

UTILITY EXTENSION PLANS

FOR

Route 102

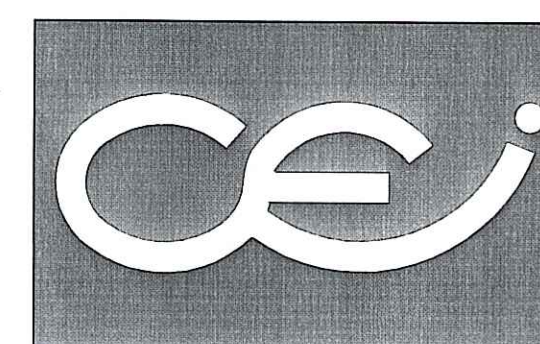
Commerce Park

ASSESSOR'S PLAT 195, LOT 2 and
 ASSESSOR'S PLAT 213, LOTS 9 and 10
 BRONCO HIGHWAY - (ROUTE 102)
 BURRILLVILLE, RHODE ISLAND
 ZONING DISTRICT - GI (GENERAL INDUSTRIAL)

OWNER:
 TOWN OF BURRILLVILLE
 105 HARRISVILLE MAIN STREET
 HARRISVILLE, RHODE ISLAND 02830

PREPARED FOR:
 INDUSTRIAL FOUNDATION
 OF BURRILLVILLE
 c/o NEW ENGLAND ECONOMIC
 DEVELOPMENT SERVICES, INC.
 1300 HIGHLAND CORPORATE DRIVE
 SUITE 202
 CUMBERLAND, RHODE ISLAND 02864

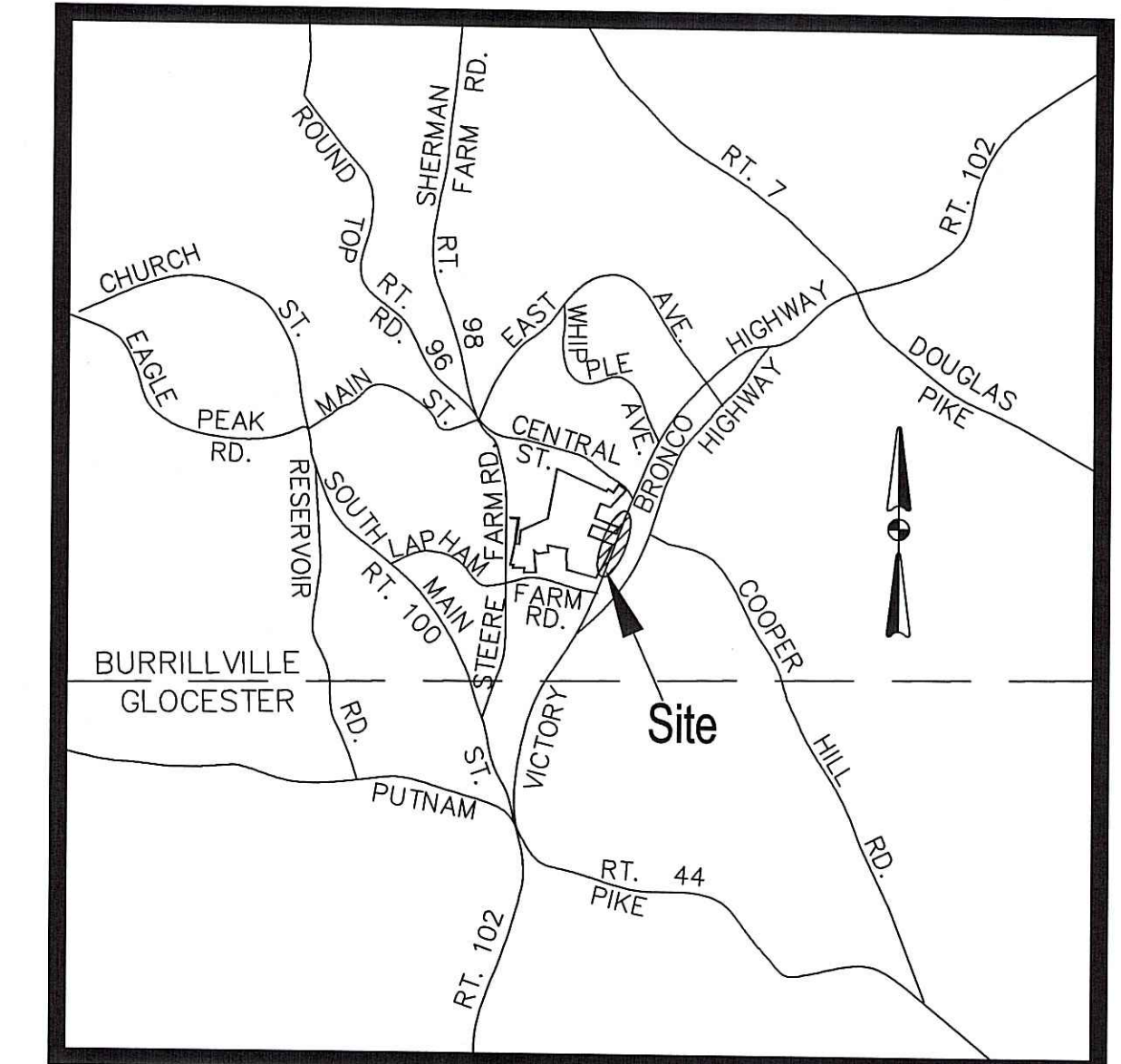
ENGINEERS AND SURVEYORS:



- Civil
- Transportation
- Environmental
- Site Planning
- Land Surveying

**CROSSMAN
 ENGINEERING, INC.**

151 Centerville Road
 Warwick, Rhode Island 02886
 Phone: (401) 738-5660 - Fax: (401) 738-8157
 Email: cei@crossmaneng.com



LOCATION MAP
 NOT TO SCALE

INDEX OF DRAWINGS

SHEET	PLAN	DRAWING NUMBER
1	COVER SHEET	
2	GENERAL NOTES and LEGEND	C-1
3	KEY PLAN	C-2
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED AUG 2 2007 FILE # 07-0159
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

AGENCY REVIEW SUBMISSION

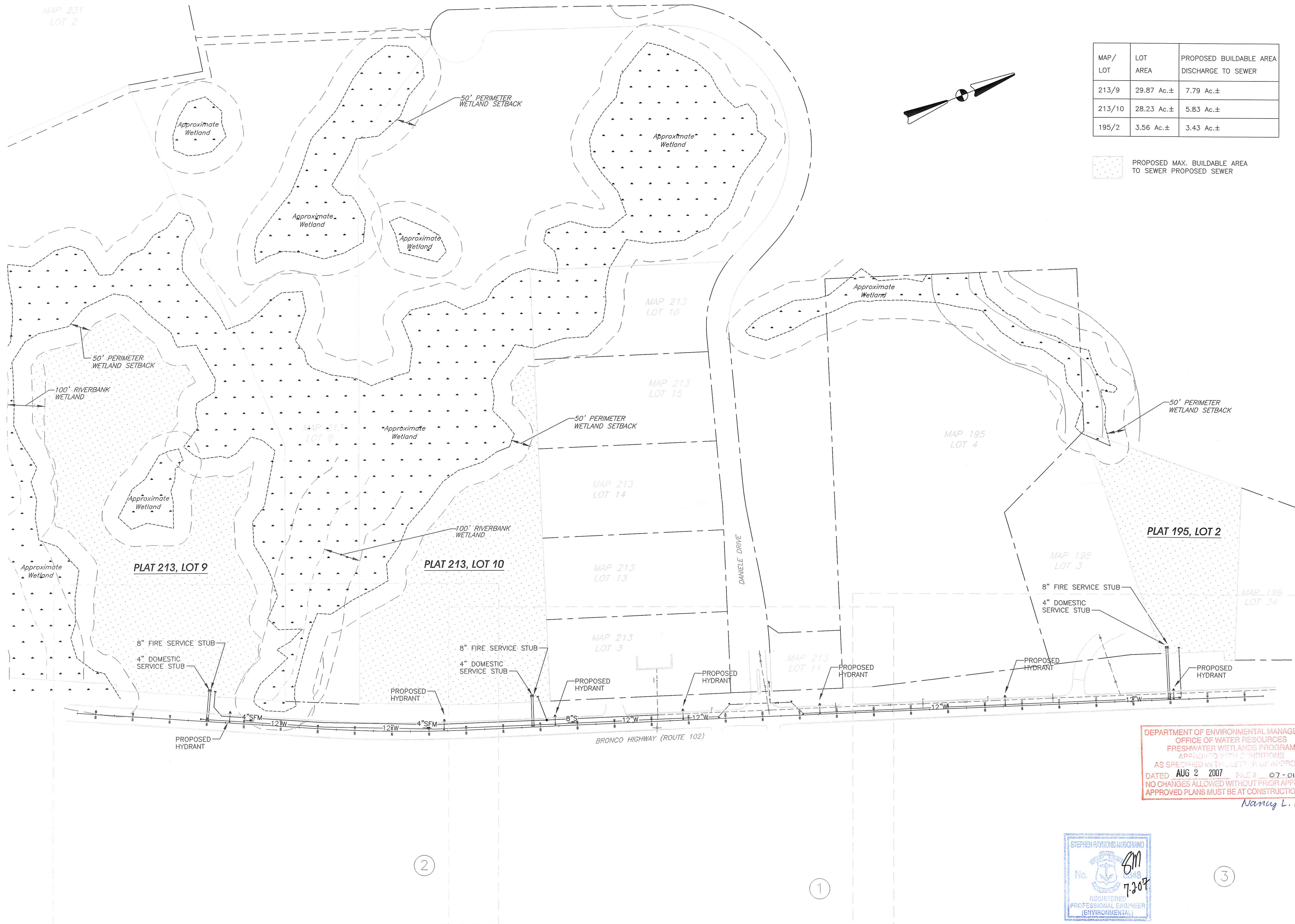
REVISIONS:

NO:	DATE:	DESCRIPTION:
1	5/17/07	KEY PLAN
2	6/28/07	RIDEM COMMENTS

RIDEM COPY

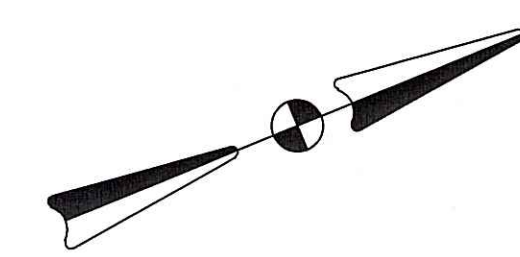
APRIL, 2007
 SHEET 1 OF 8

MAP 231
LOT 2



MAP/LOT	LOT AREA	PROPOSED BUILDABLE AREA DISCHARGE TO SEWER
213/9	29.87 Ac.±	7.79 Ac.±
213/10	28.23 Ac.±	5.83 Ac.±
195/2	3.56 Ac.±	3.43 Ac.±

PROPOSED MAX. BUILDABLE AREA TO SEWER PROPOSED SEWER



JUL 10 2007

TITLE:
**UTILITY EXTENSION PLANS
ROUTE 102
COMMERCE PARK**
ASSESSOR'S PLAT 195, LOT 2 and
ASSESSOR'S PLAT 213, LOTS 9 and 10
BRONCO HIGHWAY - RT. 102
BURRILLVILLE, RHODE ISLAND

OWNER:
**TOWN OF
BURRILLVILLE**
105 HARRISVILLE MAIN STREET
HARRISVILLE, RHODE ISLAND 02830

PREPARED FOR:
**INDUSTRIAL FOUNDATION
OF BURRILLVILLE**
C/O NEW ENGLAND ECONOMIC
DEVELOPMENT SERVICES, INC.
1300 HIGHLAND CORPORATE DRIVE
SUITE 202
CUMBERLAND, RHODE ISLAND 02864

DRAWING TITLE:
KEY PLAN

DATE: APRIL, 2007 SCALE: 1"=120'

DWG NAME: 1376-03-KEY.DWG

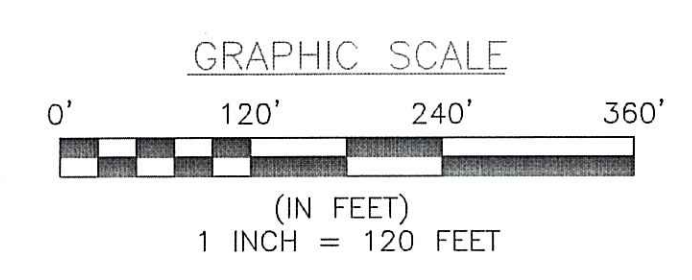
NO.	DATE	REVISION
1	5/17/07	KEY PLAN
2	6/28/07	RIDEM COMMENTS

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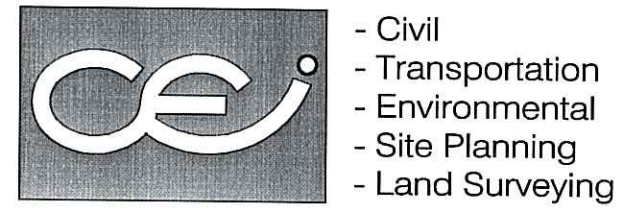


NOTE: THIS KEY PLAN IS PROVIDED FOR GENERAL PROJECT LOCATING PURPOSES ONLY. THIS KEY PLAN SHOULD NOT BE RELIED UPON FOR ANY OTHER PURPOSE. PROPOSED UTILITIES NOT SHOWN TO SCALE.



DENOTES PLAN AND PROFILE NO.

DRAWING NUMBER
C-2
SHEET: 3 OF 8
AGENCY REVIEW SUBMISSION



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 1300 HIGHLAND CORPORATE DRIVE SUITE 202
 CUMBERLAND, RHODE ISLAND 02864

DRAWING TITLE
PLAN AND PROFILE NO. 1

DATE: APRIL, 2007 **SCALE:** AS SHOWN

DWG NAME: 1376-04-PP1.dwg

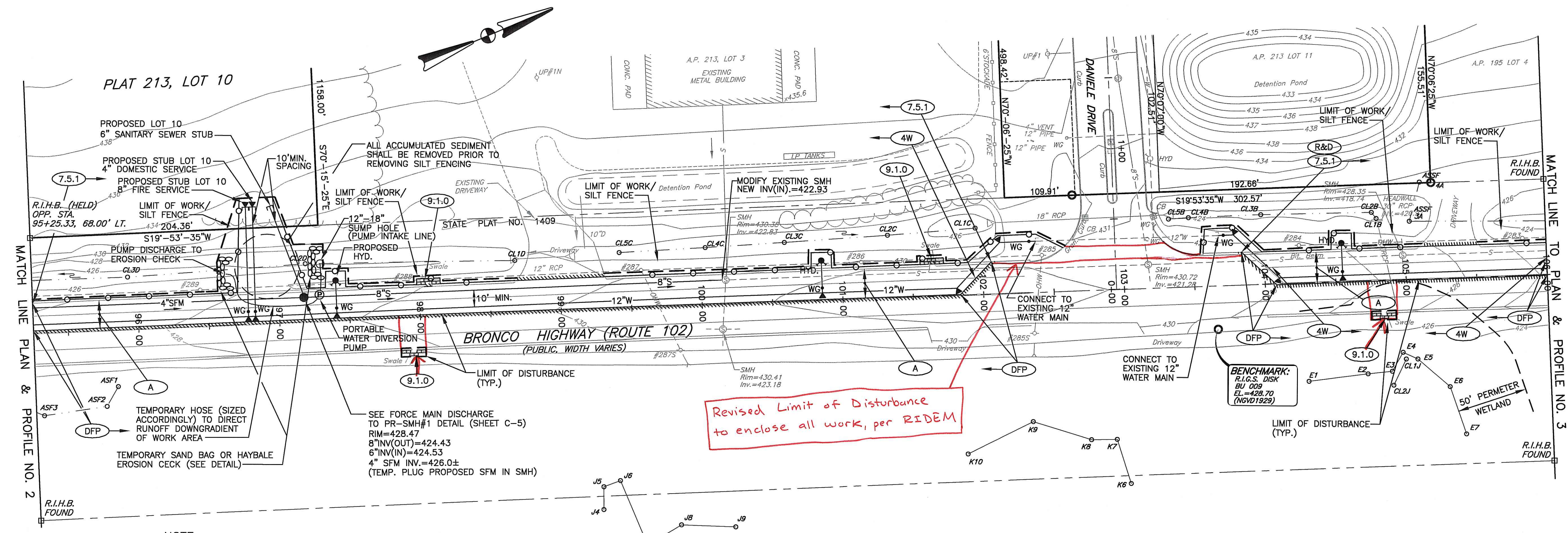
NO.	DATE	REVISION
1	5/17/07	KEY PLAN
2	6/28/07	RIDEM COMMENTS

DRAWING NUMBER

C-3

SHEET: 4 OF 8

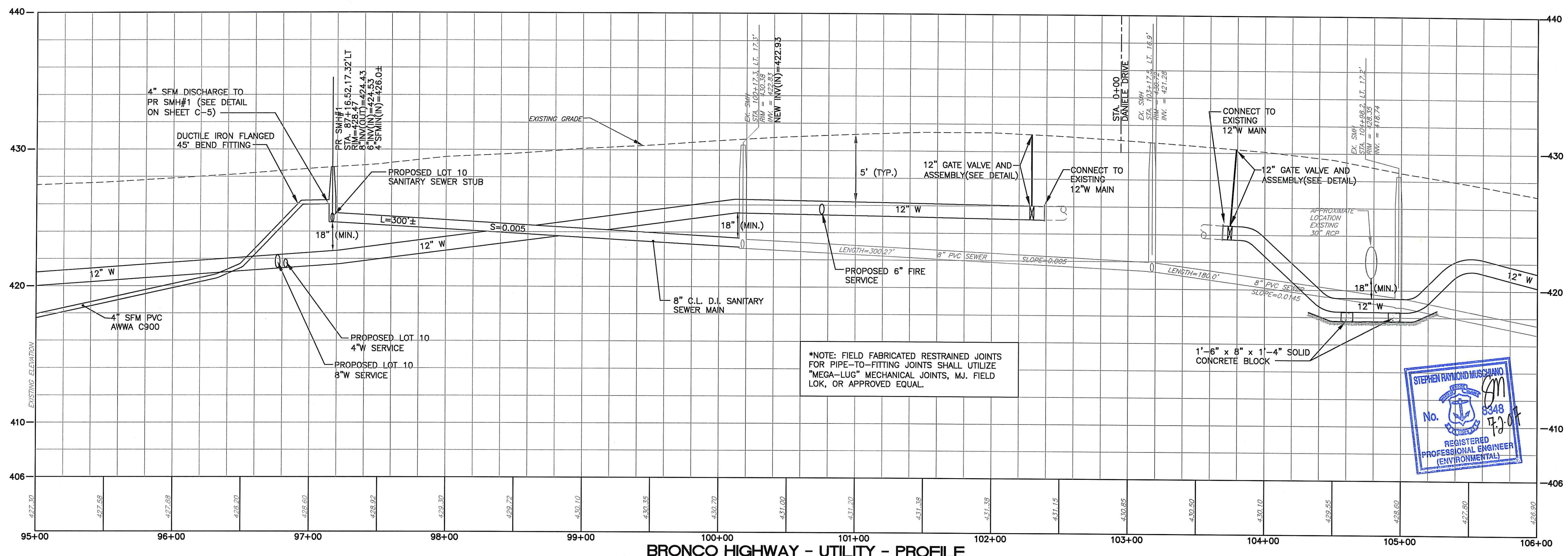
AGENCY REVIEW SUBMISSION



BRONCO HIGHWAY - UTILITY - PLAN VIEW

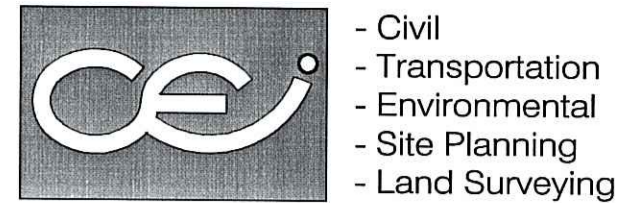
SCALE: 1"=40'

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BRONCO HIGHWAY - UTILITY - PROFILE

SCALE: HORZ. = 1"=40'
 VERT. = 1"=4'



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JUL 10 2007

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DRAWING TITLE:
**PLAN AND PROFILE
 NO. 2**

DATE: APRIL, 2007 SCALE: AS SHOWN

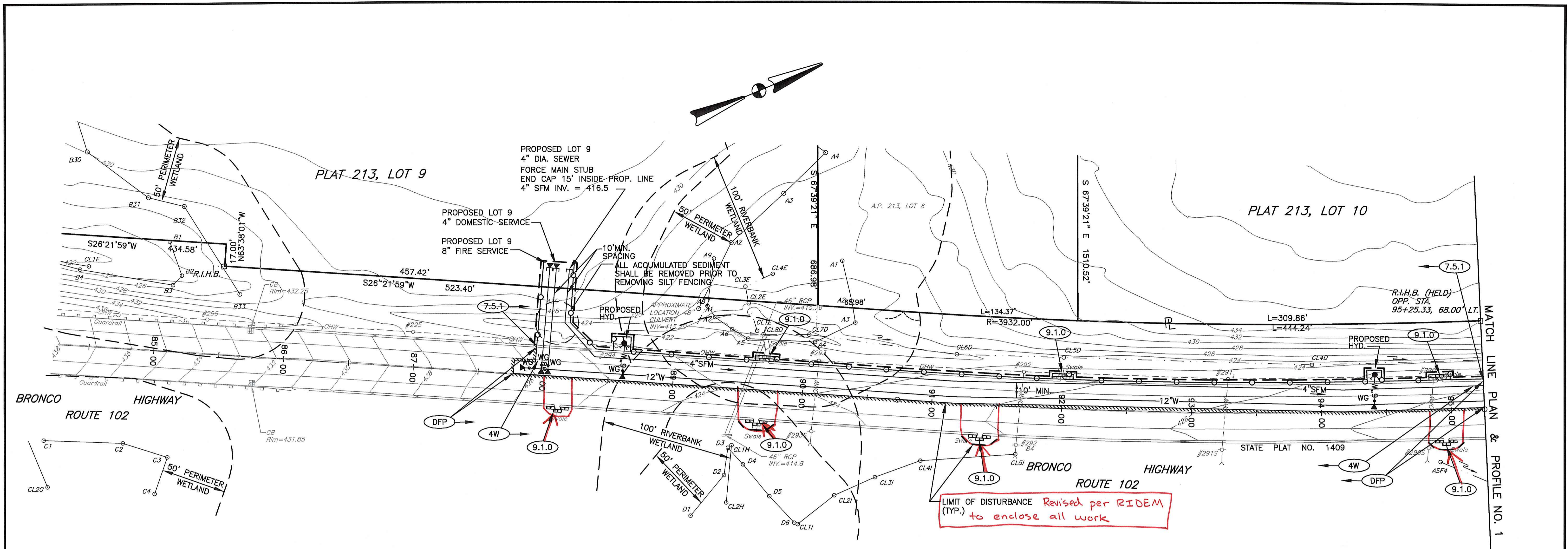
DWG NAME: 1376-05-PP2.dwg

NO.	DATE	REVISION
1	5/17/07	KEY PLAN
2	6/28/07	RIDEM COMMENTS

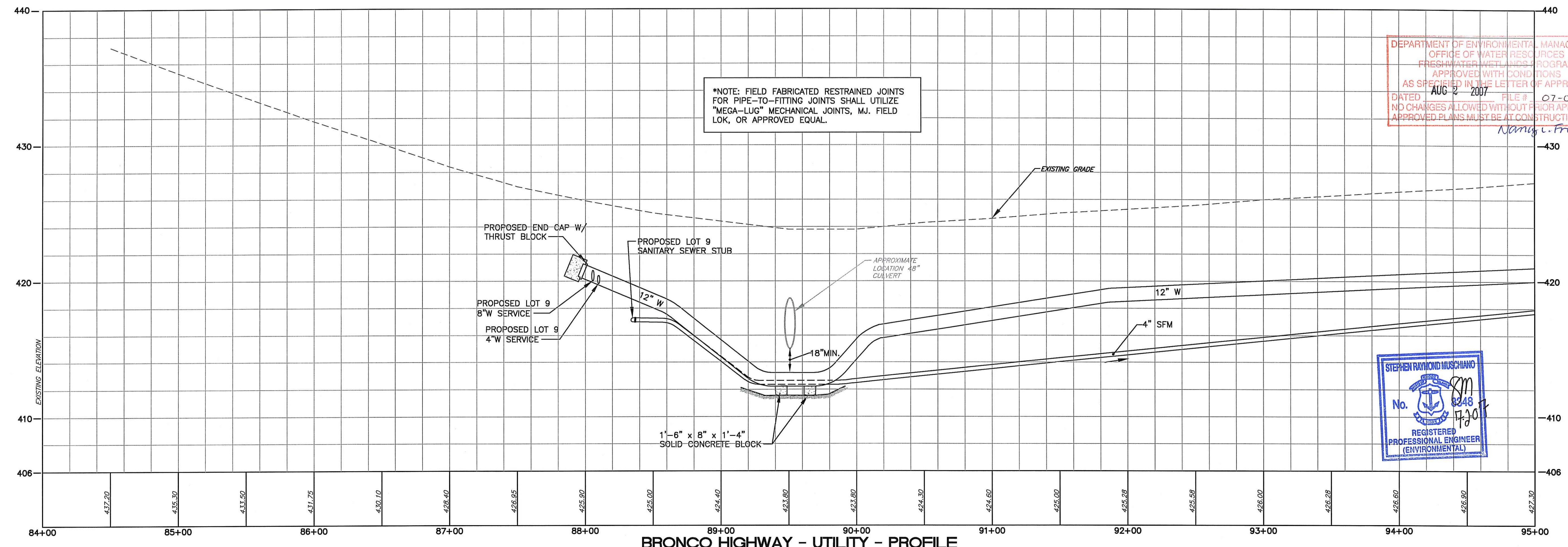
REGISTERED PROFESSIONAL ENGINEER (ENVIRONMENTAL)
 No. 8248
 Stephen Raymond Muschiano

DRAWING NUMBER:
C-4
 SHEET: 5 OF 8

AGENCY REVIEW SUBMISSION

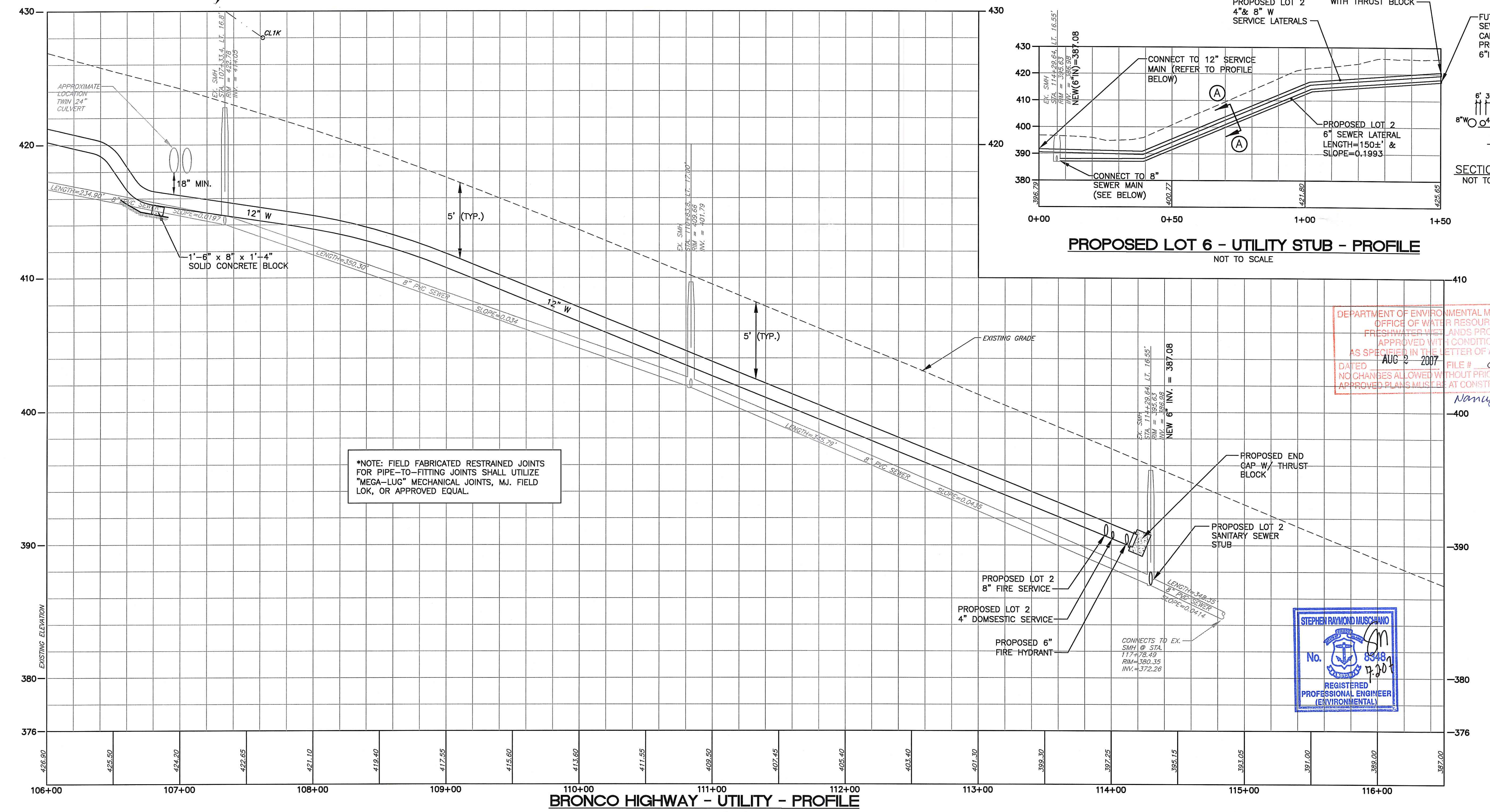
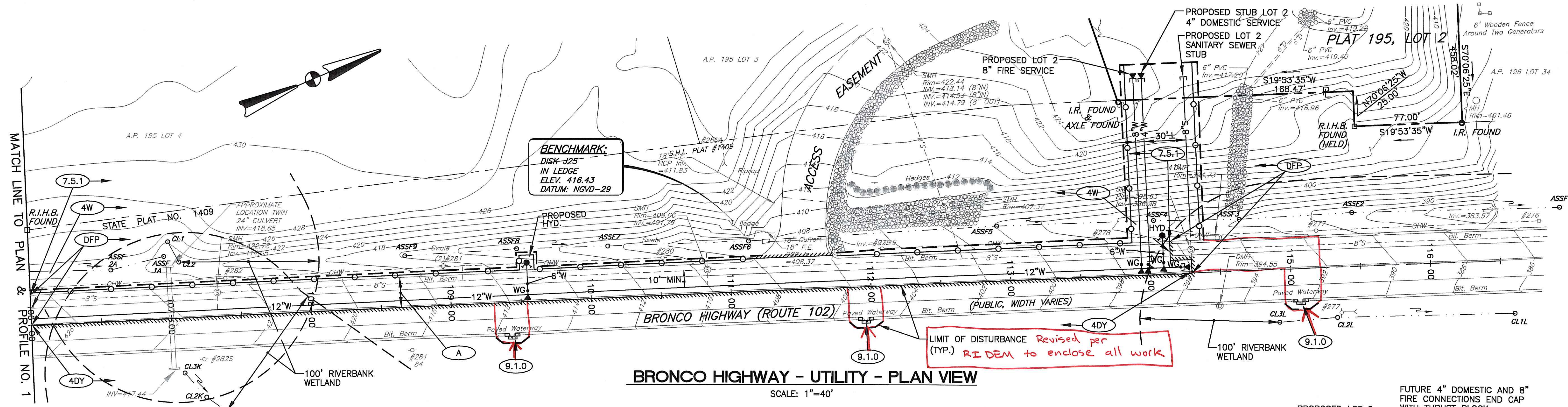


BRONCO HIGHWAY - UTILITY - PLAN VIEW
 SCALE: 1"=40'



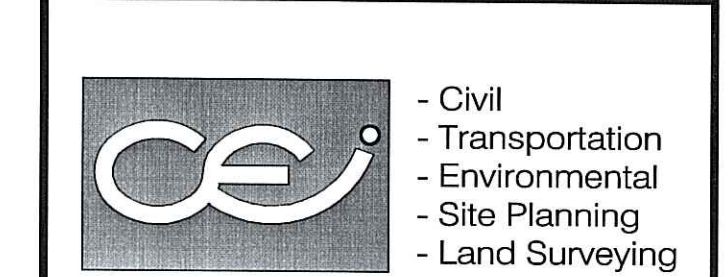
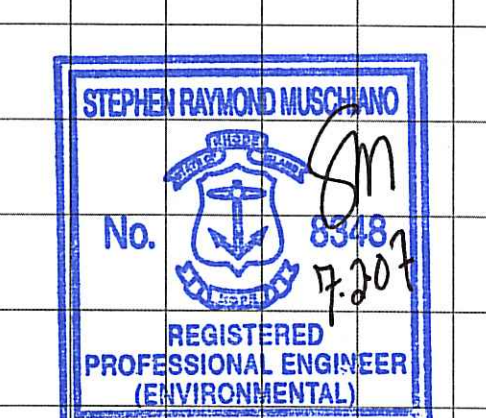
BRONCO HIGHWAY - UTILITY - PROFILE
 SCALE: HORZ. = 1"=40'
 VERT. = 1"=4'

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DRAWING TITLE
**PLAN AND PROFILE
NO. 3**

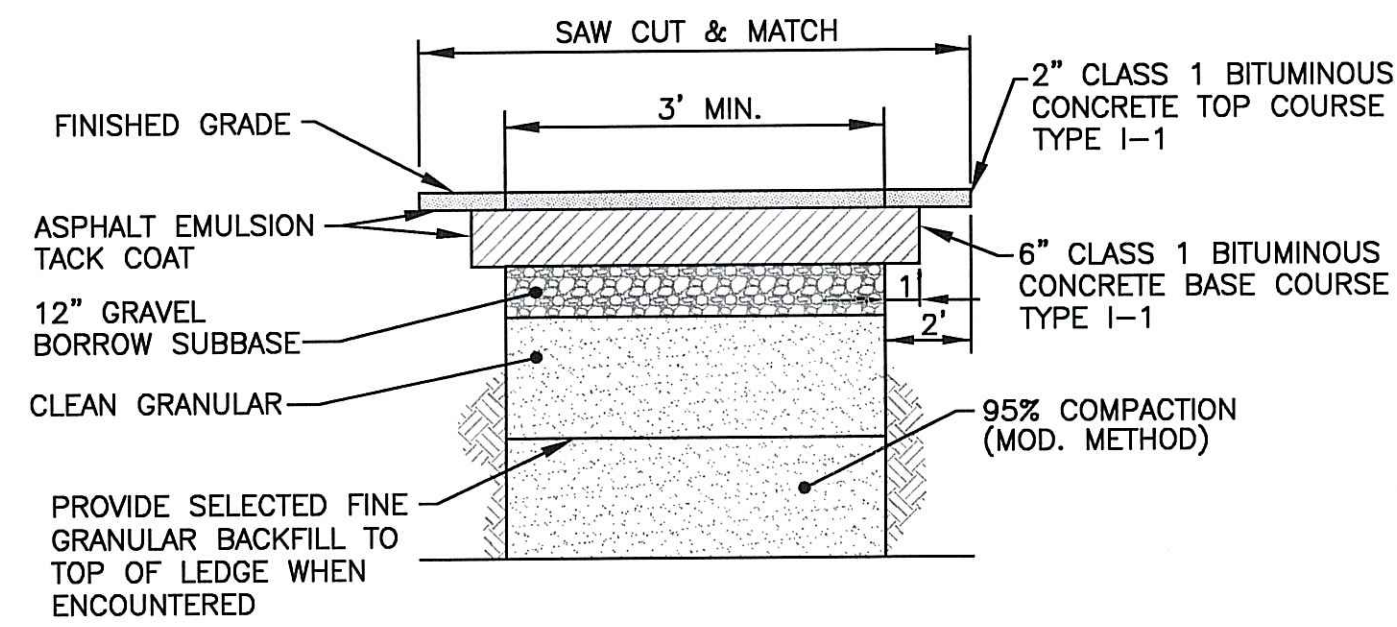
DATE: APRIL, 2007 SCALE: AS SHOWN

DWG NAME: 1376-06-PP3.dwg

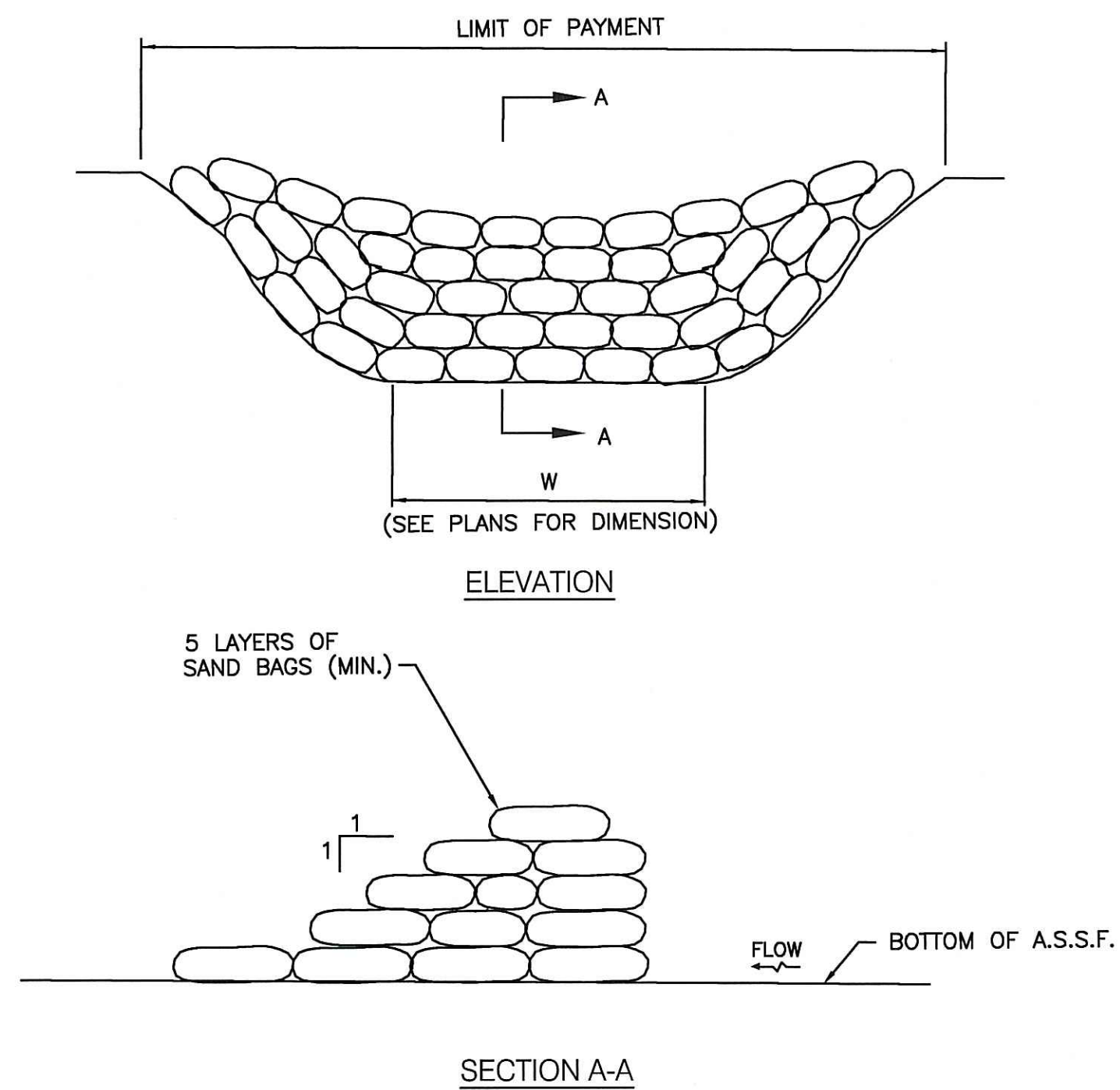
NO.	DATE	REVISION
1	5/17/07	KEY PLAN
2	6/28/07	RI DEM COMMENTS

DRAWING NUMBER
C-5
SHEET: 6 OF 8

AGENCY REVIEW SUBMISSION



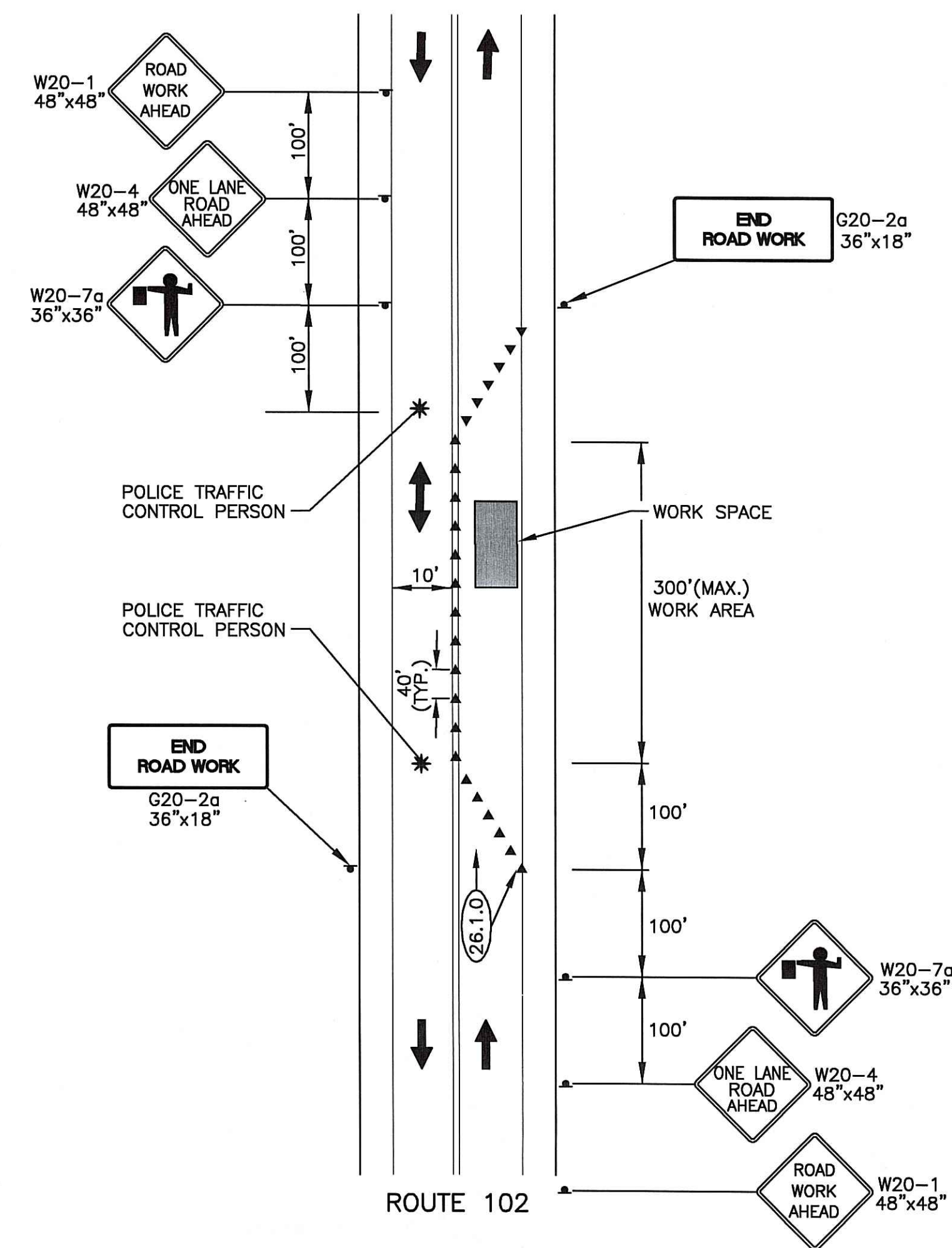
TYPICAL PIPE INSTALLATION WITHIN STREET
NOT TO SCALE



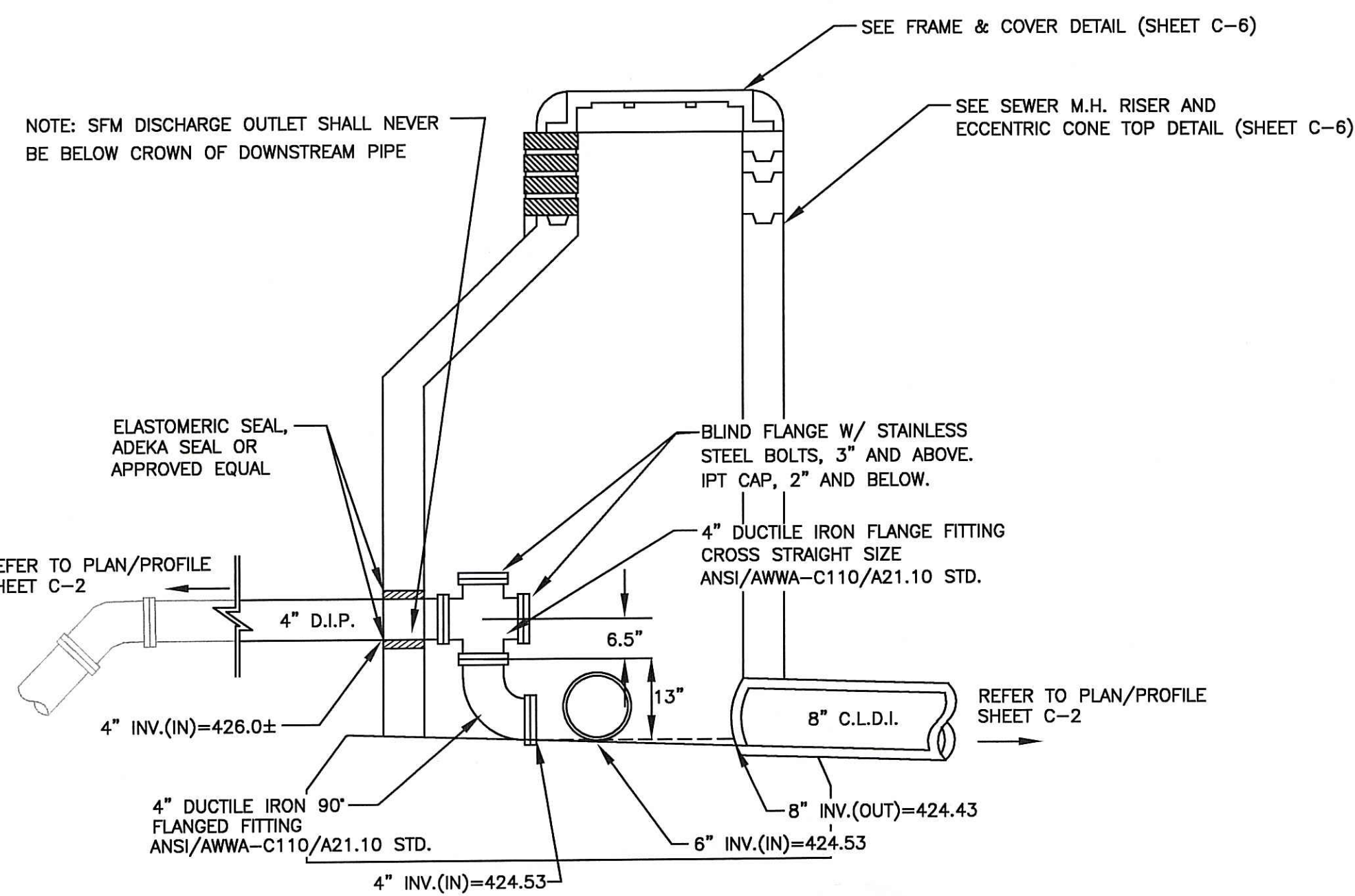
NOTES:

1. WORK SHALL BE IN ACCORDANCE WITH SECTION 207 OF THE R.I. STANDARD SPECIFICATIONS.
2. TEMPORARY SAND BAGS TO BE IMMEDIATELY REMOVED AFTER WATERLINES AND SEWER CROSSING INSTALLATIONS AND AREA RESTORED BACK TO ITS NATURAL STATE.

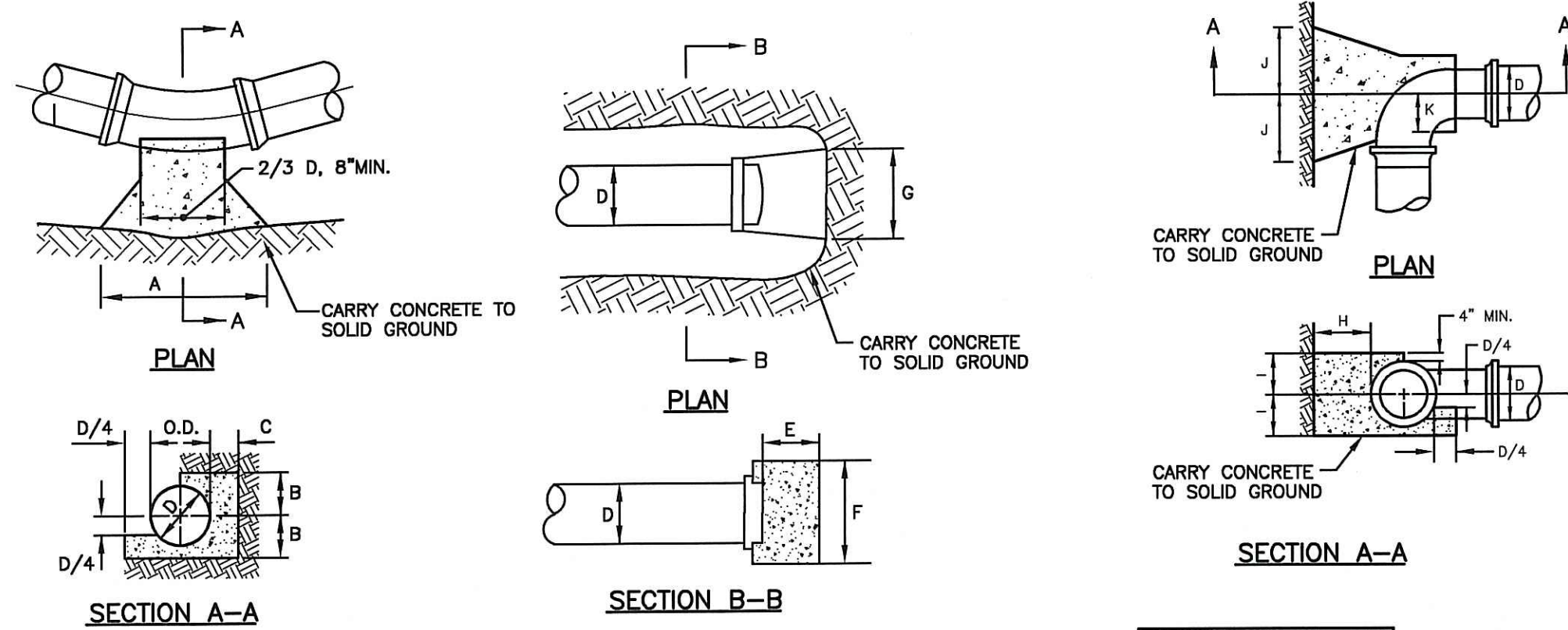
SAND BAG EROSION CHECK
NOT TO SCALE



LANE CLOSURE ON TWO LANE ROAD USING FLAGGERS
NOT TO SCALE



FORCE MAIN DISCHARGE TO PR-SMH#1 DETAIL
NOT TO SCALE



THRUST BLOCK FOR HORIZONTAL BENDS			
BEND	8"	4" & 6"	
1/8 (45)	A 2'-6"	2'-0"	
	B 12"	10"	
	C 1'-6"	1'-6"	
	A 3'-0"	2'-6"	
1/4 (90)	B 1'-2"	1'-3"	
	C 1'-6"	1'-8"	

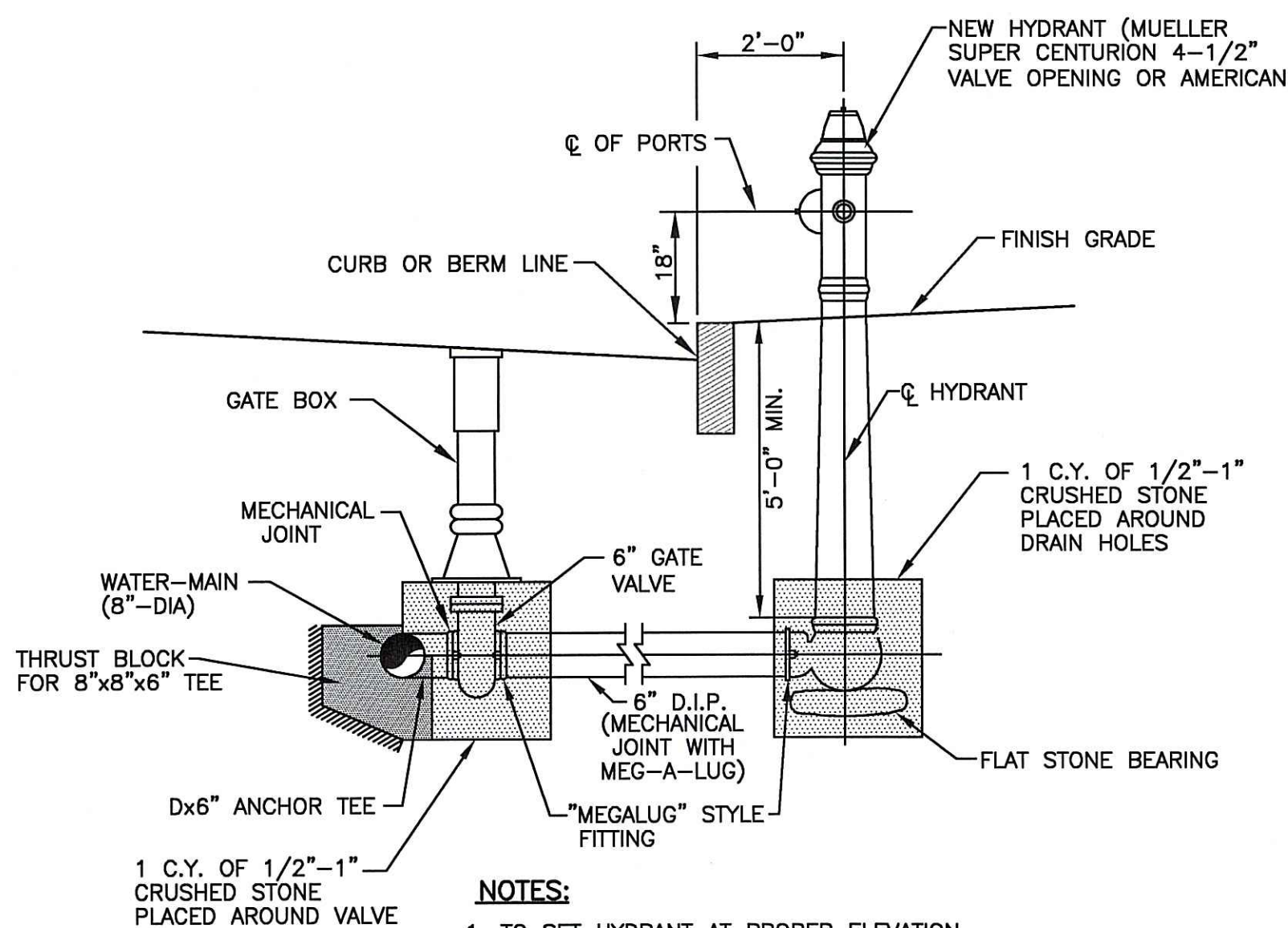
THRUST BLOCK NOTES:

1. ALL CONCRETE TO BE CLASS B.
2. BUTTRISS DIMENSIONS SHOWN ARE MINIMUM. DIMENSIONS ARE BASED UPON SOIL BEARING PRESSURE OF 1500 P.S.F. LATERAL AND STATIC WATER PRESSURE OF 150 P.S.I. WHERE PRESSURE EXCEEDS 150 P.S.I. OR WHERE SOIL BEARING PRESSURE IS LESS THAN 1500 P.S.F. LATERAL OR SOIL CONDITIONS OR EXCAVATION LIMITS ENCOUNTERED DURING CONSTRUCTION MAKE IT UNFEASIBLE TO PLACE THRUST BLOCKS AGAINST UNDISTURBED EARTH OF THE PROPER BEARING CAPACITY, THE CONTRACTOR SHALL DESIGN, GET APPROVAL OF, AND PLACE SPECIAL REACTION BLOCKS OF SUFFICIENT WEIGHT TO RESIST THE FULL THRUST OF THE LINE UNDER TEST AND OPERATING PRESSURES. THE DESIGN OF SUCH BLOCKS SHALL BE SUBJECT TO THE APPROVAL OF THE HARRISVILLE FIRE DISTRICT AND THE ENGINEERS AND SHALL BE SUBMITTED TO THE FIRE DISTRICT BEFORE ACTUAL INSTALLATION TAKES PLACE.
3. ALL THRUST BLOCKS SHALL BE CONCRETE 3,000 P.S.I. @ 28 DAYS AND BEARING AGAINST UNDISTURBED EARTH.

THRUST BLOCKS FOR CAPS AND HORIZONTAL BENDS
NOT TO SCALE

THRUST BLOCKS FOR TEES			
SIZE OF BRANCH	8"	4" & 6"	
D	1'-8"	1'-8"	
H	1'-6"	1'-6"	
I	1'-7"	1'-3"	
J	1'-7"	1'-3"	
K	8"	6"	

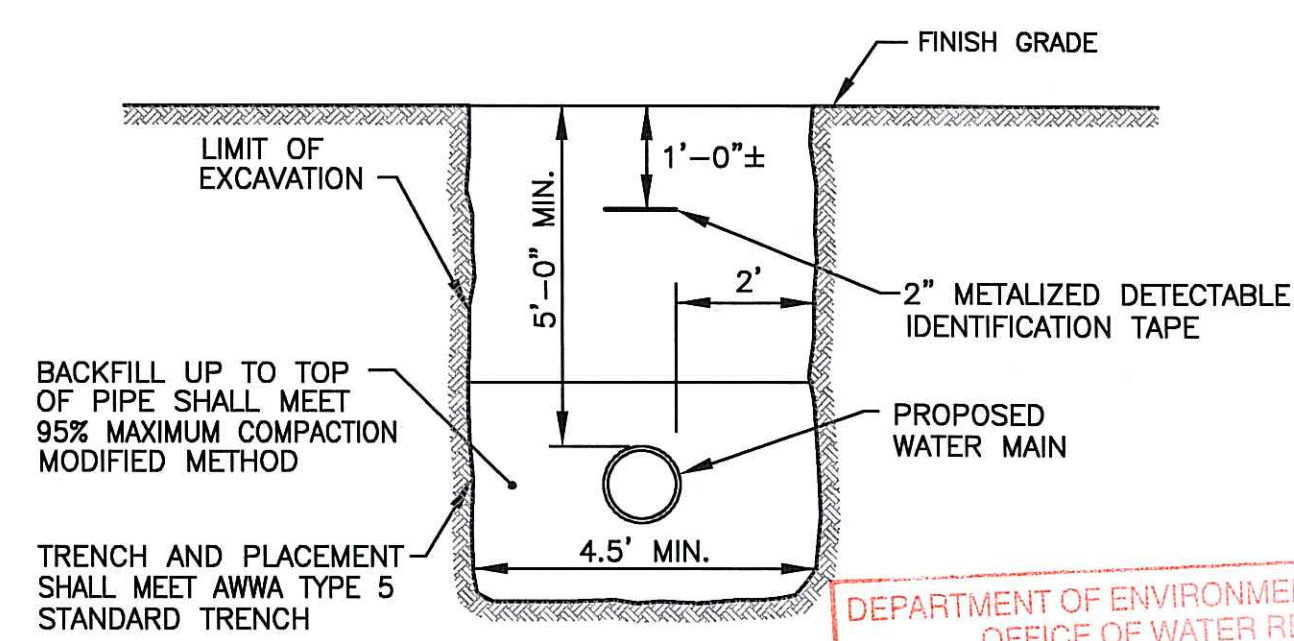
BUTTRISS FOR TEES
NOT TO SCALE



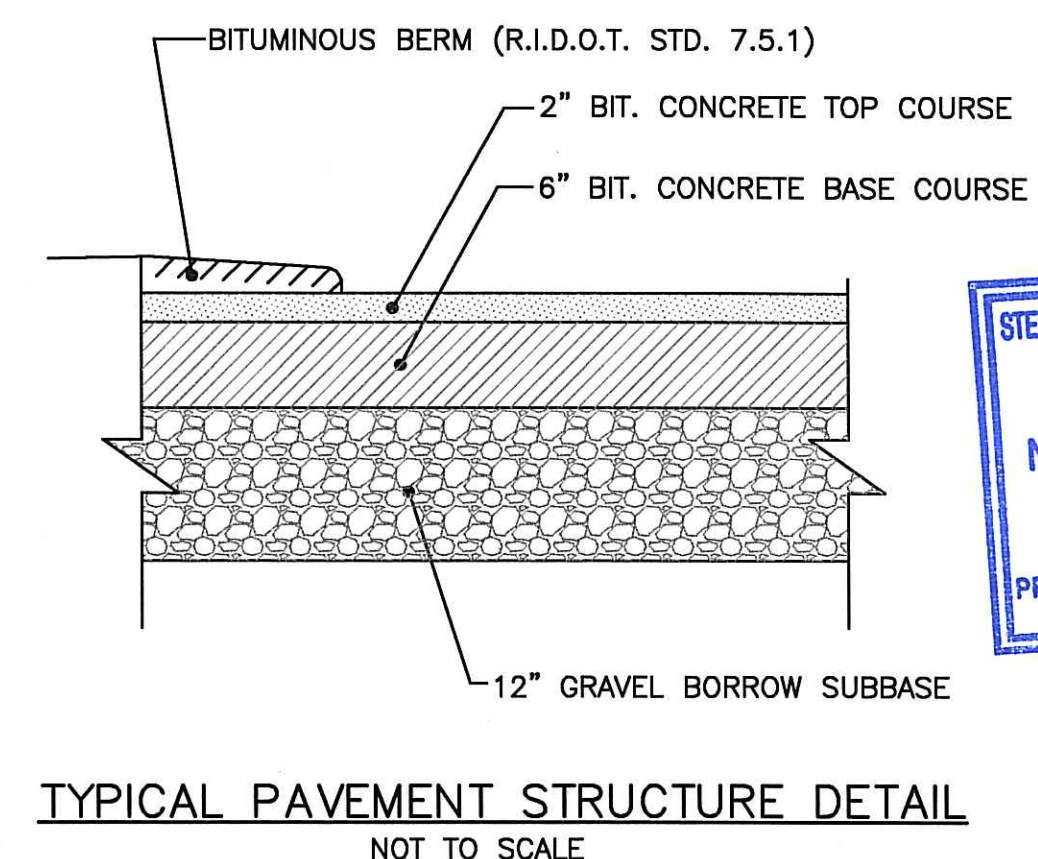
NOTES:

1. TO SET HYDRANT AT PROPER ELEVATION WHEN CONNECTING TO DEEP OR SHALLOW MAIN, INSTALL OFFSET IN HYDRANT RUN-OUT.
2. COVER CRUSHED STONE WITH 12# ROOFING FELT BEFORE FILLING VALVE.

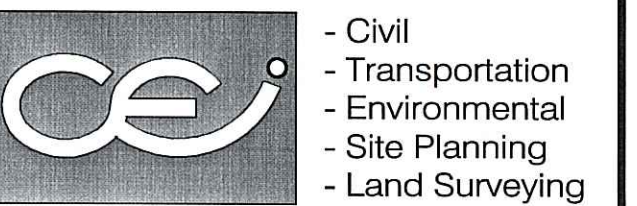
TYPICAL HYDRANT INSTALLATION
NOT TO SCALE



TYPICAL WATER LINE TRENCH DETAIL
NOT TO SCALE



TYPICAL PAVEMENT STRUCTURE DETAIL
NOT TO SCALE



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COMMERCE PARK

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1300 HIGHLAND CORPORATE DRIVE SUITE 202
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MISCELLANEOUS DETAILS
PLAN NO. 1

DATE: APRIL, 2007 SCALE: AS SHOWN

DWG NAME: 1376-07-DET1.DWG

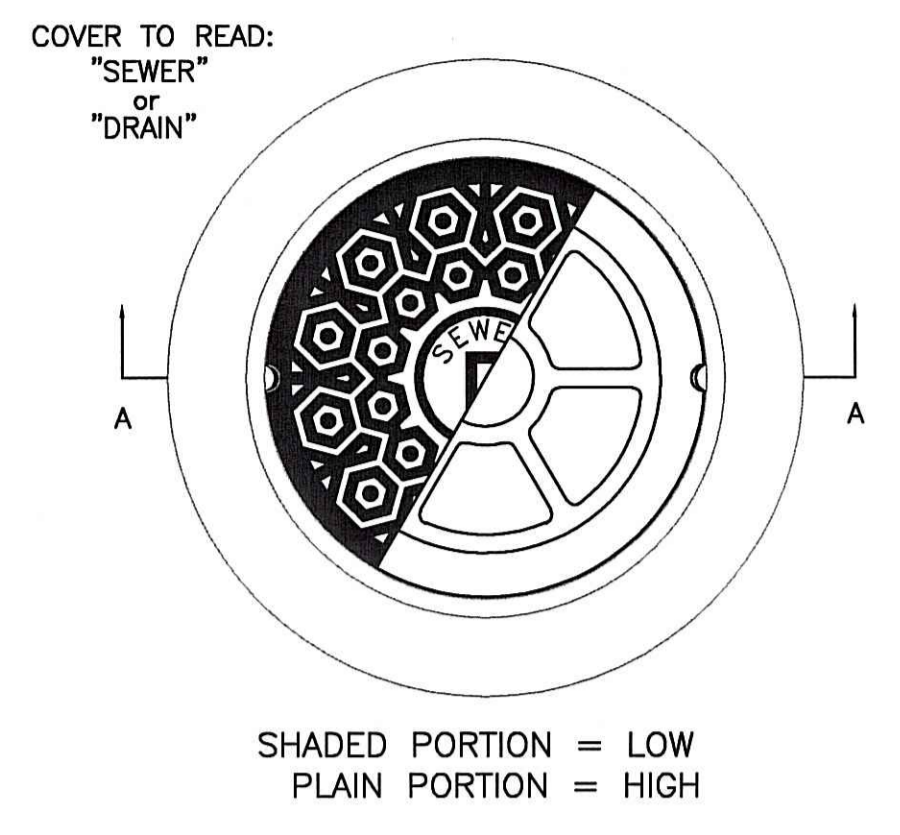
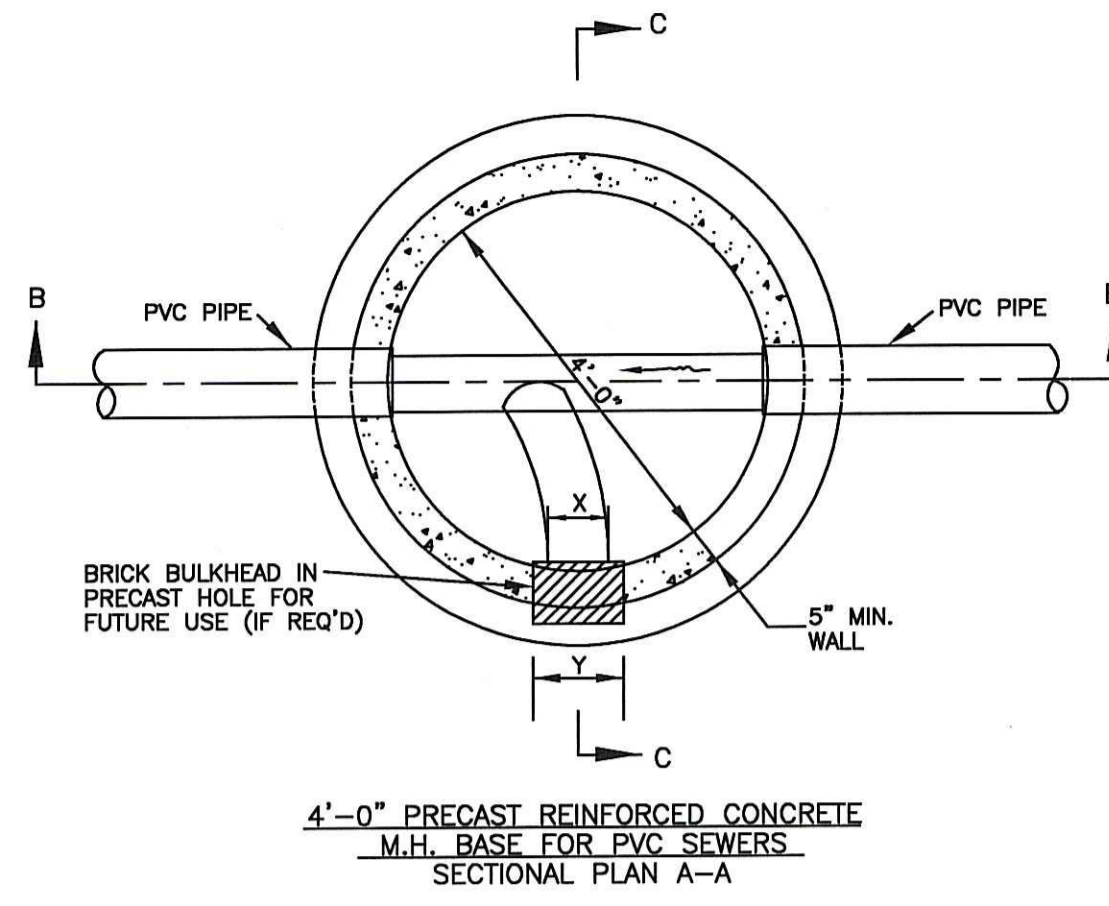
NO.	DATE	REVISION
1	5/17/07	KEY PLAN
2	6/28/07	RIDEM COMMENTS

DRAWING NUMBER

C-6

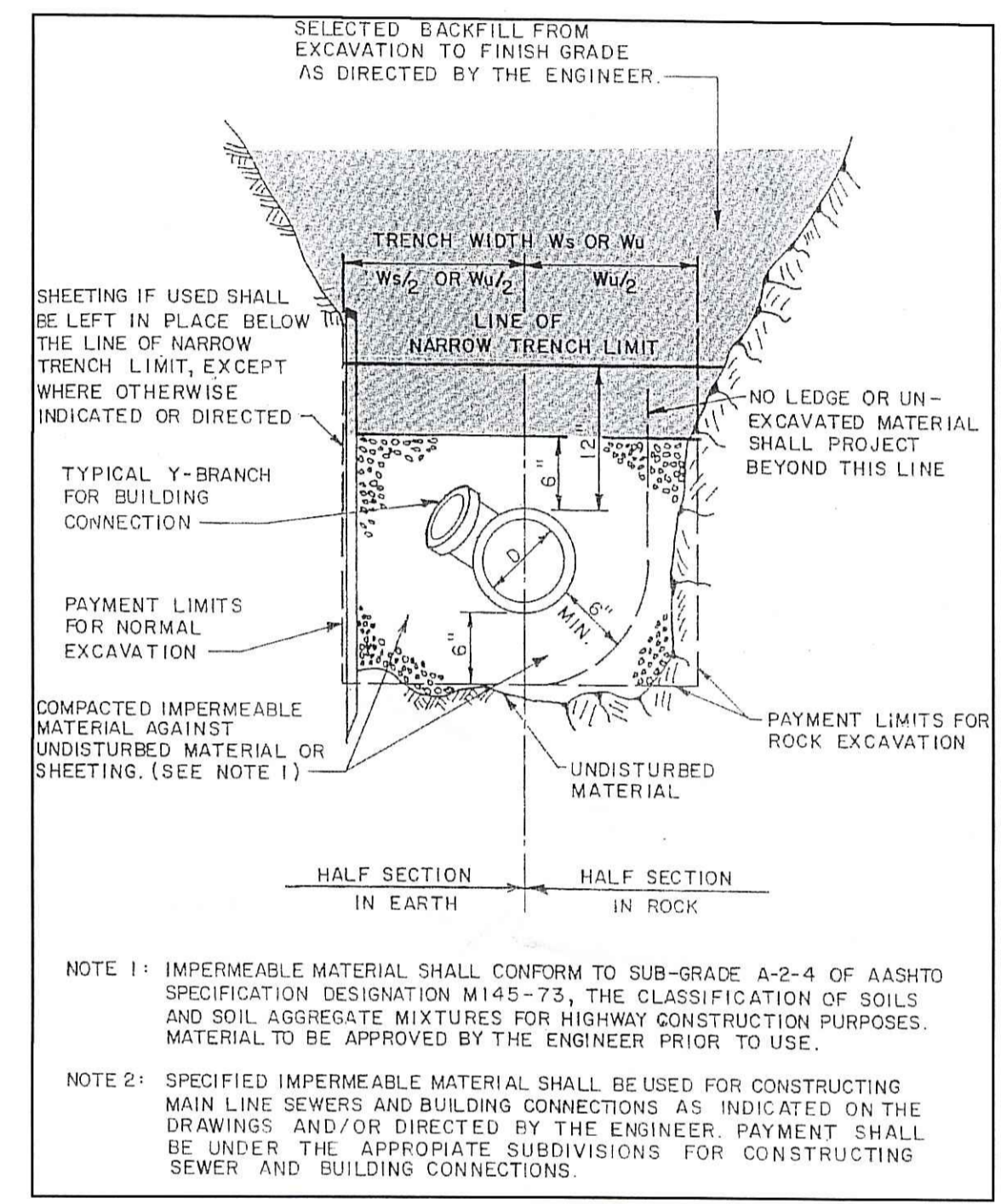
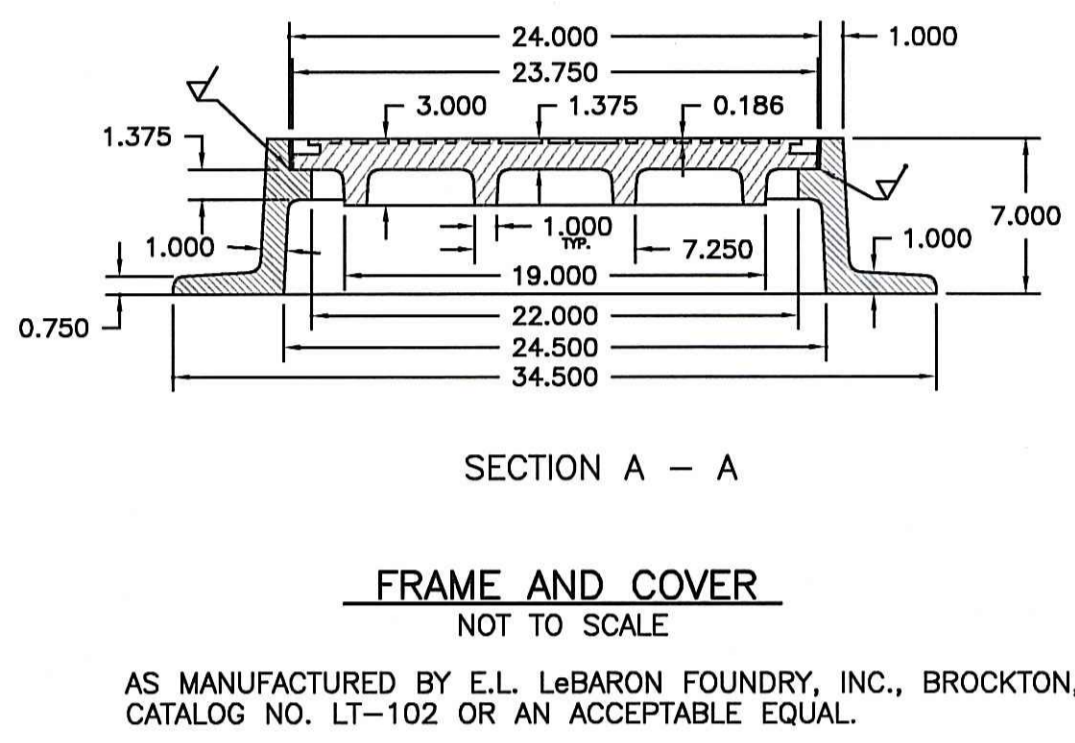
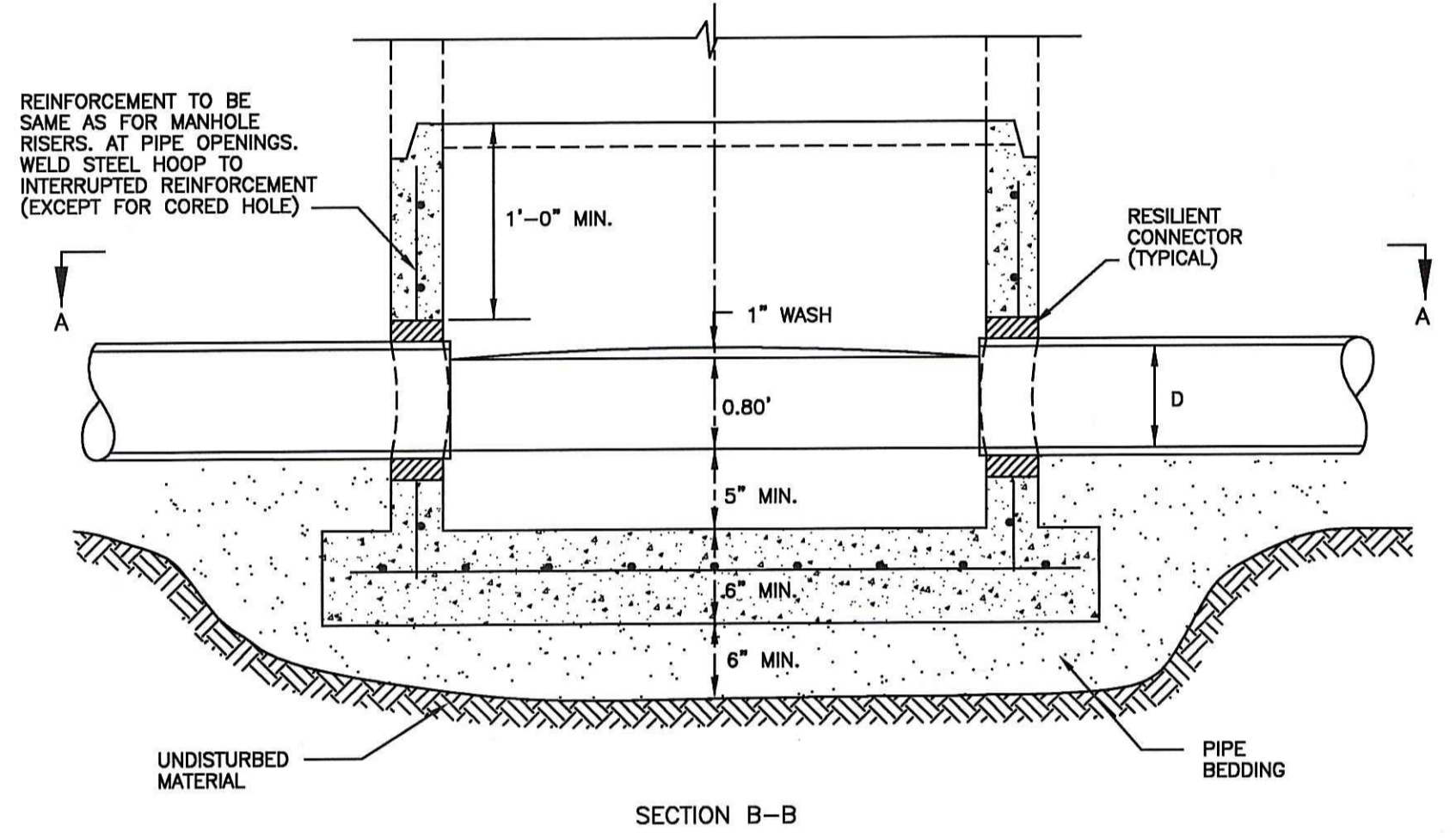
SHEET: 7 OF 8

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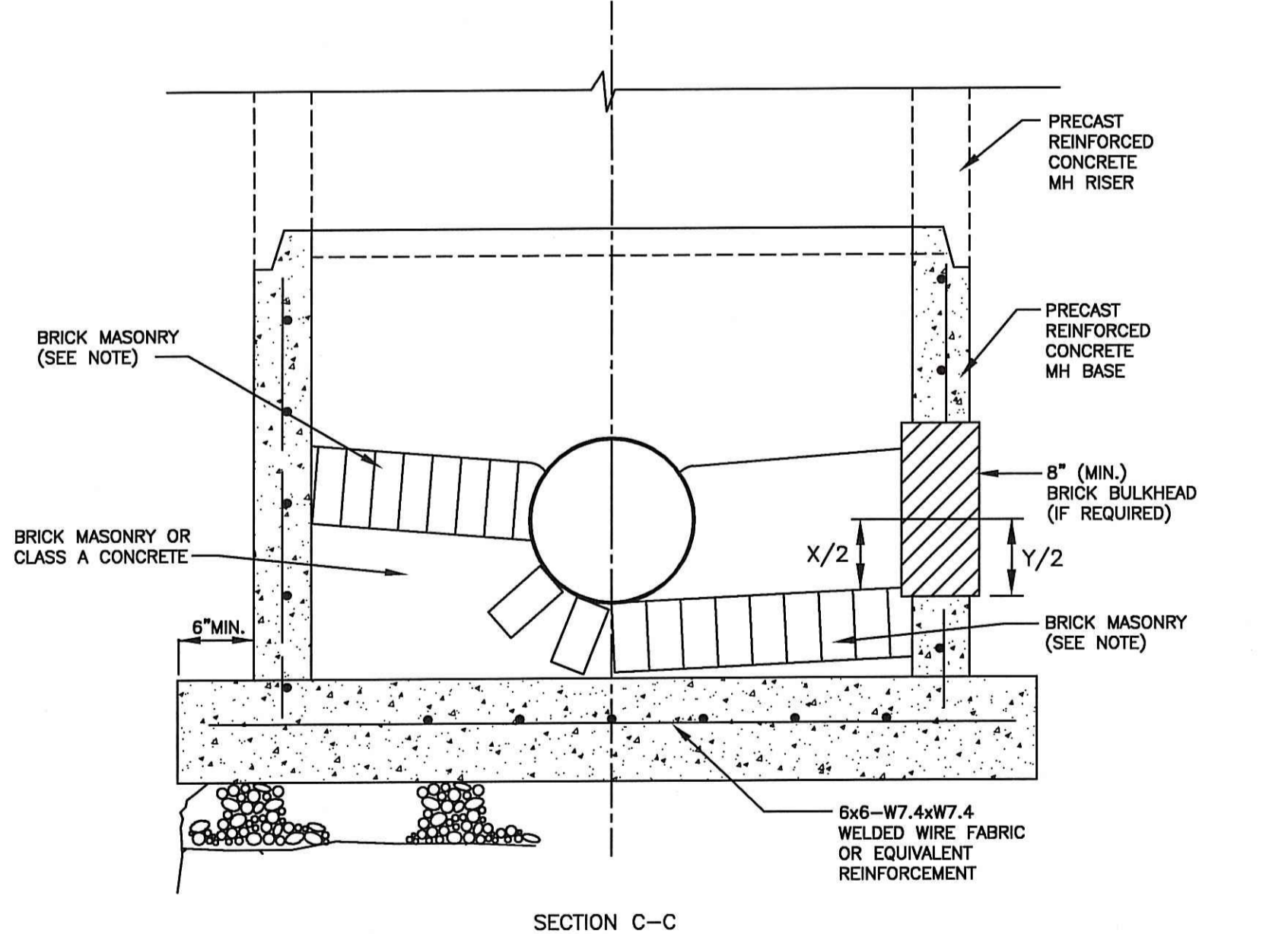


TRENCH WIDTH W_s OR W_u		
DIAMETER OF PIPE DIA.	W_u UNSHEETED	W_s SHEETED
12" AND SMALLER	3'-0"	4'-2"
15"	3'-2"	4'-4"
18"	3'-6"	4'-8"
21"	3'-10"	5'-0"
24"	4'-2"	5'-4"
27"	4'-6"	5'-8"
30"	4'-10"	6'-0"
36"	5'-6"	6'-8"
42"	6'-2"	7'-4"
48"	6'-10"	8'-0"

TRENCH WIDTHS TABLE
NOT TO SCALE
REFERENCE: SUPPLIED BY BETA ENGINEERING INC.



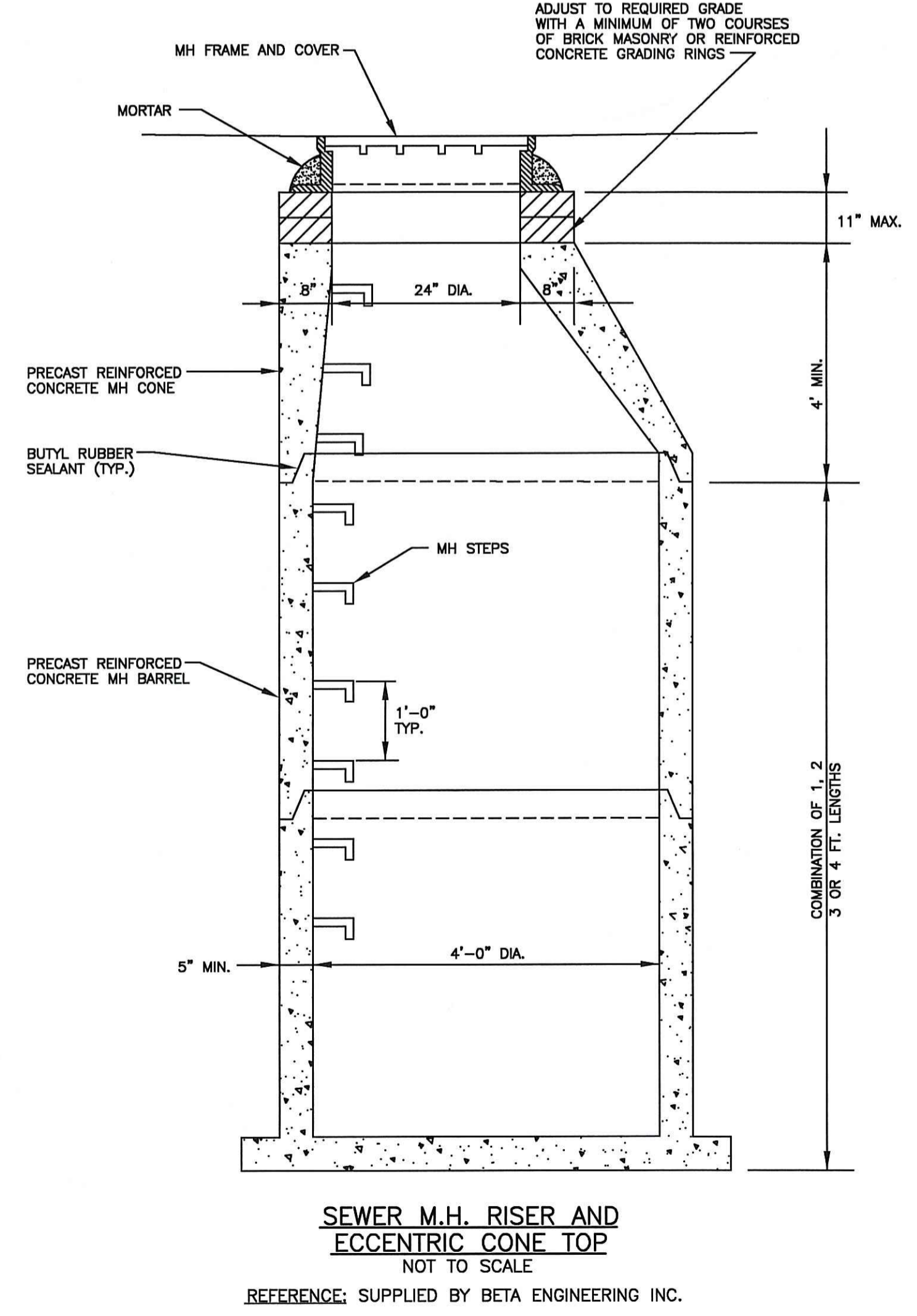
- NOTES:
- PIPE BEDDING MATERIAL TO CONSIST OF 3/4"-CRUSHED STONE AS APPROVED BY THE BURRILLVILLE SEWER COMMISSION.
 - ALL MANHOLES ARE TO BE PROVIDED WITH A MINIMUM 0.10 FOOT DEEP IN ELEVATION BETWEEN THE UPSTREAM AND DOWNSTREAM PIPELINE CONNECTIONS.



"X" (FUTURE PIPE DIA.) (IN.)	"Y" (PRECAST HOLE DIA.) (IN.)
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NOTE:
INVERT CHANNELS FOR SEWERS 18-IN. DIAMETER OR LARGER MAY BE CONSTRUCTED ENTIRELY OF CLASS A CONCRETE, IF DESIRED.

MANHOLE FOR PVC SEWERS
24" DIAMETER AND SMALLER
NOT TO SCALE
REFERENCE: SUPPLIED BY BETA ENGINEERING INC.



- NOTES:
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