

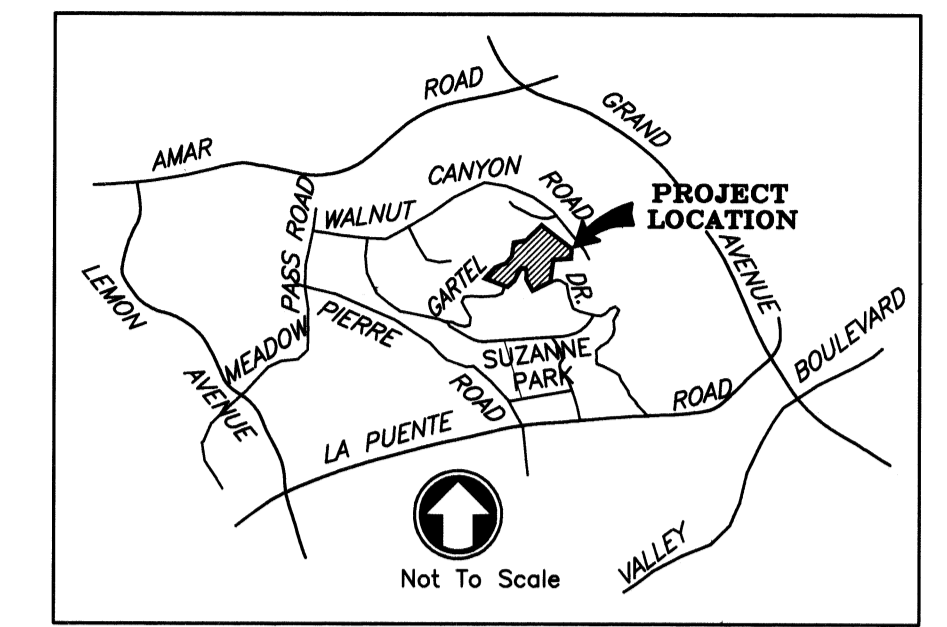
CITY OF WALNUT STORM DRAIN IMPROVEMENTS TRACT NO. 52324

GENERAL NOTES

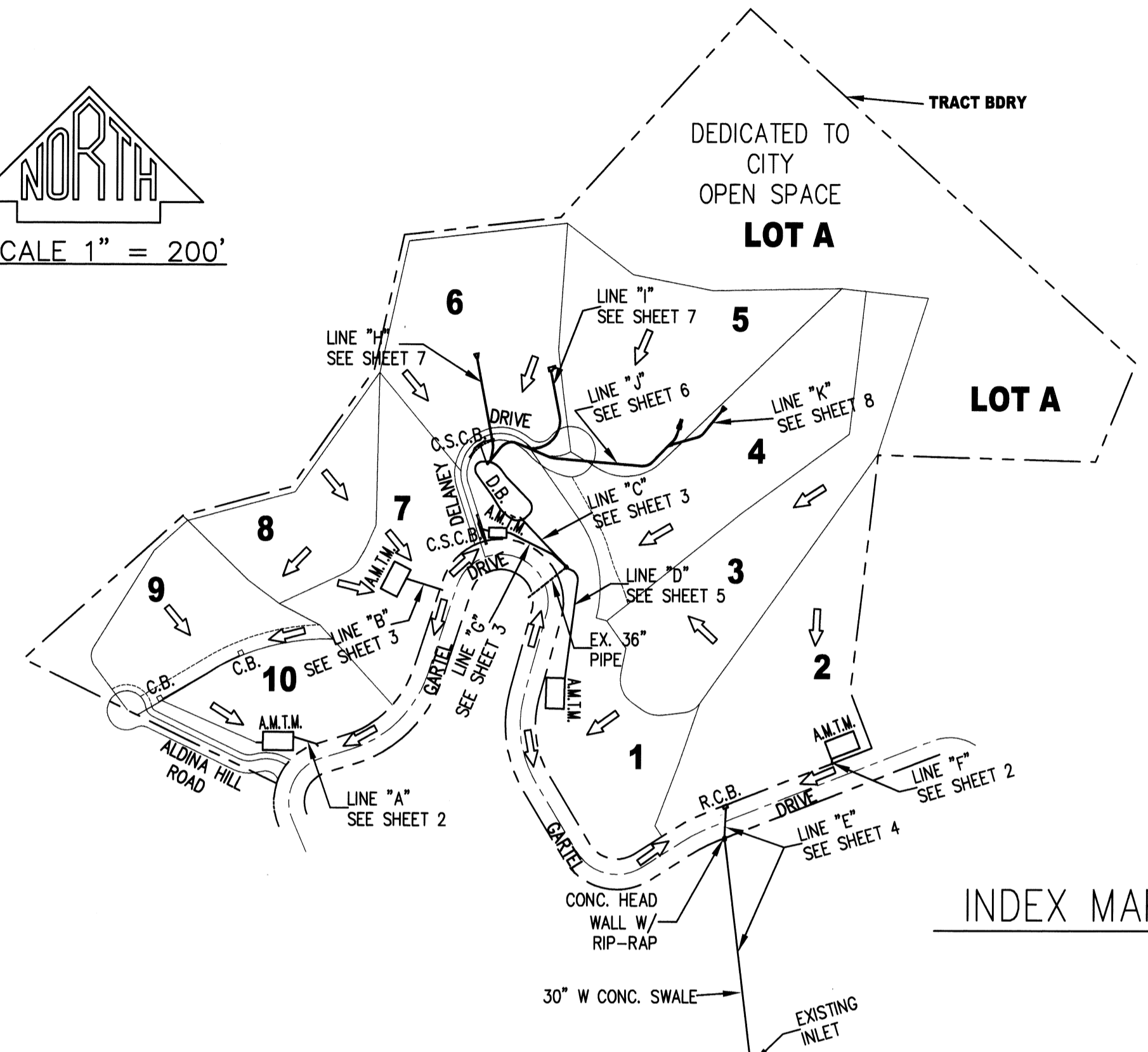
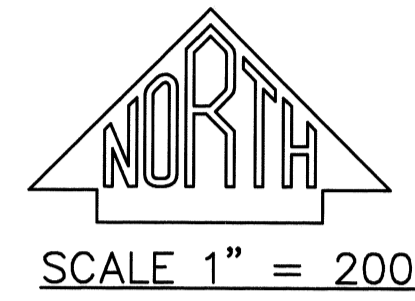
1. SUPERVISION OF CONSTRUCTION SHOWN ON THIS PLAN, INCLUDING GRADES, EARTHWORK OPERATION, PAVING AND DRAINAGE FACILITIES, WILL BE PERFORMED BY _____ A COPY OF THE GRADING PERMIT AND THE APPROVED GRADING PLAN SHALL BE MAINTAINED AT THE SITE AT ALL TIMES WHEN WORK IS IN PROGRESS.
2. A REPORT OF SOIL INVESTIGATION, INCLUDING RECOMMENDATIONS FOR GRADING PROCEDURES BASED ON THE REQUIREMENTS OF CHAPTER 70, LOS ANGELES COUNTY BUILDING CODE (LATEST EDITION), AND PAVEMENT AND BASE THICKNESS, HAS BEEN PREPARED BY THE FOLLOWING SOILS ENGINEER: _____ EARTHWORK AND PAVING SHALL CONFORM TO THE RECOMMENDATIONS CONTAINED IN THE REPORT.
3. THE SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL EARTHWORK OPERATIONS INCLUDING, BUT NOT LIMITED TO, CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION BACKFILL, AND PLACEMENT AND COMPACTION OF FILL.
4. AFTER COMPLETION OF THE GRADING OPERATION, AND PRIOR TO REQUEST FOR FINAL INSPECTION THE SOILS ENGINEER SHALL SUBMIT TO THE UNDERSIGNED REGISTERED CIVIL ENGINEER A COPY OF DENSITY REPORTS, TOGETHER WITH HIS WRITTEN VERIFICATION THAT THE COMPLETED WORK CONFORMS TO THE INTENT OF THE PLANS, SPECIFICATIONS AND SOILS REPORT RECOMMENDATIONS.
5. PERMANENT CUT OR FILL SLOPES SHALL NOT EXCEED A SLOPE OF TWO HORIZONTAL TO ONE VERTICAL.
6. ALL FILL SLOPE FACES SHALL BE COMPACTED. IF THE SLOPE IS TO BE LANDSCAPED, THE SURFACE SIX INCHES MAY BE LEFT UNCOMPACTED FOR PLANTING, AND SAFETY.
7. CONTRACTOR SHALL PROVIDE PROTECTIVE MEASURES AND TEMPORARY DRAINAGE AND DESILTING FACILITIES TO PROTECT ADJOINING PROPERTIES FROM STORM WATERS ORIGINATING ON OR DIVERTED FROM CONSTRUCTION SITE.
8. GRADE SHEETS FOR ALL CONCRETE CURB AND GUTTERS, CURBS, "Y" GUTTERS, SLABS, STORM DRAINS AND SEWERS SHALL BE PREPARED BY THE UNDERSIGNED ENGINEER. COPIES OF THE GRADE SHEETS SHALL BE MAINTAINED AT THE JOB SITE FOR THE CITY ENGINEER'S REVIEW.
9. GRADE STAKES SHALL BE SET AT 12.5' INTERVALS FOR ALL "Y" GUTTERS, CURB AND GUTTER, AND DRAINAGE SYSTEMS WITH FLOW LINE SLOPES OF LESS THAN 0.5%. CONTRACTOR SHALL PROVIDE GRADE SHEETS TO CITY ENGINEER'S OFFICE FOR ACCEPTANCE 48 HOURS PRIOR TO POURING CONCRETE.
10. EXISTING CONTOURS AND OTHER EXISTING TOPOGRAPHIC FEATURES ARE A TRUE REPRESENTATION OF SITE CONDITION ON _____ PROVIDED BY _____
11. THE CONTRACTOR SHALL KEEP ALL ADJACENT STREETS AND HAUL ROUTES CLEAR OF DIRT AND DEBRIS ORIGINATING FROM THE CONSTRUCTION SITE OR RESULTING FROM THE PROJECT WORK.
12. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING LOW LEVELS OF NOISE AND DUST.
13. THE CONTRACTOR SHALL SECURE ALL NECESSARY EXCAVATION AND CONSTRUCTION PERMITS FROM THE CITY OF BRADBURY FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY AND ASSOCIATED EASEMENTS.
14. RETAINING WALLS REQUIRED A SEPARATE BUILDING PERMIT.
15. HANDICAPPED FACILITIES REQUIRE SEPARATE APPROVAL FROM BUILDING
16. SEPARATE PLANS FOR TEMPORARY DRAINAGE AND EROSION CONTROL MEASURES TO BE USED DURING RAINY SEASON MUST BE SUBMITTED TO AND ACCEPTED BY THE CITY OF BRADBURY PRIOR TO OCTOBER 1. THE EROSION CONTROL DEVICES SHOWN ON SAID PLANS MUST BE INSTALLED BY NOT LATER THAN NOVEMBER 1 AND MAINTAINED IN OPERABLE CONDITION UNTIL APRIL 15.
17. ANY MODIFICATIONS OF OR CHANGES TO THIS PLAN MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO THE INSTITUTION OF SAID MODIFICATION OR CHANGE.
18. THE UNDERSIGNED REGISTERED CIVIL ENGINEER CERTIFIES THAT HIS PLAN WAS PREPARED UNDER HIS SUPERVISION AND THAT THE PLAN DOES COMPLY WITH CITY OF BRADBURY ORDINANCES. HE WILL, UPON COMPLETION OF THE PROJECT AND PRIOR REQUEST FOR FINAL ACCEPTANCE, SUBMIT TO THE CITY ENGINEER WRITTEN VERIFICATION THAT THE COMPLETED WORK DOES CONFORM TO THIS PLAN.
19. PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.

SHEET INDEX

SHEET 1	.....	TITLE SHEET
SHEET 2	.....	LINE "A", "F"
SHEET 3	.....	LINE "B", "C", "G"
SHEET 4	.....	LINE "E"
SHEET 5	.....	LINE "D"
SHEET 6	.....	LINE "J"
SHEET 7	.....	LINE "H", "I"
SHEET 8	.....	LINE "K"

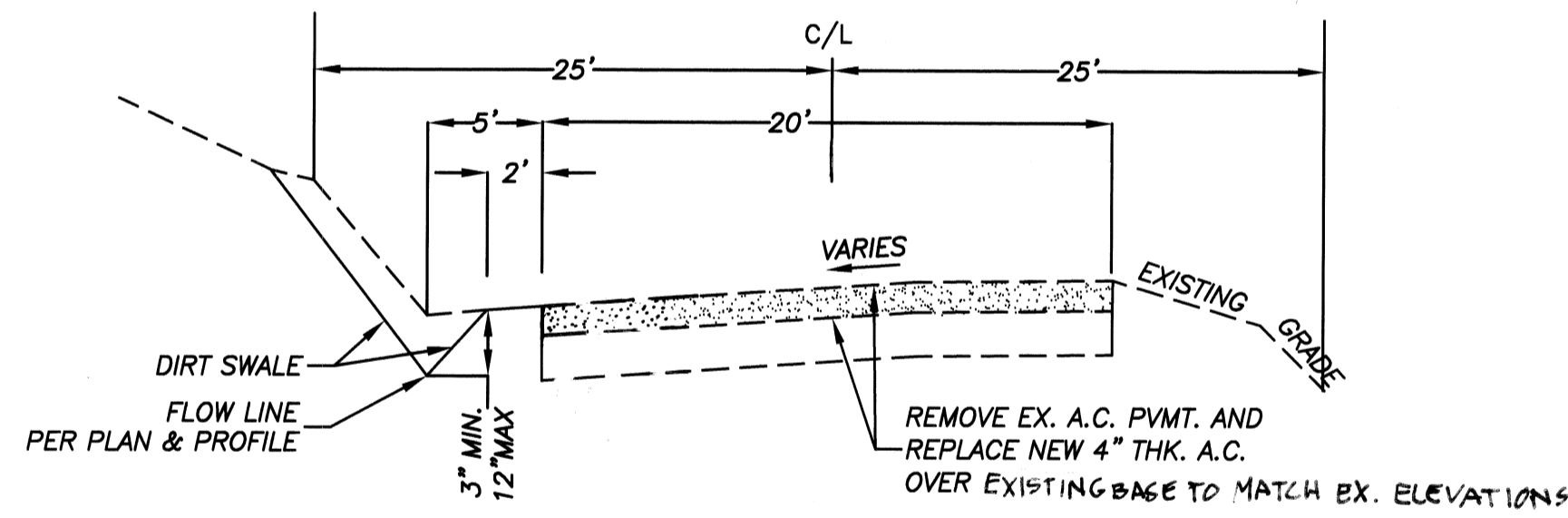


VICINITY MAP

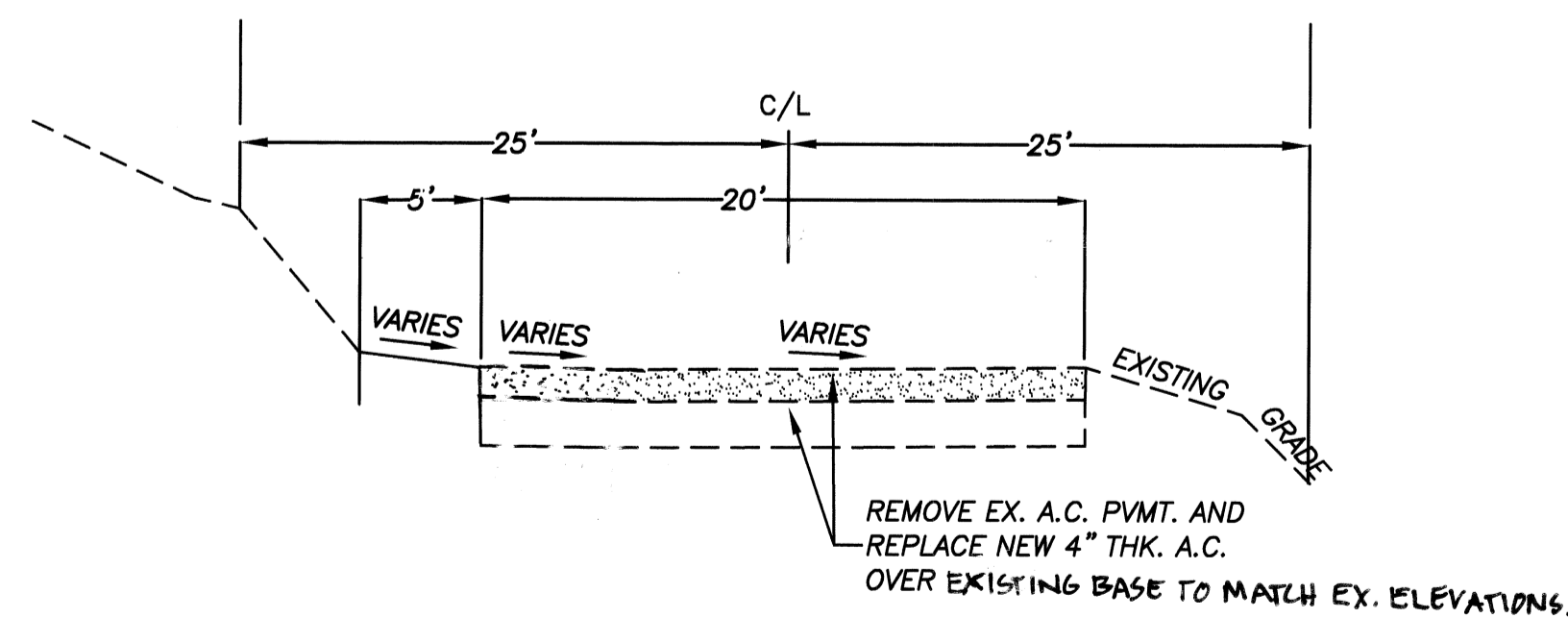


INDEX MAP

CONSTRUCTION NOTES & QUANTITIES			
ITEM	DESCRIPTION	QUANTITY	UNIT
①	CONSTRUCT 1-15" RCP (D1200) DRAIN PIPE.	529	LF
②	CONSTRUCT STORM DRAIN OUTLET HEADWALL.	3	EA
③	CONSTRUCT 1-10" PVC SCH.40 PIPE.	149	LF
④	CONSTRUCT 1-24" RCP (D1200) DRAIN PIPE.	121	LF
⑤	CONSTRUCT RURAL CATCH BASIN PER LACDFW STD. PLAN NO. 3015-0, FRONT OPENING WIDTH=6.66', 8" OPENING PER DETAIL SHOWN ON SHEET 4.	1	EA
⑥	CONSTRUCT 1-15" RCP (2000D) PIPE.	49	LF
⑦	CONSTRUCT 30" W, 12" DEEP CONC. SWALE.	364	LF
⑧	CONSTRUCT HEAD WALL W/30"Wx5'L RIP-RAP.	1	EA
⑨	CONSTRUCT JUNCTION STRUCTURE PER APWA STD. PLAN 331-2.	4	EA
⑩	CONSTRUCT STORM DRAIN MANHOLE PER APWA STD. PLAN 321-1.	1	EA
⑪	CONSTRUCT 1-12" RCP (1200D) PIPE.	435	LF



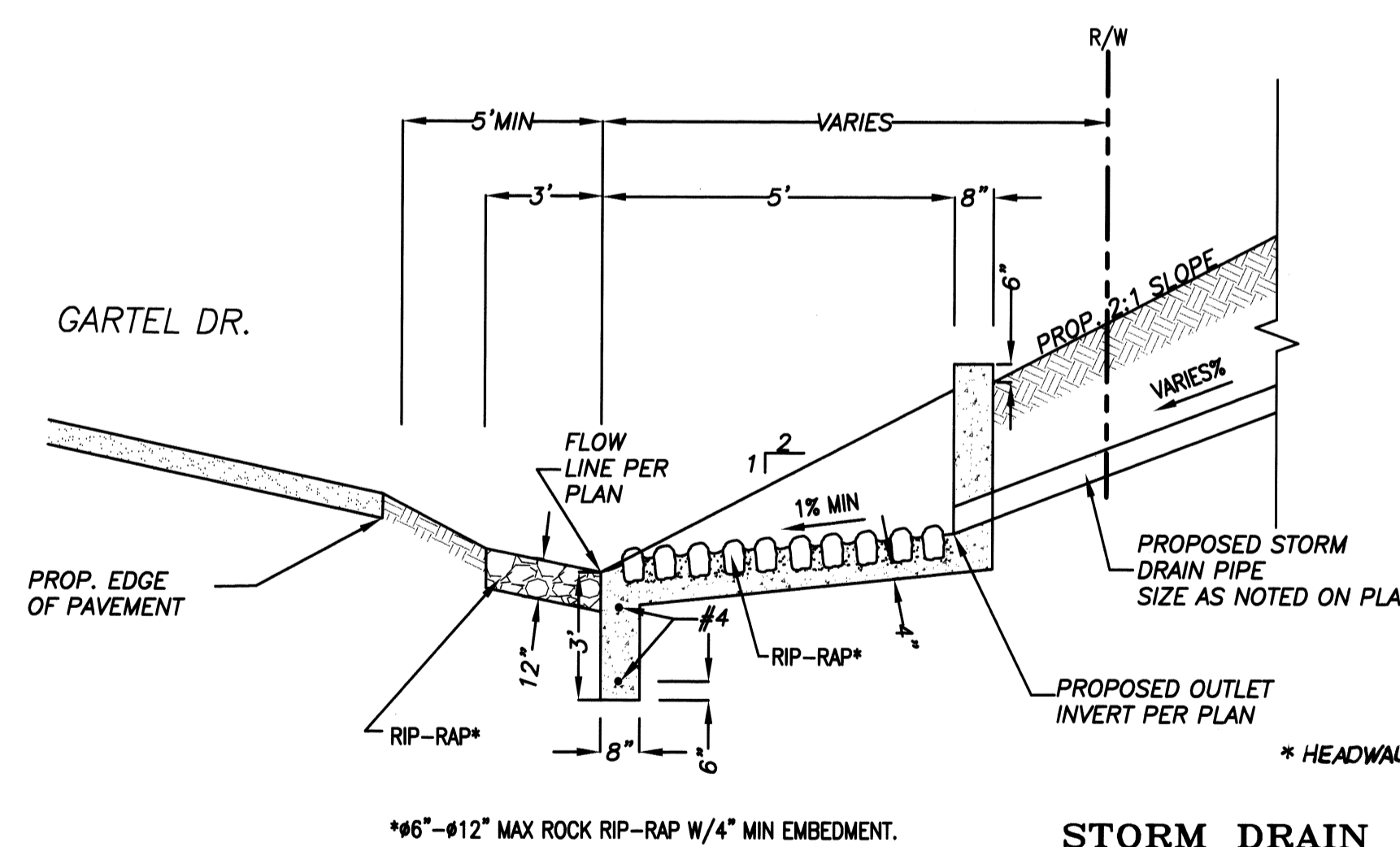
GARTEL DRIVE
TYPICAL SECTION
T.I. = 6.0 NTS



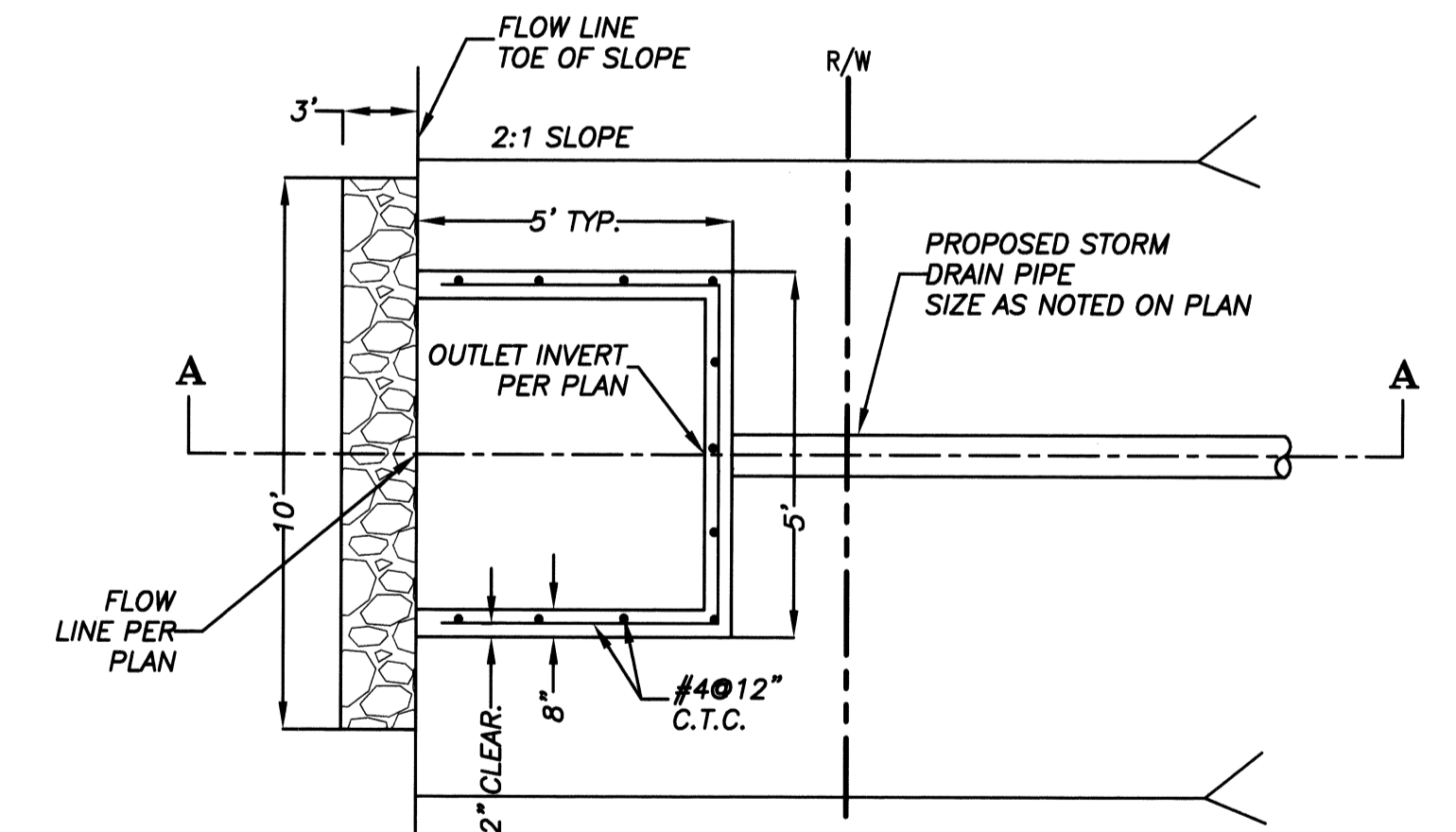
GARTEL DRIVE
TYPICAL SECTION
T.I. = 6.0 NTS

LEGEND

- TRACT BNDY./RIGHT-OF-WAY
- STORM DRAIN PIPE
- A.M.T.M. ATLANTIS MATRIX TANK MODULE
- C.B. CATCH BASIN
- C.S.C.B. CURBSIDE CATCH BASIN
- D.B. DETENSION BASIN
- R.C.B. RURAL CATCH BASIN



SECTION A-A
NTS



STORM DRAIN OUTLET HEADWALL DETAIL
NTS

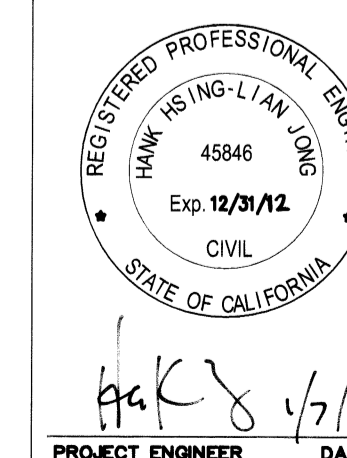
BENCHMARK:
L&T. IN S. CB VALLEY BLVD 42 FT. S. & 0.55 MILE E. GRAND AVE 5 FT S/O PI MON. NR E. P/L OF BLDG. NO. 22040
BASELINE QUAD 1975
B.M. CG 4096 ELEV. 648.194

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

EGL Associates, Inc.

11819 GOLDRING ROAD, UNIT A
ARCADIA, CA 91006

Tel: (626) 263-3588
Fax: (626) 263-3599



APPROVED BY
CITY ENGINEER

[Signature] 5/10/12
DATE

EGL JOB NO. 06-120-008 DRAWN BY: GB

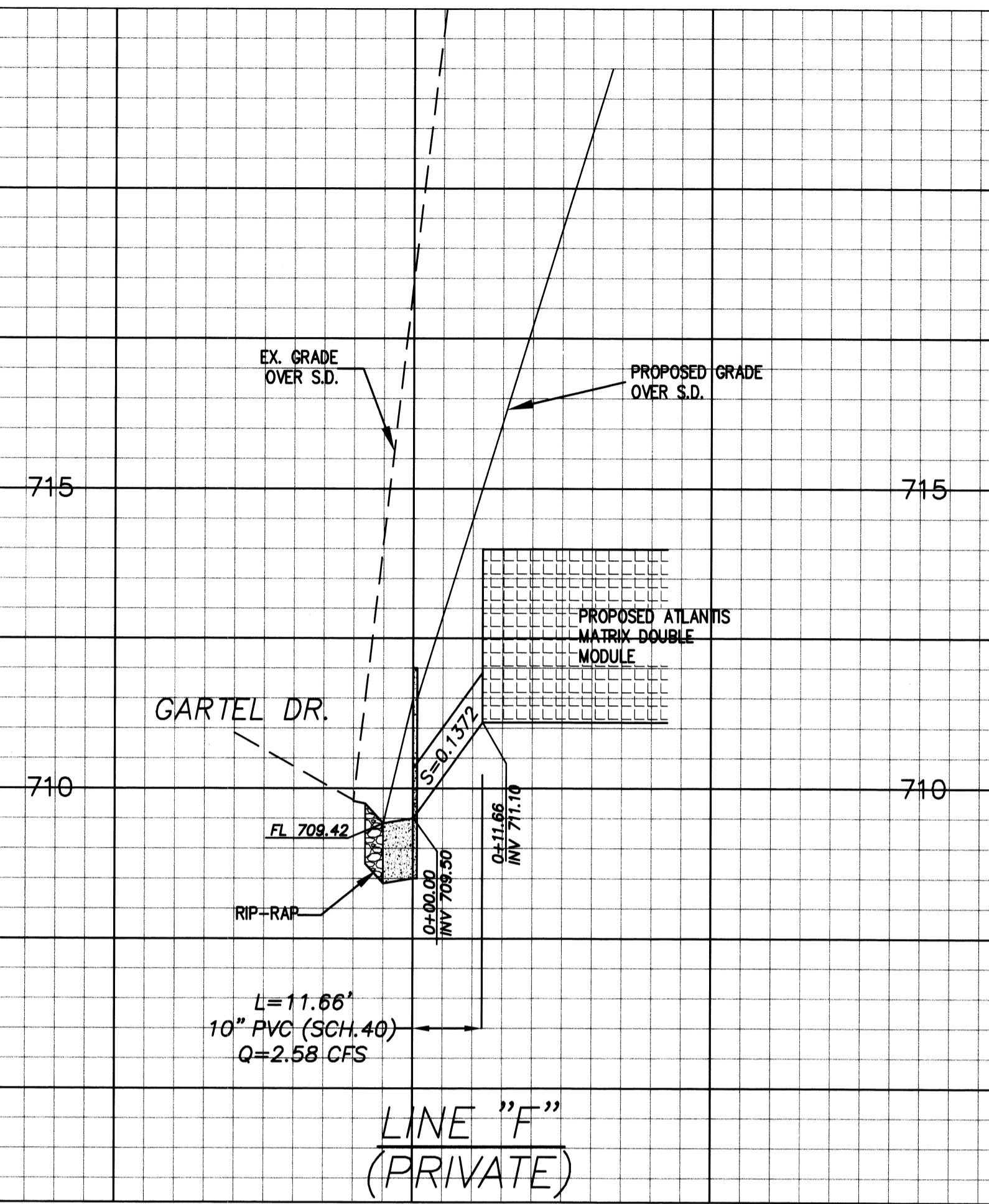
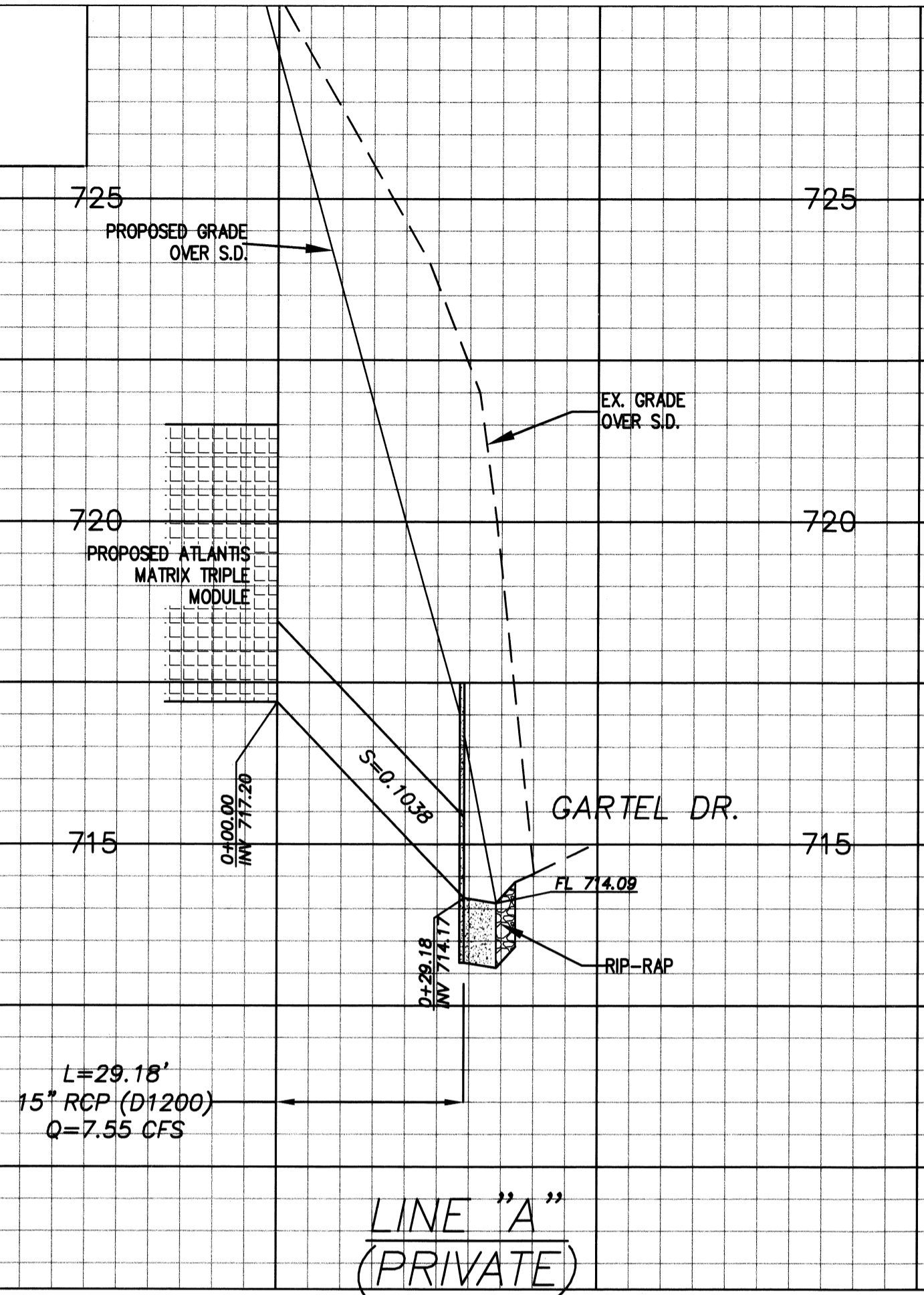
CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS

STORM DRAIN IMPROVEMENTS
TITLE SHEET
TRACT #52324

SHT. 1 OF 8 SCALE: AS SHOWN

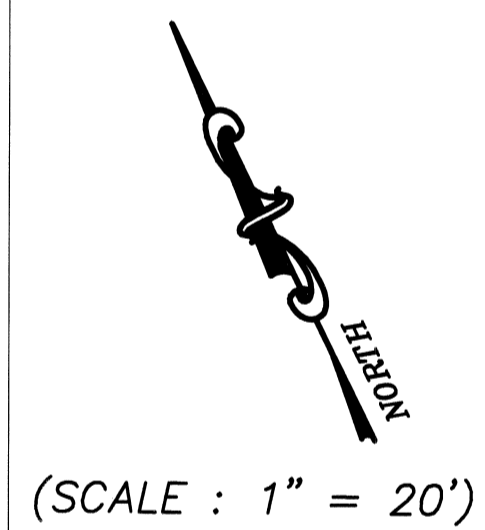
#189 A

SCALE: HOR: 1"=20'
VERT: 1"=2'

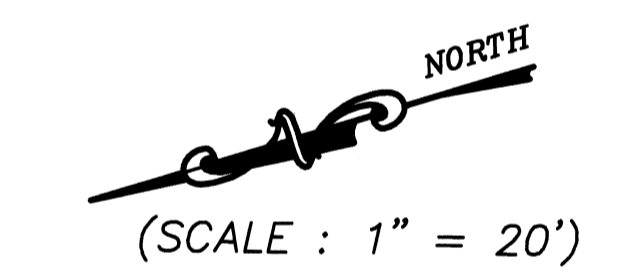


CONSTRUCTION NOTES

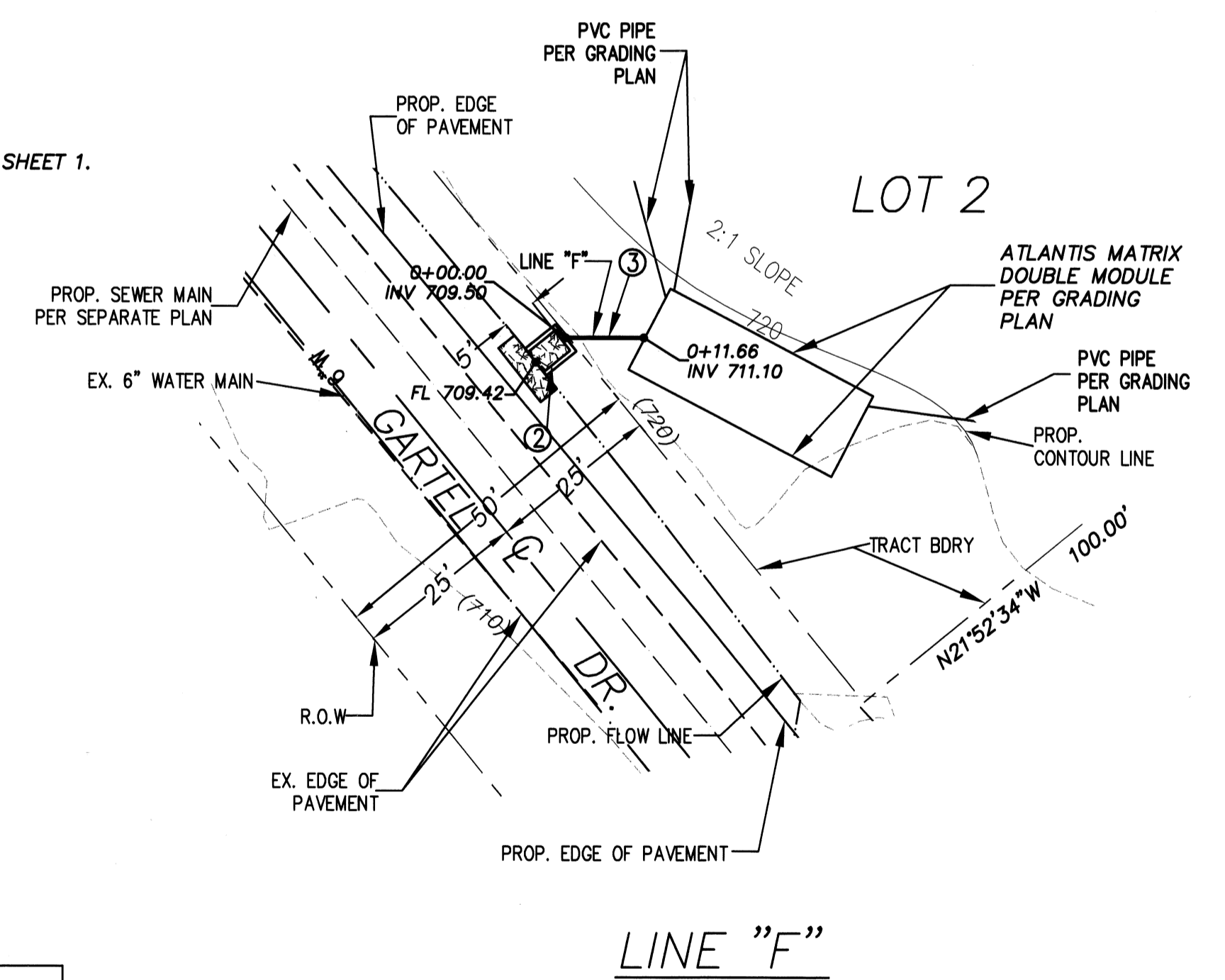
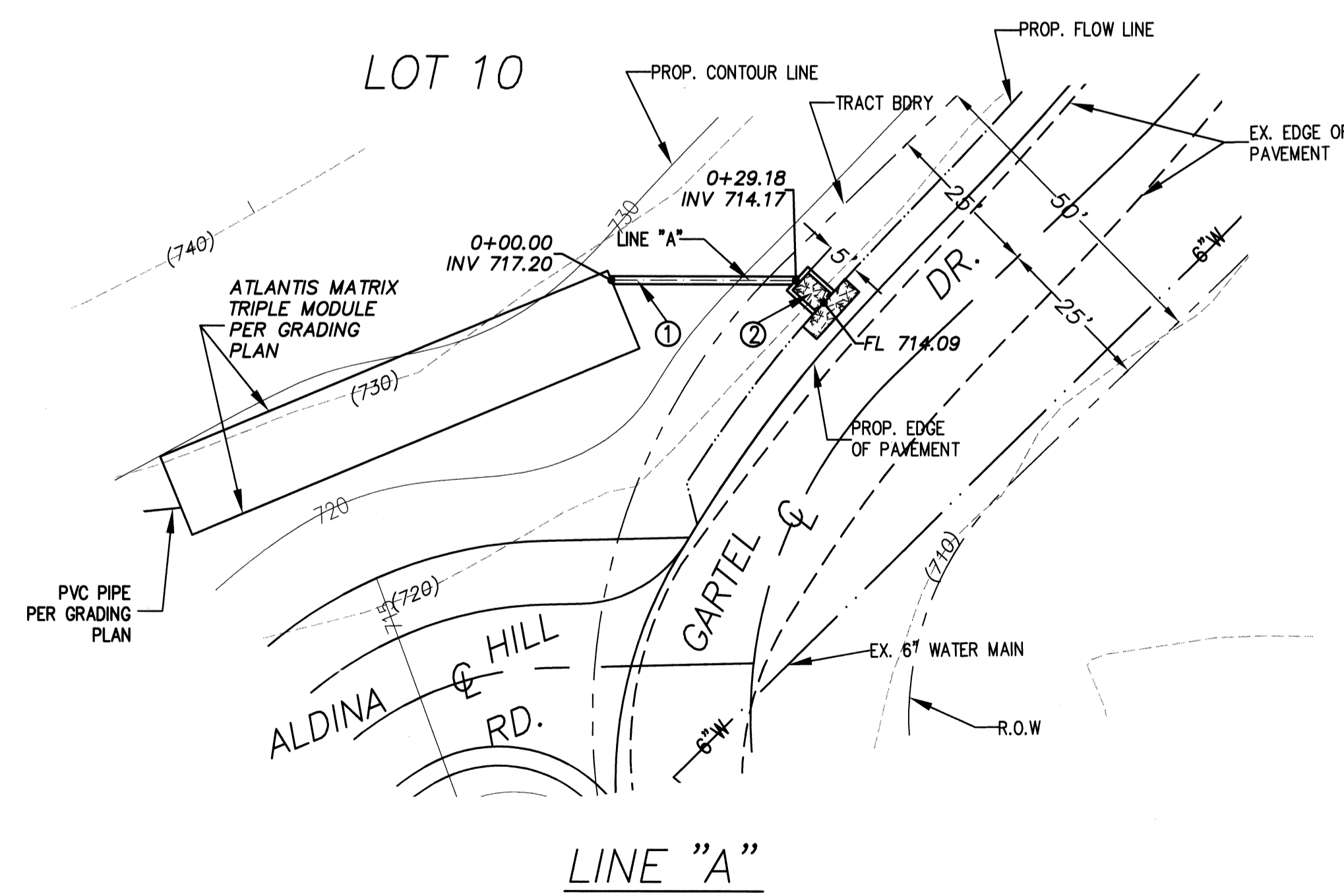
- ① CONSTRUCT 1-15" RCP (D1200) DRAIN PIPE.
- ② CONSTRUCT STORM DRAIN OUTLET W/HEADWALL, DETAIL SHOWN ON SHEET 1.
- ③ CONSTRUCT 1-10" PVC SCH.40 PIPE.



(SCALE : 1" = 20')



(SCALE : 1" = 20')



LINE TABLE		
LINE	LENGTH	BEARING
LINE A	29.18'	N63°50'41"W
LINE F	11.66'	N16°51'45"W

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

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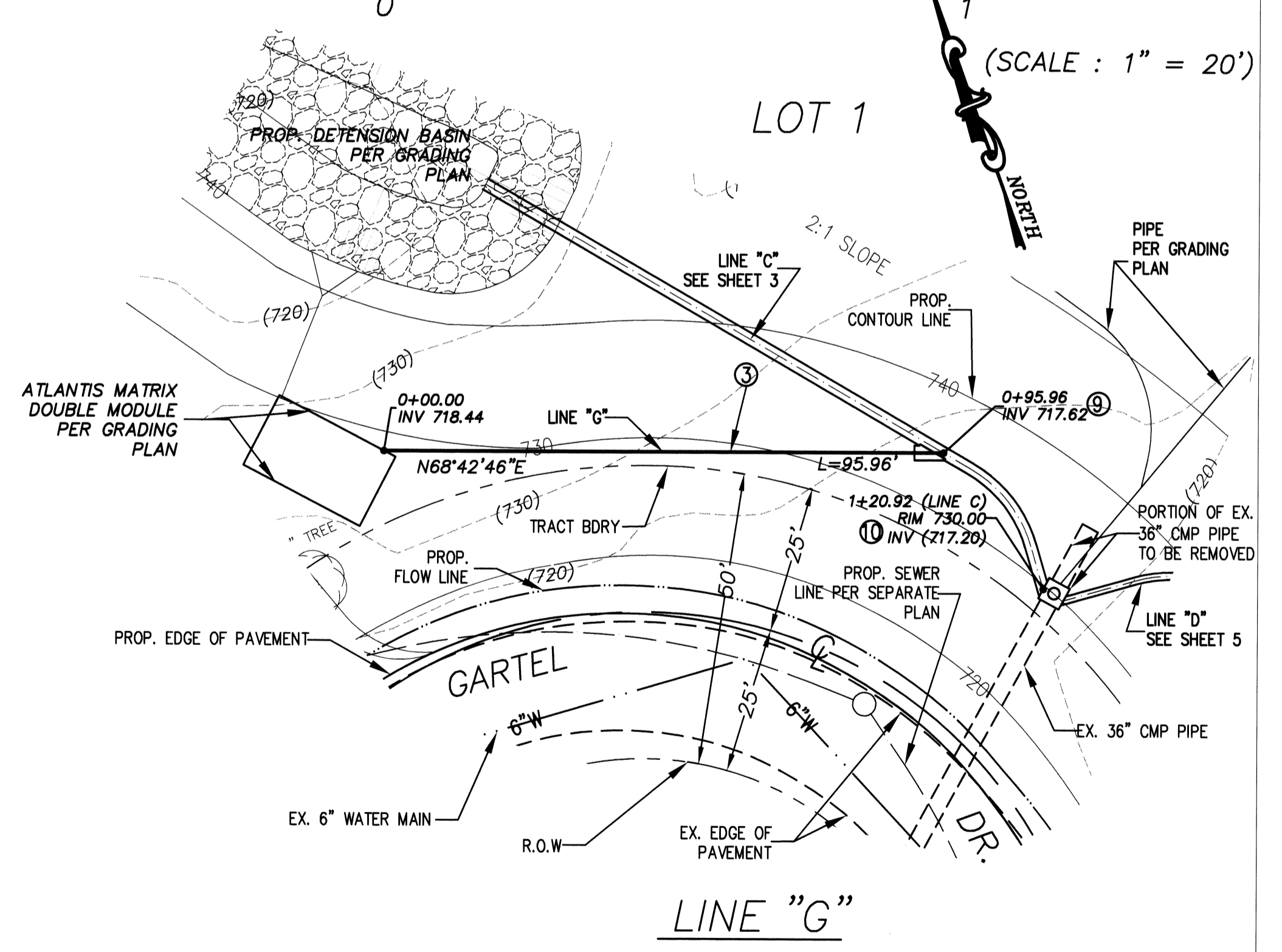
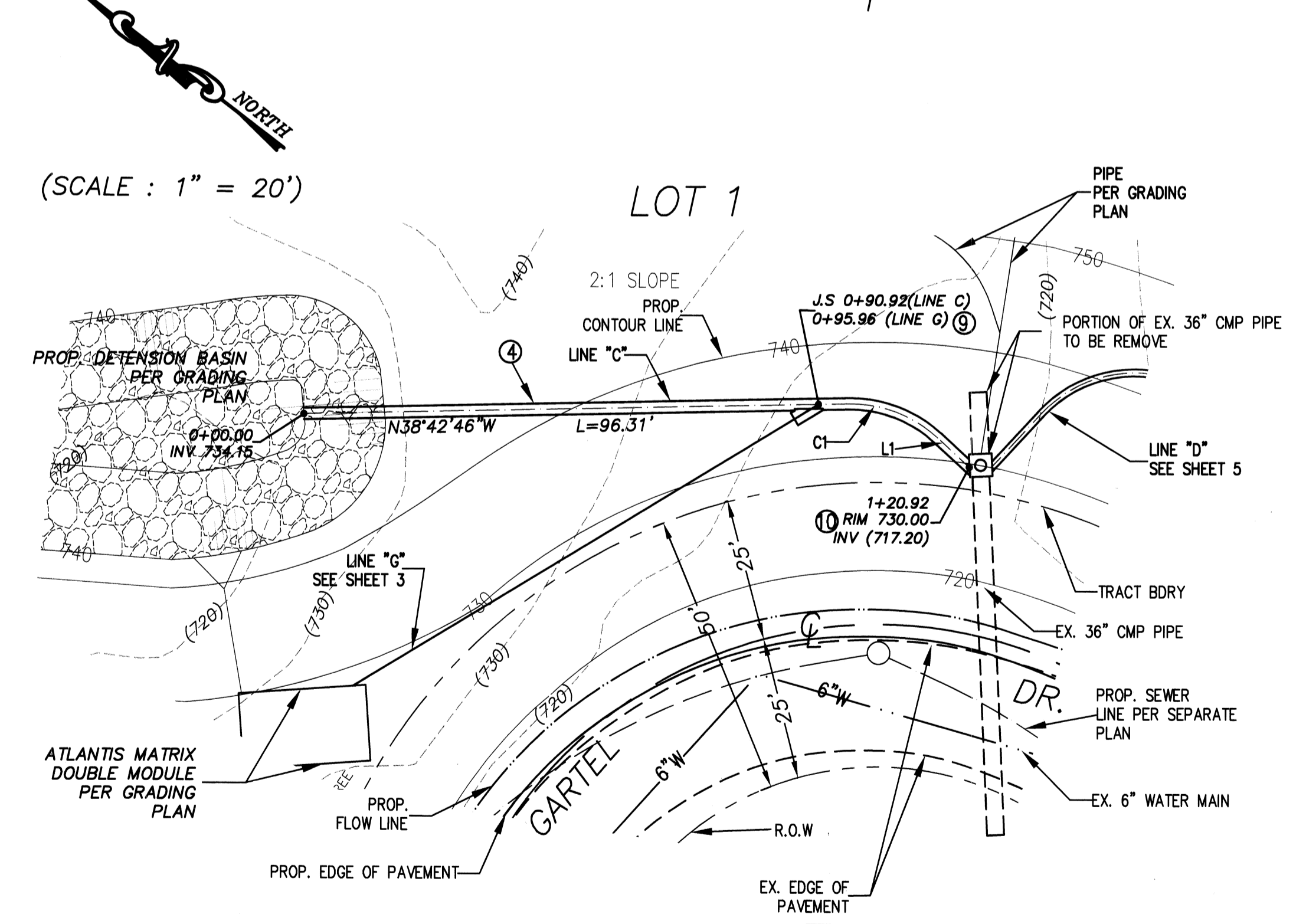
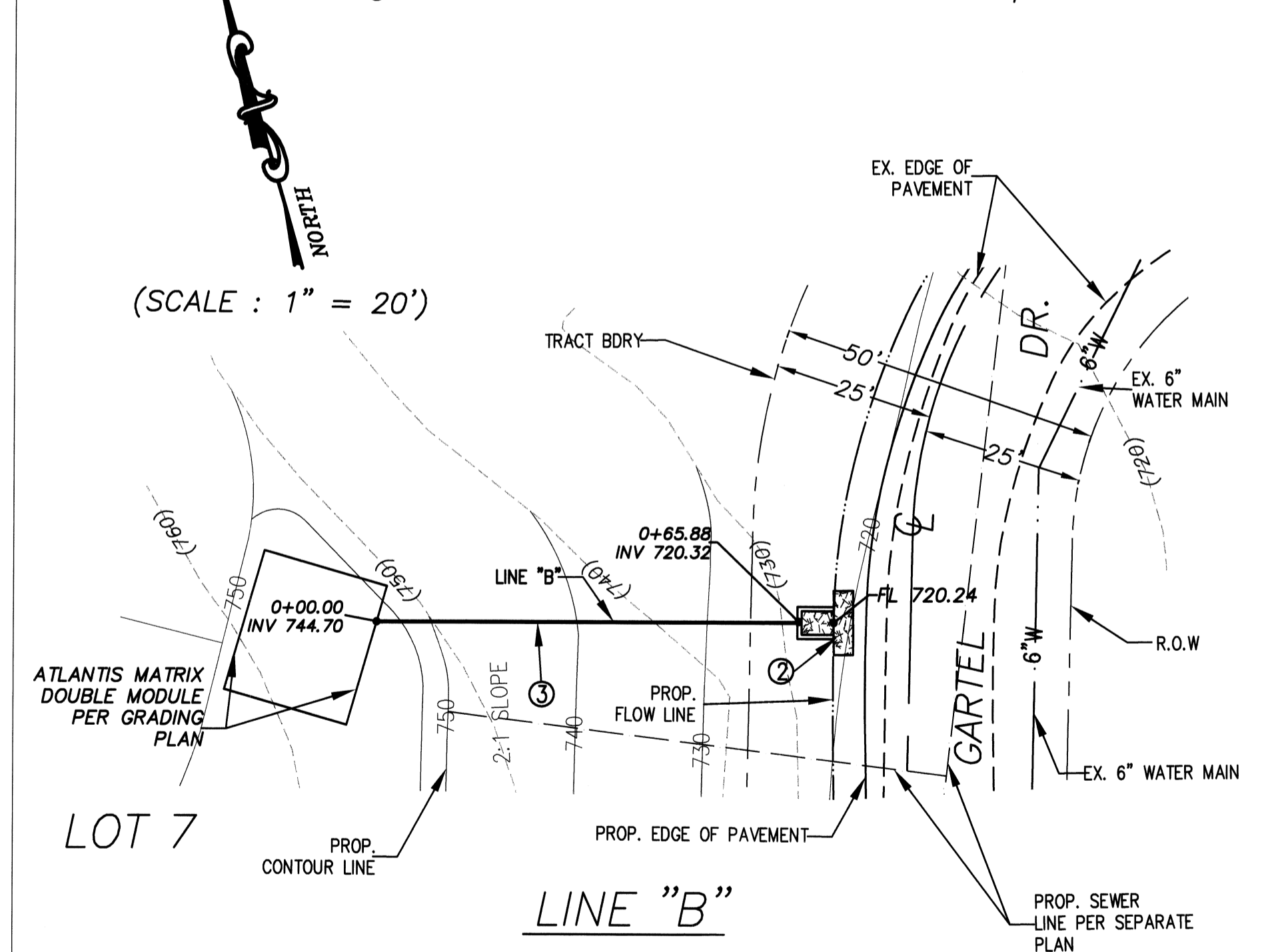
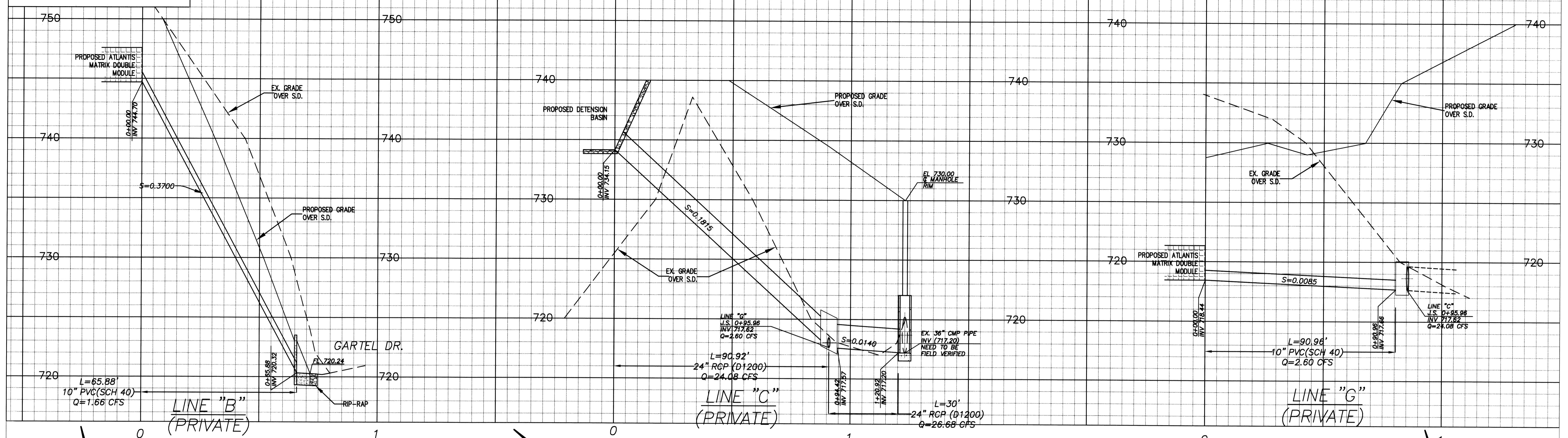
REGISTERED PROFESSIONAL ENGINEER
HANK HING-LIAN JONG
45846
Exp. 12/31/12
CIVIL
STATE OF CALIFORNIA
A.K. 8/17/09
PROJECT ENGINEER DATE

APPROVED BY
[Signature] 5/10/12
CITY ENGINEER DATE

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS
STORM DRAIN IMPROVEMENTS
GARTEL DRIVE
TRACT #52324
SHT. 2 OF 8 SCALE: AS SHOWN

#189 B

SCALE: HOR: 1"=20'
VERT: 1"=4'



LINE TABLE		
LINE	LENGTH	BEARING
LINE B	65.88'	N73°58'00"W
LINE 1	7.48'	N04°55'07"E

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	17.13'	22.50'	43°37'53"	9.01'

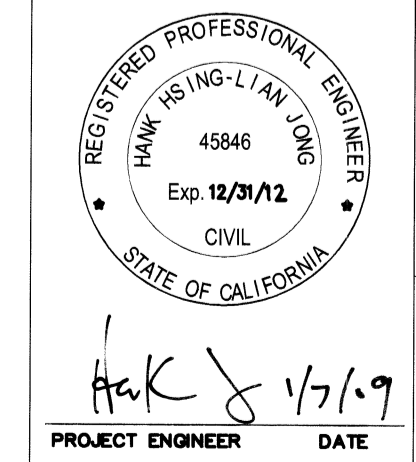
CONSTRUCTION NOTES

- ② CONSTRUCT STORM DRAIN OUTLET HEADWALL, DETAIL SHOWN ON SHEET 1.
- ③ CONSTRUCT 1-10" PVC SCH 40 PIPE.
- ④ CONSTRUCT 1-24" RCP (D1200) DRAIN PIPE.
- ⑨ CONSTRUCT JUNCTION STRUCTURE PER APWA STD. PLAN 331-2.
- ⑩ CONSTRUCT STORM DRAIN MANHOLE PER APWA STD. PLAN 321-1.

LINE "C"

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

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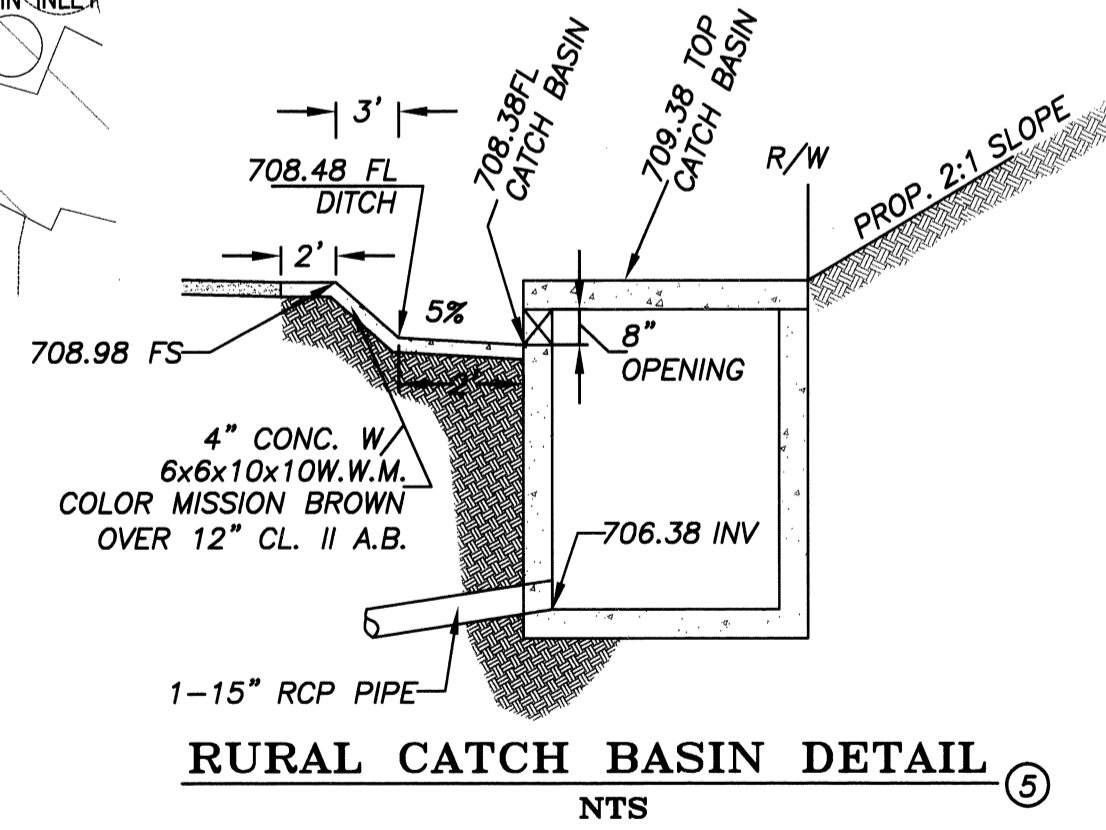
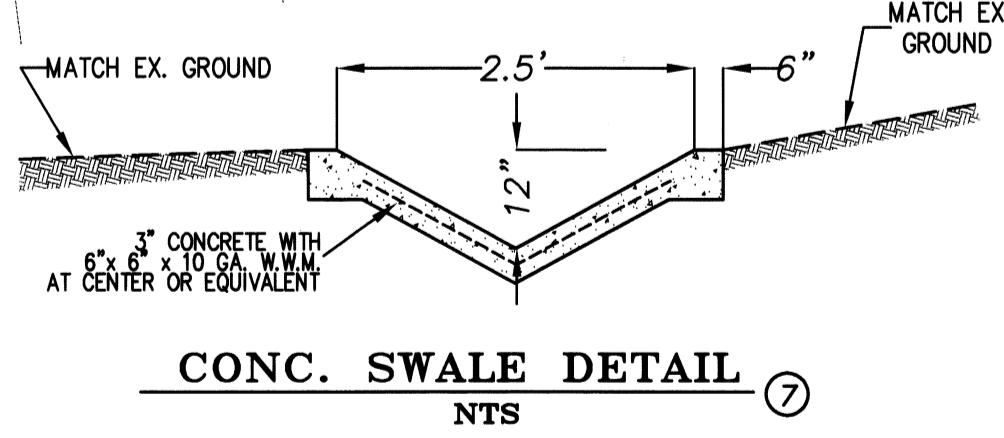
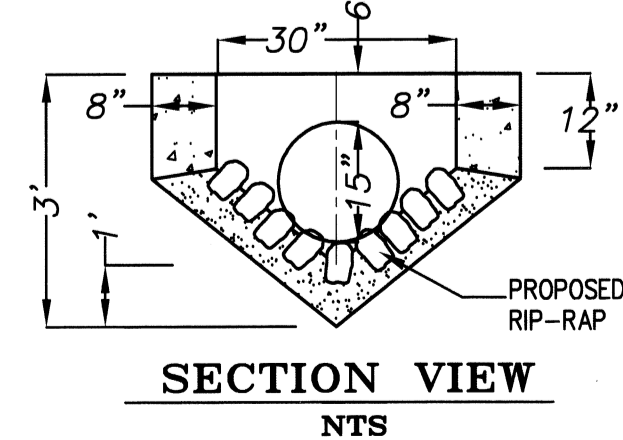
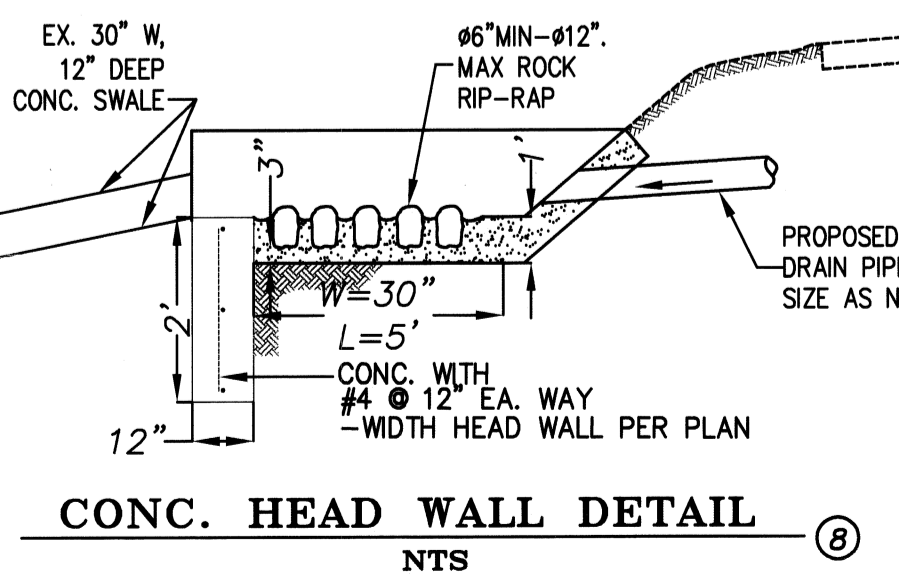
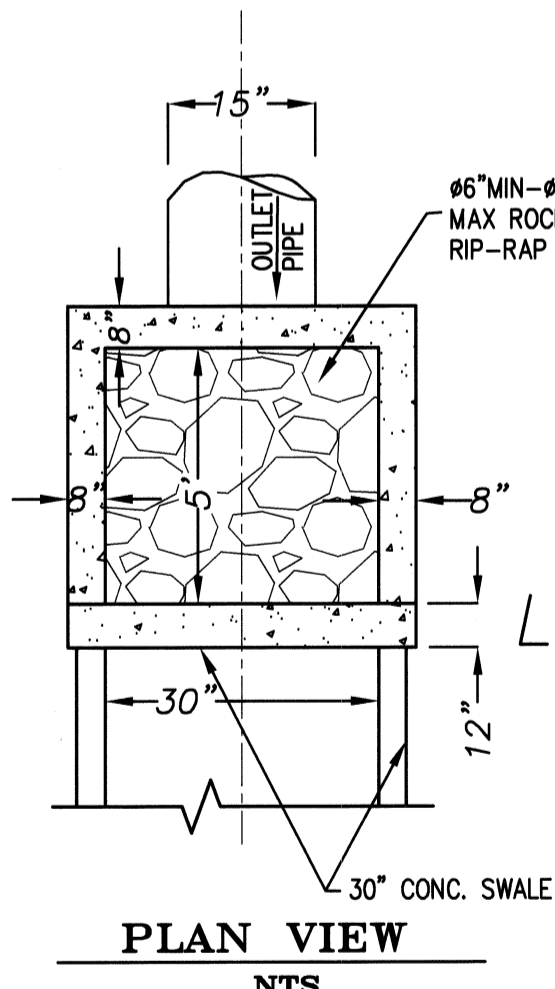
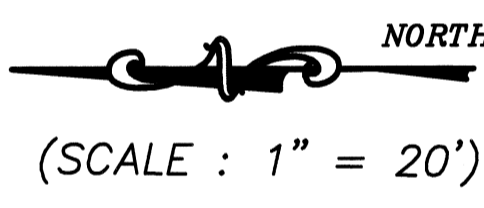
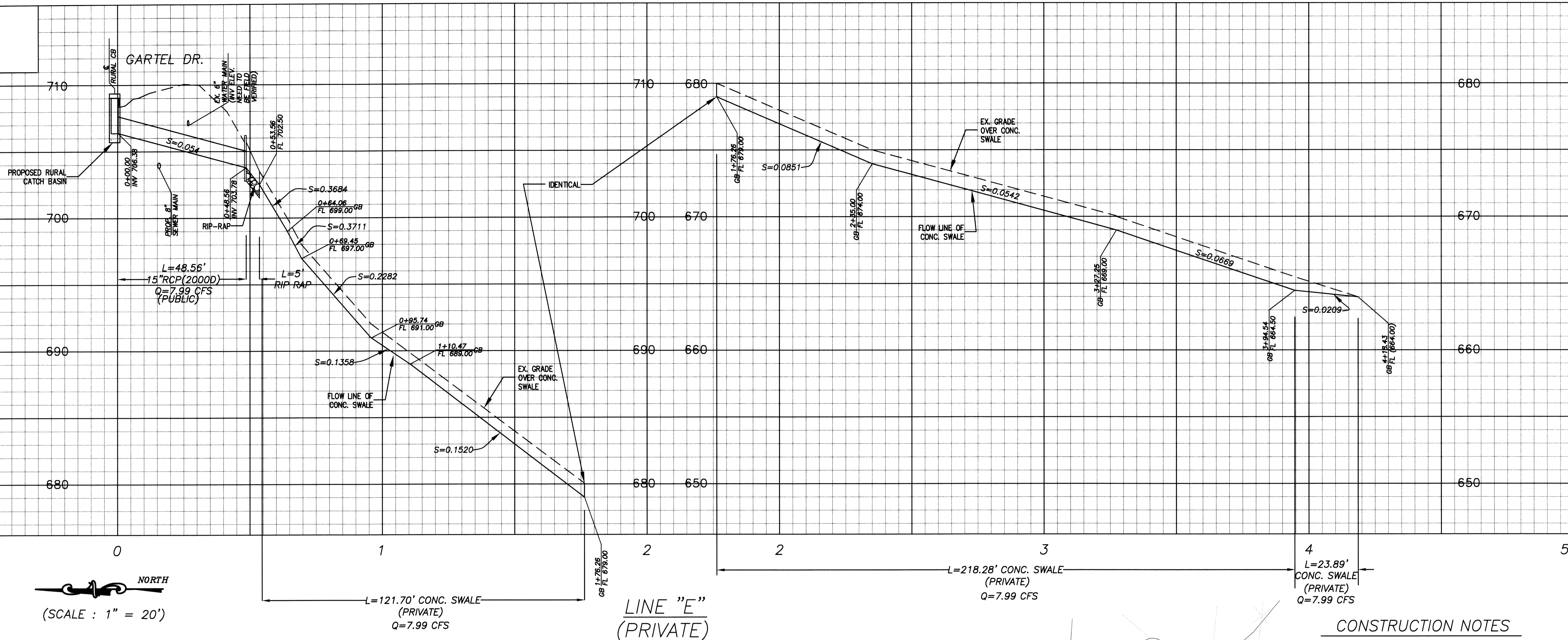


APPROVED BY
[Signature] 5/17/19
CITY ENGINEER
DATE

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS
STORM DRAIN PLAN
GARTEL DRIVE
TRACT #52324
SHT. 3 OF 8 SCALE: AS SHOWN

#189C

SCALE: HOR: 1"=20'
VERT: 1"=4'

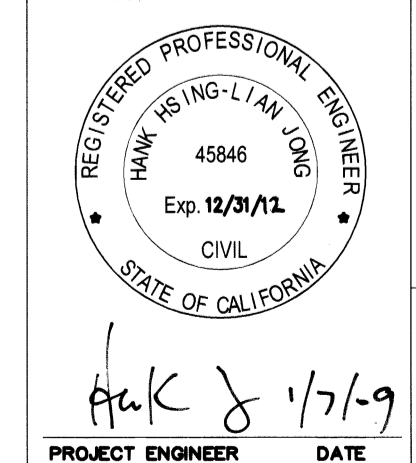


CONSTRUCTION NOTES

- 5 CONSTRUCT RURAL CATCH BASIN PER LACDFW STD. PLAN NO.3015-0, FRONT OPENING WIDTH=6.66', 8" OPENING PER DETAIL SHOWN ON HERE.
- 6 CONSTRUCT 1-15" RCP (2000D) PIPE.
- 7 CONSTRUCT 30" W, 12" DEEP CONC. SWALE, DETAIL SHOWN HEREON.
- 8 CONSTRUCT HEAD WALL W/30"Wx5'L RIP RAP.

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

EGL Associates, Inc.
11819 GOLDRING ROAD, UNIT A
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Fax: (626) 263-3599



APPROVED BY
Olaf J. Jans
CITY ENGINEER
DATE: 5/10/12

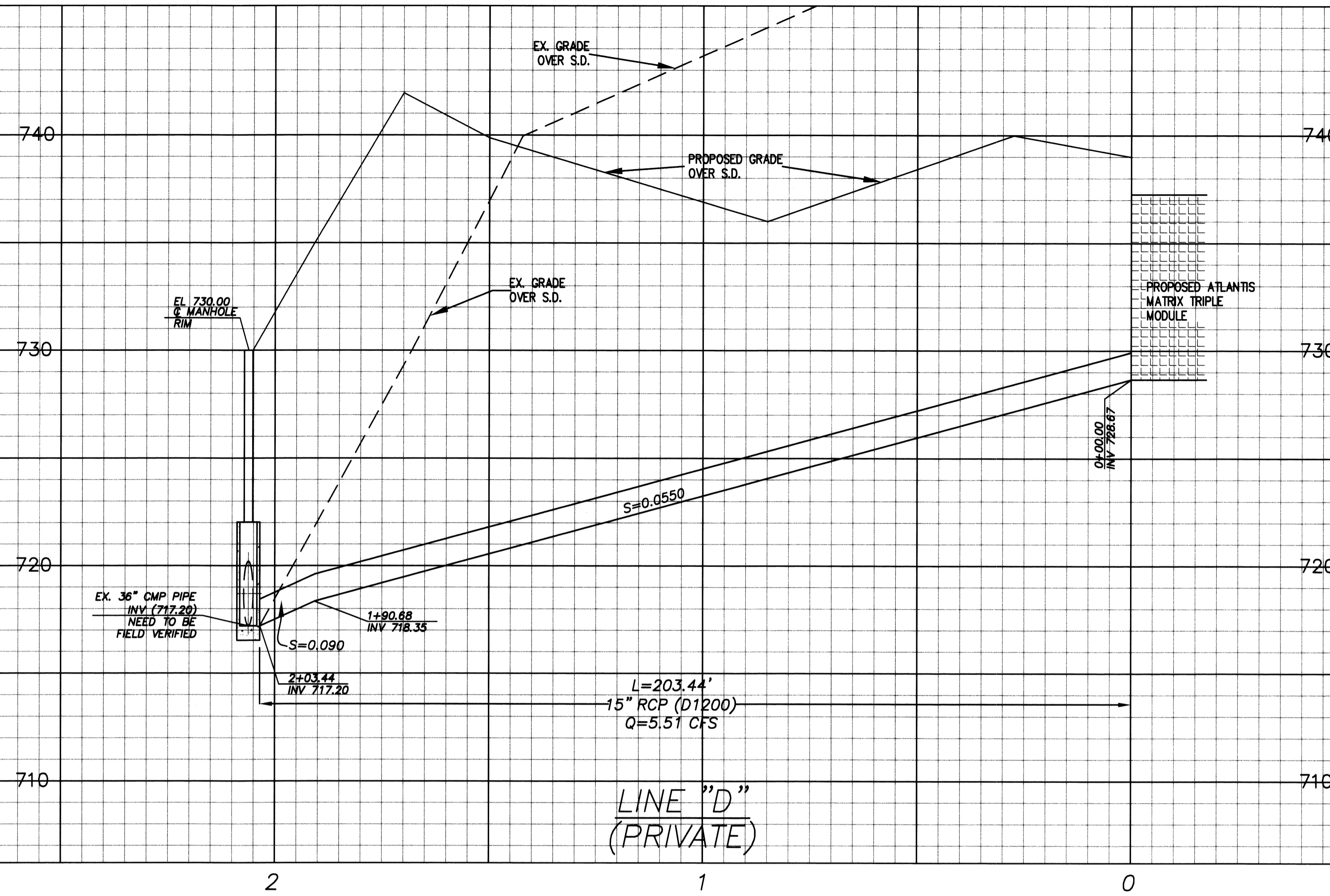
CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS

STORM DRAIN PLAN
GARTEL DRIVE
TRACT #52324

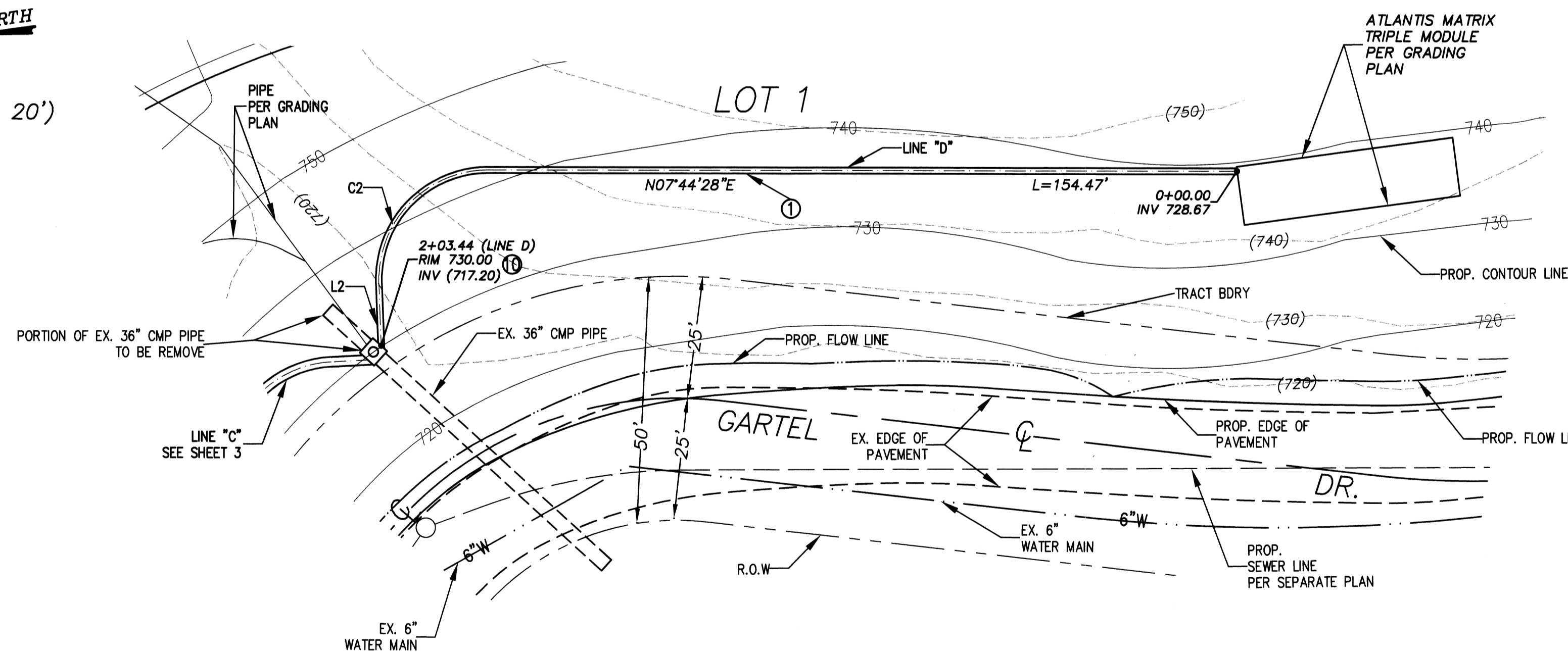
SHT. 4 OF 8 SCALE: AS SHOWN

#189 D

SCALE: HOR: 1"=20'
VERT: 1"=4'



NORTH
(SCALE : 1" = 20')



CONSTRUCTION NOTES

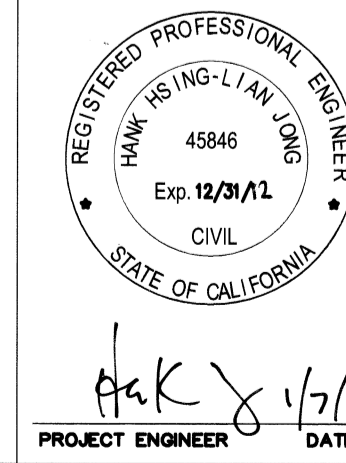
- ① CONSTRUCT 1-15" RCP (D1200) DRAIN PIPE.
- ⑩ CONSTRUCT STORM DRAIN MANHOLE PER APWA STD. PLAN 321-1.

LINE TABLE		
LINE	LENGTH	BEARING
LINE 2	12.76'	N84°28'54"W

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C2	36.22'	22.50'	92°13'22"	23.39'

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
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3	11-11-08	JZ	

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APPROVED BY
[Signature] 5/10/12
CITY ENGINEER DATE

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS

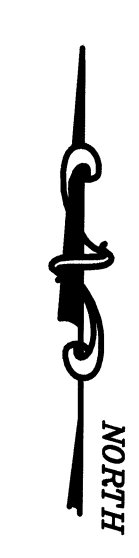
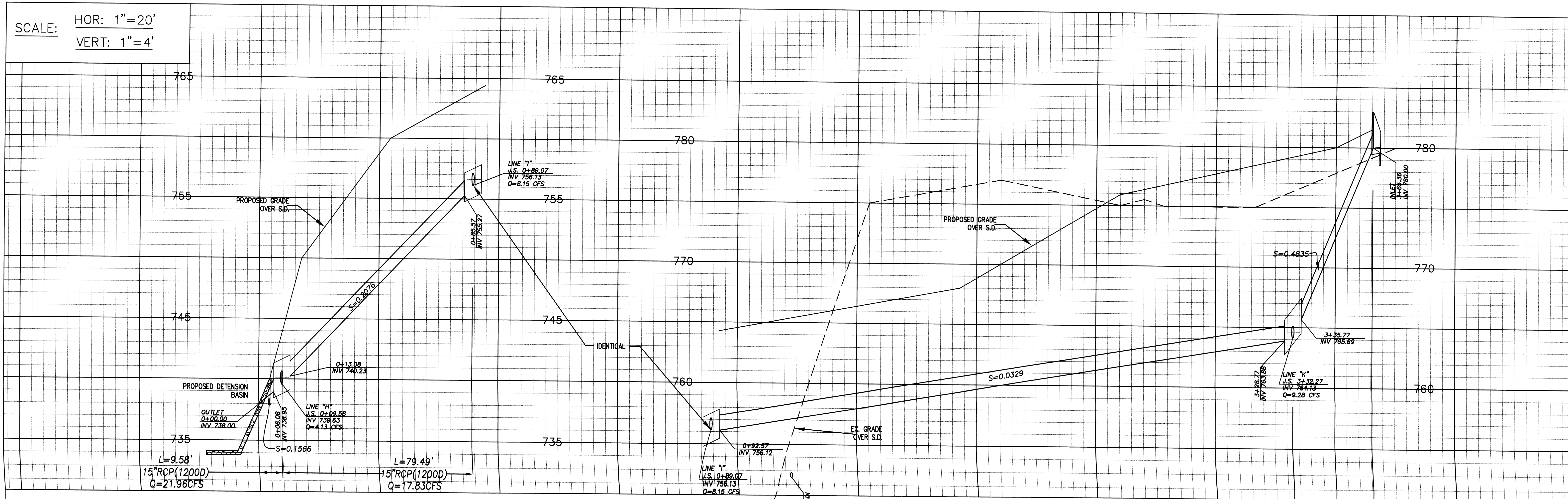
STORM DRAIN IMPROVEMENTS
GARTEL DRIVE
TRACT #52324

EGL JOB NO. 06-120-008 DRAWN BY: GB

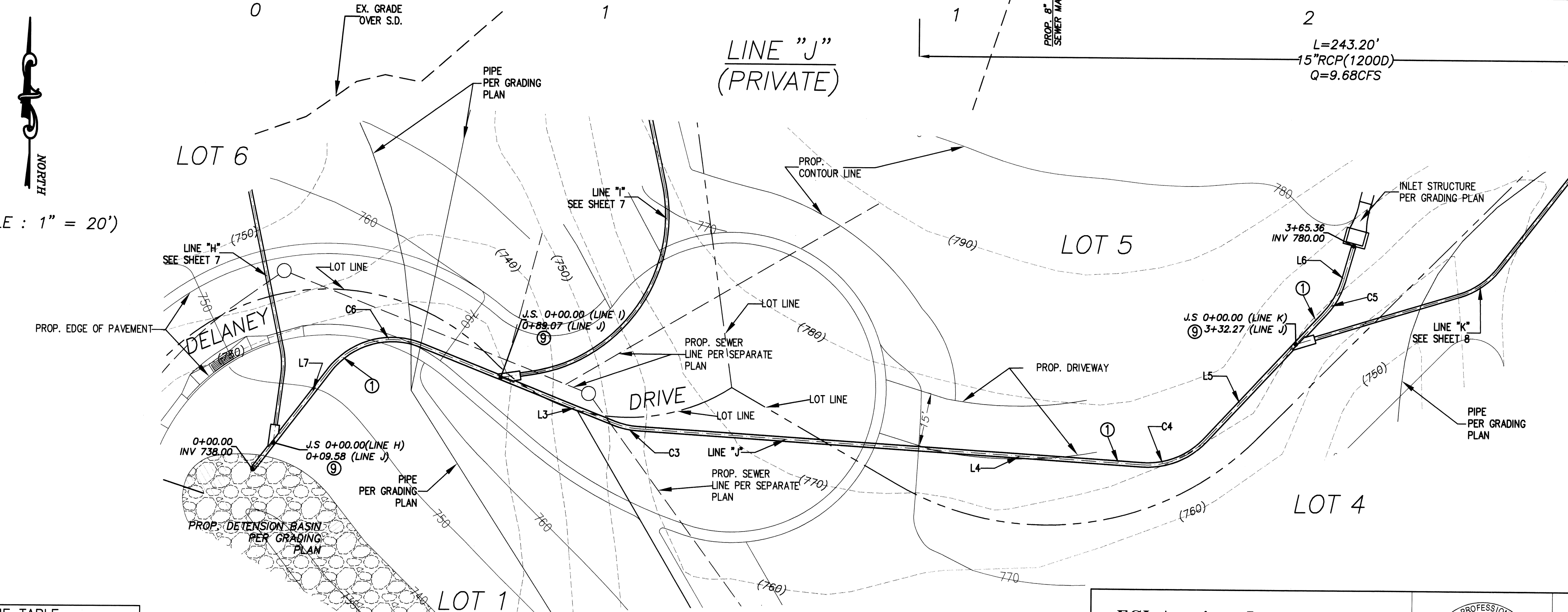
SHT. 5 OF 8 SCALE: AS SHOWN

#189 E

SCALE: HOR: 1"=20'
VERT: 1"=4'



(SCALE : 1" = 20')



CONSTRUCTION NOTES

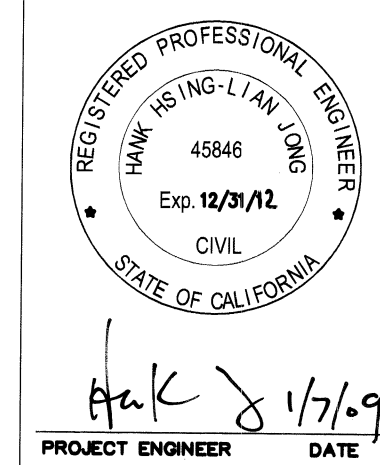
- ① CONSTRUCT 1-15" RCP (D1200) DRAIN PIPE.
- ② CONSTRUCT JUNCTION STRUCTURE PER APWA STD. PLAN 331-2.
- ⑩ CONSTRUCT STORM DRAIN MANHOLE PER APWA STD. PLAN 321-1.

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C3	7.04'	22.50'	17°55'58"	3.55'
C4	19.83'	22.50'	50°29'19"	10.61'
C5	10.61'	22.50'	27°01'48"	5.41'
C6	29.06'	22.50'	73°59'37"	16.95'

LINE TABLE		
LINE	LENGTH	BEARING
LINE 3	59.23'	S68°28'13"E
LINE 4	144.00'	S86°24'11"E
LINE 5	49.43'	N43°06'30"E
LINE 6	10.53'	N16°04'42"E
LINE 7	35.62'	N37°32'10"E

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

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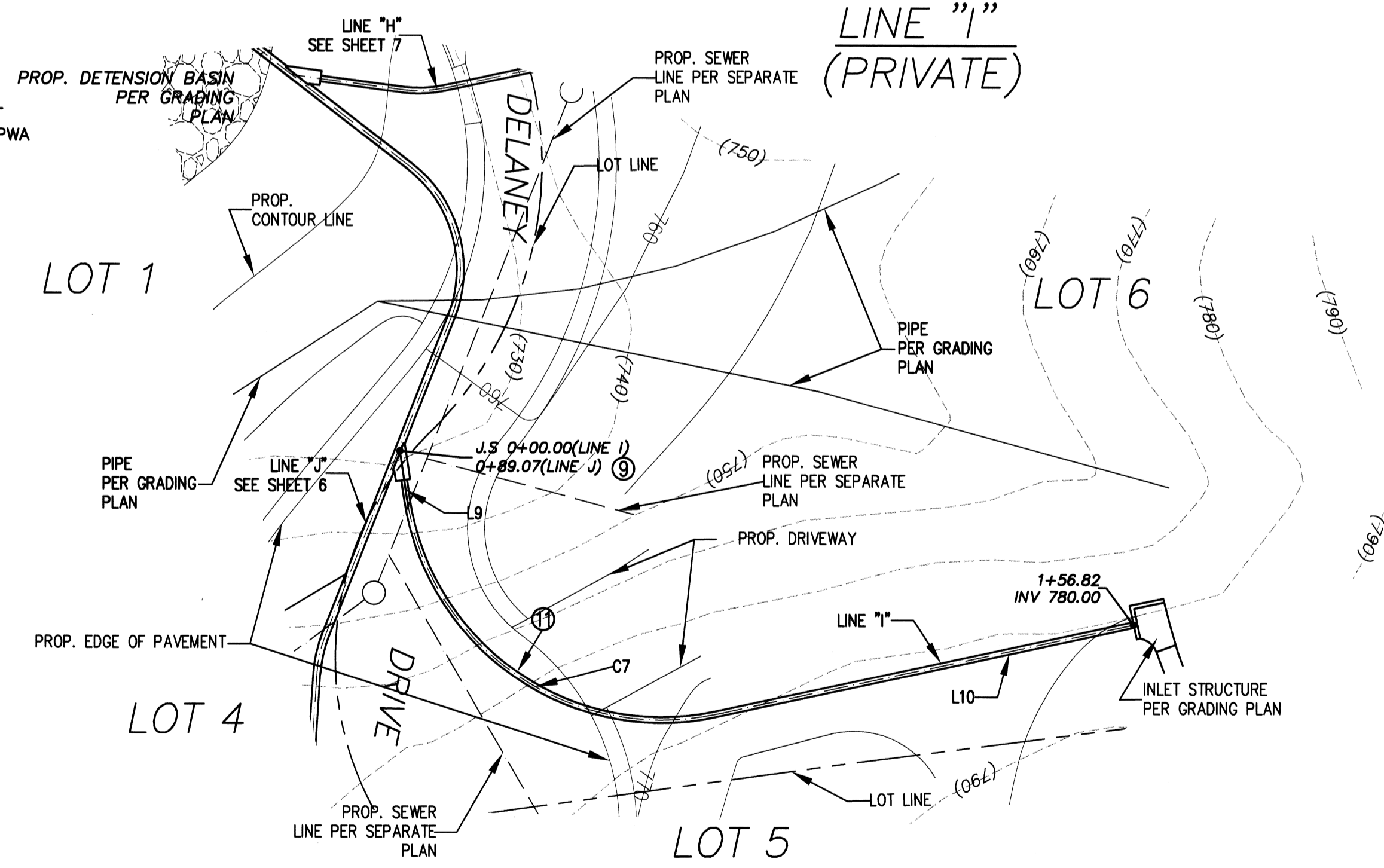
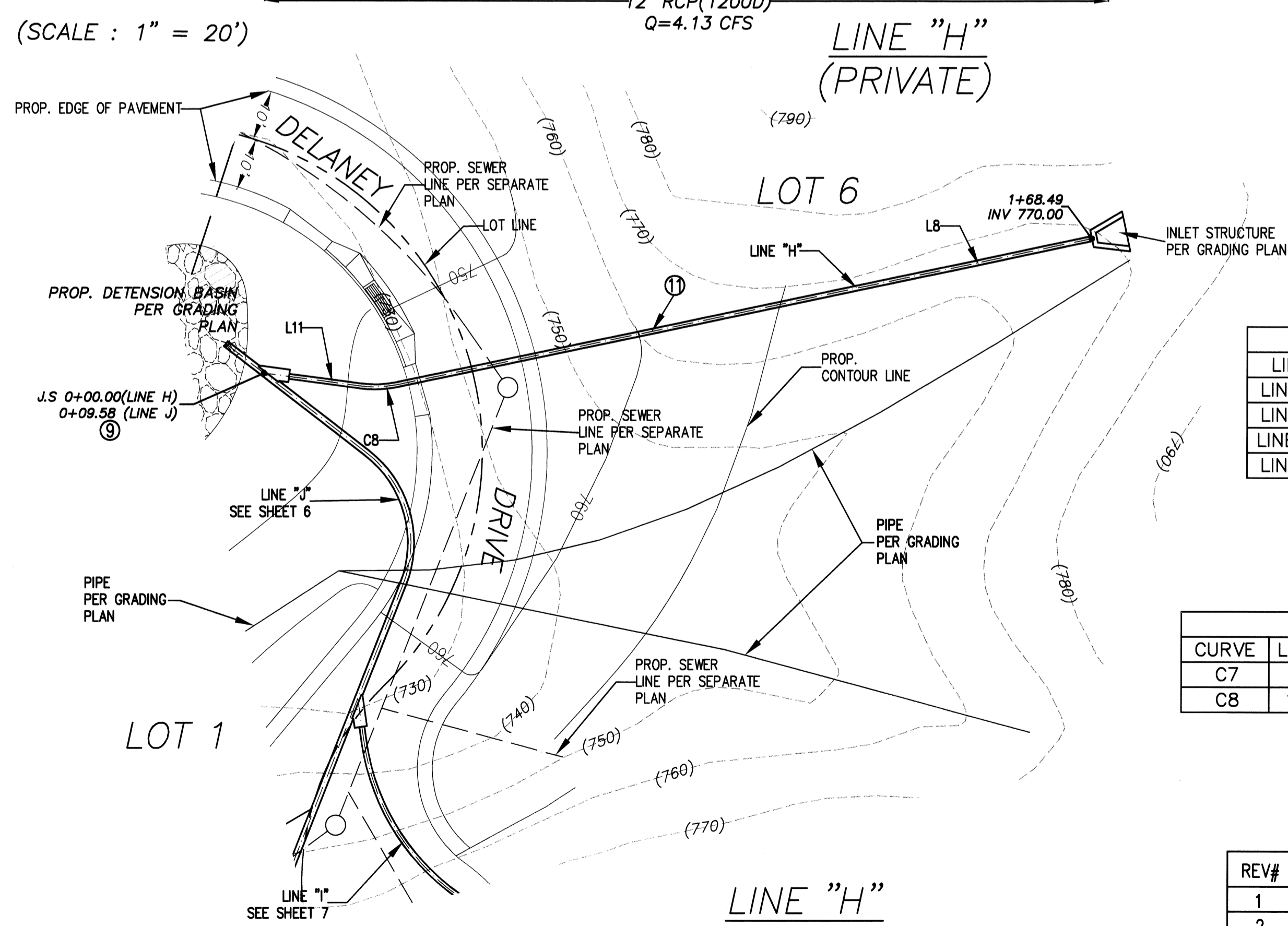
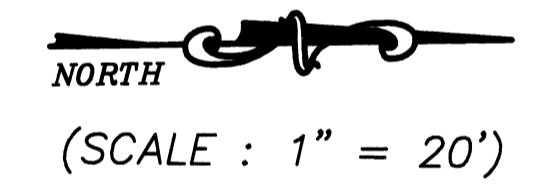
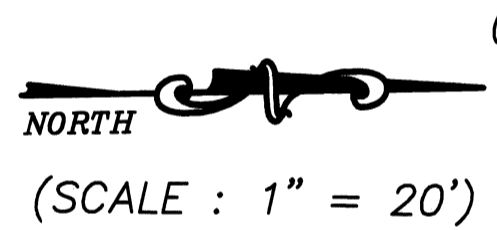
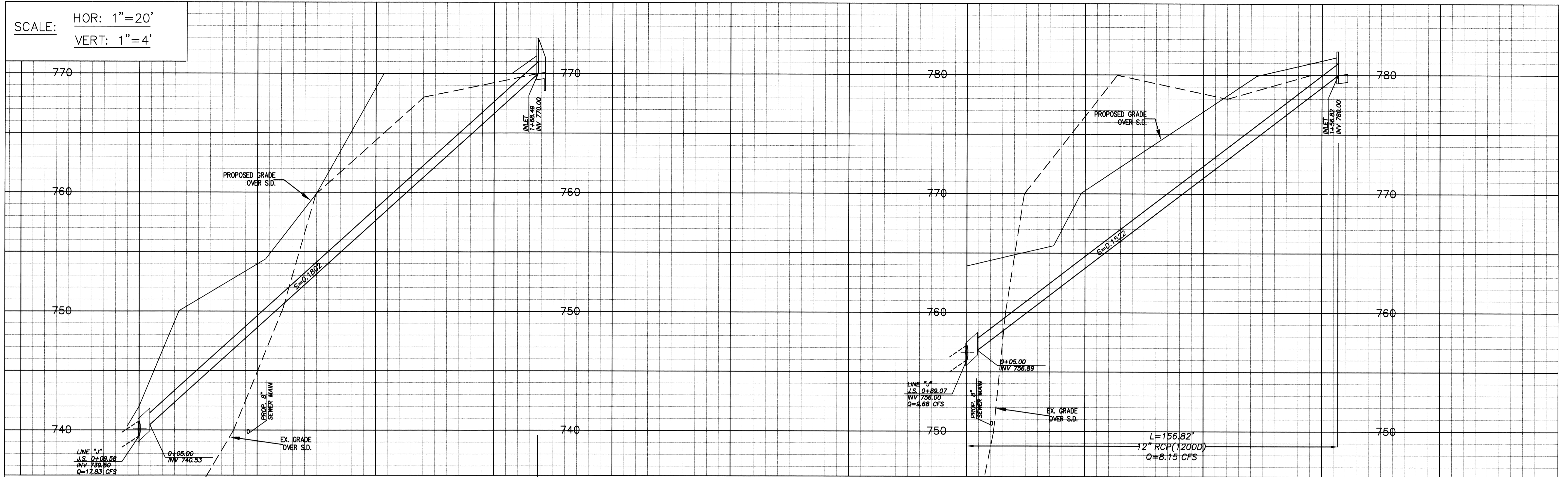
APPROVED BY
[Signature] 5/10/12
CITY ENGINEER DATE

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS

STORM DRAIN PLAN
GARTEL DRIVE
TRACT #52324
SHT. 6 OF 8 SCALE: AS SHOWN

189 F

SCALE: HOR: 1"=20'
VERT: 1"=4'



CONSTRUCTION NOTES

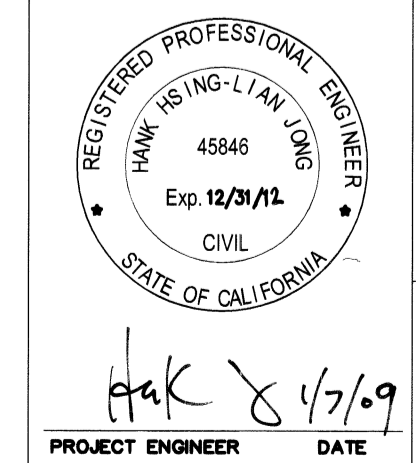
- ⑨ CONSTRUCT JUNCTION STRUCTURE PER APWA STD. PLAN 331-2.
- ⑩ CONSTRUCT 1-12" RCP (1200D) PIPE.

LINE	LENGTH	BEARING
LINE 8	141.55'	N11°51'57"E
LINE 9	8.78'	N81°31'47"E
LINE 10	74.45'	N12°10'07"W
LINE 11	19.30'	N07°32'10"E

CURVE	LENGTH	RADIUS	DELTA	TANGENT
C7	73.59'	45.00'	93°41'54"	48.00'
C8	7.62'	22.50'	19°24'07"	3.85'

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

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11819 GOLDRING ROAD, UNIT A
ARCADIA, CA 91006
Tel: (626) 263-3588
Fax: (626) 263-3599

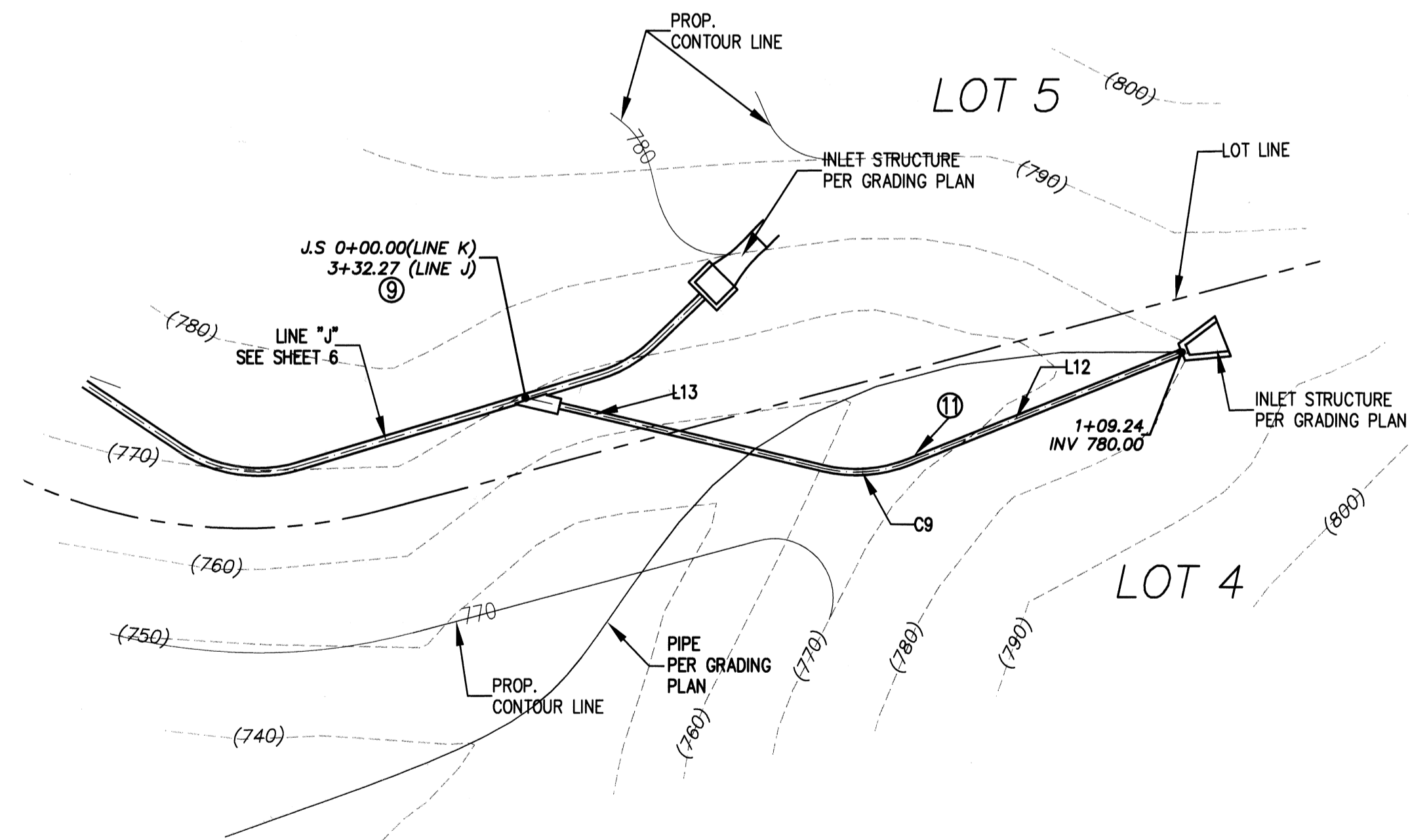
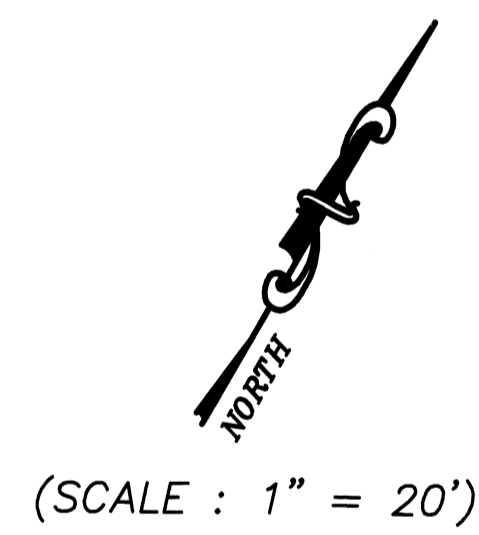
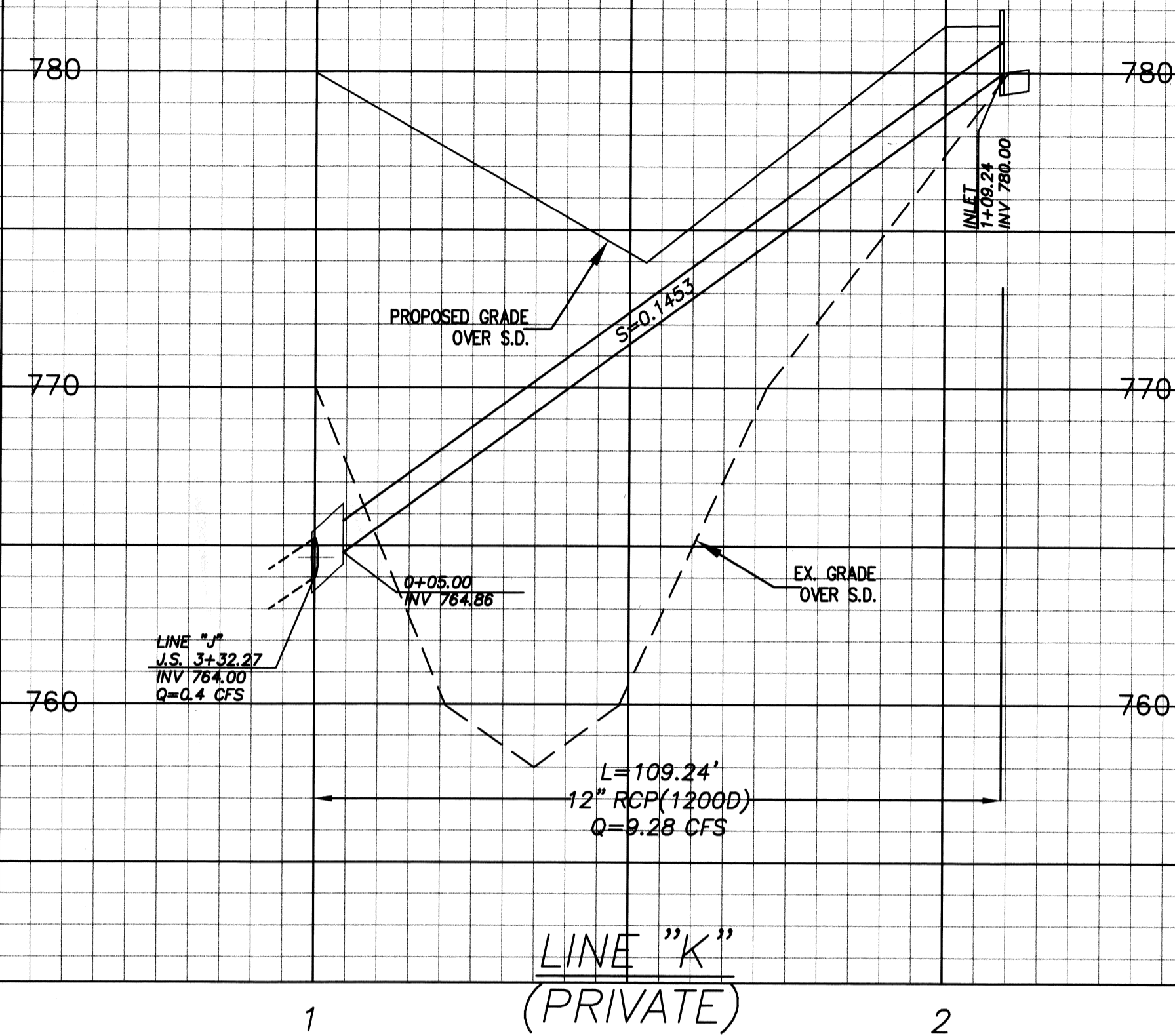


APPROVED BY
[Signature] 5/10/12
CITY ENGINEER DATE
EGL JOB NO. 06-120-008 DRAWN BY: GB

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS
STROM DRAIN PLAN
GARTEL DRIVE
TRACT #52324
SHT. 7 OF 8 SCALE: AS SHOWN

#189 G

SCALE: HOR: 1"=20'
VERT: 1"=4'



LINE TABLE		
LINE	LENGTH	BEARING
LINE 12	46.77'	S37°55'06"W
LINE 13	48.65'	S73°06'30"W

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C9	13.82'	22.50'	35°11'24"	7.24'

CONSTRUCTION NOTES

- ⑨ CONSTRUCT JUNCTION STRUCTURE PER APWA STD. PLAN 331-2.
- ⑩ CONSTRUCT 1-12" RCP (12000) PIPE.

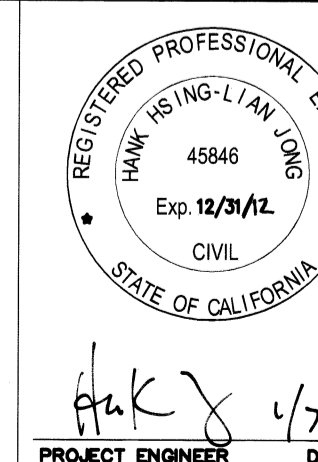
LINE "K"

REV#	DATE	BY	REVISIONS
1	7-15-08	JZ	
2	9-11-08	JZ	
3	11-11-08	JZ	

EGL Associates, Inc.

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ARCADIA, CA 91006

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[Signature]
CITY ENGINEER

[Signature]
DATE

CITY OF WALNUT
DEPARTMENT OF PUBLIC WORKS

STROM DRAIN PLAN
GARTEL DRIVE
TRACT #52324

EGL JOB NO. 06-120-008

DRAWN BY: GB

SHT. 8 OF 8

SCALE: AS SHOWN

#189 H