

**UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA**

VOLUME I - YEAR 2009 REVISIONS

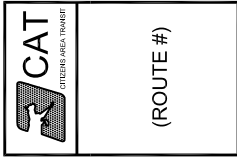
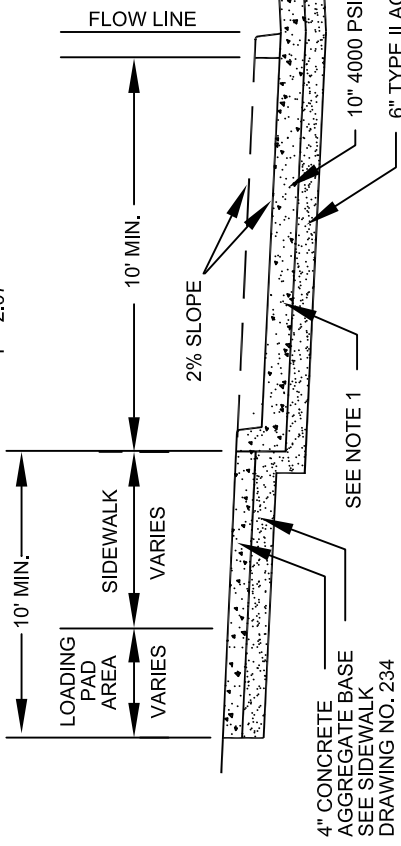
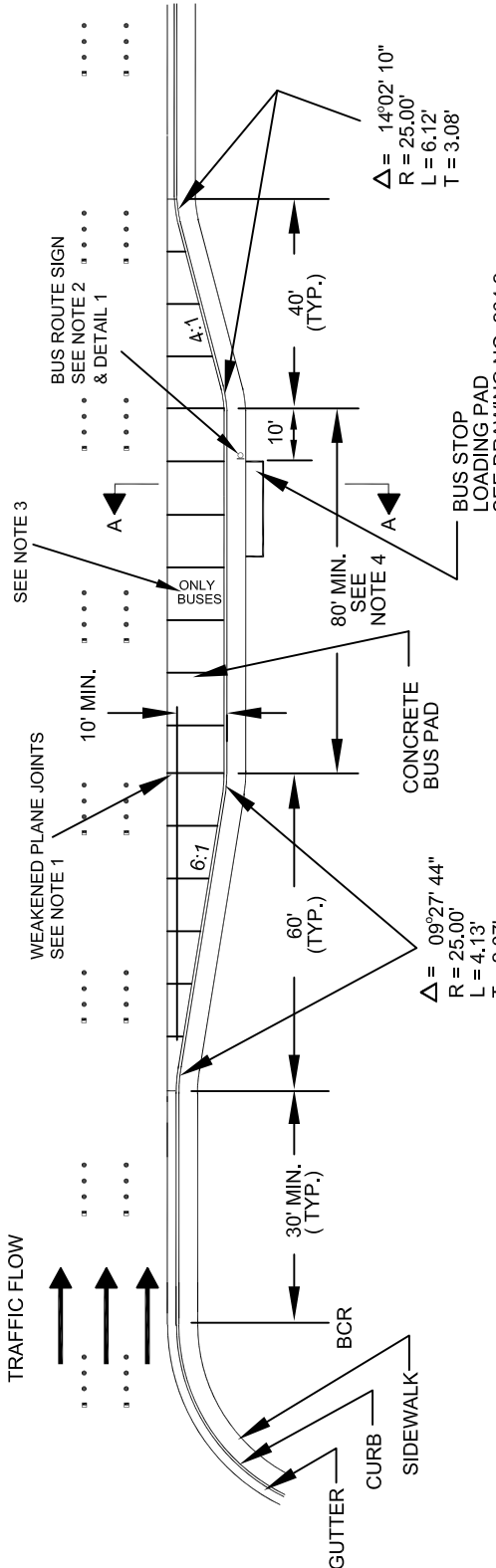
Drawing Number	Title	Nature of Change	Effective Date
234.1	"Typical Bus Turn-Out"	Revision to correct the dimension of sidewalk and loading pad.	1/1/09
234.2	"Typical Bus Stop Passenger Loading and Shelter Pads"	Revision to require that the dedication of additional right-of-way or easement for the loading pad and variable height curb at the back of sidewalk ramp be granted to the local entity.	1/1/09
234.2A	"Typical Double Bus Stop Passenger Loading and Shelter Pads"	Revision to require that the dedication of additional right-of-way or easement for the loading pad and variable height curb at the back of sidewalk ramp be granted to the local entity.	1/1/09
412A	"Type C-D Modified Drop Inlet"	Revision to clarify the closed lid specification.	1/1/09
503A	"Method A for Flexible Pipe Trench Backfill - Paved Areas"	DELETED , See 503AF	7/1/09
503AB	"Method A/B for Rigid Pipe Trench Backfill - Paved Areas"	DELETED , See 503AR	7/1/09
503AF	"Method A for Flexible Pipe Trench Backfill - Paved Areas"	Revision to clarify the requirement for the use of controlled low strength material (CLSM). (Formerly 503A)	7/1/09
503AR	"Method A for Rigid Pipe Trench Backfill - Paved Areas"	Revision to clarify the requirement for the use of controlled low strength material (CLSM). (Formerly 503AB)	7/1/09
503B	"Method B for Rigid and Flexible Pipe Trench Backfill - Paved Areas"	Revision to clarify the requirement for the use of controlled low strength material (CLSM).	7/1/09
504	"Trench Backfill With Controlled Low Strength Material (CLSM) Paved Areas (Streets Greater Than 60' R/W)"	DELETED	7/1/09

Sign up for e-mail notification of Uniform Standard Specifications and Drawings updates at:

<http://www.rtcsonthernnevada.com/mpo/streets/>

Click on the icon:



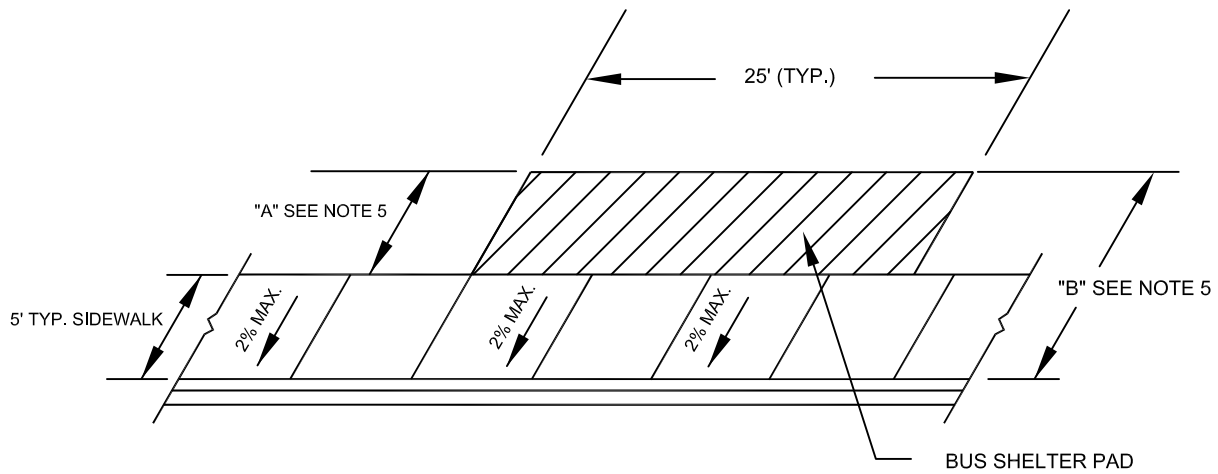


DETAIL 1
BUS ROUTE SIGN

- NOTES:**
1. CONCRETE BUS PAD SHALL BE MONOLITHIC. TRANSVERSE WEAKENED PLANE JOINTS SHALL BE INSTALLED AT 10' INTERVALS AND AS DETAILED IN STANDARD DRAWING NO. 233, TYPE "C".
 2. BUS ROUTE SIGN SHALL BE INSTALLED AT THE DOWNSTREAM END OF BUS STOP LOADING PAD.
 3. A MINIMUM OF ONE SET OF PAVEMENT MARKINGS CONTAINING THE "BUSES ONLY" SYMBOL SHALL BE PLACED IN THE TURN-OUT AREA. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
 4. ADDITIONAL STORAGE AREA WILL BE REQUIRED WHEN MORE THAN ONE BUS IS EXPECTED TO OCCUPY THE TURN-OUT AT THE SAME TIME.
 5. ALTERNATE CONCRETE AND BASE THICKNESSES MAY BE SUBSTITUTED, BUT MUST BE SUPPORTED BY ENGINEERING ANALYSIS AND APPROVED BY THE ENGINEER.
 6. TURN-OUT SURFACE SHALL BE TEXTURED IN ACCORDANCE WITH UNIFORM STANDARD SPECIFICATION NO. 409.03.08. FLOW LINE SHALL NOT BE TEXTURED, BUT SHALL BE A TROWELED SURFACE.

SPECIFICATION REFERENCE	
302	AGGREGATE BASE
501	CONCRETE
502	CONCRETE STRUCTURES

UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
TYPICAL BUS TURN-OUT	
DATE 11-13-08	DWG. NO. 234.1

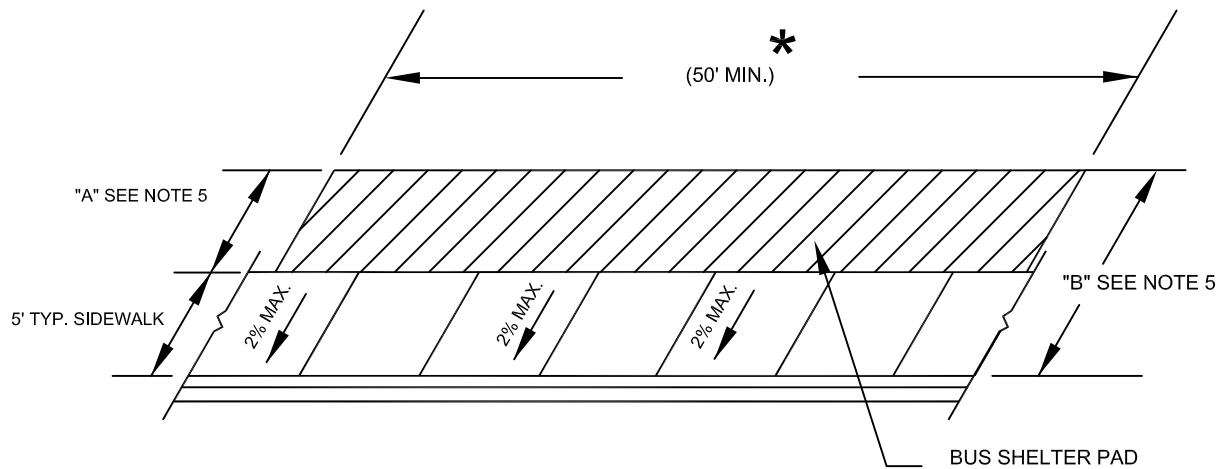



 ADDITIONAL AREA REQUIRED BEHIND
 TYPICAL 5 FT. SIDEWALK FOR
 BUS SHELTER PAD

NOTES:

1. SIDEWALK RAMP MAY BE REQUIRED TO BE CONSTRUCTED IN THOSE LOCATIONS WHERE THE BUS STOP WOULD OTHERWISE BE INACCESSIBLE AS DEFINED BY THE AMERICANS WITH DISABILITIES ACT. SEE DRAWING NO. 235, SHEET 4 OF 4 FOR SIDEWALK RAMP DETAILS.
2. ADDITIONAL RIGHT-OF-WAY OR EASEMENT IS REQUIRED FOR BUS SHELTER PAD AND VARIABLE HEIGHT CURB AT BACK OF SIDEWALK RAMP AND SHALL BE DEDICATED TO THE LOCAL ENTITY.
3. AGGREGATE BASE AND CONCRETE FOR LOADING PAD SHALL BE THE SAME AS REQUIRED FOR SIDEWALK. SEE DRAWING NO. 234.
4. BUS SHELTER PAD CONNECTION TO DETACHED SIDEWALK CONDITION SHALL BE DETERMINED BY THE ENTITIES.
5. "A" = 10', "B" = 15' UNLESS BUS TURNOUT IS CONSTRUCTED PER STANDARD DRAWINGS 234.1 OR 234.3, THEN "A" = 5', "B" = 10'.

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
302	AGGREGATE BASE		
501	CONCRETE	TYPICAL BUS STOP PASSENGER LOADING AND SHELTER PADS	
502	CONCRETE STRUCTURES		
		DATE 11-13-08	DWG. NO. 234.2



ADDITIONAL AREA REQUIRED BEHIND
TYPICAL 5 FT. SIDEWALK FOR
BUS SHELTER PAD

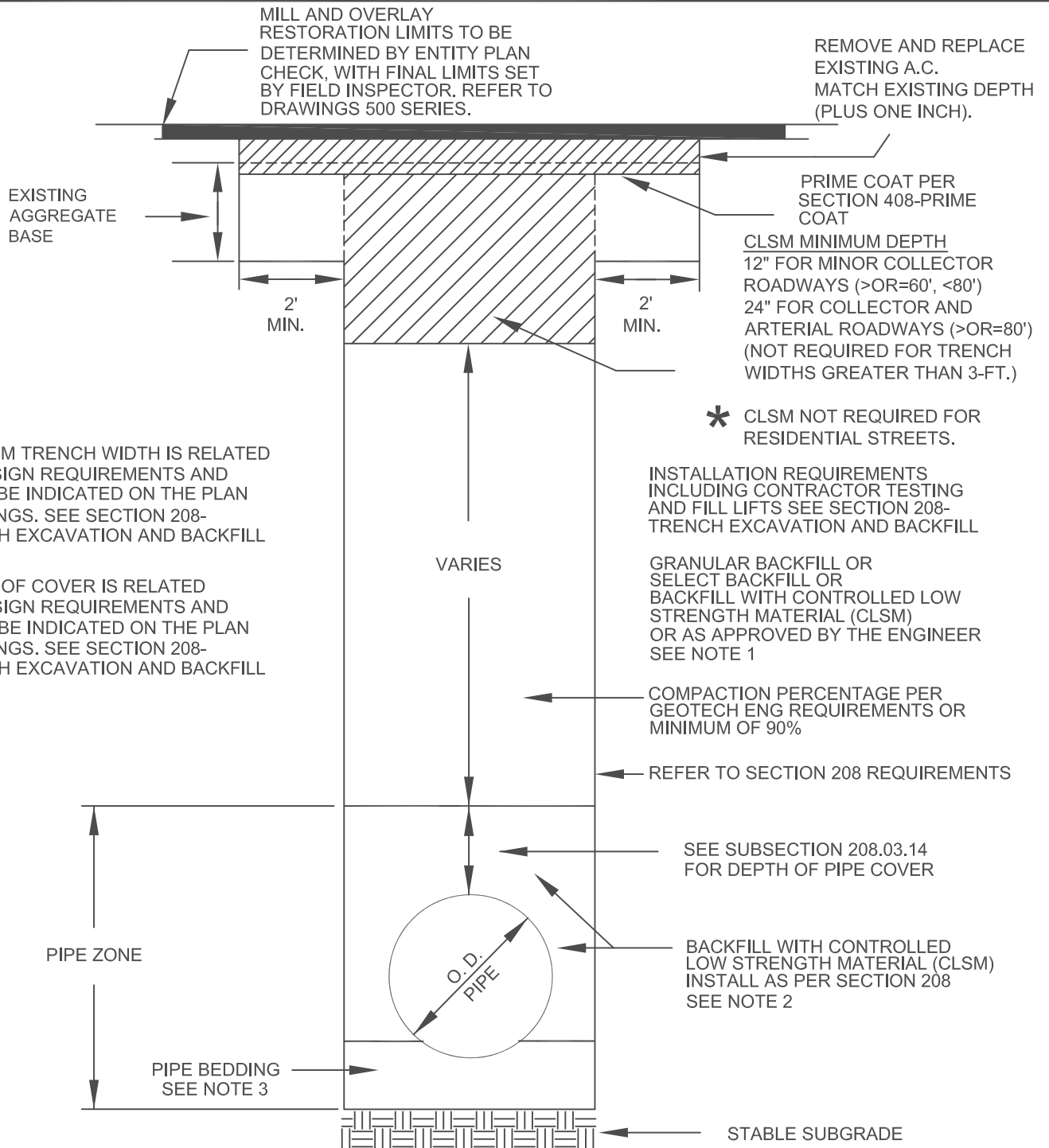


ADDITIONAL 25 FEET MAY BE
REQUIRED BY RTC.

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2. ADDITIONAL RIGHT-OF-WAY OR EASEMENT IS REQUIRED FOR BUS SHELTER PAD AND VARIABLE HEIGHT CURB AT BACK OF SIDEWALK RAMP, AND SHALL BE DEDICATED TO THE LOCAL ENTITY.
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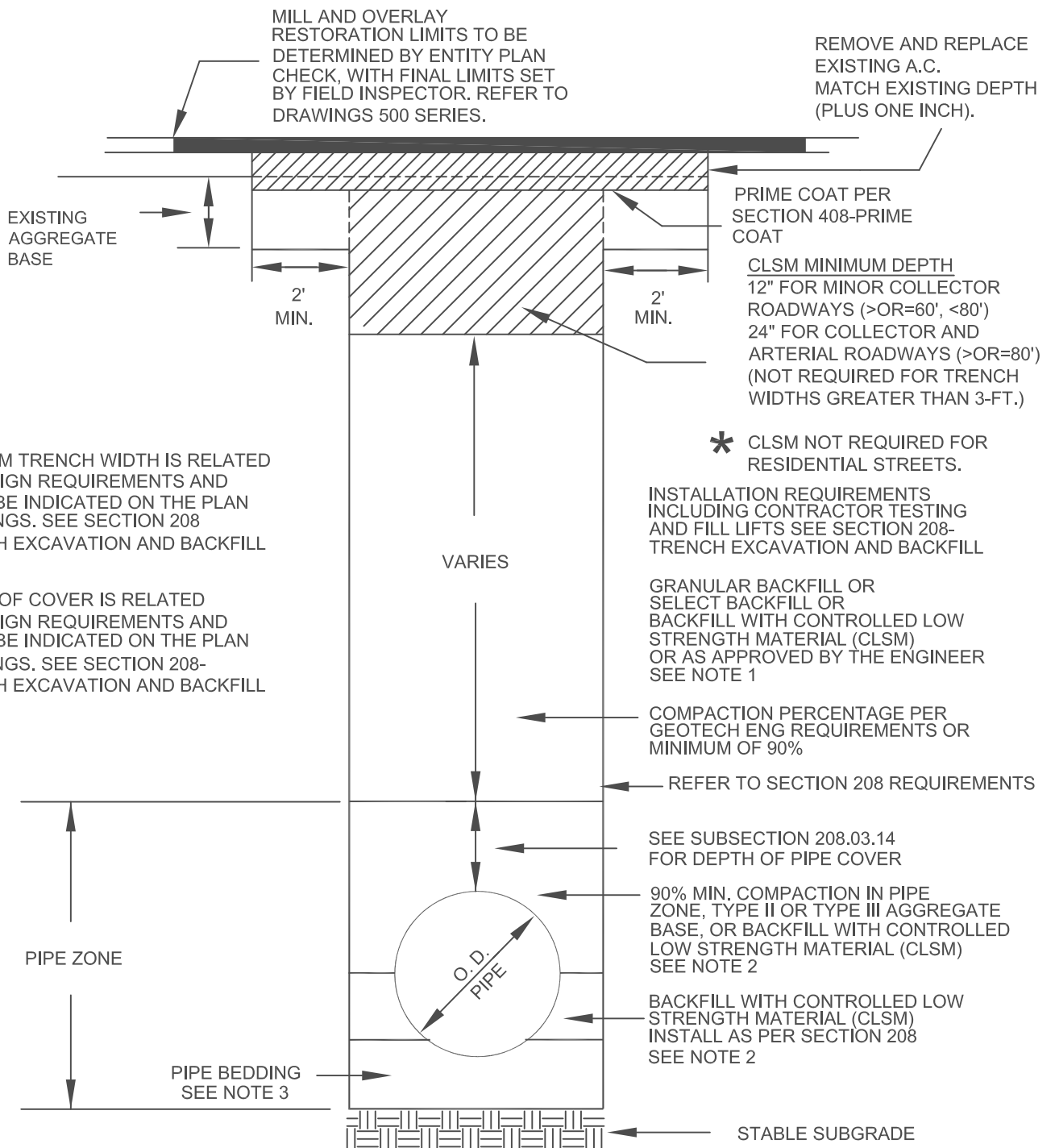
SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
302	AGGREGATE BASE	TYPICAL DOUBLE BUS STOP PASSENGER LOADING AND SHELTER PADS	
501	CONCRETE		
502	CONCRETE STRUCTURES		
		DATE 11-13-08	DWG. NO. 234.2A



NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.
3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.

SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
208	TRENCH EXCAVATION & BACKFILL	METHOD A FOR FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS	
302	AGGREGATE BASE COURSES		
		DATE 06-11-09	DWG. NO. 503AF



MINIMUM TRENCH WIDTH IS RELATED TO DESIGN REQUIREMENTS AND SHALL BE INDICATED ON THE PLAN DRAWINGS. SEE SECTION 208 TRENCH EXCAVATION AND BACKFILL

DEPTH OF COVER IS RELATED TO DESIGN REQUIREMENTS AND SHALL BE INDICATED ON THE PLAN DRAWINGS. SEE SECTION 208- TRENCH EXCAVATION AND BACKFILL

* CLSM NOT REQUIRED FOR RESIDENTIAL STREETS.

INSTALLATION REQUIREMENTS INCLUDING CONTRACTOR TESTING AND FILL LIFTS SEE SECTION 208- TRENCH EXCAVATION AND BACKFILL

GRANULAR BACKFILL OR SELECT BACKFILL OR BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) OR AS APPROVED BY THE ENGINEER SEE NOTE 1

COMPACTION PERCENTAGE PER GEOTECH ENG REQUIREMENTS OR MINIMUM OF 90%

REFER TO SECTION 208 REQUIREMENTS

SEE SUBSECTION 208.03.14 FOR DEPTH OF PIPE COVER

90% MIN. COMPACTION IN PIPE ZONE, TYPE II OR TYPE III AGGREGATE BASE, OR BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) SEE NOTE 2

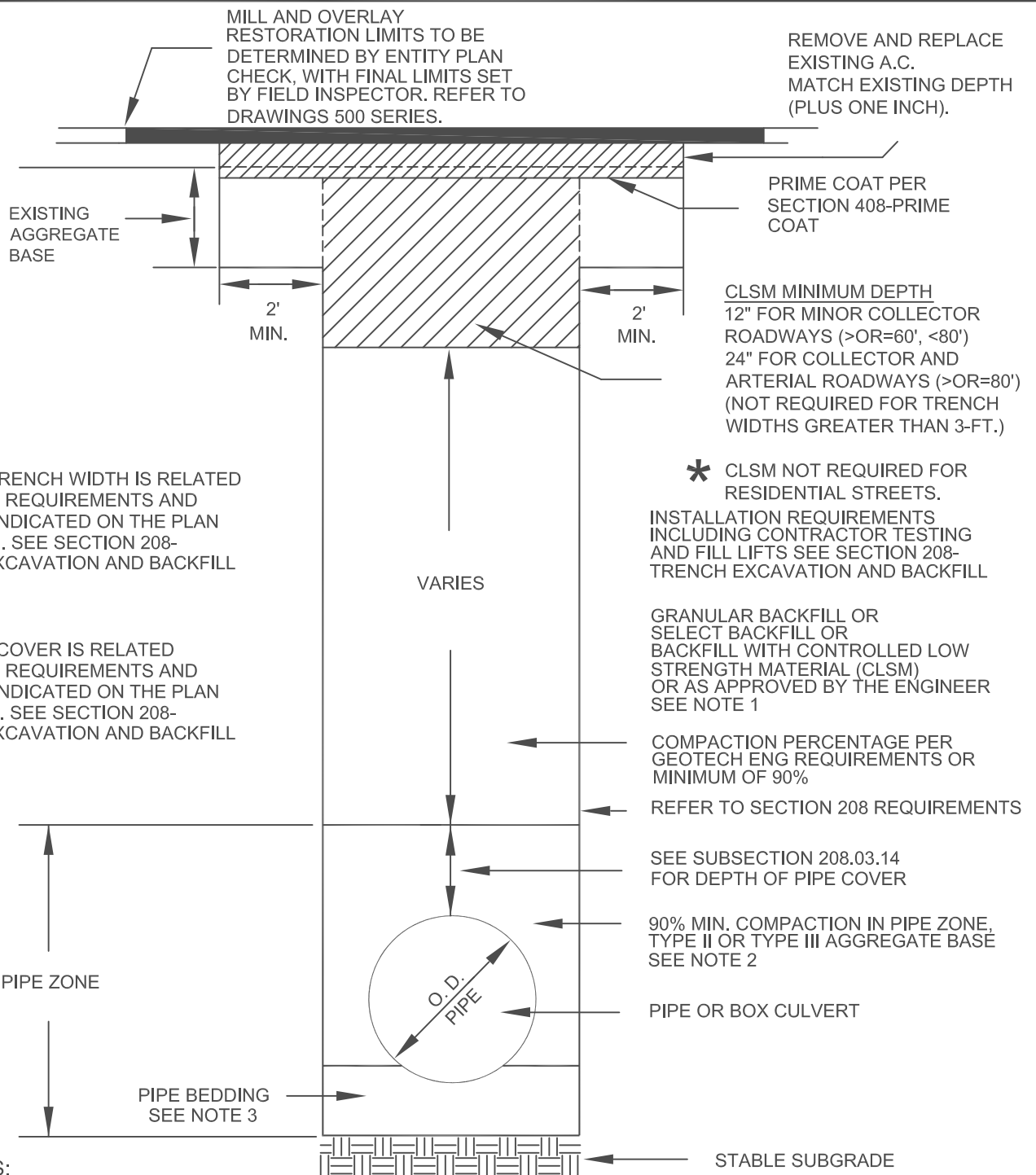
BACKFILL WITH CONTROLLED LOW STRENGTH MATERIAL (CLSM) INSTALL AS PER SECTION 208 SEE NOTE 2

STABLE SUBGRADE

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SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
208	TRENCH EXCAVATION & BACKFILL		
302	AGGREGATE BASE COURSES	METHOD A FOR RIGID PIPE TRENCH BACKFILL - PAVED AREAS	
		DATE 06-11-09	DWG. NO. 503AR



NOTES:

1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
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SPECIFICATION REFERENCE		UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA	
208	TRENCH EXCAVATION & BACKFILL	METHOD B FOR RIGID AND FLEXIBLE PIPE TRENCH BACKFILL - PAVED AREAS	
302	AGGREGATE BASE COURSES		
		DATE 06-11-09	DWG. NO. 503B