

Town of Buchanan

N178 CTH N

Appleton, WI 54915

Adopted by the Town Board

October 17, 2023

MINIMUM RESIDENTIAL ROAD SPECIFICATIONS

Road Typical Section with or without curb and gutter - Shall be compliant with Administrative Code Trans 75.

Pavement Section

Asphalt Pavement shall be 4 LT 58-28 S

Total thickness shall be 3 ½": 1 ¾" Binder Course and 1 ¾" Surface Course

Aggregate Base Course

The aggregate base at its base shall extend two feet wider on each side of the road (including shoulder) than the proposed roadway.

Aggregate Shoulders shall be ¾" Dense Graded Base per section 305 of WDOTSS.

Crushed aggregate base course thickness shall be as follows:

6" Breaker Run (3" Minus) per Section 311 of WDOTSS.

6" 1 ¼" Dense Graded Base, per Section 305 of WDOTSS.

12" Total Thickness

Typical Section without curb and gutter:

Asphalt Pavement shall have the following width:

24' for residential streets

30' for streets with mapped pedestrian/bike route on road

Cul-de-sacs shall have a 45' radius

Shoulders shall have the following width:

2' aggregate shoulders on all residential roadways

3' (paved or aggregate) shoulders on all collector and arterial roadways

Typical Section with curb and gutter:

Asphalt Pavement shall have the following width per U5 and U6 attached typical sections and the information provided below:

27' Back of curb to back of curb roadway width for U6 Typical Section
(11' drive lanes with 30" curb and gutter)

37' Back of curb to back of curb width for U5 Typical Section
(11' drive lanes, 5' bike lanes with 30" curb and gutter)

Cul-de-sacs shall have a 45' radius

MINIMUM COMMERCIAL ROAD SPECIFICATIONS

Road Typical Section – Asphalt Pavement width with or without curb and gutter shall be determined by the Development. Typical sections shall be compliant with Administrative Code Trans 75.

Pavement Section – ADT less than 5500 Vehicles

Asphalt Pavement shall be 4 LT 58-28 S

Total thickness shall be 4 ½": 2 ½" Binder Course & 2" Surface Course

Pavement Section – ADT greater than 5500 Vehicles

Asphalt Pavement shall be 4 LT 58-28 S.

Total thickness shall be 5 ½": 3 ½" Binder Course and 2" Surface Course

Aggregate Base Course

The aggregate base at its base shall extend two feet wider on each side of the road (including shoulder) than the proposed roadway.

Aggregate Shoulders shall be ¾" Dense Graded Base per section 305 of WDOTSS.

Crushed aggregate base course thickness shall be as follows for commercial or rural roadways:

6" Breaker Run (3" Minus) per Section 311 of WDOTSS.

12" 1 ¼" Dense Graded Base, per Section 305 of WDOTSS.

18" Total Thickness

MISCELLANEOUS RESIDENTIAL DESIGN STANDARDS

Road Right-of-Way shall be no less than 66 feet in width per Town Ordinance.

The developer shall bear all cost including, but not limited to, roadway design, roadway construction, street lighting, street signing and dedication to the Town. The Right-of-Way shall be dedicated through either Certified Survey Map or Plat of Survey in accordance with current law in the State of Wisconsin.

All work shall be done in accordance with the most recent edition of the "Wisconsin Standard Specifications for Highway and Structure Construction".

Standard intersection radius on roadways without curb and gutter shall be 25' measured to the edge of pavement. The standard intersection radius on roadways with curb and gutter shall be 20' measured to the back of curb.

Ditching – One ditch on each side of the road with minimum 2’ depth from edge of pavement to ditch centerline. Side slopes shall be at a maximum of 4:1, unless approved by Town Engineer. Longitudinal slope shall be a minimum of 1’/100’ or 1.00%

Culverts across road and driveways – Minimum culvert size is 15”, unless approved by Town Engineer. Permit must be obtained from Town. Permit application shall contain requested culvert size and supporting calculations. Calculations shall be reviewed by the Town Engineer.

Driveways: Standard 7% slope (not to exceed) on aprons and driveways constructed by any “Town Project” with the caveat that if the % slopes exceed that, during design, the Engineer shall bring them to the Town Board for review and approval to exceed that % slope. The maximum slope would be 15%. Driveways on roads identified for multi-modal improvements shall have the 5 feet wide sidewalk sections designed and installed as part of the project whether or not the sidewalk/trail is installed at that time. The roads not included in these designations will not have the sidewalk section designed or installed.

Driveway aprons in urbanized areas shall be minimum 6” thick unreinforced concrete in residential areas; driveway thicknesses in commercial and industrial areas shall be determined in design.

Driveway aprons in rural residential areas may be asphalt or concrete; if asphalt it shall be a minimum 2” thick hot mix asphalt, if concrete it shall be 6” thick unreinforced concrete. Driveway thicknesses in commercial and industrial areas shall be determined in design.

Dowel tie bars into existing concrete driveways where new concrete driveways are placed. Place #4 rebar 2 feet long, 2 feet apart in the driveway. Install equal length (half of full length) into existing/abutting driveway and new driveway.

Property Owners are not allowed to construct their own concrete apron in the Town of Buchanan right-of-way when the driveway is being reconstructed as a part of a Town of Buchanan construction contract.

STORM SEWER CONSTRUCTION

Storm Sewer pipe material

12" – 15" shall be PVC or RCP

12" – 15" up to 25 feet deep ASTM D3034, PSM SDR35

12" - 15" greater than 25 feet deep, ASTM D3034, PSM SDR 26

RCP CL III minimum or based on loading/soils

Storm Sewer pipe material 18" and greater shall be RCP.

Storm Services 4" – 6" shall be PVC SCH 40 pipe.

Repair coupling shall be from ABS to PVC shall be Fernco with Stainless Steel Shear Rings. Repairs couplings for like materials shall be the same.

Select Granular Backfill conforming to WisDOT 1 ¼" dense graded base course gradation is required above the specified bedding material in the following locations:

- a. Roadway and up to 4 feet beyond the back of curb
- b. Under sidewalk, within 1 foot outside of edges of sidewalk
- c. Under driveways

Plastic pipe bedding to be 4" below the pipe to 12" above the pipe with ¾" crushed rock. Concrete pipe bedding to be 4" below pipe to 1/6 of outside diameter with ¾" crushed rock.

Manhole shall be a minimum of 6' height from the top of casting to the top of the base section.

Manhole castings shall be Type 1 Frame and Cover Neenah Foundry R-1500. When manhole adjustment is limited, provide Type 2 Frame and Cover Neenah Foundry R-1689.

Catch Basins shall be Type 11 Frame and Box with Type "L" grate except at sags, provide a Type "C" grate Neenah Foundry R-3067. At driveways, provide a Type 10 Frame and Box with Type "C" grate Neenah Foundry R-3290-A. Catch basins to have a Type R grate with the Neenah R-3000-A EnviroNotice Plate – "Dump No Waste – Drains to Fresh Water".

Catch basins to be Type "A" (2' x 3') in roadway. Catch Basins shall be a minimum of 6' height from the top of casting to the top of the base section. Catch Basins to have a 12" min./18" max. sump installed.

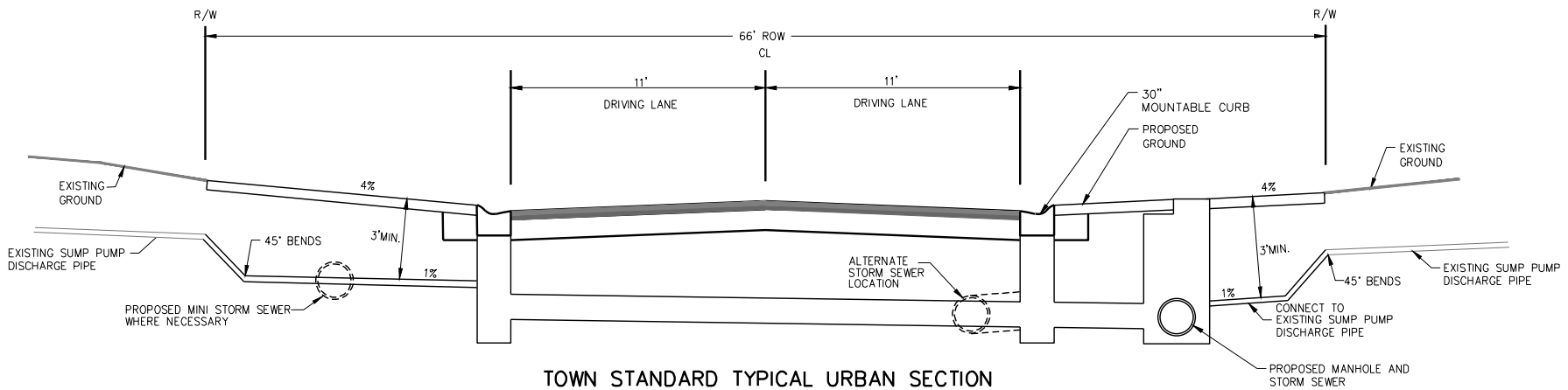
CURB AND GUTTER CONSTRUCTION

Curb and Gutter shall be 30" mountable curb and gutter, unless determined otherwise by the Town of Buchanan.

Minimum of 0.40% longitudinal grade on curb and gutter.

Curb Reinforcement at all lateral trenches (20-foot length), also 10 feet length each way of inlets, or as designated by Owner. Dowel reinforcement into existing curb at all point repairs and tie-ins.

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TOWN STANDARD TYPICAL URBAN SECTION
 CURB AND GUTTER WITH STORM SEWER – ALTERNATIVE OPTION U6
 PARKING ALLOWED ON ONE SIDE OF ROAD ONLY
 NO SCALE

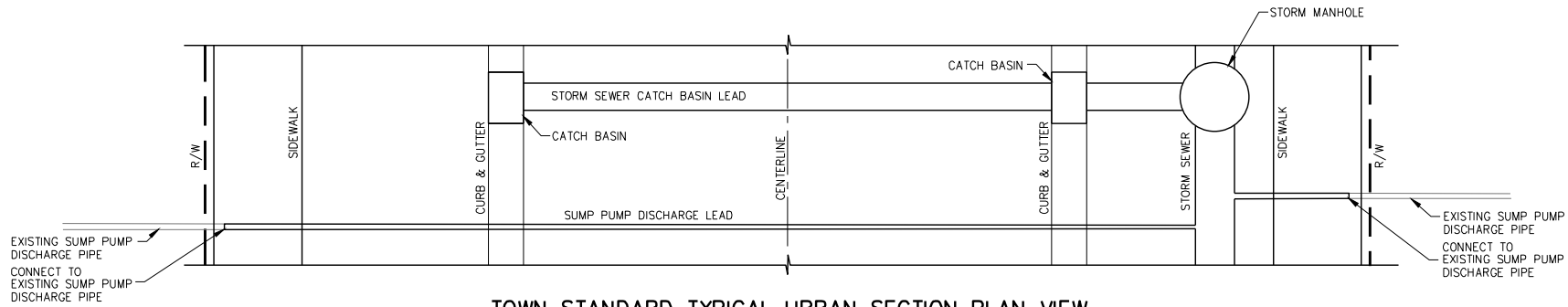
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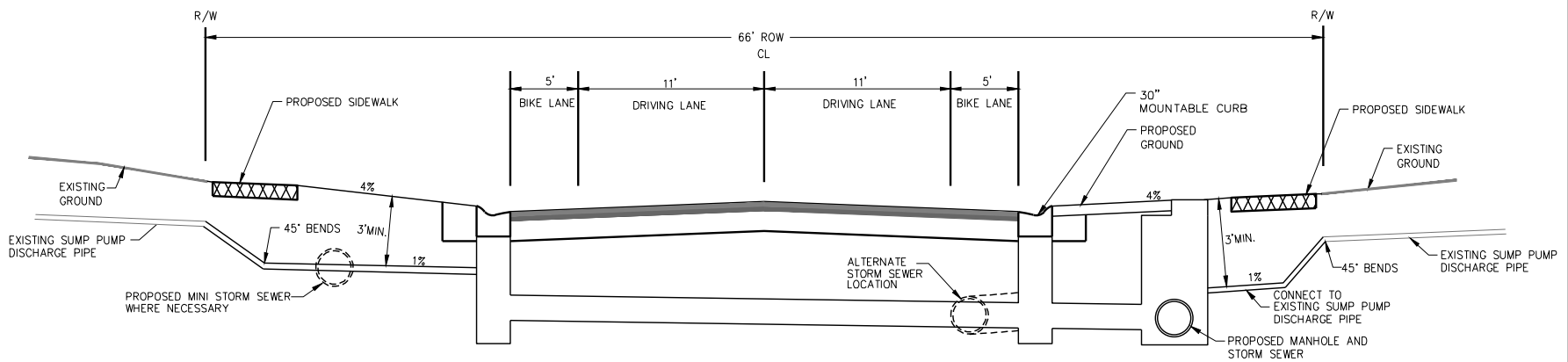
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TOWN OF BUCHANAN
 TOWN STANDARD TYPICAL URBAN SECTION
 STORM SEWER WITH CATCH BASINS AND SUMP PUMP CONNECTIONS



TOWN STANDARD TYPICAL URBAN SECTION PLAN VIEW

NO SCALE



TOWN STANDARD TYPICAL URBAN SECTION WITH BIKE LANES
COLLECTOR ARTERIAL ROADWAY WITH SIDEWALK ON BOTH SIDES
STORM SEWER WITH MINI STORM TO CATCH BASINS - ALTERNATIVE OPTION U5

NO SCALE

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TOWN OF BUCHANAN
TOWN STANDARD TYPICAL URBAN SECTION
WITH BIKE LANES
STORM SEWER WITH CATCH BASINS AND SUMP PUMP CONNECTIONS

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