

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

January 22, 2020

Martin Garcia, P.E.  
Anchor Engineering LLC  
1035 S. Bosque Loop  
Bosque Farms, NM 87123

**RE: 144 Texas Street Drainage  
Grading and Drainage Plan  
Engineer's Stamp Date: 01/13/20  
Hydrology File: K19D153**

Dear Mr. Garcia:

PO Box 1293

Based upon the information provided in your submittal received 01/16/2020, the Grading and Drainage Plan is approved for SO-19 Permit.

Albuquerque

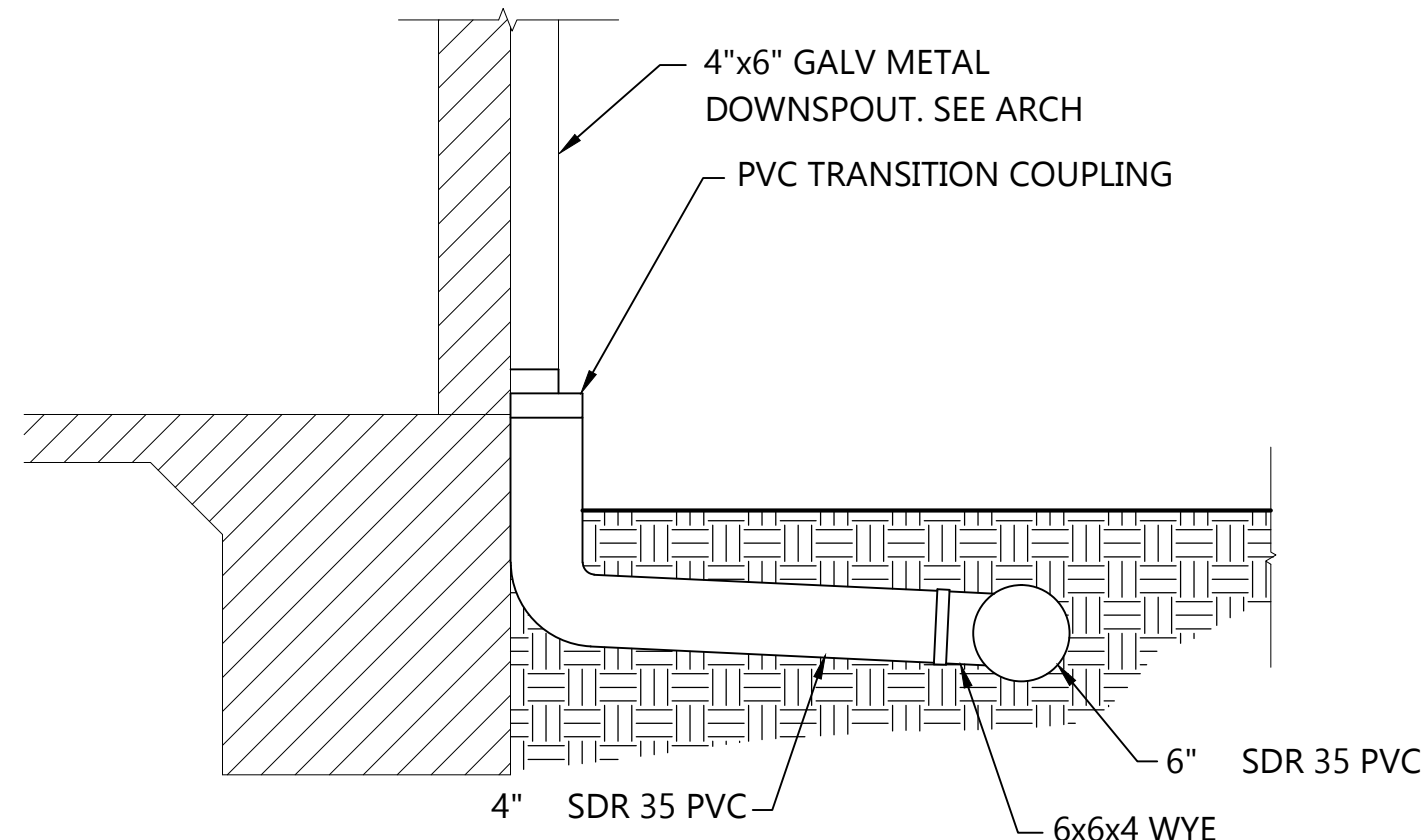
If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

NM 87103

[www.cabq.gov](http://www.cabq.gov)

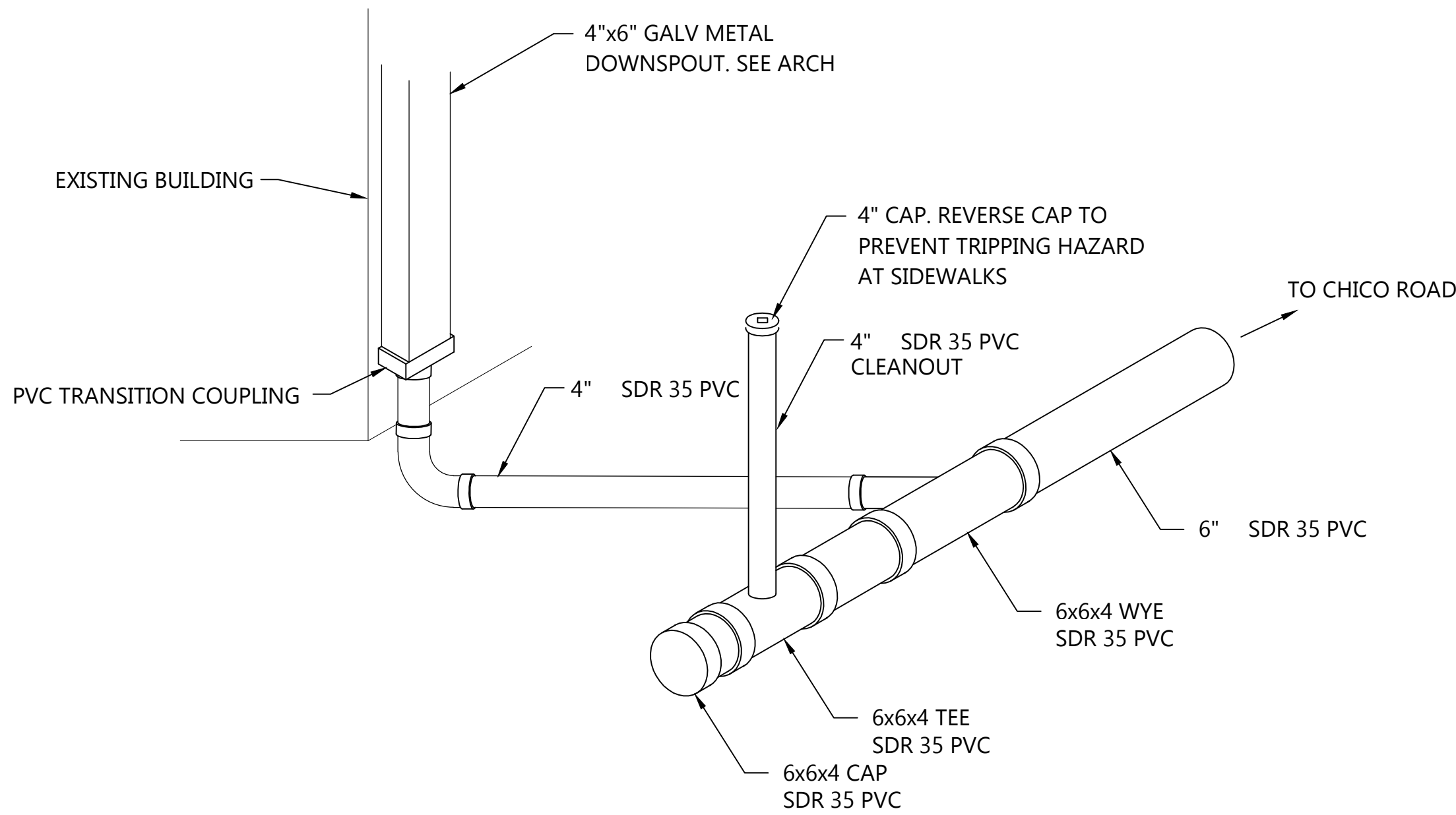
Renée C. Brissette, P.E. CFM  
Senior Engineer, Hydrology  
Planning Department



### DOWNSPOUT TO PVC DETAIL

SCALE: NTS

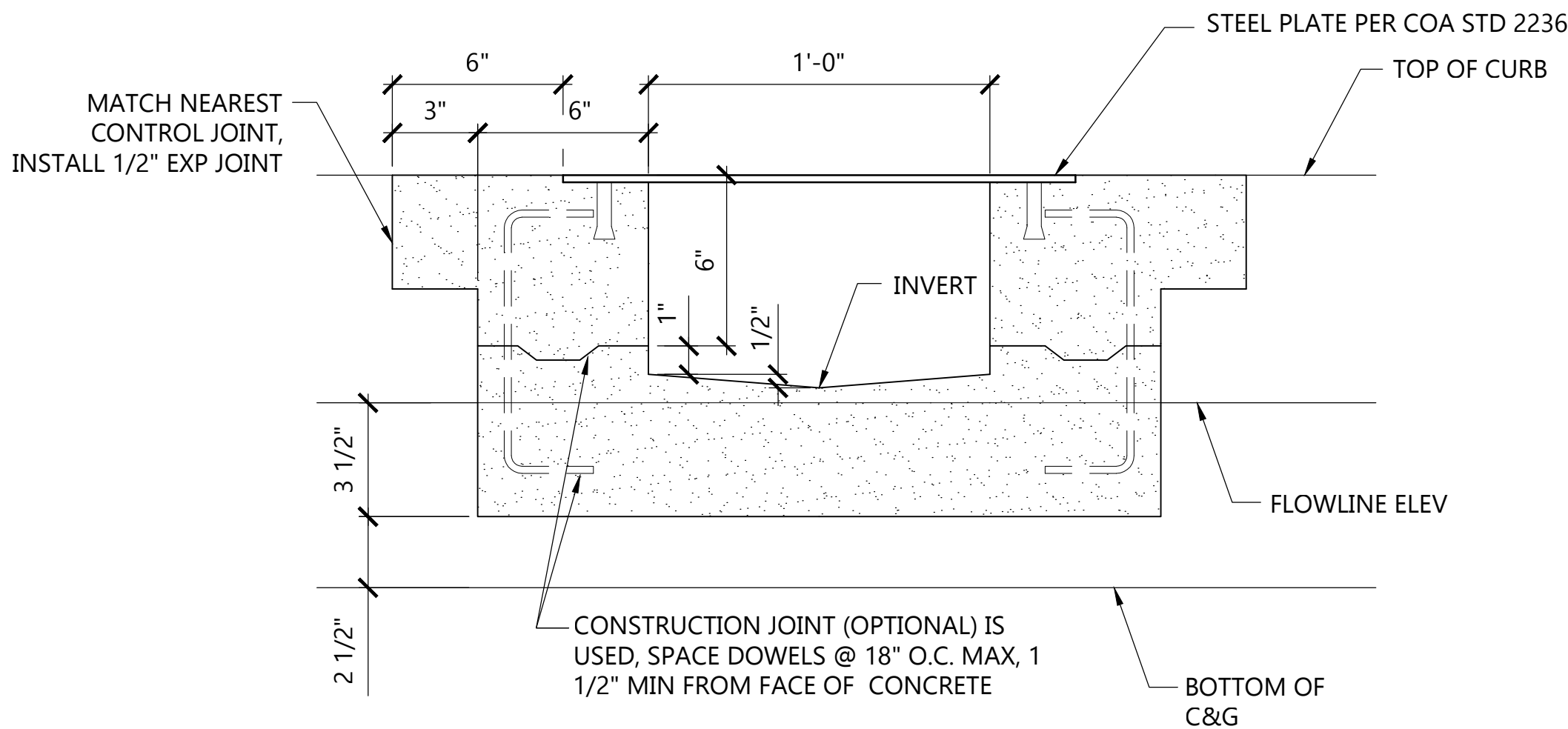
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### DRAIN PIPE ISOMETRIC

SCALE: NTS

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DETAIL

### SIDEWALK CULVERT DETAIL (COA STD DWG 2236)

SCALE: NTS

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Weir Calculations	
LENGTH OF STORM DRAIN	65 FT
SLOPE OF STORM DRAIN	1.15%
SIZE OF PVC PIPE	6" DIA
AREA OF ROOF CONTRIBUTING	2,215 SF (0.0508 AC)

FROM DRAINAGE CALCULATIONS

STORM DRAIN CAPACITY

$$Q = \frac{1.48}{n} A r^{\frac{2}{3}} S_o \quad n=0.015$$

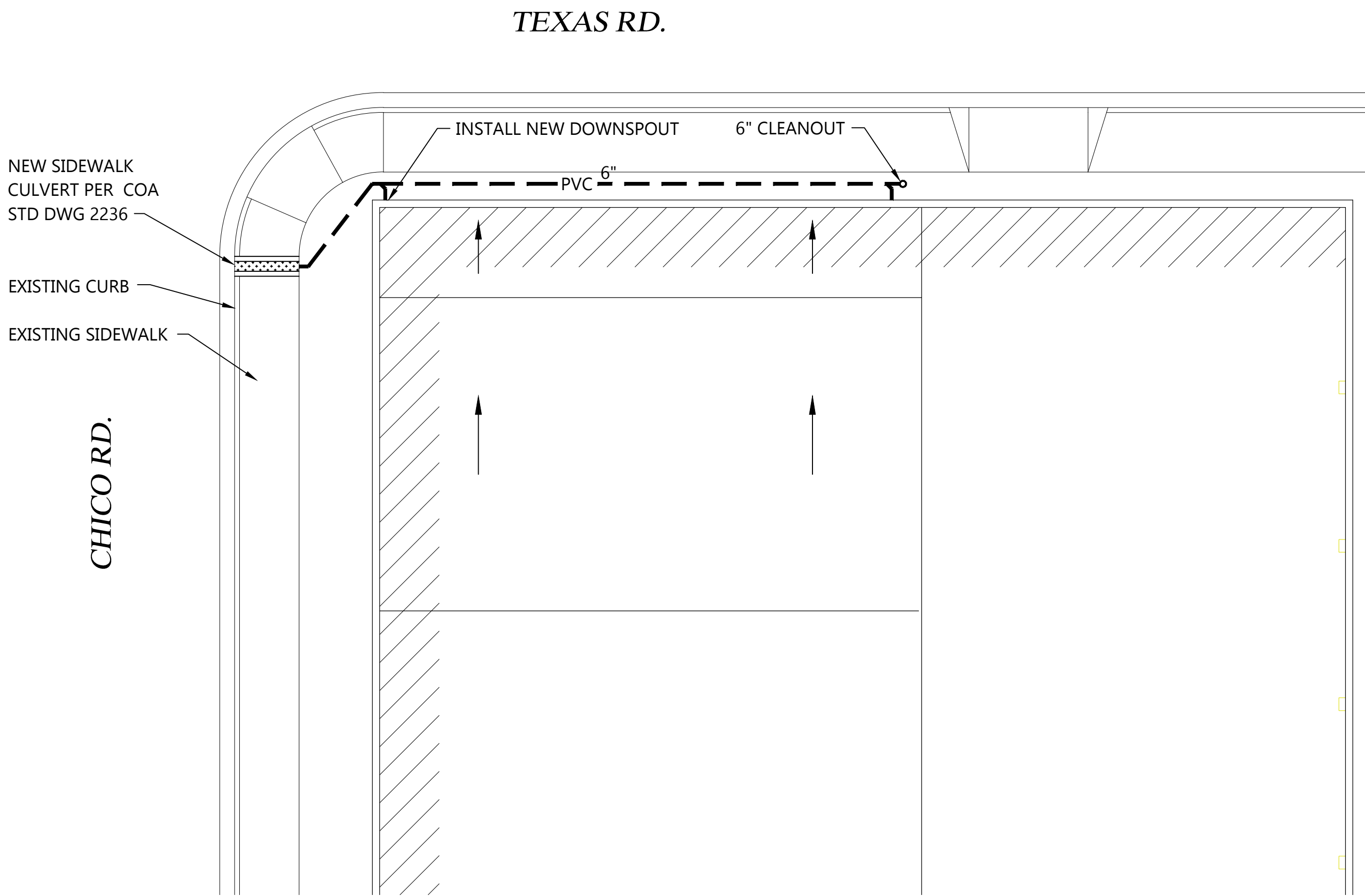
$$A = \pi \frac{d^2}{4} = \pi \frac{(0.5)^2}{4} = 0.196 \text{ ft}^2$$

$$\text{Per} = \pi d = 3.14(0.5) = 1.57 \text{ ft}$$

$$r = \frac{h}{p} = \frac{0.196}{1.57} = 0.1248 \quad r = .2496$$

$$S_o = 0.0115 \quad S_o \frac{1}{2} = 0.1072$$

$$Q \text{ CAPACITY} = (0.196) (0.2496) (0.1072)$$
$$QCAP = 0.5209 \text{ cfs}$$



### DRAINAGE IMPROVEMENT PLAN

SCALE: 1" = 10'

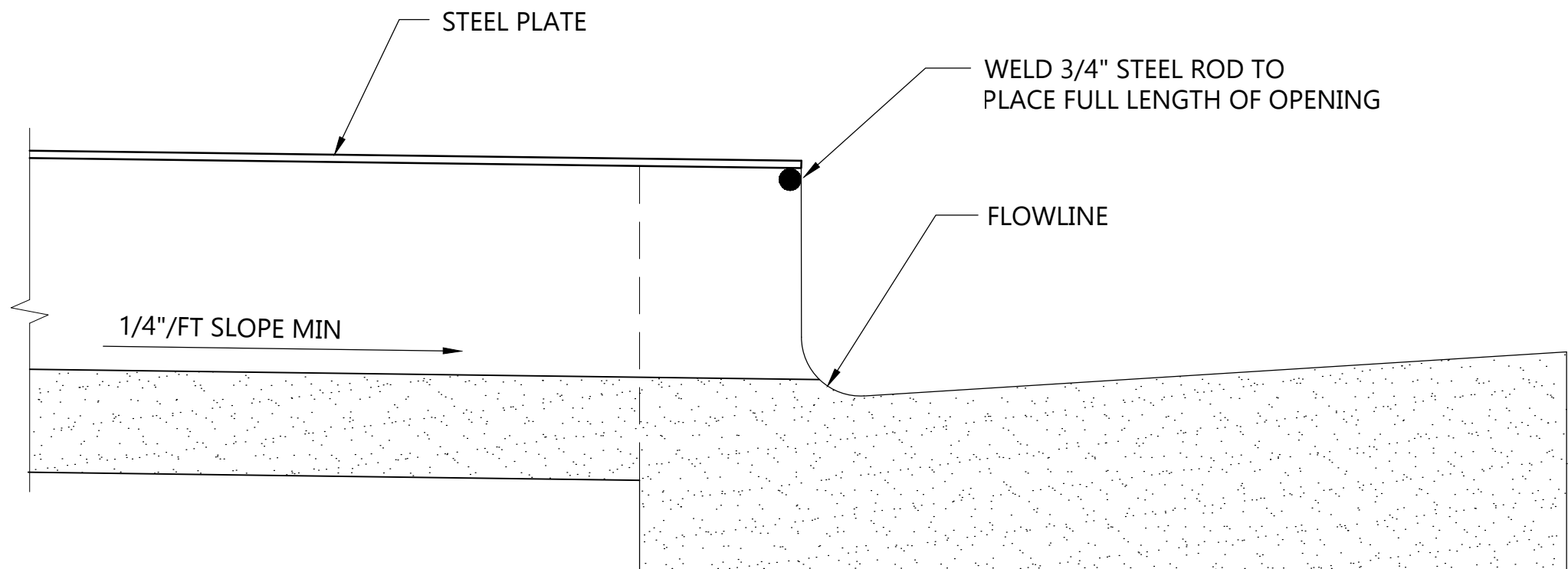
SO-19



Hydrology Calculations roof top contributing to storm drain								
147 Texas Street NE								
Precipitation Zone 3								
100 yr 6 hr Storm								
Basin Area =		0.0508 ac.		2215 sq ft				
Existing								
Land Treatment	Percent	Area (ac.)	Excess Precipitation (in.)	Unit Peak Discharge (cfs/ac.)	Runoff Volume (ac. Ft.)	Peak Discharge (cfs)	SCS Curve Number	Comments
A	0.00%	0.00	0.66	1.87	0.00	0.00	80.00	Natural Ground
B	0.00%	0.00	0.92	2.60	0.00	0.00	82.00	Landscaped Areas
C	0.00%	0.00	1.29	3.45	0.00	0.00	87.00	Compacted earth
D	100.00%	0.05	2.36	5.02	0.01	0.26	98.00	Impervious Areas
TOTAL	100.00%	0.05	2.36		0.01	0.26	98.00	
					435.19	cu ft		

#### Private Drainage Facilities within City Right-of-Way Notice to Contractor (Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call**, dial **"811"** [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Augie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.



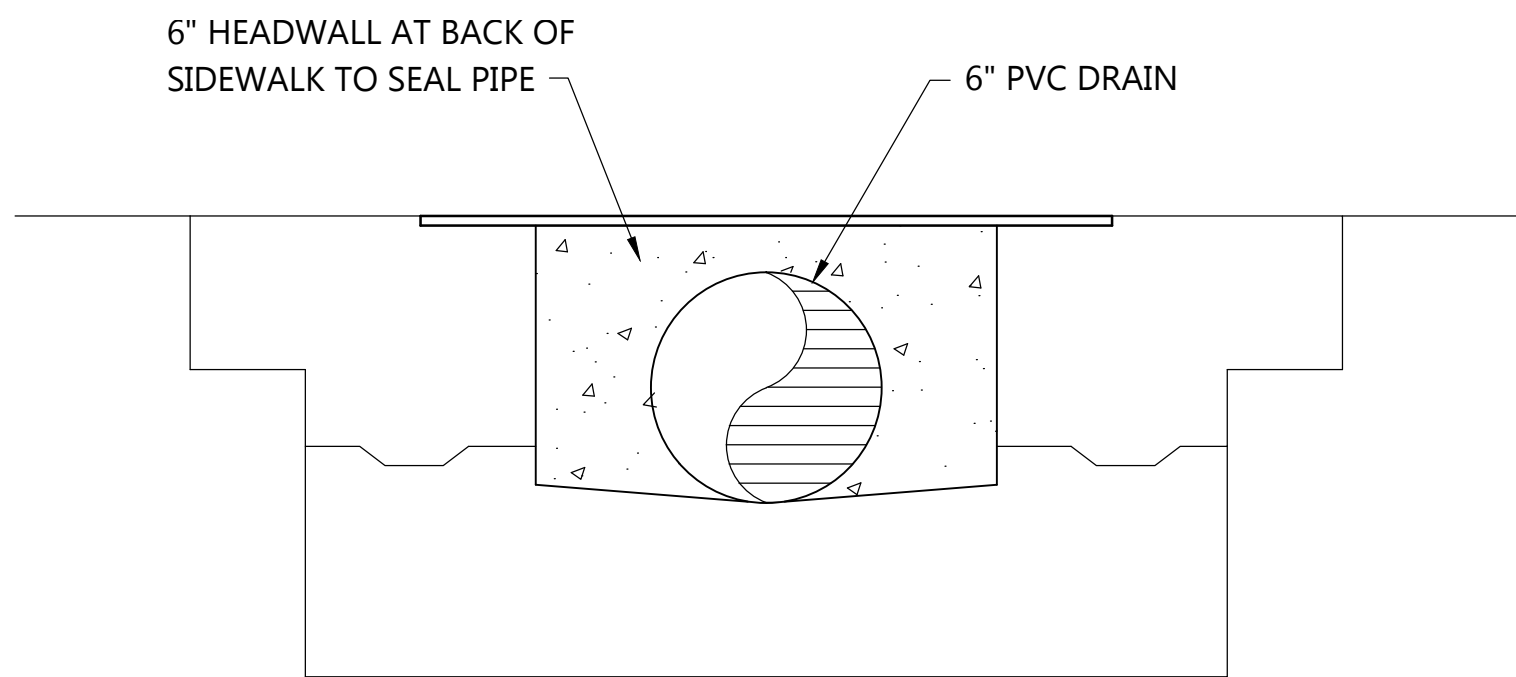
SECTION THRU C&G

### SIDEWALK CULVERT SECTION THROUGH CURB

SCALE: NTS

(COA STD DWG 2236)

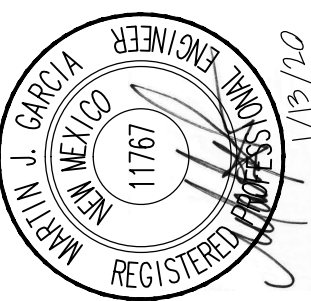
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### DRAIN PIPE HEADWALL AT CULVERT

SCALE: NTS

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**Anchor**  
Engineering, LLC  
1160 Besque Farms Blvd., Suite E, Besque Farms, NM 87068  
505.362.1530  
martin@anchoreng.net

NO.	DATE	COMMENTS
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PROJECT NO.	19-079
DATE:	1.13.2020
DRAWN BY:	F PHILLIPS
CHECKED BY:	M GARCIA
SCALE	AS SHOWN

PROJECT TITLE	DRAINAGE IMPROVEMENTS 147 TEXAS STREET N.E. ALBUQUERQUE, NEW MEXICO
SHEET TITLE	DRAINAGE IMPROVEMENT PLAN AND DETAILS

SHEET

C1