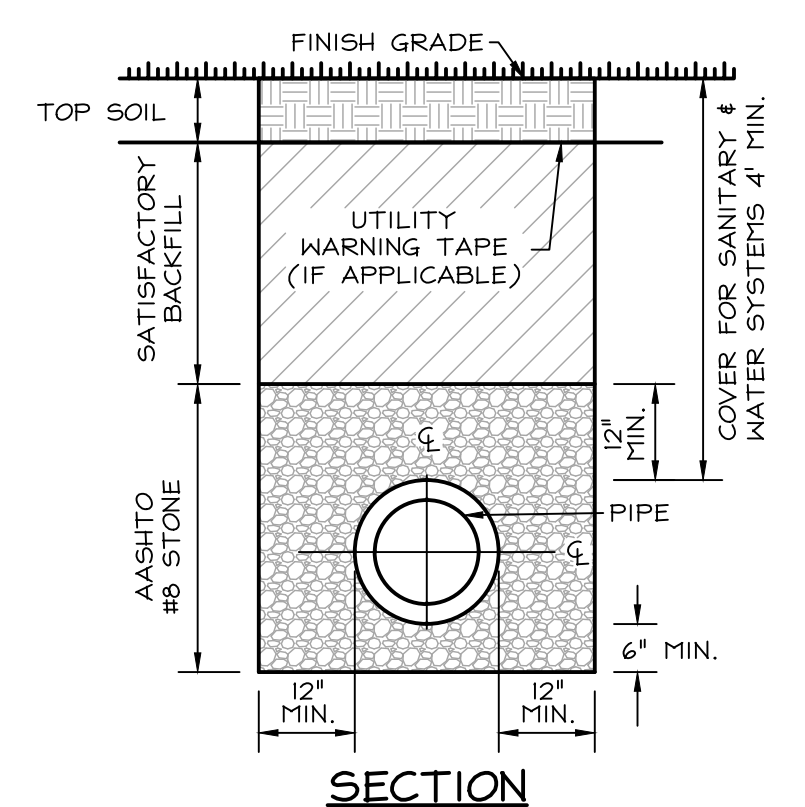
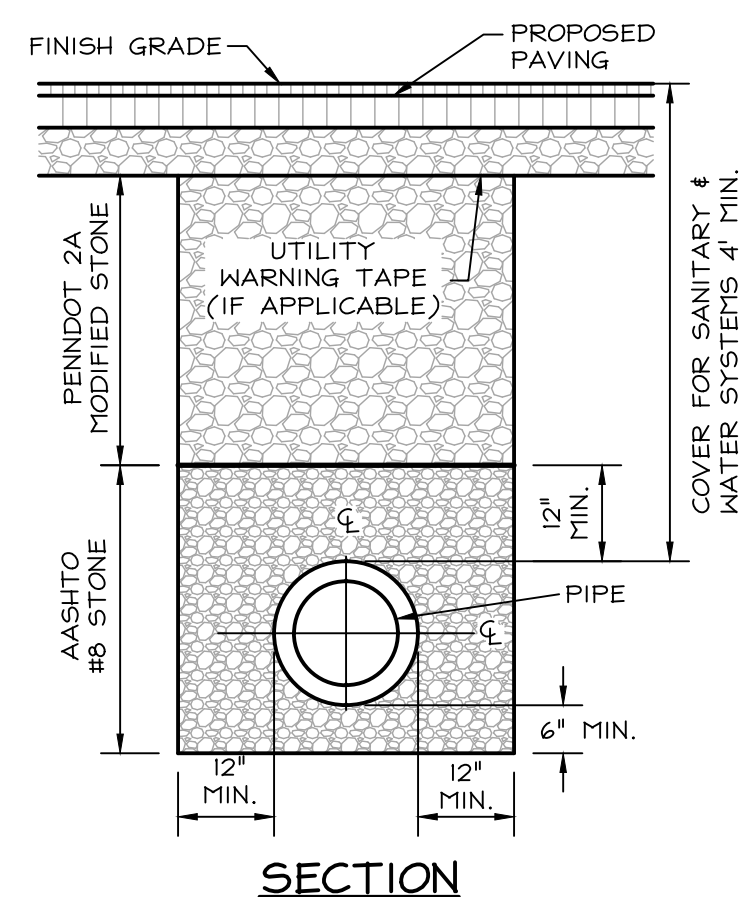


NOTES:
 ALL SEDIMENT TRAP OUTLET BASINS SHALL BE INSPECTED ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
 DISPLACED RIP RAP WITHIN THE OUTLET BASIN SHALL BE REPLACED IMMEDIATELY.
 NO BENDS OR CURVES AT THE INTERSECTION OF THE CONDUIT AND SCOUR HOLE PERMITTED
 THERE SHALL BE NO OVER FALL FROM THE END OF THE APRON TO THE RECEIVING CHANNEL
 MEDIAN STONE DIAMETER (D50) = 6"

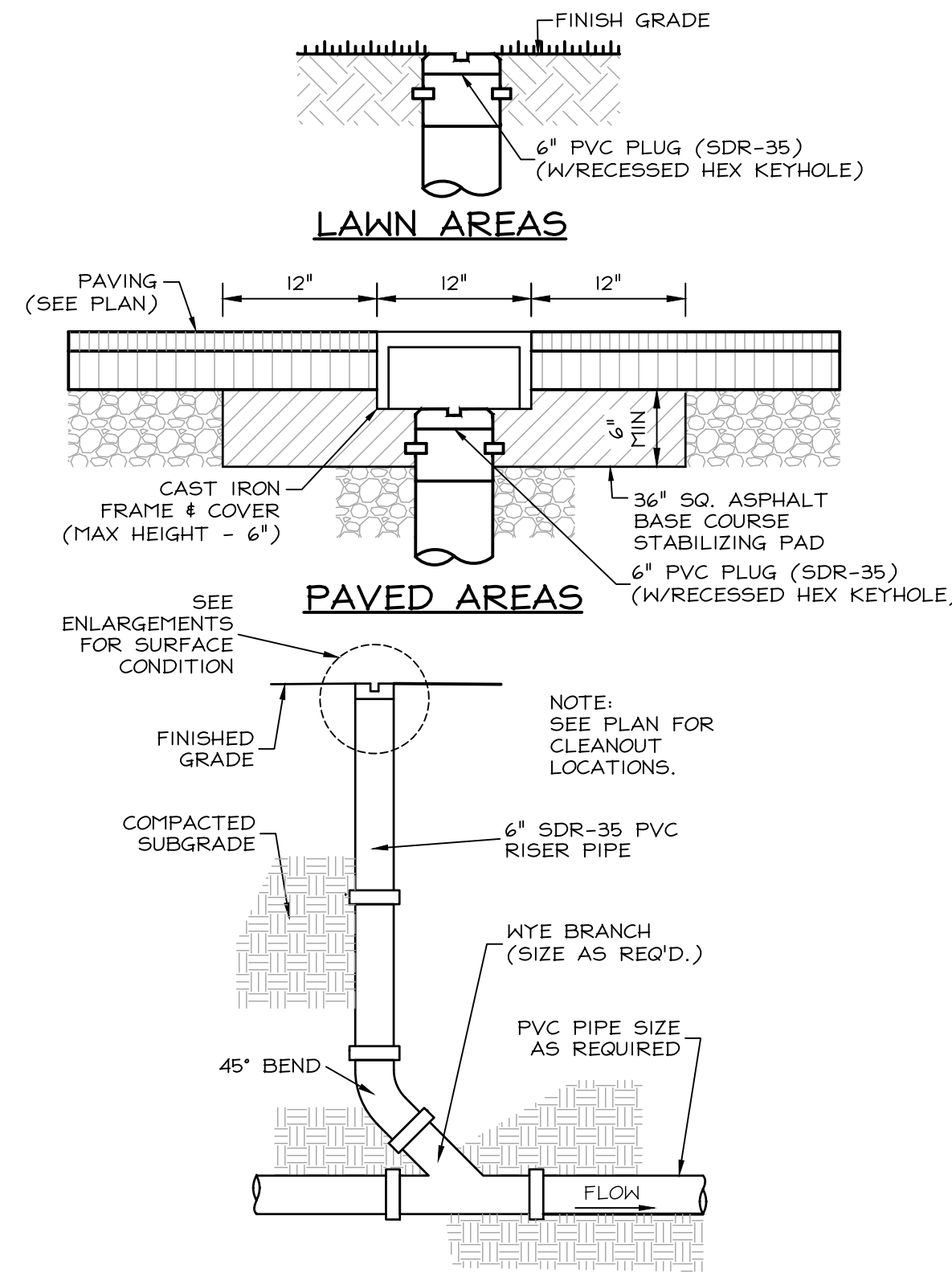
8 CONDUIT OUTLET PROTECTION
 C-504 NOT TO SCALE



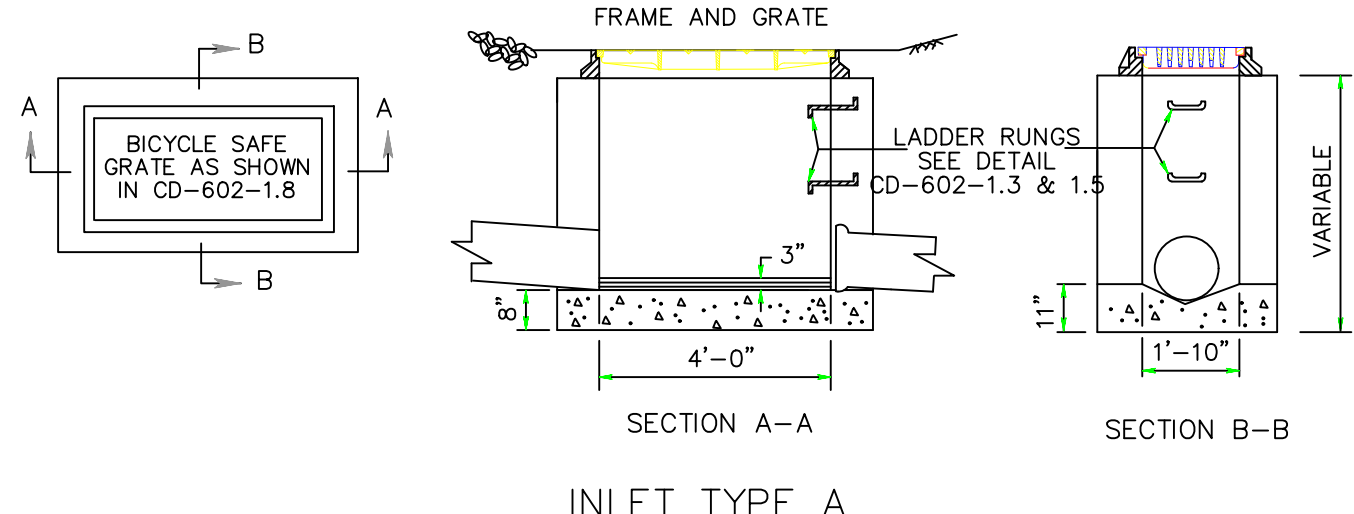
7 TRENCH IN UNPAVED AREA
 C-504 334100-049-003 NOT TO SCALE



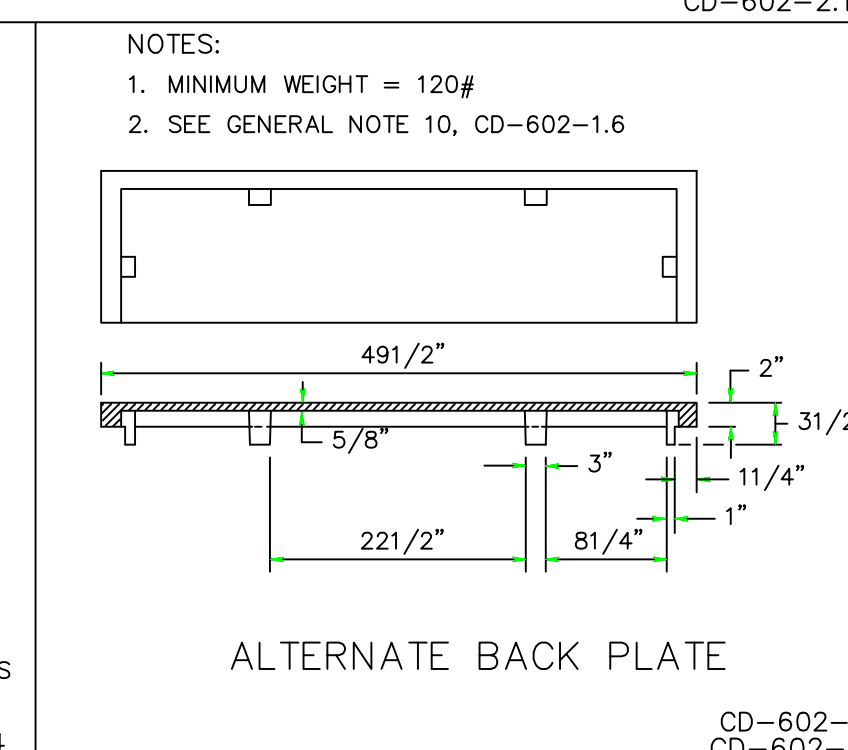
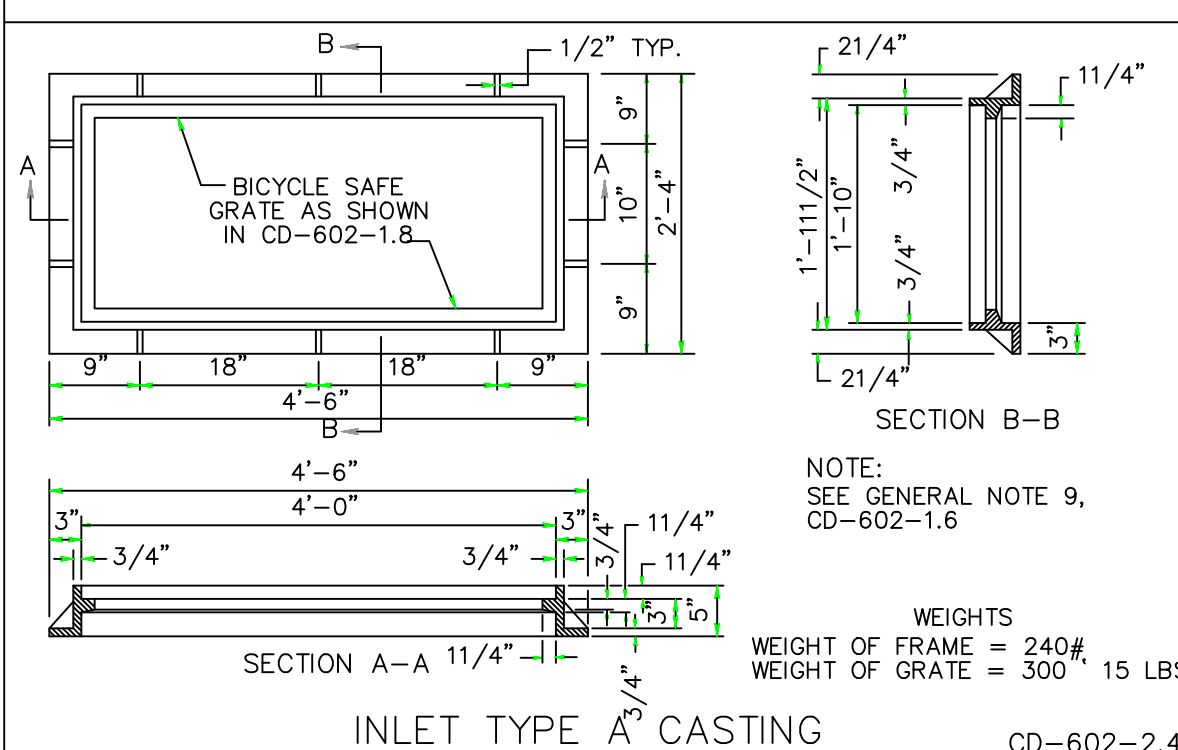
6 TRENCH IN PAVEMENT - STONE BACKFILL
 C-504 334100-047-002 NOT TO SCALE



5 CLEANOUT (CO)
 C-504 334100-046-001 NOT TO SCALE

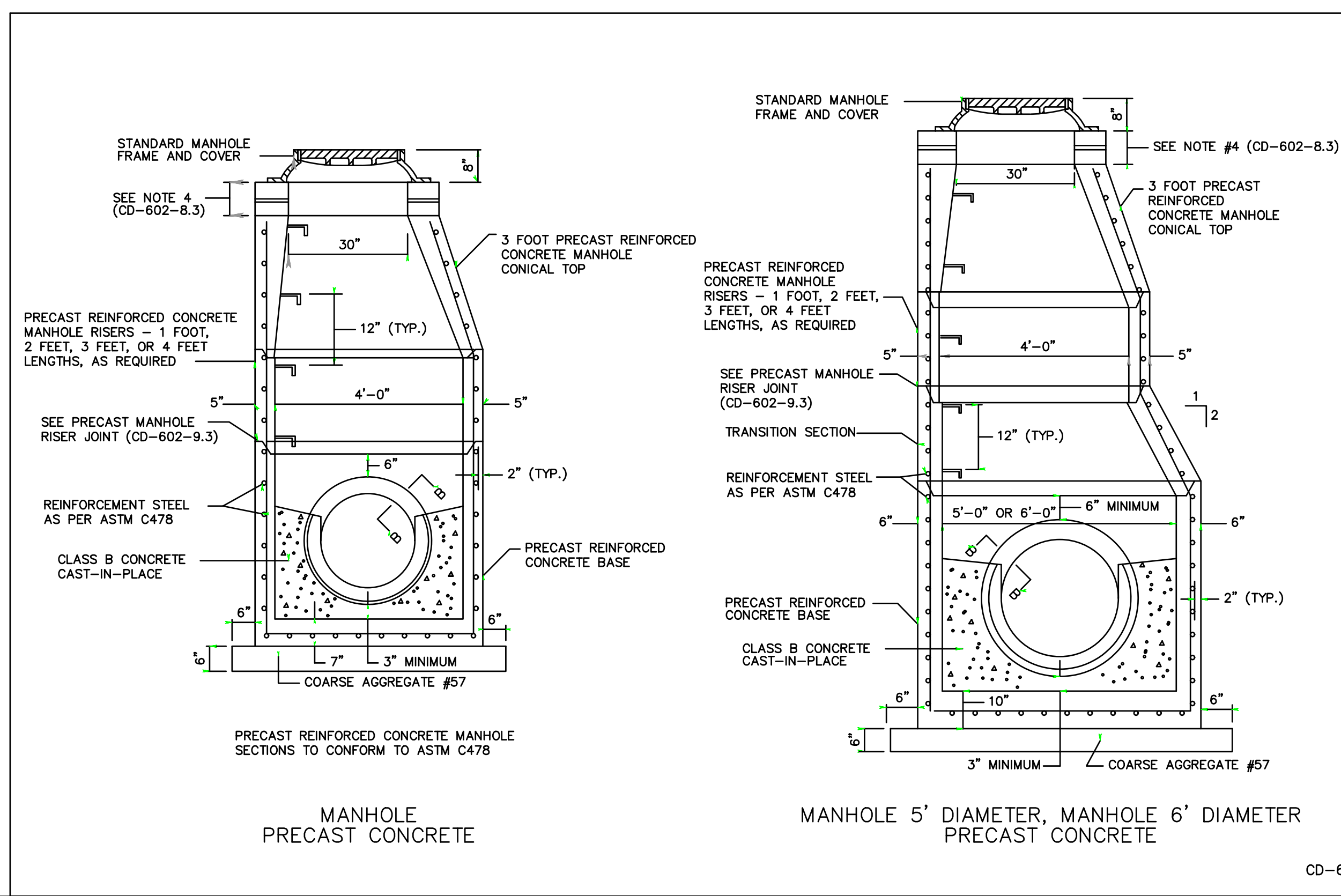


INLET TYPE A
 CD-602-2.1

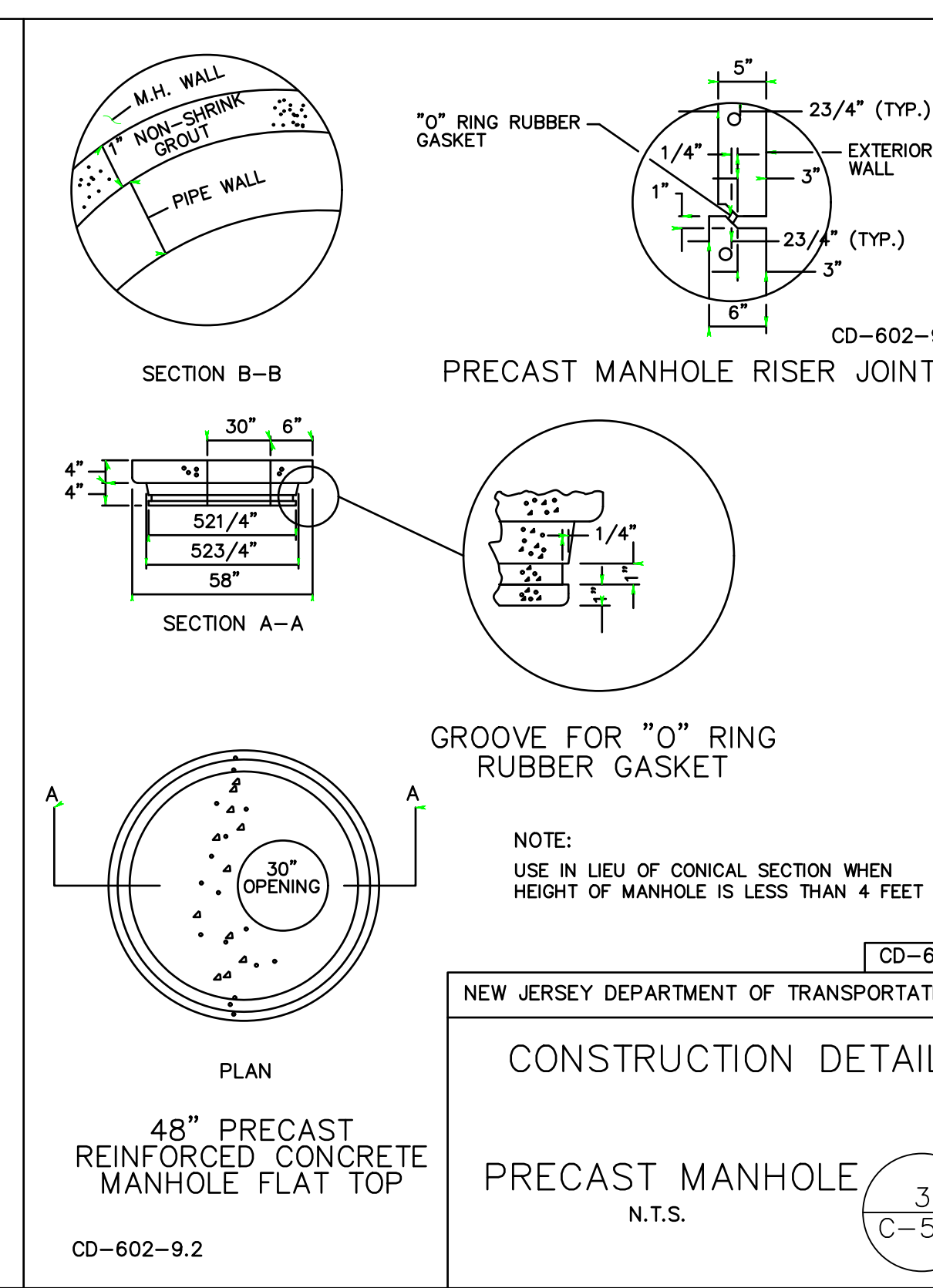


NOTES:
 1. MINIMUM WEIGHT = 120#
 2. SEE GENERAL NOTE 10, CD-602-1.6

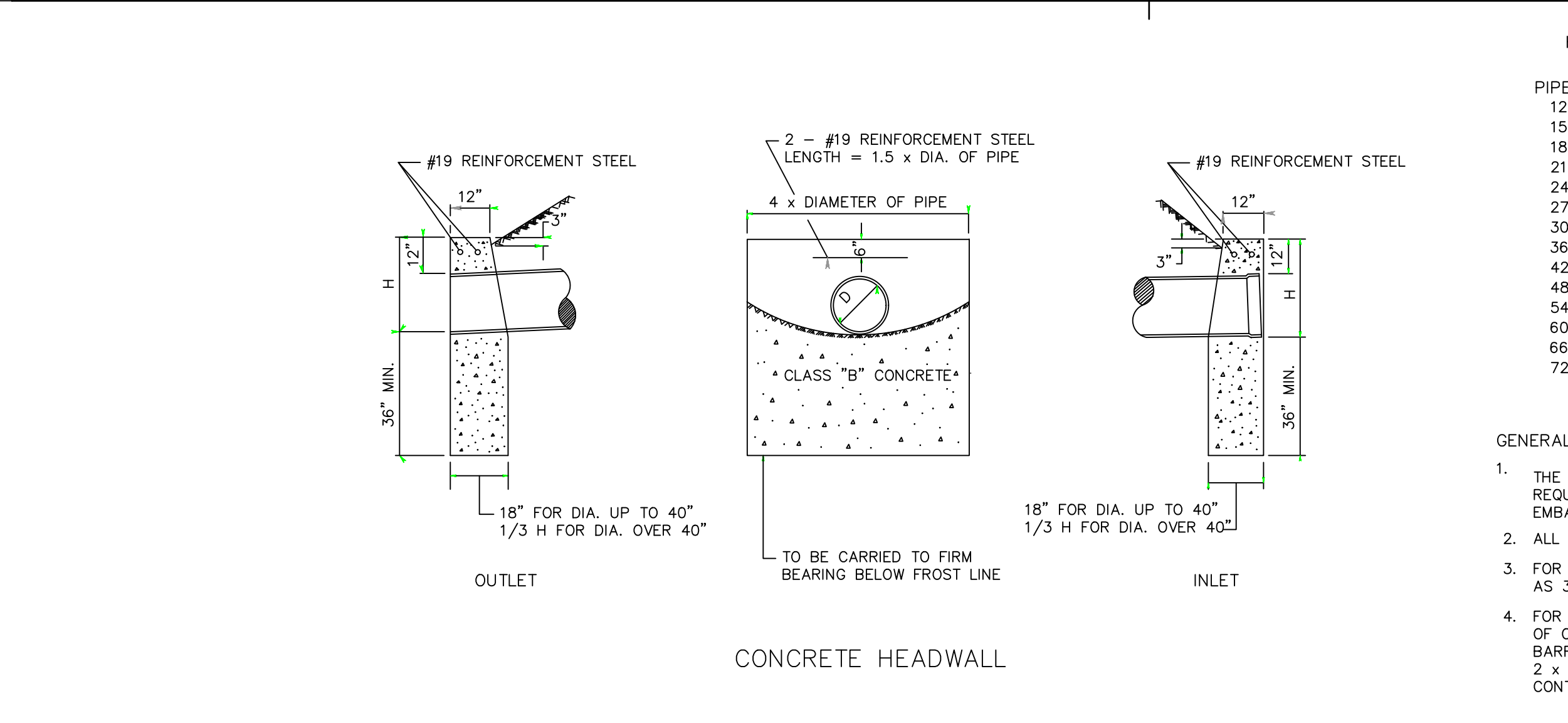
CONSTRUCTION DETAILS
INLETS TYPE A
 N.T.S. **4**
 C-504



MANHOLE PRECAST CONCRETE
MANHOLE 5' DIAMETER, MANHOLE 6' DIAMETER PRECAST CONCRETE
 CD-602-9.1 CD-602-9.2

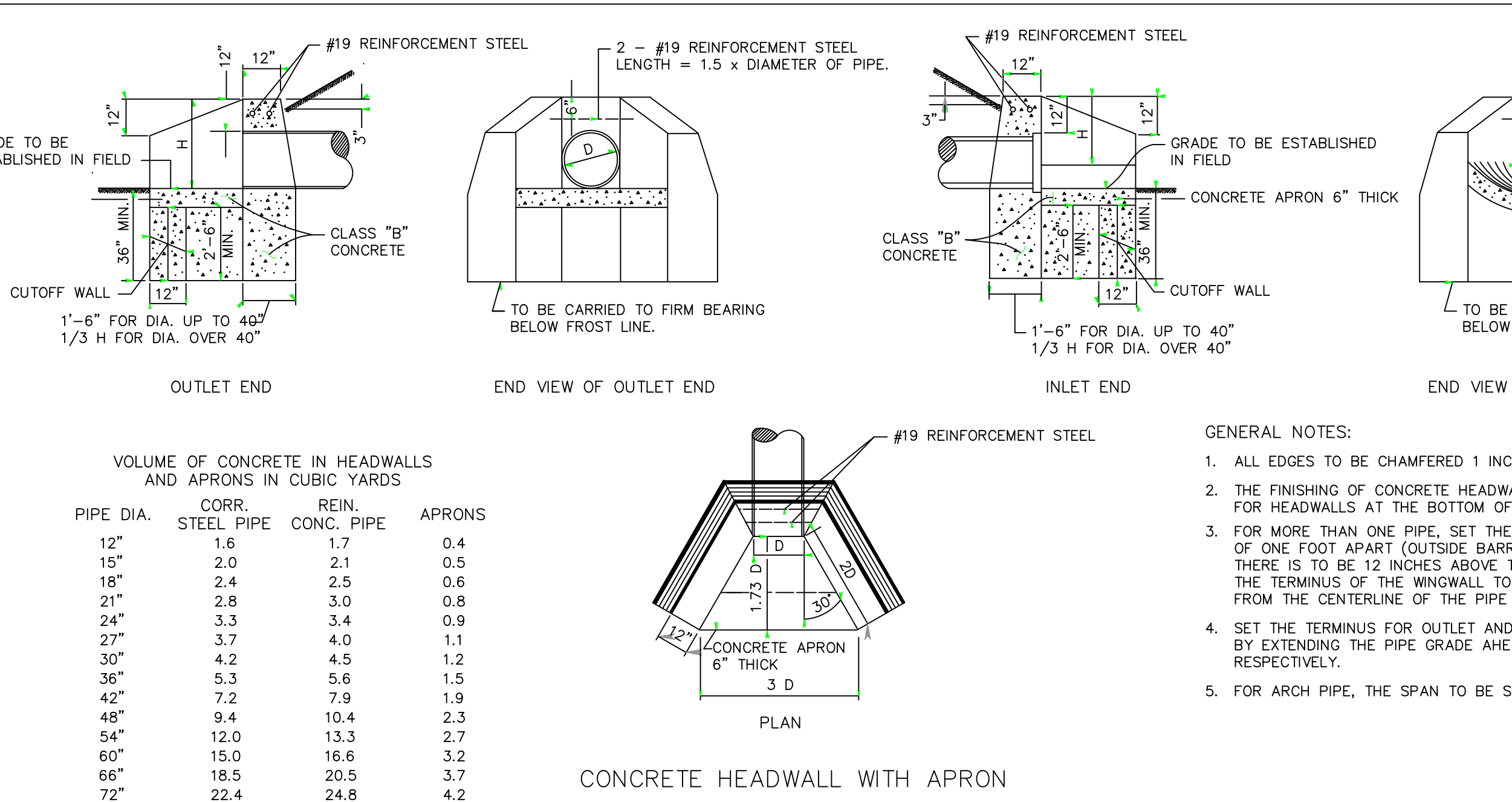


CONSTRUCTION DETAILS
PRECAST MANHOLE
 N.T.S. **3**
 C-504



PIPE DIA.	HEADWALL QUANTITY IN CUBIC YARDS	
	CORR. STEEL PIPE	REINF. CONC. PIPE
12"	1.0	1.1
15"	1.3	1.4
18"	1.7	1.7
21"	2.0	2.1
24"	2.3	2.5
27"	2.7	2.8
30"	3.1	3.3
36"	3.9	4.2
42"	4.8	5.8
48"	6.3	7.6
54"	8.1	9.7
60"	10.1	12.1
66"	12.3	14.9
72"	14.5	18.0

- GENERAL NOTES:**
- THE FINISHING OF CONCRETE HEADWALLS WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS.
 - ALL EDGES TO BE CHAMFERED 1 INCH.
 - FOR ARCH PIPE USE LENGTH OF HEADWALL AS 3H + SPAN.
 - FOR MORE THAN ONE PIPE, SET THE PIPE A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THE ENDS OF THE HEADWALL TO BE SET 2 x DIAMETER OFF THE CENTERLINE OF THE CONTROLLING PIPE.

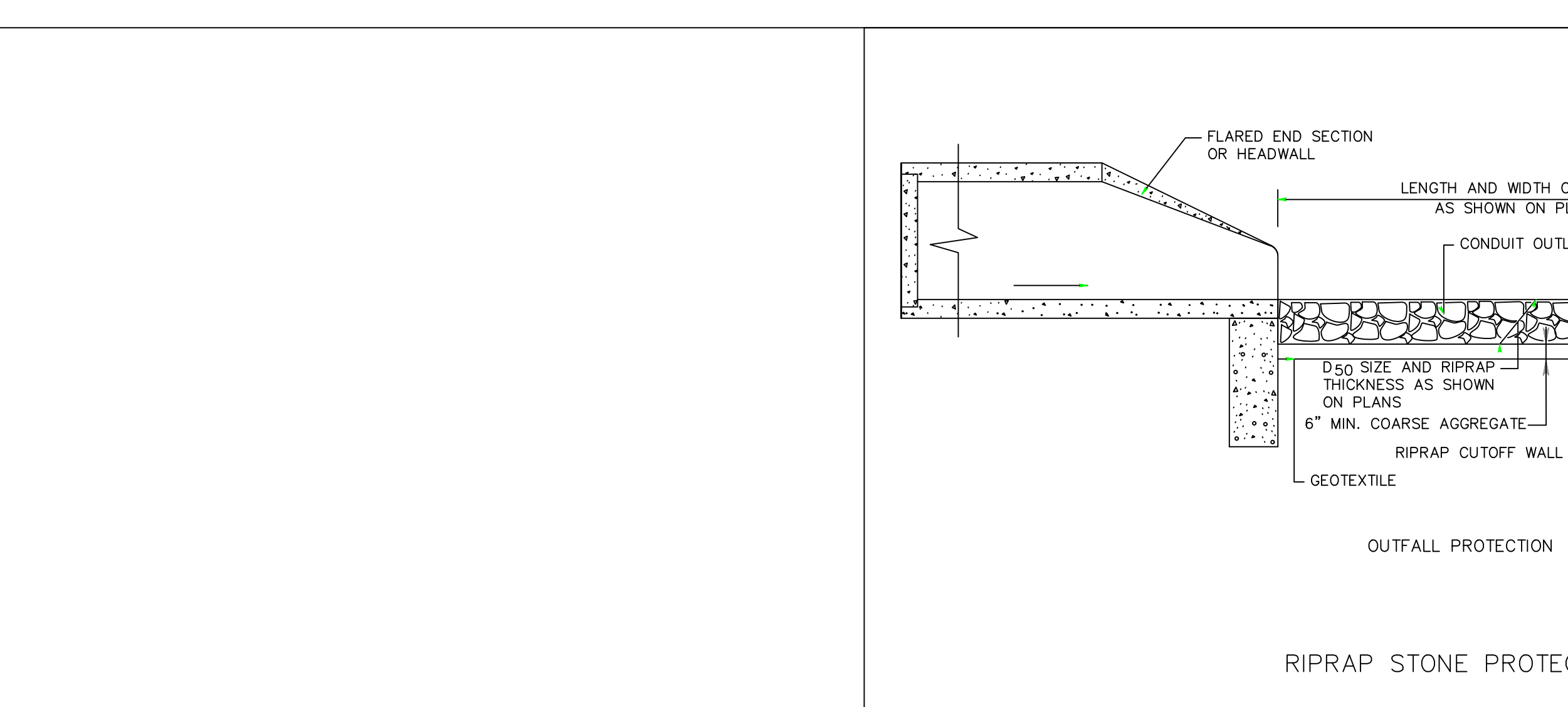


VOLUME OF CONCRETE IN HEADWALLS AND APRONS IN CUBIC YARDS

PIPE DIA.	CORR. STEEL PIPE		REINF. CONC. PIPE	
	APRONS	APRONS	APRONS	APRONS
12"	1.6	1.7	0.4	0.4
15"	2.0	2.1	0.5	0.5
18"	2.4	2.5	0.6	0.6
21"	2.8	3.0	0.8	0.8
24"	3.3	3.4	0.9	0.9
27"	3.7	4.0	1.1	1.1
30"	4.2	4.5	1.2	1.2
36"	5.3	5.6	1.5	1.5
42"	7.2	7.9	1.9	1.9
48"	9.4	10.4	2.3	2.3
54"	12.0	13.3	2.7	2.7
60"	15.0	16.6	3.2	3.2
66"	18.5	20.5	3.7	3.7
72"	22.4	24.8	4.2	4.2

- GENERAL NOTES:**
- ALL EDGES TO BE CHAMFERED 1 INCH.
 - THE FINISHING OF CONCRETE HEADWALLS WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS.
 - FOR MORE THAN ONE PIPE, SET THE PIPES A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THERE IS TO BE 12 INCHES ABOVE THE TOP OF A PIPE IN A WINGWALL; THE TERMINUS OF THE WINGWALL TO BE 2 x DIAMETER FROM THE CENTERLINE OF THE PIPE IN A WINGWALL.
 - SET THE TERMINUS FOR OUTLET AND INLET APRONS BY EXTENDING THE PIPE GRADE AHEAD AND BACK, RESPECTIVELY.
 - FOR ARCH PIPE, THE SPAN TO BE SUBSTITUTED FOR D.

CONSTRUCTION DETAILS
CONCRETE HEADWALL AND APRON
 N.T.S. **2**
 C-504



CONSTRUCTION DETAILS
SLOPE, OUTFALL, AND CHANNEL PROTECTION
 N.T.S. **1**
 C-504

811 SAFETY BEFORE YOU DIG
 CALL NUMBER XXXXXXXX
GEOFFREY L. COGAN
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 OFF: 903.263.2020 FAX: 903.263.0264
 EMAIL: GCOGAN@GALCO.COM
DERCKSON & REDSON
 ENGINEERS
 CAMPUSES: DOWNTOWN ATHLETIC FIELD
 301 MARKET STREET, SUITE 100, PHILADELPHIA, PA 19106
 WWW.DERCKSONANDREDSON.COM (717) 825-5564
NOT FOR CONSTRUCTION DETAILS
 AMENDED PRELIMINARY / FINAL SITE DEVELOPMENT PLAN
FAIRLEIGH DICKINSON ATHLETIC FIELDS
 FAIRLEIGH DICKINSON UNIVERSITY
 LOT 6 / BLOCK 101 - ZONE: UNIVERSITY
 285 MADISON AVENUE, MADISON, NJ 07940
 MADISON BOROUGH, MORRIS COUNTY, NEW JERSEY
REVISIONS:
 No. DATE DESCRIPTION OF CHANGES
 DATE: 03/02/2020
 PROJECT NO: 190450
 DRAWN BY: JML
 PLOT: JML
 PLOT: JML
 PLOT: JML
C-504
 P 20-002