

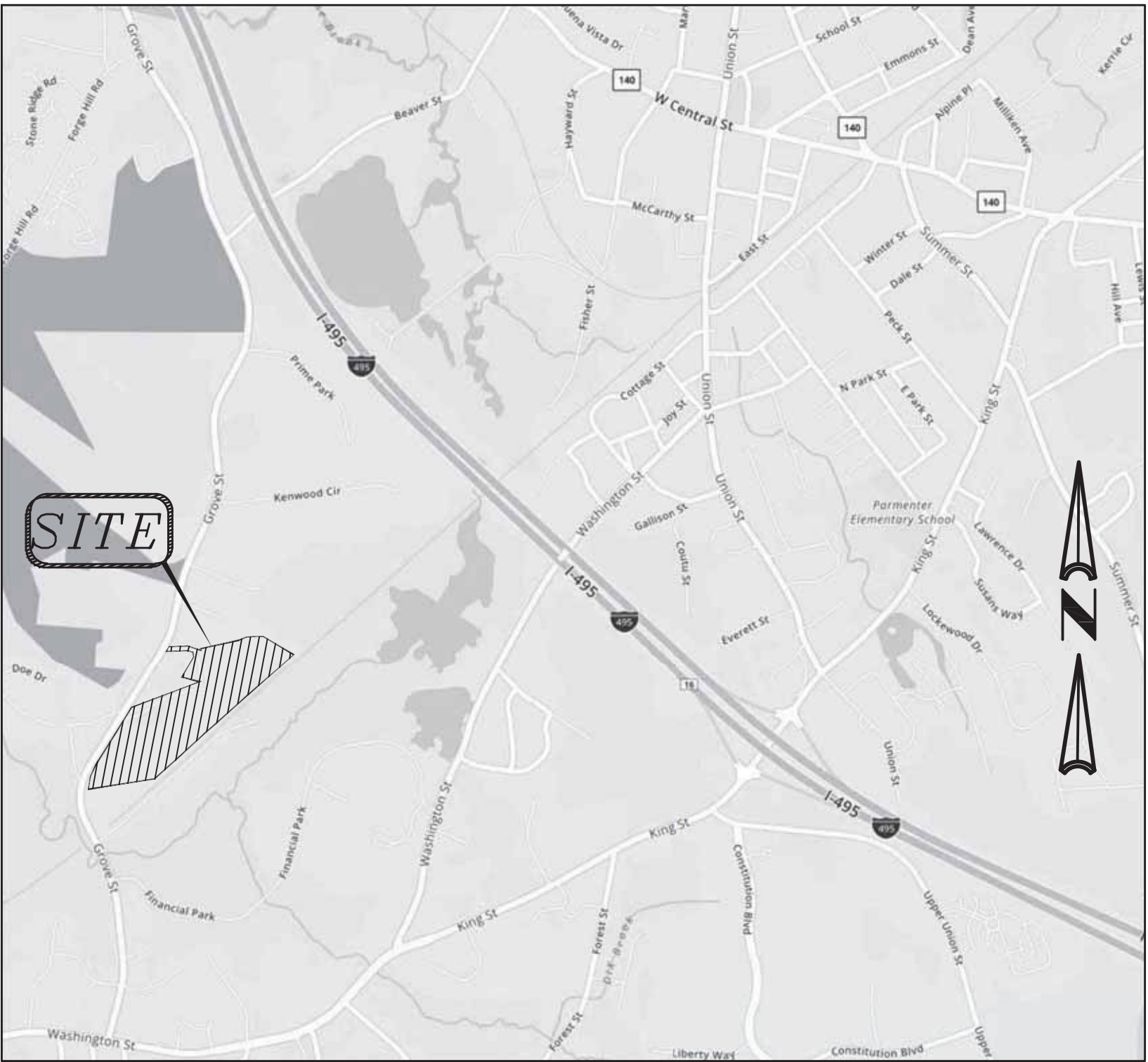
SITE DEVELOPMENT PLANS

FOR

176– 210 GROVE STREET FRANKLIN, MA

FEBRUARY 14, 2020

SHEET INDEX						
SHEET No.	DESCRIPTION	LATEST REVISED DATE	CONSTRUCTION	REVISIONS		
1	COVER SHEET	10/01/20				
2	OVERALL LAYOUT PLAN	10/01/20				
3	EXISTING CONDITIONS PLAN	10/01/20				
4	LAYOUT PLAN	10/01/20				
5	GRADING PLAN	10/01/20				
6	SEWER, DRAIN PLAN	10/01/20				
7	UTILITY PLAN	10/01/20				
8	DETAIL SHEET	10/01/20				
9	DETAIL SHEET	10/01/20				
10	DETAIL SHEET	10/01/20				
11	DETAIL SHEET	10/01/20				
12	DETAIL SHEET	10/01/20				



LOCATION MAP

OWNER/APPLICANT:

MCP III 176 GROVE LLC & MCP III 210 GROVE LLC
260 FRANKLIN STREET, STE 620
BOSTON, MA 02110

CIVIL ENGINEERS:

KELLY ENGINEERING GROUP, INC.
0 CAMPANELLI DRIVE
BRAINTREE, MA 02184

LANDSCAPE ARCHITECT:

HAWK DESIGN INC.
P.O. BOX 1309
SANDWICH, MA 02563

APPROVED BY THE FRANKLIN PLANNING BOARD

APPROVED DATE _____

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Digitally signed by David Noel
Kelly P.E.
DN: cn=David Noel Kelly P.E.,
o=Kelly Engineering Group,
Inc., ou,
email=dkelly@kellyengr.com,
nggroup.com, c=US
Date: 2020.10.08 10:34:21
+0400

	SCALE NA	JOB # F:\P\2019-127	176– 210 GROVE STREET FRANKLIN, MA			KELLY ENGINEERING GROUP civil engineering consultants 0 Campanelli Drive, Braintree, MA 02184 Phone: 781-843-4333 www.kellyengineeringgroup.com	SHEET NO. 1
	DATE 02/14/20	DRAWN BY C.J.L.					
	SHEET 1 OF 12	CHKD BY GSH					
	FILE # 2019-127-TS04	APPD BY DNK					

ZONE: INDUSTRIAL, WATER RESOURCE DISTRICT

(NOTE 5)

	REQUIRED	PROVIDED (176) LOT 1	PROVIDED (206) LOT 2	PROVIDED (210) LOT 3	COMPLIANCE
MIN LOT AREA	40,000 S.F.	669,813 S.F.	427,456 S.F.	457,130 S.F.	YES
MIN. FRONTAGE	175'	175'	>175'	>175'	YES
MIN. DEPTH	200'	>200'	>200'	>200'	YES
MIN. Width	157.5' DIA. CIRCLE	>157.5'	>157.5'	>157.5'	YES
MIN YARD					
FRONT	40'	448.4' +/-	249.7' +/-	125.5' +/-	YES
SIDE	30'	31.8' +/- (NOTE 2)	38.0' (NOTE 2)	30.1' +/- (NOTE 2)	YES (NOTE 2)
REAR	30'	92.2' +/-	125.4'	44.7' +/-	YES
MAX STORIES	3	1	1	1	YES
MAX HEIGHT	NA	<45'	<45'	<45'	N/A
LOT COVERAGE	80%	58.6 %	68.9 %	72.2 %	YES
BUILDING COVERAGE	70%	25.1 %	35.1 %	36.5 %	YES
PARKING					
TOTAL	487	(NOTE 3)	(NOTE 3)	(NOTE 3)	(NOTE 3)
SIZE	9'X19'	9'X19'	9' X19'	9' X 19'	YES
HAILE	24'	24'	24'	24'	YES
HANDICAP	PARKING LEGEND	PARKING LEGEND	PARKING LEGEND	PARKING LEGEND	YES
PARKING SETBACKS					
FRONT	10'	>10'	>10'	70' +/-	YES
SIDE	N/A	N/A	N/A	N/A	N/A
REAR	N/A	N/A	N/A	N/A	N/A
BUILDING	N/A	N/A	N/A	N/A	N/A

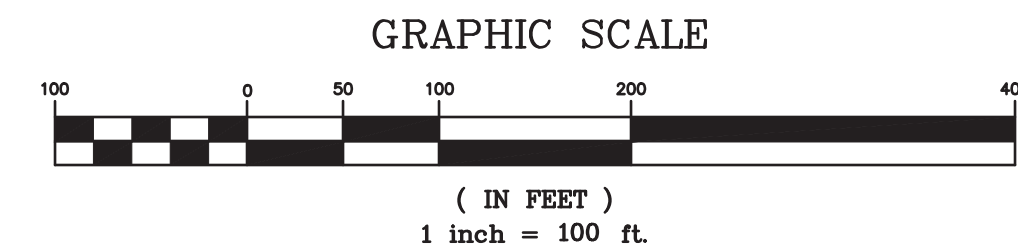
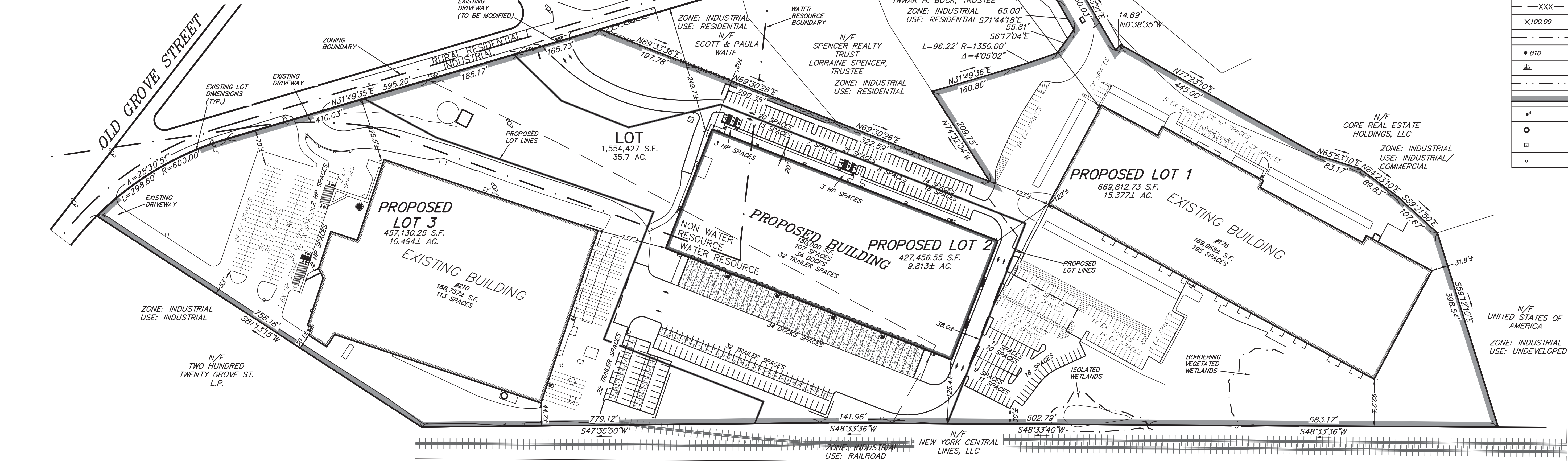
NOTES:

1. PARKING: REQUIRED PARKING FOR WAREHOUSE = 1 SPACE PER 1000 SF
2. BUILDINGS 176 AND 210 ARE LESS THAN 30' HIGH. SIDE YARD SETBACKS ARE GREATER THAN 30'. PROPOSED BUILDING 206 WILL BE APPROX. 45' HIGH. SIDE YARD SETBACK IS 102' AND THEREFORE SIDE YARD COMPLIES WITH BY LAW SECTION ATTACHMENT 9 FOOT NOTE 8 FOR SETBACKS TO A RESIDENTIAL USE .
3. PER PLANNING BOARD DETERMINATION.
4. 55 SPACES LOCATED ON LOT 1 ARE FOR USE BY LOT 2
5. SEE APPROVAL NOT REQUIRED PLAN DATED 09/01/20 FOR ACTUAL METES AND BOUNDS, CIRCLE DIAMETER ETC.

PARKING LEGEND

BUILDING	BUILDING AREA (SF)	PARKING REQUIRED (NOTE 1)	PARKING PROVIDED	HANDICAP PARKING REQUIRED	HANDICAP PARKING PROVIDED	LOADING PROVIDED
176 GROVE	169,968	170	195	6	6	65 +/-
206 GROVE	150,000	150	107 (NOTE 4)	5	6	33
210 GROVE	166,757	167	113 (NOTE 4)	5	5	15 +/-
TOTAL	486,725	487	415	16	17	113 +/-

*ALLOWED BY 9/15/2015 PLANNING BOARD DECISION



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EXISTING LEGEND

	HANDICAP SPACE
	UTILITY POLE
	PROPERTY LINE
	INTERIOR LOT LINE TO BE ELIMINATED

PROPOSED LEGEND

	HANDICAP SPACE
	SAW CUT/ MATCH PAVEMENT LINE

NOTES: (FOR SHEET 3)

- 1.) UNDERGROUND FEATURES HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND KELLY ENGINEERING GROUP, INC. DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO KELLY ENGINEERING GROUP, INC. THE SIZE, LOCATION, AND EXISTENCE OF ALL SUCH FEATURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.
- 2.) THE LOCATION OF ALL UTILITIES SHOWN HEREON HAVE BEEN ESTABLISHED USING ASCS 38-02 (STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA) QUALITY LEVEL G.
- 3.) THE SITE DETAIL AND SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN ON THE GROUND SURVEY PERFORMED BY KELLY ENGINEERING GROUP IN NOVEMBER AND DECEMBER OF 2019.
- 4.) ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) ESTABLISHED BY RTK GPS CONNECTED TO MOCCORS. CONTOURS SHOWN WERE OBTAINED FROM ON THE GROUND SURVEY AND LIDAR DATA OBTAINED FROM NOAA AND CONFIRMED BY KELLY ENGINEERING GROUP, INC.
- 5.) WETLAND FLAGS SHOWN WERE FLAGGED BY ECOTEC, INC AND WERE LOCATED BY KELLY ENGINEERING GROUP, INC.

CURRENT OWNER

210 GROVE ST
CURRENT OWNER: MCP III 210 GROVE LLC
C/O MARCUS PARTNERS INC.
PARCEL ID: 311-002

176 GROVE ST
CURRENT OWNER: MCP III 176 GROVE LLC
C/O MARCUS PARTNERS INC.
PARCEL ID: 311-001

APPROVED BY THE FRANKLIN PLANNING BOARD

APPROVED DATE

SHEET 2 LEGEND

CCB	CAPE COD BERM
VGC	VERTICAL GRANITE CURB
CONC.	CONCRETE
BCC	BITUMINOUS CONCRETE CURB
	HANDICAP SPACE
L.S	LANDSCAPED AREA
	CATCH BASIN
	DOUBLE CATCH BASIN
	AREA DRAIN
	TRENCH DRAIN
	DRAIN MANHOLE
	STORM CEPTOR
	DRAIN LINE
	ROOF DRAIN LINE
	AREA DRAIN LINE
	SEWER MANHOLE
	SEWER LINE
	SEWER FORCE MAIN
	GAS VALVE
	GAS LINE
	HYDRANT
	WATER VALVE
	WATER LINE
	UTILITY POLE
	LIGHT POLE
	FLOOD LIGHT
	OVERHEAD ELECTRIC LINE
	CHAIN LINK FENCE
	CONTOUR LINE (MNR)
	CONTOUR LINE (MUR)
	SPOT GRADE
	EDGE OF WETLANDS
	WETLANDS FLAG
	WETLANDS
	FLOOD PLAIN
	PROPERTY LINE
	BOLLARD
	IRON PIPE
	BOUND
	SIGN



Steven Horsfall
2020.10.08
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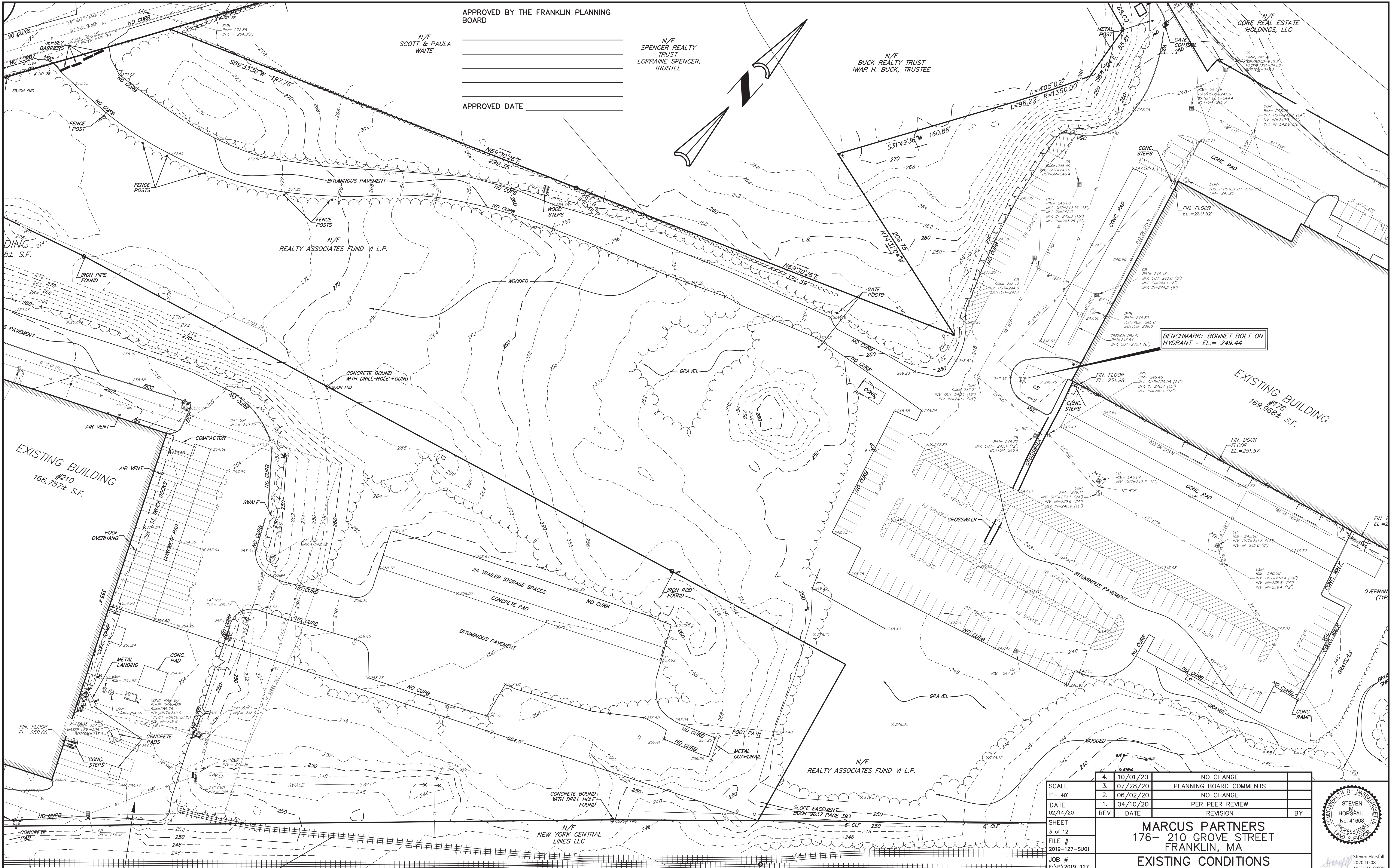


Designed by David Noel Kelly P.E.
Drawn by David Noel Kelly P.E.
Checked by David Noel Kelly P.E.
Reviewed by David Noel Kelly P.E.
Date: 2020.10.08
10:42:23 -04'00"

4.	10/01/20	PER TENANT COORDINATION	
3.	07/28/20	PLANNING BOARD COMMENTS	
2.	06/02/20	PER PEER REVIEW	
1.	04/10/20	PER PEER REVIEW	
REV	DATE	REVISION	BY
MARCUS PARTNERS 176- 210 GROVE STREET FRANKLIN, MA			
OVERALL LAYOUT PLAN			
KELLY ENGINEERING GROUP civil engineering consultants 0 Campanelli Drive, Braintree, MA 02184 Phone: 781-843-4333 www.kellyengineeringgroup.com			

SHEET NO.

2



APPROVED BY THE FRANKLIN PLANNING BOARD

N/F SCOTT & PAULA WAITE

N/F SPENCER REALTY TRUST LORRAINE SPENCER, TRUSTEE

N/F BUCK REALTY TRUST IWAR H. BUCK, TRUSTEE

APPROVED DATE _____

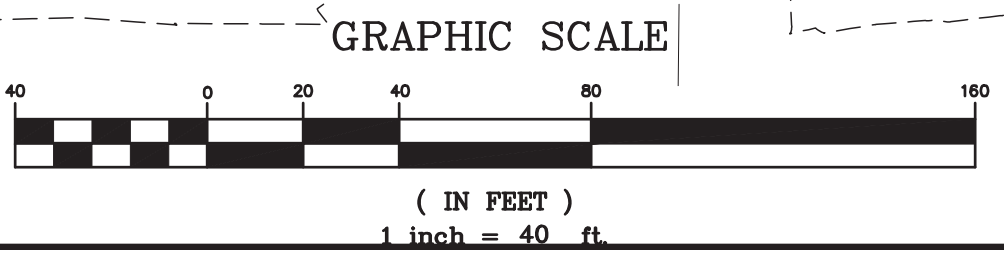
BENCHMARK: BONNET BOLT ON HYDRANT - EL. = 249.44

EXISTING BUILDING #176 169,984± S.F.

EXISTING BUILDING #210 166,757± S.F.

N/F REALTY ASSOCIATES FUND VI L.P.

N/F NEW YORK CENTRAL LINES LLC



SEE SHEET 2 FOR NOTES & SYMBOL LEGEND

4.	10/01/20	NO CHANGE	
3.	07/28/20	PLANNING BOARD COMMENTS	
2.	06/02/20	NO CHANGE	
1.	04/10/20	PER PEER REVIEW	
REV	DATE	REVISION	BY

SHEET 3 of 12
FILE # 2019-127-SU01
JOB # F:\P\2019-127
DRAWN BY JPM
CHKD BY SMH
APPD BY SMH

MARCUS PARTNERS
176- 210 GROVE STREET
FRANKLIN, MA
EXISTING CONDITIONS
PLAN
KELLY ENGINEERING GROUP
civil engineering consultants
0 Campanelli Drive, Braintree, MA 02184
Phone: 781-843-4333 www.kellyengineeringgroup.com

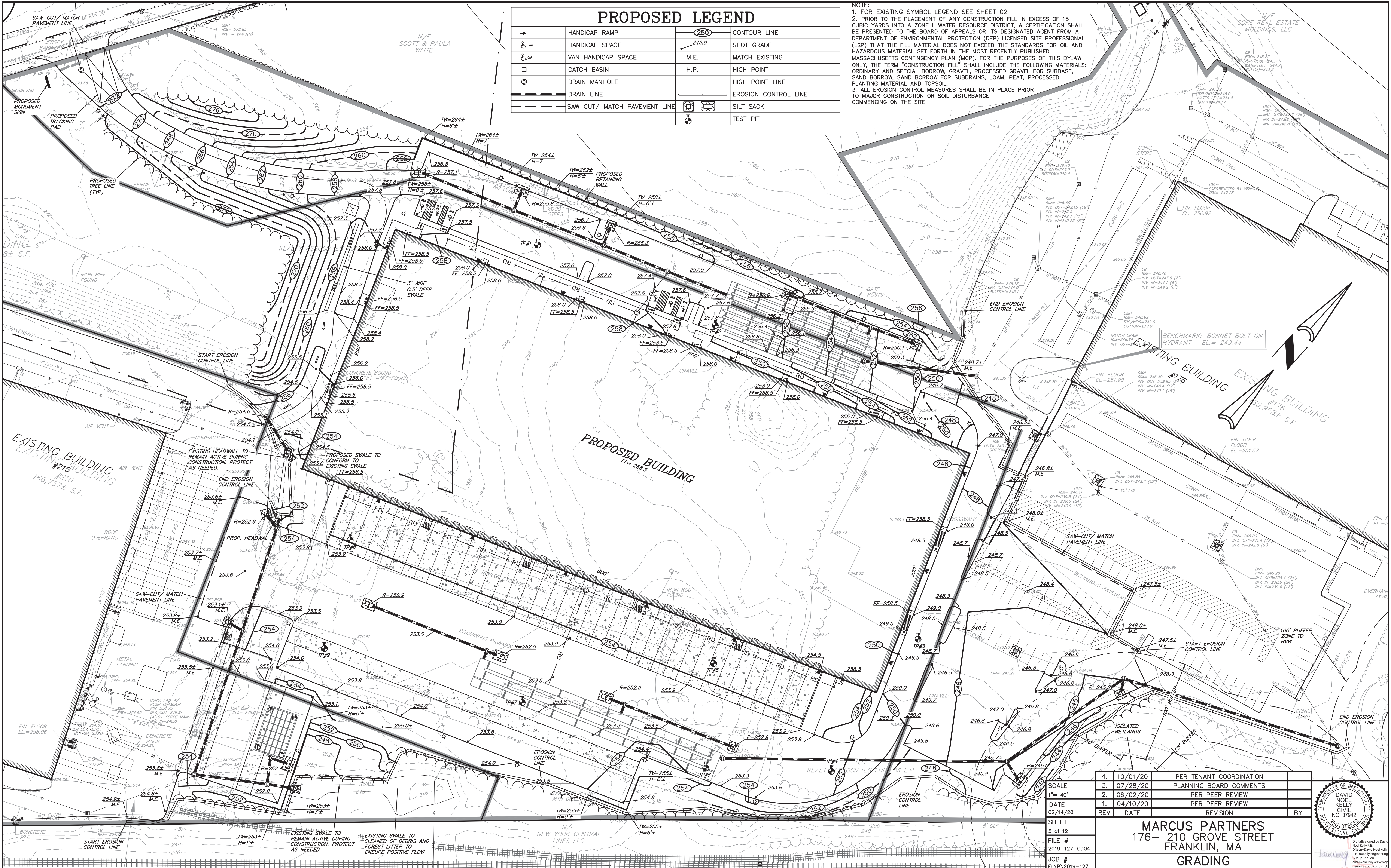
STEVEN HORSFALL
No. 41608
PROFESSIONAL LAND SURVEYOR
Steven Horsfall
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SHEET NO. 3

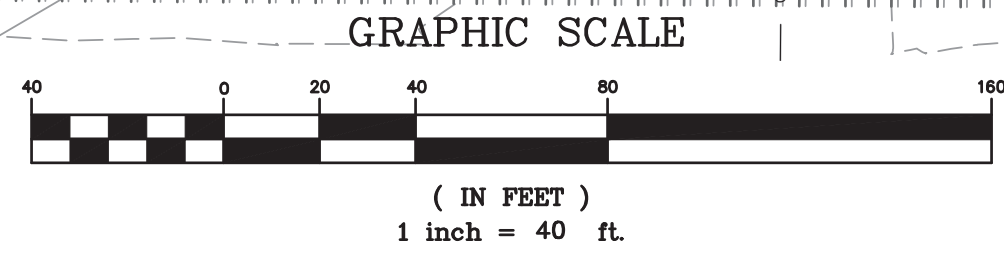
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PROPOSED LEGEND			
	HANDICAP RAMP		CONTOUR LINE
	HANDICAP SPACE		SPOT GRADE
	VAN HANDICAP SPACE		MATCH EXISTING
	CATCH BASIN		HIGH POINT
	DRAIN MANHOLE		HIGH POINT LINE
	DRAIN LINE		EROSION CONTROL LINE
	SAW CUT/ MATCH PAVEMENT LINE		SILT SACK
			TEST PIT

NOTE:
 1. FOR EXISTING SYMBOL LEGEND SEE SHEET 02
 2. PRIOR TO THE PLACEMENT OF ANY CONSTRUCTION FILL IN EXCESS OF 15 CUBIC YARDS INTO A ZONE II WATER RESOURCE DISTRICT, A CERTIFICATION AGENT FROM A DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) LICENSED SITE PROFESSIONAL (LSP) THAT THE FILL MATERIAL DOES NOT EXCEED THE STANDARDS FOR OIL AND HAZARDOUS MATERIAL SET FORTH IN THE MOST RECENTLY PUBLISHED MASSACHUSETTS CONTINGENCY PLAN (MCP). FOR THE PURPOSES OF THIS BYLAW ONLY, THE TERM "CONSTRUCTION FILL" SHALL INCLUDE THE FOLLOWING MATERIALS: ORDINARY AND SPECIAL BORROW, GRAVEL, PROCESSED GRAVEL FOR SUBBASE, SAND BORROW, SAND BORROW FOR SUBDRAINS, LOAM, PEAT, PROCESSED PLANTING MATERIAL AND TOPSOIL.
 3. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MAJOR CONSTRUCTION OR SOIL DISTURBANCE COMMENCING ON THE SITE



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4.	10/01/20	PER TENANT COORDINATION	
3.	07/28/20	PLANNING BOARD COMMENTS	
2.	06/02/20	PER PEER REVIEW	
1.	04/10/20	PER PEER REVIEW	
REV	DATE	REVISION	BY
MARCUS PARTNERS 176- 210 GROVE STREET FRANKLIN, MA GRADING PLAN			
KELLY ENGINEERING GROUP civil engineering consultants 0 Campanelli Drive, Braintree, MA 02184 Phone: 781-843-4333 www.kellyengineeringgroup.com			

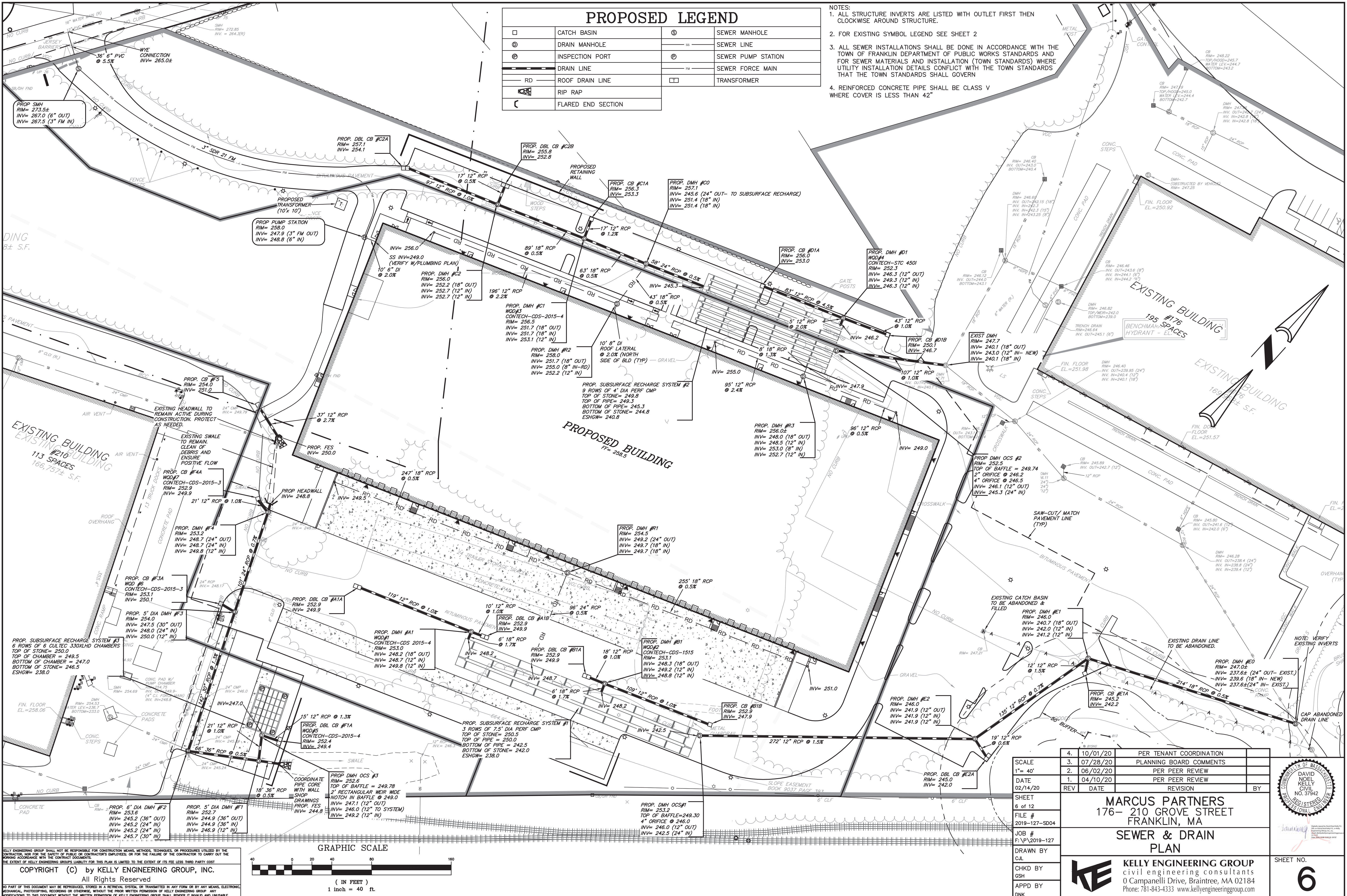
DAVID NOEL KELLY
 CIVIL
 NO. 37942
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MASSACHUSETTS

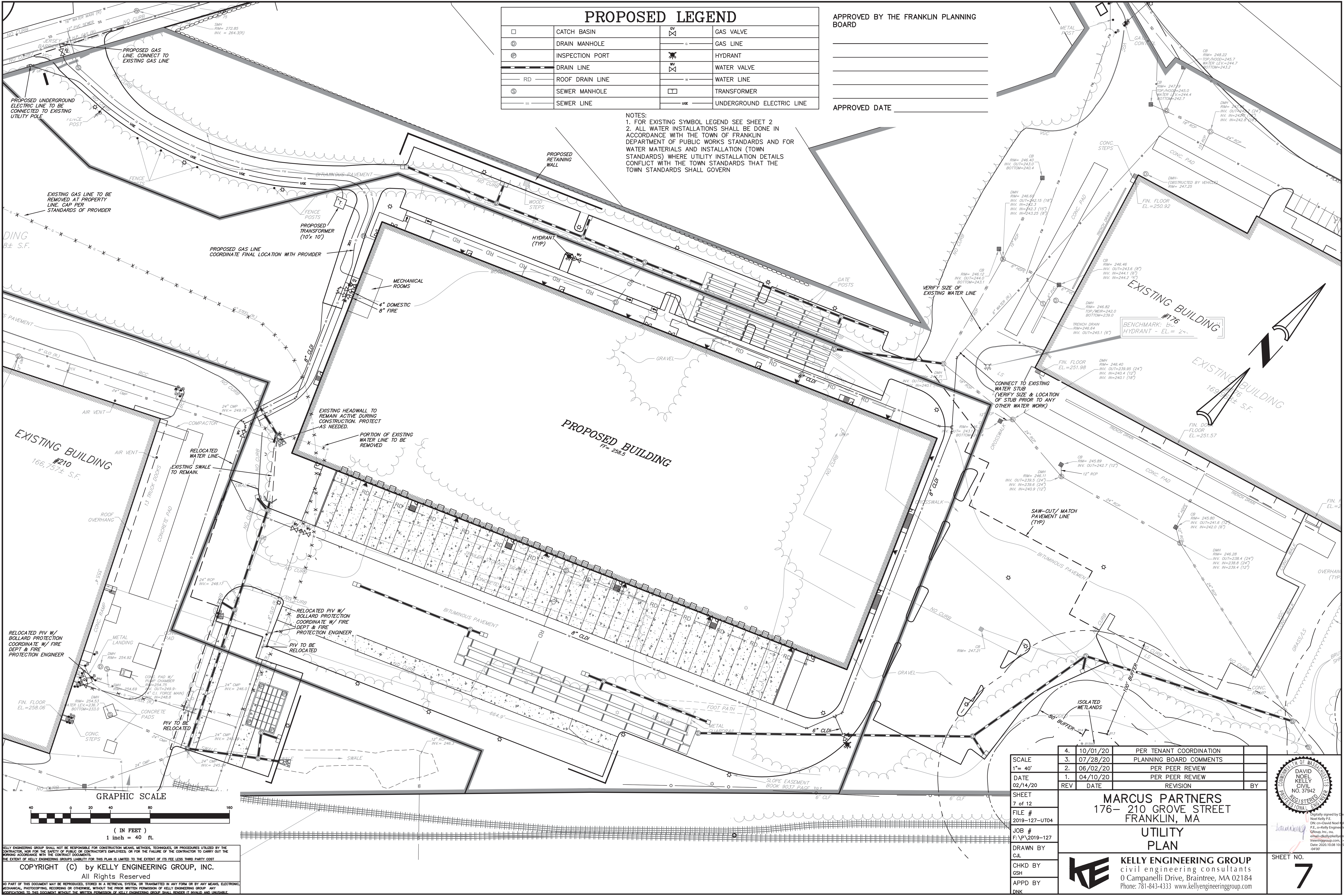
Original signed by David Noel Kelly P.E. on David Noel Kelly P.E. on Kelly Engineering Group, Inc. on 04/10/2020. Date: 2020.10.08 10:45:04

SHEET NO.
5

PROPOSED LEGEND			
	CATCH BASIN		SEWER MANHOLE
	DRAIN MANHOLE		SEWER LINE
	INSPECTION PORT		SEWER PUMP STATION
	DRAIN LINE		SEWER FORCE MAIN
	ROOF DRAIN LINE		TRANSFORMER
	RIP RAP		
	FLARED END SECTION		

- NOTES:
1. ALL STRUCTURE INVERTS ARE LISTED WITH OUTLET FIRST THEN CLOCKWISE AROUND STRUCTURE.
 2. FOR EXISTING SYMBOL LEGEND SEE SHEET 2
 3. ALL SEWER INSTALLATIONS SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF FRANKLIN DEPARTMENT OF PUBLIC WORKS STANDARDS AND FOR SEWER MATERIALS AND INSTALLATION (TOWN STANDARDS) WHERE UTILITY INSTALLATION DETAILS CONFLICT WITH THE TOWN STANDARDS THAT THE TOWN STANDARDS SHALL GOVERN
 4. REINFORCED CONCRETE PIPE SHALL BE CLASS V WHERE COVER IS LESS THAN 42"



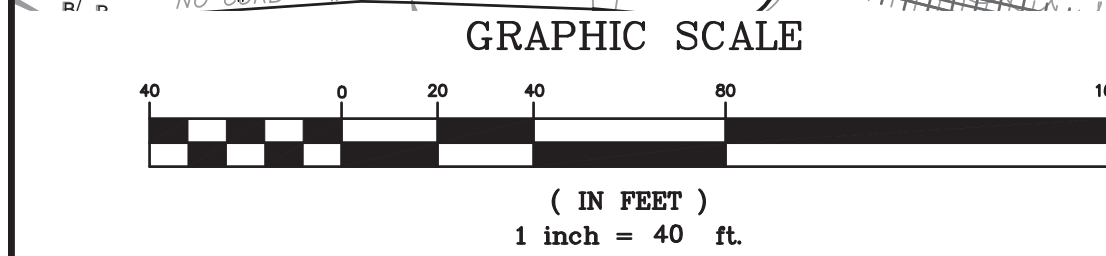


PROPOSED LEGEND			
	CATCH BASIN		GAS VALVE
	DRAIN MANHOLE		GAS LINE
	INSPECTION PORT		HYDRANT
	DRAIN LINE		WATER VALVE
	ROOF DRAIN LINE		WATER LINE
	SEWER MANHOLE		TRANSFORMER
	SEWER LINE		UNDERGROUND ELECTRIC LINE

NOTES:
1. FOR EXISTING SYMBOL LEGEND SEE SHEET 2
2. ALL WATER INSTALLATIONS SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF FRANKLIN DEPARTMENT OF PUBLIC WORKS STANDARDS AND FOR WATER MATERIALS AND INSTALLATION (TOWN STANDARDS) WHERE UTILITY INSTALLATION DETAILS CONFLICT WITH THE TOWN STANDARDS THAT THE TOWN STANDARDS SHALL GOVERN

APPROVED BY THE FRANKLIN PLANNING BOARD

APPROVED DATE _____



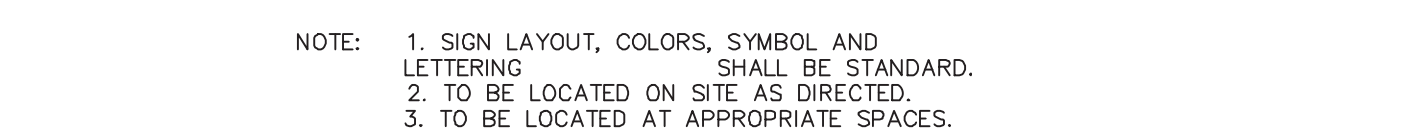
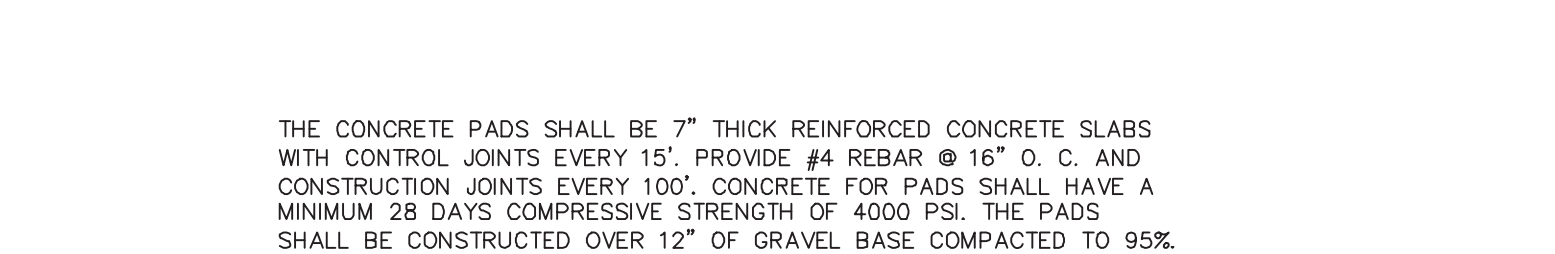
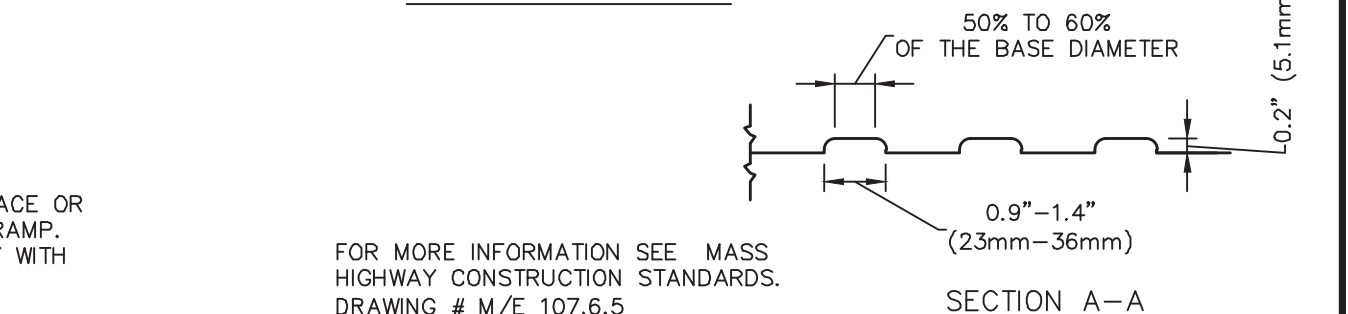
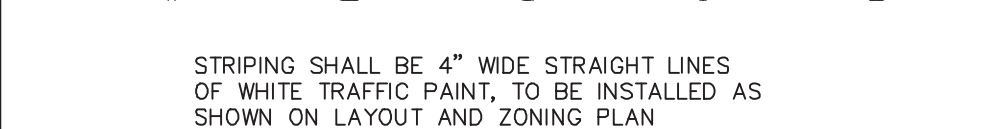
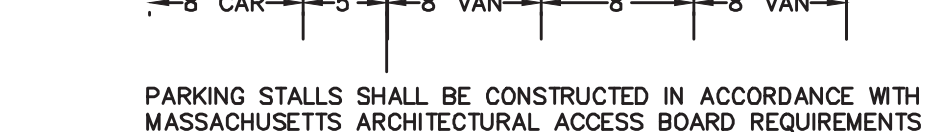
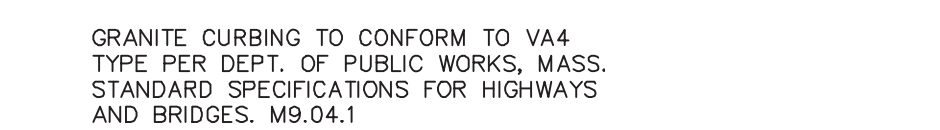
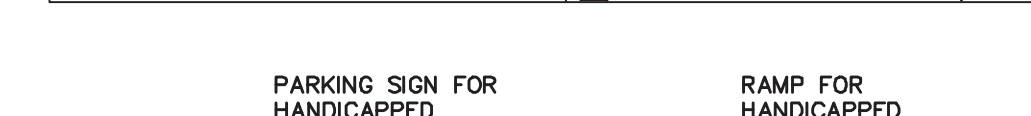
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SCALE 1" = 40'	4. 10/01/20	PER TENANT COORDINATION	
DATE 02/14/20	3. 07/28/20	PLANNING BOARD COMMENTS	
SHEET 7 of 12	2. 06/02/20	PER PEER REVIEW	
FILE # 2019-127-UT04	1. 04/10/20	PER PEER REVIEW	
JOB # F:\P\2019-127	REV	DATE	BY
DRAWN BY CJL			
CHKD BY GSH			
APPD BY DNK			
MARCUS PARTNERS 176- 210 GROVE STREET FRANKLIN, MA			
UTILITY PLAN			
KELLY ENGINEERING GROUP civil engineering consultants 0 Campanelli Drive, Braintree, MA 02184 Phone: 781-843-4333 www.kellyengineeringgroup.com			
SHEET NO. 7			






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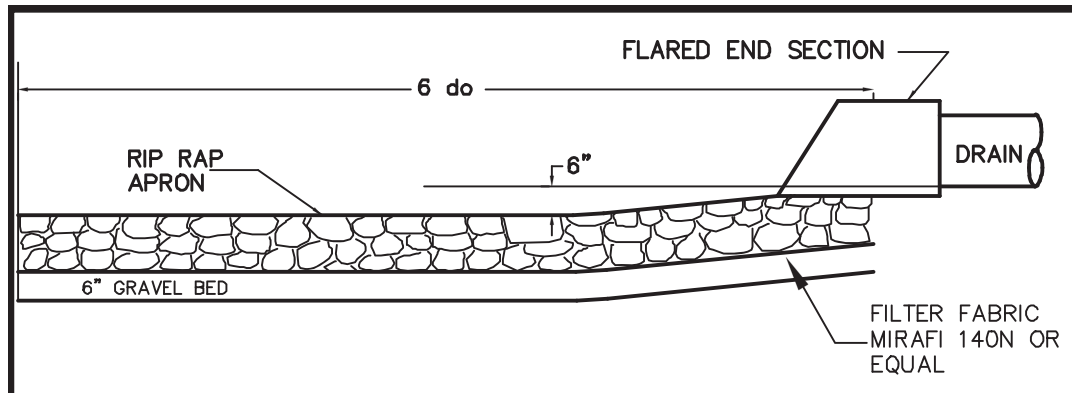
SHEET 8 of 12	<p>MARCUS PARTNERS 176- 210 GROVE STREET FRANKLIN, MA</p> <p>DETAIL SHEET</p> <p>KELLY ENGINEERING GROUP civil engineering consultants 0 Campanelli Drive, Braintree, MA 02184 Phone: 781-843-4333 www.kellyengineeringgroup.com</p>
FILE # 2019-027-DT04	
JOB # F:\P\2019-127	
DRAWN BY C.d.	
CHKD BY GSH	
APPD BY DNK	

COMMONWEALTH OF MASSACHUSETTS
DAVID NOEL KELLY
CIVIL
NO. 37942
REGISTERED
PROFESSIONAL ENGINEER

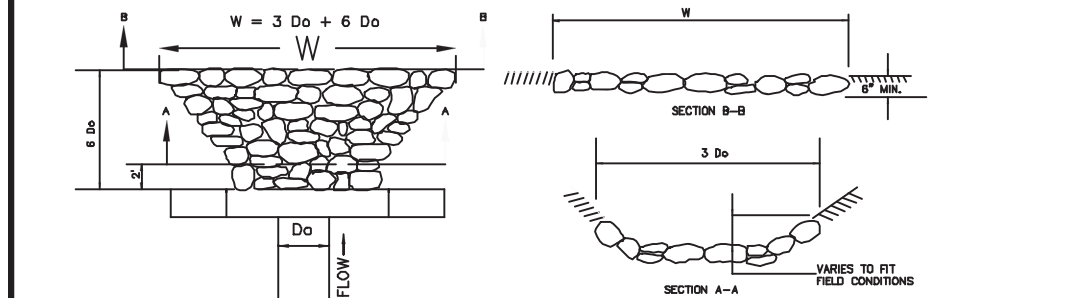
Truly signed by David Noel Kelly P.E.
DIN: civ-david Noel Kelly
P.E., cvelky Engineering Group, Inc.,
email: dnoelkelly@engr.com
engineeringgroup.com
cvels
Date: 2020.10.08
10:47:56 -0400

SHEET NO.

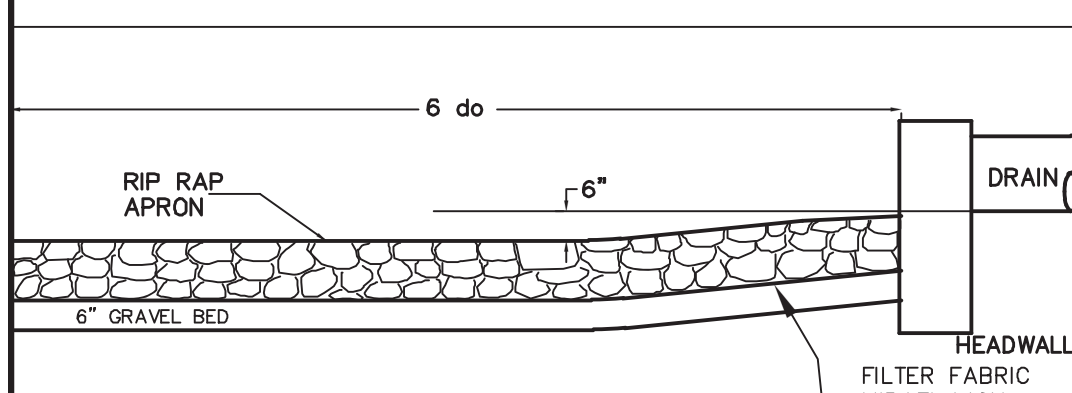
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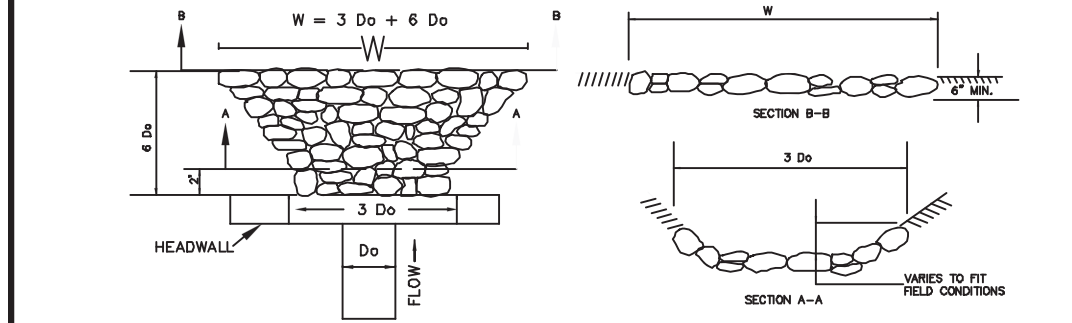
APRON TO BE COMPOSED OF A LAYER OF STONES 12" IN THICKNESS OR MORE, PLACED UPON A BED OF SAND AND GRAVEL 6" IN THICKNESS. THE STONES SHALL BE SIZED SO THAT NOT LESS THAN 60% SHALL HAVE ONE DIMENSION 12" OR MORE. THE STONES, AFTER BEING LAID, SHALL BE CAREFULLY CHINKED BY HAND TO MAKE A REASONABLY SMOOTH AND SHAPED SURFACE. RIP RAP IS TO BE USED WHERE INDICATED ON THE PLAN.



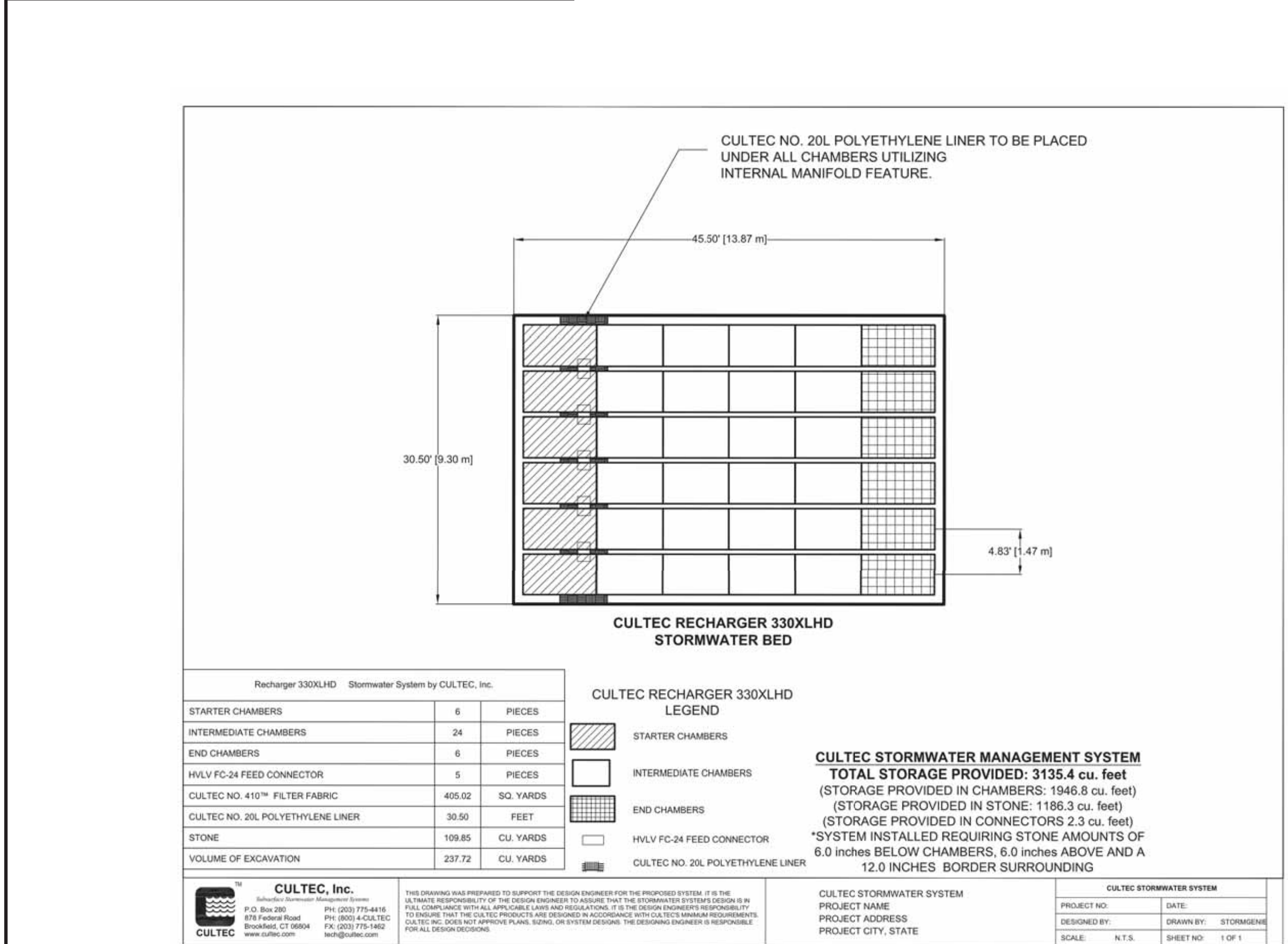
RIP-RAP APRON DETAIL AT F.E.S.
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.



APRON TO BE COMPOSED OF A LAYER OF STONES 12" IN THICKNESS OR MORE, PLACED UPON A BED OF SAND AND GRAVEL 6" IN THICKNESS. THE STONES SHALL BE SIZED SO THAT NOT LESS THAN 60% SHALL HAVE ONE DIMENSION 12" OR MORE. THE STONES, AFTER BEING LAID, SHALL BE CAREFULLY CHINKED BY HAND TO MAKE A REASONABLY SMOOTH AND SHAPED SURFACE. RIP RAP IS TO BE USED WHERE INDICATED ON THE PLAN.



RIP-RAP APRON AT HEADWALL
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.



Recharger 330XLHD Stormwater System by CULTEC, Inc.			CULTEC RECHARGER 330XLHD LEGEND	
STARTER CHAMBERS	6	PIECES		STARTER CHAMBERS
INTERMEDIATE CHAMBERS	24	PIECES		INTERMEDIATE CHAMBERS
END CHAMBERS	6	PIECES		END CHAMBERS
HVLV FC-24 FEED CONNECTOR	5	PIECES		HVLV FC-24 FEED CONNECTOR
CULTEC NO. 410™ FILTER FABRIC	405.02	SQ. YARDS		CULTEC NO. 410™ FILTER FABRIC
CULTEC NO. 20L POLYETHYLENE LINER	30.50	FEET		CULTEC NO. 20L POLYETHYLENE LINER
STONE	109.85	CU. YARDS		STONE
VOLUME OF EXCAVATION	237.72	CU. YARDS		

CULTEC, Inc.
P.O. Box 200
1075 Federal Road
Branford, CT 06408
www.cultec.com

PH: (203) 775-4418
FAX: (203) 4-0426
FAX: (203) 775-1462
info@cultec.com

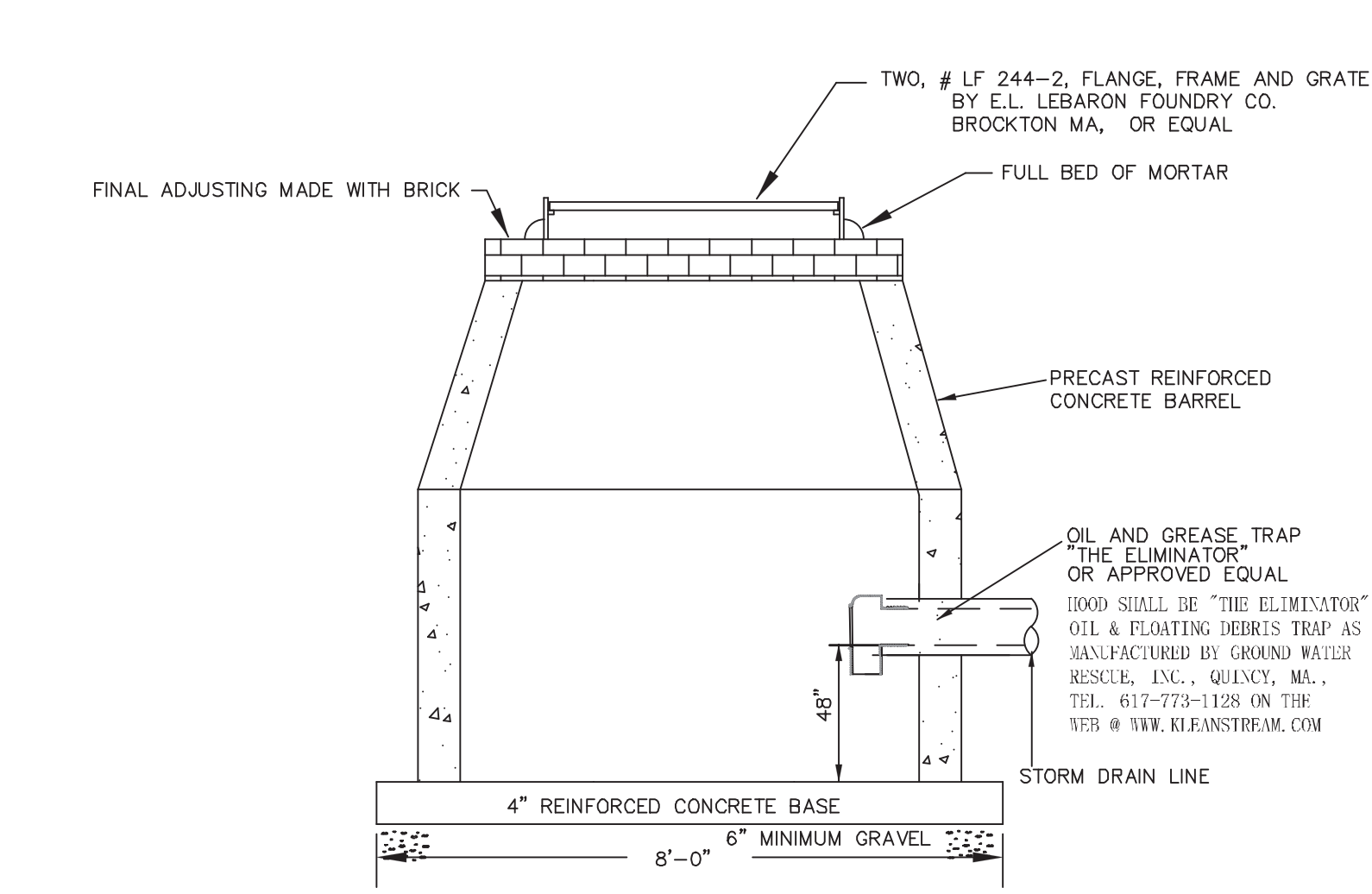
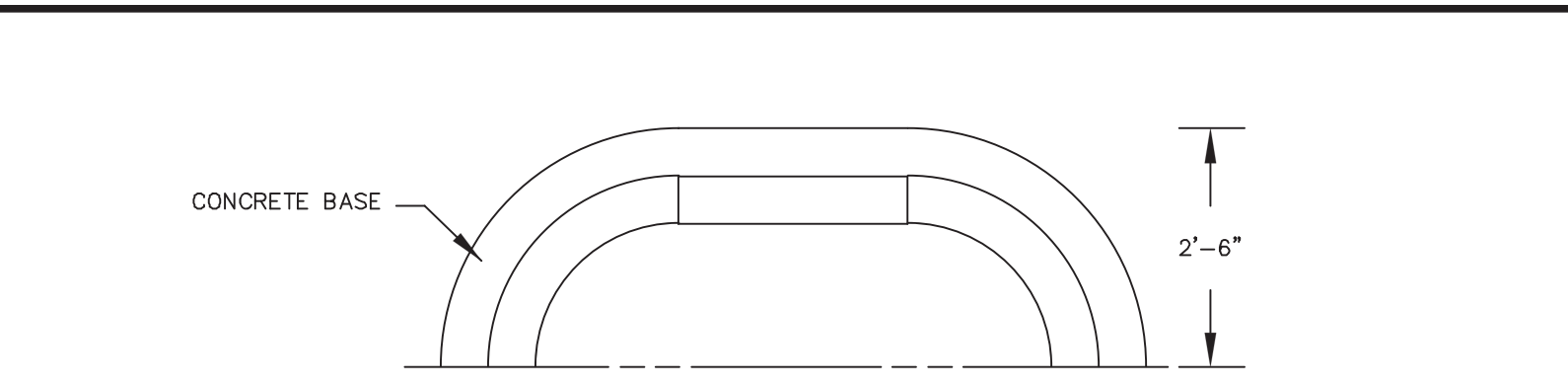
THIS DRAWING WAS PREPARED TO SUPPORT THE DESIGN ENGINEER FOR THE PROPOSED SYSTEM. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE CULTEC PRODUCTS ARE DESIGNED IN ACCORDANCE WITH CULTEC'S DESIGN REQUIREMENTS. FOR ALL DESIGN DECISIONS, THE DESIGN ENGINEER IS RESPONSIBLE.

CULTEC STORMWATER SYSTEM
TOTAL STORAGE PROVIDED: 3135.4 cu. feet
(STORAGE PROVIDED IN CHAMBERS: 1946.8 cu. feet)
(STORAGE PROVIDED IN CONNECTORS 2.3 cu. feet)
*SYSTEM INSTALLED REQUIRING STONE AMOUNTS OF 6.0 INCHES BELOW CHAMBERS, 6.0 INCHES ABOVE AND A 12.0 INCHES BORDER SURROUNDING

CULTEC STORMWATER SYSTEM
PROJECT NAME: _____
PROJECT ADDRESS: _____
PROJECT CITY, STATE: _____

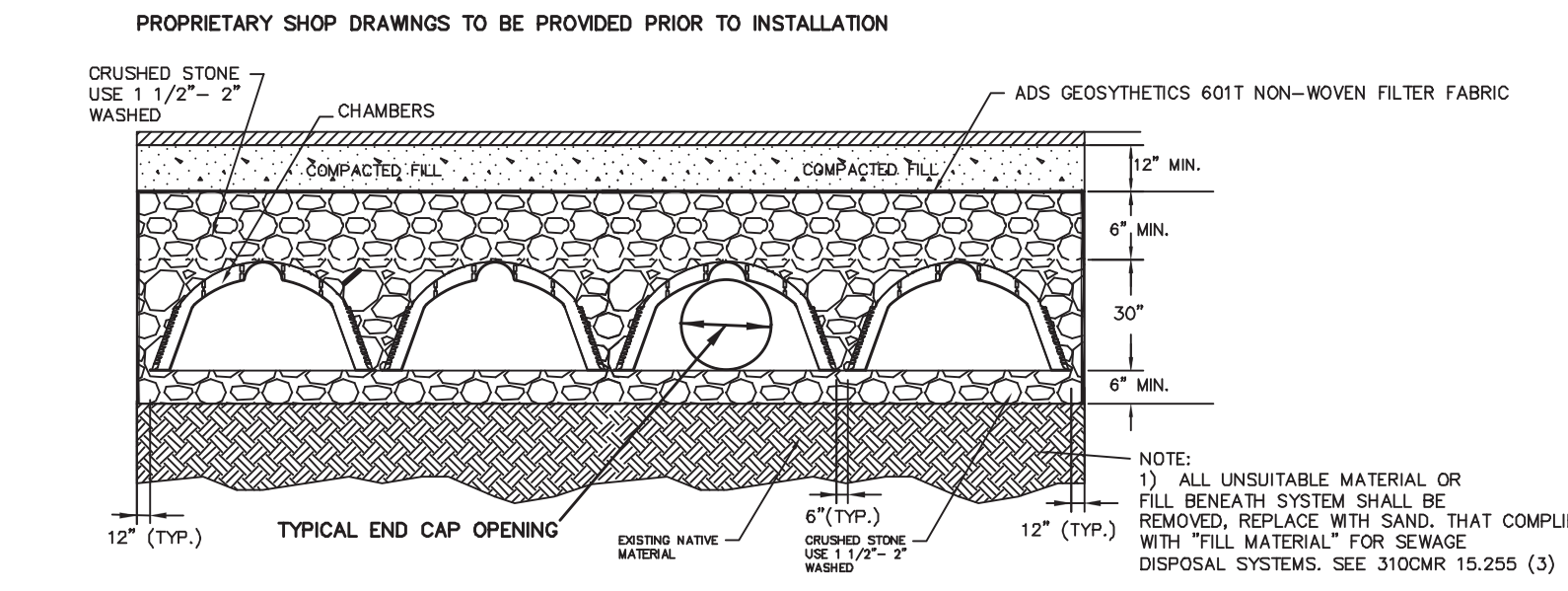
CULTEC STORMWATER SYSTEM
PROJECT NO.: _____
DATE: _____
DESIGNED BY: _____
SCALE: N.T.S. SHEET NO. 1 OF 1

KELLY ENGINEERING GROUP SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORKING ACCORDANCE WITH THE CONTRACT DOCUMENTS.
THE EXTENT OF KELLY ENGINEERING GROUP'S LIABILITY FOR THIS PLAN IS LIMITED TO THE EXTENT OF ITS FEE LESS THIRD PARTY COST.
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PRECAST DOUBLE CATCH BASIN
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.

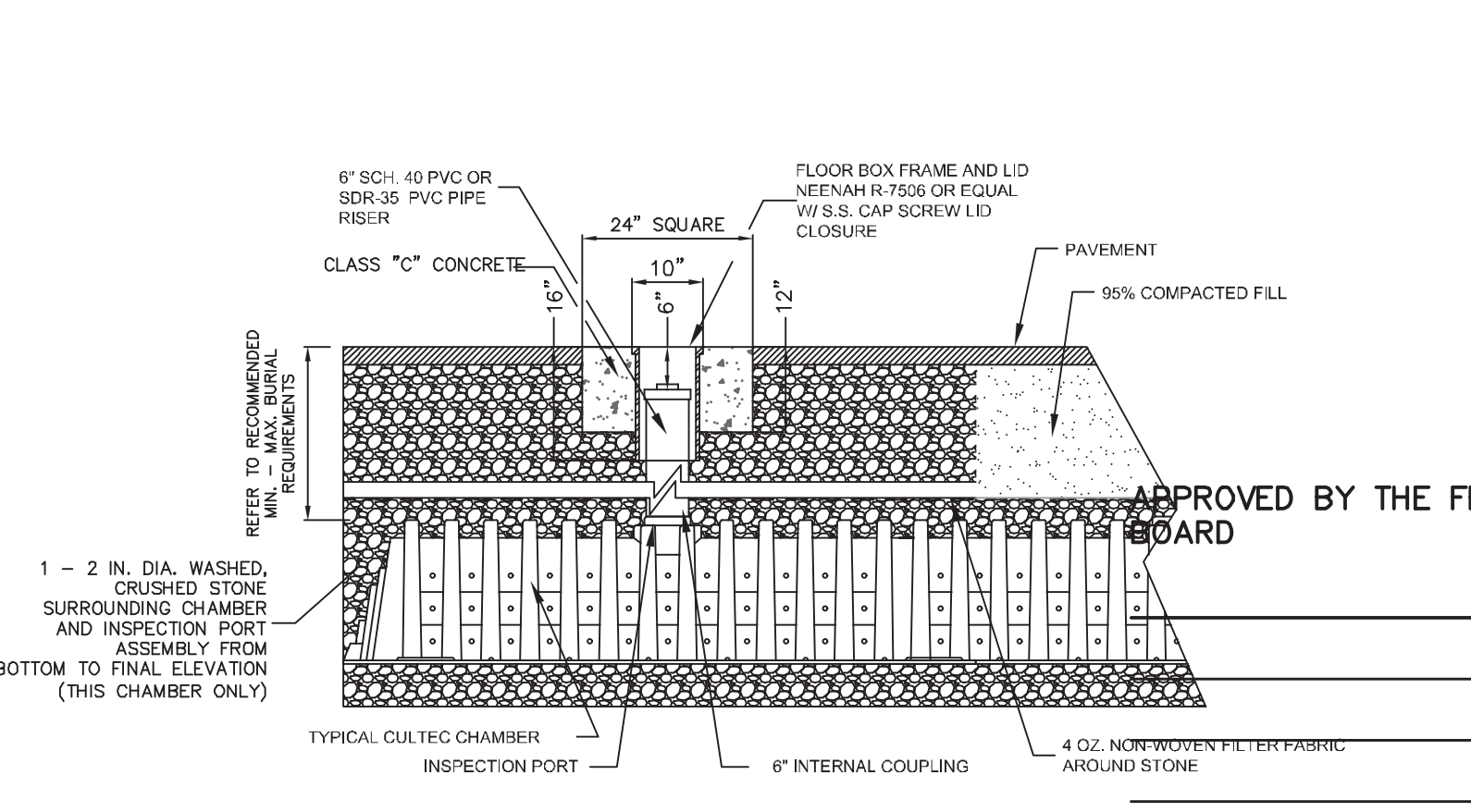
SUBSURFACE RECHARGE CHAMBERS (CULTEC 330XLHD OR APPROVED EQUAL)
PROPRIETARY SHOP DRAWINGS TO BE PROVIDED PRIOR TO INSTALLATION



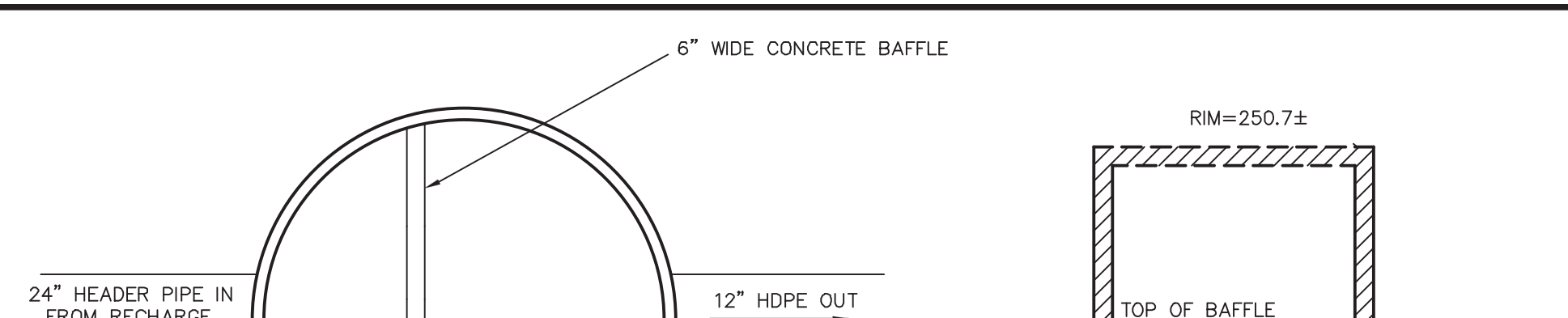
- STORMWATER MANAGEMENT SYSTEM CONSTRUCTION OPERATION + MAINTENANCE NOTES:**
- EXTREME CARE SHALL BE TAKEN DURING CONSTRUCTION TO AVOID SILTATION DURING THE CONSTRUCTION PROCESS.
 - EXTREME CARE SHALL BE TAKEN TO PREVENT COMPACTION OF UNDISTURBED SOILS BENEATH RECHARGE SYSTEM.
 - THERE SHALL BE NO DISCHARGE OF WATER FOR CONSTRUCTION DEWATERING ACTIVITIES INTO THE STORMWATER MANAGEMENT SYSTEM.
 - THERE SHALL BE NO DISCHARGE OF STORMWATER INTO THE RECHARGE SYSTEM UNTIL THE SITE HAS BEEN STABILIZED.

- CONSTRUCTION INSPECTION SCHEDULE**
- SILT SACKS AND SILT SOCKS SHALL BE INSPECTED AND REPLACED AS NECESSARY.
 - INSPECTIONS SHALL INCLUDE THE PAVEMENT TO DETERMINE IF ACCUMULATED SEDIMENT IS TO BE REMOVED, OF THE CATCH BASINS TO DETERMINE DEPTH OF SEDIMENTS AND REQUIRED CLEANING, AND INSPECTION OF THE RECHARGE SYSTEM TO DETERMINE IF CLEANING IS NECESSARY.
 - AN INSPECTION OF THE EXCAVATION OF THE RECHARGE SYSTEM SHALL BE CONDUCTED BY THE ENGINEER AND A REPRESENTATIVE OF THE TOWN'S ENGINEERING DEPARTMENT PRIOR TO PLACEMENT OF ANY CHAMBERS.

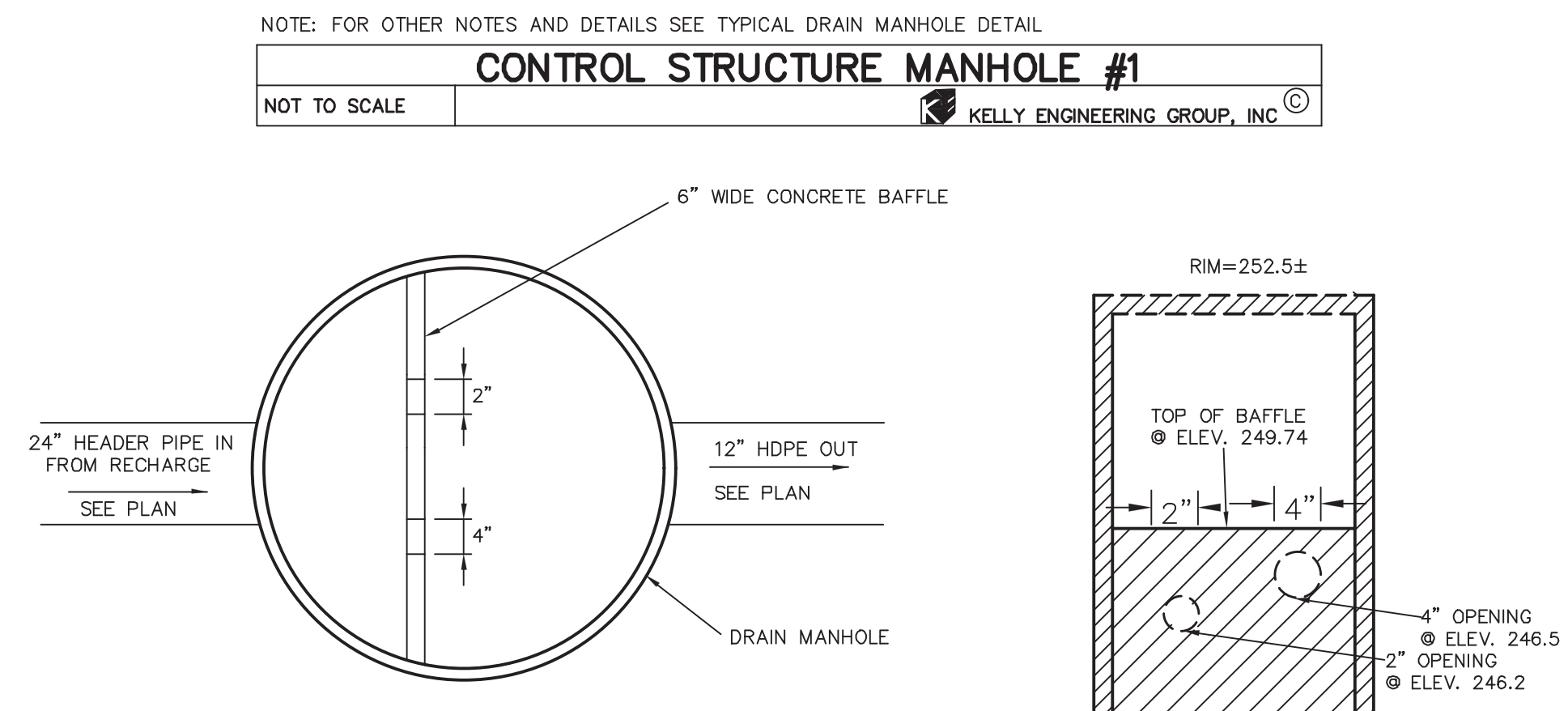
SUBSURFACE RECHARGE CHAMBERS
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.



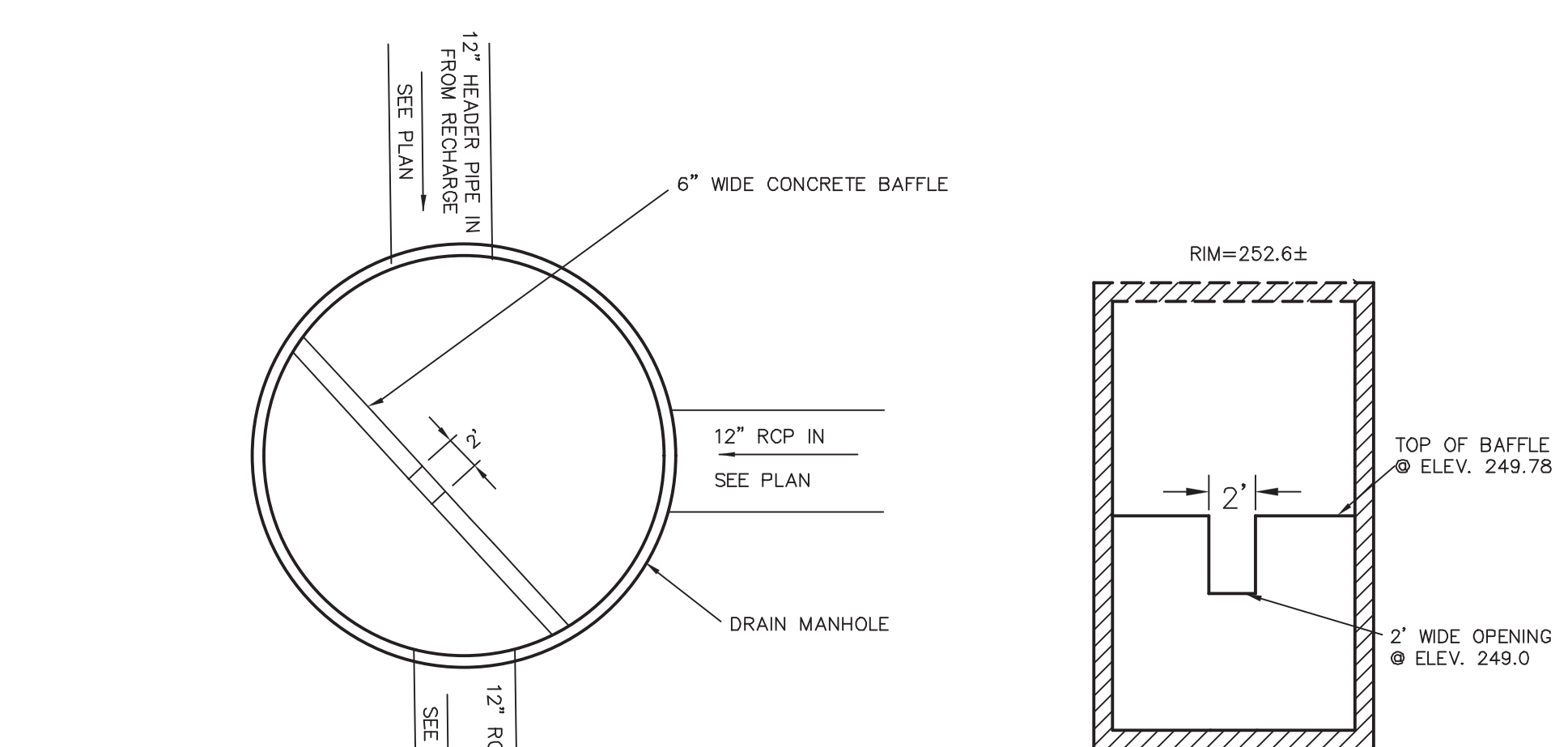
TYPICAL H2O INSPECTION PORT DETAIL
APPROVED DATE _____



CONTROL STRUCTURE MANHOLE #1
NOTE: FOR OTHER NOTES AND DETAILS SEE TYPICAL DRAIN MANHOLE DETAIL
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.



CONTROL STRUCTURE MANHOLE #2
NOTE: FOR OTHER NOTES AND DETAILS SEE TYPICAL DRAIN MANHOLE DETAIL
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.



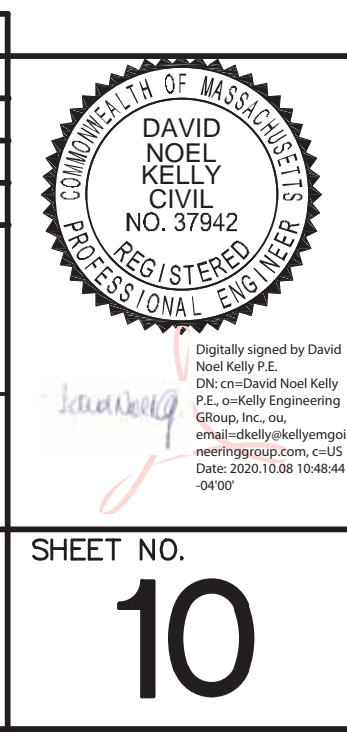
CONTROL STRUCTURE MANHOLE #3
NOTE: FOR OTHER NOTES AND DETAILS SEE TYPICAL DRAIN MANHOLE DETAIL
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.

SCALE	4.	10/01/20	PER TENANT COORDINATION	
NA	3.	07/28/20	PLANNING BOARD COMMENTS	
DATE	2.	06/02/20	NO CHANGE	
02/14/20	1.	04/10/20	PER PEER REVIEW	BY
SHEET	REV	DATE	REVISION	
10 of 12				
FILE #				
2019-127-DT04				
JOB #				
F:\P\2019-127				
DRAWN BY				
Cd				
CHKD BY				
SSH				
APPD BY				
DNK				

MARCUS PARTNERS
176- 210 GROVE STREET
FRANKLIN, MA

DETAIL SHEET

KELLY ENGINEERING GROUP
civil engineering consultants
0 Campanelli Drive, Braintree, MA 02184
Phone: 781-843-4333 www.kellyengineeringgroup.com



PROJECT SUMMARY

- CALCULATION DETAILS
- LOADING = HS20 & HS25
 - APPROX. LINEAR FOOTAGE = 768 lf.

- STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 46,600 cf.
 - PIPE STORAGE VOLUME = 33,929 cf.
 - BACKFILL STORAGE VOLUME = 12,768 cf.
 - TOTAL STORAGE PROVIDED = 46,697 cf.

- PIPE DETAILS
- DIAMETER = 90 IN.
 - CORRUGATION = 5x1
 - GAGE = 16
 - COATING = ALT2
 - WALL TYPE = Perforated
 - BARRELL SPACING = 36 IN.

- BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
 - ABOVE PIPE = 6 IN.
 - WIDTH AT SIDES = 12 IN.
 - BELOW PIPE = 6 IN.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 25" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN. QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.

MARK	DATE	REVISION DESCRIPTION	BY



9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX



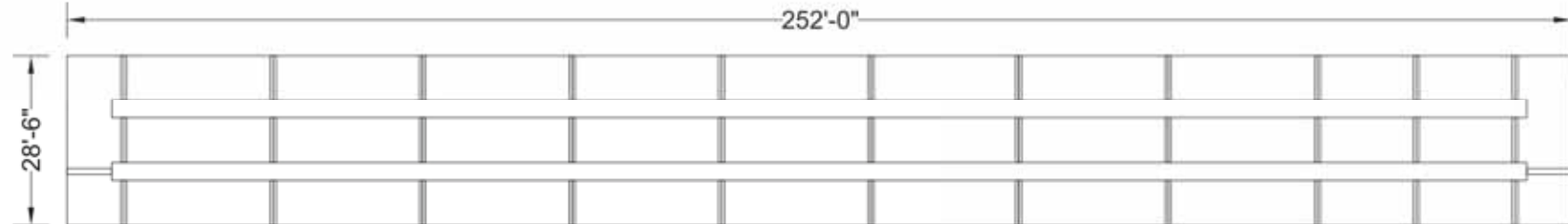
CONTECH
DYODS
DRAWING

ASSEMBLY
SCALE: 1" = 30'

DY01548 206 Grove Street
90" CMP Detention - 43604 cf.

DETENTION SYSTEM

PROJECT NO.	DES. NO.	DATE
1186	1584	7/3/2020
DESIGNED	DYOD	DYOD
CHECKED	DYOD	DYOD
SHEET NO.	D1	



PROJECT SUMMARY

- CALCULATION DETAILS
- LOADING = HS20 & HS25
 - APPROX. LINEAR FOOTAGE = 1,321 lf.

- STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 25,800 cf.
 - PIPE STORAGE VOLUME = 16,600 cf.
 - BACKFILL STORAGE VOLUME = 9,236 cf.
 - TOTAL STORAGE PROVIDED = 25,836 cf.

- PIPE DETAILS
- DIAMETER = 48 IN.
 - CORRUGATION = 2 2/3x1/2
 - GAGE = 16
 - COATING = ALT2
 - WALL TYPE = Perforated
 - BARRELL SPACING = 24 IN.

- BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
 - ABOVE PIPE = 6 IN.
 - WIDTH AT SIDES = 12 IN.
 - BELOW PIPE = 6 IN.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 25" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN. QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.

MARK	DATE	REVISION DESCRIPTION	BY



9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX



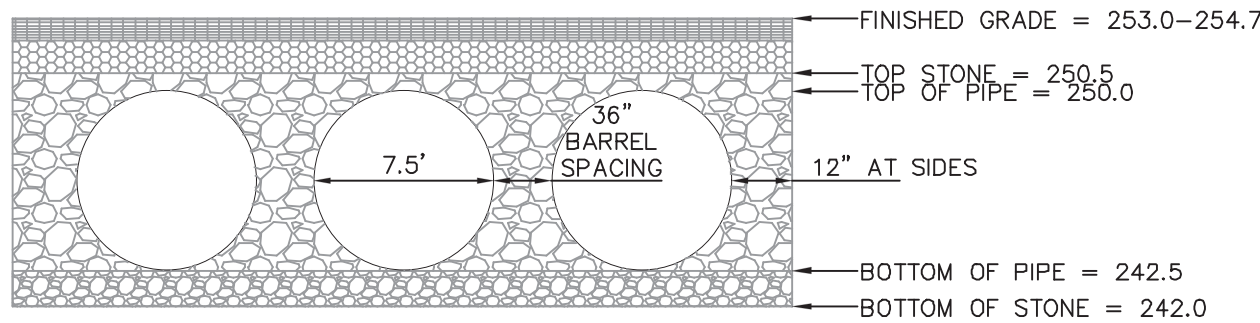
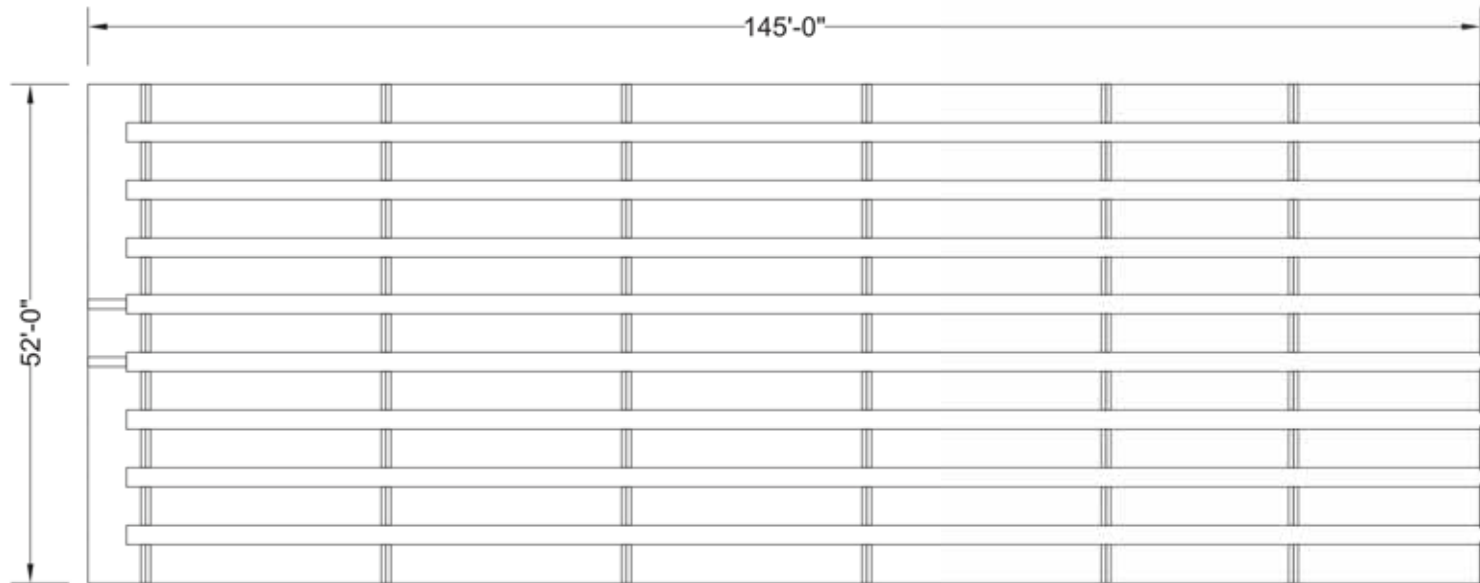
CONTECH
DYODS
DRAWING

ASSEMBLY
SCALE: 1" = 20'

DY01584 206 Grove Street
48" CMP Detention - 16600 cf.

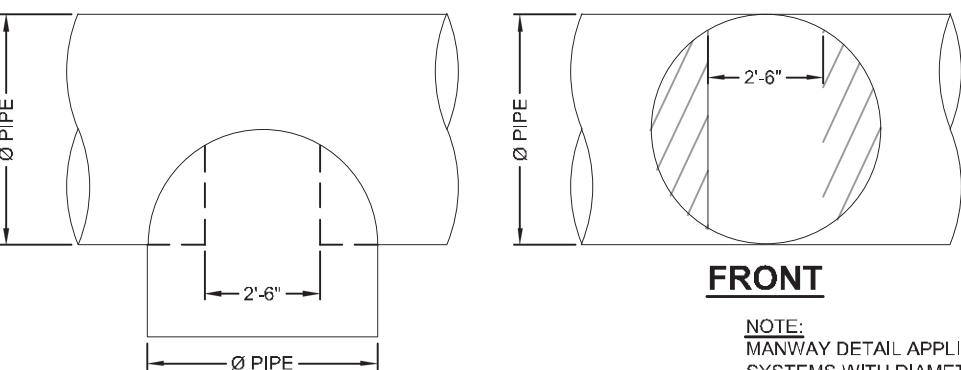
DETENTION SYSTEM

PROJECT NO.	DES. NO.	DATE
1186	1584	7/3/2020
DESIGNED	DYOD	DYOD
CHECKED	DYOD	DYOD
SHEET NO.	D1	

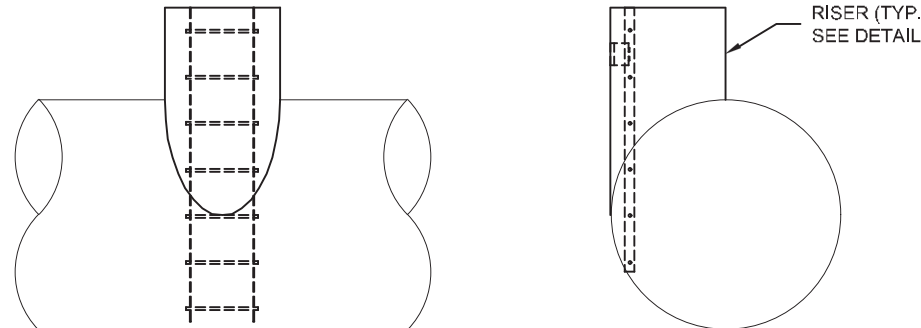


SECTION VIEW SUBSURFACE SYSTEM 1
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.

NOTE: PRIOR TO CONSTRUCTION FULL SHOP DRAWINGS TO BE PROVIDED BY MANUFACTURER.

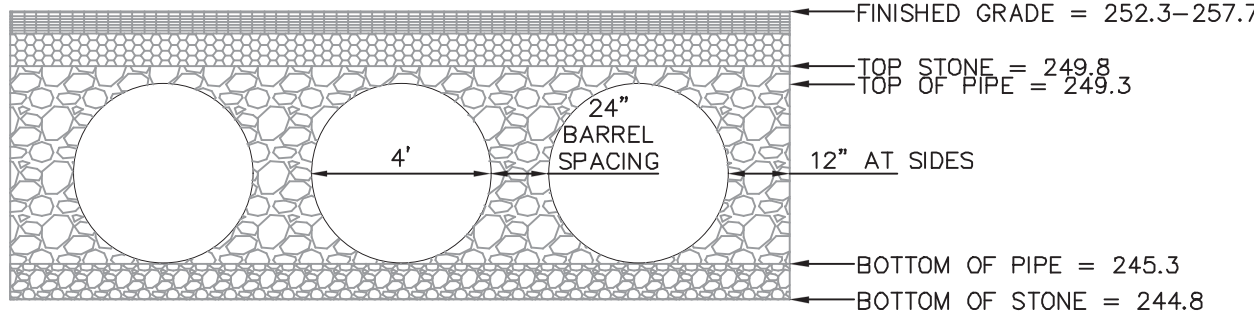


TYPICAL MANWAY DETAIL
SCALE: N.T.S.



TYPICAL RISER DETAIL
SCALE: N.T.S.

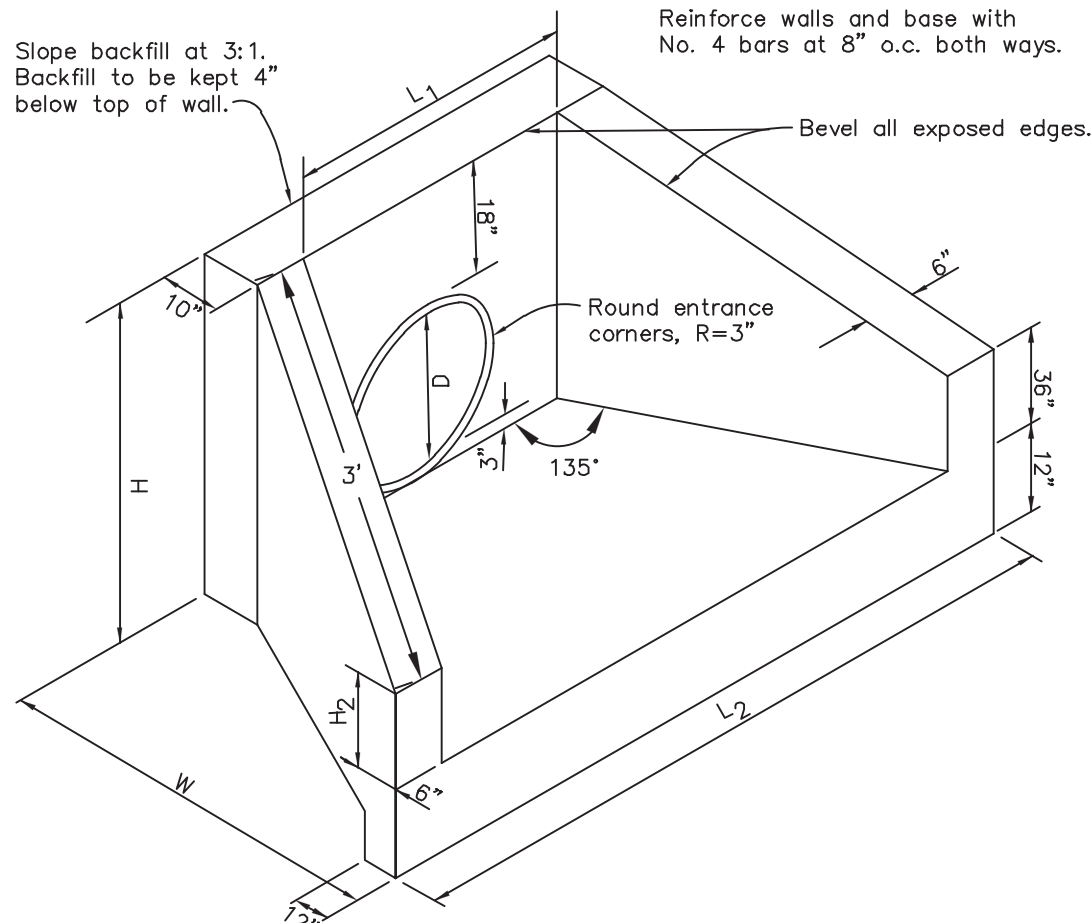
NOTE: PRIOR TO CONSTRUCTION FULL SHOP DRAWINGS TO BE PROVIDED BY MANUFACTURER.



SECTION VIEW SUBSURFACE SYSTEM 2
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.

NOTE: PRIOR TO CONSTRUCTION FULL SHOP DRAWINGS TO BE PROVIDED BY MANUFACTURER.

HEADWALL #	D	H ₁	H ₂	L ₁	L ₂	W ₁
1	12"	35'	0.5'	4'	7.5'	2.5'
2	15"	3.7'	0.5'	4'	8.0'	3.0'
3	15"	3.7'	0.5'	4'	8.0'	3.0'
4	12"	3.5'	0.5'	4'	7.5'	3.0'
5	42"	5.7'	0.5'	6.8'	13'	4.0'
6	42"	5.7'	0.5'	6.8'	13'	4.0'



NOTE:
Concrete shall be Class B" (5 sack mix) unless otherwise noted.

HEADWALL DETAIL
NOT TO SCALE
KELLY ENGINEERING GROUP, INC.

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APPROVED BY THE FRANKLIN PLANNING BOARD

APPROVED DATE

SCALE	4.	10/01/20	PER TENANT COORDINATION	
NA	3.	07/28/20	PLANNING BOARD COMMENTS	
DATE	2.	06/02/20	NO CHANGE	
02/14/20	1.	04/10/20	PER PEER REVIEW	
SHEET	REV	DATE	REVISION	BY
11 of 12				
FILE #				
2019-127-DT04				
JOB #				
F:\P\2019-127				
DRAWN BY				
C.d.				
CHKD BY				
SSH				
APPD BY				
DNK				

MARCUS PARTNERS
176- 210 GROVE STREET
FRANKLIN, MA

DETAIL SHEET

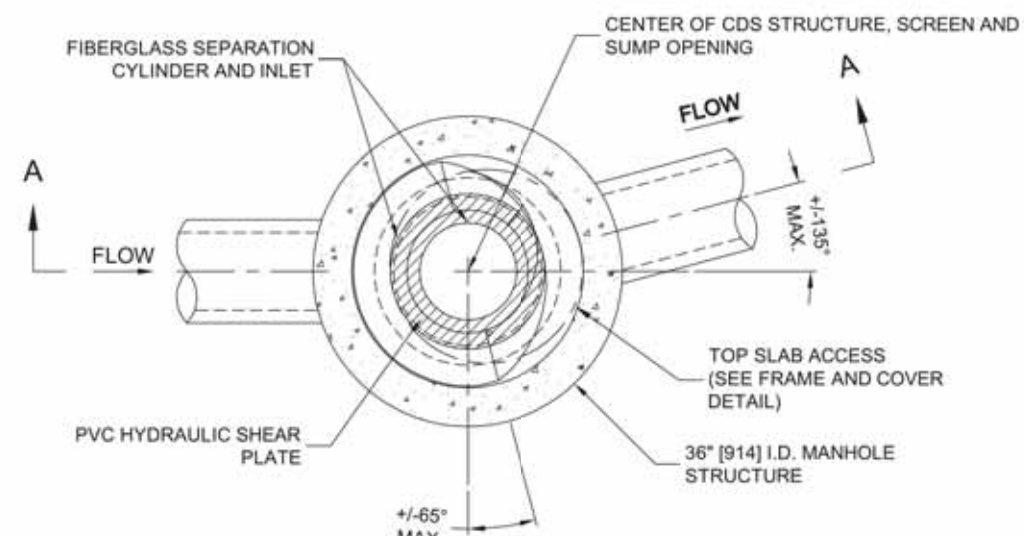
KELLY ENGINEERING GROUP
civil engineering consultants
0 Campanelli Drive, Braintree, MA 02184
Phone: 781-843-4333 www.kellyengineeringgroup.com

DAVID NOEL KELLY CIVIL NO. 37942 REGISTERED PROFESSIONAL ENGINEER

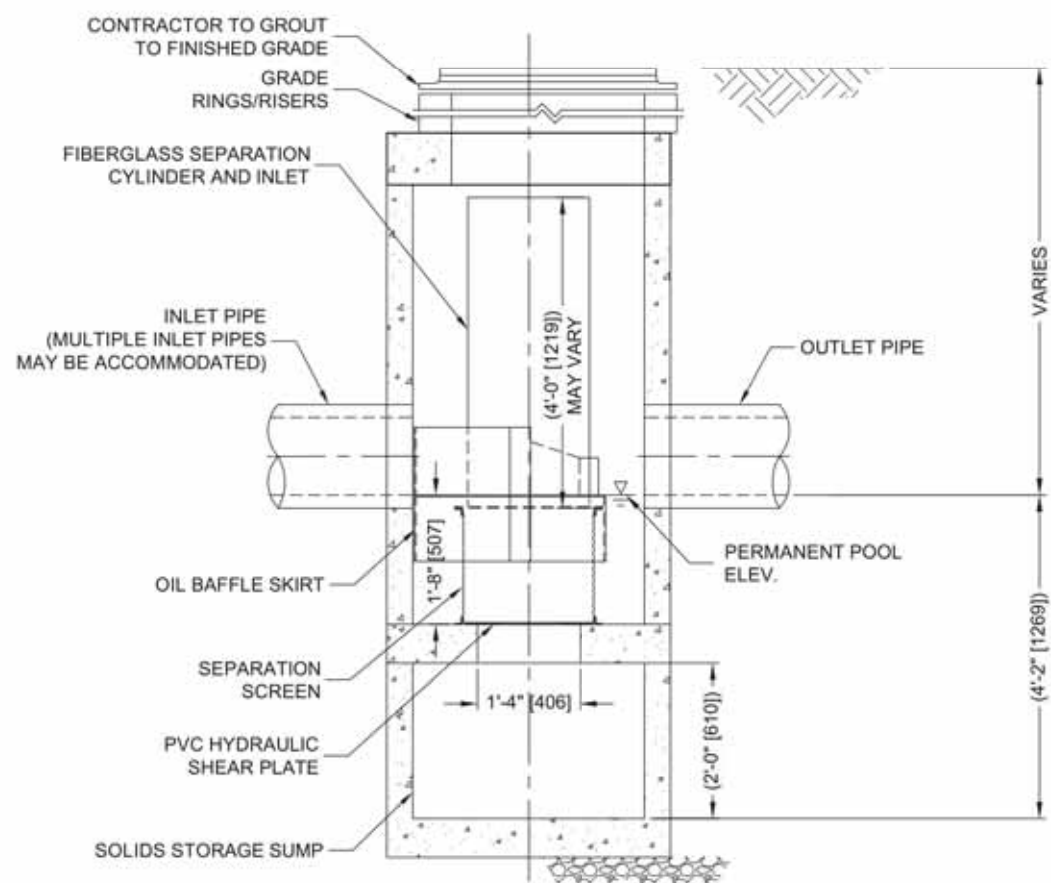
Seal of David Noel Kelly P.E., Civil Engineer, State of Massachusetts, No. 37942, Date: 2020.10.08 10:49:07 a.m.

SHEET NO. 11

C:\USERS\KELLY\Documents\STORMCEPTOR\STORMCEPTOR\STANDARD DRAWINGS\DWG\STC450I.DWG 10/20/2018 10:07 AM



PLAN VIEW B-B
N.T.S.

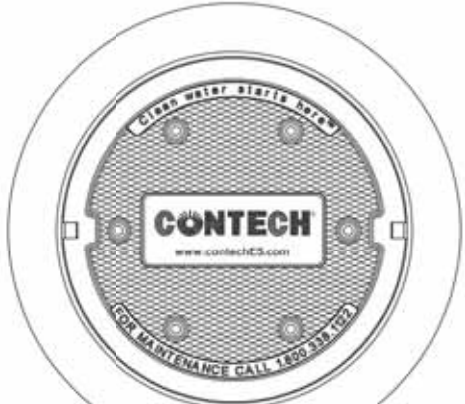


ELEVATION A-A
N.T.S.



CDS1515-3-C DESIGN NOTES

THE STANDARD CDS1515-3-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

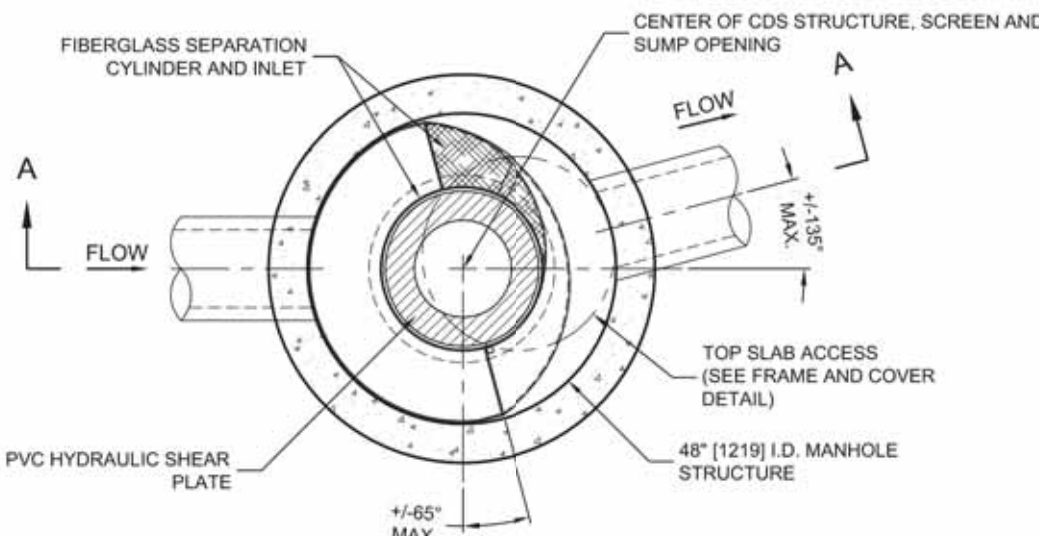
STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	*
PEAK FLOW RATE (CFS OR L/s)	*
RETURN PERIOD OF PEAK FLOW (YRS)	*
SCREEN APERTURE (2400 OR 4700)	*
PIPE DATA:	I.E. MATERIAL DIAMETER
INLET PIPE 1	* * *
INLET PIPE 2	* * *
OUTLET PIPE	* * *
RIM ELEVATION	*
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO H20 AND CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
 - IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 - CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

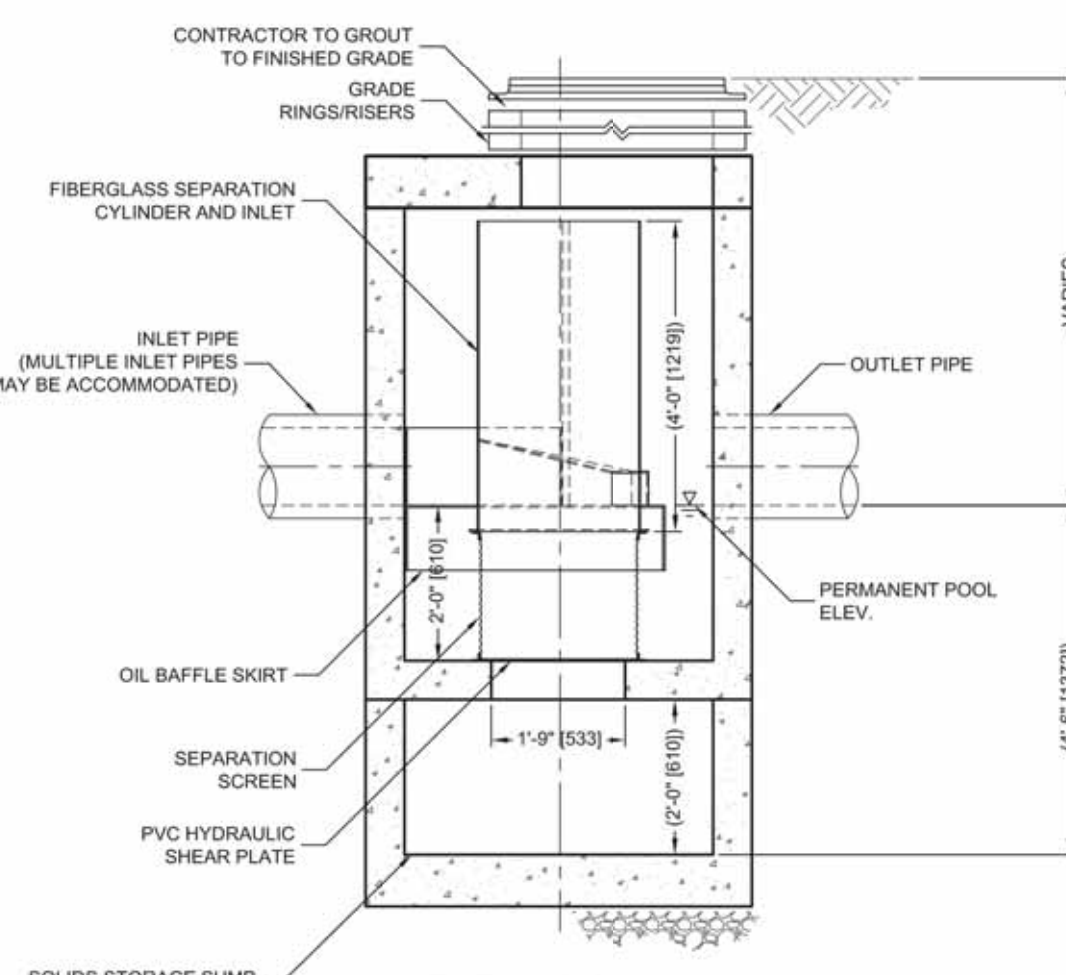
- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



CDS1515-3-C
ONLINE CDS
STANDARD DETAIL



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

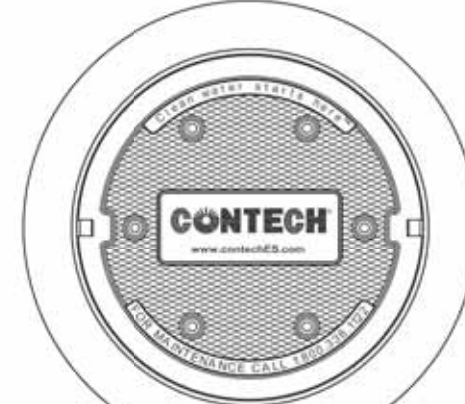


CDS2015-4-C DESIGN NOTES

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES
- SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
- SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	*
PEAK FLOW RATE (CFS OR L/s)	*
RETURN PERIOD OF PEAK FLOW (YRS)	*
SCREEN APERTURE (2400 OR 4700)	*
PIPE DATA:	I.E. MATERIAL DIAMETER
INLET PIPE 1	* * *
INLET PIPE 2	* * *
OUTLET PIPE	* * *
RIM ELEVATION	*
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET AASHTO H20 AND CASTINGS SHALL MEET AASHTO M306 (AASHTO M306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 - PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



CDS2015-4-C
ONLINE CDS
STANDARD DETAIL

STORMCEPTOR DESIGN NOTES

THE STANDARD STC450I CONFIGURATION WITH ROUND, SOLID FRAME AND COVER, AND INLET PIPE IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

- GRATED INLET ONLY (NO INLET PIPE)
- GRATED INLET WITH INLET PIPE OR PIPES
- CURB INLET ONLY (NO INLET PIPE)
- CURB INLET WITH INLET PIPE OR PIPES

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (cfs [L/s])	
PEAK FLOW RATE (cfs [L/s])	
RETURN PERIOD OF PEAK FLOW (yrs)	
RIM ELEVATION	
PIPE DATA:	INVERT MATERIAL DIAMETER
INLET PIPE 1	
INLET PIPE 2	
OUTLET PIPE	
NOTES/SPECIAL REQUIREMENTS:	

FRAME AND COVER
(MAY VARY)
NOT TO SCALE

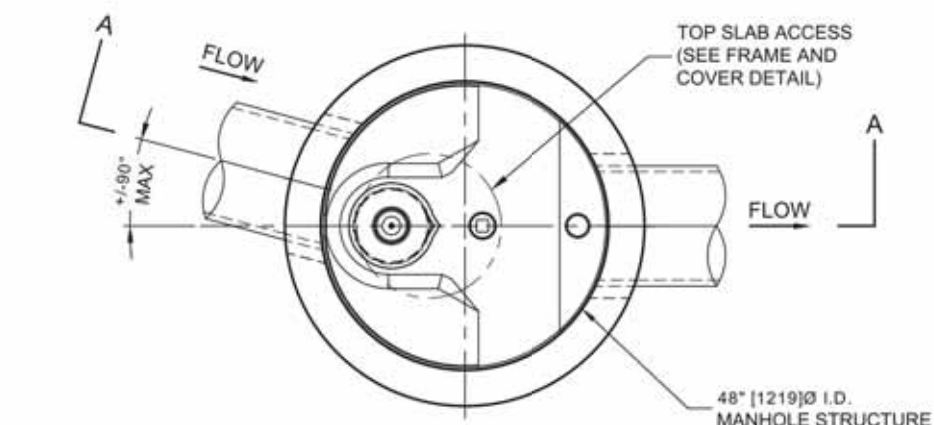
FRAME AND GRATE
(MAY VARY)
NOT TO SCALE

- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STORMCEPTOR STRUCTURE SHALL MEET AASHTO H20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' (610), AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
 - STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - ALTERNATE UNITS ARE SHOWN IN MILLIMETERS (mm).

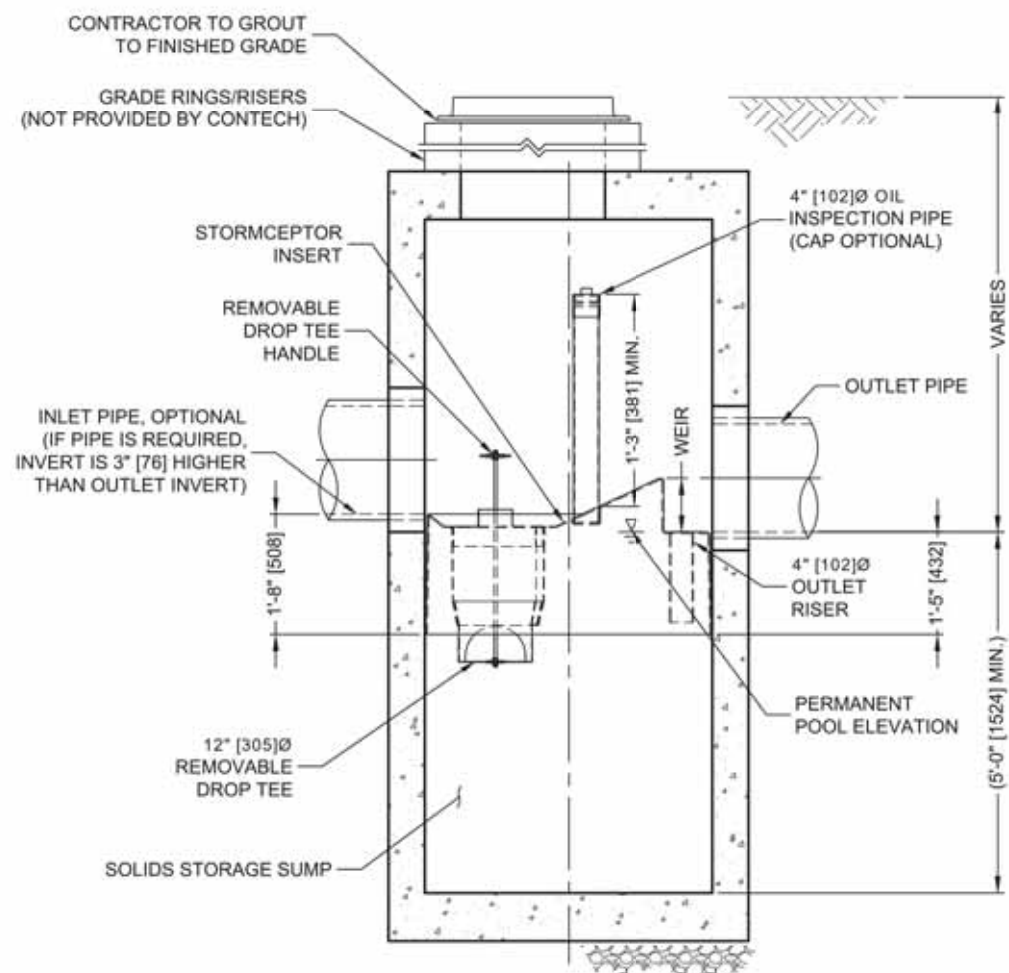
- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



STC450I
STORMCEPTOR
STANDARD DETAIL



PLAN VIEW
TOP SLAB NOT SHOWN



SECTION A-A



KELLY ENGINEERING GROUP SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORKING ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE EXTENT OF KELLY ENGINEERING GROUP'S LIABILITY FOR THIS PLAN IS LIMITED TO THE EXTENT OF ITS FEE LESS THIRD PARTY COST.

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APPROVED BY THE FRANKLIN PLANNING BOARD

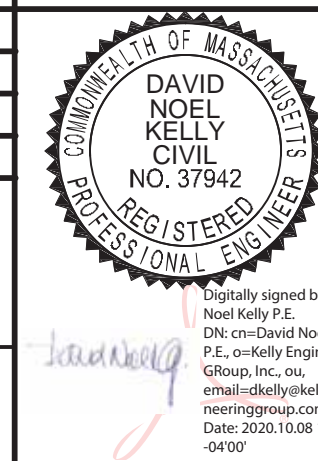
APPROVED DATE

SCALE	3.	10/01/20	NO CHANGE	
NA	3.	07/28/20	PLANNING BOARD COMMENTS	
DATE	2.	06/02/20	NO CHANGE	
02/14/20	1.	04/10/20	PER PEER REVIEW	
SHEET	REV	DATE	REVISION	BY
12 of 12				
FILE #				
2019-127-DT04				
JOB #				
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DRAWN BY				
CdL				
CHKD BY				
SSH				
APPD BY				
DNK				

MARCUS PARTNERS
176- 210 GROVE STREET
FRANKLIN, MA

DETAIL SHEET

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SHEET NO.

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