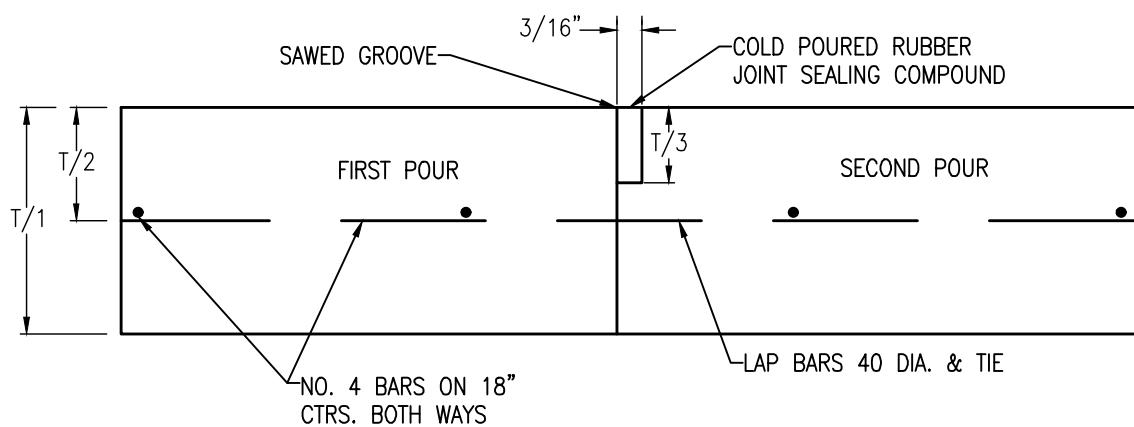
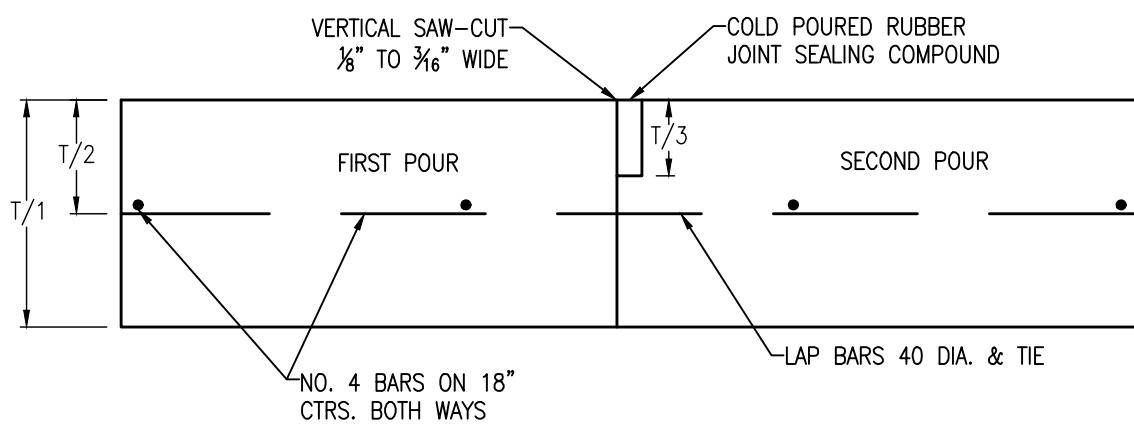


EXPANSION JOINT

NOT TO EXCEED 300' ALONG PAVEMENT CENTERLINE



CONSTRUCTION JOINT



SAWED CONTRACTION JOINT

NOTE: T= PAVEMENT THICKNESS

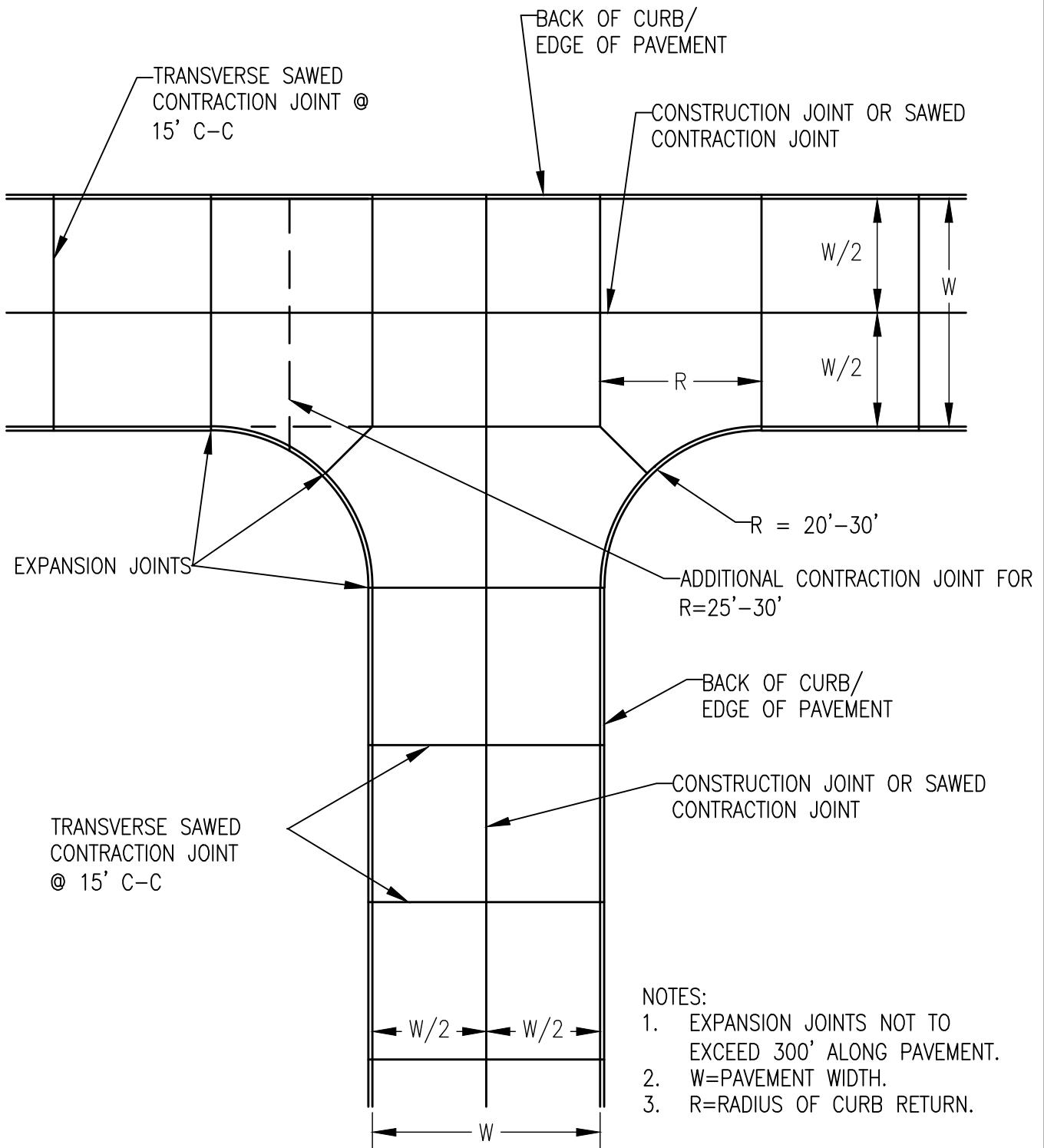
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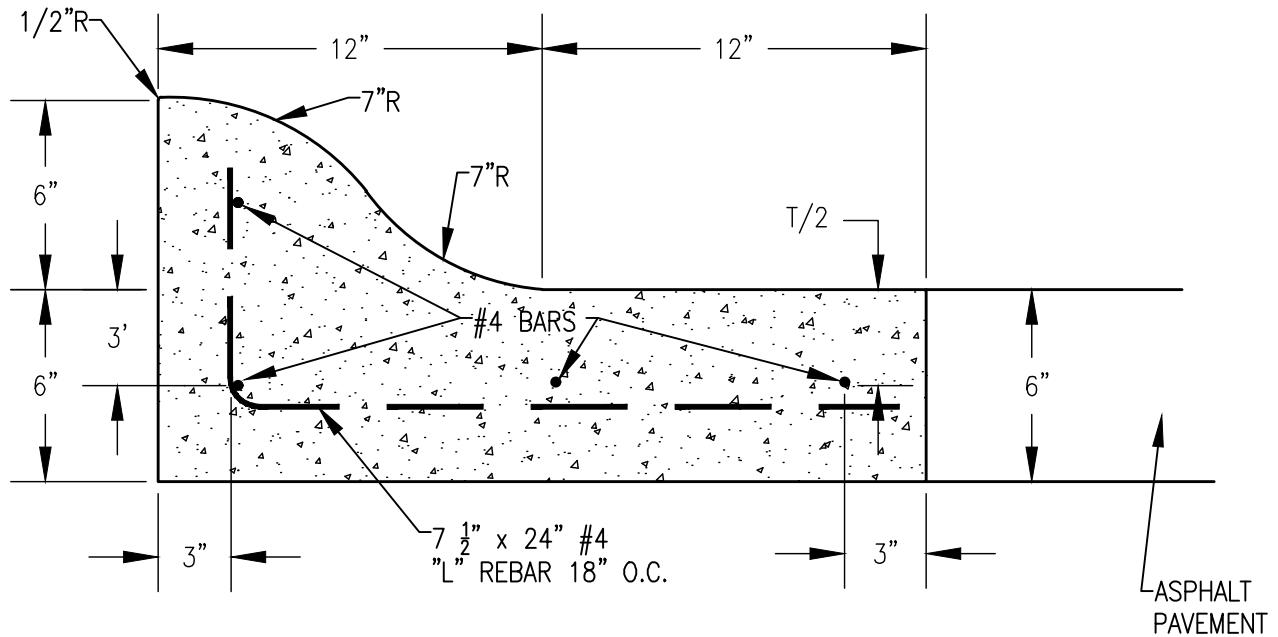
TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

CONC. PAVE.
JOINT DETAIL
WPD-01

CONCRETE PAVEMENT JOINT SPACING



MOUNTABLE
CONCRETE CURB & GUTTER
ASPHALT STREET



NOTES:

1. CONCRETE SHALL BE CLASS "A"

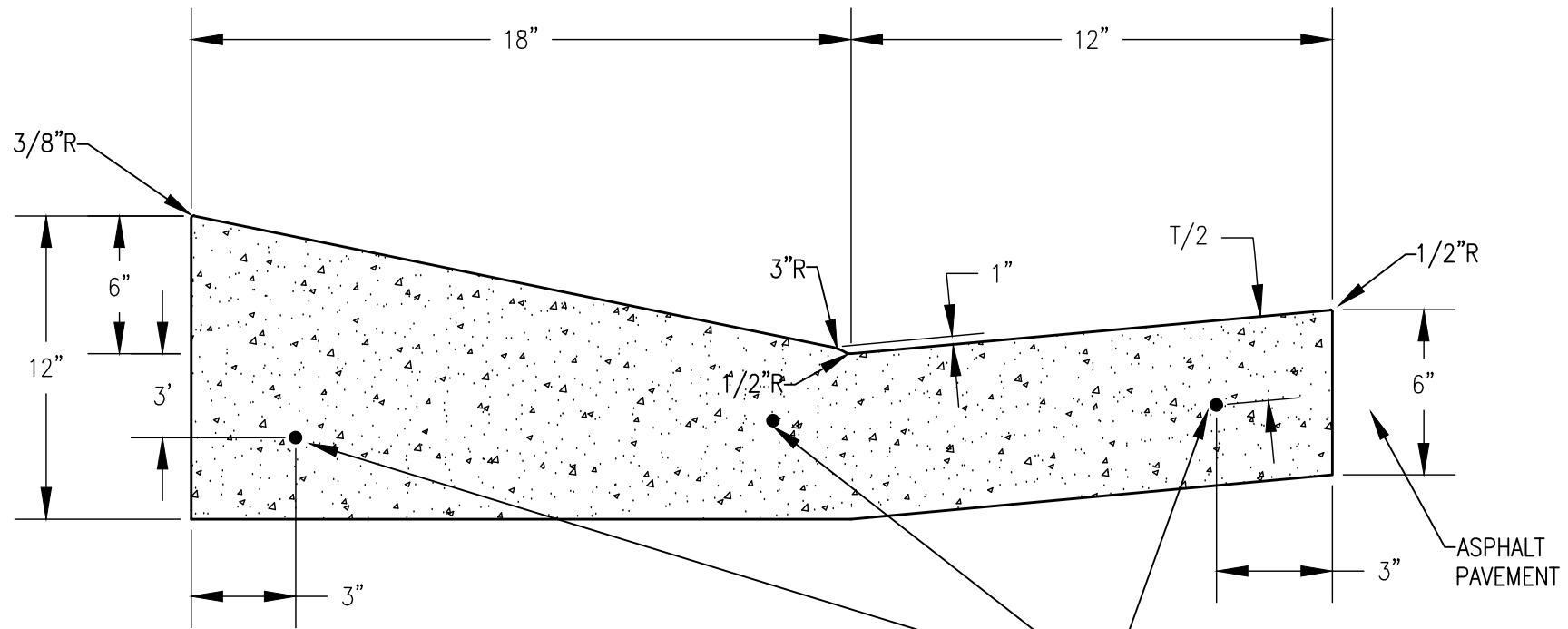
SEPTEMBER 2022



TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

CONCRETE
CURB AND
GUTTER
WPD-03

CONCRETE ROLLOVER
CURB & GUTTER
ASPHALT STREET



NOTES:

1. CONCRETE SHALL BE CLASS "A"

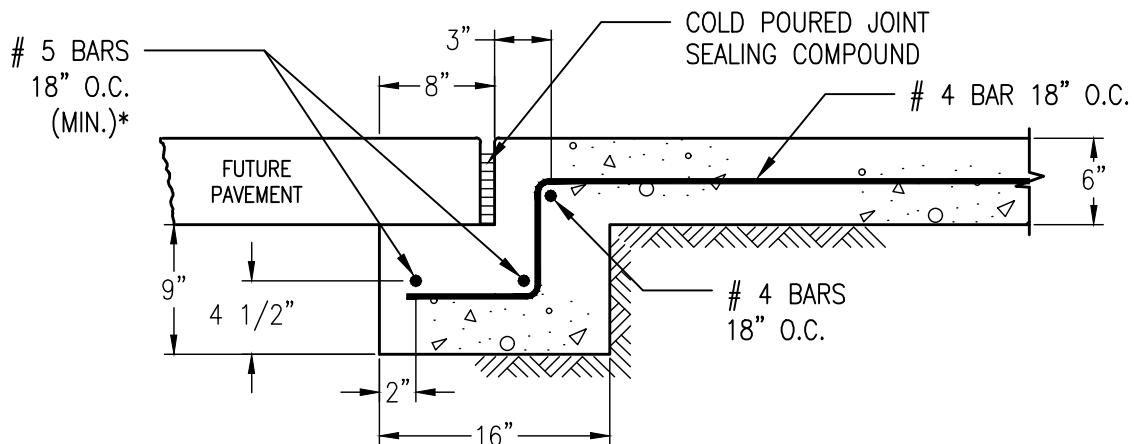
#5 BARS 12" O.C.
BOTH WAYS
ON CHAIRS

SEPTEMBER 2022



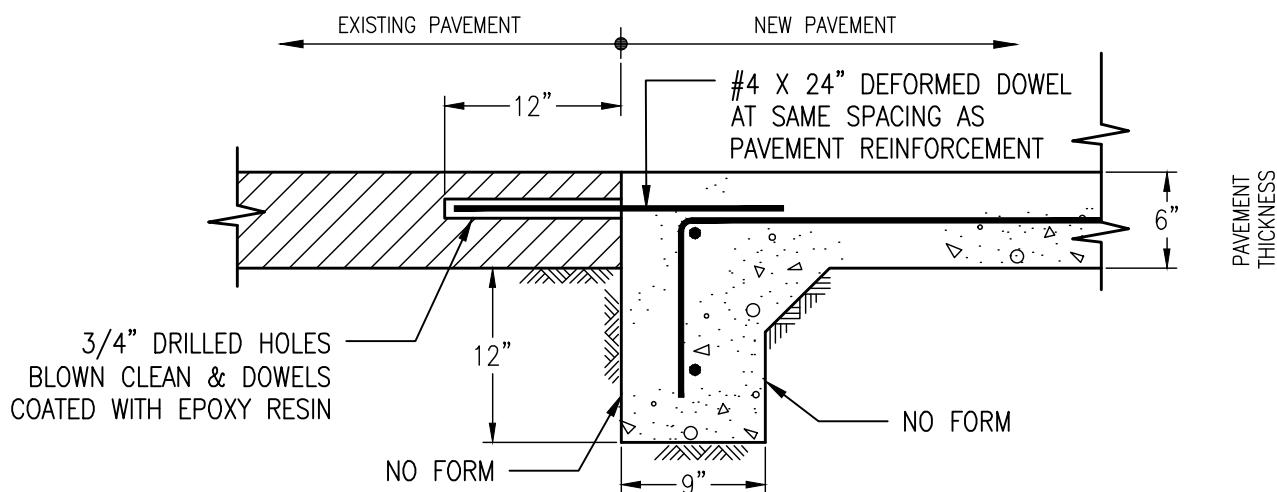
TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

CONCRETE
ROLLOVER
CURB
WPD-03A



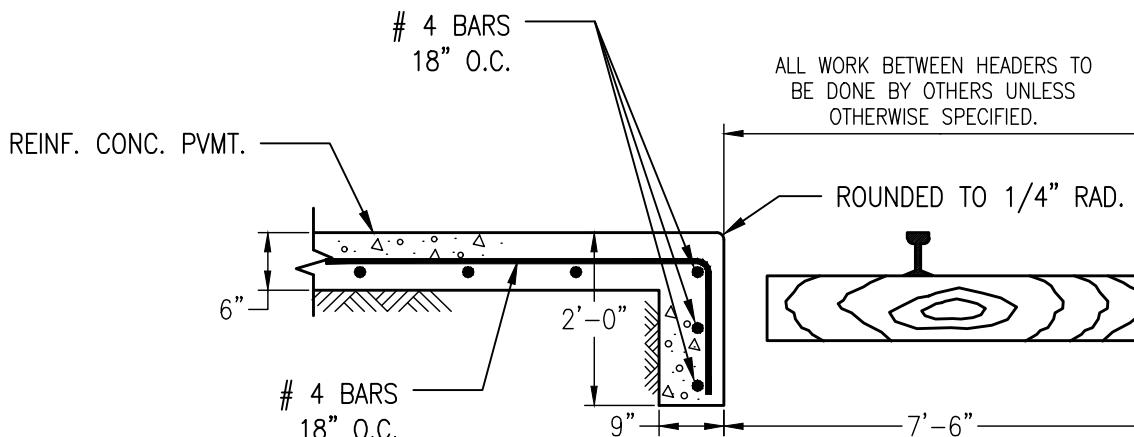
STREET HEADER FOR FUTURE PAVEMENT

N.T.S.



STREET HEADER AT EXISTING PAVEMENT

N.T.S.



NOTES:

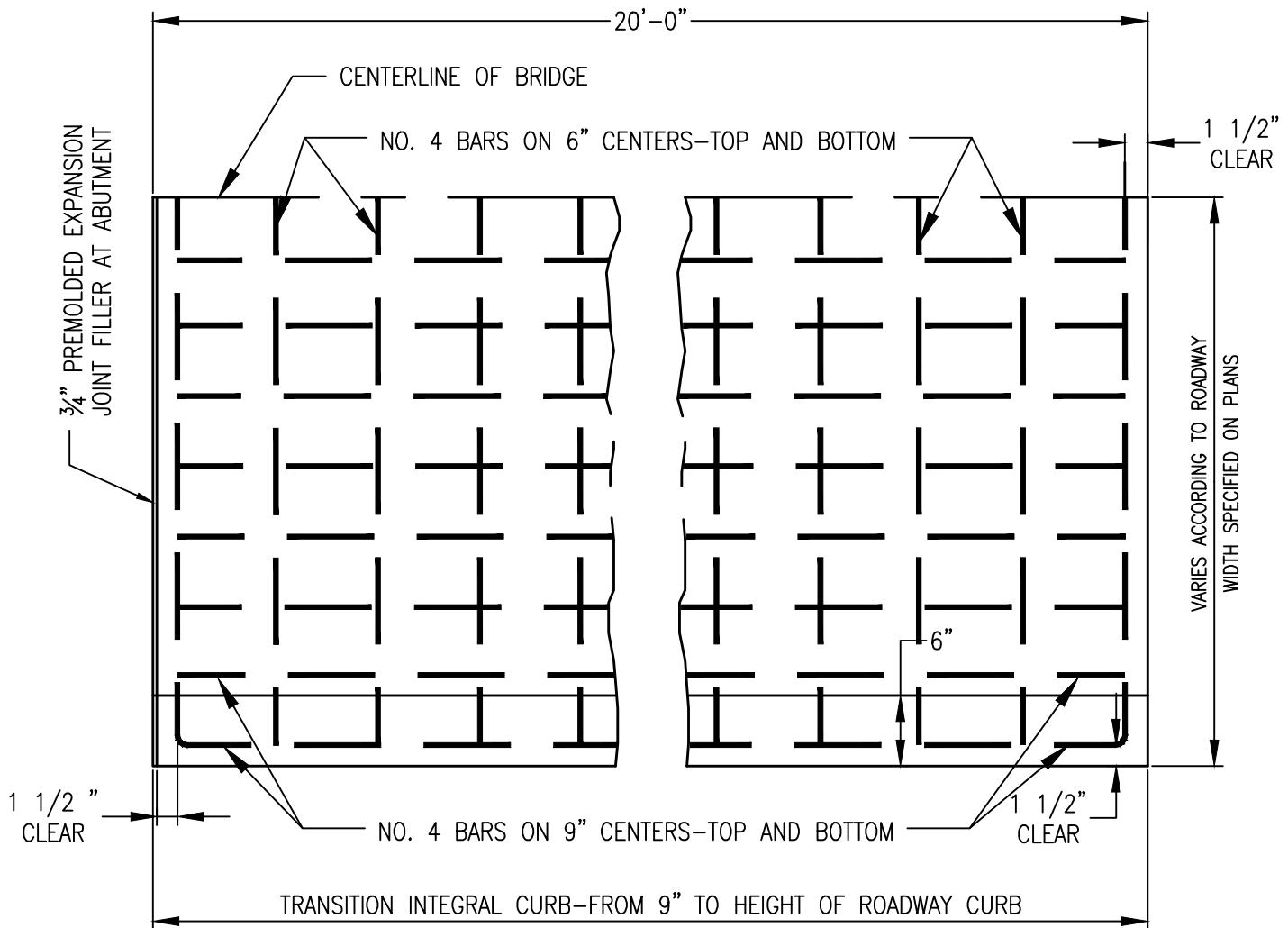
1. PAVEMENT BARS TO BE BENT DOWN INTO HEADER.
2. HEADER AND PAVEMENT TO BE MONOLITHIC.
3. REINFORCING STEEL TO BE DETERMINED BY RECOMMENDATION OF GEOTECHNICAL ENGINEER PROVIDED BY DEVELOPER

STREET HEADER AT RAILROAD

N.T.S.

SYMMETRICAL
ABOUT
CENTER LINE

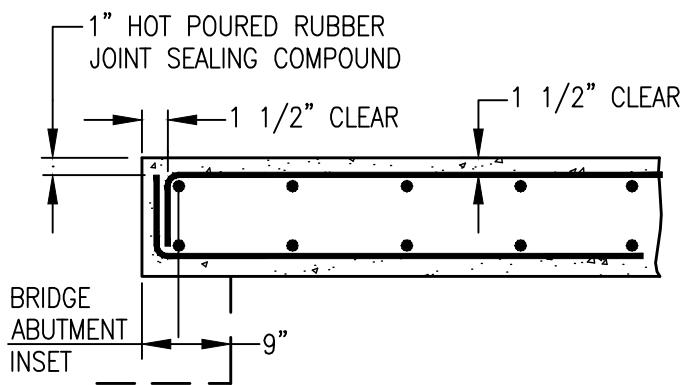
BRIDGE APPROACH SLAB



PLAN

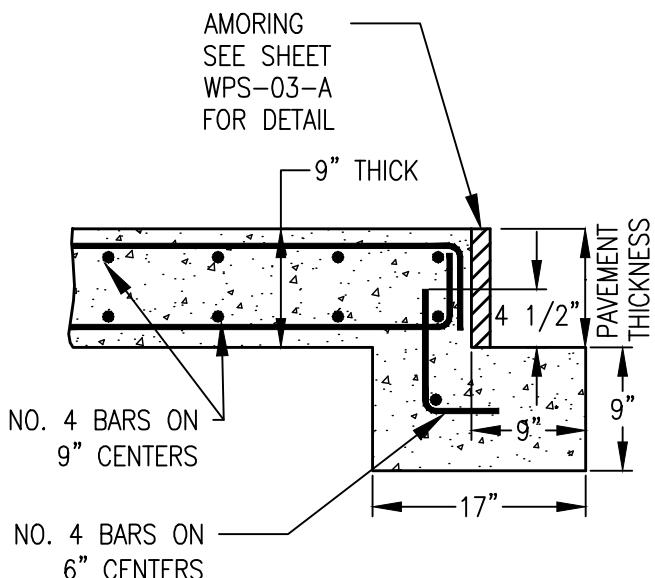
N.T.S.

AMORING
SEE SHEET
WPS-03-A
FOR DETAIL



SECTION

N.T.S.

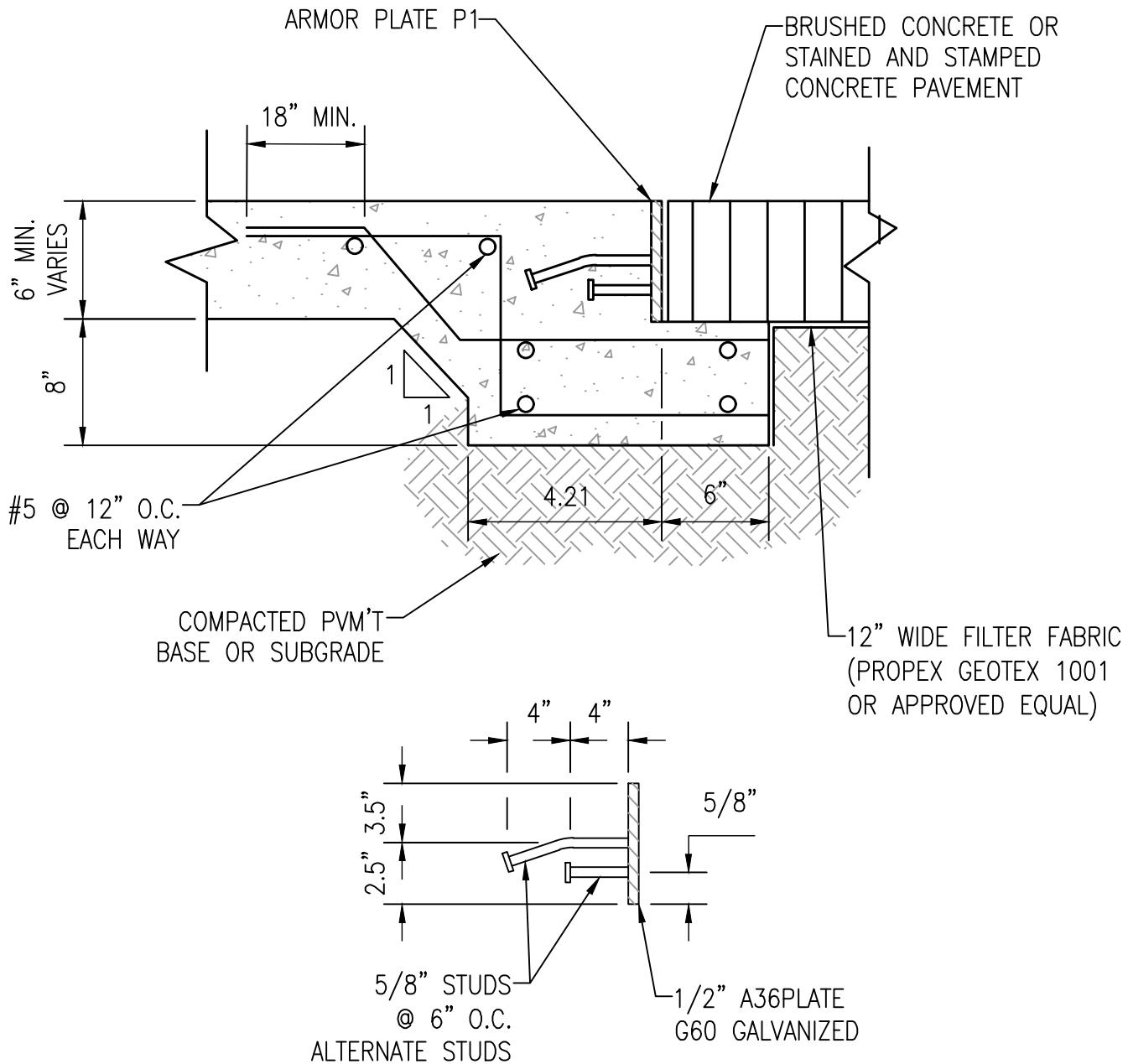


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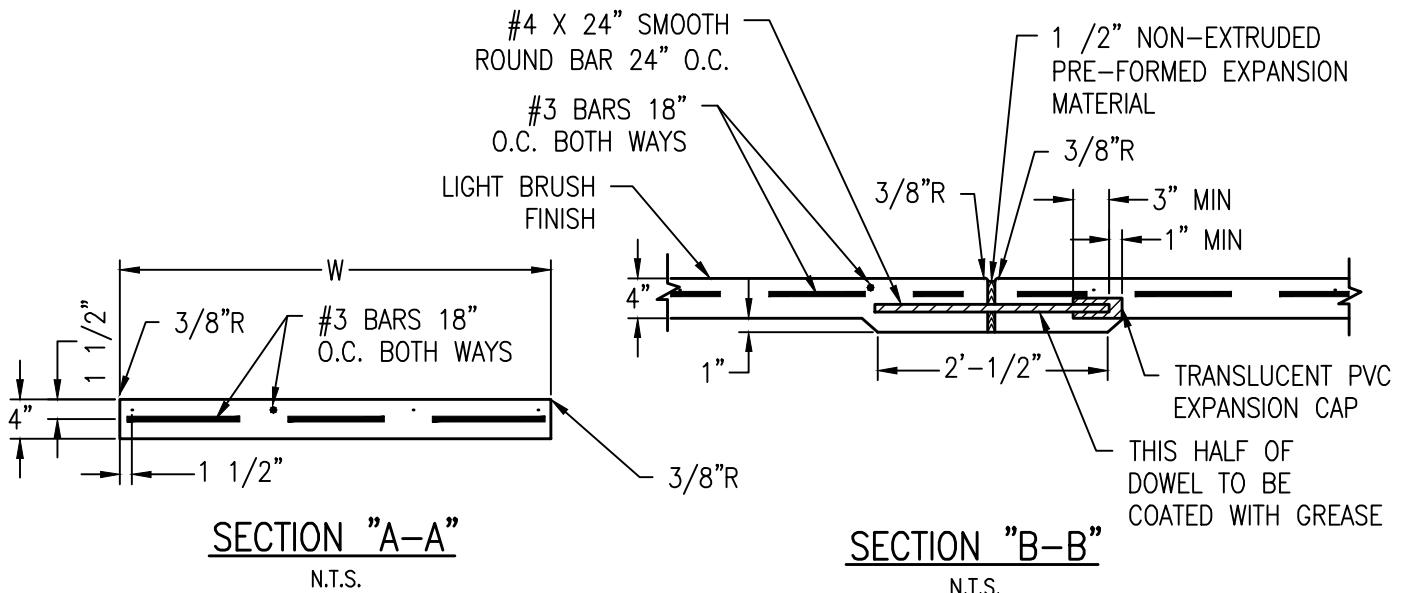
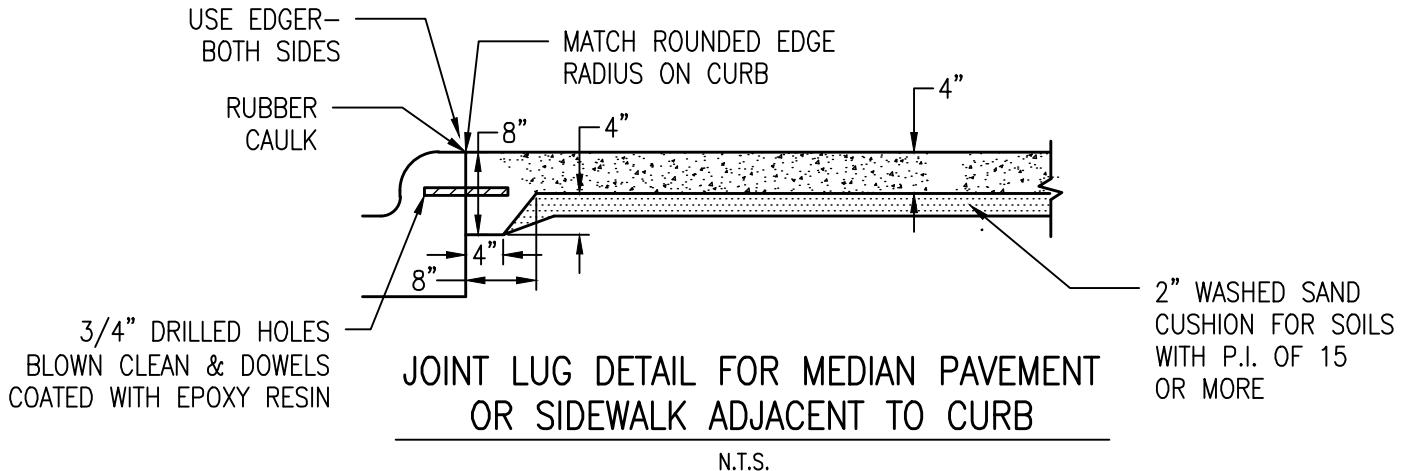
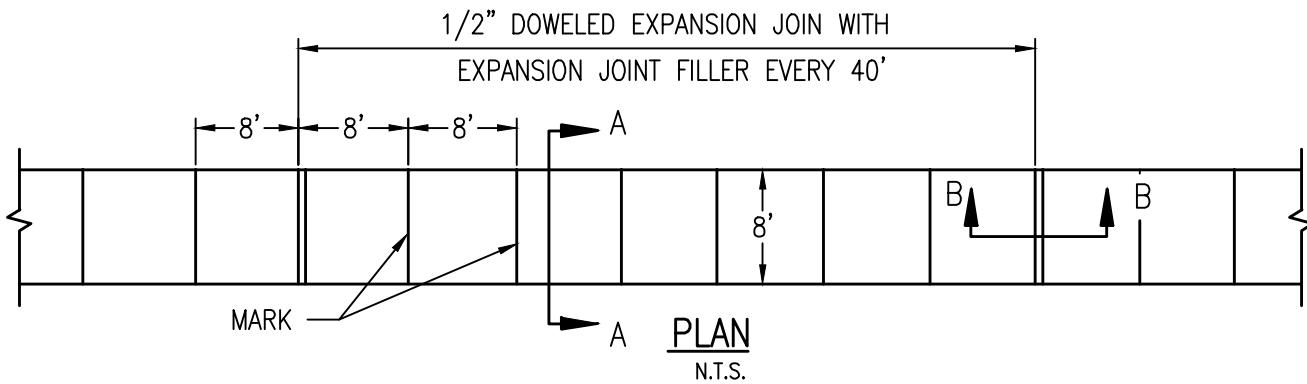
TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

REINFORCED
CONCRETE
PAVEMENT
WPD-05



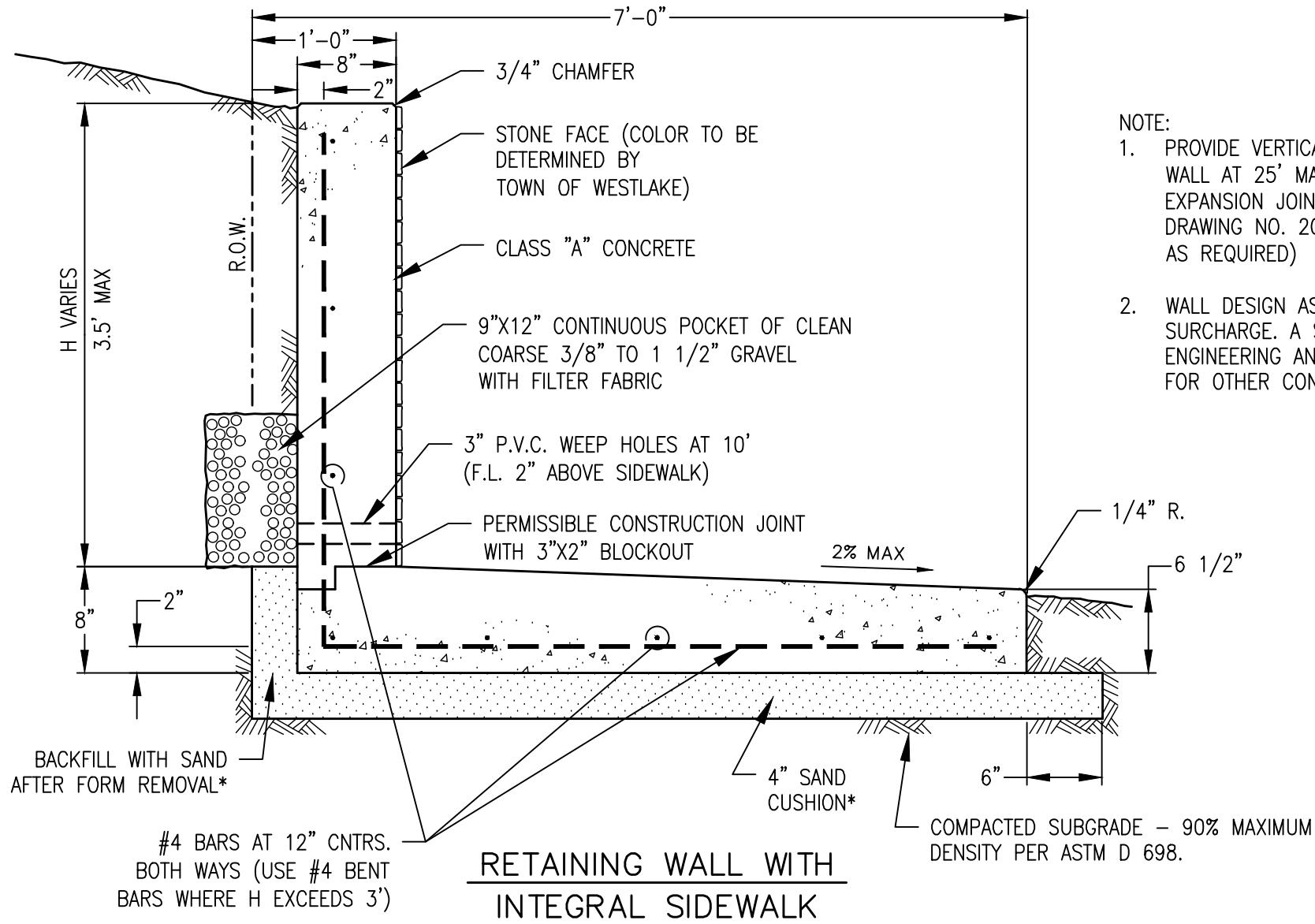
GENERAL NOTES:

1. CONCRETE $f'_c=4000$ PSI AT 28 DAYS.
2. PROVIDE 48" x BAR DIAMETER MIN. LAP SPLICING LENGTH.
3. ALL REINFORCING STEEL BE GRADE 60, UNLESS OTHERWISE SPECIFIED
4. PROVIDE 1.5" REINFORCEMENT CLEAR COVER U.N.O.



NOTE:

1. CROSS SLOPE OF SIDEWALK SHALL BE 2% MAX.
2. OTHER THAN 8' SIDEWALK WIDTH MAY BE SPECIFIED BY OWNER.
3. SIDEWALK SHALL BE CLASS "A" CONCRETE UNLESS OTHERWISE SPECIFIED BY OWNER.
4. ALL HONEYCOMB IN BACK OF CURB TO BE TROWEL-PLASTERED BEFORE POURING SIDEWALK.
5. LUG MAY BE FORMED BY SHAPING SUBGRADE TO APPROXIMATE DIMENSIONS SHOWN.



* WHEN SPECIFIED ON PLANS
WITH P.I. 15 OR MORE

SEPTEMBER 2022



TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

REINF. CONC.
RETAINING
WALL
WPS-02

NOTE:

1. PROVIDE VERTICAL EXPANSION IN WALL AT 25' MAX. SPACING (USE EXPANSION JOINT, STANDARD DRAWING NO. 2050, AND MODIFY AS REQUIRED)
2. WALL DESIGN ASSUMES NO SURCHARGE. A SPECIAL ENGINEERING ANALYSIS IS REQUIRED FOR OTHER CONDITIONS.

GENERAL NOTES:

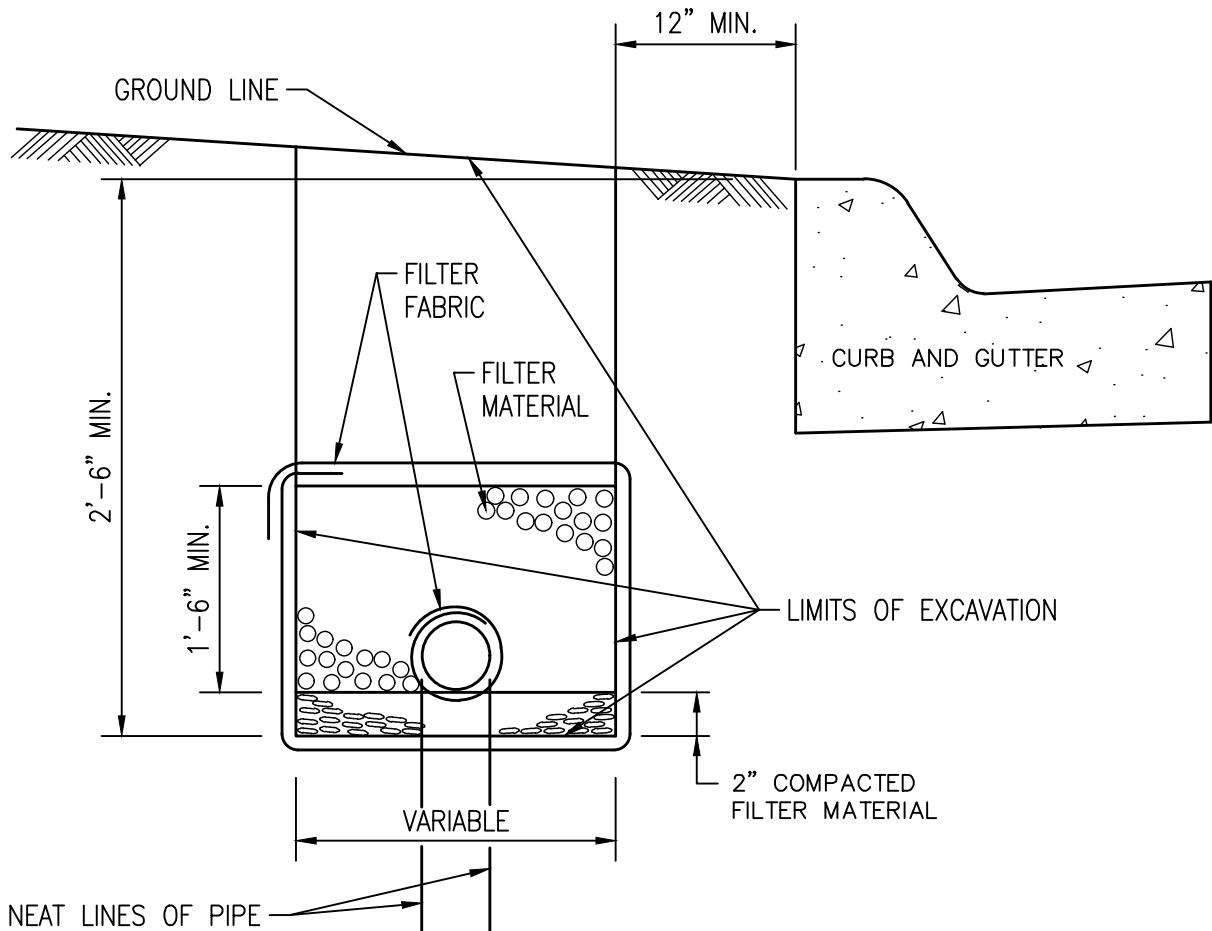
1. ALL CONSTRUCTION MATERIALS, METHODS, AND PLACEMENT NOT DETAILED SHALL MEET OR EXCEED THE STANDARD SPECIFICATIONS OF THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, LATEST EDITION UNLESS SUPERSEDED BY TOWN OF WESTLAKE STANDARDS OR TESTING POLICIES.
2. ALL CONCRETE FOR PAVING SHALL BE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 AT 28 DAYS.
3. REINFORCED CONCRETE PAVEMENT:
 - A. ALL CURBS SHALL BE PLACED INTEGRAL WITH PAVEMENT UNLESS OTHERWISE APPROVED BY THE OWNER.
 - B. CURBS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE PAVEMENT.
 - C. BAR LAPS SHALL BE 30 DIAMETERS.
 - D. REINFORCING BARS SHALL BE SUPPORTED BY CHAIRS OR OTHER DEVICES APPROVED BY THE OWNER.
4. SUBGRADE: (UNLESS OTHERWISE SPECIFIED BY OWNER)
 - A. SUBGRADE UNDER ALL PAVEMENTS SHALL BE STABILIZED TO A MINIMUM DEPTH OF 8" WITH HYDRATED LIME OR CEMENT WHEN THE P.I. OF THE INPLACE MATERIAL IS GREATER THAN 15. LABORATORY TESTS MUST BE PERFORMED TO DETERMINE THE AMOUNT OF LIME OR CEMENT REQUIRED TO LOWER THE P.I. TO 15 OR BELOW. SATURATION P.I. (PH > 12.4) WILL BE THE LIMIT WHEN A SOIL'S P.I. CANNOT BE BROUGHT TO 15 OR LOWER.
 - B. WHERE THE INPLACE MATERIAL HAS A P.I. OF LESS THAN 15, THE SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 8" AND RECOMPACTED.
5. IF THE ROADWAY IS A DESIGNATED BIKE ROUTE OR BIKE USAGE IS ANTICIPATED, REFER TO NCTCOG'S REGIONAL BICYCLE AND PEDESTRIAN FACILITIES DESIGN MANUAL FOR DESIGN GUIDANCE.

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TOWN OF WESTLAKE
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PAVEMENT
SYSTEMS
WPS-03



SECTION

N.T.S.

LIMITS OF EXCAVATION

DEPTH OF TRENCH (FT.)	DIST. IN FT. OUTSIDE NEAT LINES OF PIPE SUBDRAIN
0 TO 6	1.00
6 TO 10	1.50
10 TO 15	2.00
OVER 15	2.50

FILTER MATERIAL SPECIFICATIONS

SIEVE SIZE	PERCENTAGE RETAINED ON SIEVE	
	TYPE A	TYPE B
1 1/2	---	0 - 10
3/4	0 - 10	20 - 40
3/8	15 - 35	---
NO. 4	35 - 55	40 - 60

TYPES OF PIPE ACCEPTABLE FOR USE AS SUBDRAIN

1. PERFORATED 6" SCHEDULE 40 PVC PIPE.
2. PERFORATED 6" POLYETHYLENE PIPE.

MATERIAL FINER THAN NO. 4 SIEVE

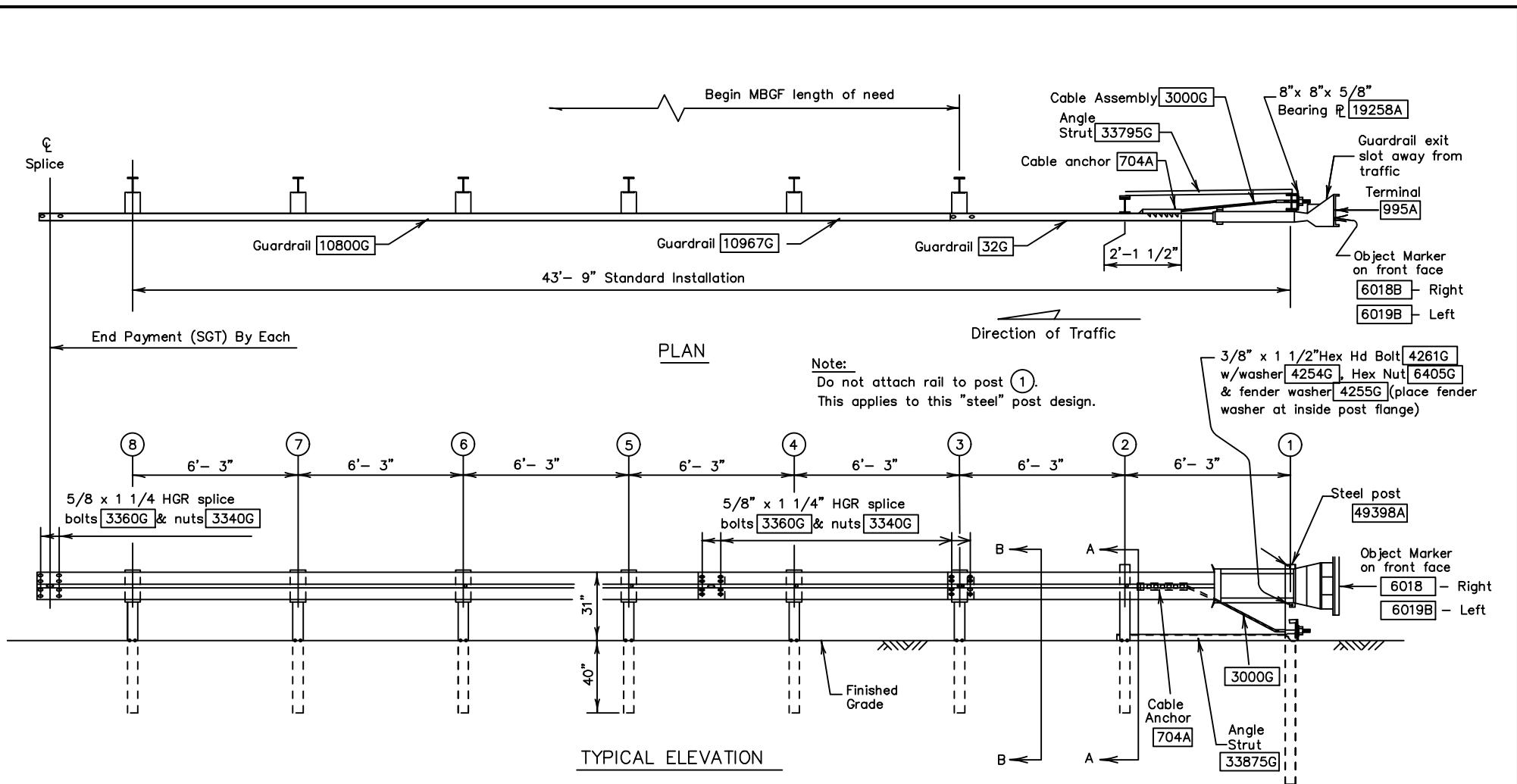
4	---
20	35 - 65
50	75 - 100

SEPTEMBER 2022



TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

PAVEMENT
SUBGRADE
SUBDRAIN
WPS-04



NOTE:

- 1) ALL GALVANIZED STEEL, GUARDRAIL, POSTS, HARDWARE ETC. SHALL BE POWDER COATED CORTEN COLOR.
- 2) USE MOST CURRENT STANDARD DETAILS PROVIDED BY TXDOT.

SEPTEMBER 2022



TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
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METAL BEAM
GUARD FENCE
WPS-5.1

GENERAL NOTES

1. All bolts, nuts, cable assemblies, cable anchors, steel tubes & bearing plates shall be galvanized.
2. SGT's placed within the "minimum" 150 ft. radius, shall be installed straight.
Standard rail elements may be installed within the radius, without special fabrication.
3. A flare rate of 25:1 may be used to prevent the terminal head from encroaching on the shoulder.
The flare may be decreased or eliminated for specific installations, if directed by the Engineer.
4. If solid rock is encountered. See the manufacturer's installation manual for the proper installation guidance.
5. The breakaway cable assembly must be taut. A locking device,(vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening the nuts.
6. Hinge bolts shall not be set below finished grade. At curb locations the posts shall be installed at the proper ground elevation behind the curb. The posts will then require field drilling new holes to accommodate the rail to post connection bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed as directed by the Engineer.
7. An object marker shall be installed on the front of the impact head as detailed on D&OM(VIA).
8. A special site evaluation should be considered, prior to using this end treatment where there is less than 25 feet between the extrusion side of the end treatment and any adjacent driving lane.
9. Composite blocks are an approved alternative to wood blocks.
10. All galvanized steel, guardrail, posts, hardware, etc., shall be powder coated Corten color.
11. Use most current details provided by TXDOT.

SEPTEMBER 2022



TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
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METAL BEAM
GUARD FENCE
WPS-5.2

HARDWARE		
3340G	31	5/8" Hex Nut
3360G	25	5/8" x 1 1/4" HGR Splice Bolt
3500G	6	5/8" x 10" Post Bolt
3701G	2	3/4" Flat Washer
3704G	2	3/4" Hex Nut
3717G	2	3/4" x 2 1/2" Hex HD Bolt (A325) ~ Post①
3900G	2	1" Flat Washer
3910G	2	1" Hex Nut
4254G	4	3/8" Flat Washer
4255G	2	3/8" Fender Washer (1 1/2" OD)
4258G	2	3/8" Lockwasher
4261G	2	3/8" x 1 1/2" Hex HD Bolt (Grade 5)
4389G	2	7/16" Flat Washer
4390G	2	7/16" x 1 1/2" Hex HD Bolt ~ Post②
4393G	2	7/16" Lockwasher
4396G	2	7/16" Hex Nut
4699G	2	3/4" Lockwasher
6321G	2	3/8" x 2" Hex HD Bolt (Grade 5) ~ Post①
6405G	4	3/8" Hex Nut
19948G	2	Plate Washer ~ Post②

BILL OF MATERIAL		
ITEM #	QTY	DESCRIPTION
32G	1	Guardrail (12 Ga) at 12'- 6"
10967G	1	Guardrail (12 Ga) at 9'- 4 1/2"
10800G	1	Guardrail (12 Ga) at 25'- 0"
49398A	1	HBA Steel Post - Post① Top
33873A	1	HBA Steel Post - Post① Bottom
15000G	7	SYT Steel Post - Posts② thru ⑧
33795G	1	Angle Strut (ET/SYT/HBA)
4076B	6	Block - 14"x 6"x 8"
19258A	1	Bearing Plate - 8"x 8"x 5/8"
704A	1	Cable Anchor
3000G	1	Cable Assembly (3/4"x 78")
995A	1	ET Plus Extruder
6018B	1	Right - Object Marker
6019B	1	Left - Object Marker

NOTE:

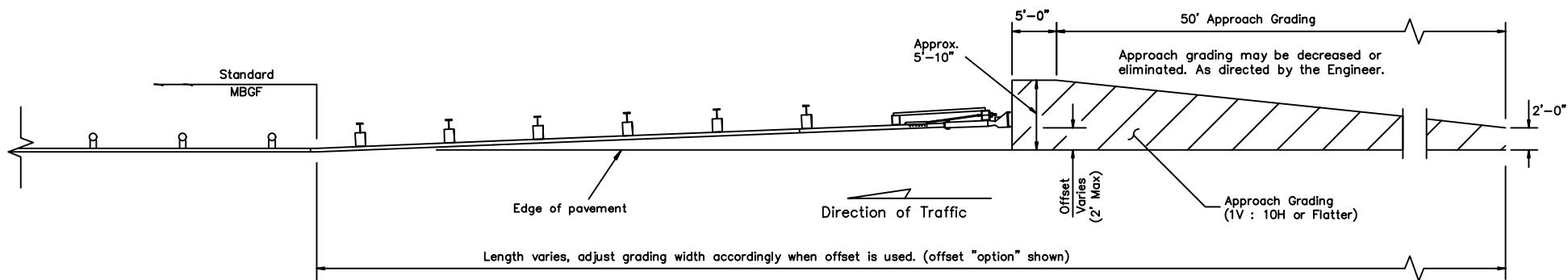
- 1) ALL GALVANIZED STEEL, GUARDRAIL, POSTS, HARDWARE ETC. SHALL BE POWDER COATED CORTEN COLOR.
- 2) USE MOST CURRENT STANDARD DETAILS PROVIDED BY TXDOT.

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TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

METAL BEAM
GUARD FENCE
WPS-5.3



Note: Site Condition(s)

Site conditions may exist where grading is required for the proper installation of metal guard fence and end treatments.

APPROACH GRADING AT GUARDRAIL END TREATMENTS

NOTE:

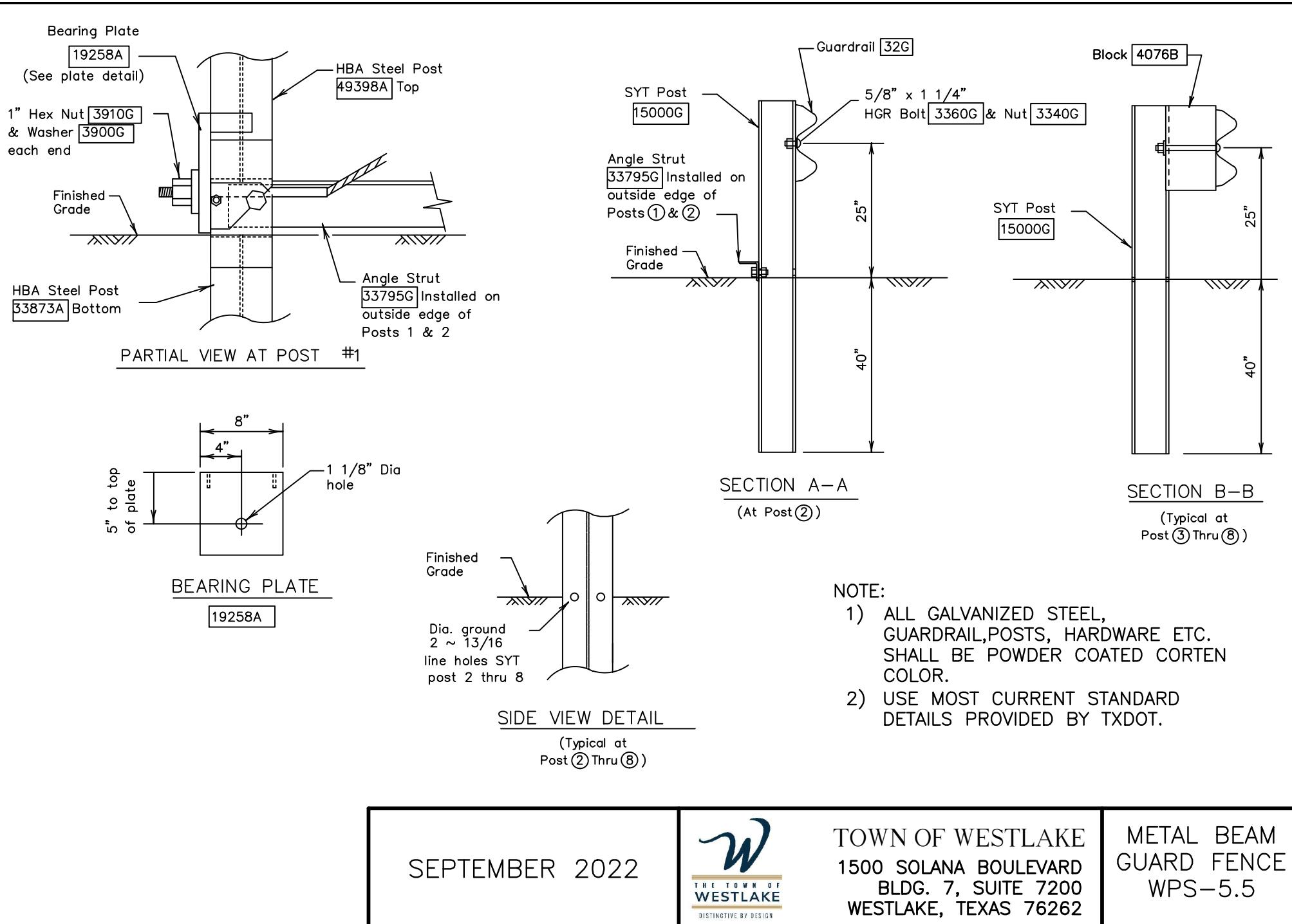
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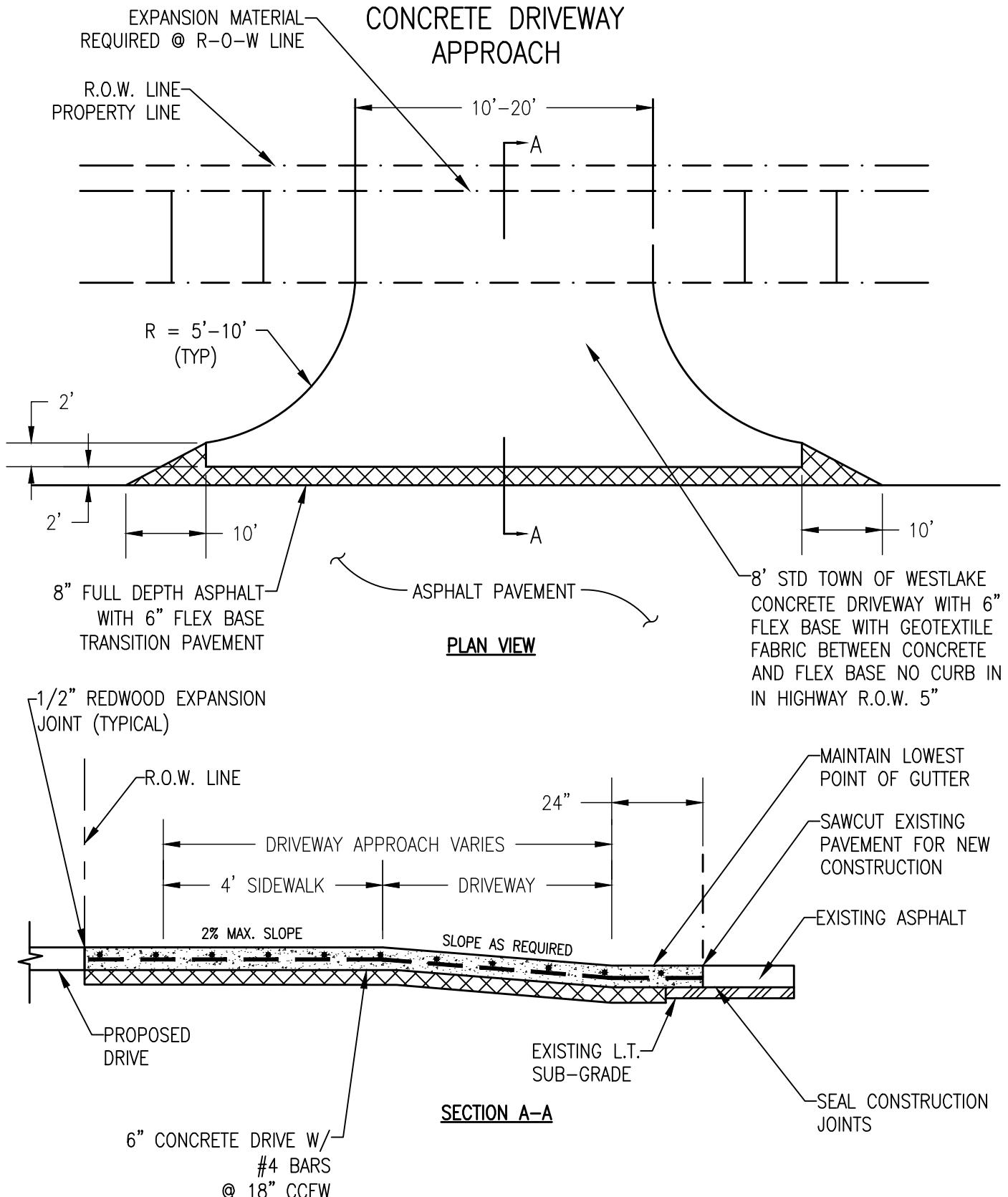


TOWN OF WESTLAKE
1500 SOLANA BOULEVARD
BLDG. 7, SUITE 7200
WESTLAKE, TEXAS 76262

METAL BEAM
GUARD FENCE
WPS-5.4



RESIDENTIAL CONCRETE DRIVEWAY APPROACH



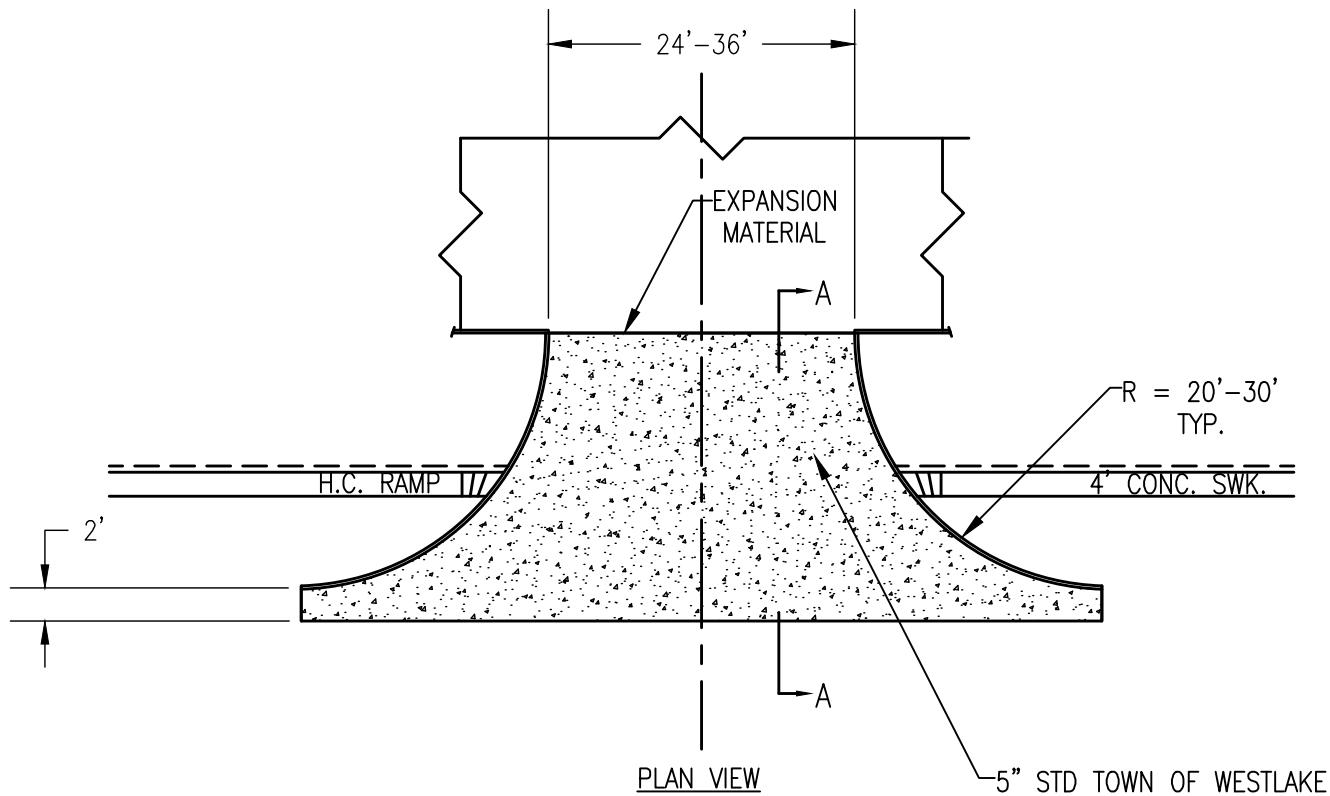
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TOWN OF WESTLAKE
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RESIDENTIAL
DRIVEWAY
APPROACH
WST-01

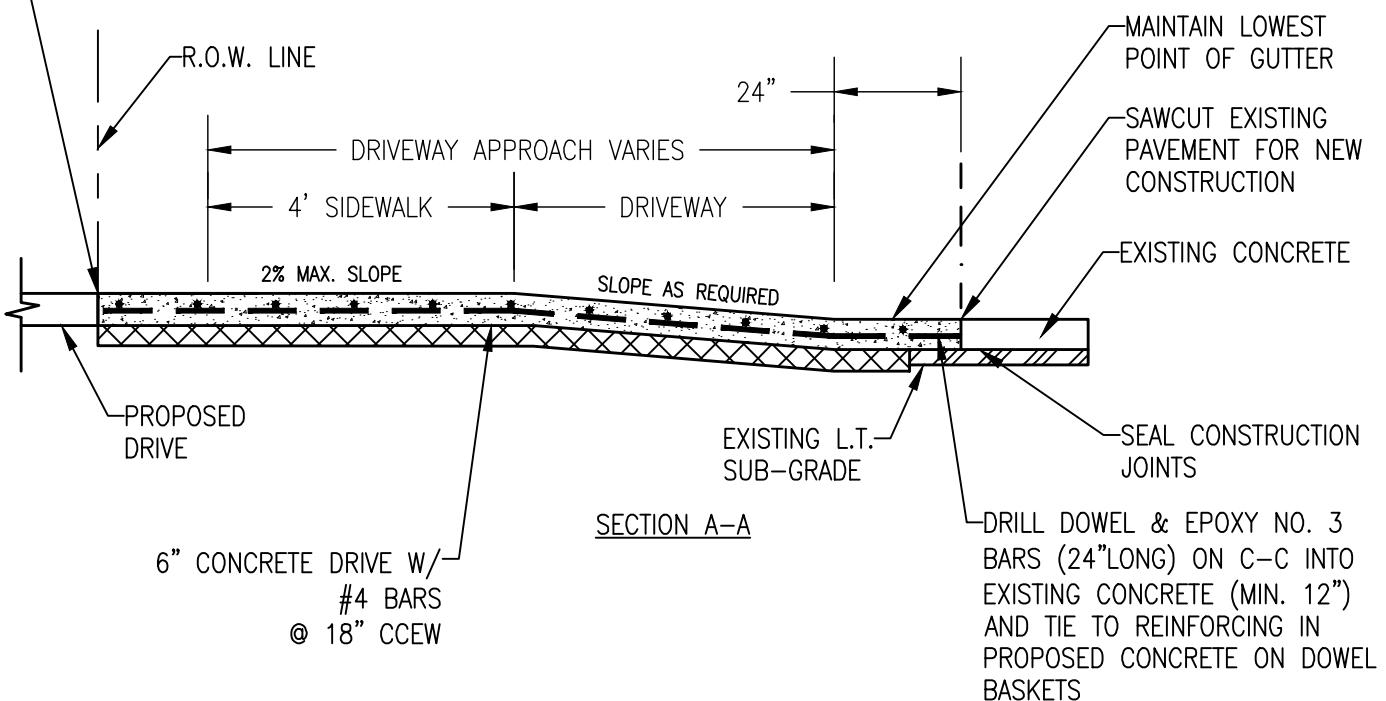
COMMERCIAL CONCRETE
DRIVEWAY



PLAN VIEW

5" STD TOWN OF WESTLAKE
CONCRETE DRIVEWAY WITH
FLEX BASE WITH GEOTEXTILE
FABRIC BETWEEN CONCRETE
AND FLEX BASE NO CURB IN
IN HIGHWAY R.O.W.

1/2" REDWOOD EXPANSION
JOINT (TYPICAL)



SECTION A-A

SEPTEMBER 2022



TOWN OF WESTLAKE
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COMMERCIAL
CONCRETE
DRIVEWAY
WST-02