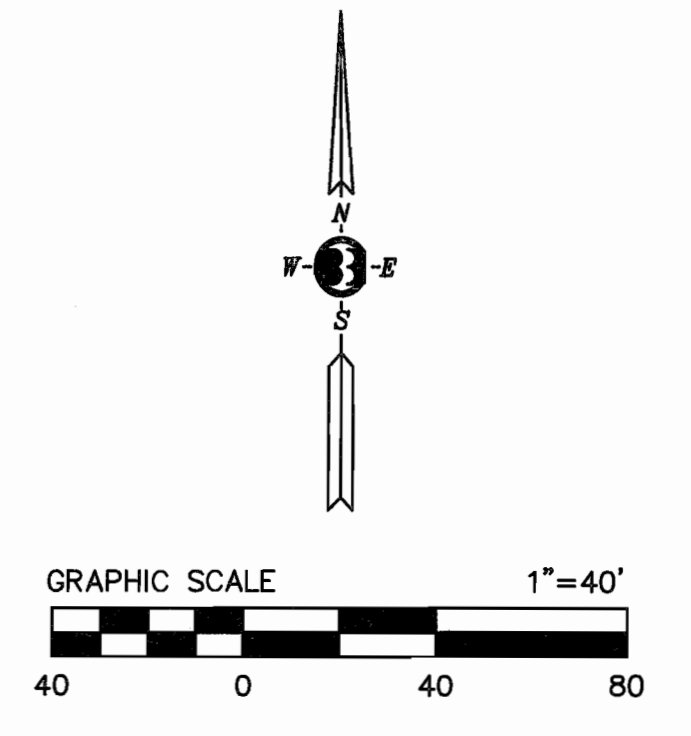


- NOTES:**
1. REFER TO SHEET C1 FOR RIPRAP DETAIL UNLESS OTHERWISE NOTED.
  2. RIPRAP APRON DESIGN CALCULATIONS FOR THE OUTFALL VELOCITY OF LINE O BASED ON ISWM TECHNICAL MANUAL SECTION 4.5. USE MEDIAN ROCK SIZE,  $D_{50}$  OF 8" AND EXTEND RIPRAP 40' BEYOND CULVERT OUTFALL IN ORDER TO PROVIDE CHANNEL PROTECTION WHERE VELOCITY IS GREATER THAN 8 FEET PER SECOND OR PROTECTION OF THE UNDERLYING 16" IS REQUIRED.
  3. SEE SHEET C18.1 FOR FLOOD STUDY DATA AT CHANNEL CROSS. SECTIONS 765, 774, 828, AND 839.



DESIGNED BY:	TPJ	FINAL FLOODPLAIN DATA, INLET COORDINATES	06.30.2019
DRAWN BY:	WSB	MODIFIED DAM AND HEADWALL RIPRAP	06.19.2019
CHECKED BY:	TPJ	STORM LINES "M", "M-1", & "M-1-1"	12.03.2018
JOB NO.:	10.07.2019	STORM LINES "O" AND "P"	09.19.2018
DATE:	AS SHOWN		
SCALE:			



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**PARK PLACE WEST - PHASE III**  
**R. BALLARD SURVEY ABSTRACT NO. 29**  
**ROCKWALL, ROCKWALL COUNTY, TEXAS**  
**STORM SEWER PLAN AREA II**

Sheet No:  
**C20.1**  
 OF 38

- 1 THIS SHEET SUPPLEMENTS ORIGINAL SHT C20 AND SHALL BE USED FOR THE CONSTRUCTION OF THE CLOUDED INFORMATION ONLY. BINKLEY BARFIELD SHALL BE RESPONSIBLE FOR ALL OTHER DESIGN INFORMATION SHOWN.
- 2
- 3
- 4

**BENCHMARKS**

BM ON THE SOUTH EDGE OF PAVEMENT OF WASHINGTON STREET AT THE INTERSECTION OF ALUMINUM PLANT ROAD. ELEVATION = 542.91'

BM ON THE EAST EDGE OF PAVEMENT OF RENOIR STREET APPROXIMATELY 340' SOUTH OF THE INTERSECTION OF HARTMAN. ELEVATION = 535.43'

**CONSTRUCTION RECORDS**

DATE: 10.10.2019 BY: TJE

THIS DRAWING INDICATES THE WORK COMPLETED PER AGREEMENT SUPPLIED BY THE CONTRACTOR. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION HAS NOT BEEN VERIFIED. ACTUAL ON THE GROUND SURVEY VERIFICATION WAS NOT PERFORMED EXCEPT AS SPECIFICALLY NOTED. TOMDEN ENGINEERING, L.L.P. SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS.

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