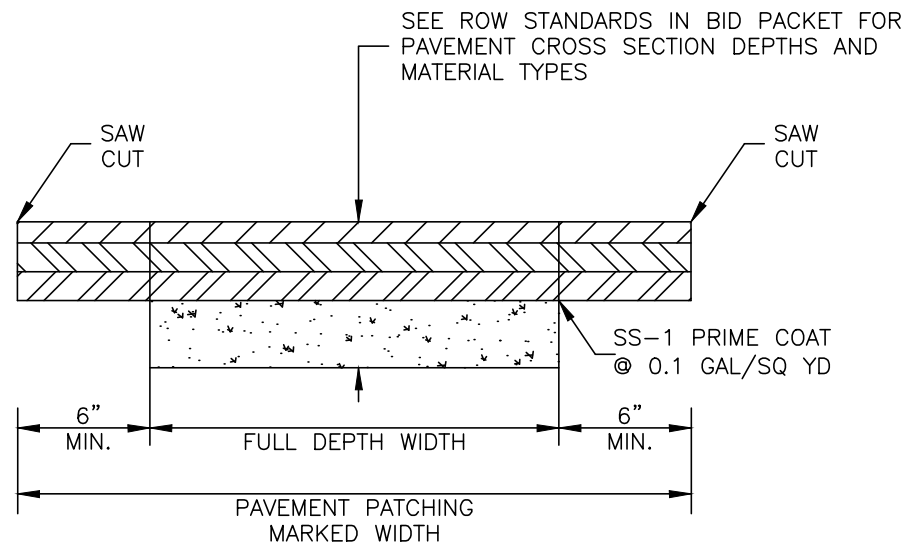
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

- \* UNLESS REPLACING CURB WITH PATCH
- \*\* SIZE AS REQUIRED

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL PORTLAND CEMENT  
CONCRETE PAVEMENT PATCH

STANDARD # ROW-1146



## TYPICAL HOT MIX ASPHALT PAVEMENT PATCH, FULL DEPTH

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

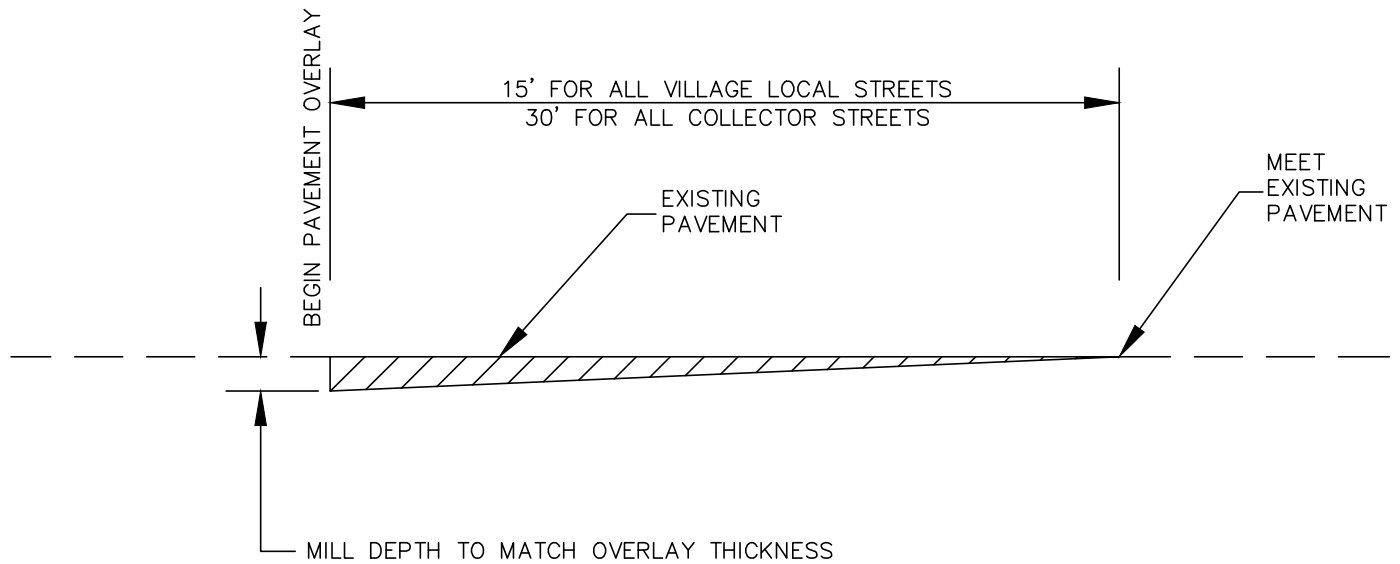
### NOTES:

- 1) SAW CUT AND REPLACE HMA PAVEMENT 6" OUTSIDE OF FULL DEPTH EXCAVATION.
- 2) REMOVE EXISTING PAVEMENT AND AGGREGATE BASE TO WIDTHS SHOWN. COMPACT AGGREGATE BASE, APPLY BITUMINOUS MATERIAL (PRIME COAT) SS-1 FOR FULL COVERAGE OF PATCH AREA AND VERTICAL EDGES. INSTALL HOT MIX ASPHALT

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL HMA PAVEMENT  
PATCH, FULL DEPTH

STANDARD # ROW-1150



## HOT MIX ASPHALT SURFACE REMOVAL – BUTT JOINT

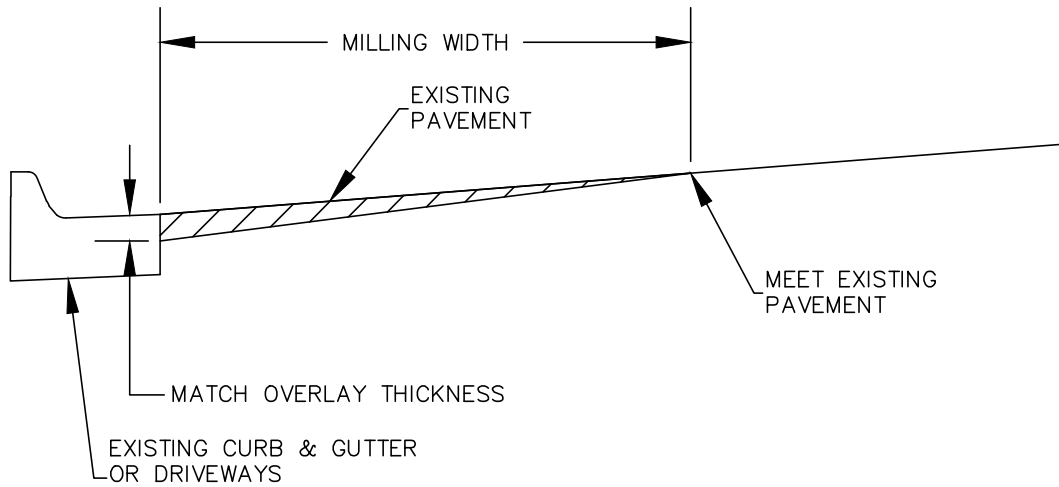
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

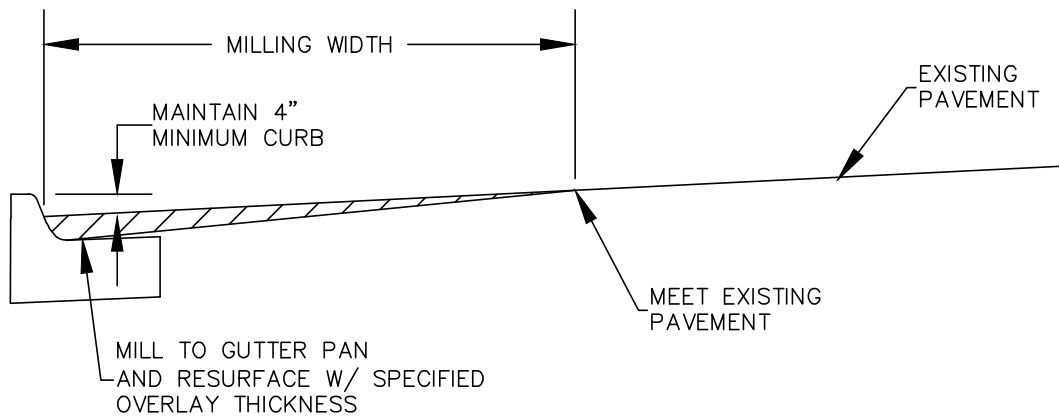
VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 HOT MIX ASPHALT SURFACE  
 REMOVAL – BUTT JOINT

STANDARD # ROW-1160





EXPOSED GUTTER



OVERLAID GUTTER

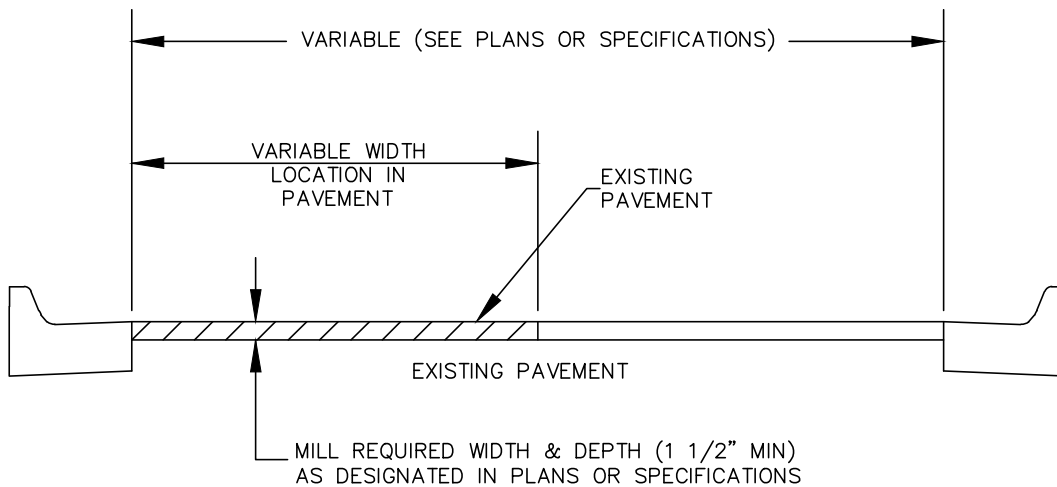
HOT MIX ASPHALT SURFACE REMOVAL – EDGE MILLING

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 HOT MIX ASPHALT SURFACE  
 REMOVAL – EDGE MILLING

STANDARD # ROW-1161



## HOT MIX ASPHALT SURFACE REMOVAL

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

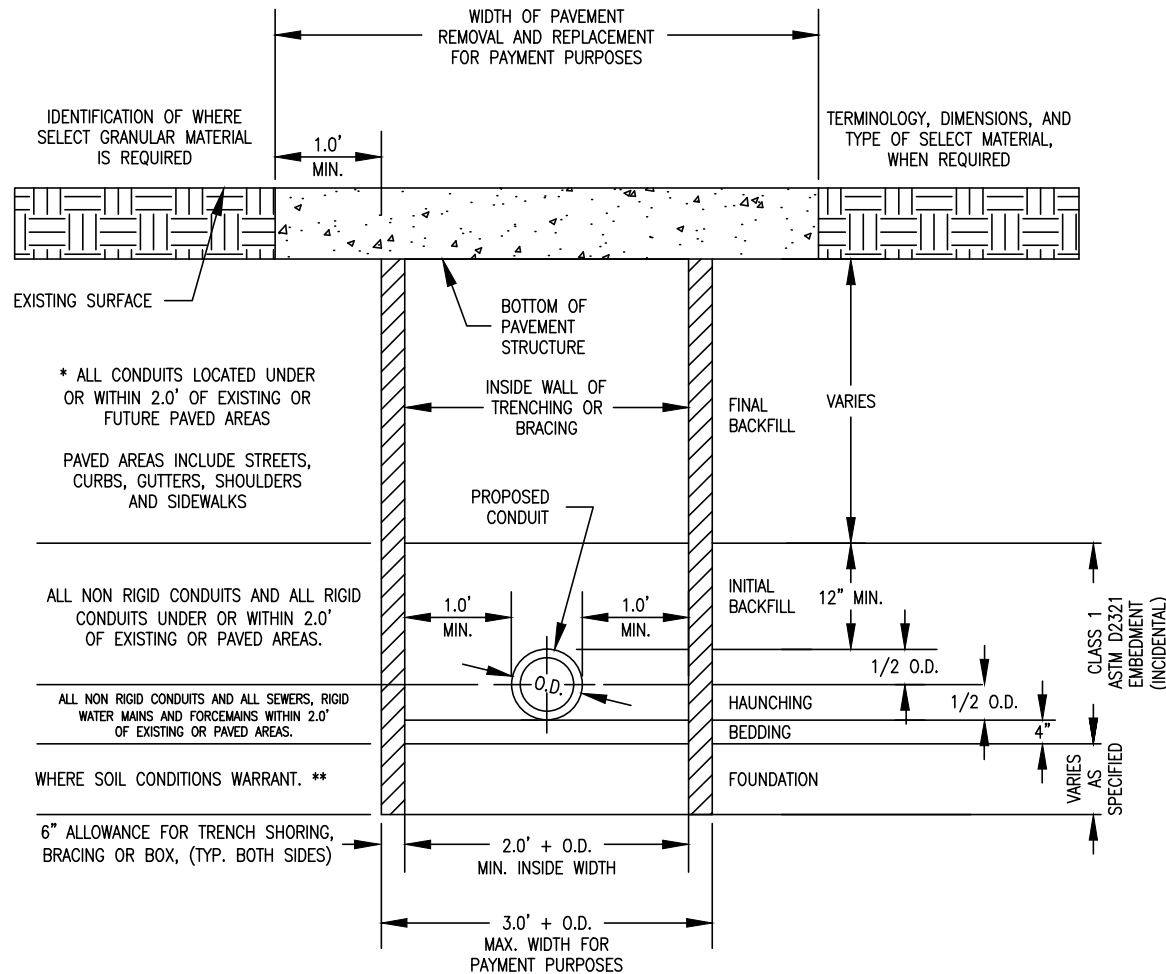
**NOTES:**

1. MILLING WIDTH MAY BE EOP TO EOP OR A VARIABLE WIDTH OF THE STREET MILLED AT DESIGNATED UNIFORM DEPTH.
2. PROPER CROWN SHALL BE MAINTAINED DURING MILLING PROCESS.

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
HOT MIX ASPHALT SURFACE  
REMOVAL

STANDARD # ROW-1162



\* INDICATES ELIGIBLE FOR PAYMENT AS BACKFILL. SELECT GRANULAR OTHERWISE INCIDENTAL TO THE PIPE

\*\* INDICATES ELIGIBLE FOR PAYMENT AS SELECT FOUNDATION MATERIAL

TYPICAL TRENCH BACKFILL FOR SEWERS  
N.T.S.

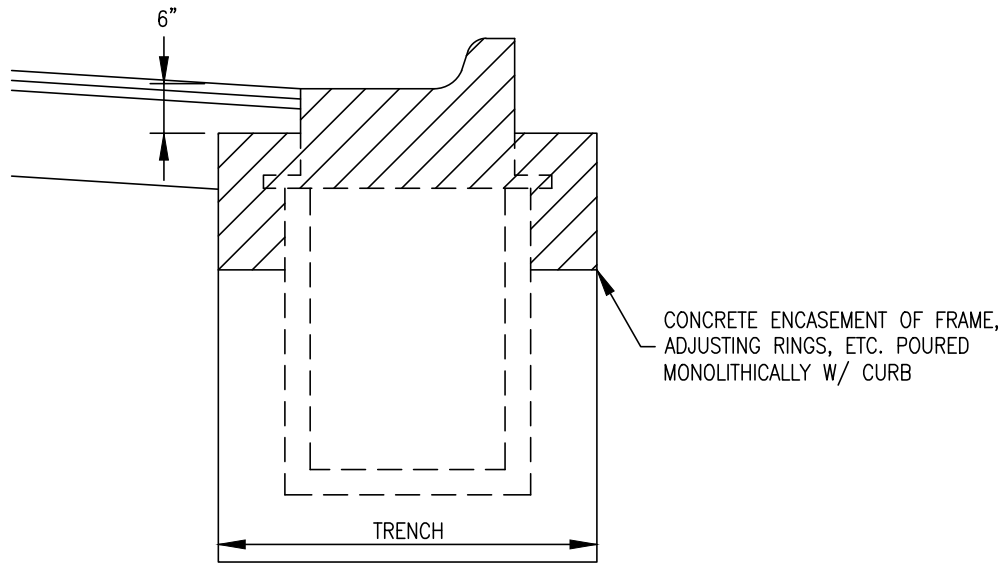
JAN 2014

NOTES:

1. TRENCH BACKFILL SHOULD BE USED ON ALL TRENCHES UNDER AND WITHIN 2 ft OF PAVED AREAS AND IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"
2. TRENCH BOX SHALL NOT EXTEND BELOW TOP OF PIPE, AND NOT EXCEED 2.0' FROM THE BOTTOM OF THE TRENCH

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL TRENCH BACKFILL  
FOR SEWERS

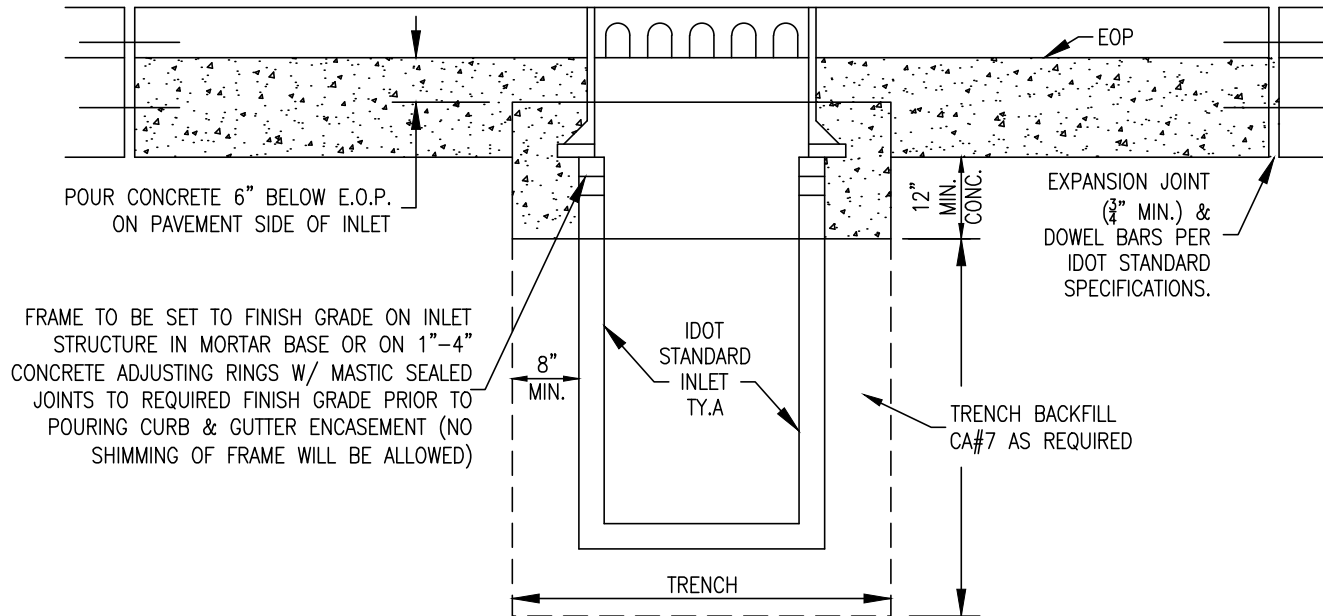
STANDARD# SWR-2010



CROSS SECTION

## TYPICAL CURB INLET CONCRETE ENCASEMENT INLET TYPE A

CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD  
SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION -  
CURRENT EDITION

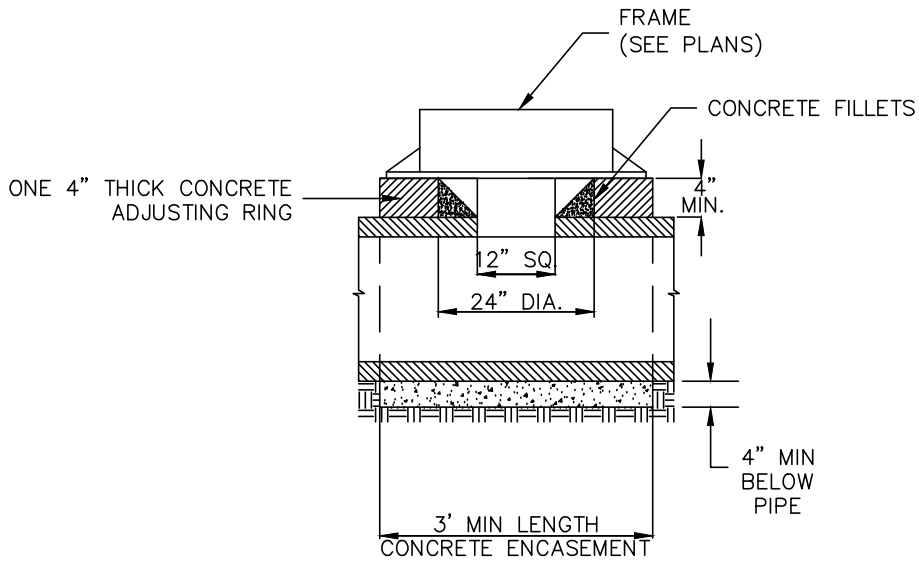


PROFILE

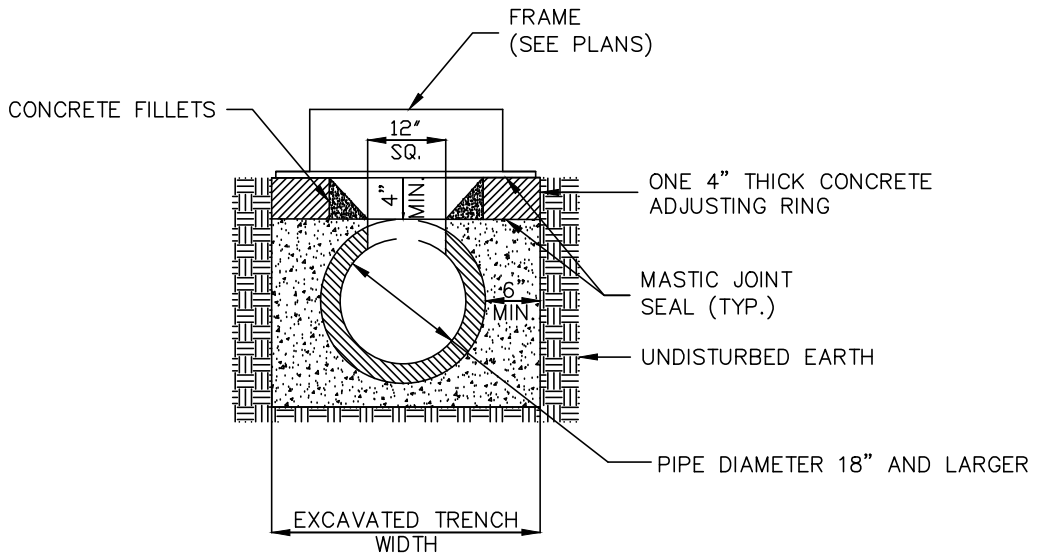
JAN 2015

VILLAGE OF BRADLEY, IL.  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL CURB CONCRETE  
ENCASEMENT  
INLET TYPE A

STANDARD # SWR-2020



LONGITUDINAL SECTION



CROSS SECTION

## TYPICAL PIPE INLET

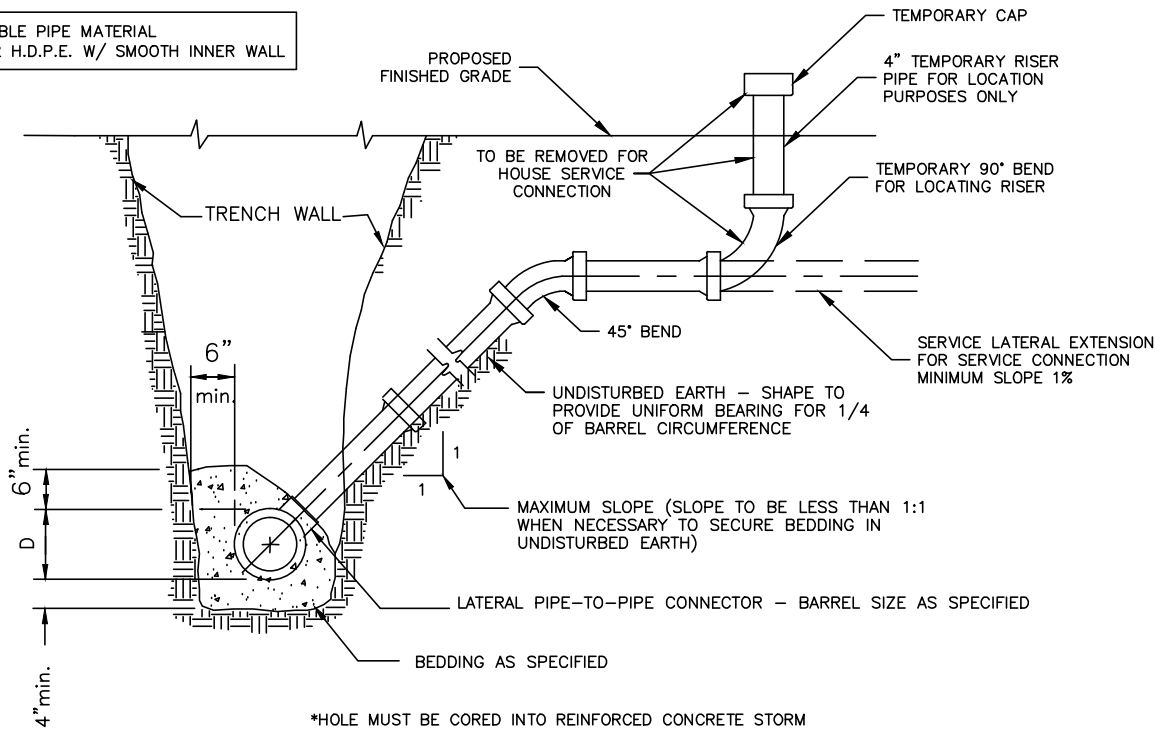
CONSTRUCTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION – CURRENT EDITION

JAN 2014

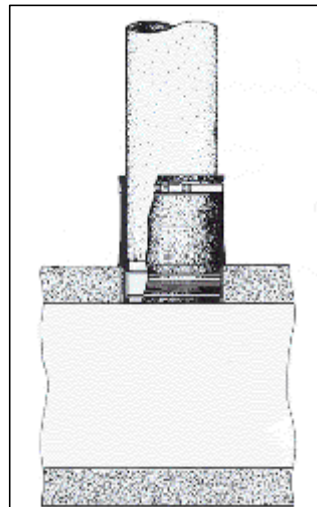
VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL PIPE INLET

STANDARD # SWR-2025

\*ACCEPTABLE PIPE MATERIAL  
1. N-12 H.D.P.E. W/ SMOOTH INNER WALL



TYPICAL SUMP PUMP CONNECTION  
(R.C.P. PIPE)



Lateral Pipe-to-Pipe Connectors

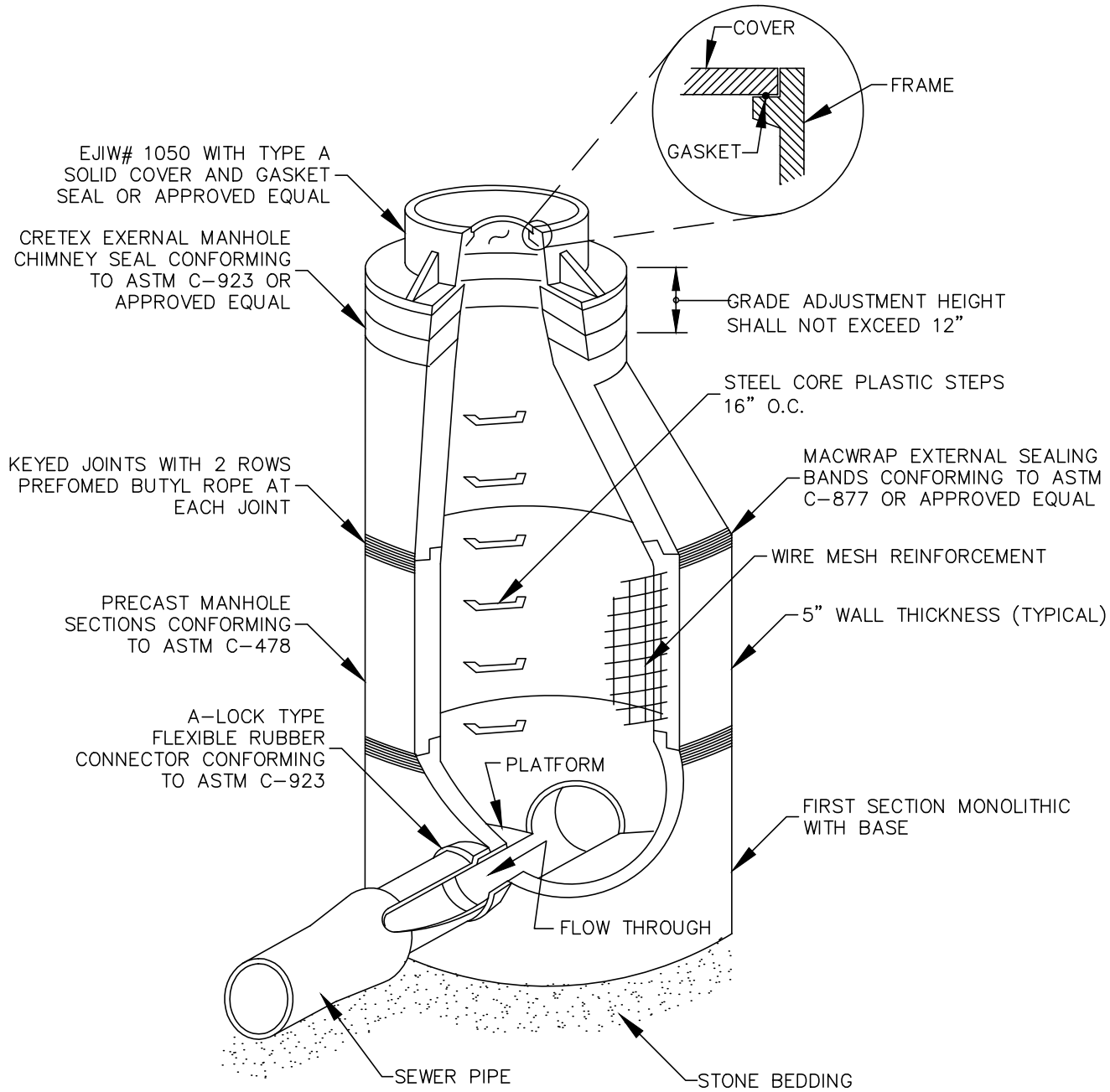
Pipe to pipe connector designed for lateral connections in concrete pipe. Must provide a flexible, watertight seal. Connector must meet or exceed applicable ASTM specifications.

JAN 2014

Reference Kor-N-Tee Connectors Web Page  
([http://www.npc.com/kor\\_n\\_tee.htm](http://www.npc.com/kor_n_tee.htm))

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL SUMP PUMP  
CONNECTION

STANDARD # SWR-2080

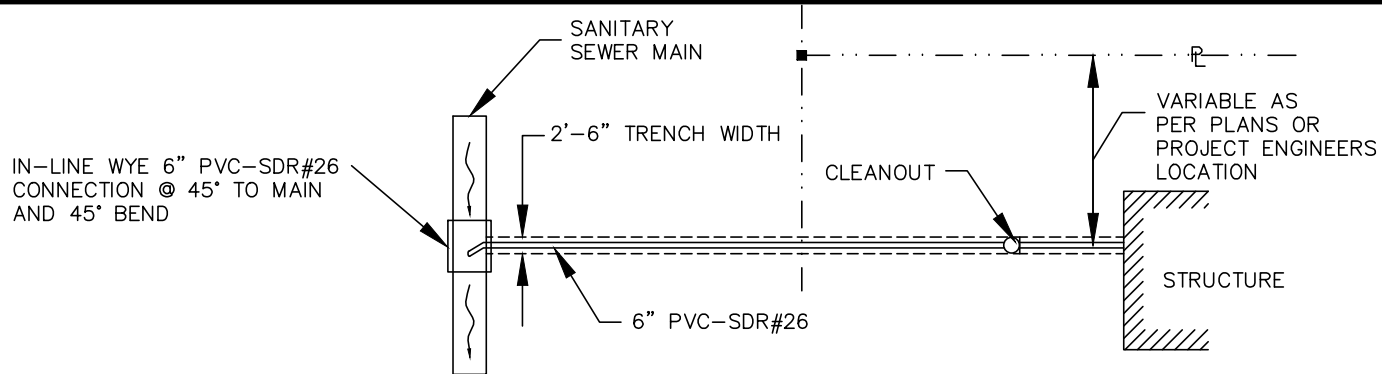


NOTES:  
 1) SANITARY MANHOLES SHALL HAVE A RAISED (VERTICAL) TOP EDGE ON THE CONE TO ALLOW PROPER INSTALLATION OF THE CHIMNEY SEAL.

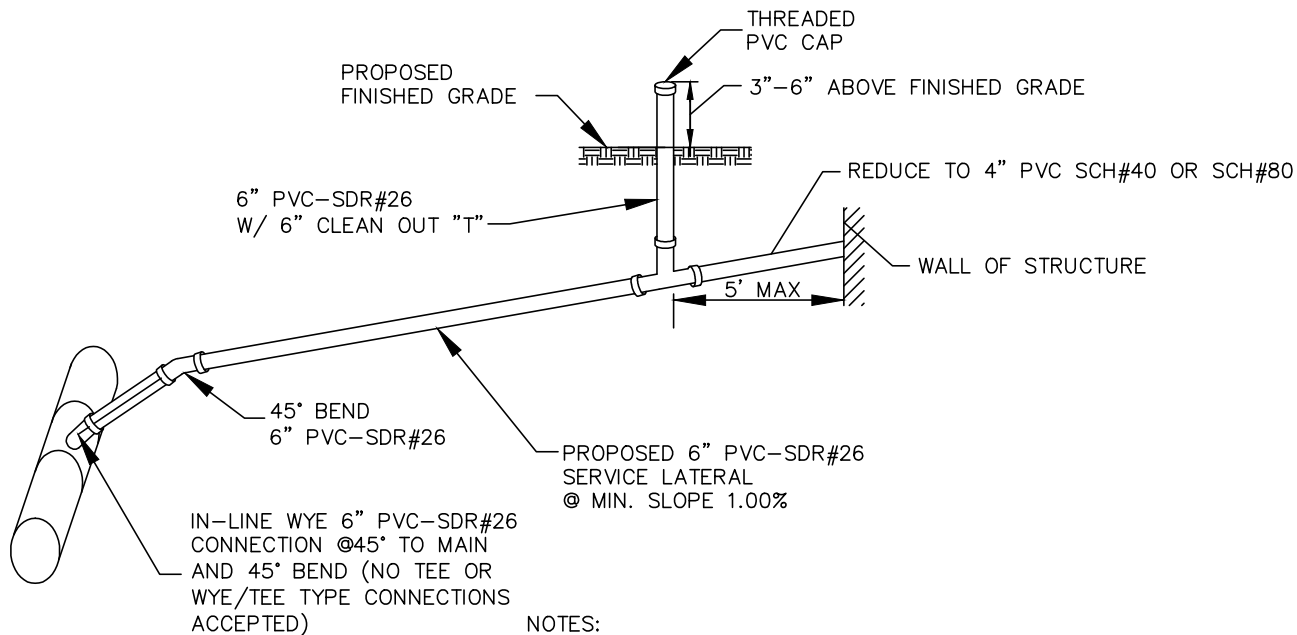
JAN 2015

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL SANITARY SEWER  
 MANHOLE

STANDARD# SWR-3020



LATERAL DESIGN



NOTES:

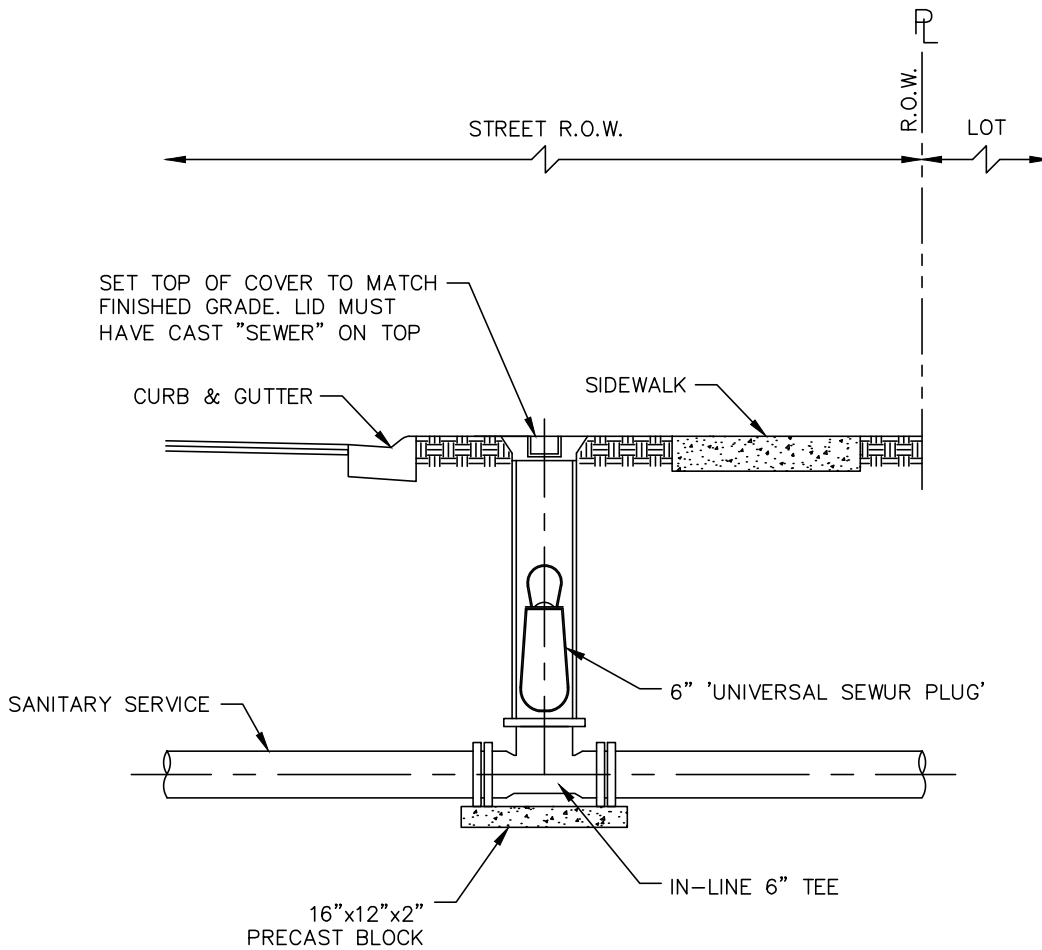
- 1) FOR CONNECTION TO EXISTING SANITARY SEWER MAIN (SEE VILLAGE STANDARD SWR-3035)
- 2) ALL BACKFILL MATERIAL TO BE CA-11 OR FA-6 SAND 1' OVER PIPE AND MAIN
- 3) ANY TEMPORARY RISERS SHALL BE REMOVED FROM SERVICE LINE PRIOR TO FINAL CONNECTION.

AUGUST 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
SANITARY SERVICE  
LATERAL INSTALLATION

STANDARD # SWR-3030





ALTERNATE LOCATION

IT MAY NOT BE PRACTICAL TO PLACE SANITARY SERVICE SHUTOFF IN VILLAGE OF BRADLEY RIGHT OF WAY. IF SO, THE SANITARY SERVICE SHUTOFF MAY BE PLACED ON PRIVATE PROPERTY WITHIN A PROPERLY RECORDED SANITARY SEWER OR PUBLIC UTILITY EASEMENT.

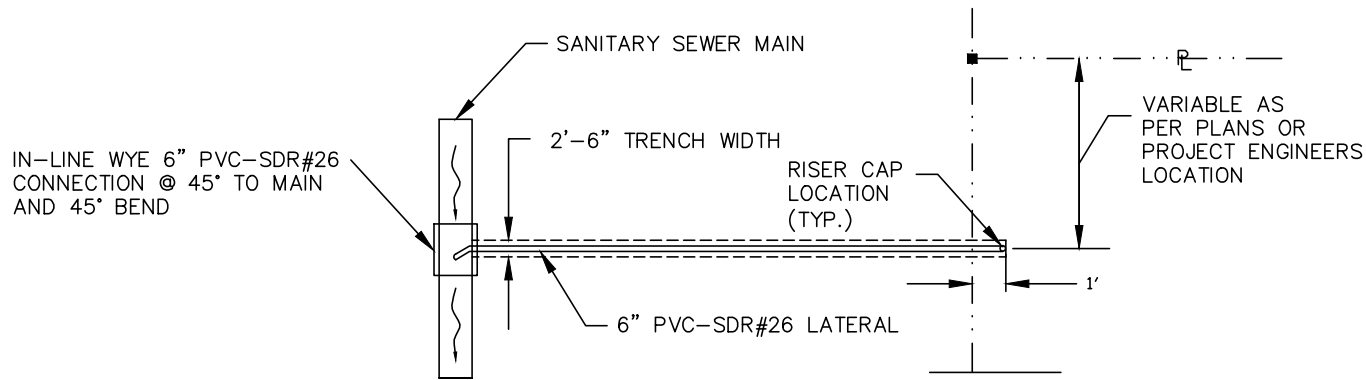
(SEE STANDARD # SAN-3030 FOR GENERAL SANITARY SERVICE LATERAL INSTALLATION.)

A 6" UNIVERSAL SEWUR PLUG VALVE AND RETRIEVAL HOOK SHALL BE SUPPLIED TO THE VILLAGE.

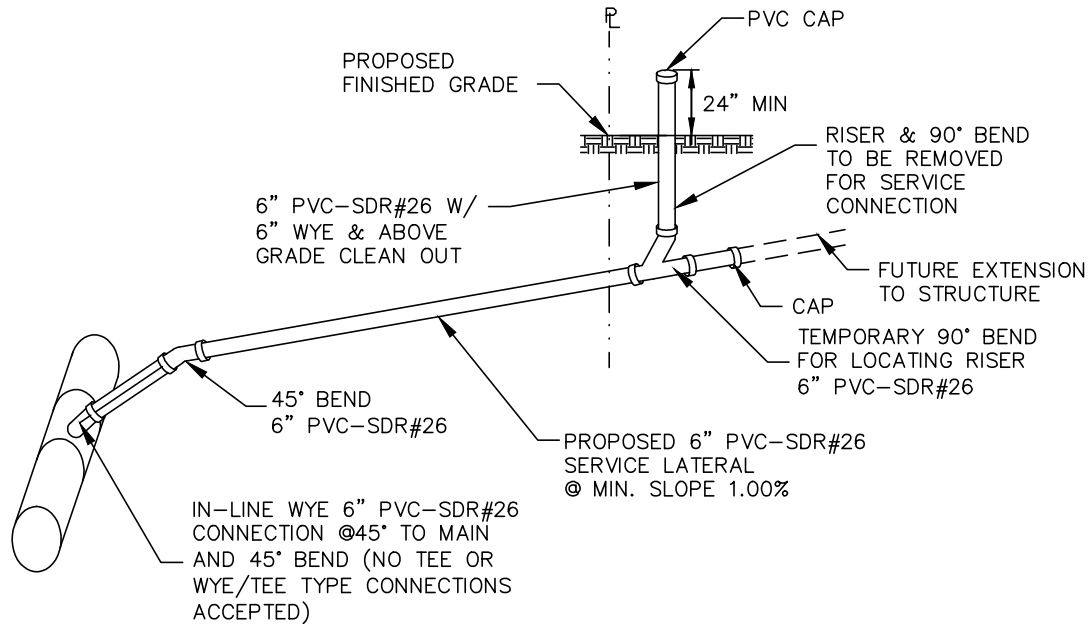
JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
SANITARY SERVICE  
SHUT OFF

STANDARD # SWR-3031



LATERAL DESIGN



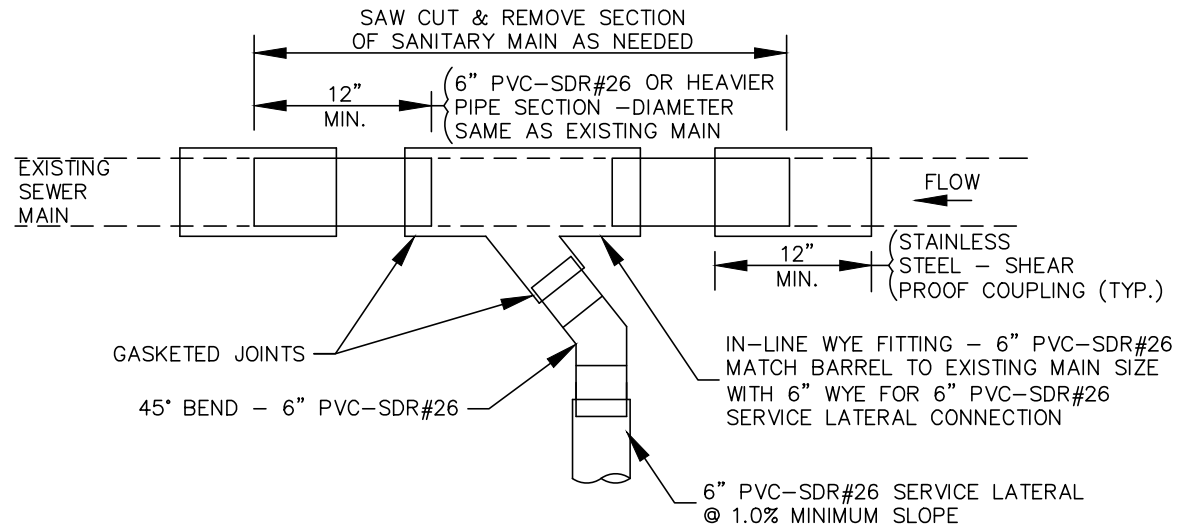
NOTES:

- 1) FOR CONNECTION TO EXISTING SANITARY SEWER MAIN. (SEE VILLAGE STANDARD SWR-3035)
- 2) ALL BACKFILL MATERIAL TO BE CA-11 OR FA-6 SAND 1' OVER PIPE AND MAIN

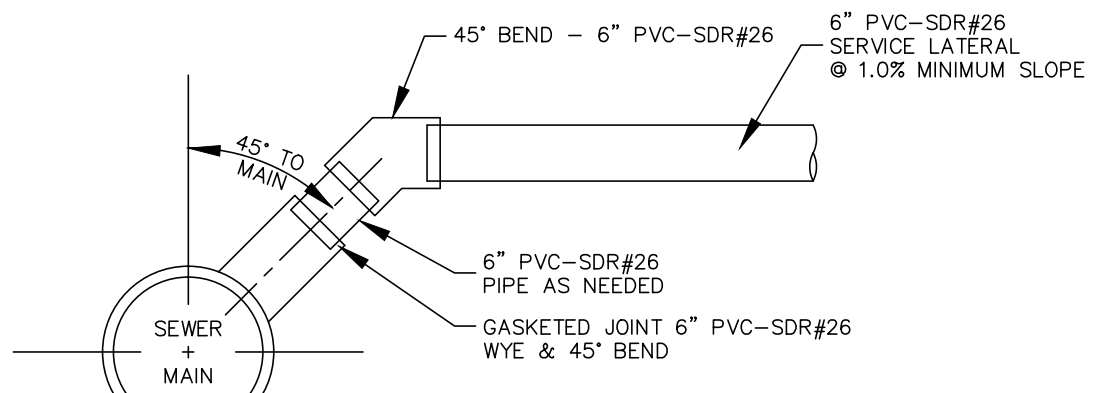
JUNE 2014

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 SANITARY SERVICE  
 LATERAL INSTALLATION  
 WITH TEMPORARY RISER

STANDARD # SWR-3032



TOP VIEW



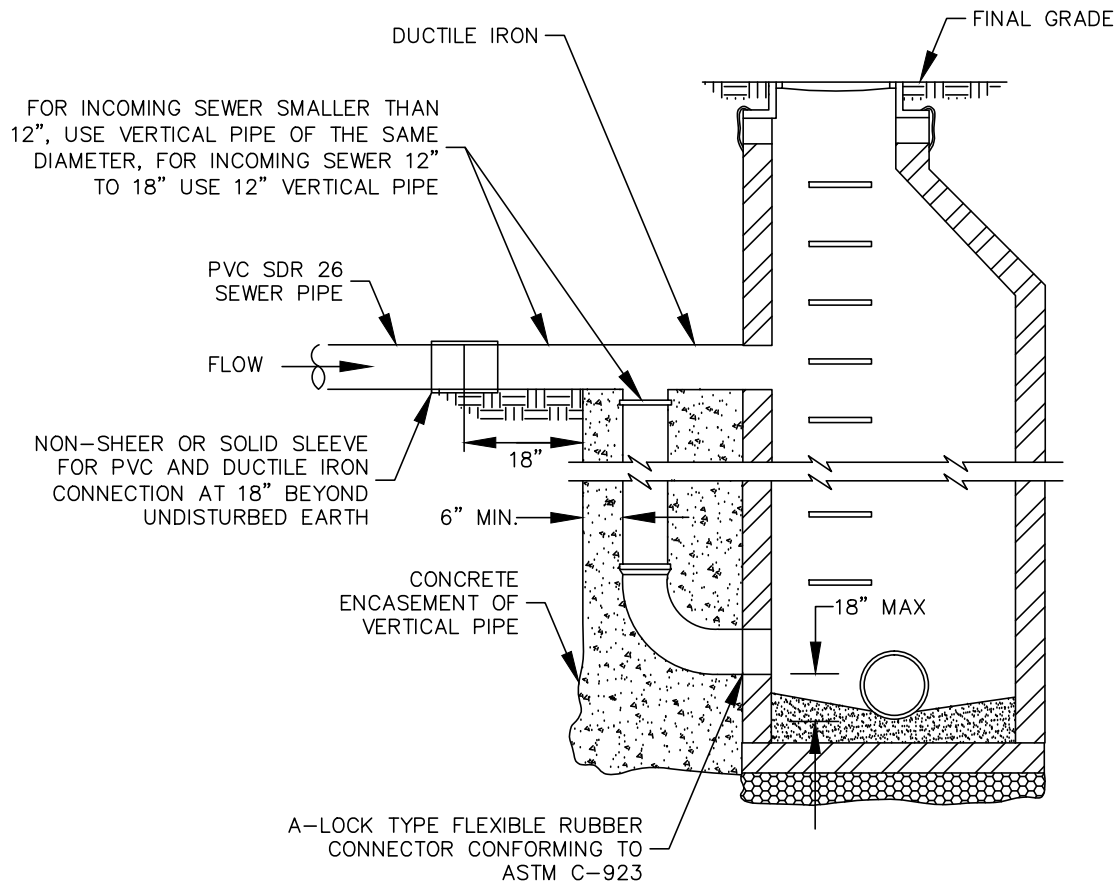
SIDE ELEVATION VIEW

- NOTES:
1. NO SADDLE TAP TYPE CONNECTION ALLOWED.
  2. NO TEE OR WYE/TEE TYPE FITTINGS ALLOWED.
  3. ALL BACKFILL MATERIAL TO BE CA-11 OR FA-6 SAND 1' OVER PIPE AND MAIN

JUNE 2014

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 SANITARY SERVICE  
 REPAIR/CONNECTION  
 TO SEWER MAIN

STANDARD # SWR-3035



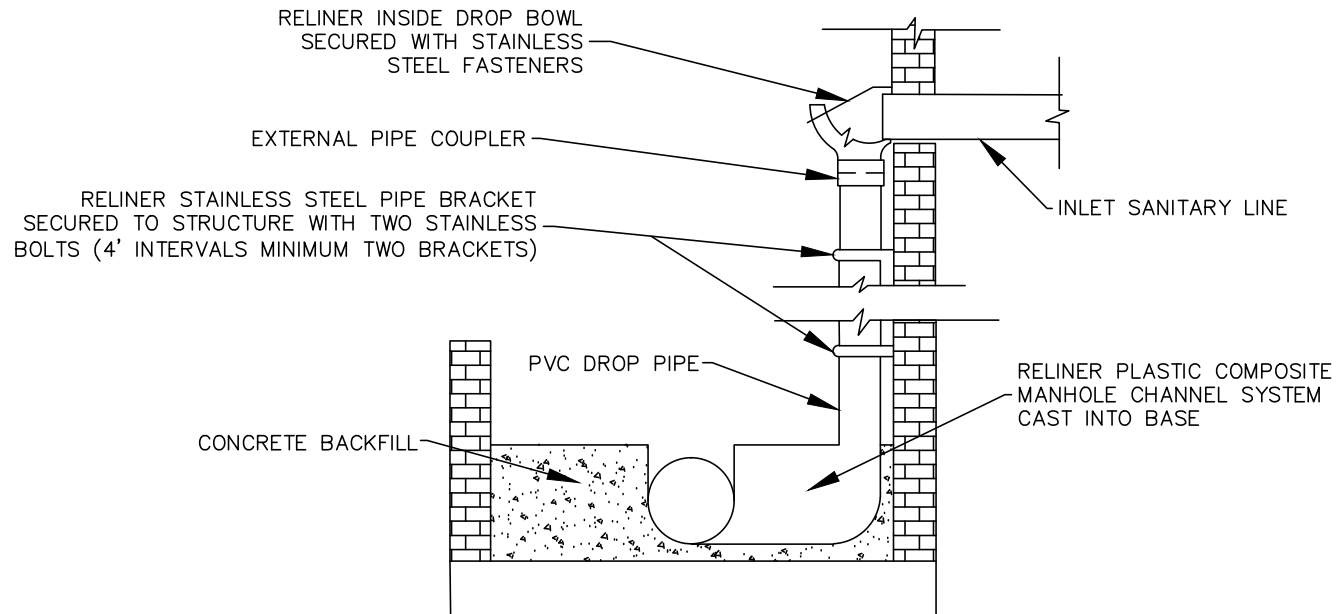
GENERAL NOTES

1. SEE STANDARD # SWR 3020 FOR SANITARY MANHOLE REQUIREMENTS.

VILLAGE OF BRADLEY, IL  
 CONSTRUCTION STANDARDS  
 FOR  
 TYPICAL EXTERNAL DROP  
 MANHOLE CONNECTION

JAN 2014

STANDARD # SWR-3050



JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL INTERNAL DROP  
MANHOLE CONNECTION

STANDARD # SWR-3060

**VILLAGE OF BRADLEY, ILLINOIS**  
**LIST OF STANDARD FRAMES WITH LIDS & GRATES:**

**STORM SEWER STRUCTURES:**

**PAVEMENT INLETS: (MINIMUM, SUBJECT TO CAPACITY REQUIREMENTS)**  
**EAST JORDAN IRON WORKS (EJIW) 1050 FRAME WITH M1 GRATE**

**YARD INLETS: (MINIMUM, SUBJECT TO CAPACITY REQUIREMENTS)**  
**EJIW 1050 FRAME WITH M1 GRATE OR EJIW 6489**

**MANHOLES: (MINIMUM, SUBJECT TO CAPACITY REQUIREMENTS)**  
**EJIW 1050 FRAME WITH M1 GRATE**

**CURB INLETS:**  
**TYPE M3.12 CURB & GUTTER EJIW 7525 FRAME WITH GRATE**  
**TYPE B6.12 CURB & GUTTER EJIW 7210 FRAME WITH M1 GRATE**  
**TYPE B6.24 CURB & GUTTER EJIW 7210 FRAME WITH M1 GRATE**

**SANITARY SEWER STRUCTURES:**

**MANHOLES:**  
**EJIW 1050 FRAME WITH TYPE A SOLID COVER AND GASKET SEAL**

**NOTES:**

- 1. ALL STORM SEWER STRUCTURES TO BE PROVIDED WITH GRATE UNLESS LOCATED IN PEDESTRIAN WALKWAY AREAS, I.E. SIDEWALKS, SHARED PATHS ETC. WHERE SOLID LIDS OR ADA GRATES WILL BE REQUIRED.**
- 2. EQUALS MAY BE ALLOWED IF APPROVED BY THE VILLAGE**
- 3. SANITARY SEWER LIDS SHALL HAVE "SANITARY SEWER" ON THE COVER**

JAN 2014

VILLAGE OF BRADLEY, IL  
CONSTRUCTION STANDARDS  
FOR  
TYPICAL LIST OF CAST IRON  
FRAMES AND LIDS/GRATES

STANDARD # SWR-5000