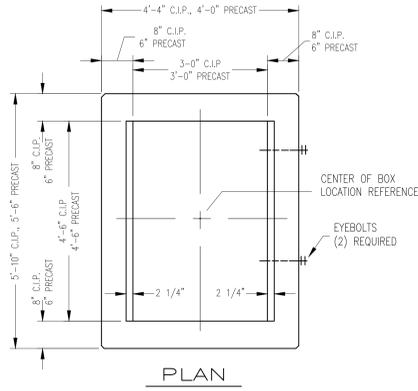
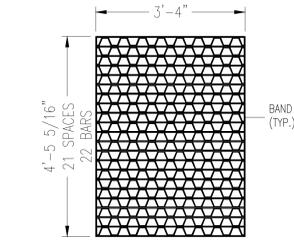


- NOTES:
- A MINIMUM OF 12" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR COMPACTION OF FILL MATERIAL. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER THE PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 6". UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED. COMPACTION REQUIREMENTS SHALL BE ATTAINED BY THE USE OF MECHANICAL TAMPS ONLY. EACH AND EVERY LAYER OF BACKFILL SHALL BE PLACED LOOSE AND THOROUGHLY COMPACTED INTO PLACE.
 - ALL BACKFILL MATERIAL SHALL HAVE AN IN PLACE COMPACTED DENSITY OF 95% MODIFIED PROCTOR. THE FINAL 2" BELOW FINISHED GRADE SHALL BE 100%.
 - ALL TRENCHING OPERATIONS SHALL MEET OSHA STANDARDS.

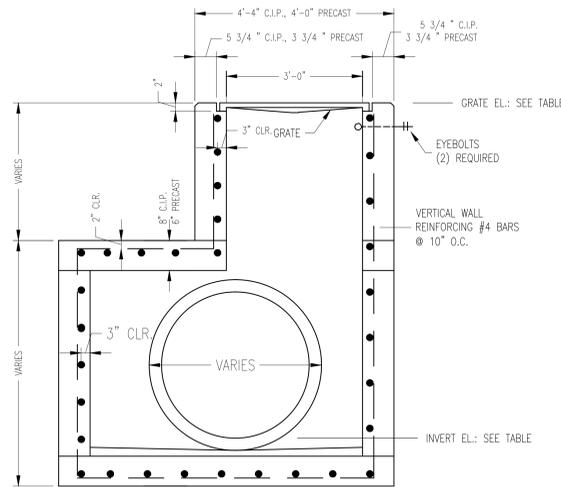
STORMWATER PIPE TRENCH DETAIL
SCALE: N.T.S.



PLAN

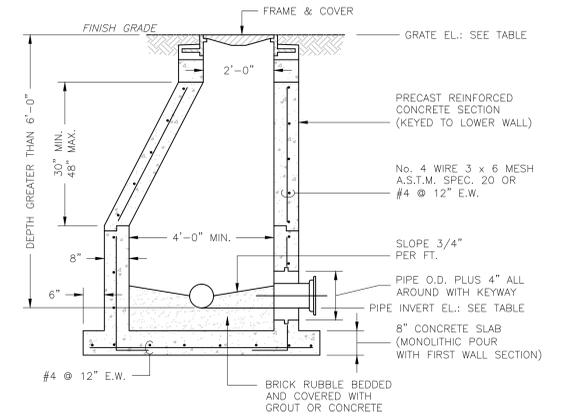


TYPE E STEEL GRATE
STRAIGHT BARS 2"x1/4"
RETICULINE BARS 1 1/4"x3/16"
BANDS 2"x1/4"
APPROXIMATE WEIGHT 215 LBS.



SECTION

TYPE E INLET J BOTTOM DETAIL
SCALE: N.T.S.



- NOTES:
- PRECAST CONCRETE TYPE II, 4000 P.S.I.
 - RAMMEK OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
 - ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
 - FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM.
 - LIFT HOLES ARE PERMITTED.
 - ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
 - A.C. COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
 - INSIDE AND OUT FIRST COAT RED AND SECOND COAT BLACK. SECOND COAT M.H. TO RECEIVE 2 COATS OF KOPPERS BITUMASTIC OR APPROVED EQUAL ON INSIDE TO BE APPLIED AFTER ALL GROUTING, SEALING AND OTHER WORK IS COMPLETED.

TYPICAL MANHOLE DETAIL
SCALE: N.T.S.

STORM WATER STRUCTURE INVERT SUMMARY TABLE						
ID	DESCRIPTION	GRATE ELEV.	INVERT #1	INVERT #2	INVERT #3	INVERT OUT
PIPE ROUTE NO. 1						
MH-1	EXISTING MH	88.46	76.74 (N) (36")	83.51 (W) (18")	- - - -	76.67 (SW) (36")
CI-A	NEW CURB INLET	88.50	76.61 (N) (36")	- - - -	- - - -	76.61 (S) (36")
CI-B	NEW CURB INLET	87.50	76.50 (N) (36")	- - - -	- - - -	76.50 (S) (36")
CI-C	NEW CURB INLET	87.20	76.39 (N) (36")	83.10 (W) (18")	- - - -	76.39 (E) (36")
CB-A	NEW GRATE INLET	86.50	76.26 (W) (36")	- - - -	- - - -	76.21 (SE) (36")
PIPE ROUTE NO. 2						
CI-1	EXISTING	87.29	84.54 (W) (18")			84.26 (E) (18")
CI-C	NEW CURB INLET	87.20	76.39 (N) (36")	83.10 (W) (18")	- - - -	76.39 (E) (36")

FINAL DESIGN
APPROVED FOR CONSTRUCTION

CONSULTANTS: 	ENGINEER-OF-RECORD MICHAEL D. TOOTLE FL P.E. NO. 67818	ARCHITECT/ENGINEERS: AKEA INC. 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #26693 AKEA Project No. 083-14	Drawing Title STORMWATER UTILITY DETAILS	Project Title REPLACE BOILERS - FCA D, ENERGY AT THE MALCOM RANDALL VAMC	Project Number 573-14-600
			Approved: Project Director	Location GAINESVILLE, FLORIDA	Building Number
Revisions:	Date		Date JULY 8, 2016	Checked MDT	Drawn JG
			Drawing Number C510		Office of Construction and Facilities Management Department of Veterans Affairs