

Fire Safe Regulations Updates



**Nevada County Department of Public Works
Nevada County Fire Marshal's Office
December 2019**

PURPOSE OF THE UPDATES

- CA Board of Forestry and Fire Protection adopted new SRA Fire Safe Regulations, effective 1/1/2020
- Updates to Building Code already in process
- Updates to other affected chapters of Land Use & Development Code presented today:
 - Zoning Regulations
 - Street Addressing
 - Fire Safety Regulations
 - Road Standards

PRIOR TO THIS MEETING

Public Works met with

- NCCA
- Individual local contractors
- Local development representatives
- Fire Marshal's Office
- Planning Dept

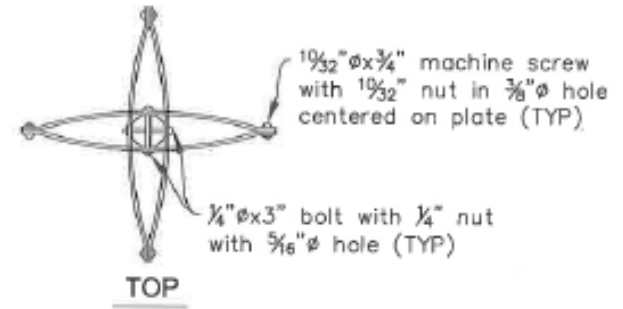
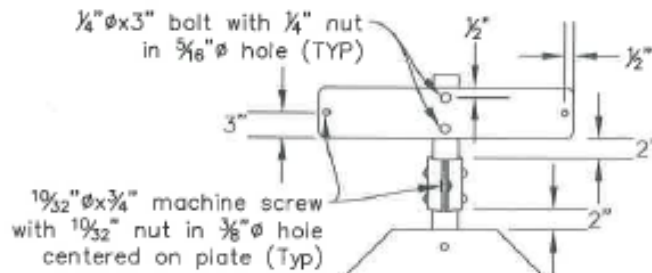
No concerns or opposition from members of the building/development community

CHAPTER II – ZONING REGULATIONS

- Corrections to code reference and typos only

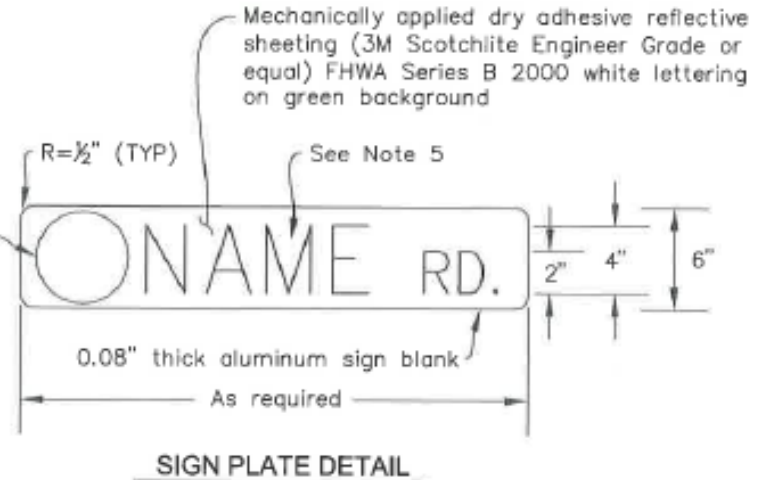
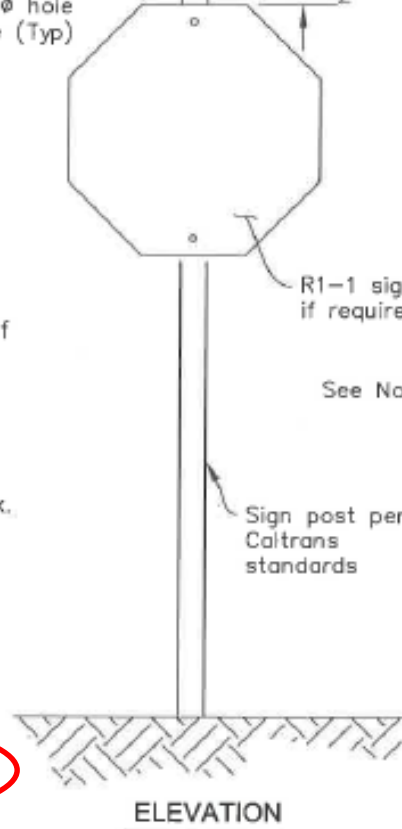
CHAPTER VII – STREET ADDRESSING

- New standards for address identification to facilitate easier location of sites during emergency response
 - Larger address numbering
 - More visible sign placement
 - Maintenance of address signage
- Corrected typos and code and standard drawing references
- Removed two standard drawings from Code section which were no longer relevant



NOTES:

1. Posts shall be 6' to 12' from edge of traveled way (rural) or 2' from the face of curb or dike (urban).
2. 12' min to 30" max from edge of traveled way in areas with no sidewalk.
3. County provided 5" diameter decal for county maintained signs.
4. Lettering and decal shall be centered on sign.
5. Lettering to consist of minimum $\frac{1}{2}$ " stroke.



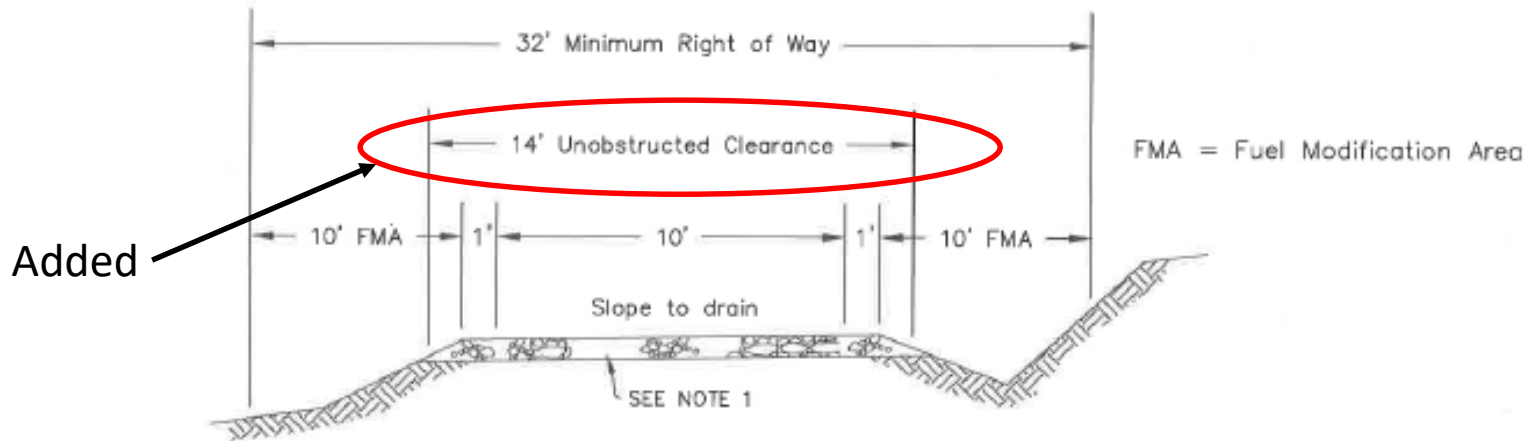
Added



COUNTY OF NEVADA DEPARTMENT OF PUBLIC WORKS	
LOCAL RURAL ROAD SYSTEM	
STANDARD STREET AND STOP SIGN	
Approved by: <i>Patth Perlo</i> Principal Civil Engineer	12-17-19 Date
STANDARD DRAWING A-5	

CHAPTER XVI – FIRE SAFETY

- Updates to definitions consistent with SRA Fire Safe Regs
- Driveway standards updated
 - Wider turnouts (10 to 12') with taper
 - Additional width on larger radii
 - Paved driveway encroachments clarified
 - Removed 3 drawings no longer relevant



NOTES:

1. Surface capable of supporting a 40,000 lb. vehicle with a minimum of 4" A.B., compacted to 95%, placed on a subgrade compacted to 90%.



COUNTY OF NEVADA
 DEPARTMENT OF PUBLIC WORKS

LOCAL RURAL ROAD SYSTEM
 FIRE STANDARD DRIVEWAY

Approved by: *Patrick Perkins*
 Principal Civil Engineer Date 12-17-19

STANDARD
 DRAWING

C-2

CHAPTER XVI – FIRE SAFETY

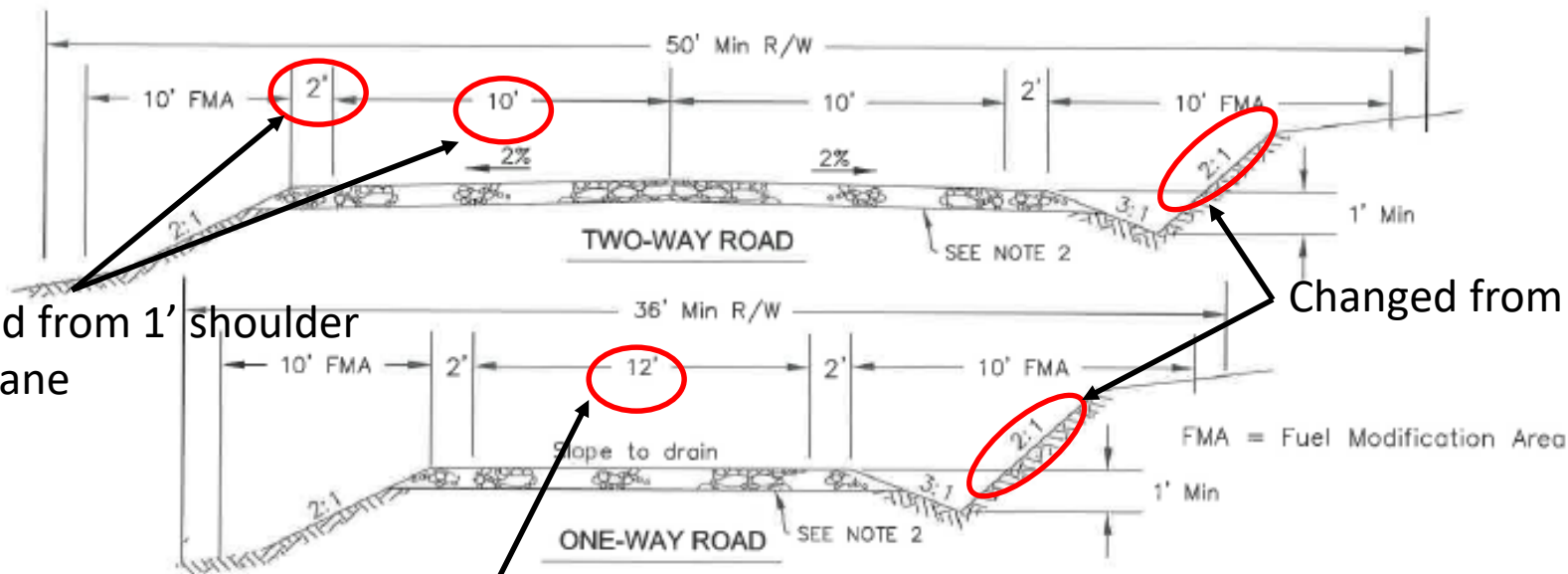
- Maintenance of defensible space for new development permits required in covenant or other binding agreement
- Fuel Modification
 - Added defensible space regulations and permissible exceptions where 30' of clearing is impracticable
- Minor corrections, clarifications, and code reference updates

CHAPTER XVII – ROAD STANDARDS

- Updates to definitions consistent with SRA Fire Safe Regs and LUDC Fire Safety Chapter XVI
- Turnouts added to road standard consistent with driveway standards
- Design Geometrics and Structural Section Design updated
 - New Class 1 standards – 10' lane width. Double seal/4"AB removed and 3"AC/6"AB substituted
 - New Fire Standard road specs – 10' wide lanes and 2' shoulders. Surface capacity 75K lbs. Subgrade compacted to 95%. 6" AB.
 - Class 2 and Minor Collector surfacing depths increased

CHAPTER XVII – ROAD STANDARDS

- Turnaround intervals added
- Measuring guidelines added
- Security gates on private roads allowed only with Fire Marshal Office approval
- Typo corrections, clarifications, and code reference updates



Changed from 1' shoulder and 9' lane

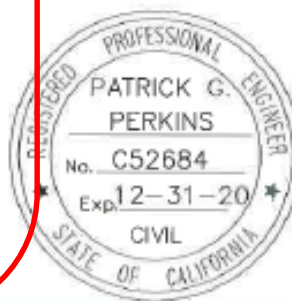
Changed from 1½:1

Changed from 10'

NOTES:

1. Changes in SRA Fire Safe Regulations shall supercede this standard and be approved by the Engineer.
2. The surface shall be capable of supporting a 75,000 lb. vehicle with a minimum of 6" AB compacted to 95%, placed on a subgrade compacted to 95%. Road grade shall not exceed 16%.
3. Roadway turnouts shall be provided along the route at locations specified in Nevada County Land Use and Development Code Chapter XVII.
4. Slope easements or R/W shall be provided to contain all cuts and/or fills satisfactory to the Engineer.
5. All Secondary "Emergency Egress Only" routes shall be identified as such by signs constructed to the standards as specified by the current California Manual on Uniform Traffic Control Devices.
6. All horizontal and vertical curves with inadequate sight distance shall be constructed to a two way road standard.

New notes



COUNTY OF NEVADA
DEPARTMENT OF PUBLIC WORKS

LOCAL RURAL ROAD SYSTEM
**FIRE STANDARD
ACCESS ROAD**

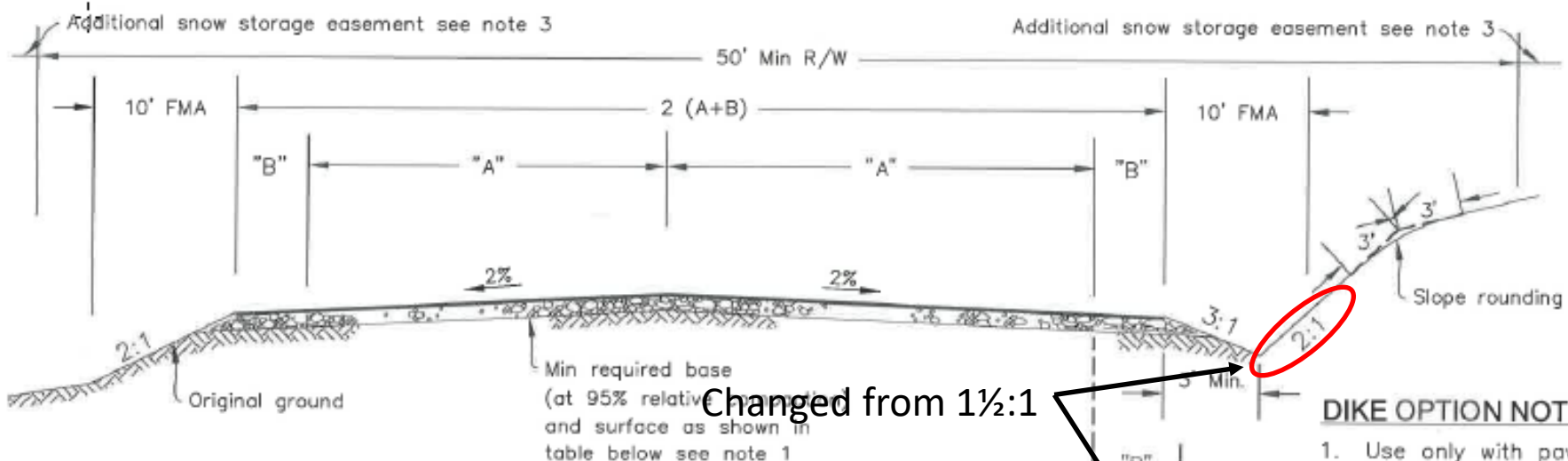
Approved by: *Patel Patel*
Principal Civil Engineer Date 12-17-19

STANDARD
DRAWING

C-1

RECOMMENDATIONS

- I. Environmental Action: Find the project exempt from CEQA pursuant to Sec 15307 & 15308 of the CEQA Guidelines, as an action taken by a regulatory agency for the protection of natural resources and the environment.
- II. Standard Drawings: Approve amendments to the Standard Drawings
- III. Ordinance Amendments: Introduce and waive further reading of the Ordinance amending Chapters II, VII, XVI, and XVII of the LUDC



Changed from 1½:1

Changed from Chip Seal, 4" AB, 9' lane

Changed from 6" AB

Changed from 6" AB, 9' lane

NOTES:

1. Structural section design to be based on "R" value and "T.I."
2. Centerline of improvements to coincide with centerline of R/W.
3. 10' wide Snow Storage Easement required above 3500' elevation. To be provided outside of Ditch Area.
4. FMA = Fuel Modification Area
5. See Section L-XVII 3.4, L.U.D.C. for maximum grade standards.

DIKE OPTION NOTES:

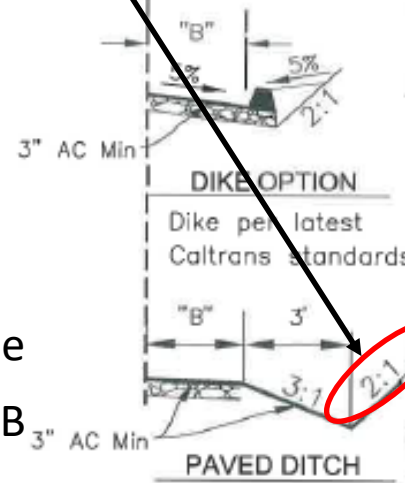
1. Use only with paved shoulder
2. Add to "B" the width necessary for storm flows

PAVED DITCH NOTE:

Required where profile grade exceeds 5%

MINIMUM ROAD REQUIREMENTS				
CLASS	1		2	
ELEVATION	LOWER THAN 3500'		HIGHER THAN 3500'	
ADT	<400	401-2000	<400	401-2000
SURFACE**	3" A.C.	3" A.C.	3" A.C.	3" A.C.
AGG. BASE	6"	8"	8"	8"
"A"	10'	10'	10'	10'
"B"	2'	4'	2'	4'
DESIGN SPEED	20 MPH	25 MPH	20 MPH	25 MPH
Std Max GRADE	10% *	10% *	8% *	8% *

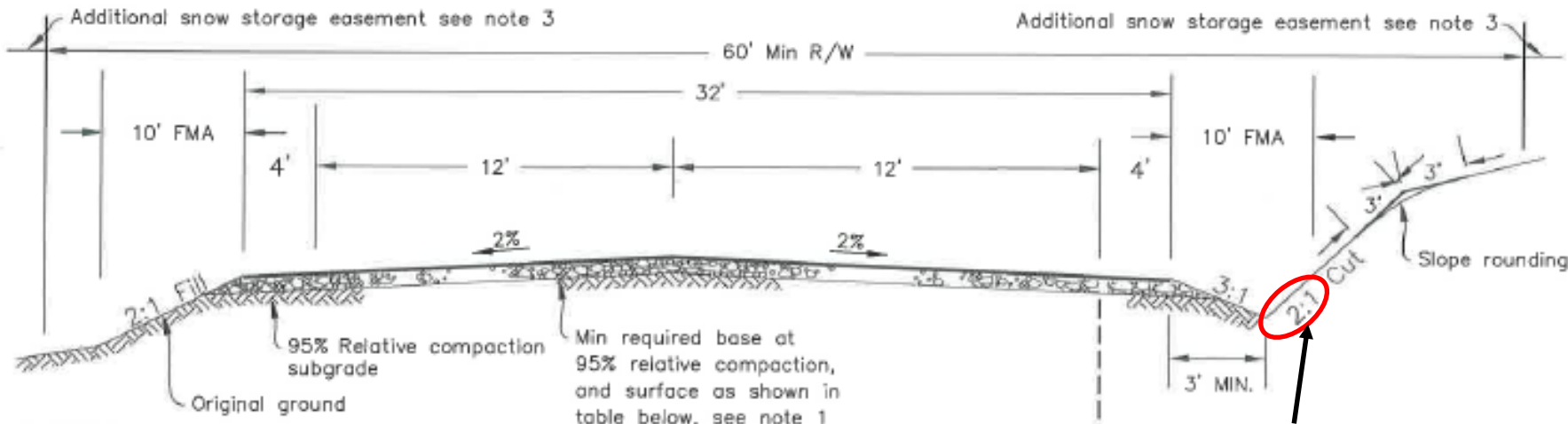
* SEE NOTE 5



COUNTY OF NEVADA
DEPARTMENT OF PUBLIC WORKS
LOCAL RURAL ROAD SYSTEM
LOCAL CLASS 1 & 2 ROAD

Approved by: *Patrick G. Perkins*
Principal Civil Engineer Date 12-17-19

STANDARD DRAWING
A-1



NOTES:

1. Structural section design to be based on "R" value and "T.I."
2. Centerline of improvements to coincide with centerline of R/W.
3. 10' wide Snow Storage Easement required above 3500' elevation. To be provided outside of the Ditch Area.
4. FMA = Fuel Modification Area
5. See Section L-XII 3.4, L.U.D.C., for maximum grade standards.

Changed from 2" AC and 6" AB

MINIMUM ROAD REQUIREMENTS		
ELEVATION	LOWER THAN 3500'	HIGHER THAN 3500'
SURFACE	3" A.C.	3" A.C.
BASE	8" A.B.	8" A.B.
DESIGN SPEED	35 M.P.H.	35 M.P.H.
Std Max GRADE	10% *	8% *

* SEE NOTE 5



DIKE OPTION
Dike per latest Caltrans standards

DIKE OPTION NOTE:
Use only with paved shoulder

PAVED DITCH

PAVED DITCH NOTE:
Required where profile grade exceeds 5%

Changed from 1½:1

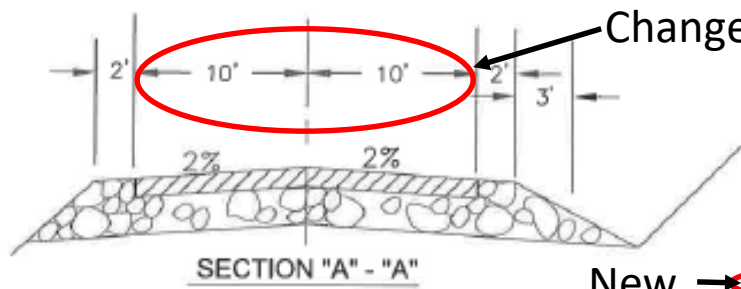
COUNTY OF NEVADA
DEPARTMENT OF PUBLIC WORKS

LOCAL RURAL ROAD SYSTEM
MINOR COLLECTOR AND
LOCAL CLASS 3 ROAD

Approved by: *Patrick Perkins*
Principal Civil Engineer Date 12-17-19

STANDARD DRAWING

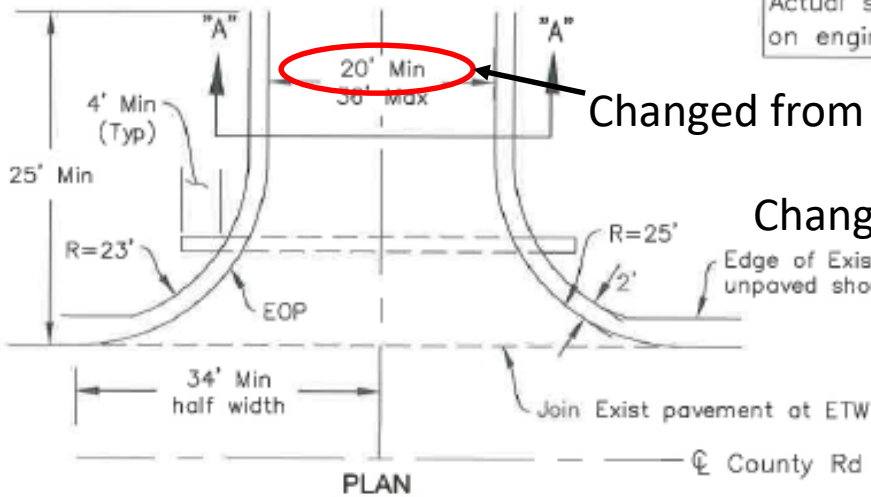
A-2



Changed from 9' lanes

CULVERT DATA	
Length	Min ϕ
Up to 30'	12"
30'-80'	18"
80'-100'	24"
Above 3000'	18" Min

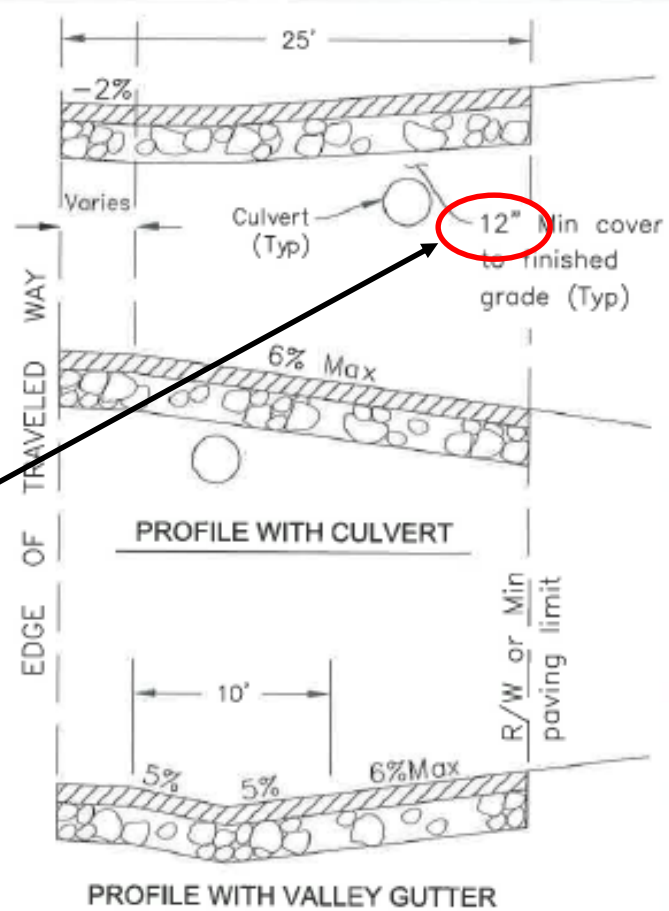
New → All pipe shall be new HDPE.
Actual size will be dependent on engineering analysis.



New

Changed from 18' min

Changed from 9" min



NOTES:

1. Subgrade to be compacted to 95% relative compaction. Place 6" compacted Class 2 Aggregate Base with 3" Min Asphalt Concrete to match existing where county road is paved.
2. Portland Cement Concrete may be used only if approved by the Department of Public Works.
3. The Department of Public Works must approve use of culvert or valley gutter.
4. Special design required in areas with existing curb and gutter.
5. Adequate sight distance shall be provided per County standards.



COUNTY OF NEVADA
DEPARTMENT OF PUBLIC WORKS
ENCROACHMENTS
PRIVATE ROAD APPROACH

Approved by:

Patrick Perkins

Principal Civil Engineer

12-17-19
Date

STANDARD
DRAWING

B-1