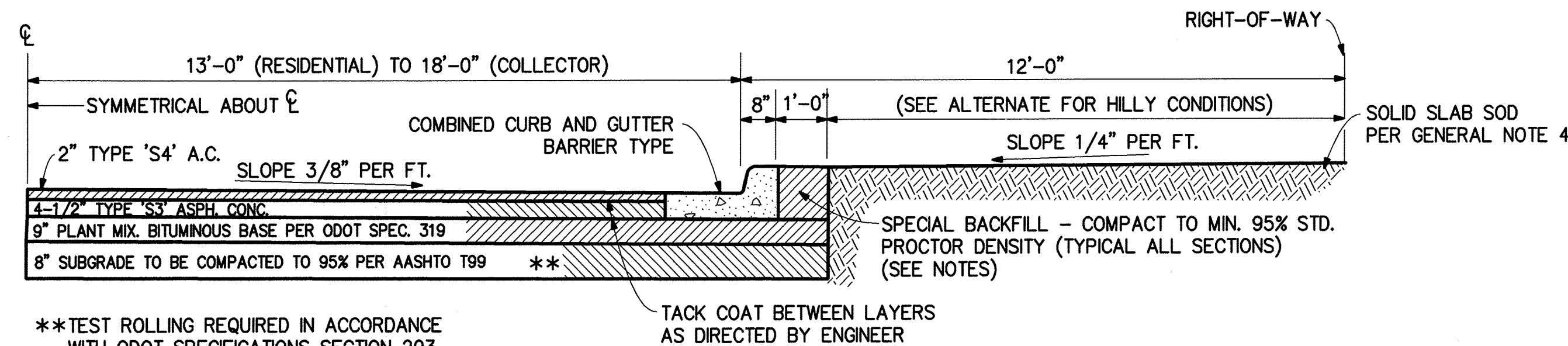
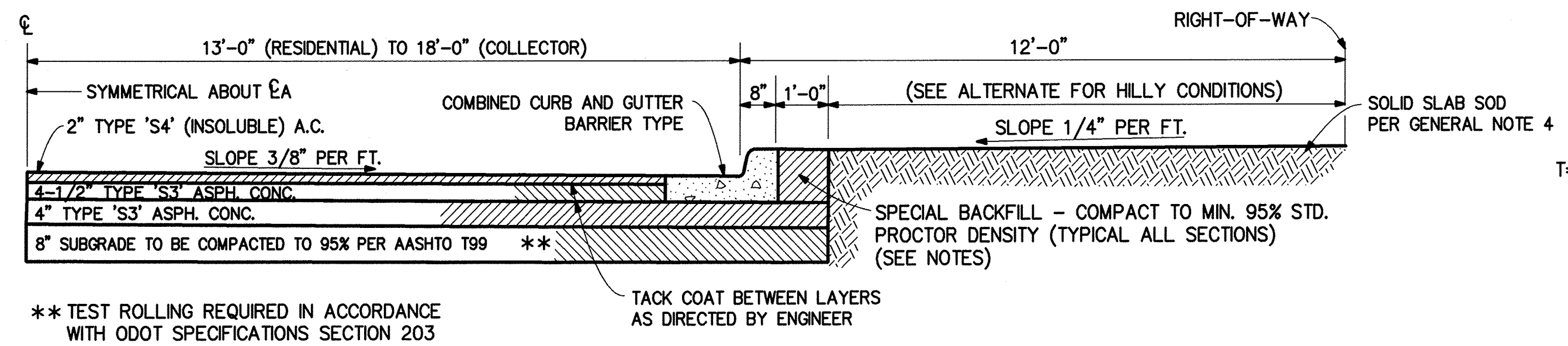


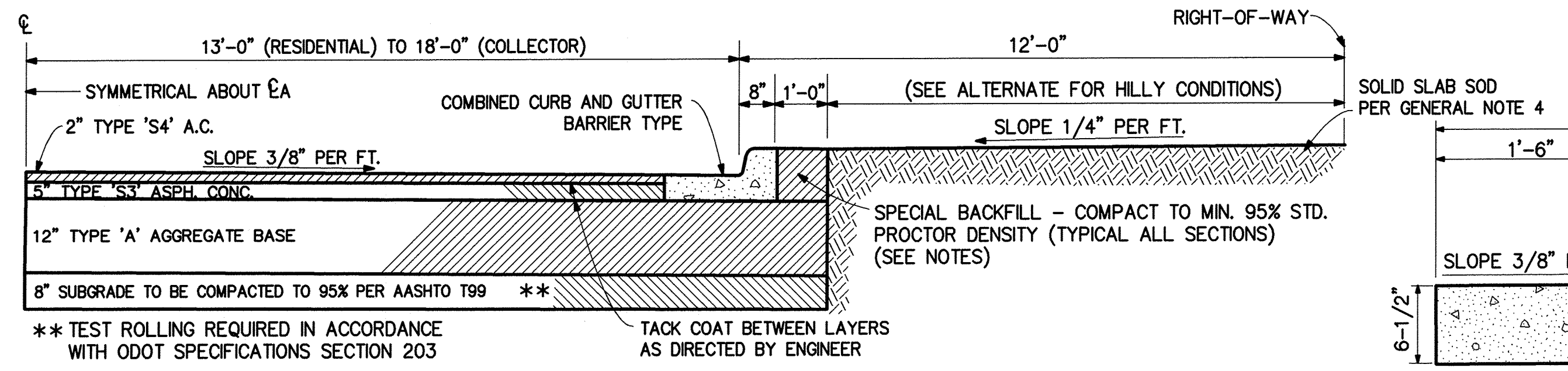
TYPICAL HALF SECTION - TYPE 1
6-1/2" ASPHALT ON 8" P.C. TREATED BASE



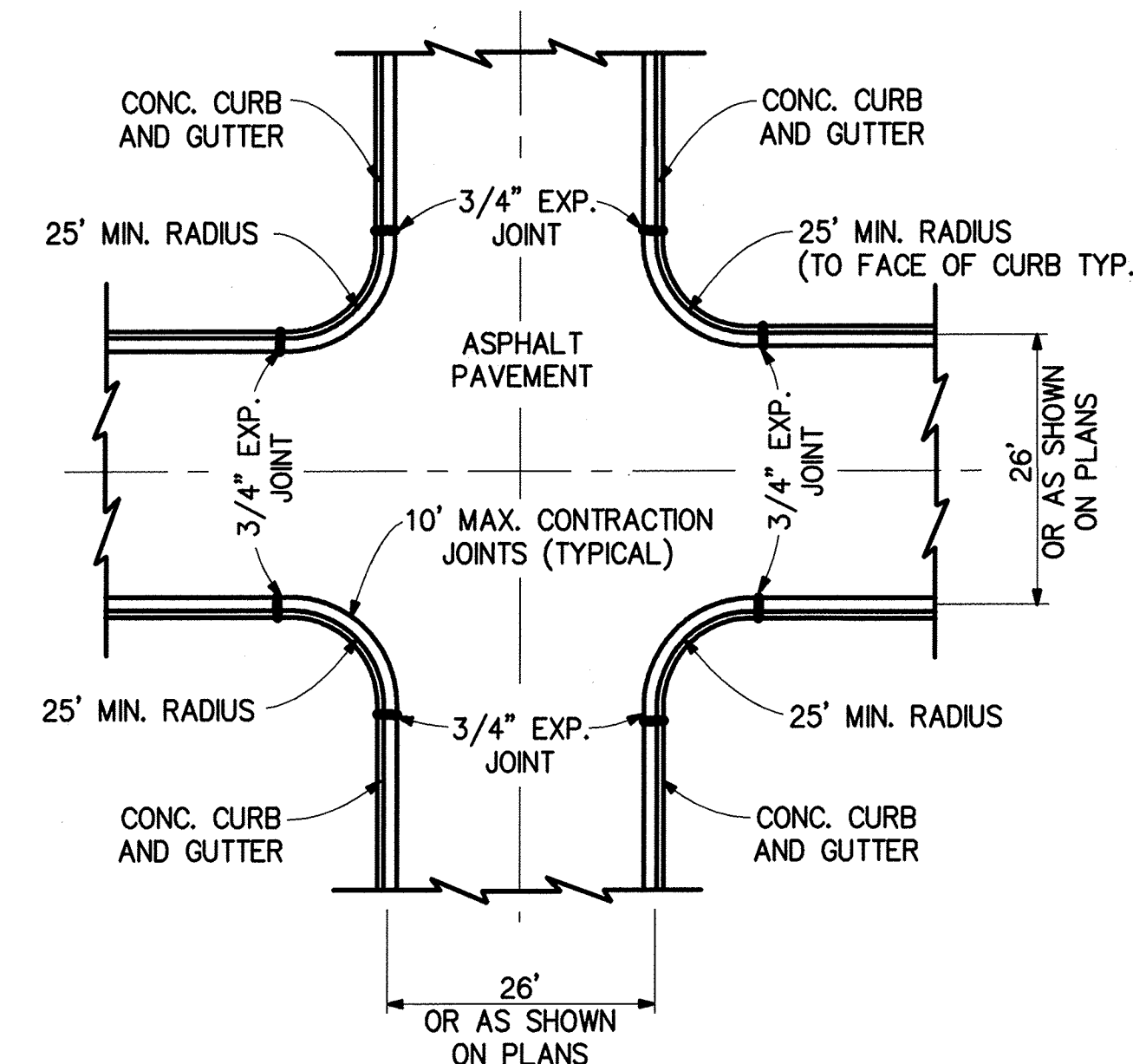
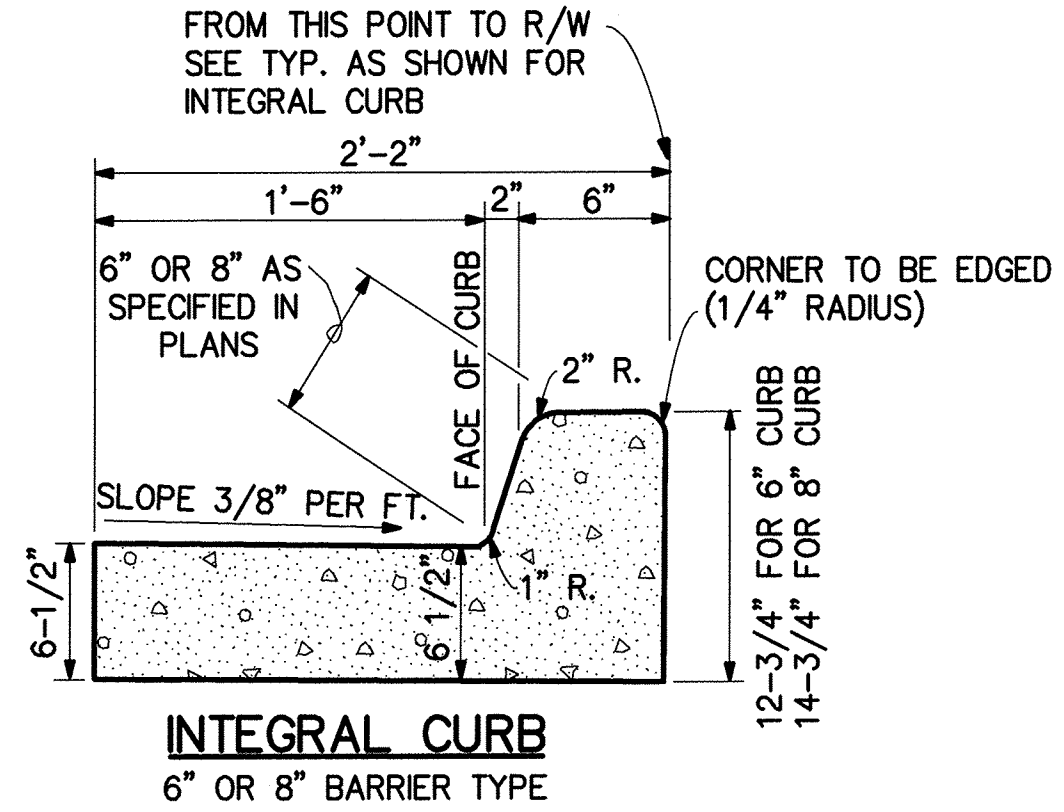
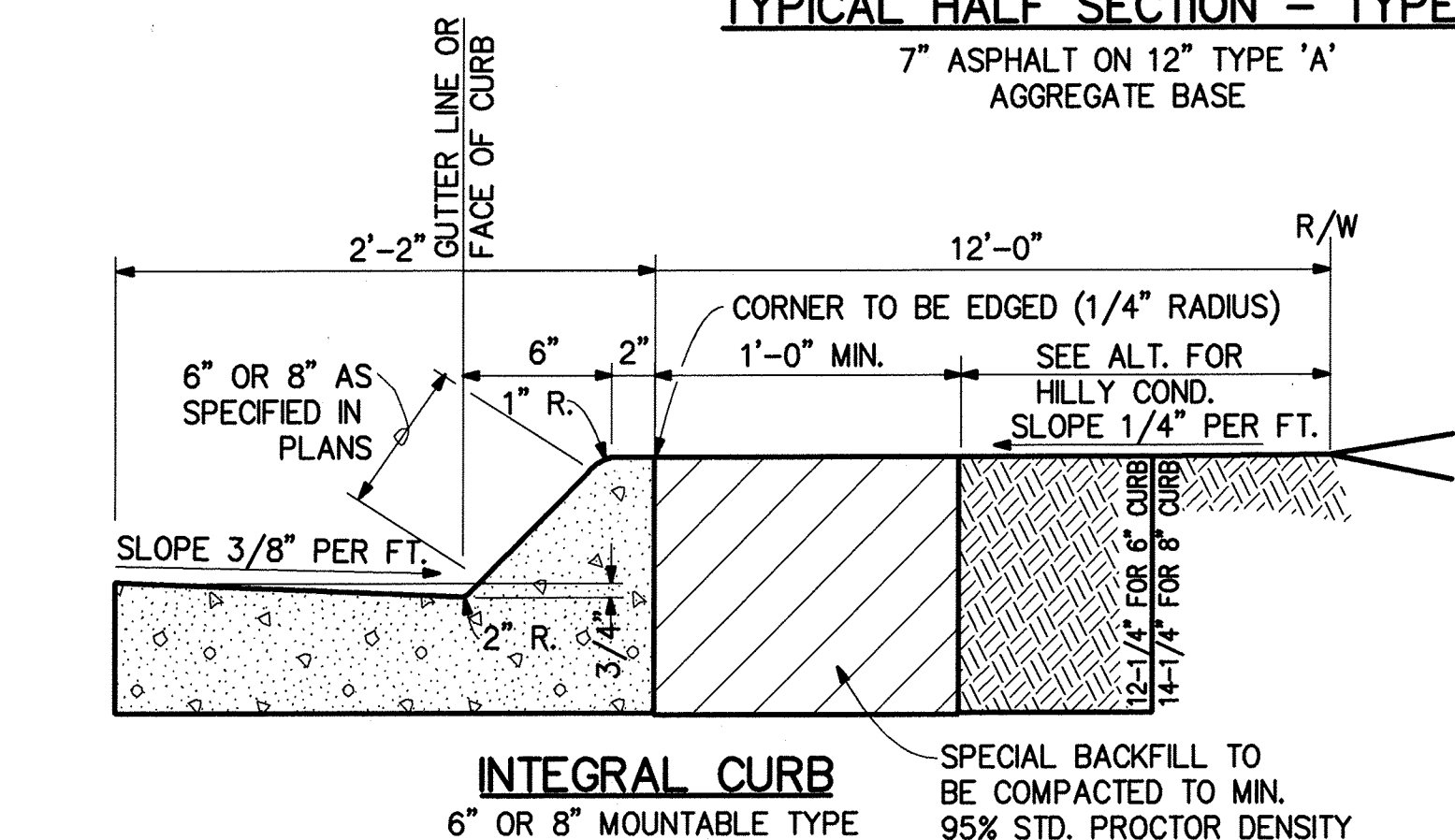
TYPICAL HALF SECTION - TYPE 2
6-1/2" ASPHALT ON 9" PLANT MIX BITUMINOUS BASE



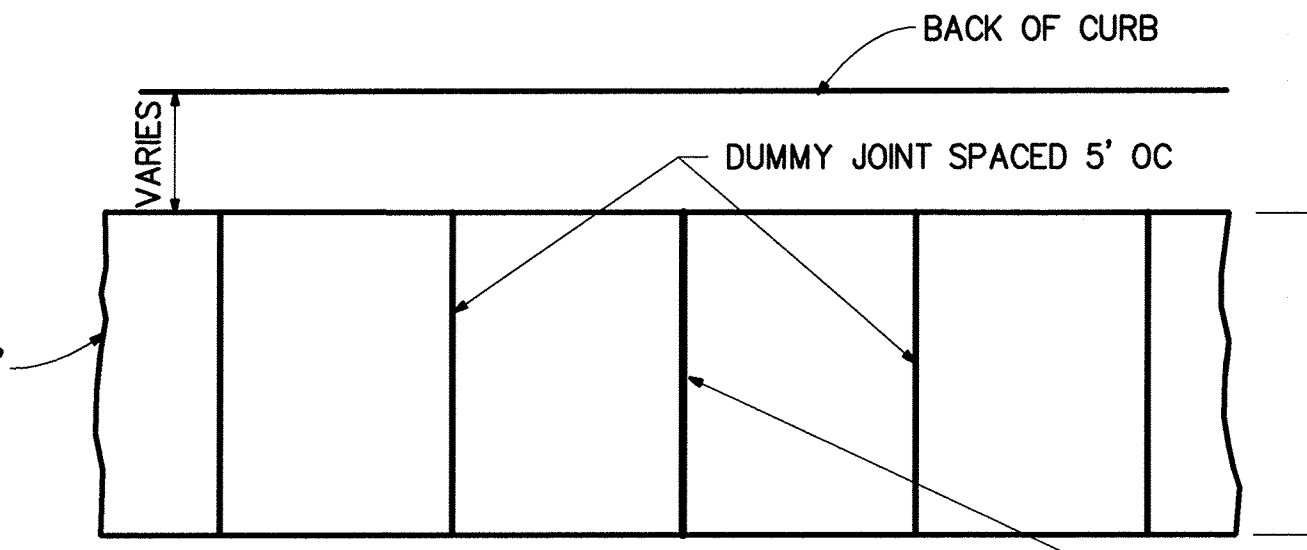
TYPICAL HALF SECTION - TYPE 3
6-1/2" ASPHALT ON 4" TYPE 'S3' ASPHALT CONCRETE BASE



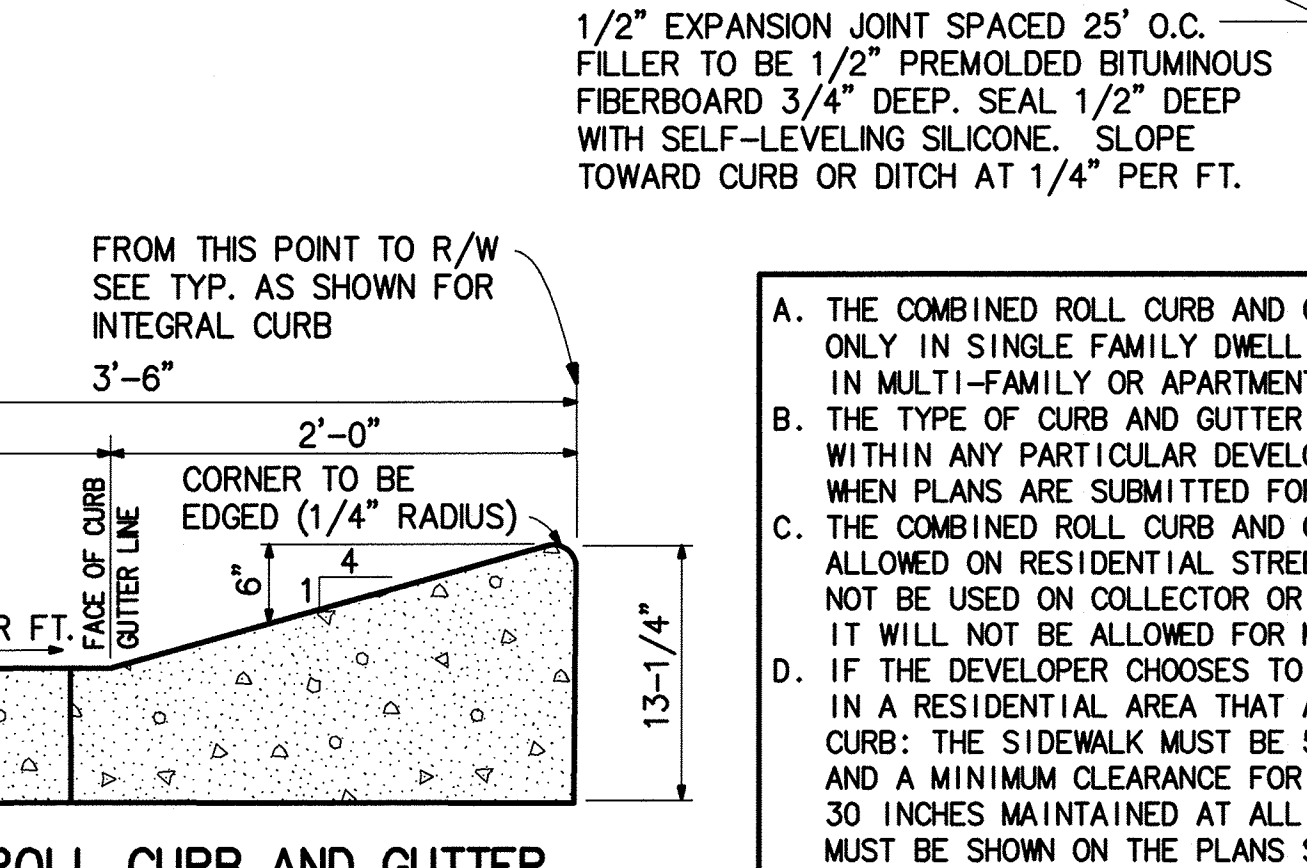
TYPICAL HALF SECTION - TYPE 4
7" ASPHALT ON 12" TYPE 'A' AGGREGATE BASE



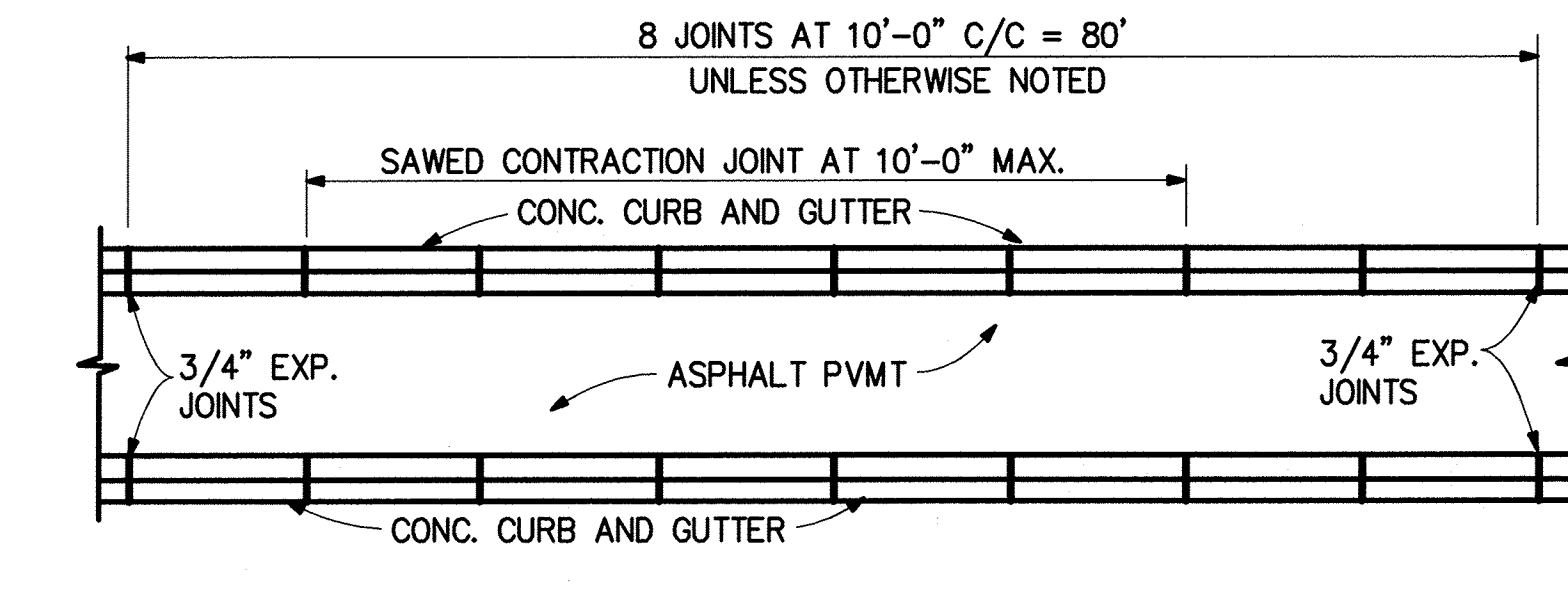
TYPICAL ASPHALT CONCRETE INTERSECTION LAYOUT



PLAN DETAIL OF CONCRETE SIDEWALK



COMBINED ROLL CURB AND GUTTER



TYPICAL COMBINED CURB AND GUTTER JOINT LAYOUT

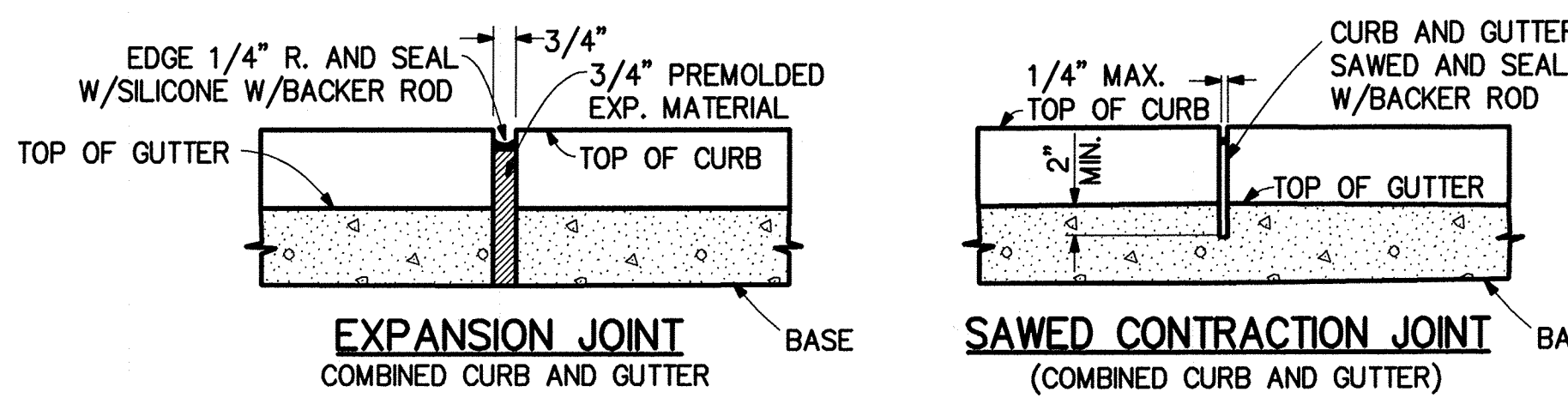
PLACE EXPANSION JOINTS AT P.C. AND P.T. OF ALL CURVES (NTS)

GENERAL NOTES

- ENGINEER SHALL SUBMIT SOILS REPORT VERIFYING THAT THE SUBGRADE IS COMPATIBLE AS SPECIFIED.
- SPECIAL BACKFILL SHALL BE ANY MATERIAL MEETING THE SPECIFICATIONS OF ODOT SECTION 704.01.
- ALL MATERIALS AND CONSTRUCTION, EXCEPT AS TESTED, SHALL BE IN STRICT ACCORDANCE WITH STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1999, AND LATEST SUPPLEMENTS AS PUBLISHED BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION.
- THESE ARE TYPICAL SECTIONS THAT MEET THE PERFORMANCE STANDARDS. OTHER DESIGNS MAY BE SUBMITTED FOR APPROVAL IF SUPPORTED BY ADEQUATE ENGINEERING AND GEOTECHNICAL DATA, AND MEET THE FOLLOWING PERFORMANCE STANDARDS:
 - DESIGN LIFE 25 YEARS
 - AVERAGE ANNUAL DAILY TRAFFIC 10,000
 - TRUCKS 10%
 - ANNUAL GROWTH RATE 4%
 - DESIGN EQUIVALENT SINGLE 18 KIP AXLE LOADS (ESALS) 400,000
- APPROVAL OF ALTERNATE DESIGNS WILL BE BASED ON THE LEAST LIFE-CYCLE COST OVER THE DESIGN LIFE. MAINTENANCE FREQUENCIES AND COSTS ARE TO BE ESTABLISHED BY THE CITY OF TULSA PAVEMENT MANAGEMENT SYSTEM.
- SOLID SLAB SOD MEETING THE REQUIREMENTS OF ODOT SECTION 230 SHALL BE CONSTRUCTED IN ALL UNPAVED AREAS WITHIN THE LIMITS OF THE STREET'S RIGHT-OF-WAY.
- MOUNTABLE CURBS TO BE CONSTRUCTED IN ALL MEDIANS.
- CONCRETE SIDEWALKS TO BE CONSTRUCTED ON ALL COLLECTOR STREETS IN ACCORDANCE WITH SIDEWALK DETAIL.

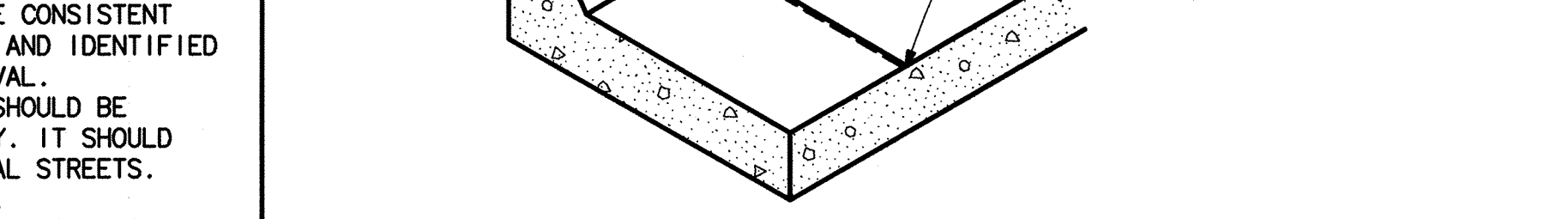
CONTRACTOR'S ATTENTION IS DIRECTED TO THE FOLLOWING:

- CONTRACTOR SHALL CLEAN ASPHALT PAVEMENT SURFACE AND REMOVE LOOSE MATERIAL PRIOR TO APPLYING TACK COAT.
- ONE QUART TACK COAT SAMPLE FROM CONTRACTOR'S TACK TRUCK SHALL BE DELIVERED BY CONTRACTOR TO THE INSPECTOR 24 HOURS PRIOR TO APPLICATION. OIL CONTENT MUST BE 23% OR GREATER.
- MINIMUM TACK APPLICATION RATE IS 0.1 GAL./S.Y. EQUIPMENT HEATER, AGITATOR, AND SPRAY BAR SHALL BE OPERABLE. CONTRACTOR SHALL BROOM OFF EXCESS TACK. TACK SHALL BE COMPLETELY CURED BEFORE LAYING ASPHALT.
- ASPHALT TEMPERATURE SHALL NOT EXCEED 350° F. OR MAX. DESIGN TEMPERATURE AT PLANT DISCHARGE.
- AMBIENT SURFACE TEMPERATURE AT LAYDOWN SHALL BE PER SPEC. ODOT 411.04(F). SURFACE MUST BE DRY.
- ASPHALT TEMPERATURE AT LAYDOWN SHALL BE A MAXIMUM OF 325° F. AND A MINIMUM OF 285° F.
- PAVING OPERATION SHALL BE CONTINUOUS WITH STEADY FLOW OF TRUCKS.
- CONTRACTOR SHALL ESTABLISH ROLLING PATTERN BY TRACKING DENSITIES WITH A NUCLEAR GAUGE. CONTRACTOR SHALL VERIFY PATTERN WITH TESTING LAB. EXTRACTION/GRADATION SAMPLES SHALL BE TAKEN DAILY.
- CONTRACTOR SHALL FURNISH, WITH QUALIFIED OPERATORS, A BREAKDOWN ROLLER (STEEL), A PNEUMATIC ROLLER (RUBBER TIRE), AND A FINISH ROLLER (STEEL). ROLLER SPRAY SYSTEMS SHALL BE OPERABLE.
- CONTRACTOR SHALL ROLL OUT AND COMPACT ASPHALT MATERIAL ABOVE 180°F. ASPHALT TEMPERATURE.
- CONTRACTOR SHALL TAKE 3 CORINGS FOR EACH DAY'S PRODUCTION OR EVERY 500 TONS. LOCATION TO BE DESIGNATED BY THE ENGINEER.
- CONTRACTOR SHALL APPLY TACK COAT TO FACE OF THE GUTTER PRIOR TO PLACEMENT OF PAVING.

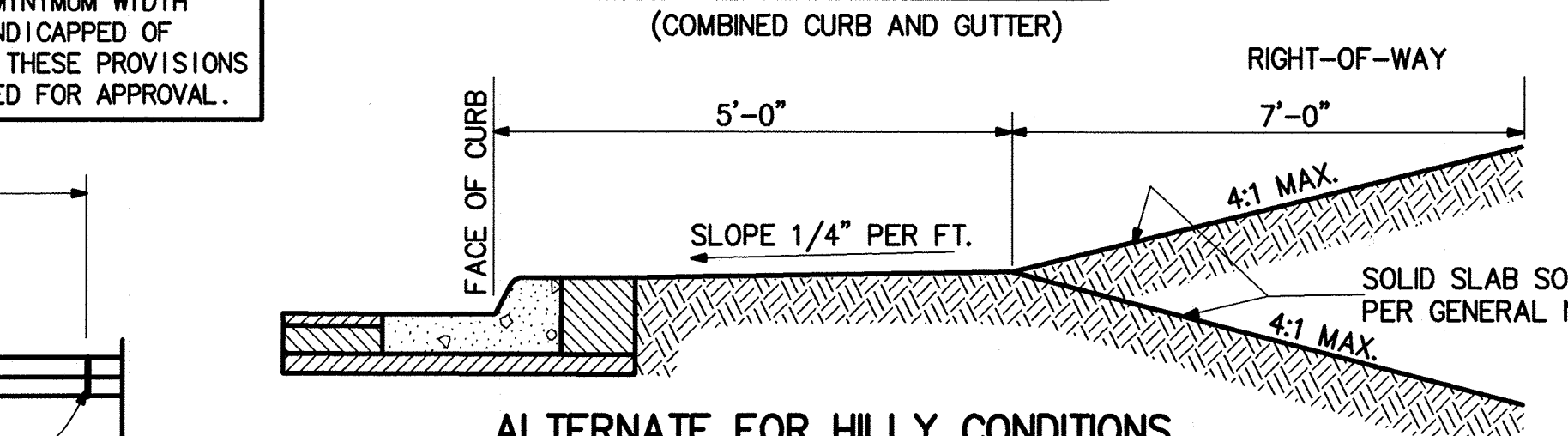


EXPANSION JOINT (COMBINED CURB AND GUTTER) and **SAWED CONTRACTION JOINT** (COMBINED CURB AND GUTTER)

ALL CURB SHALL BE SAWED AND BACKER ROD PLACED UP THE FACE OF CURB, ACROSS THE TOP OF CURB AND 2" BEHIND CURB



SAWED CONTRACTION JOINT (COMBINED CURB AND GUTTER)



ALTERNATE FOR HILLY CONDITIONS

REVISION	BY	DATE

[Signature]
CITY ENGINEER

[Signature]
DESIGN MANAGER

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

ASPHALT PAVEMENT STANDARD
DETAILS FOR RESIDENTIAL
AND COLLECTOR STREETS

DATE: OCTOBER 2013

PATH NAME: /E1/PARTS/STD/DGN/STD/726-ASP-PVMT-STD-DTLS-RES-COLL-ST.DGN SBW 07/19/2012