

Sheet Index

1. STANDARD CONSTRUCTION DRAWINGS
2. TYPICAL SECTION ASPHALT STREET
3. CURB SECTION DETAILS
4. DRIVE APRON
5. PAVER DRIVE
6. CURB RAMP PLAN (SINGLE APPROACH)
7. CURB RAMP PLAN (DOUBLE APPROACH)
8. CURB RAMP PROFILES
9. CONCRETE WALK
10. STREET SIGN
11. TRENCH REPAIR
12. CURB INLET & CATCH BASIN
13. STREET DESIGN STANDARDS
14. DRIVE APPROACH WITH CULVERT
15. VISION CLEARANCE ON CORNER LOTS

STANDARD CONSTRUCTION
DRAWINGS

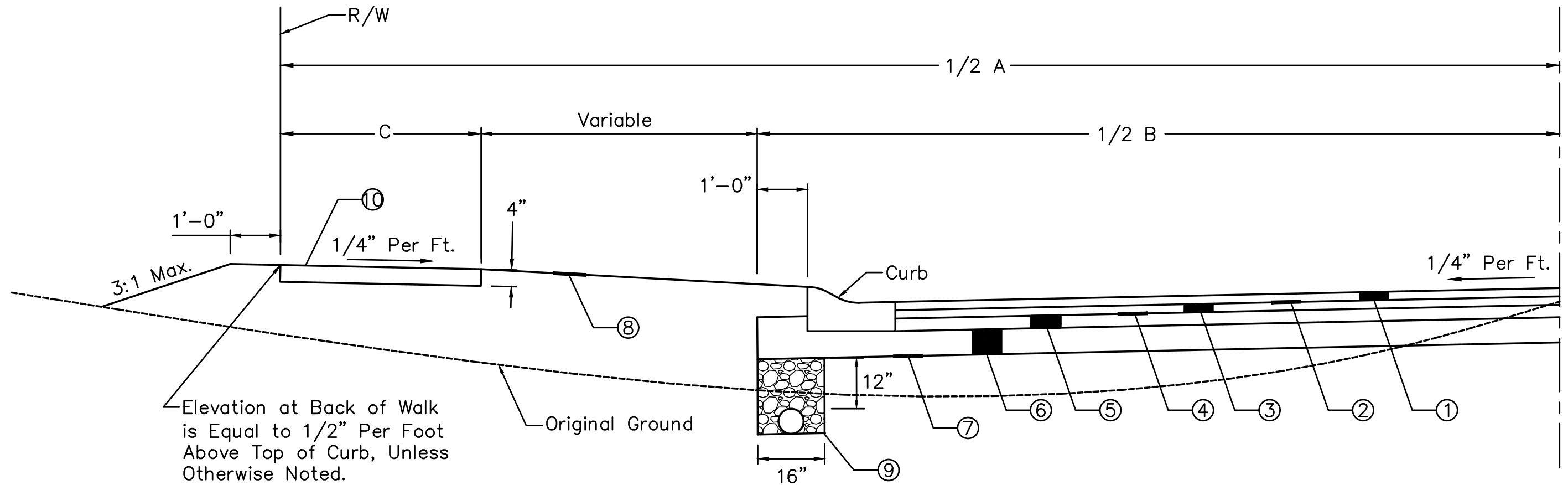
WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____



DRAWN IBI GROUP _____
DATE JUNE 2023 _____

SHEET 1



- ① ITEM 448 Asphalt Concrete, 2" Surface Course, to be applied 9 months after item 448, Intermediate Course (development project only).
- ② ITEM 407 Tack Coat (0.1 gal/sy)
- ③ ITEM 448 Asphalt Concrete, 2" Intermediate Course
- ④ ITEM 407 Tack Coat (0.1 gal/sy)
- ⑤ ITEM 301 Asphalt Base, 3" course
- ⑥ ITEM 304 Aggregate Base, 4" course
- ⑦ ITEM 204 Compacted Subgrade
- ⑧ ITEM 659 Seeding and Mulching
- ⑨ ITEM 605 8" Perforated Underdrain, trench filled with washed 57's
- ⑩ ITEM 608 4" Concrete Walk

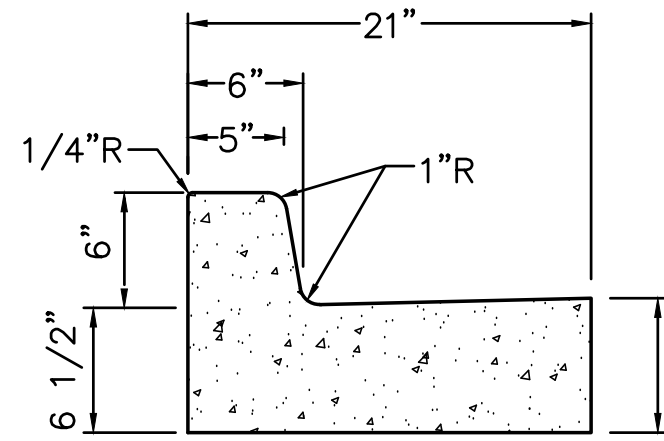
A	B	C
50'	27-29 FT.	4'-0"
60'	37 FT.	5'-0"

GENERAL NOTES:

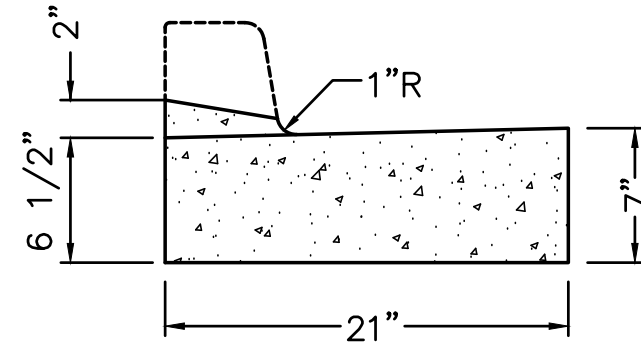
1. For development projects the Item 448, Surface Course, shall not be applied until item 448, Intermediate Course has been in place 9 months. Any deterioration or setting that has developed during this period shall be removed and replaced before item 448, Surface Course is applied.
2. All construction methods and materials shall be in conformance with the current edition of the State of Ohio, Department of Transportation, Construction and Materials Specifications.
3. All trenches within the right-of-way must be backfilled with compacted granular material.
4. A ribbon of AC-20 shall be applied where item 448, Intermediate Course meets the edges of curb prior to placing the asphalt surface.
5. At the direction of the of the engineer the contractor may need to mill Intermediate Course and provide a leveling course prior to applying final asphalt surface course.



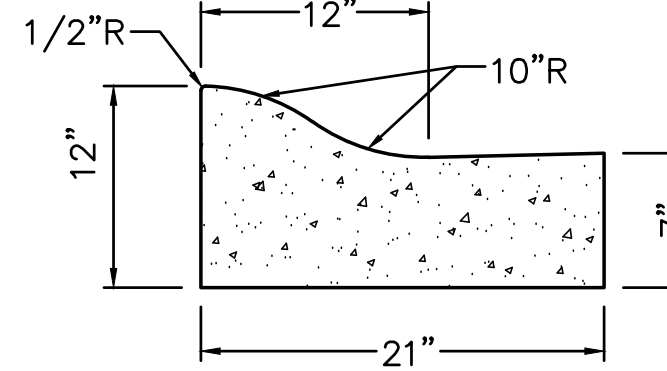
TYPICAL SECTION ASPHALT STREET	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET
DATE <u>JUNE 2023</u>	2



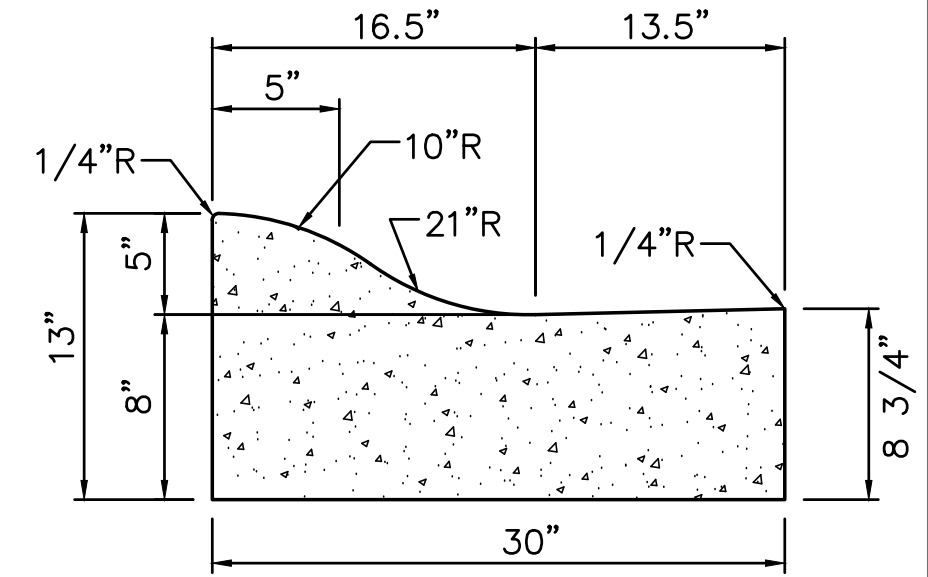
TYPE 2



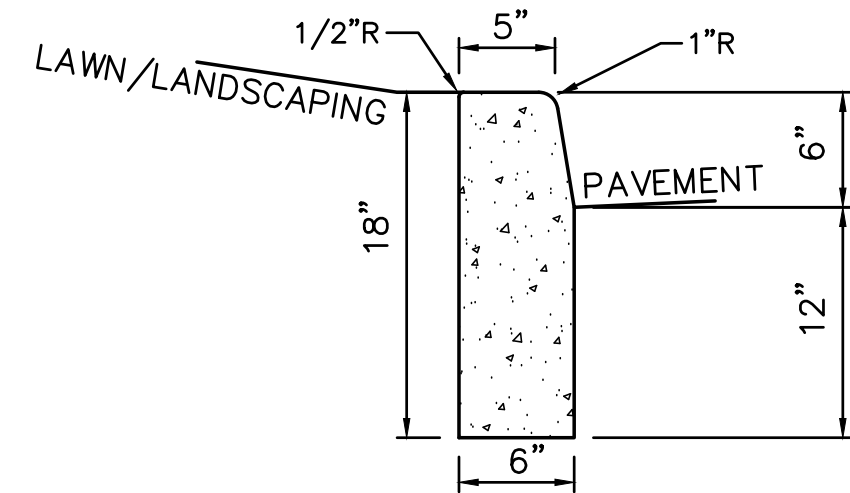
DEPRESSED CURB
TYPE 2 CURB



TYPE 3



30" CURB



TYPE 6

GENERAL NOTES:

1. Concrete shall meet the requirements of ODOT item 609.
2. 1/2 inch thick pre-molded expansion joint shall be constructed at the beginning and end of intersection radius curb and at intervals not to exceed 100 feet. pre-molded joints constructed with catch basins shall be considered as effective in meeting the requirement.
3. Curbing shall have contraction joints a maximum of every ten feet (10') and at no time are joints to be spaced closer than five feet (5').
4. Six inches (6") of item 304 shall be placed under curbing when in a fill area as specified.
5. Curbing shall be backfilled immediately after the forms are removed.
6. Provide a broom finish and edging to all exposed surfaces.
7. Curing compound shall be applied in accordance with item 451.10. From May 1 through September 30, white curing compound is preferred.
8. Damaged curb when marked for replacement before acceptance by the Township will be removed and replaced joint to joint unless directed differently by the Township engineer/inspector.

CURB SECTION
DETAILS

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

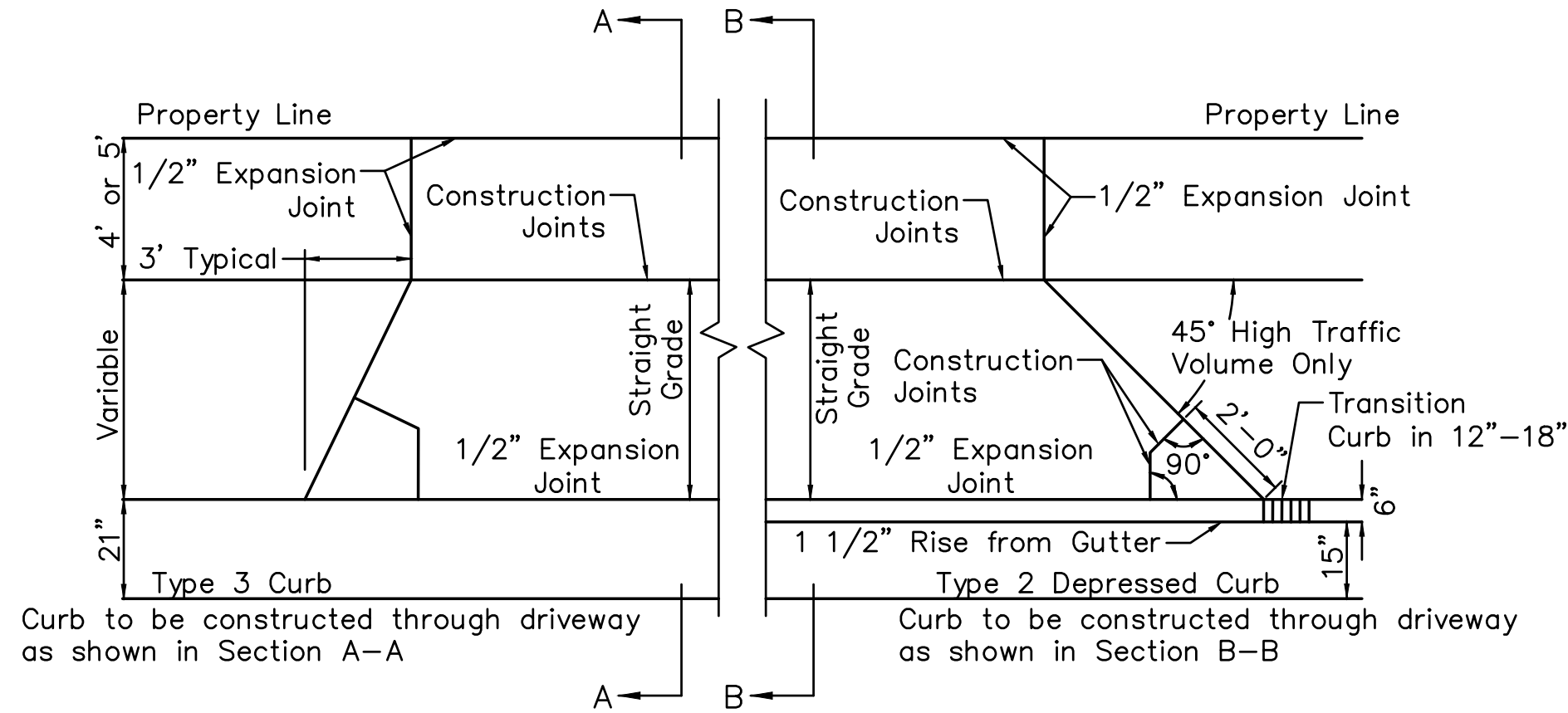
APPROVED: _____

DRAWN IBI GROUP SHEET
DATE JUNE 2023 3



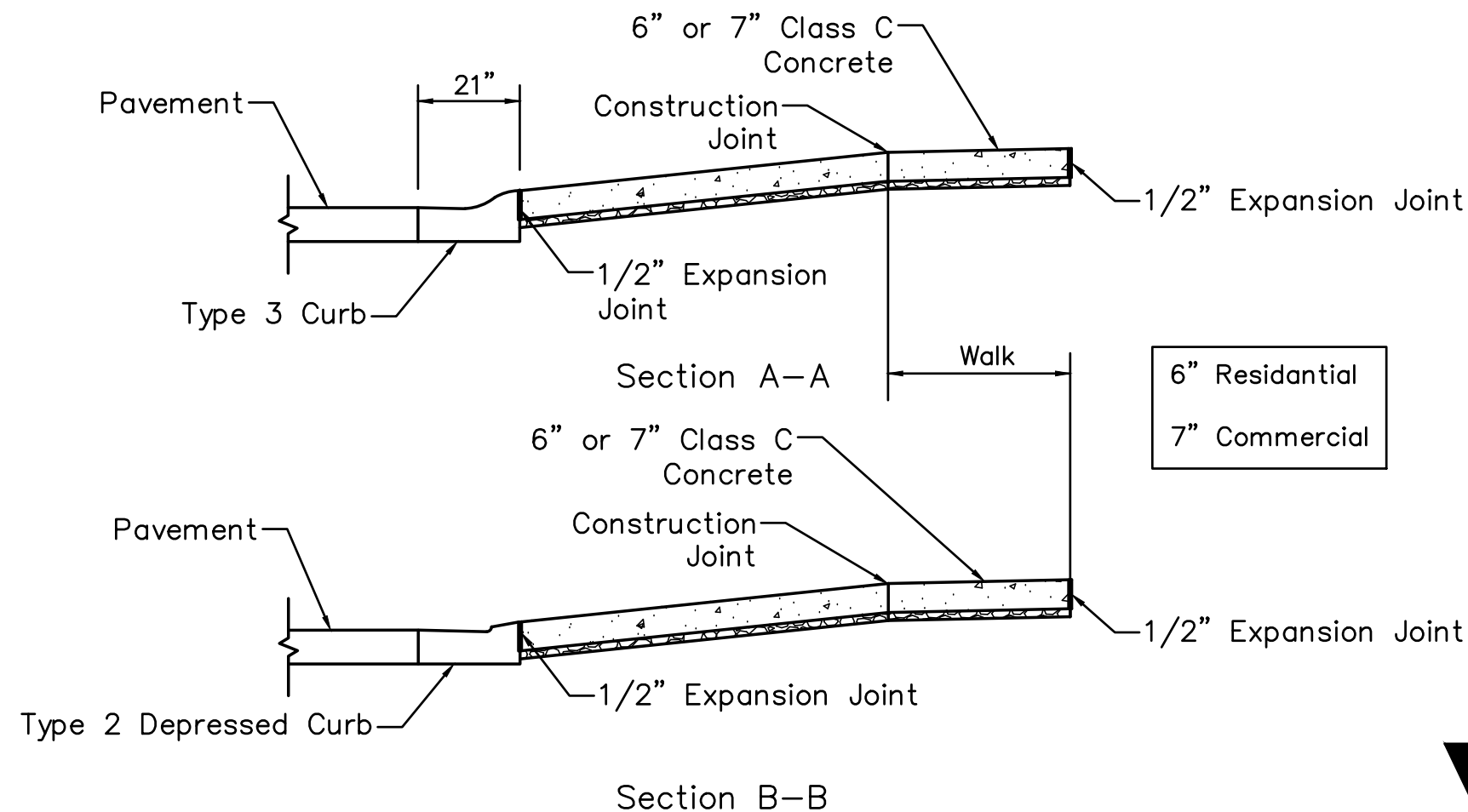
GENERAL NOTES:

1. Concrete for drive approaches shall meet the requirements for ODOT Item 452 – Plain Portland Cement Concrete Pavement.
2. All curbs shall be depressed for high traffic volume approaches and all multi-family residences.
3. Maximum joint spacing shall be 12 feet (12') longitudinally and transversely. Minimum joint depth shall be 2 inches (2").
4. Drive approaches shall be keyed at all construction joints.
5. Expansion material shall be one half inch (1/2") pre-molded.
6. Driveway flares shall normally be 3 feet (3'). High volume places shall be at a 45 degree angle..
7. Three Inches (3") of ODOT 304 shall be placed under the residential drive approach and six inches (6") of 304 for commercial and industrial drive approach as determined by the Township Engineer.
8. All exposed surfaces shall be broomed and edged.
9. All drive approaches shall be concrete from back of curb to back of walk or right-of-way if no walk is required. Asphalt approaches are permitted only with written approval of the Public Works Director.
10. High traffic volume approaches shall be used only with the approval of the Township Public Works Director or their representative.
11. Where asphalt pavement is to be removed, it shall be with a sawed joint.
12. Curing compound shall be applied in accordance with Item 451.10. From May 1 through September 30, white curing compound is preferred.

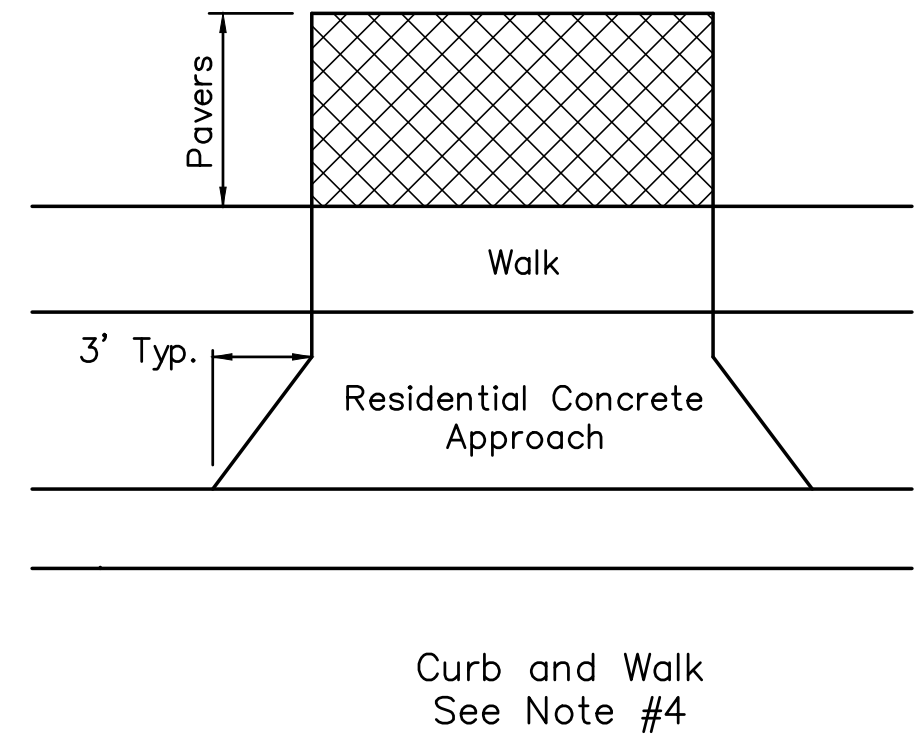
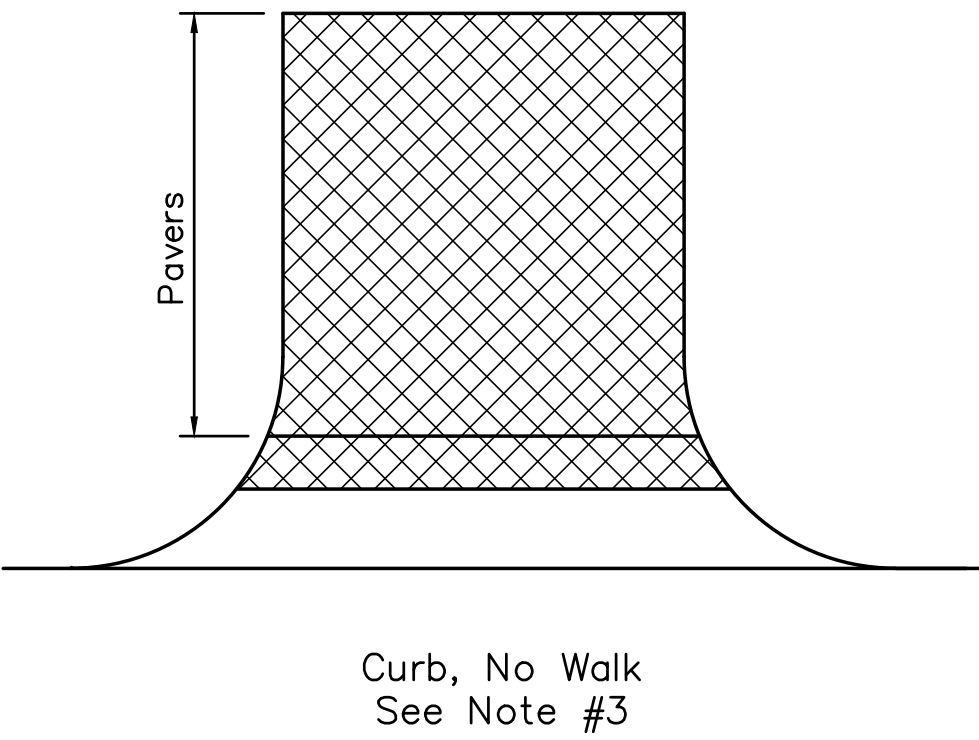
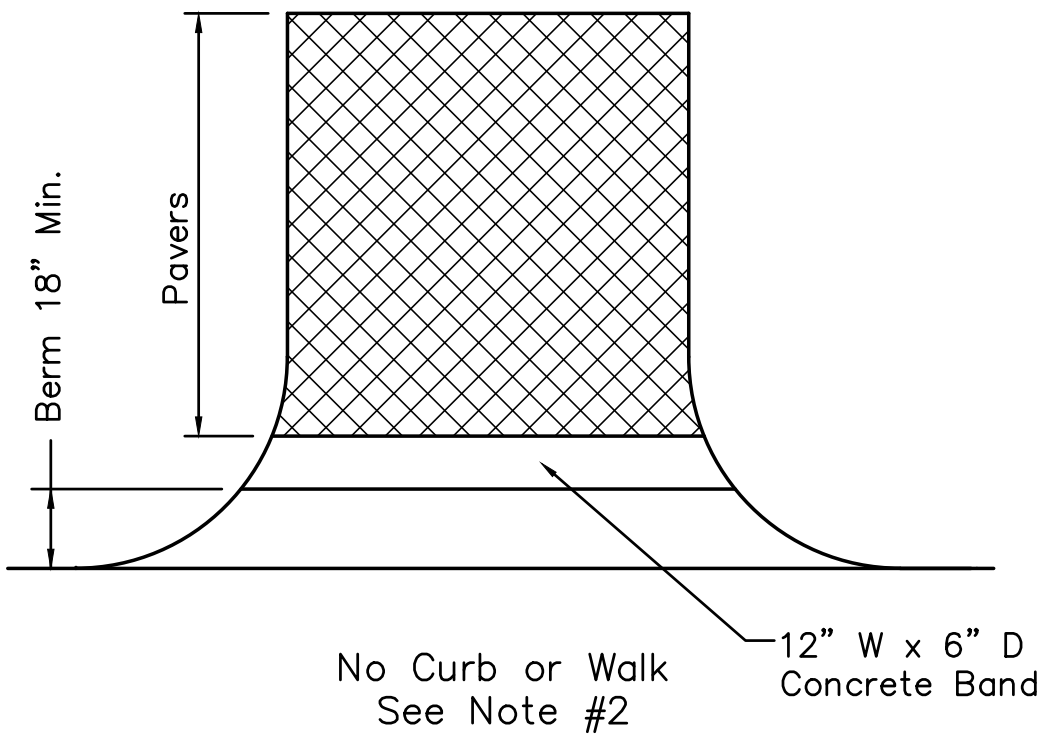
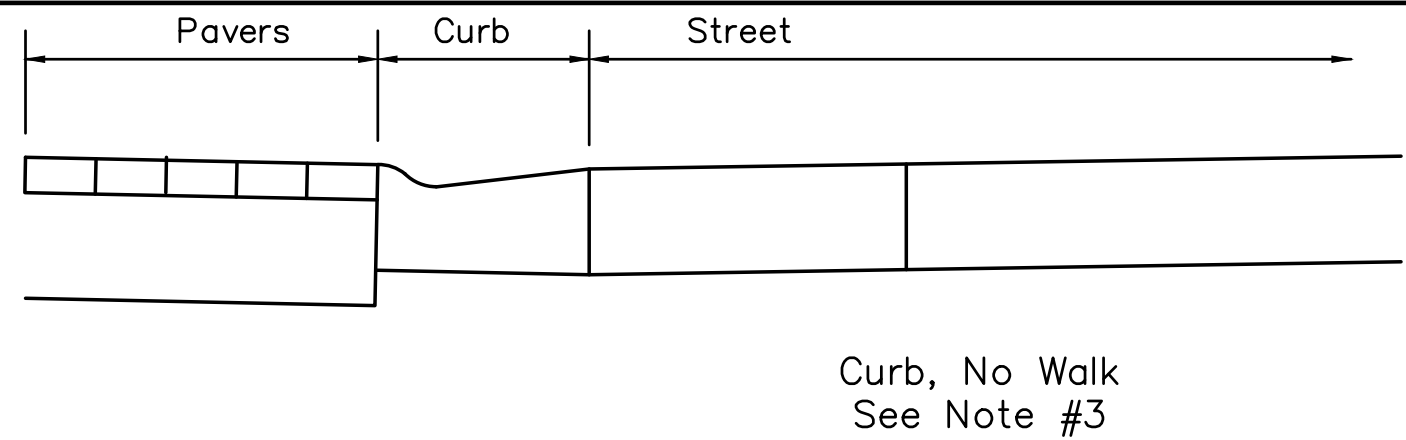
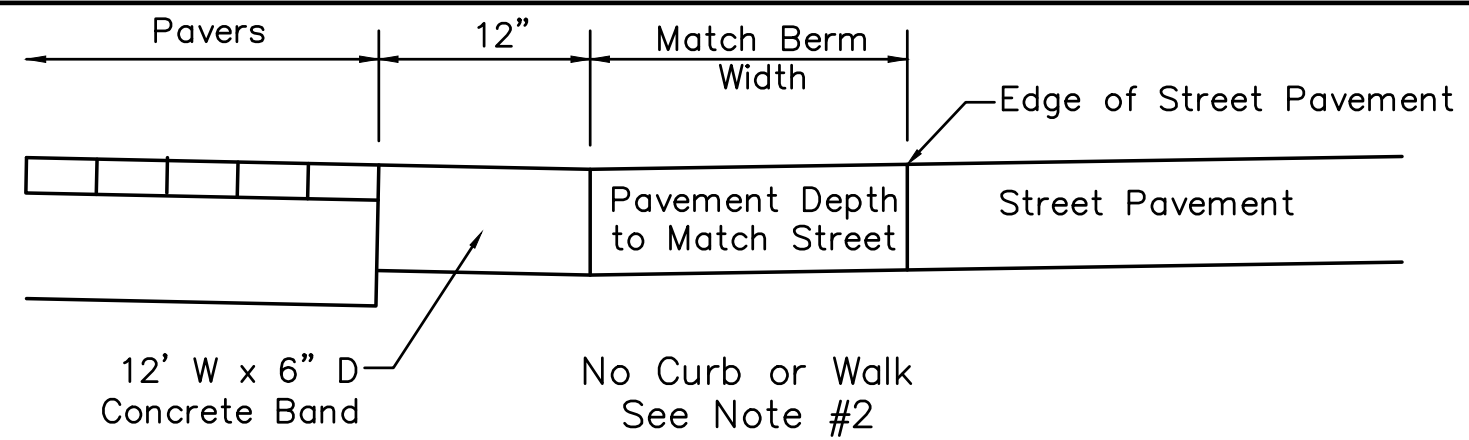


Curb to be constructed through driveway as shown in Section A-A

Curb to be constructed through driveway as shown in Section B-B



DRIVE APRON	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET 4
DATE <u>JUNE 2023</u>	

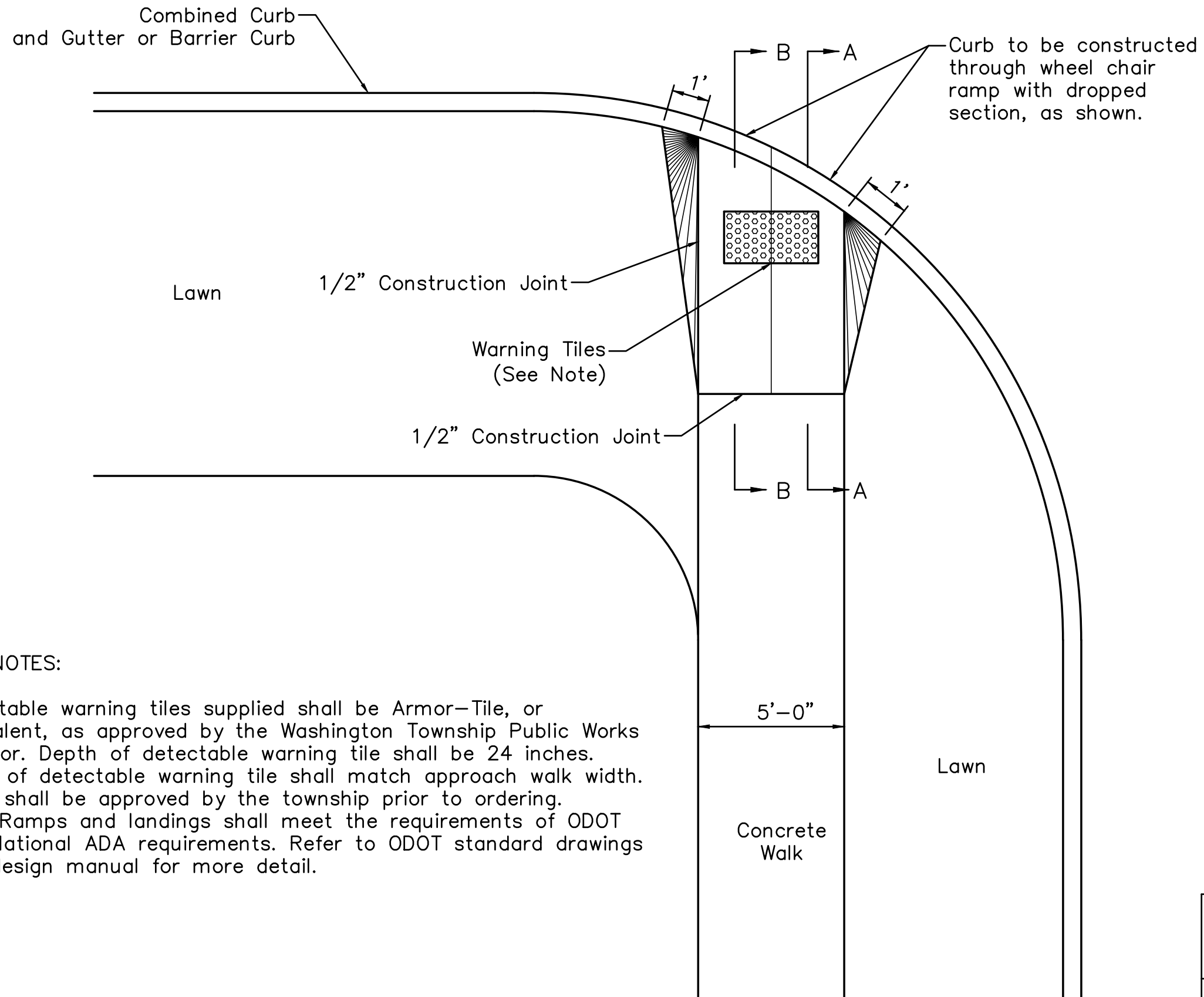


GENERAL NOTES:

1. Concrete for drive approaches shall conform to ODOT Item 452—Plain Portland Cement Concrete Pavement
2. The dimension from the edge of pavement to the face of the concrete band shall be equal to the width of the roadside gravel berm, or a minimum of Eighteen inches (18") if there is no berm.
3. On streets with curb, but no sidewalk, paver blocks can be set to the back of the curb.
4. On the streets with curb and walk, paver blocks can be set to the back of the walk and a standard drive approach shall be used.



PAVER DRIVE	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET 5
DATE : JUNE 2023	



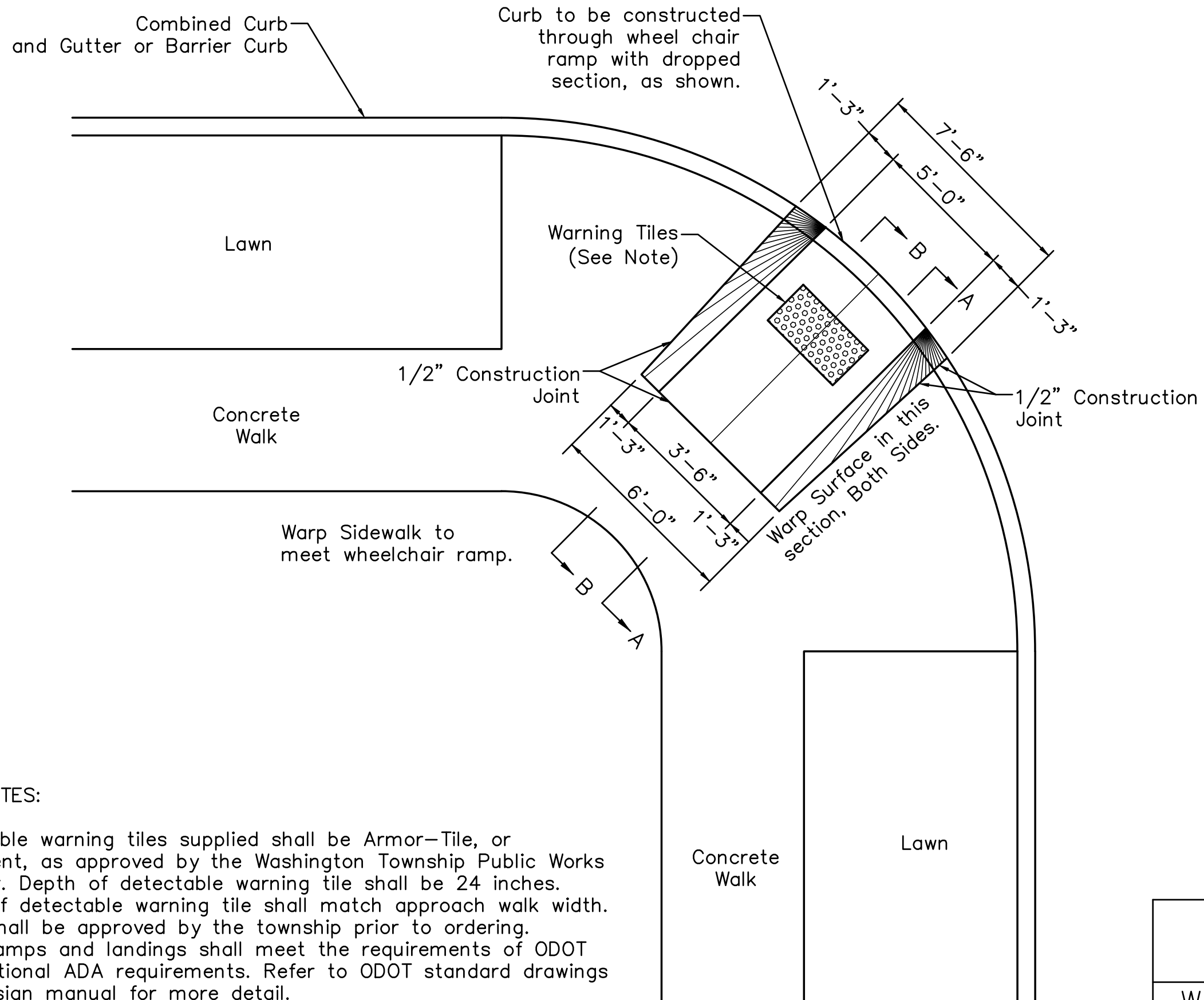
GENERAL NOTES:

1. Detectable warning tiles supplied shall be Armor-Tile, or equivalent, as approved by the Washington Township Public Works Director. Depth of detectable warning tile shall be 24 inches. Width of detectable warning tile shall match approach walk width. Color shall be approved by the township prior to ordering.
2. Curb Ramps and landings shall meet the requirements of ODOT and National ADA requirements. Refer to ODOT standard drawings and design manual for more detail.

Typical Ramp Detail with Walk on Only One Side.



CURB RAMP PLAN	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET 6
DATE : JUNE 2023	



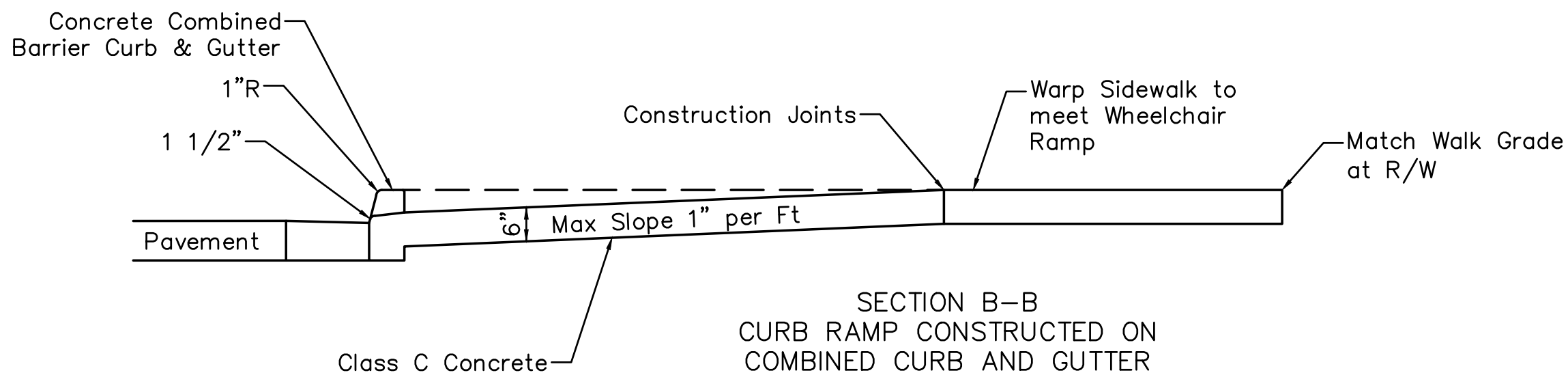
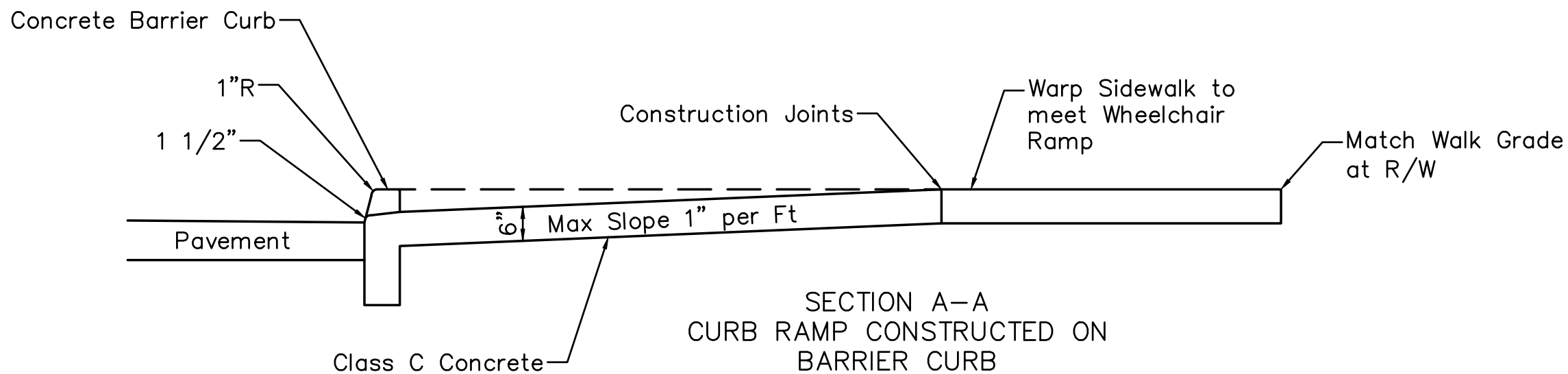
GENERAL NOTES:

1. Detectable warning tiles supplied shall be Armor-Tile, or equivalent, as approved by the Washington Township Public Works Director. Depth of detectable warning tile shall be 24 inches. Width of detectable warning tile shall match approach walk width. Color shall be approved by the township prior to ordering.
2. Curb Ramps and landings shall meet the requirements of ODOT and National ADA requirements. Refer to ODOT standard drawings and design manual for more detail.

Typical Ramp Detail with Walk on Both Sides.



CURB RAMP PLAN	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET 7
DATE : JUNE 2023	



CURB RAMP PROFILES

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

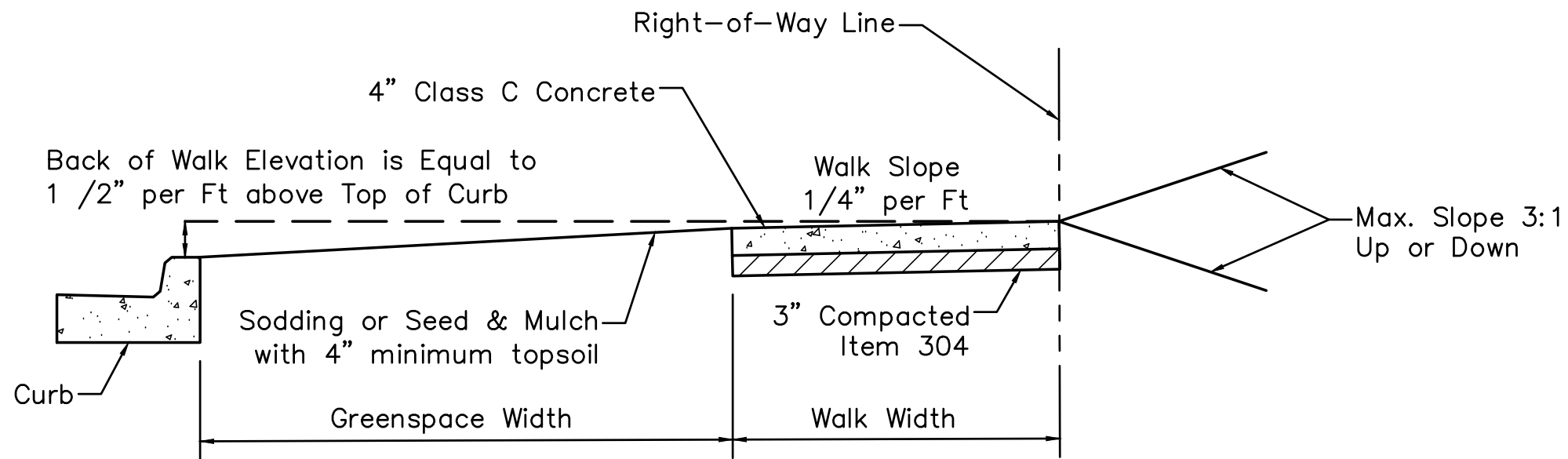
APPROVED: _____

DRAWN IBI GROUP
DATE : JUNE 2023

SHEET

8

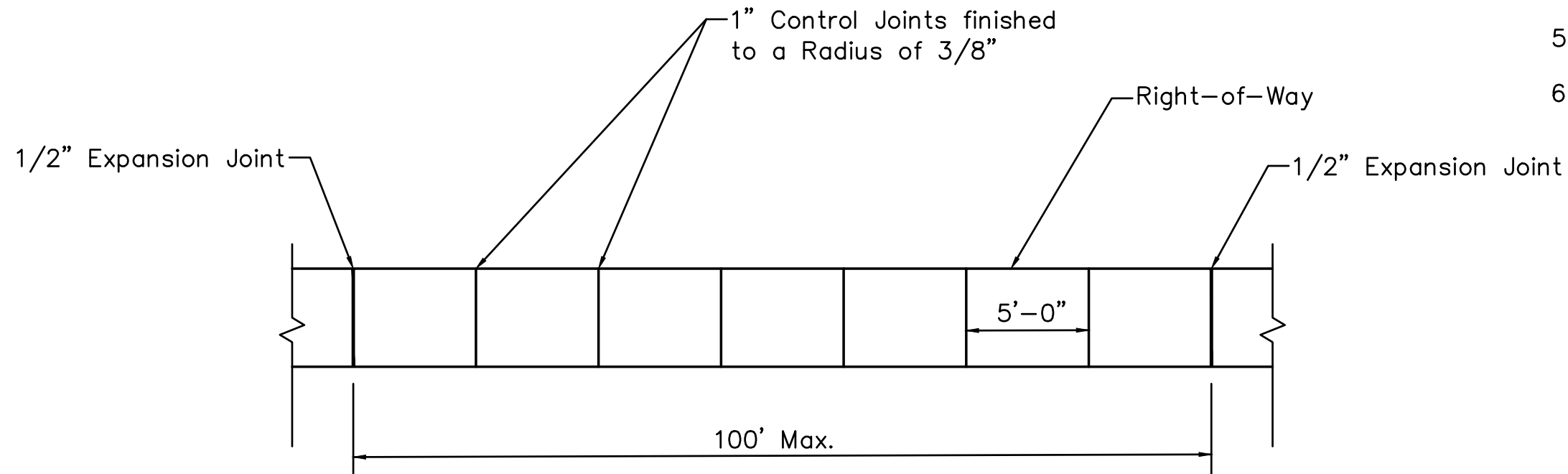




SIDEWALK CROSS-SECTION

GENERAL NOTES:

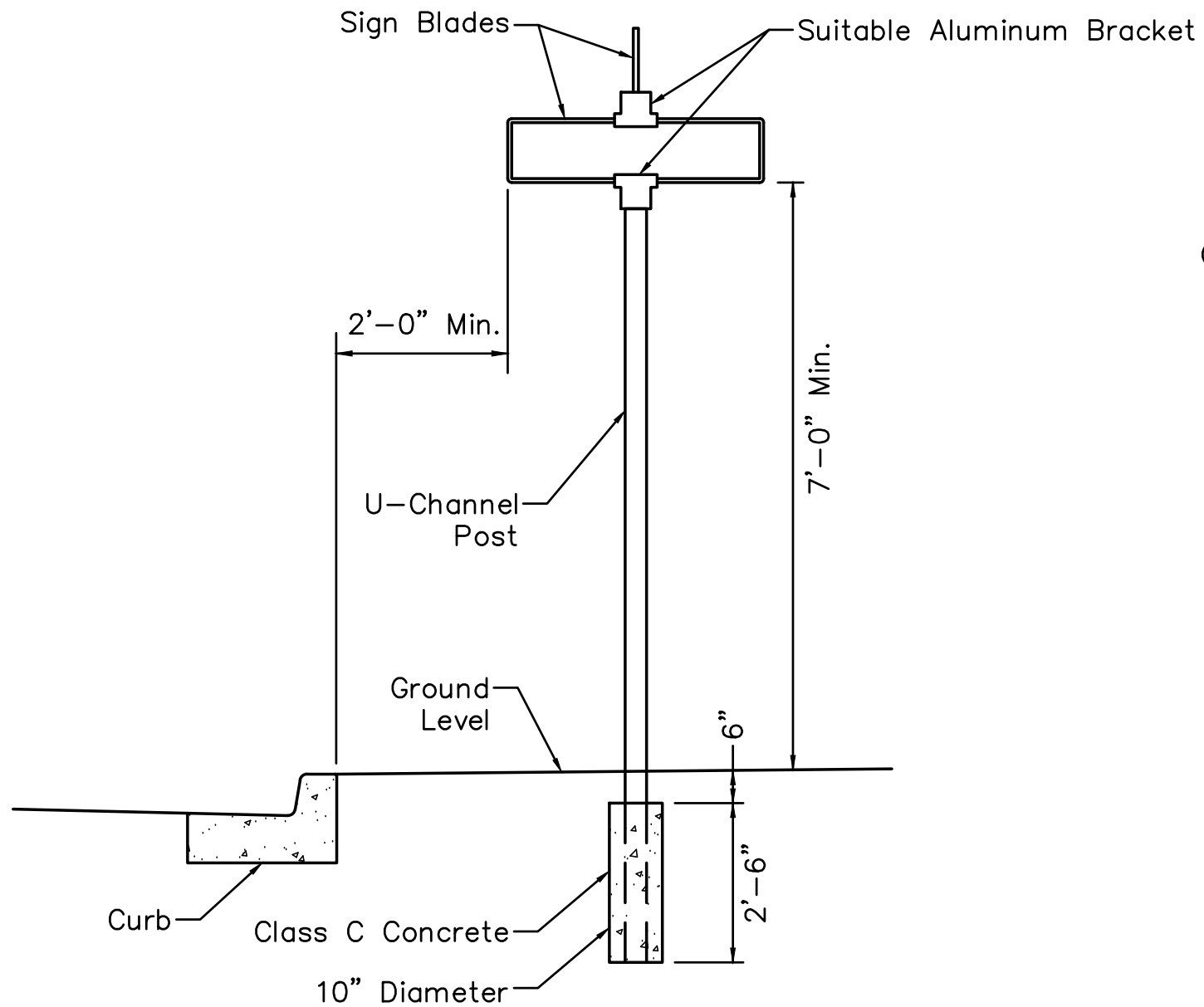
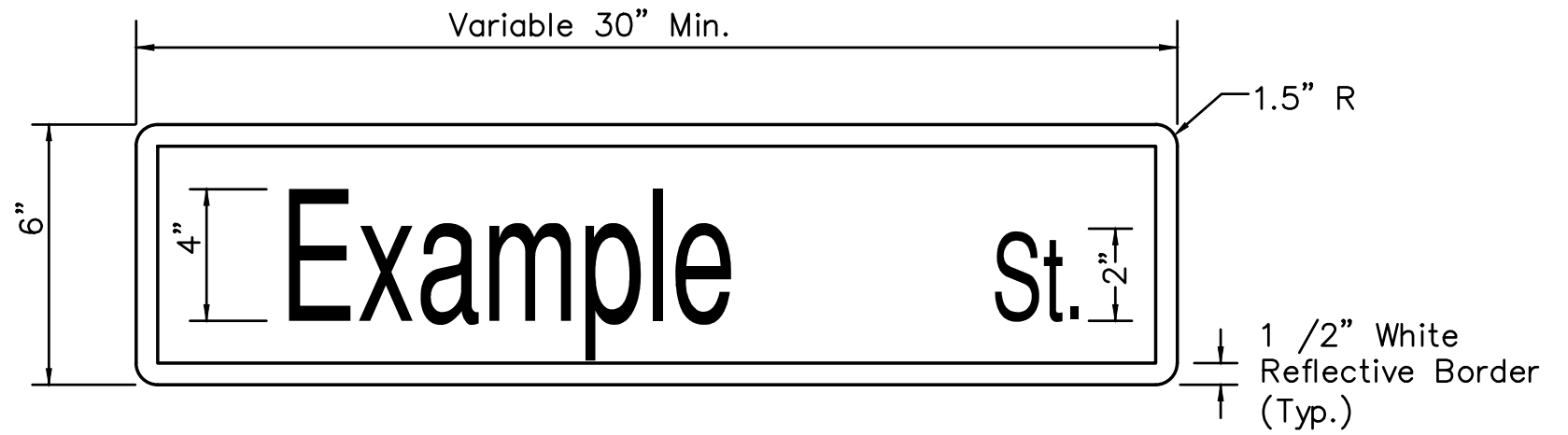
1. Concrete for sidewalk shall meet the requirements of Item 608.
2. All exposed surfaces shall be broomed edge to edgewidth tooled edges per ODOT Item 608.
3. Sidewalks shall be 4" thick, except thru driveways which shall be:
 Residential Driveway: 6"
 Commercial Driveway: 7"
4. 3" of gravel base shall be placed under walks if determined necessary.
5. Walks shall be backfilled within 5 days of being poured.
6. Curing compound shall be applied in accordance with Item 451.10.



SIDEWALK PLAN

CONCRETE WALK	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN <u>IBI GROUP</u>	SHEET
DATE : <u>JUNE 2023</u>	9





GENERAL NOTES:

1. The Sign Face shall be made of Reflectorized White Letters on Reflectorized Green Background with a White Border.
2. Type 'C' Series Letters, Reference: Ohio Manual of Uniform Traffic Control Devices.
3. Sign Blades shall have Nominal Thickness of 0.080 Inches and shall be of 6061-T6 Aluminum alloy.
4. The Blades shall be made of extruded Aluminum.
5. All Blades shall be Bonderized or Anodized prior to applying the reflective sheeting.
6. Post shall be located at the intersection to provide good visibility of Street names from all approaches.

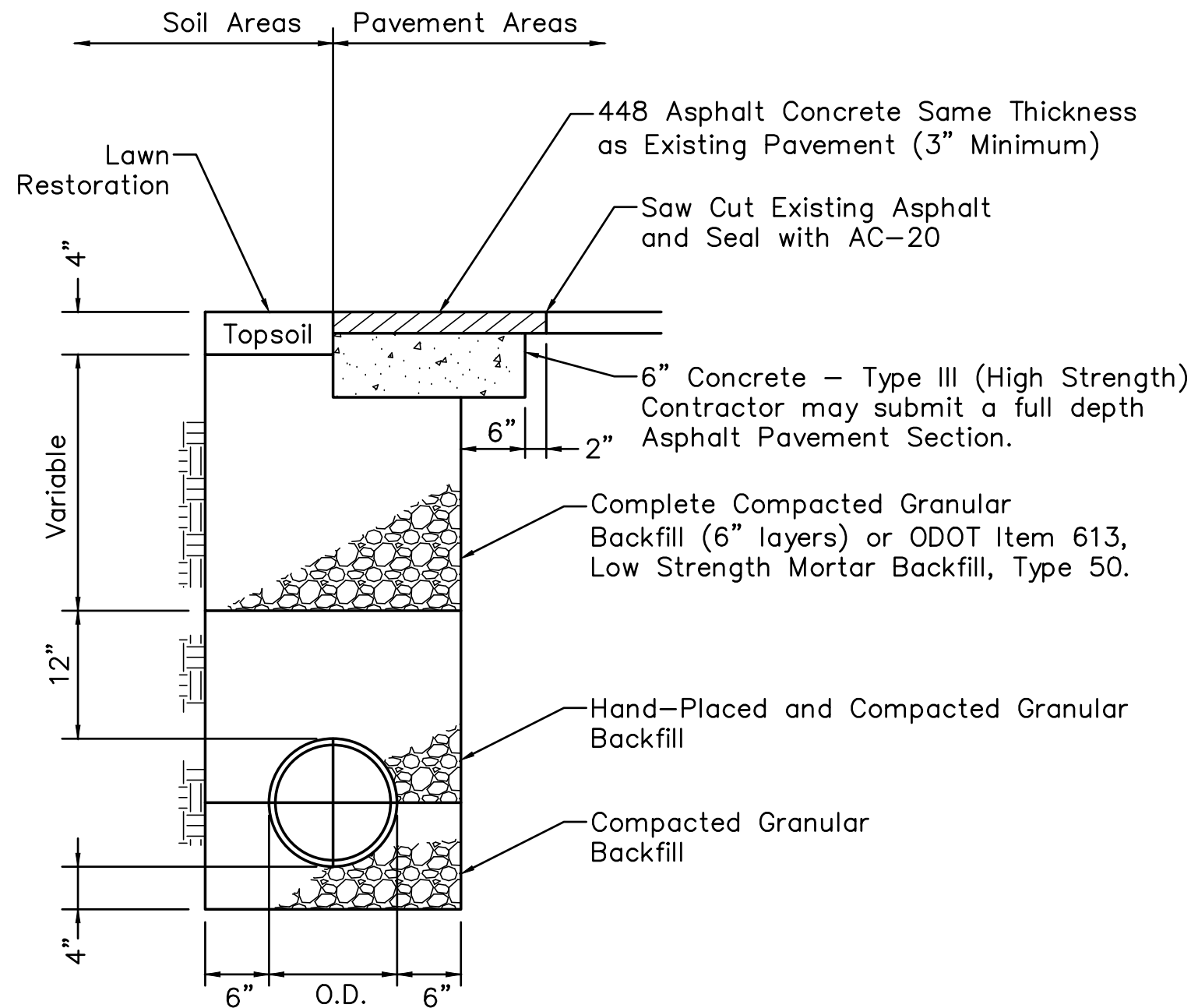
STREET SIGN

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____

DRAWN	IBI GROUP	SHEET	10
DATE	: JUNE 2023		





GENERAL NOTES:

1. A street cut permit shall be obtained from the Washington Township Public Works Department prior to opening a Township roadway.
2. Traffic shall be maintained at all times. All traffic control shall be in accordance with the latest edition of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD). Contractor shall supply for review and approval a Maintenance of Traffic Plan prior to beginning work.
3. Closing of a township road requires the approval of the Township Trustees. A written request shall be submitted to the Public Works Director two (2) weeks prior to the closing.
4. Washington Township shall inspect the trench prior to backfilling.
5. All backfill material shall be compacted in uniform layers.
6. Item 407 - Tack Coat shall be placed on the concrete surface at the rate of 0.1 gal. per sq. yd. prior to placing the 448 asphalt.
7. All joints shall be sealed with an AC-20 seal or approved equal.
8. Upon completion of the job, the area shall be cleaned of all dirt, mud and debris.
9. Lawn Restoration can be Seed & Mulch or Sod. Permit holder and /or contractor is responsible to maintain until restoration is established. Re-seeding may be required by the Public Works Director

NOTE:

In pavement areas, the 448 asphalt concrete shall be placed the same day the concrete is poured. If the contractor is unable to complete the restoration the same day, temporary means shall be used to open the road to traffic (temporary patch, gravel, anchored steel plates, etc.). The contractor will assume responsibility for maintaining the temporary patch until the final 448 asphalt is in place.

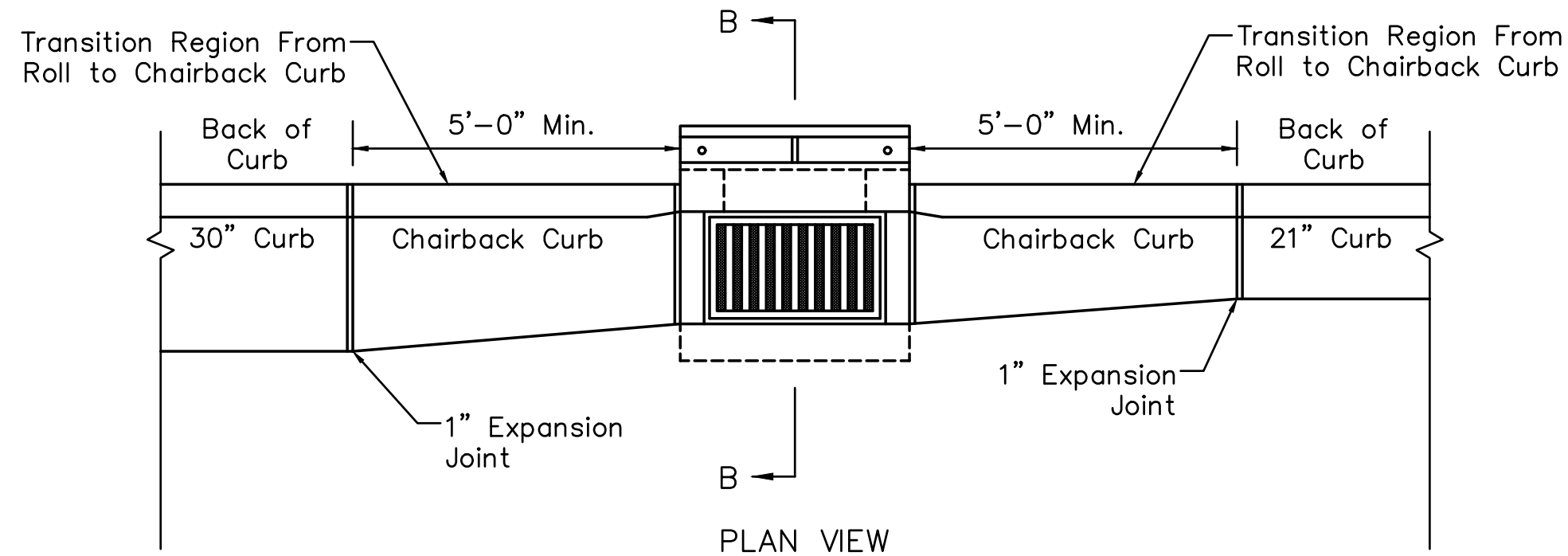
TRENCH REPAIR

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____

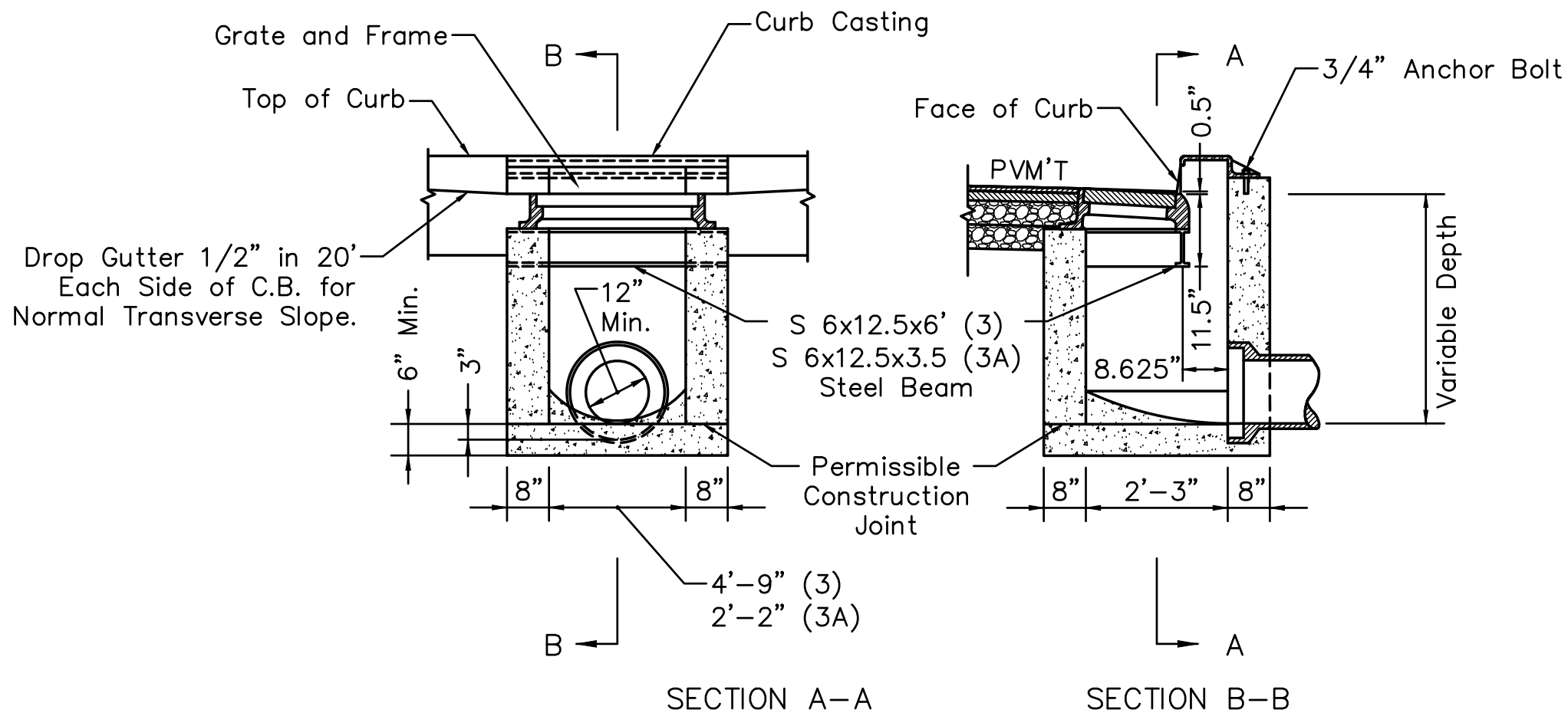


DRAWN	IBI GROUP	SHEET	11
DATE	: JUNE 2023		



GENERAL NOTES:

1. Concrete for curb shall meet the requirements of Item 609.
2. All exposed surfaces shall be broomed and edged.
3. Type 3 catch basins are to be located in low spots and type 3A in other locations.
4. Taper curb in transition region from the typical 21" or 30" to meet the corner of inlet frame.
5. Catch basin and curbing shall be backfilled immediately after removal of curb forms.
6. Curing compound shall be applied in accordance with Item 451.10.
7. Cast the following text into the top of the curb casting: "DUMP NO WASTE" and "DRAINS TO CREEK". Print text in bold, capital letter at least 3/4" high.



CURB INLET &
CATCH BASIN

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____

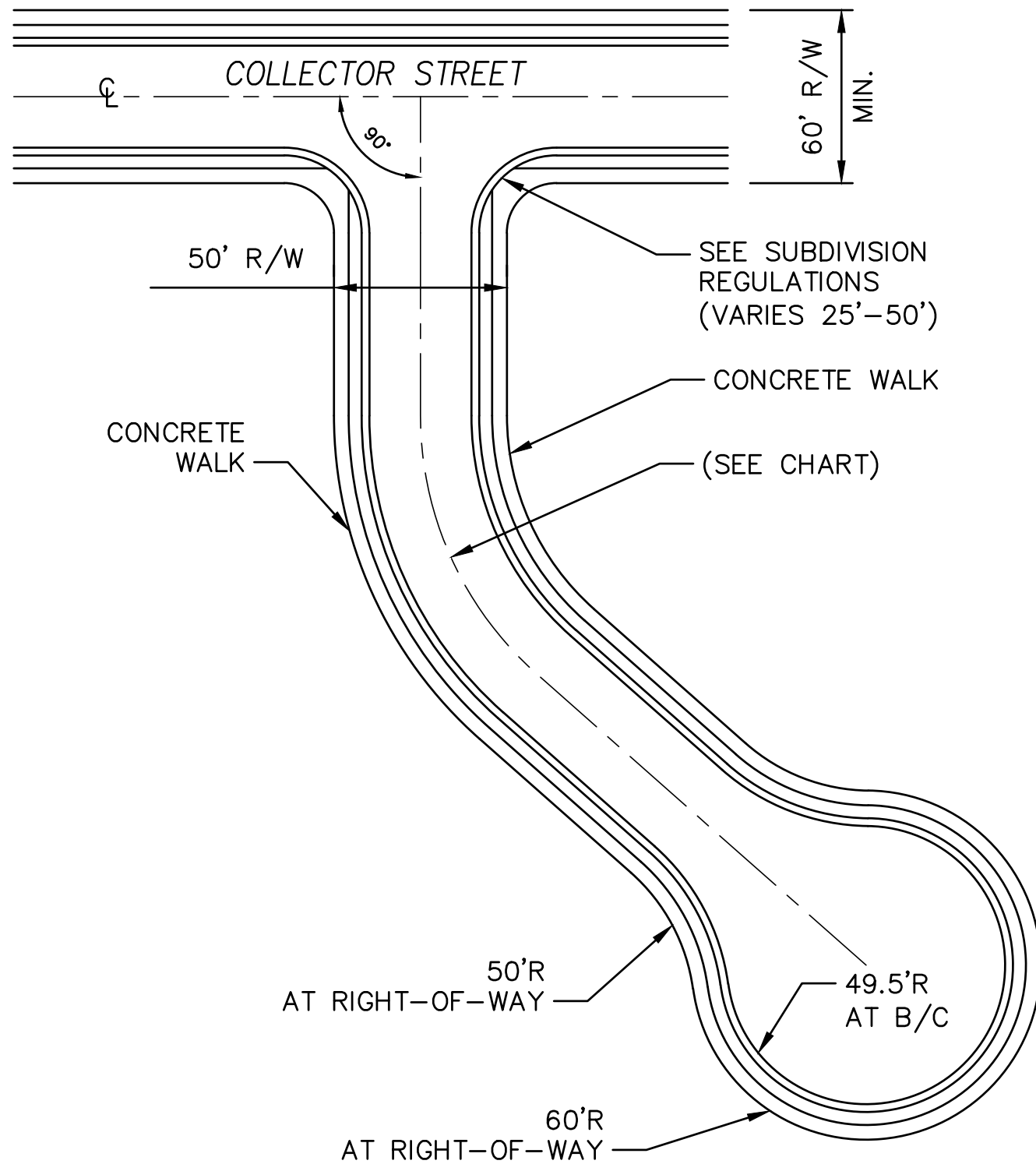
DRAWN IBI GROUP
DATE : JUNE 2023

SHEET

12



TYPICAL STREET AND CUL-DE-SAC PLAN



MINIMUM STREET DESIGN STANDARDS

	LOCAL	COLLECTOR	ARTERIAL
MINIMUM CENTERLINE GRADES	.50%	.50%	.50%
MAXIMUM CENTERLINE GRADES	8%	8%	7%
MINIMUM LENGTH OF VERTICAL CURVE (SEE NOTE A).	50FT.	50FT.	100FT.
MINIMUM CENTERLINE RADIUS	200FT.	300FT.	400FT.
MINIMUM LENGTH TANGENT BETWEEN CURVES	PER SUBDIVISION REGULATIONS		
MINIMUM BACK-OF-CURB RADIUS	PER SUBDIVISION REGULATIONS		
MINIMUM HORIZONTAL VISIBILITY	200FT.	300FT.	500FT.
MINIMUM STOPPING SIGHT DISTANCE (MEASURED FROM 3.5" EYE-LEVEL TO 6" OBJECT HEIGHT)	PER SUBDIVISION REGULATIONS		
CROSSROAD GRADE-STOP CONDITION- WITHIN 100' OF AN INTERSECTION	3%	3%	3%

NOTES

- A. Minimum length of vertical curve can be reduced or eliminated to allow for proper drainage, with approval.
- B. Street grades shall not exceed 3% within a distance of 100 feet from an intersection with another street centerline.
- C. The maximum length for a cul-de-sac street shall be 600 feet from center of the street to the center of the cul-de-sac unless authorized by the Public Works Director.

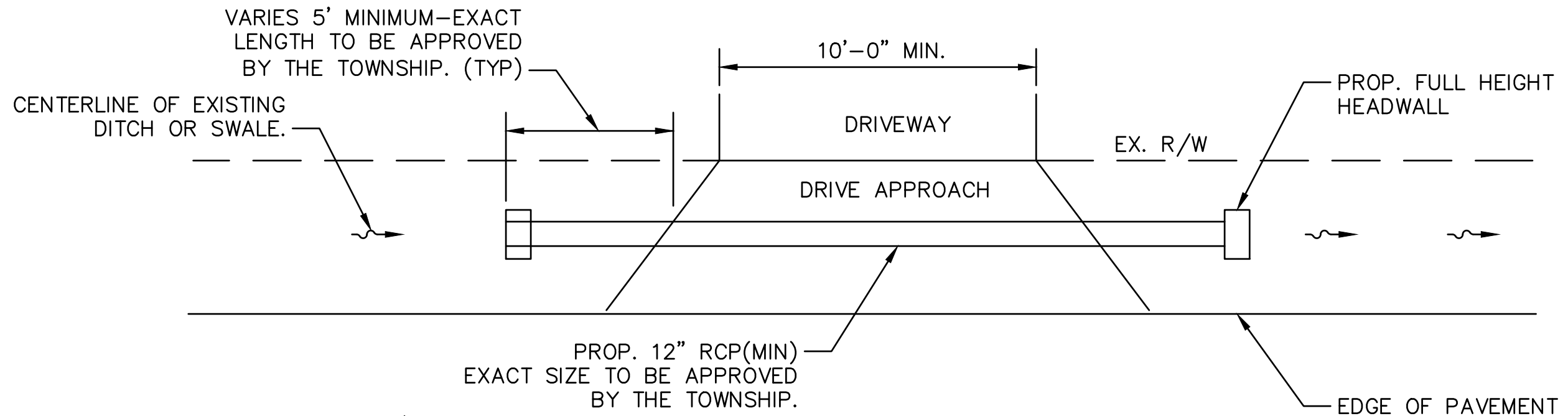
STREET DESIGN STANDARDS

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____

DRAWN IBI GROUP	SHEET
DATE : JUNE 2023	13



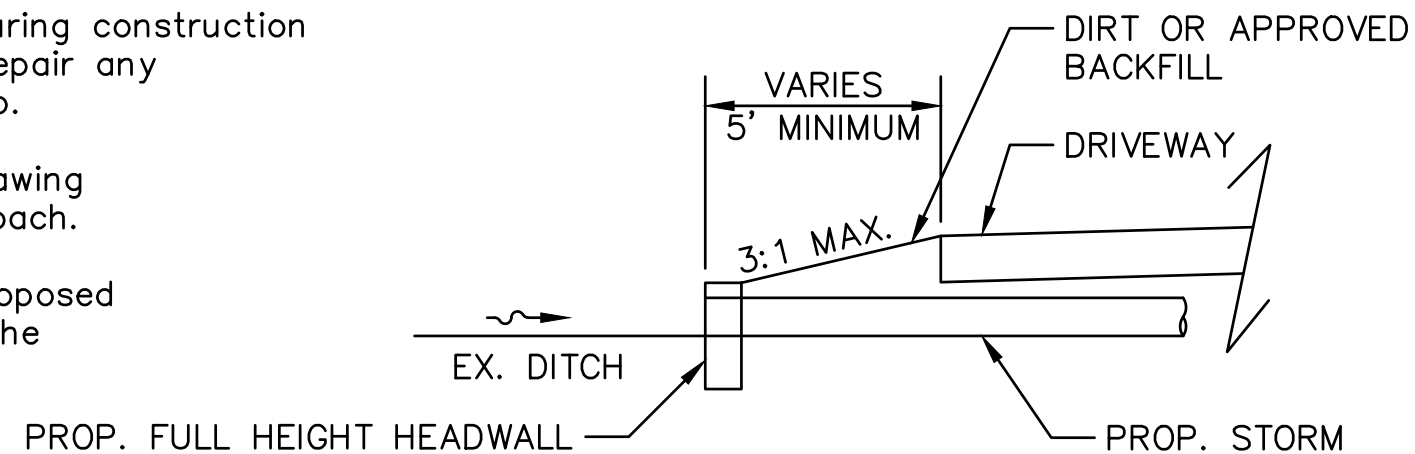
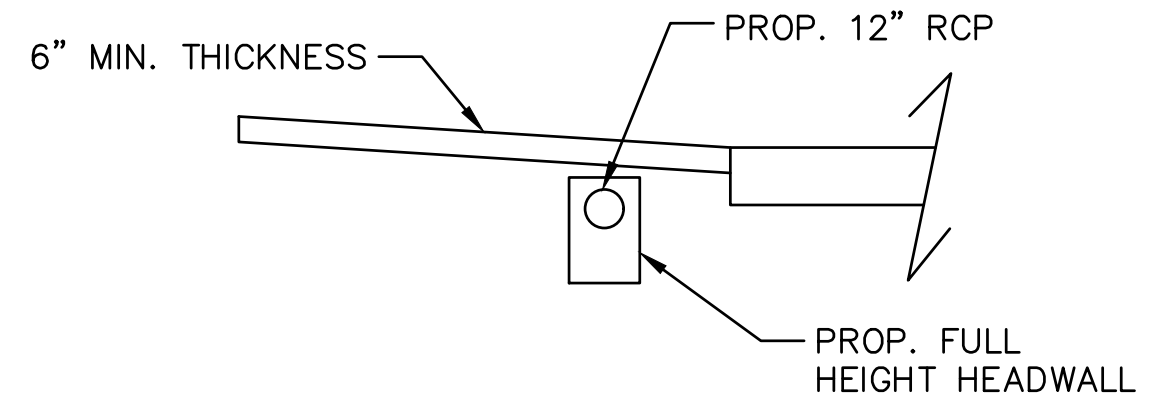


ENGINEER REQUIRED TO PROVIDE SIGNED/SEALED CALCULATIONS FOR SIZING.

DRIVE WITH CULVERT

NOTES

- A. Drive approaches shall be constructed per the Township standards and approval.
- B. All new construction or modifications of drive approaches require a concrete approach, regardless of whether there is a sidewalk or not. the new approach is to go from edge of existing street to right-of-way.
- C. Any drainage issues will have to be addressed when a driveway is installed or modified.
- D. If the existing roadway is disturbed during construction the property owner will be responsible to repair any damage to the satisfaction of the Township.
- E. The property owner shall provide a drawing showing the location of the proposed approach.
- F. The exact size and location of the proposed culvert and headwalls will be approved by the Township prior to construction.



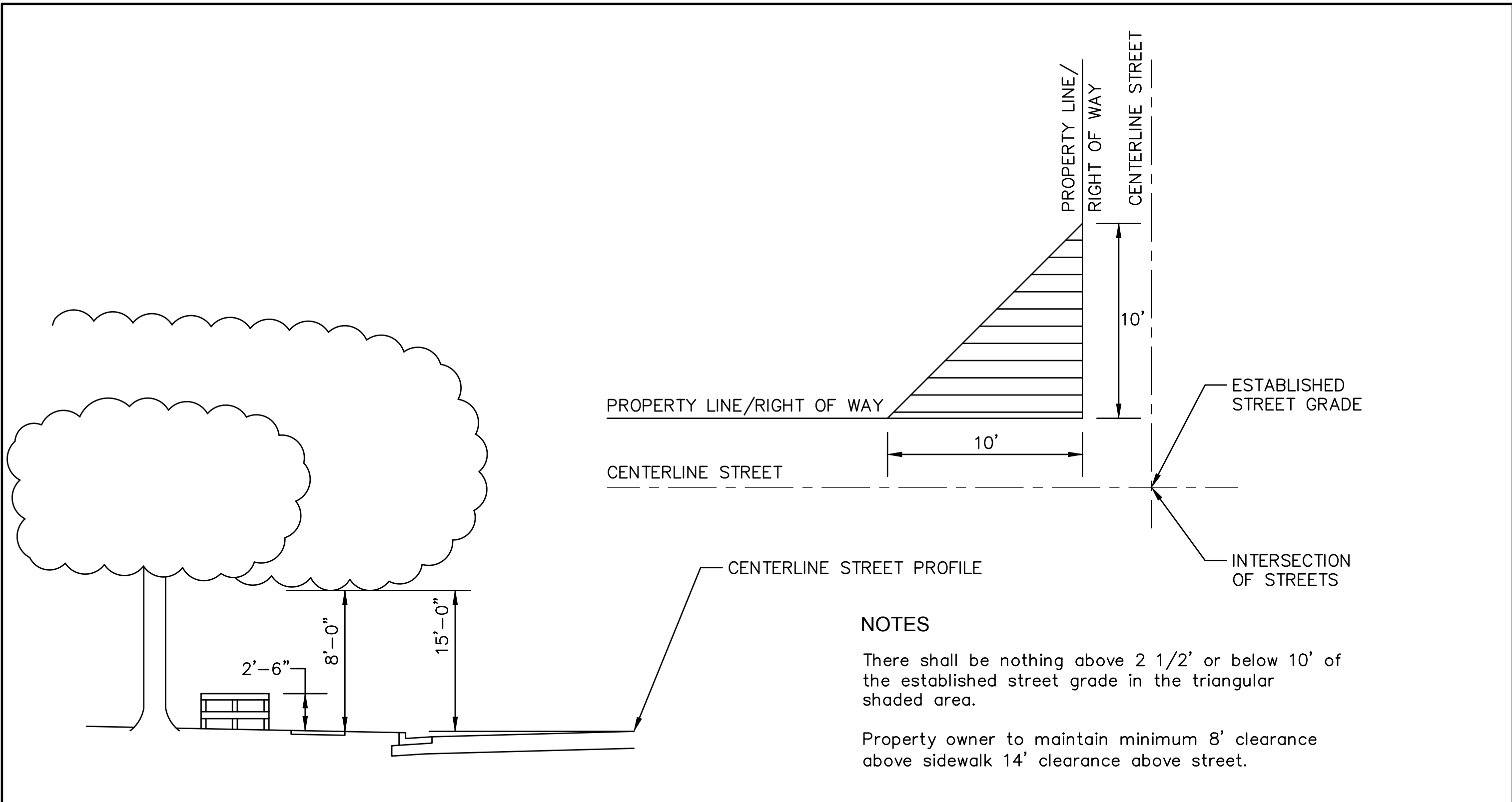
DRIVE APPROACH WITH CULVERT

WASHINGTON TOWNSHIP
MONTGOMERY COUNTY, OHIO

APPROVED: _____

DRAWN	IBI GROUP	SHEET	14
DATE	: JUNE 2023		





NOTES

There shall be nothing above 2 1/2' or below 10' of the established street grade in the triangular shaded area.

Property owner to maintain minimum 8' clearance above sidewalk 14' clearance above street.

VISION CLEARANCE EXHIBIT

VISION CLEARANCE ON CORNER LOTS	
WASHINGTON TOWNSHIP MONTGOMERY COUNTY, OHIO	
APPROVED: _____	
DRAWN IBI GROUP	SHEET
DATE : JUNE 2023	15

