

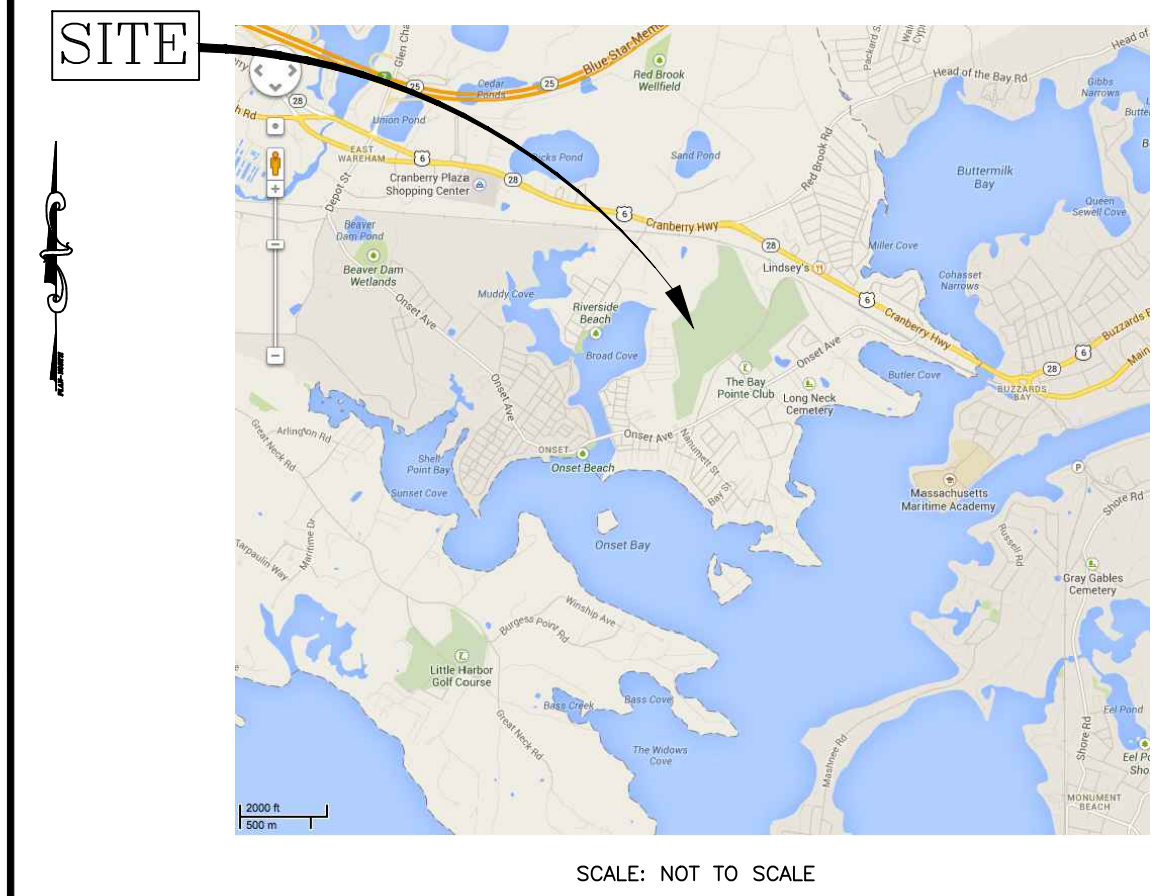


MODIFICATION TO SPECIAL USE PERMIT &
 SITE PLAN APPROVAL
 BAY POINTE CLUB MIXED USE
 DEVELOPMENT PHASE IV
 in
 WAREHAM, MASSACHUSETTS

OWNER / APPLICANT:
 BAY POINTE CLUB, LLC
 C/O STONESTREET, CORP.
 501 WAMPANOAG TRAIL, SUITE 400
 EAST PROVIDENCE, RHODE ISLAND 02915
 401.433.6900

LIST OF DRAWINGS

- 1) TITLE SHEET
- 2) EXISTING CONDITIONS PLAN
- 3) SITE LAYOUT PLAN
- 4) GRADING & UTILITY PLAN
- 5-8) CONSTRUCTION DETAIL SHEETS

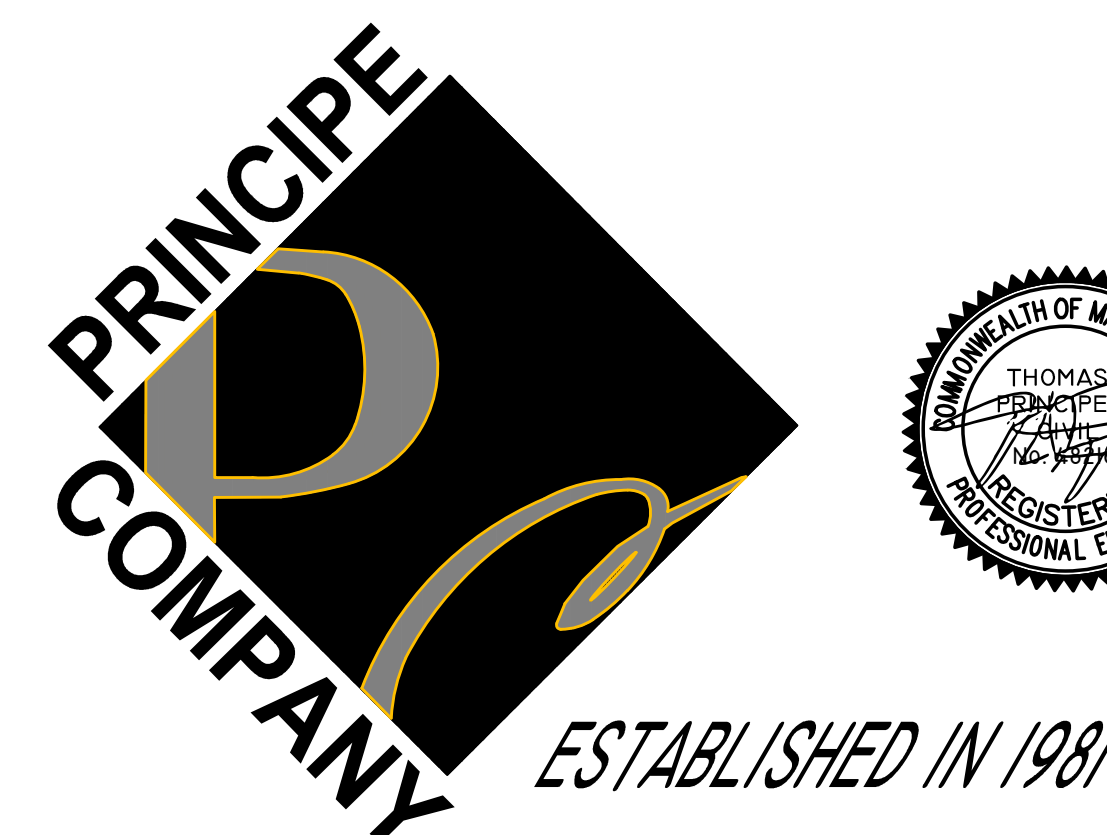


PROJECT DATA:

PLAT: 9 LOT: 1004.B
 NUMBER OF CONDO BUILDINGS: 7
 BUILDING A: 8 UNITS
 BUILDING B: 6 UNITS
 BUILDING C: 9 UNITS
 BUILDING D: 7 UNITS
 BUILDING E: 8 UNITS
 BUILDING F: 8 UNITS
 BUILDING G: 6 UNITS
 NUMBER OF TOTAL DWELLING UNITS: 52

ZONING CLASSIFICATION:

"CR" CONFERENCE RECREATIONAL DISTRICT



PREPARED BY:
PRINCIPE COMPANY, INC.
 ENGINEERING DIVISION
 PO BOX 298
 TIVERTON, RHODE ISLAND 02878
 401.816.5385
 PRINCIPEENGINEERING@GMAIL.COM

DATE: OCTOBER 1, 2021

EXISTING CONDITIONS AND PROPERTY LINE SURVEY BY:
 RICHARD LIPSITZ, PLS
 WARTERMAN ENGINEERING COMPANY
 46 SUTTON AVENUE
 EAST PROVIDENCE, RHODE ISLAND 02914
 PHONE: 401.438.5775
 FAX: 401.438.5773

LANDSCAPE ARCHITECTURE BY: DONALD LEIGHTON, ASLA
 BETA GROUP: GLA LANDSCAPE DIVISION
 6 BALCKSTONE PLACE
 LINCOLN, RI 02865
 PHONE: 401.333.2382

GOLF COURSE ARCHITECTURE BY: TIM GERRISH
 GARDNER & GERRISH LANDSCAPE ARCHITECTS, LLC
 192 WENTWORTH AVENUE
 EDGEWOOD, RI 02905
 PHONE: 401.263.7106

DEFINITIVE PLAN APPROVAL GRANTED
 BY: WAREHAM PLANNING BOARD
 DATE APPROVED: _____

 DATE SIGNED: _____

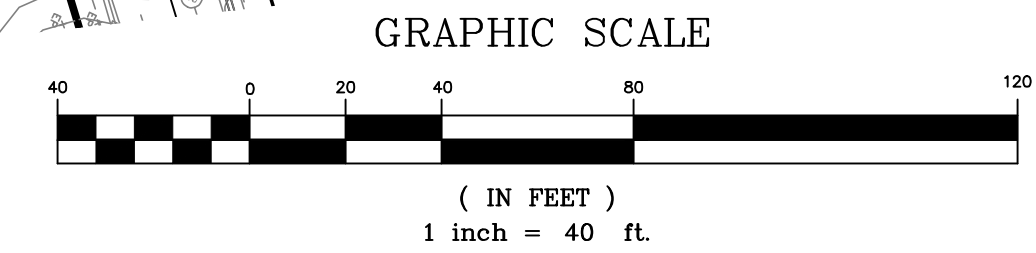
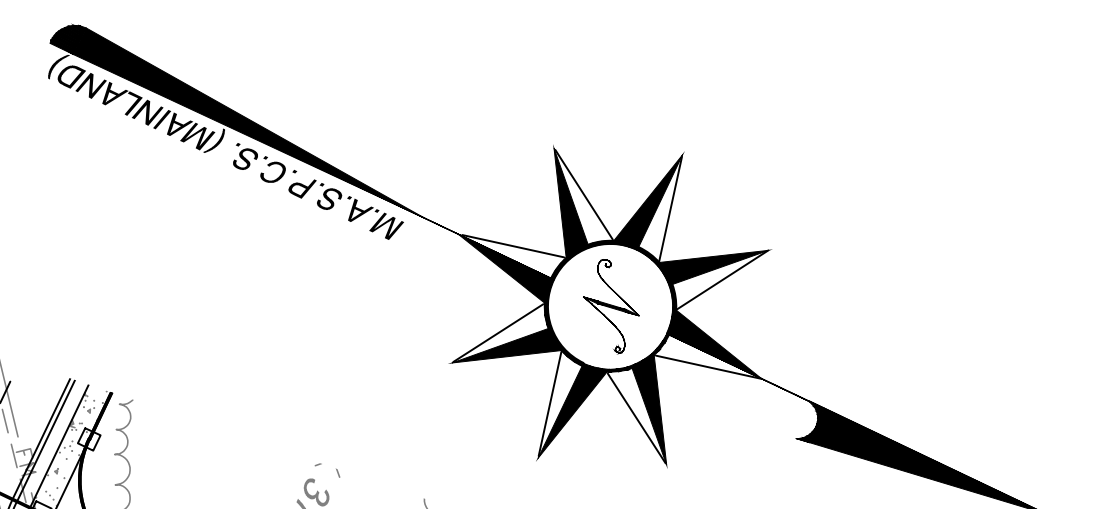
I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20-DAY STATUTORY APPEAL PERIOD

TOWN CLERK - WAREHAM MASSACHUSETTS

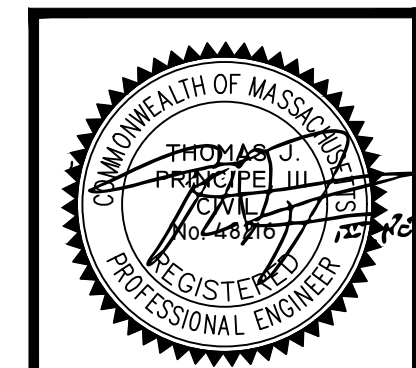
LEGEND & ABBREVIATIONS

- N/F - NOW OR FORMERLY
- A.P. - ASSESSORS PLAT
- S.F. - SQUARE FEET
- AC. - ACRES
- ± - PLUS OR MINUS
- STY - STORY
- WF - WOOD FRAMED
- SWP - STATE HIGHWAY PLAT
- RET. - RETAINING WALL
- PE.D. - PEDESTRIAN
- (FND.) - FOUND
- R/HB - RI HIGHWAY BOUND
- PK NAIL - MASONRY NAIL
- FE. - FLARED END
- ROP - REINFORCED CONCRETE PIPE
- CLF - CHAIN LINK FENCE
- INV. - INVERT
- x 10.80
- - - - - EXISTING SPOT GRADE
- - - - - EXISTING STONE WALL

- - - - - PROPERTY LINE
- - - - - ZONING SETBACK LINE
- - - - - EXISTING CONTOUR
- - - - - FENCE
- - - - - SEWER LINE
- - - - - DRAIN LINE
- - - - - WATER LINE
- - - - - GAS LINE
- - - - - ELECTRIC LINE
- - - - - SANITARY SEWER MANHOLE
- - - - - CATCH BASIN
- - - - - STORM DRAIN MANHOLE
- - - - - WATER GATE
- - - - - GAS VALVE
- - - - - ELECTRIC MANHOLE
- - - - - GRANITE BOUND
- - - - - DRILL HOLE
- - - - - IRON RODPIPE



EXISTING CONDITIONS PLAN



PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
PO BOX 298
TIVERTON, RI 02878
401.816.5385
PRINCIPLEENGINEERING@GMAIL.COM
ESTABLISHED IN 1981

REVISIONS			
No.	DATE	DRWN	CHKD

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
in
WAREHAM, MASSACHUSETTS

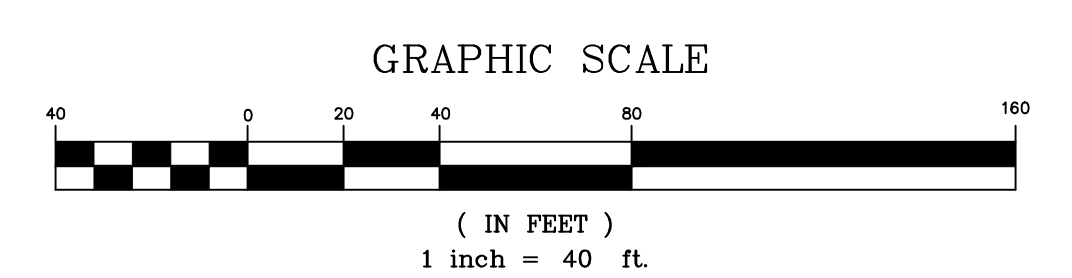
SCALE: 1"=80' SHEET NO: 2 OF 8
DRAWN BY: TJP DESIGN BY: TJP CHECKED BY: TJP
DATE: 10/1/21 PROJECT NO.: LD13-1 CEDA



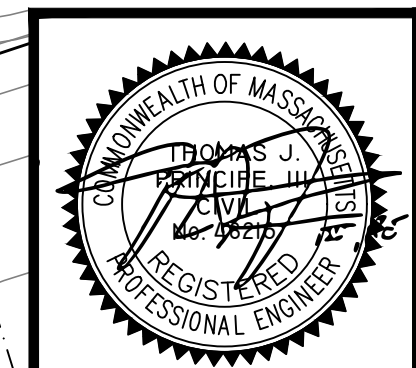
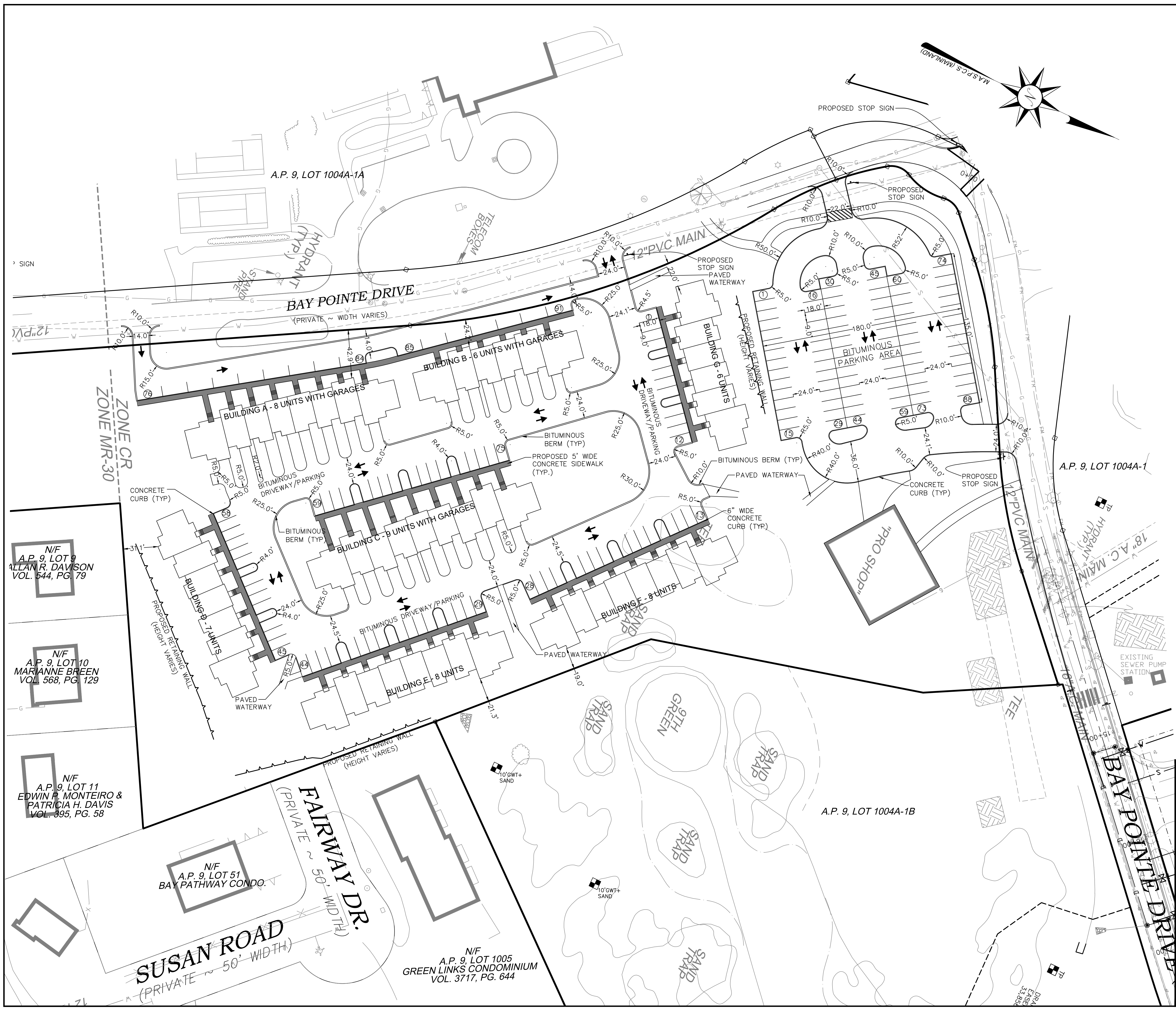
PARKING SUMMARY:
 OFF STREET RESIDENT PARKING:
 BUILDING A & B
 SPACES PROVIDED: 16 SPACES
 BUILDING C-G
 SPACES PROVIDED: 75 SPACES
 TOTAL PARKING SPACES: 91 SPACES
 PRO-SHOP PARKING LOT:
 SPACES PROVIDED: 88 SPACES

LEGEND & ABBREVIATIONS

N/F	- NOW OR FORMERLY	---	- PROPERTY LINE
A.P.	- ASSESSORS PLAT	---	- ZONING SETBACK LINE
S.F.	- SQUARE FEET	---	- EXISTING CONTOUR
AC.	- ACRES	---	- FENCE
±	- PLUS OR MINUS	---	- SEWER LINE
STY	- STORY	---	- DRAIN LINE
W/F	- WOOD FRAMED	---	- WATER LINE
SHP	- STATE HIGHWAY PLAT	---	- GAS LINE
RET.	- RETAINING WALL	---	- ELECTRIC LINE
PED.	- PEDESTRIAN	---	- SANITARY SEWER MANHOLE
(FND.)	- FOUND	---	- CATCH BASIN
R/HB	- RI HIGHWAY BOUND	---	- STORM DRAIN MANHOLE
PK NAIL	- MASONRY NAIL	---	- WATER GATE
FE	- FLARED END	---	- GAS VALVE
RCP	- REINFORCED CONCRETE PIPE	---	- ELECTRIC MANHOLE
CLF	- CHAIN LINK FENCE	---	- GRANITE BOUND
INV.	- INVERT	---	- DRILL HOLE
x 10.80	- EXISTING SPOT GRADE	---	- IRON ROODPIPE
---	- EXISTING STONE WALL	---	- PROPOSED LOT LINE
---		---	- PROPOSED EASEMENT
---		---	- PROPOSED WATER LINE
---		---	- PROPOSED SEWER LINE
---		---	- PROPOSED SEWER FORCE MAIN LINE
---		---	- PROPOSED EDGE OF PAVEMENT
---		---	- PROPOSED RETAINING WALL
---		---	- PROPOSED CONCRETE BOUND
---		---	- PROPOSED PARKING SPACES



SITE LAYOUT PLAN



PRINCIPE COMPANY, INC.
 ENGINEERING DIVISION
 PO BOX 298
 TIVERTON, RI 02878
 401.816.5385
 PRINCIPLEENGINEERING@GMAIL.COM

REVISIONS

No.	DATE	DRWN	CHKD

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
 in
 WAREHAM, MASSACHUSETTS

SCALE: 1"=40' SHEET NO: 3 OF 8
 DRAWN BY: TJP DESIGN BY: TJP CHECKED BY: TJP
 DATE: 10/1/21 PROJECT NO.: LD13-1 CEDA

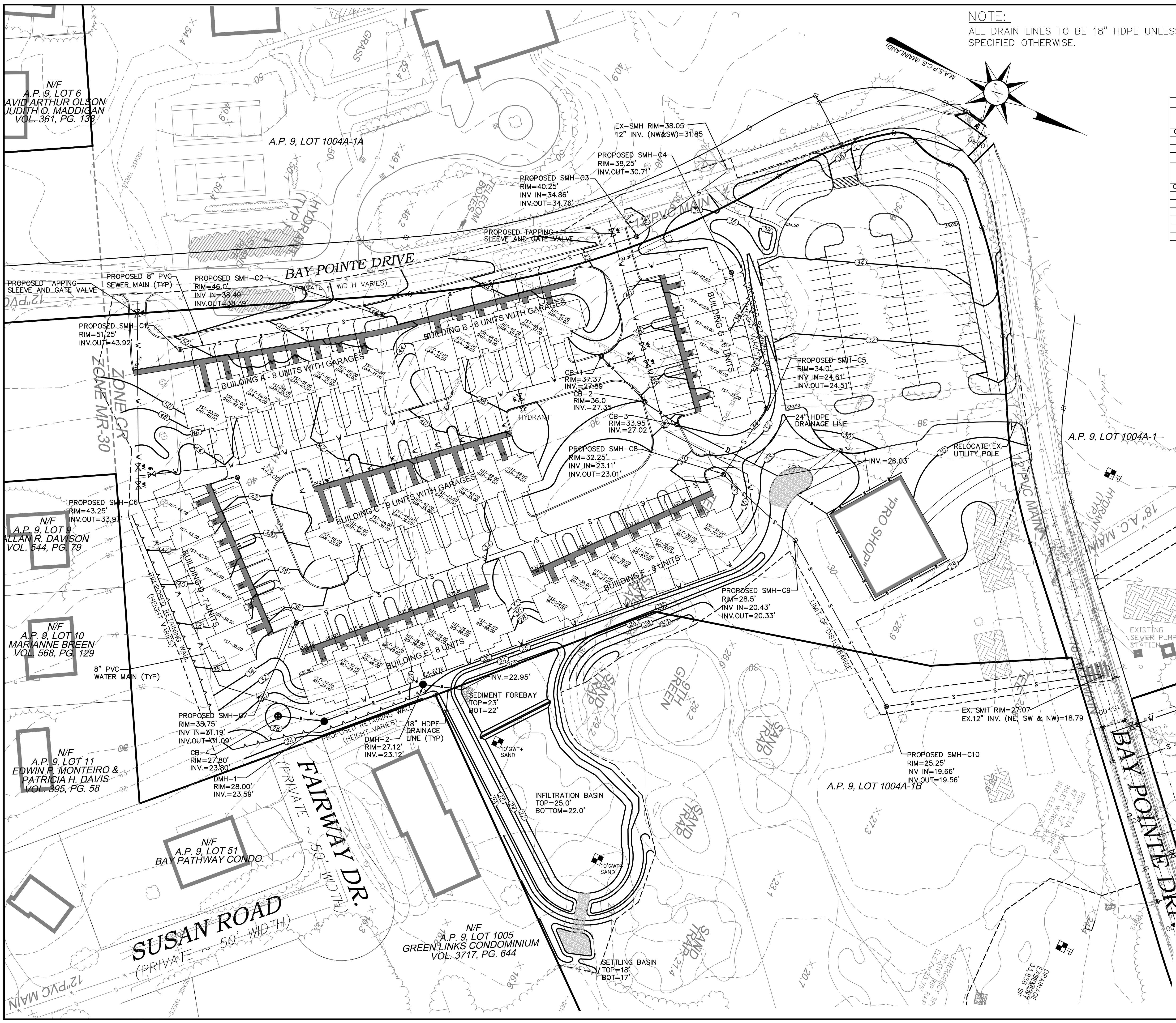
N/F
 A.P. 9, LOT 9
 ALLAN R. DAVISON
 VOL. 544, PG. 79

N/F
 A.P. 9, LOT 10
 MARIANNE BREEN
 VOL. 568, PG. 129

N/F
 A.P. 9, LOT 11
 EDWIN P. MONTEIRO &
 PATRICIA H. DAVIS
 VOL. 395, PG. 58

N/F
 A.P. 9, LOT 51
 BAY PATHWAY CONDO.

N/F
 A.P. 9, LOT 1005
 GREEN LINKS CONDOMINIUM
 VOL. 3717, PG. 644



NOTE:
ALL DRAIN LINES TO BE 18" HDPE UNLESS SPECIFIED OTHERWISE.

DRAINAGE PIPE SCHEDULE					
FROM/TO STRUCTURE	PIPE DIAMETER/MATERIAL	LENGTH	INV. 'FROM' EL.	INV. 'TO' EL.	SLOPE '/'
CB4 TO MH-1	18" HDPE	41'	23.83'	23.62'	0.005
MH-1 TO MH-2	18" HDPE	93'	23.62'	23.15'	0.005
MH-2 TO FOREBAY	18" HDPE	40'	23.15'	22.95'	0.005
CB-1 TO CB-2	18" HDPE	53'	27.89'	27.35'	0.01
CB-2 TO CB-3	18" HDPE	31'	27.35'	27.02'	0.01
CB-3 TO FOREBAY	24" HDPE	98'	27.02'	26.03'	0.01

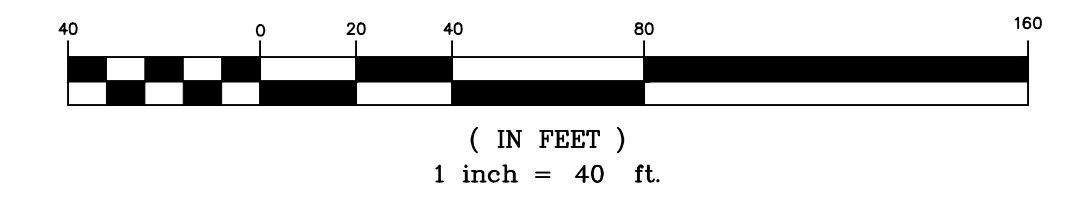
SEWER PIPE SCHEDULE (BUILDINGS A & B)					
FROM/TO STRUCTURE	PIPE DIAMETER/MATERIAL	LENGTH	INV. OUT	INV. IN	SLOPE '/'
C3 TO EX SMH	8" PVC	97'	34.76'	31.85'	0.03
C2 TO C3	8" PVC	235'	38.39'	34.86'	0.015
C1 TO C2	8" PVC	181'	43.92'	38.49'	0.03

SEWER PIPE SCHEDULE (BUILDINGS C-G)					
FROM/TO STRUCTURE	PIPE DIAMETER/MATERIAL	LENGTH (FT)	INV. OUT (FT)	INV. IN (FT)	SLOPE '/'
C10 TO EX SMH	8" PVC	193	19.56	18.79	0.004
C9 TO C10	8" PVC	168	20.33	19.66	0.004
C8 TO C9	8" PVC	86	23.01	20.43	0.03
C7 TO C8	8" PVC	399	31.09	23.11	0.02
C6 TO C7	8" PVC	139	33.97	31.19	0.02
C5 TO C6	8" PVC	70	24.51	23.11	0.02
C4 TO C5	8" PVC	122	30.71	24.61	0.05

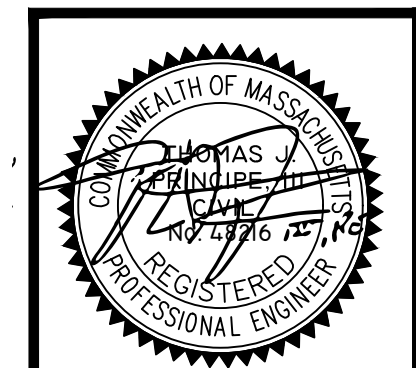
LEGEND & ABBREVIATIONS

- N/F - NOW OR FORMERLY
- A.P. - ASSESSORS PLAT
- S.F. - SQUARE FEET
- AC. - ACRES
- + - PLUS OR MINUS
- STY - STORY
- WF - WOOD FRAMED
- SHP - STATE HIGHWAY PLAT
- RET. - RETAINING WALL
- PED. - PEDESTRIAN
- (FND) - FOUND
- (RIB) - RI HIGHWAY BOUND
- PK NAIL - MASONRY NAIL
- FE - FLARED END
- RCP - REINFORCED CONCRETE PIPE
- CLF - CHAIN LINK FENCE
- INV. - INVERT
- x 10.80 - EXISTING SPOT GRADE
- - - - - EXISTING STONE WALL
- - - - - PROPERTY LINE
- - - - - ZONING SETBACK LINE
- - - - - EXISTING CONTOUR
- - - - - FENCE
- - - - - SEWER LINE
- - - - - DRAIN LINE
- - - - - WATER LINE
- - - - - GAS LINE
- - - - - ELECTRIC LINE
- - - - - SANITARY SEWER MANHOLE
- - - - - CATCH BASIN
- - - - - STORM DRAIN MANHOLE
- - - - - WATER GATE
- - - - - GAS VALVE
- - - - - ELECTRIC MANHOLE
- - - - - GRANITE BOUND
- - - - - DRILL HOLE
- - - - - IRON ROD PIPE
- - - - - PROPOSED LOT LINE
- - - - - PROPOSED EASEMENT
- - - - - PROPOSED WATER LINE
- - - - - PROPOSED SEWER LINE
- - - - - PROPOSED EDGE OF PAVEMENT
- - - - - PROPOSED CONCRETE BOUND
- - - - - PROPOSED RETAINING WALL

GRAPHIC SCALE



GRADING & UTILITY PLAN



PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
PO BOX 298
TIVERTON, RI 02878
401.816.5385
PRINCIPEENGINEERING@GMAIL.COM

REVISIONS			
No.	DATE	DRWN	CHKD

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
in
WAREHAM, MASSACHUSETTS

SCALE: 1"=40'
DRAWN BY: TJP DESIGN BY: TJP CHECKED BY: TJP
DATE: 10/1/21 PROJECT NO.: LD13-1 CEDA

N/F
A.P. 9, LOT 6
AVID ARTHUR OLSON
JUDITH O. MADDIGAN
VOL. 361, PG. 138

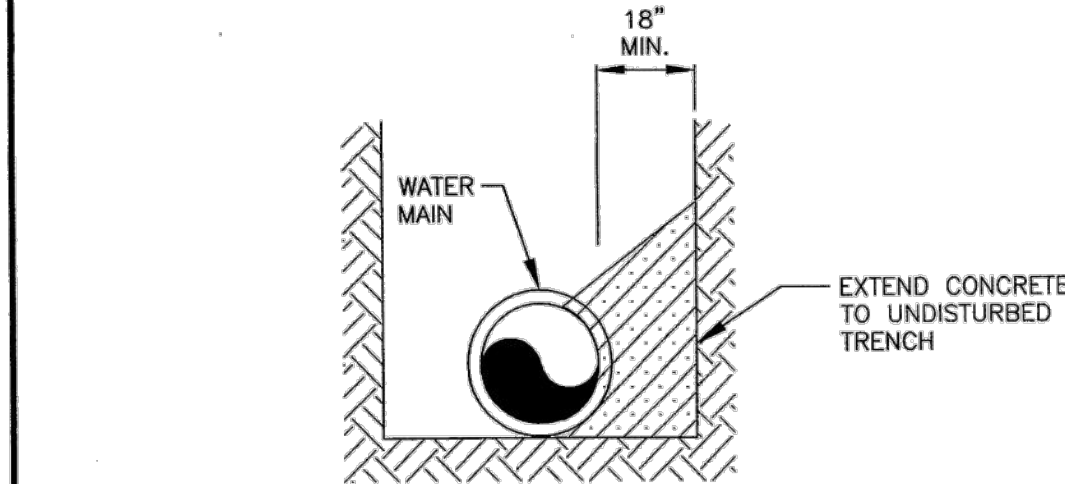
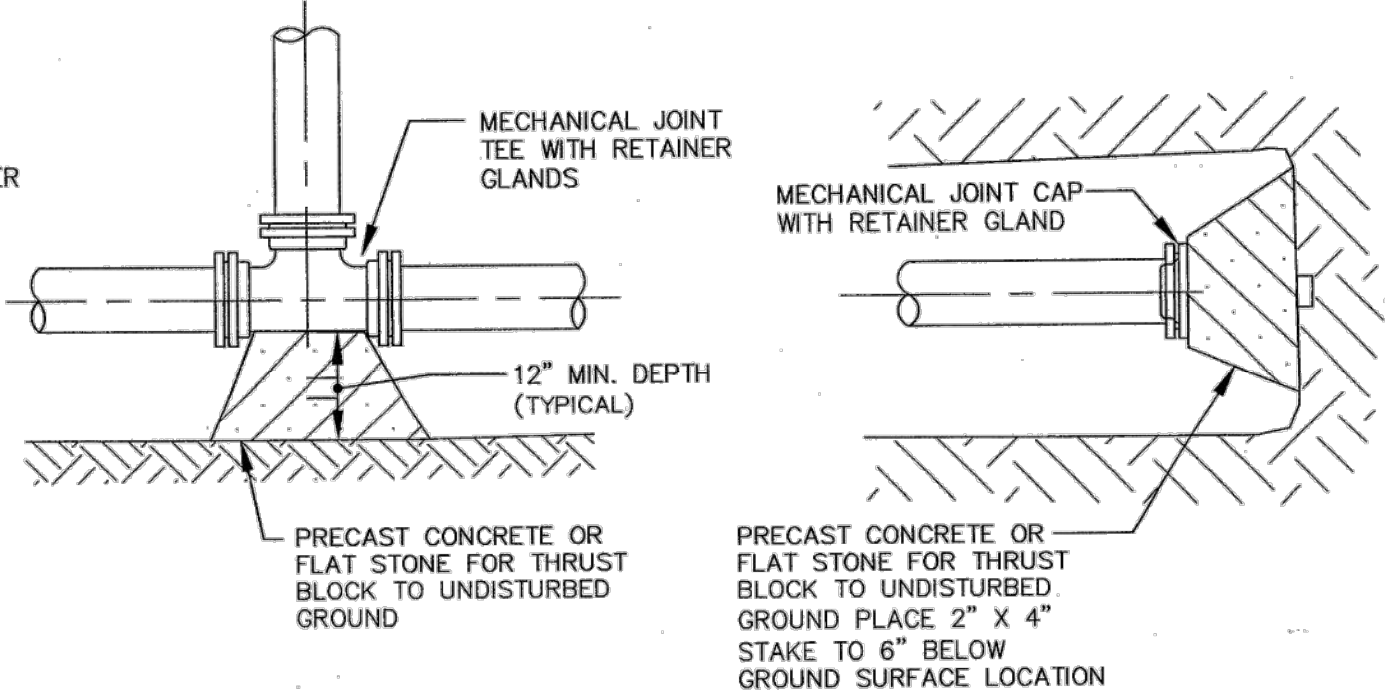
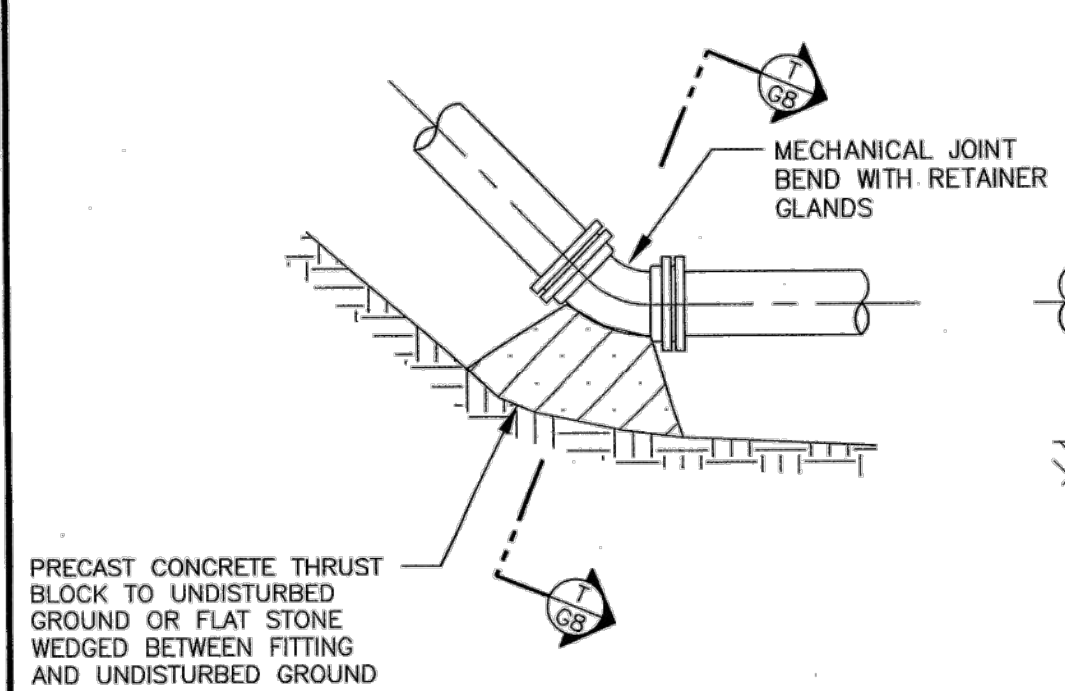
N/F
A.P. 9, LOT 9
ALLAN R. DAVISON
VOL. 544, PG. 79

N/F
A.P. 9, LOT 10
MARIANNE BREEN
VOL. 568, PG. 129

N/F
A.P. 9, LOT 11
EDWIN P. MONTEIRO &
PATRICIA H. DAVIS
VOL. 395, PG. 58

N/F
A.P. 9, LOT 51
BAY PATHWAY CONDO.

N/F
A.P. 9, LOT 1005
GREEN LINKS CONDOMINIUM
VOL. 3717, PG. 644



TYPICAL THRUST BLOCK DETAILS

NOT TO SCALE

T
CS NOT TO SCALE

PIPE DIAMETER	BENDS				TEE
	11.25	22.5	45	90	
6	1	1	1	2	1.5
8	1	1	2	3	2.5
12	1	2	3.5	6.5	5

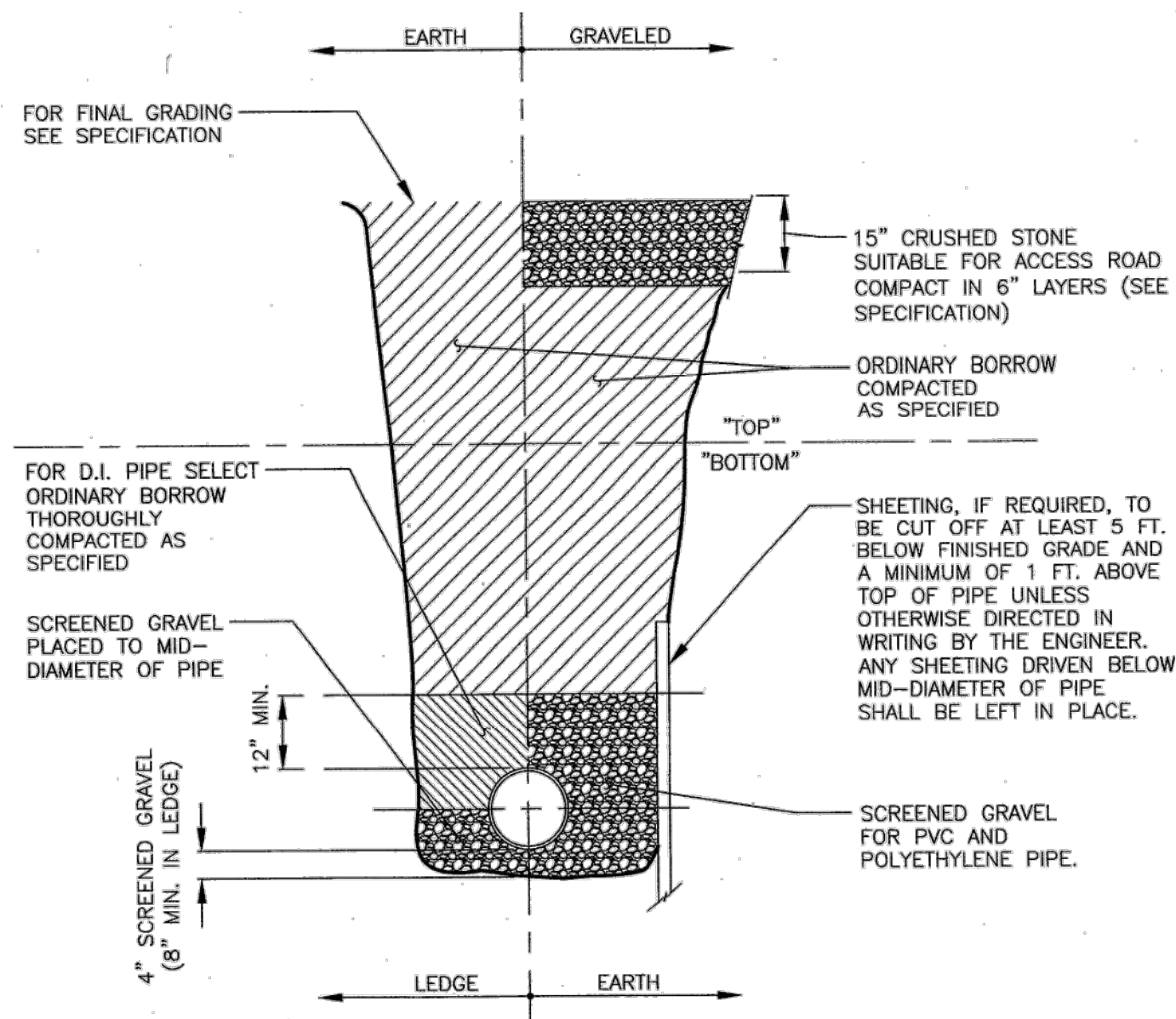
THRUST BLOCK BEARING AREA (SF)
(BASED UPON 100 PSI WATER PRESSURE
AND 3000 PSF BEARING LOAD CAPACITY)

THRUST BLOCK TABLE

	FITTINGS	RESTRAINED LENGTH (ft)
DUCTILE IRON WATER MAIN	8" 90° BEND	31
	8" 60° BEND	18
	8" 45° BEND	13
	8" 30° BEND	8
	8" 22.5° BEND	6
	8" 11.25° BEND	3
	8" x 8" TEE	52
PVC WATER MAIN	10" x 8" REDUCER	45
	8" x 6" REDUCER	34
	12" 90° BEND	58
	12" 60° BEND	35
	12" 45° BEND	24
	12" 30° BEND	16
	12" 22.5° BEND	12
	12" x 11.25° BEND	6
	12" x 12" TEE	87
	12" x 8" REDUCER	59
12" DEAD END	104	

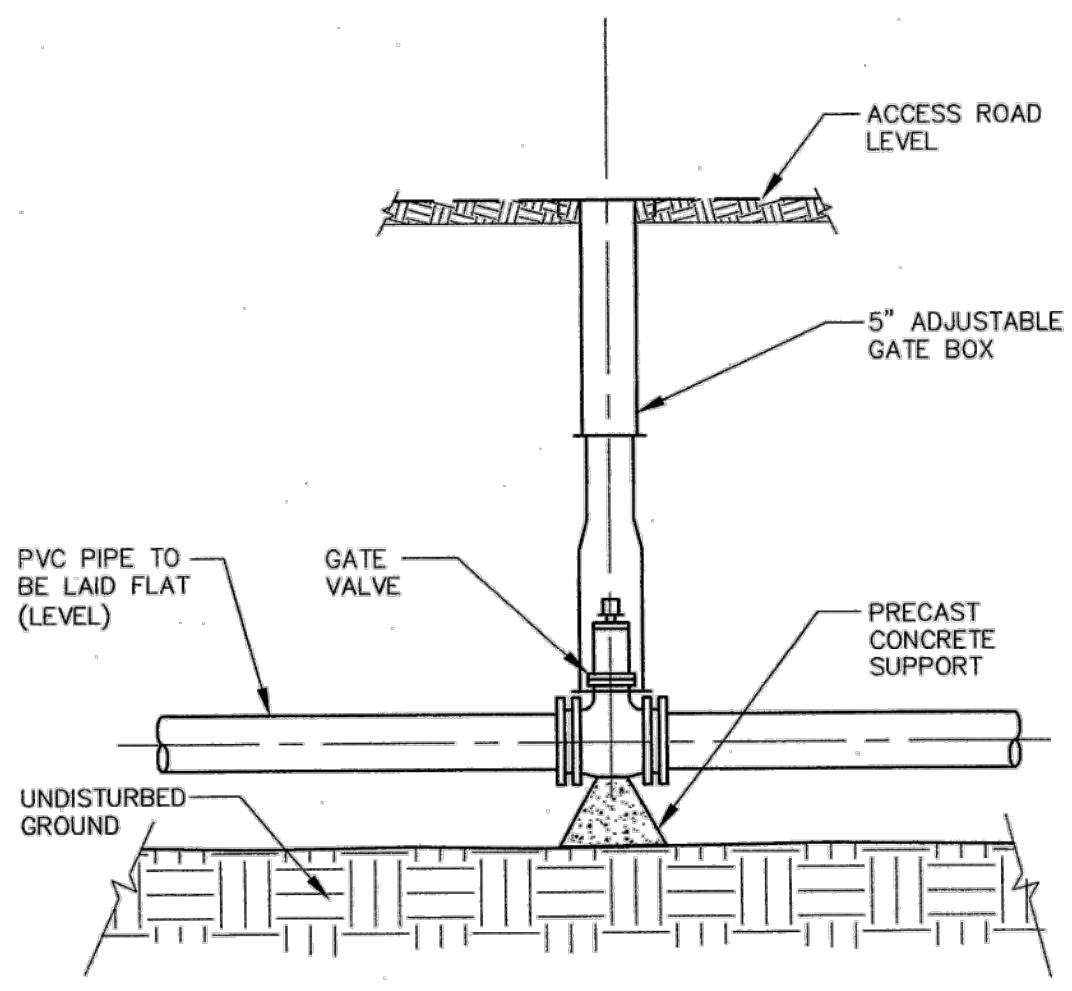
MINIMUM ONE RESTRAINED PIPE TO PIPE JOINT

PUSH-ON-JOINT RESTRAINT TABLE



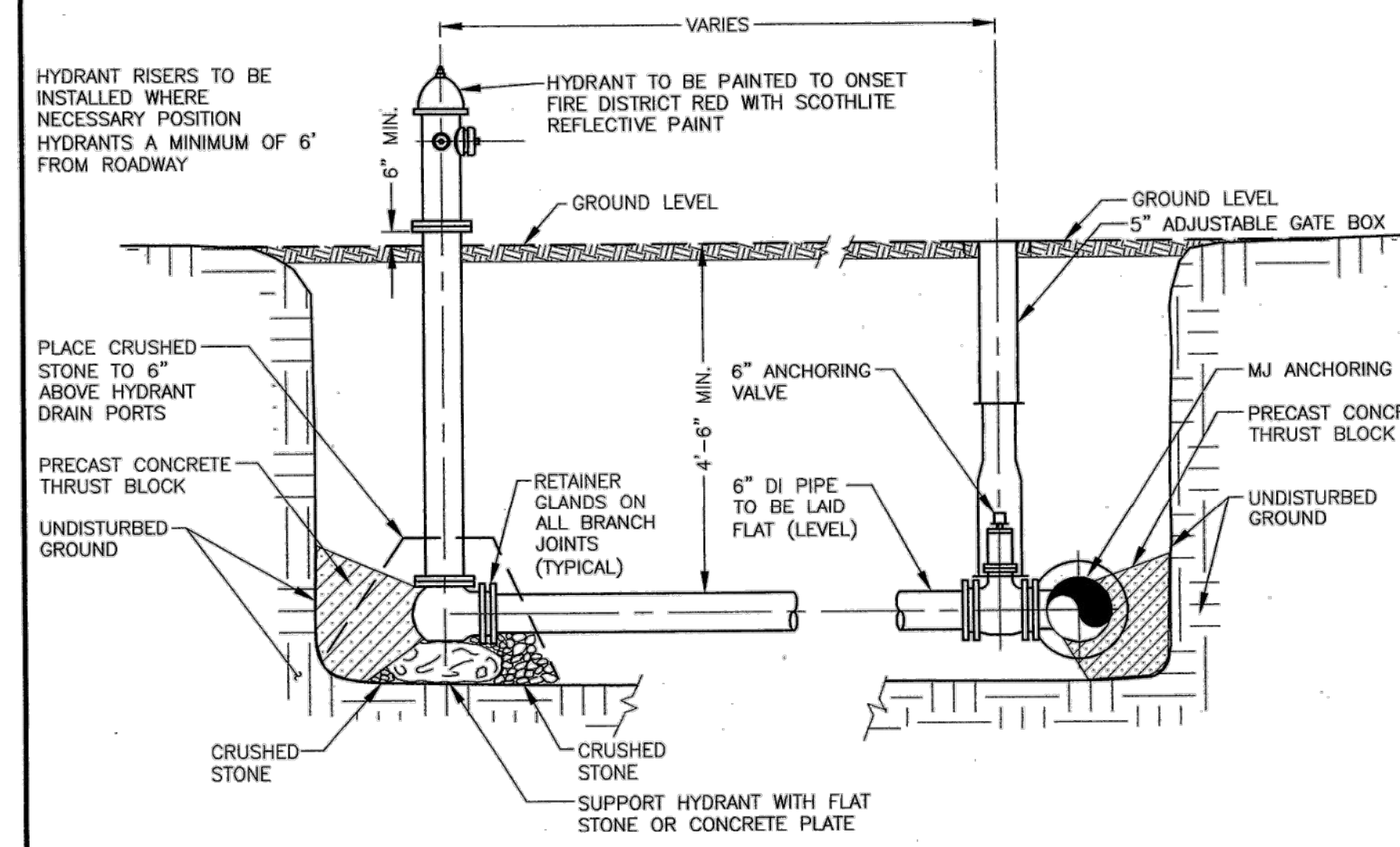
TYPICAL TRENCH

NOT TO SCALE



TYPICAL GATE VALVE INSTALLATION

NOT TO SCALE

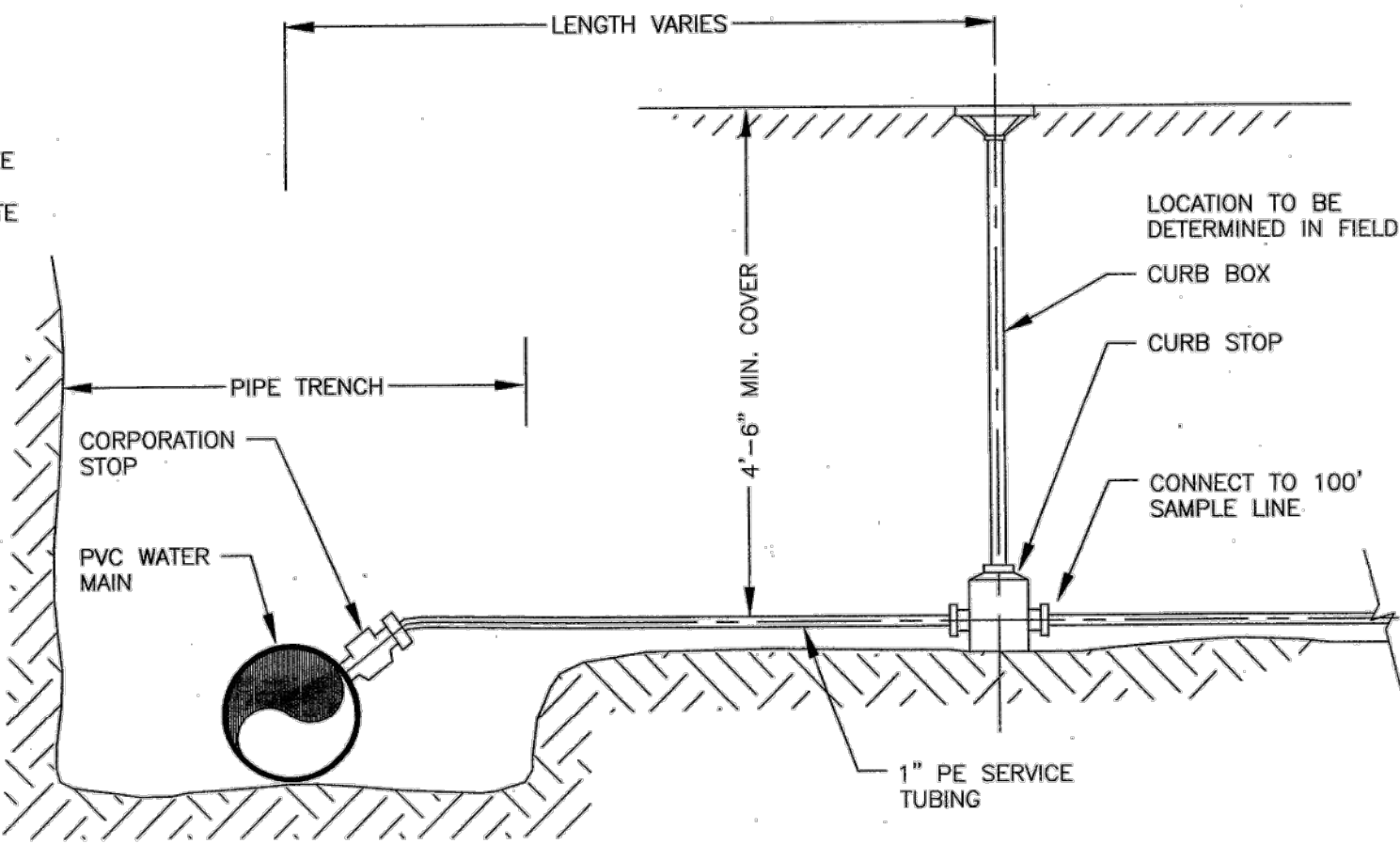


TYPICAL HYDRANT ASSEMBLY INSTALLATION

NOT TO SCALE

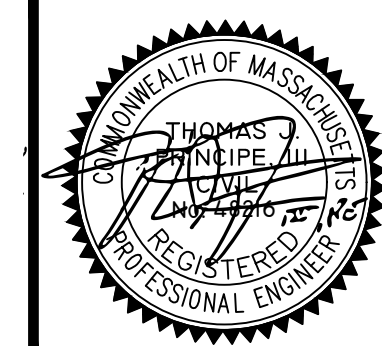
NOTES:

- FOR HYDRANTS INSTALLED AT DEAD END OF WATER MAINS: INSTALL VALVE WITH RESTRAINED JOINTS AND ONE FULL LENGTH OF PIPE BETWEEN VALVE AND HYDRANT WITH RESTRAINED JOINTS.



100' SAMPLE LINE

NOT TO SCALE



PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
PO BOX 298
TIVERTON, RI 02878
401.816.5385
PRINCIPEENGINEERING@GMAIL.COM

REVISIONS			
No.	DATE	DRWN	CHKD

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
in
WAREHAM, MASSACHUSETTS

SCALE: AS NOTED	SHEET NO: 5 OF 8
DRAWN BY: TJP	DESIGN BY: TJP
DATE: 10/1/21	CHECKED BY: TJP
PROJECT NO.: LD13-1 CEDA	

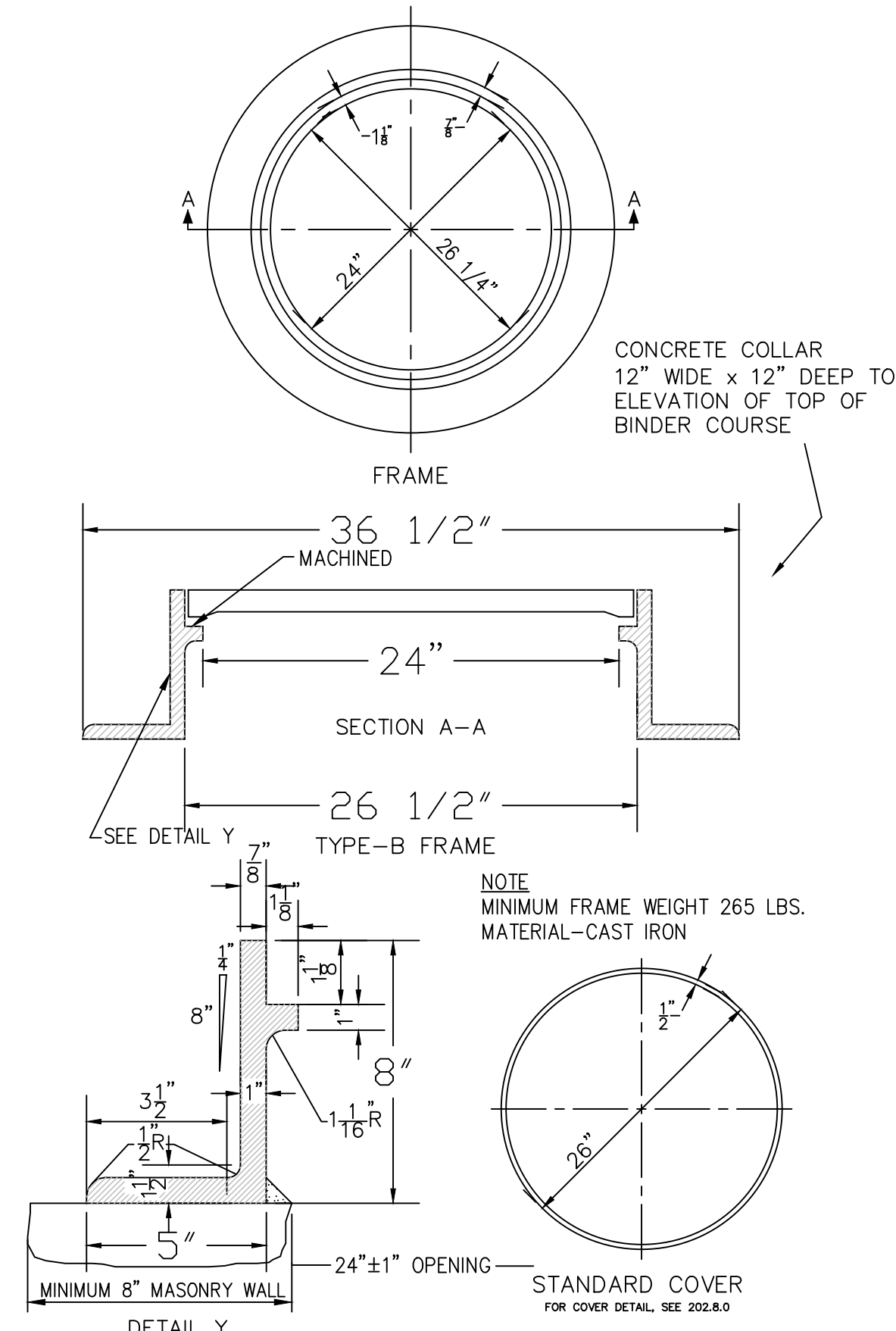
STORM DRAINAGE SYSTEM MAINTENANCE PLAN:

THE FOLLOWING LIST OF MAINTENANCE TASKS AND FREQUENCIES MUST BE ADHERED TO IN ORDER TO INSURE A SUCCESSFUL LONG TERM OPERATION OF THE STORM DRAINAGE SYSTEM.

1. DURING CONSTRUCTION ACTIVITIES ALL EROSION CONTROLS ON THE SITE SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER AN EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAIN IN A TWENTY FOUR (24) HOUR PERIOD.
2. SEDIMENTS SHALL BE REMOVED FROM ALL BASINS IMMEDIATELY AFTER SITE STABILIZATION.
3. ALL TRASH, LITTER AND OTHER DEBRIS SHALL BE REMOVED FROM ALL STORM WATER INLET AND OUTLET STRUCTURES A MINIMUM OF TWICE PER YEAR. THESE STRUCTURES SHALL ALSO BE INSPECTED TWICE PER YEAR. INSPECTIONS SHALL BE PERFORMED SEVERAL TIMES WITHIN THE FIRST SIX MONTHS OF OPERATION.
4. INSPECTIONS OF ALL CATCH BASINS SHALL OCCUR ON AN ANNUAL BASIS TO CHECK FOR DEBRIS REMOVAL (SEDIMENT AND HYDROCARBONS) AND STRUCTURAL INTEGRITY OR DAMAGE. SUCH DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY.
5. REPAIRS OR REPLACEMENT OF INLET/OUTLET STRUCTURES OR ANY ELEMENT OF THE FACILITY SHALL BE DONE WITHIN THIRTY (30) DAYS OF DEFICIENCY REPORTS. IF AN EMERGENCY SITUATION IS IMMINENT THEN REPAIR/REPLACEMENT SHALL BE DONE IMMEDIATELY TO AVERT FAILURE OR DANGER TO NEARBY RESIDENTS.
6. MAKE REPAIRS IMMEDIATELY USING APPROPRIATE STONE SIZES. DO NOT PLACE STONES ABOVE FINISHED GRADE.
7. ALL REMOVED SEDIMENTS AND DEBRIS SHALL BE DISPOSED OF OFF SITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
8. ALL OUTLET STRUCTURES AND OUTFLOW CHANNELS WILL BE INSPECTED ANNUALLY. INSPECTIONS WILL BE ACCOMPLISHED SEVERAL TIMES DURING THE FIRST SIX MONTHS OF OPERATION, ESPECIALLY AFTER RAINFALL EVENTS TO CHECK FOR CLOGGING OR, CONVERSELY, TOO RAPID OF A RELEASE.
9. REPAIRS OR REPLACEMENT OF INLET/OUTLET STRUCTURES, RIP-RAP CHANNELS, FENCES, OR OTHER ELEMENTS OF THE FACILITY WILL BE DONE WITHIN 30 DAYS OF DEFICIENCY REPORTS. IF AN EMERGENCY SITUATION IS IMMINENT THEN REPAIR/REPLACEMENT MUST BE DONE IMMEDIATELY TO AVERT FAILURE OR DANGER TO NEARBY RESIDENTS.
10. ALL SEDIMENT GENERATED DURING CONSTRUCTION AND AS A RESULT OF MAINTENANCE OF THE DRAINAGE SYSTEM MUST BE DISPOSED OF PROPERLY. SEDIMENT SHALL NOT BE DISPOSED OF IN OR NEAR STATE OR FEDERAL REGULATED WATERS.
11. ADDITIONAL BMP INSPECTION/MAINTENANCE MEASURES OUTLINED WITHIN THE PROJECT STORMWATER POLLUTION PREVENTION PLAN SHALL BE ADHERED TO.

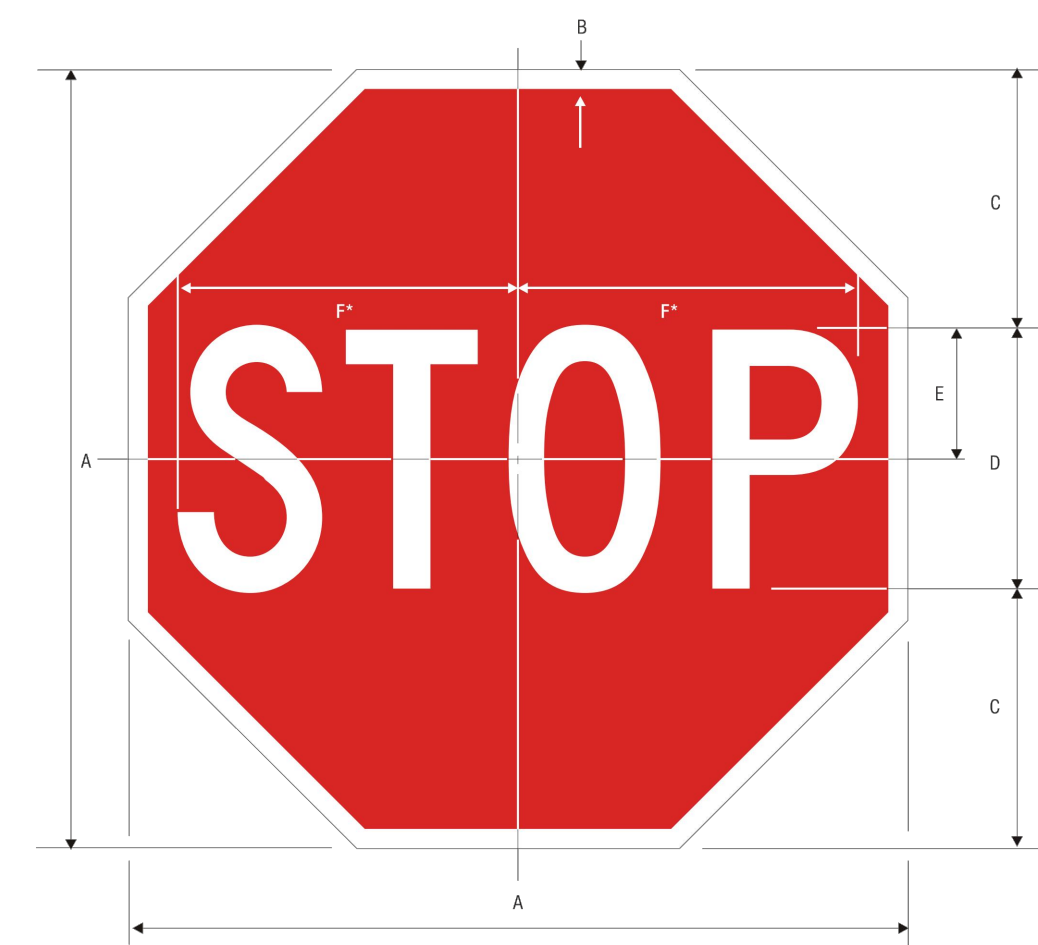
DRAINAGE AND UTILITY NOTES:

1. UTILITY LOCATION VERIFICATION IS TO INCLUDE TEST HOLES AS NEEDED.
2. WATER MAINS AND APPURTENANCES, INCLUDING SERVICE CONNECTIONS SHALL BE INSTALLED IN CONFORMITY WITH THE SPECIFICATIONS OF THE ONSET WATER DEPARTMENT AND IN ACCORDANCE WITH THE TOWN'S MASTER OR STUDY WATER PLAN.
3. THE CONTRACTOR IS REQUIRED TO SCHEDULE AND COORDINATE WATER SERVICE INSTALLATIONS, SHUT DOWNS AND DISRUPTIONS WHICH AFFECT THE SITE AND SITE ADJACENT USERS WITH THE LOCAL WATER AUTHORITY AND THE LOCAL FIRE DEPARTMENT.
4. UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE, FIRE ALARM CABLE, TELEVISION AND GAS SERVICES SHALL BE INSTALLED PER THE REQUIREMENTS OF THE APPLICABLE SITE UTILITY PROVIDER
5. METALLIC WARNING TAPE SHALL BE INSTALLED 12" ABOVE ALL STORM DRAIN AND OTHER UTILITIES.
6. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.



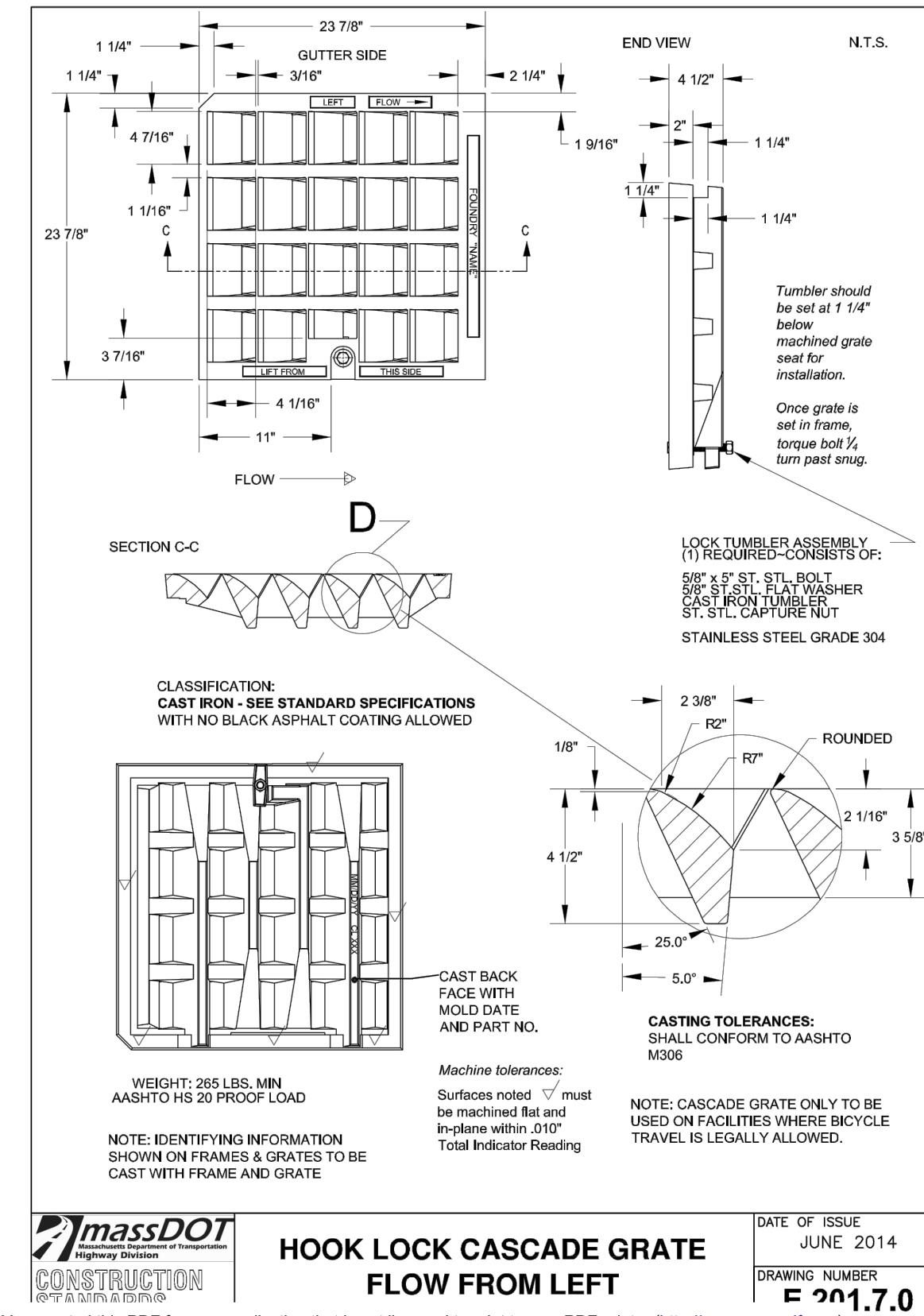
MANHOLE FRAME & COVER
NOT TO SCALE

NOTE: DRAIN MANHOLE COVERS SHALL HAVE THE WORD "DRAIN" CAST INTO THEM WITH THREE INCH LETTERING



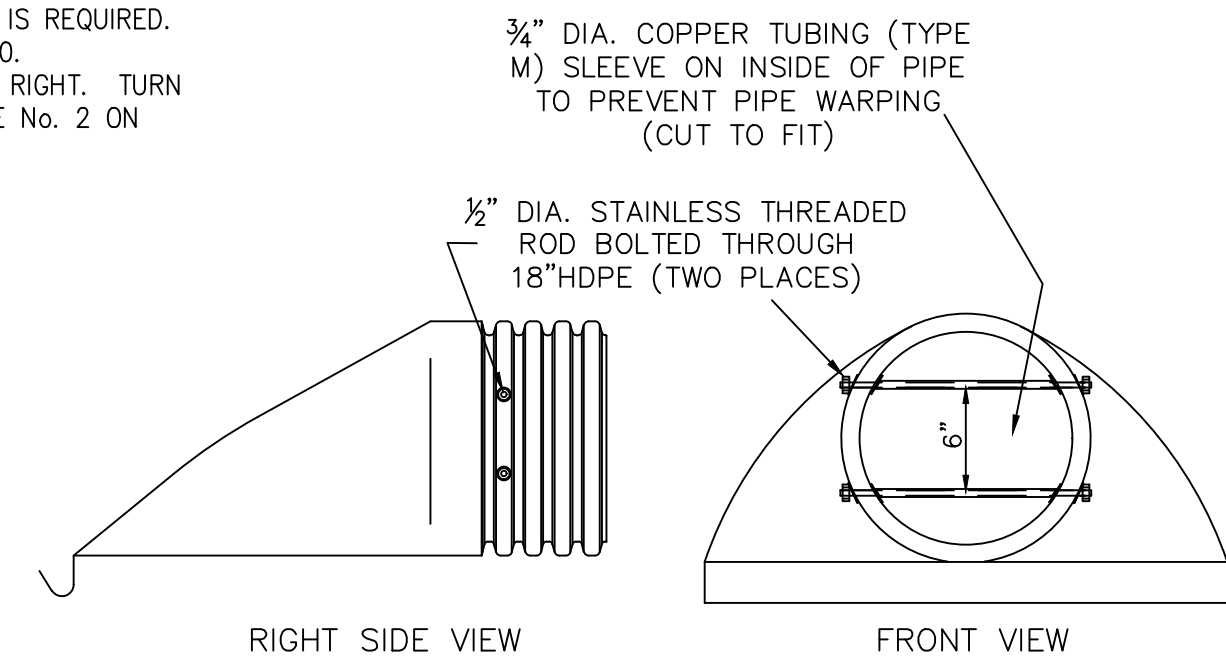
A	B	C	D	E	F
18	375	6	6C	3	775
24	525	8	8C	4	1100
30	775	10	10C	5	1525
36	1025	12	12C	6	2050
48	1500	16	16C	8	2800

COLORS: LEGEND - WHITE (RETROREFLECTIVE)
BACKGROUND - RED (RETROREFLECTIVE)

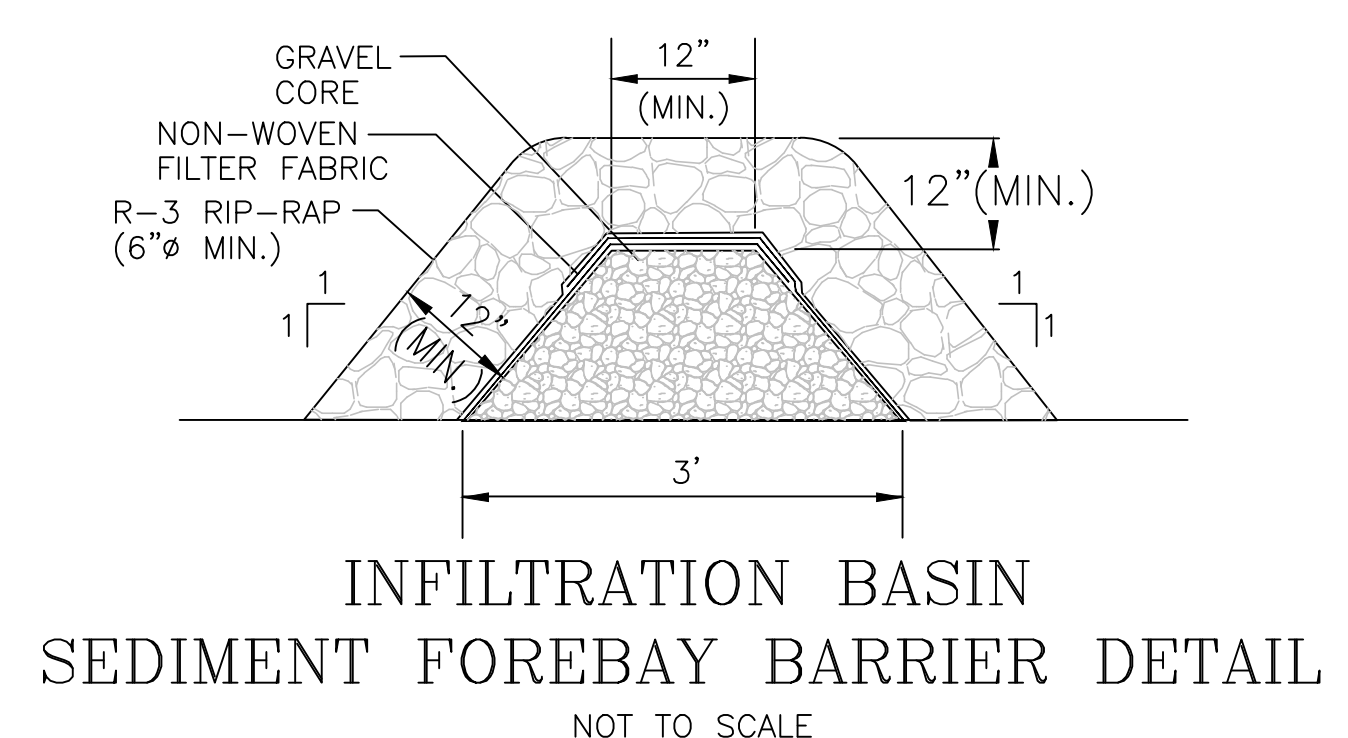


- NOTES:**
1. THE MASSACHUSETTS STANDARD FRAME IS TO BE USED, DETAILS AND DIMENSIONS NOT SHOWN ABOVE ARE TO BE THE SAME AS THOSE SHOWN ON CONSTRUCTION STANDARD 201.6.0.
 2. A (3)THREE FLANGE FRAME IS TO BE USED WHEN A CURB INLET IS REQUIRED.
 3. GRATE DETAILS ARE SHOWN ON CONSTRUCTION STANDARD 201.7.0.
 4. THE GRATE AS PLACED ABOVE IS FOR WATER COMING FROM THE RIGHT. TURN THE GRATE 180° FOR A WATER FLOW FROM THE LEFT. SEE NOTE No. 2 ON CONSTRUCTION STANDARD 201.7.0. (TO BE USED AT ALL CATCH BASINS)
 5. THE GRATE IS ONLY SHOWN SCHEMATICALLY.

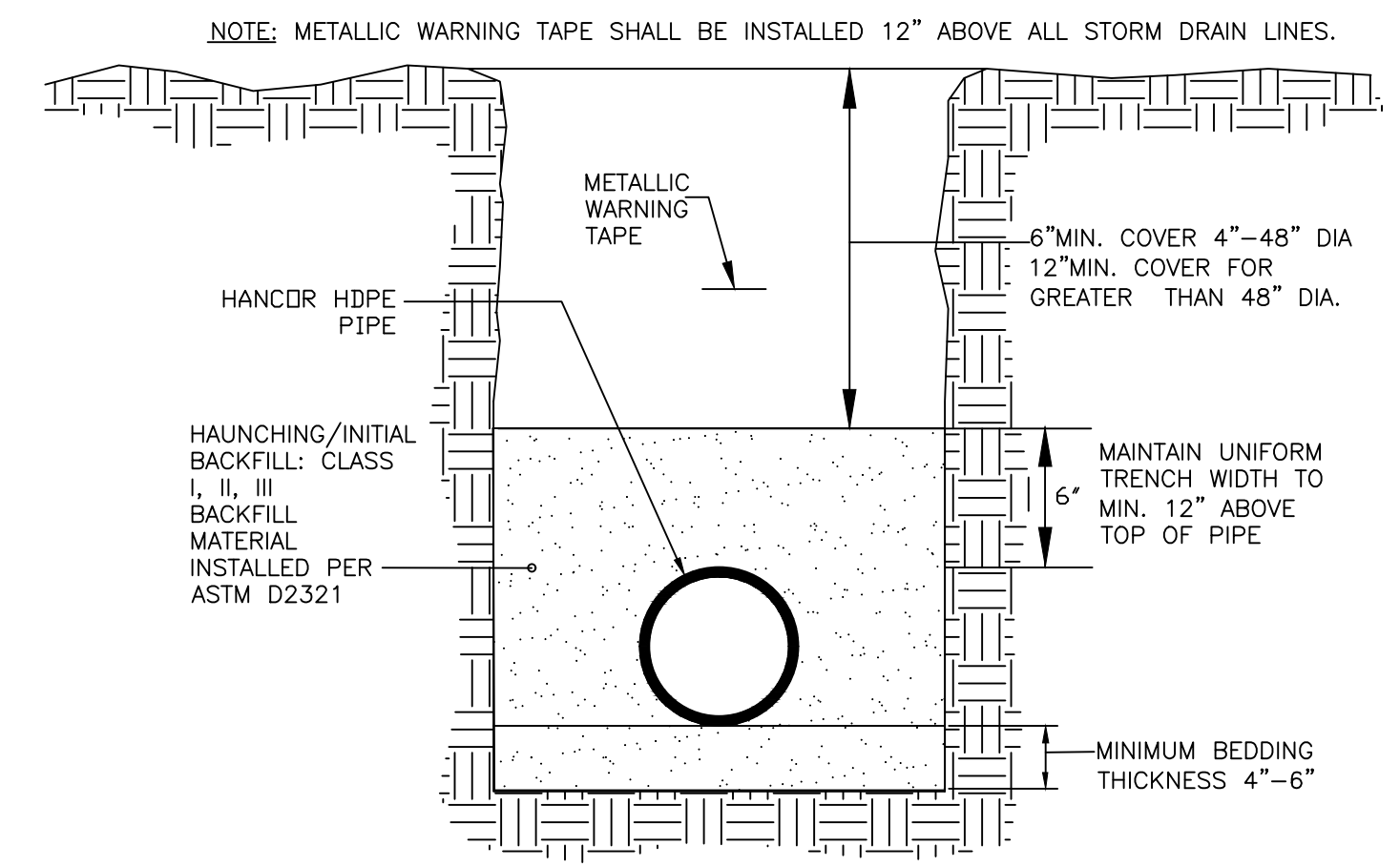
FRAME FOR MASSACHUSETTS CASCADE GRATE
NOT TO SCALE



TRASH RACK DETAIL FOR HDPE FLARED END SECTION
NTS



INFILTRATION BASIN SEDIMENT FOREBAY BARRIER DETAIL
NOT TO SCALE

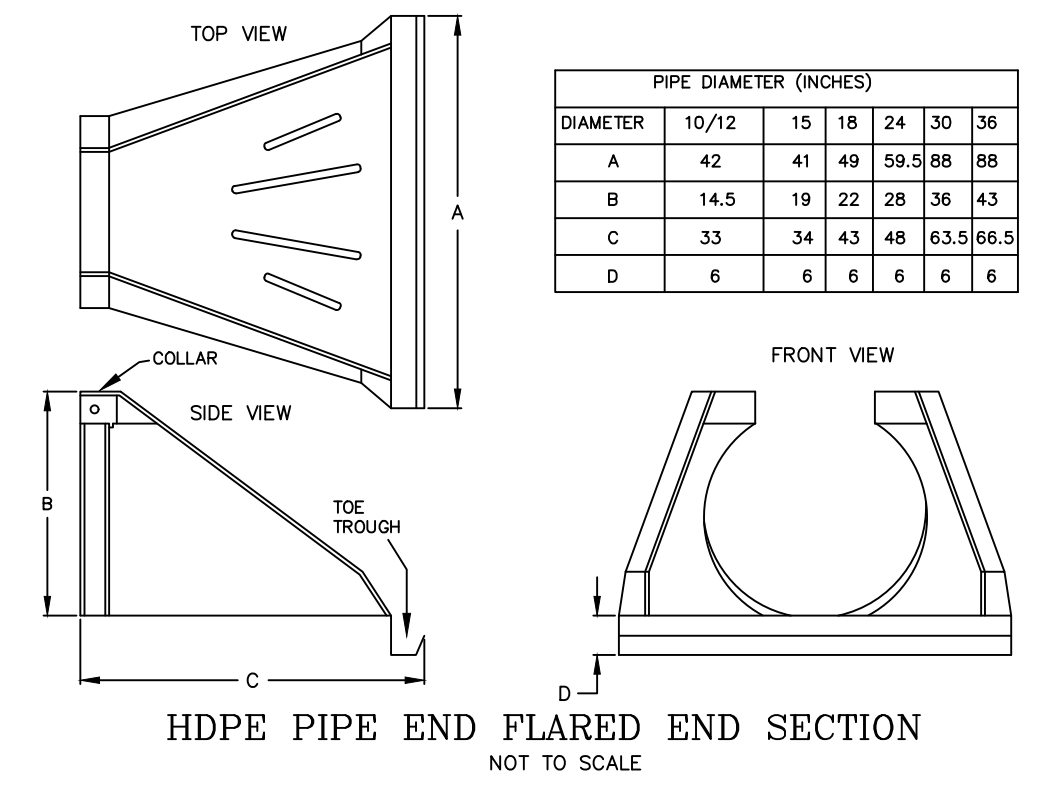


REFERENCE ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS."

HDPE TRENCH INSTALLATION DETAIL
NOT TO SCALE

RECOMMENDED MINIMUM TRENCH WIDTH			
PIPE DIAMETER IN. (MM)	TRENCH WIDTH IN. (M)	PIPE DIAMETER IN. (MM)	TRENCH WIDTH IN. (M)
4 - 8 (100-200)	*	30 (750)	60 (1.5)
10 (250)	24 (0.6)	36 (900)	65 (1.7)
12 (300)	28 (0.7)	42 (1050)	84 (2.1)
15 (375)	35 (0.9)	48 (1200)	91 (2.3)
18 (450)	43 (1.1)	54 (1350)	97 (2.5)
24 (600)	56 (1.4)	60 (1500)	103 (2.6)

* USUALLY BASED ON SMALLEST BUCKET SIZE AVAILABLE



MAINTENANCE RESPONSIBILITY

1. THE APPLICANT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE STRUCTURES.

DETAIL SHEET - 3

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
PO BOX 298
TIVERTON, RI 02878
401.816.5385
PRINCIPEENGINEERING@GMAIL.COM

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
in
WAREHAM, MASSACHUSETTS

SCALE: AS NOTED
DRAWN BY: TJP
DATE: 10/1/21

SHEET NO: 7 OF 8
DESIGN BY: TJP
CHECKED BY: TJP
PROJECT NO.: LD13-1 CEDA

INFILTRATION BASIN NOTES:

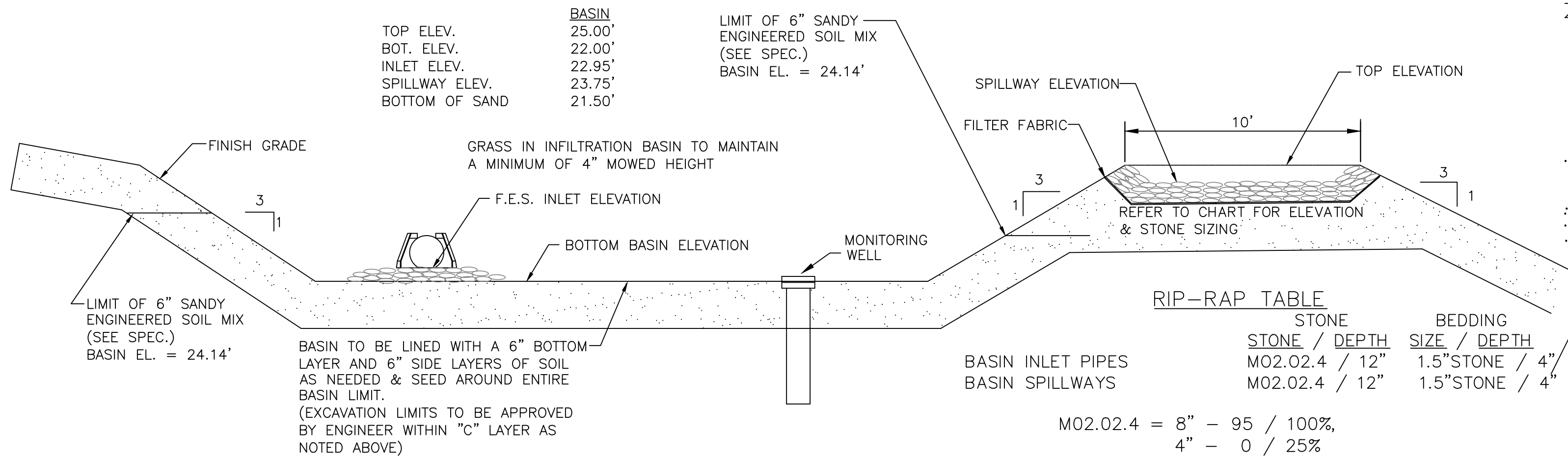
1) DURING CONSTRUCTION HEAVY EQUIPMENT SHALL NOT TRAVERSE THE INFILTRATION AREA IN ORDER TO PREVENT DETRIMENTAL COMPACTION.
 2) SHOP DRAWING SUBMITTAL AND APPROVAL BY DESIGN ENGINEER REQUIRED FOR EACH INFILTRATION BASIN PRIOR TO CONSTRUCTION.

SOIL TESTING NOTE:

DATE: FRIDAY, SEPTEMBER 12, 2014.
 CONDUCTED BY: THOMAS J. PRINCIPE, III, PE (LICENSED MASS. SOIL EVALUATOR)
 PREVIOUS SOIL EVALUATIONS AND PERCOLATION TESTING FOR THE DRAINAGE MITIGATION SYSTEMS PROPOSED CONCLUDED CONSISTENT <2MPI PERCOLATION RATES FOR THE SANDY SUBSOIL OUTWASH MATERIAL. ESTIMATED SEASONAL HIGH GROUNDWATER TABLES >10FT. ALL TESTING AREAS WERE DRY AT 12"FT EXCAVATION DEPTHS WITH NO SIGNS OF RE-DOXYMORPHIC MORPHOLOGY IN THE SOIL.
 BASIN
 A, 0"-6" (FSL)
 Bw, 6"-22" (SL)
 C, 22"-120" (SAND)

ENGINEERED SOIL MIX:

A UNIFORM MIX SHALL BE IMPORTED TO THE SITE CONSISTING OF:
 40% SAND (ASTM D 422)
 20-30% SAND LOAM TOPSOIL
 MIN. 3% ORGANIC MATERIAL
 <5% CLAY
 <500 PPM SOLUBLE SALTS
 30-40% COMPOST WITHOUT BIOSOLIDS
 pH 5.5-6.5
 FREE OF STONES & ORGANIC MATTER >2"
 FREE OF ANY SYNTHETIC MATERIAL



INFILTRATION BASIN CROSS SECTION DETAIL

NOT TO SCALE

Maintenance

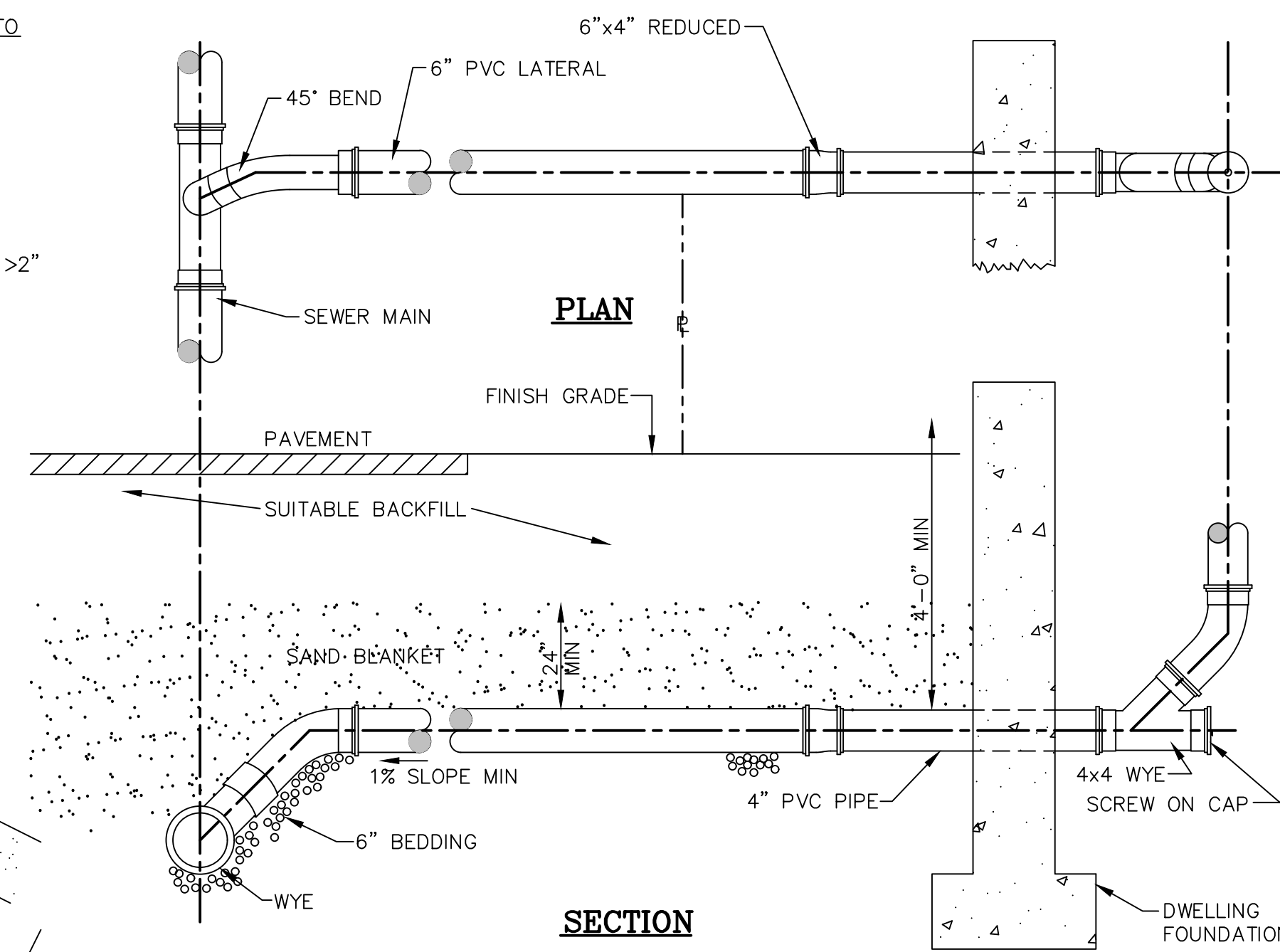
Activity	Frequency
Preventative maintenance	Twice a year
Inspect to ensure proper functioning	After every major storm during first 3 months of operation and twice a year thereafter and when there are discharges through the high outlet orifice.
Mow the buffer area, side slopes, and basin bottom if grassed floor; rake if stone bottom; remove trash and debris; remove grass clippings and accumulated organic matter	Twice a year
Inspect and clean pretreatment devices	Every other month recommended and at least twice a year and after every major storm event.

Special Features: High failure rate without adequate pretreatment and regular maintenance.

RIP-RAP TABLE

STONE / DEPTH	BEDDING SIZE / DEPTH
M02.02.4 / 12"	1.5" STONE / 4"
M02.02.4 / 12"	1.5" STONE / 4"

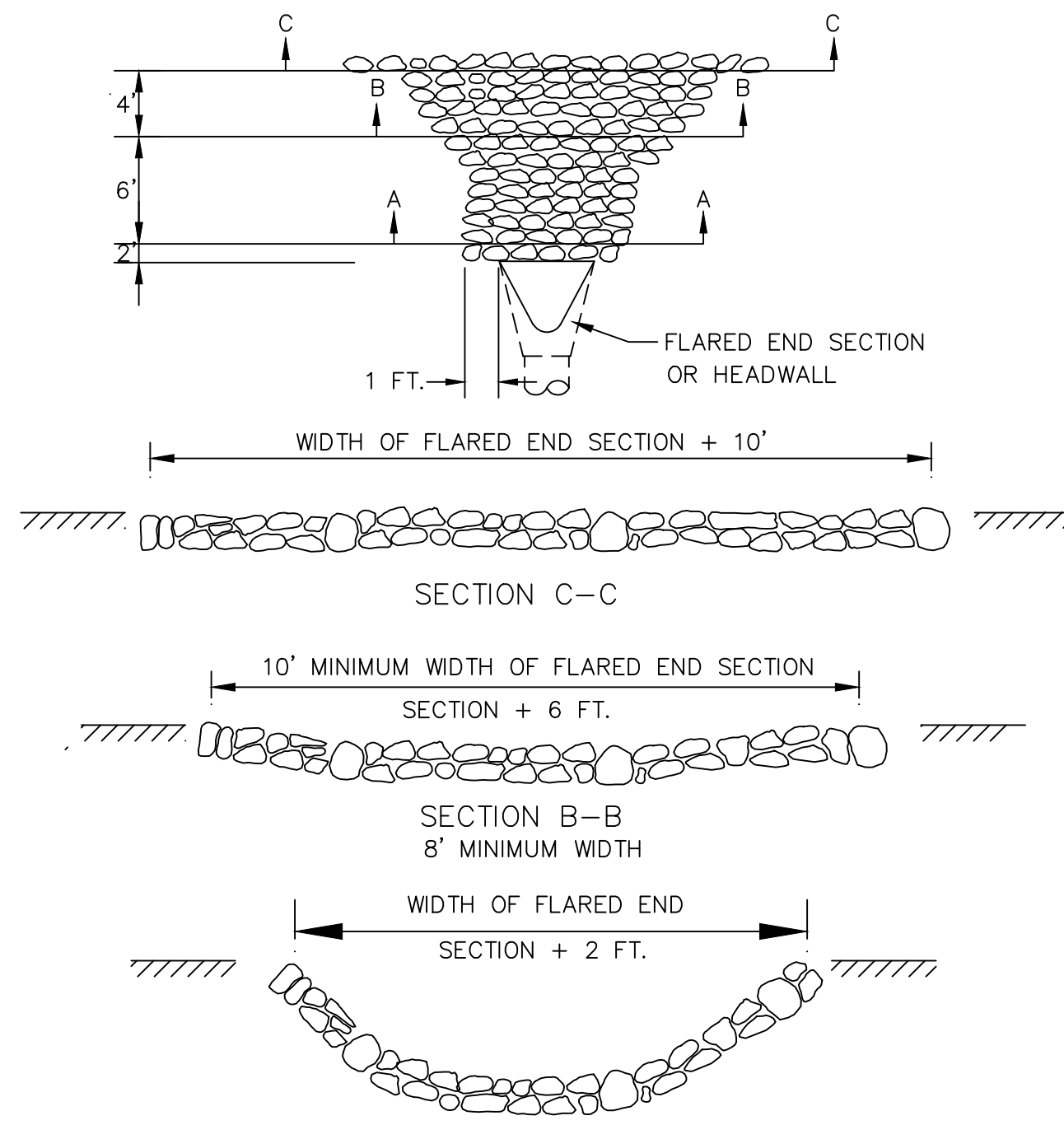
M02.02.4 = 8" - 95 / 100%,
 4" - 0 / 25%,
 2 1/2" - 0 / 5%
 (50lb. STONE MIN)



STANDARD HOUSE CONNECTION DETAIL

NOT TO SCALE

NOTE: FOR AN EXISTING SEWER MAIN THAT DOES NOT HAVE A WYE INSTALLED, THE CONTRACTOR SHALL INSTALL A PIPE SADDLE.



CATCH BASIN

NOT TO SCALE

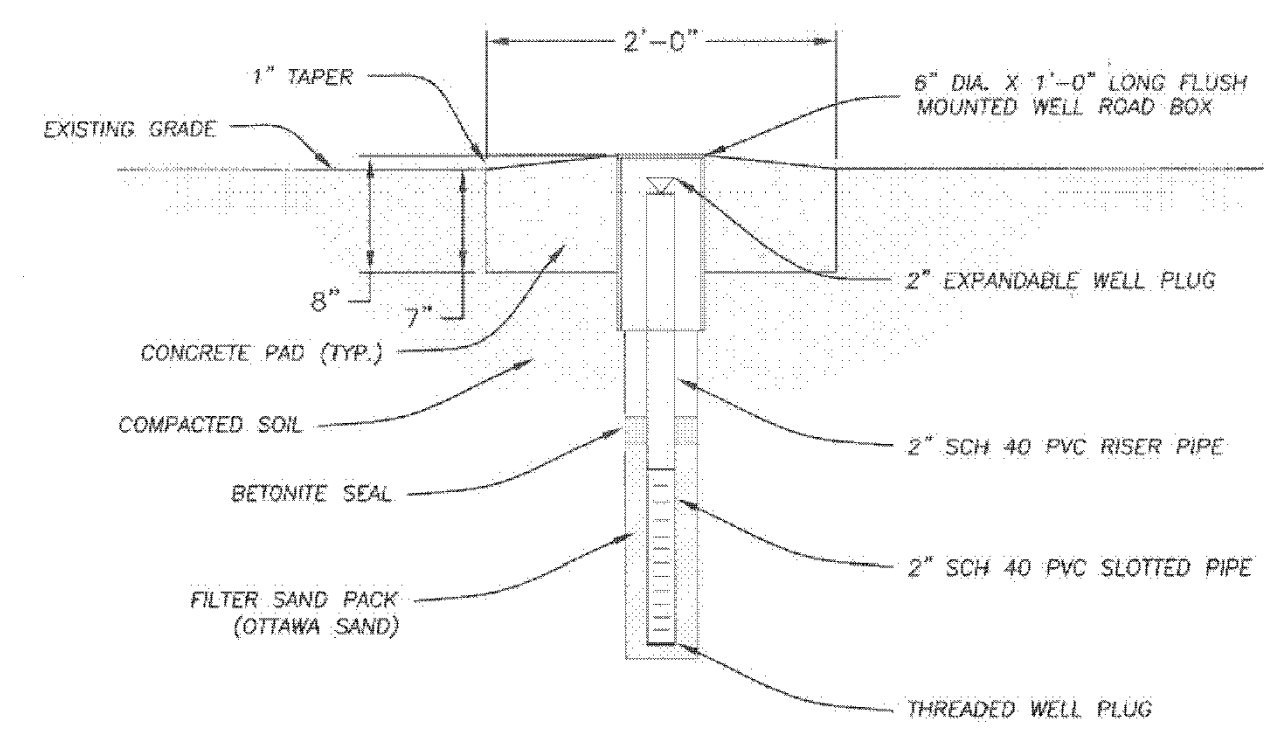
NOTES:
 1. CLASS OF RIP-RAP AND BEDDING TO BE SPECIFIED IN CONTRACT DOCUMENTS.
 2. DIMENSIONS MAY BE MODIFIED BY ENGINEER TO MEET FIELD CONDITIONS.
 3. UNLESS OTHERWISE SPECIFIED, DUMPED RIP-RAP SHALL BE USED.

ROCK FILL RIP-RAP @ FLARED END SECTIONS AND HEADWALL

RIP-RAP STONE

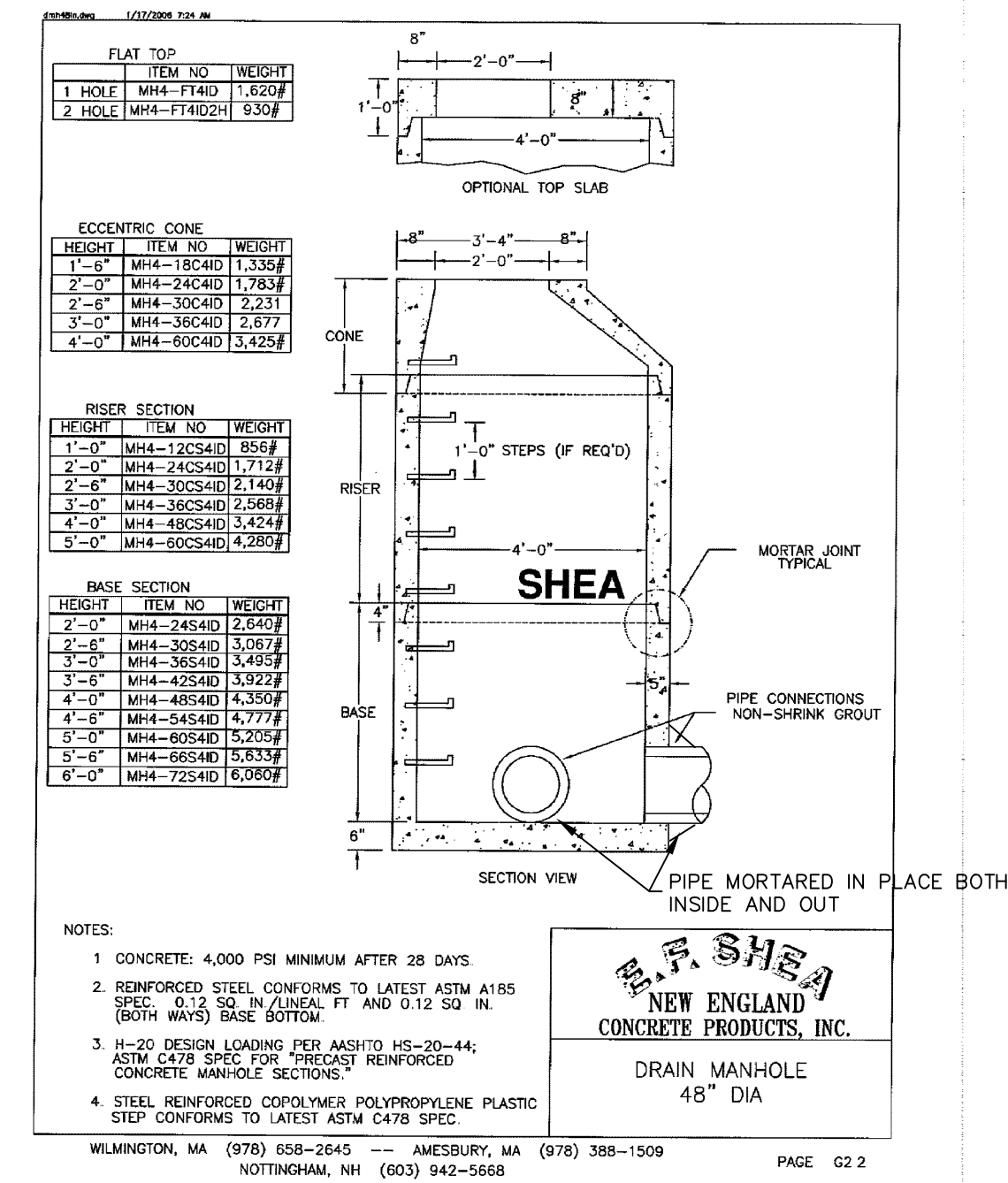
STONE / DEPTH	BEDDING SIZE / DEPTH
M02.02.4 / 12"	1" STONE / 4"

M02.02.4 = 8" - 95 / 100%,
 4" - 0 / 25%,
 2 1/2" - 0 / 5%



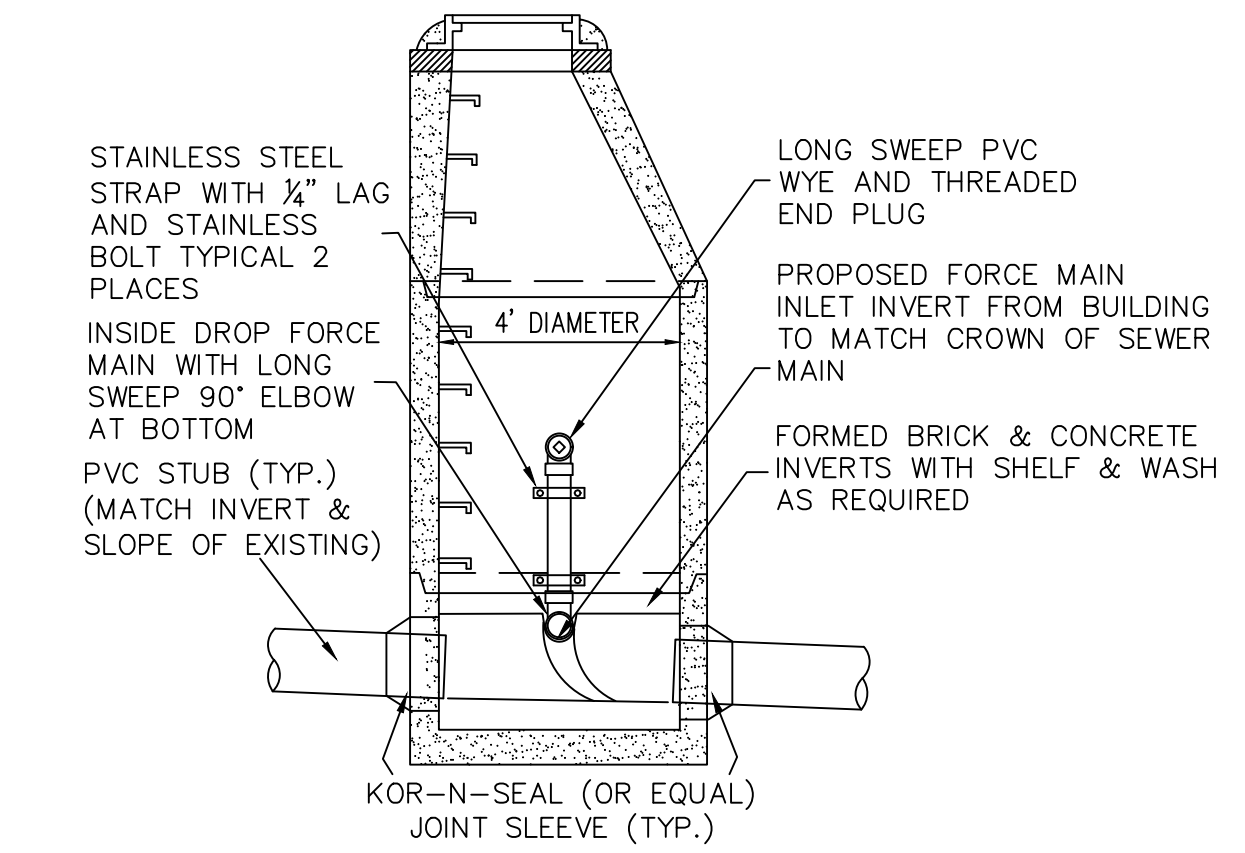
FLUSH MOUNTED MONITOR WELL DETAIL

NOTE: MONITOR WELL DEPTH FROM FINISH GRADE TO BE 20 FEET OR REFUSAL, WHICHEVER COMES FIRST



4 DIAMETER PRECAST CONCRETE MANHOLE

NOT TO SCALE



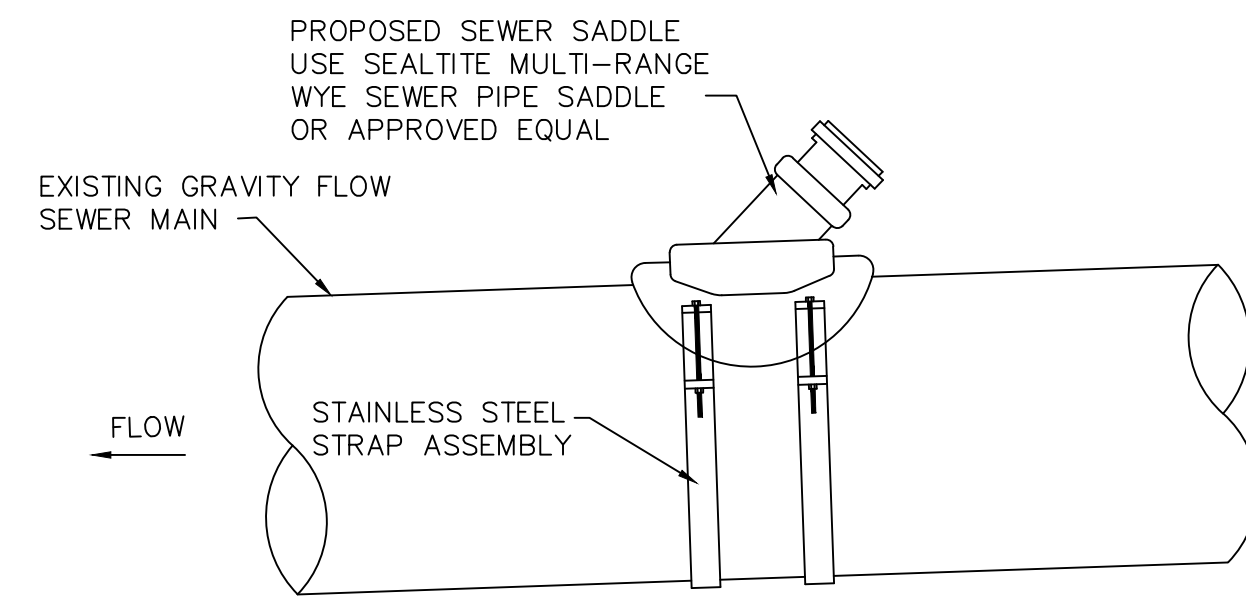
MANHOLE TO BE SET ON A 6\"/>

NOT TO SCALE

MAINTENANCE RESPONSIBILITY

1. THE APPLICANT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE STRUCTURES.

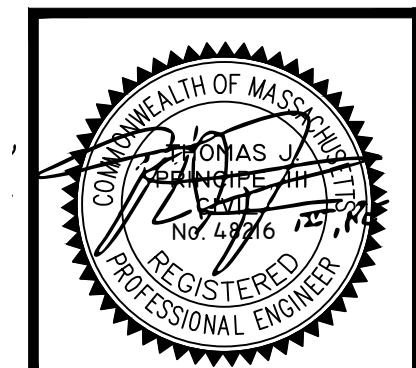
GENERAL NOTES:
 1. REINFORCED STEEL CONFORM TO LATEST ASTM A185 SPEC. 0.15 SQ. IN. LINEAR FT. AND 0.15 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 2. CONCRETE COMPRESSIVE STRENGTH-4000 PSI MINIMUM.
 3. MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST ASTM C478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS."
 4. CATCH BASIN TO BE SET ON A 6\"/>



SEWER PIPE SADDLE DETAIL

NOT TO SCALE

SHOP DRAWING SUBMITTAL REQUIRED



PRINCIPE COMPANY, INC.
 ENGINEERING DIVISION
 PO BOX 298
 TIVERTON, RI 02878
 401.816.5385
 PRINCIPLEENGINEERING@GMAIL.COM

REVISIONS

No.	DATE	DRWN	CHKD

MODIFICATION TO SPECIAL USE PERMIT & SITE PLAN APPROVAL BAY POINTE CLUB MIXED USE DEVELOPMENT PHASE IV
 in
 WAREHAM, MASSACHUSETTS

SCALE: AS NOTED	SHEET NO: 8 OF 8
DRAWN BY: TJP	DESIGN BY: TJP
DATE: 10/1/21	CHECKED BY: TJP
PROJECT NO.: LD13-1 CEDA	