



104 STONY BROOK, LLC  
P.O. BOX 158, WABAN, MASSACHUSETTS 02468

# PROPOSED WASTEWATER TREATMENT FACILITIES STONY BROOK APARTMENTS 104 BOSTON POST ROAD WESTON, MASSACHUSETTS

CONCEPTUAL DESIGN SUBMITTAL

APRIL 14, 2017

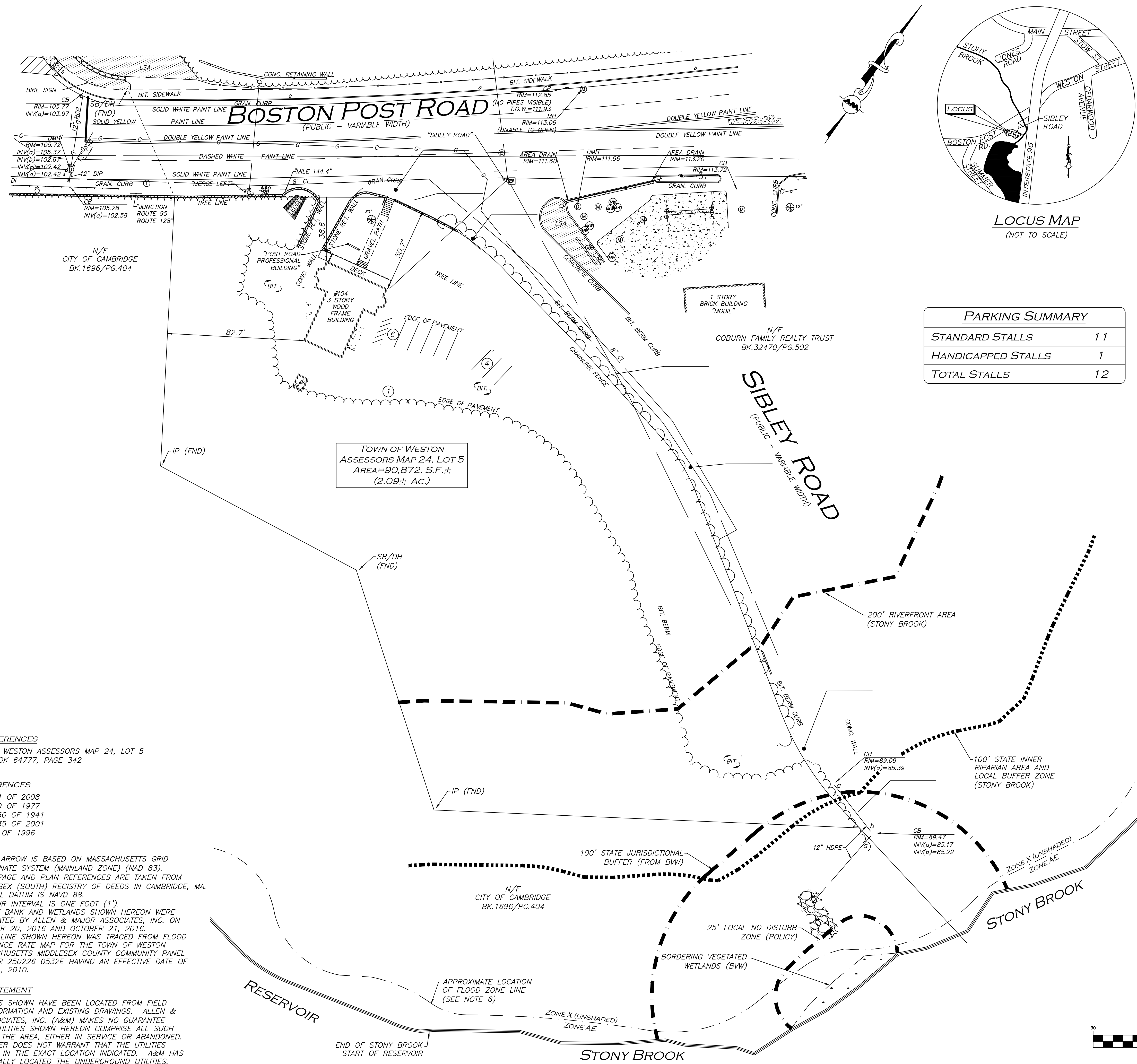
Project Number: 195150441



SITE LOCUS MAP  
1" = 400'

LIST OF PLANS

SHEET NO.	DWG NO.	TITLE
1	-	COVER
2	EC-01	EXISTING CONDITIONS PLAN
3	PC-01	PROPOSED CONDITIONS PLAN 1 OF 2
4	PC-02	PROPOSED CONDITIONS PLAN 2 OF 2
5	N-01	NOTES AND CALCULATIONS
6	G-101	PROCESS FLOW DIAGRAM 1 OF 2
7	G-102	PROCESS FLOW DIAGRAM 2 OF 2
8	G-103	HYDRAULIC PROFILE
9	D-101	PROCESS BUILDING PLAN 1 OF 3
10	D-102	PROCESS BUILDING PLAN 2 OF 3
11	D-103	PROCESS BUILDING PLAN 3 OF 3
12	D-301	PROCESS BUILDING SECTION 1 OF 3
13	D-302	PROCESS BUILDING SECTION 2 OF 3
14	D-303	PROCESS BUILDING SECTION 3 OF 3



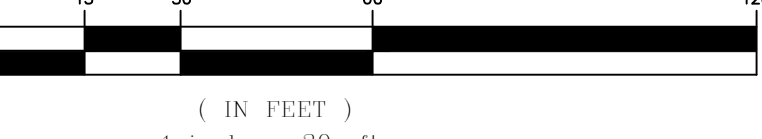
**PARKING SUMMARY**

STANDARD STALLS	11
HANDICAPPED STALLS	1
<b>TOTAL STALLS</b>	<b>12</b>

**LEGEND**

- DRAIN MANHOLE (DMH)
- SEWER MANHOLE (SMH)
- ELECTRIC MANHOLE (EMH)
- MISC. MANHOLE (MH)
- TELEPHONE MANHOLE (TMH)
- CATCH BASIN (CB)
- UTILITY POLE
- UTILITY POLE W/RISER
- UTILITY POLE W/LIGHT
- GUY WIRE
- FIRE HYDRANT
- WATER GATE
- GAS GATE
- BOLLARD
- LIGHT
- TREE
- VENT
- AREA DRAIN
- SIGN
- SIGN
- TRANSFORMER
- MONITOR WELL
- HANDICAP RAMP
- WETLAND FLAG (NUMBERS ONLY)
- TOP OF BANK FLAG ("A" SERIES)
- HAND HOLE
- ELECTRIC METER
- HANDICAPPED PARKING SPACE
- CONCRETE
- LANDSCAPED AREA (LSA)
- LEDGE
- WETLAND AREA
- BUILDING
- BUILDING OVERHANG
- BORDERING VEGETATED WETLAND
- 1' CONTOUR
- 5' CONTOUR
- PROPERTY LINE
- ABUTTERS LINE
- CONCRETE RETAINING WALL
- STONE RETAINING WALL
- TREE LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- EDGE OF WATER/TOP OF BANK CURB
- CHAIN LINK FENCE
- GUARDRAIL
- DRAIN LINE
- GAS LINE
- OVERHEAD WIRES
- BITUMINOUS
- CONCRETE
- GRANITE
- BOTTOM CENTER (BC)
- REINFORCED CONCRETE PIPE (RCP)
- POLYVINYL CHLORIDE PIPE (PVC)
- DUCTILE IRON PIPE (DIP)
- NOW OR FORMERLY
- BOOK
- PAGE

**GRAPHIC SCALE**



**LOCUS REFERENCES**  
 -TOWN OF WESTON ASSESSORS MAP 24, LOT 5  
 -DEED BOOK 64777, PAGE 342

**PLAN REFERENCES**  
 -PLAN 414 OF 2008  
 -PLAN 990 OF 1977  
 -PLAN 1260 OF 1941  
 -PLAN 1135 OF 2001  
 -PLAN 64 OF 1996

**NOTES**

- NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
- BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
- VERTICAL DATUM IS NAVD 88.
- CONTOUR INTERVAL IS ONE FOOT (1').
- TOP OF BANK AND WETLANDS SHOWN HEREON WERE DELINEATED BY ALLEN & MAJOR ASSOCIATES, INC. ON OCTOBER 20, 2016 AND OCTOBER 21, 2016.
- FLOOD LINE SHOWN HEREON WAS TRACED FROM FLOOD INSURANCE RATE MAP FOR THE TOWN OF WESTON, MASSACHUSETTS MIDDLESEX COUNTY COMMUNITY PANEL NUMBER 250226 0532E HAVING AN EFFECTIVE DATE OF JUNE 4, 2010.

**UTILITY STATEMENT**  
 THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

WE HEREBY CERTIFY THAT:  
 THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN OCTOBER 21, 2016 AND FEBRUARY 1, 2017.  
 THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS DATED JANUARY 1, 1976 AND REVISED JANUARY 12, 1988.  
 ACCORDING TO DEEDS AND PLANS OF RECORD, THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF THE STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS AND WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.  
 THE ABOVE CERTIFICATION IS INTENDED TO MEET REQUIREMENTS FOR THE RECORDING OF PLANS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF WESTON ASSESSOR'S INFORMATION.  
 THE ABOVE IS CERTIFIED TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF.  
 ALLEN & MAJOR ASSOCIATES, INC.

**ISSUED FOR REVIEW**  
 FEBRUARY 1, 2017

PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
2.	03/06/17	WATER LINE SIZES ADDED
1.	02/01/17	SIBLEY ROAD DRAINAGE

APPLICANT/OWNER:  
 104 STONY BROOK, LLC  
 P.O. BOX 158  
 WABAN, MA 02468

PROJECT:  
 STONY BROOK WESTON  
 104 BOSTON POST ROAD  
 WESTON, MA

PROJECT NO. 2275-01 DATE: 12/22/16

SCALE: 1" = 30'DWG. NAME: S-2275-01

DRAFTED BY: COB/MSM CHECKED BY: KJK

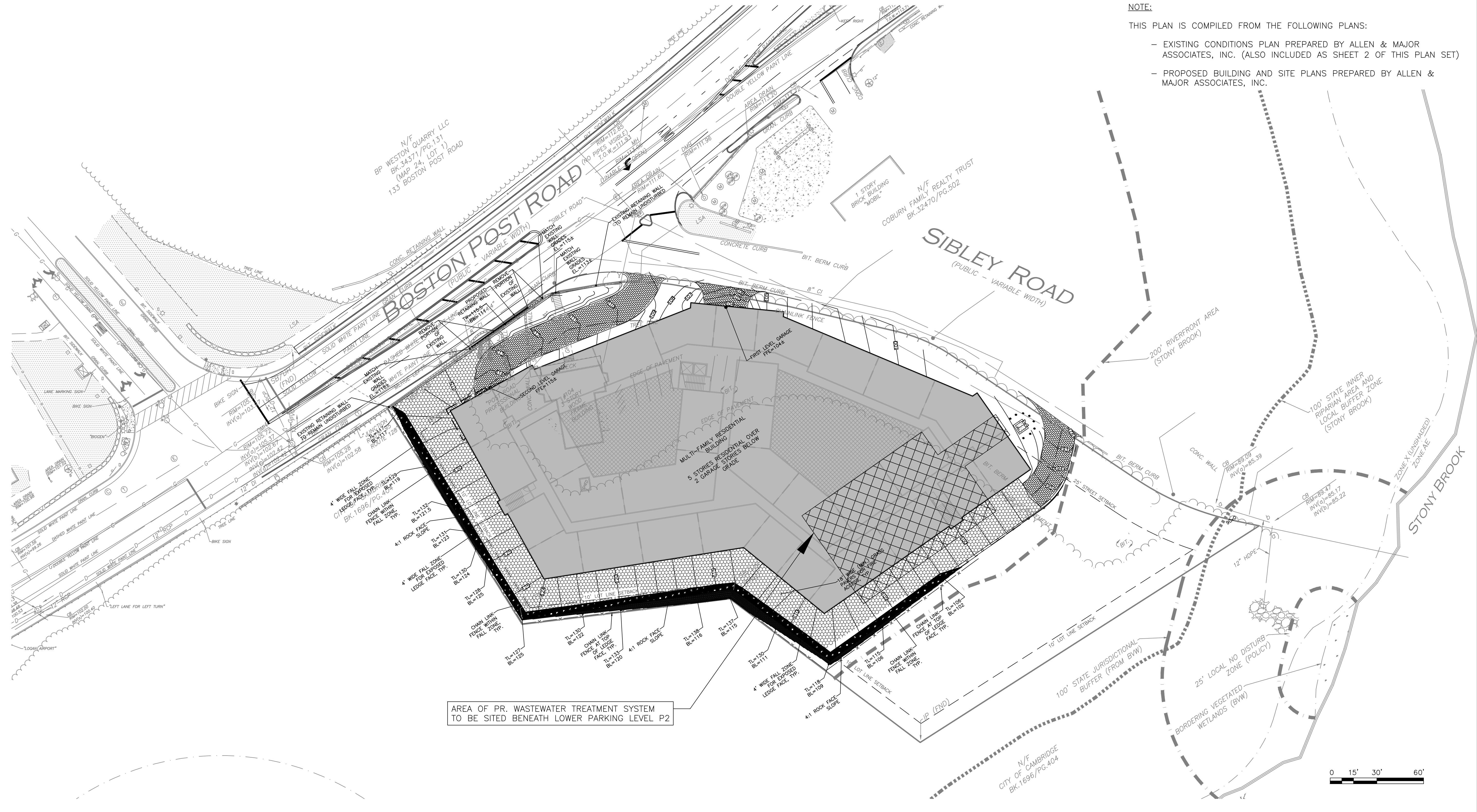
PREPARED BY:

**ALLEN & MAJOR ASSOCIATES, INC.**  
 civil & structural engineering • land surveying  
 environmental consulting • landscape architecture  
 www.allenmajor.com  
 100 COMMERCE WAY  
 P.O. BOX 2118  
 WOBURN MA 01888-0118  
 TEL: (781) 935-6889  
 FAX: (781) 935-2896  
 WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

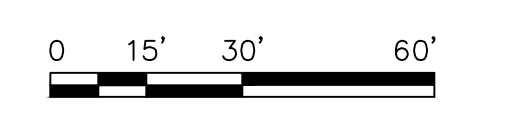
THIS DRAWING HAS BEEN PREPARED IN ELECTRONIC FORMAT. CLIENT/CLIENT'S REPRESENTATIVE OR CONSULTANT MAY BE PROVIDED COPIES OF DRAWINGS AND SPECIFICATIONS ON MAGNETIC MEDIA FOR HIS/HER INFORMATION AND USE FOR SPECIFIC APPLICATION TO THIS PROJECT. DUE TO THE POTENTIAL THAT THE MAGNETIC INFORMATION MAY BE MODIFIED UNINTENTIONALLY OR OTHERWISE, ALLEN & MAJOR ASSOCIATES, INC. MAY REMOVE ALL INDICATION OF THE DRAWING'S AUTHORITY ON THE MAGNETIC MEDIA. PRINTED REPRESENTATIONS OF THE DRAWINGS AND SPECIFICATIONS SHALL BE THE ONLY VALID PRODUCT.  
 EXISTING CONDITIONS 1



- NOTE:**
- THIS PLAN IS COMPILED FROM THE FOLLOWING PLANS:
  - EXISTING CONDITIONS PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC. (ALSO INCLUDED AS SHEET 2 OF THIS PLAN SET)
  - PROPOSED BUILDING AND SITE PLANS PREPARED BY ALLEN & MAJOR ASSOCIATES, INC.



AREA OF PR. WASTEWATER TREATMENT SYSTEM TO BE SITED BENEATH LOWER PARKING LEVEL P2



I:\195150441\WWT\Final\Design\CAD\Design\Process\195150441\_Site.dwg  
 2017/04/14 12:27 PM By: YYY.MM.DD

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants

5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec, without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

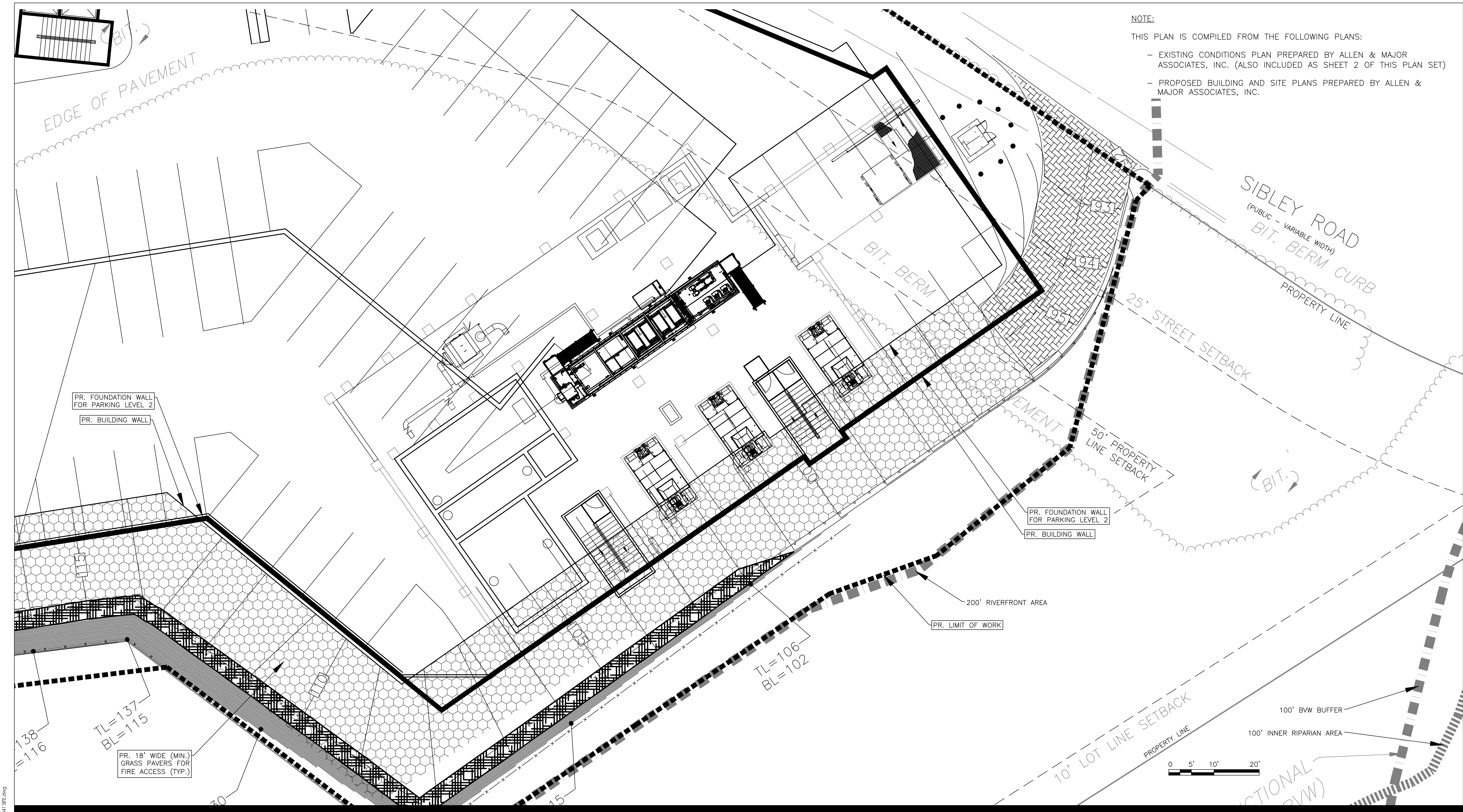
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 195150441\_PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYY.MM.DD

Title		
PROPOSED CONDITIONS 1 of 2		
Project No. 195150441	Scale 1" = 30'	
Drawing No. PC-01	Sheet 3 of 14	Revision 0





NOTE:  
THIS PLAN IS COMPILED FROM THE FOLLOWING PLANS:  
- EXISTING CONDITIONS PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC. (ALSO INCLUDED AS SHEET 2 OF THIS PLAN SET)  
- PROPOSED BUILDING AND SITE PLANS PREPARED BY ALLEN & MAJOR ASSOCIATES, INC.

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal	Consultants

CONCEPTUAL DESIGN SUBMITTAL

5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project  
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468  
Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 195150441 PROCESS K.M.K. Dwn. K.P.K. Chkd. D.M. Dsgn. 2017.04.14

Title	
PROPOSED CONDITIONS 2 of 2	
Project No. 195150441	Scale 1" = 10'
Drawing No. PC-02	Sheet 4 of 14
Revision 0	

I:\195150441\WWT\Final\Design\CAD\Design\Process\195150441\_SITE.dwg  
 2017/04/14 2:27PM By: [unclear]

**GENERAL CONSTRUCTION NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS.
2. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS:
  - ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION PLANS PREPARED BY ALLEN & MAJOR ASSOCIATES, INC.
  - SITE AND BUILDING PLANS
3. THE MATERIALS AND CONSTRUCTION OF ALL PROPOSED UTILITIES SHALL CONFORM TO THE MASS. D.P.W. STANDARDS AND SPECIFICATIONS DATED 1988, OR AS MOST RECENTLY REVISED, AND SUPPLEMENTAL SPECIFICATIONS, AS WELL AS 310 CMR 15.000 TITLE 5 STATE ENVIRONMENTAL CODE, THE "GUIDELINES FOR THE DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF SMALL SEWAGE TREATMENT FACILITIES WITH LAND DISPOSAL" AND THE TOWN OF WESTON BOARD OF HEALTH RULES AND REGULATIONS.
4. ALL CONSTRUCTION METHODS AND MATERIALS, AS WELL AS ALL MATERIAL SHOP DRAWINGS AND MANUFACTURERS DATA SHALL REQUIRE THE WRITTEN APPROVAL OF STANTEC CONSULTING SERVICES, INC. (STANTEC) PRIOR TO FABRICATION AND INSTALLATION. STANTEC IS NOT RESPONSIBLE FOR ANY WORK FOR WHICH SHOP DRAWINGS AND/OR CONSTRUCTION MATERIALS HAVE NOT BEEN PRE-APPROVED BY STANTEC.
5. THE LOCATION AND ELEVATION OF ANY EXISTING AND PROPOSED UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. UNDERGROUND UTILITIES SHOWN ARE FROM FIELD OBSERVATION AND THE BEST AVAILABLE RECORD INFORMATION AND ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES TO DETERMINE THE LOCATION, SIZE, MATERIALS AND ELEVATION OF ALL EXISTING UTILITIES, CONDUITS AND LINES.
6. THE CONTRACTOR SHALL CONTACT "DIG SAFE" AT 1-888-344-7233, 72 HOURS PRIOR TO ANY EXCAVATION AND/OR SUBSURFACE TESTING TO INFORM THE UTILITY COMPANIES OF ANY EXCAVATION.
7. WHENEVER EXISTING STRUCTURES ARE ENCOUNTERED, THE CONTRACTOR SHALL REPAIR ANY DAMAGED STRUCTURES OR REPLACE ANY REMOVED STRUCTURES, AND MAKE ANY IMPROVEMENTS ABOVE AND BELOW GRADE TO A CONDITION BETTER THAN OR EQUAL TO PRE-EXISTING CONDITIONS.
8. ALL EXCAVATED MATERIAL DESIGNATED FOR REUSE SHALL BE STOCKPILED ON SITE AND SHALL BE ENCLOSED BY TEMPORARY SILT FENCES TO PREVENT TRAVEL OF SEDIMENT TO ADJACENT PROPERTIES OR DRAINAGE WAYS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL WASTE MATERIAL AT A LOCATION APPROVED BY THE ENGINEER. BURIAL OF UNSUITABLE WASTE MATERIAL ON SITE WILL NOT BE PERMITTED.
10. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND MAINTAINED IN GOOD CONDITION UNTIL SURFACE RESTORATION IS COMPLETE AND ALL AREAS DISTURBED BY THE CONTRACTORS OPERATIONS ARE STABILIZED. EROSION CONTROL MEASURES SHALL NOT BE REMOVED WITHOUT PRIOR APPROVAL FROM THE ENGINEER AND THE LOCAL CONSERVATION COMMISSION.
11. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTIES AND WETLAND RESOURCE AREAS FROM ON-SITE CONSTRUCTION ACTIVITIES AND SHALL REMOVE ANY SEDIMENT OR DEBRIS DEPOSITED THEREON IMMEDIATELY.
12. DRAINAGE GENERATED AS A RESULT OF DEWATERING SHALL BE DISCHARGED TO EXISTING DRAINAGE COURSES WITH PROPER EROSION CONTROL MEASURES SUBJECT TO APPROVAL BY THE LOCAL CONSERVATION COMMISSION. DISCHARGE ONTO PAVEMENT, WETLANDS, OR PRIVATE PROPERTY SHALL NOT BE ALLOWED.
13. APPROVAL FROM THE ENGINEER, SHALL BE REQUIRED FOR ALL FIELD CHANGES IN THE WORK PRIOR TO IMPLEMENTATION. NO FIELD CHANGES SHALL BE MADE IN ANY SPECIFIED SITE WORK OR ANY MATERIALS FOR WHICH SHOP DRAWINGS HAVE BEEN SUBMITTED AND APPROVED WITHOUT PRIOR CONSULTATION OF STANTEC AND THE OWNER. ANY CHANGES SO MADE WITHOUT THE CONSENT OF THE ENGINEER SHALL, IF DEEMED UNACCEPTABLE BY THE ENGINEER, BE PROMPTLY REMOVED FROM THE WORK SITE AT NO EXPENSE TO THE OWNER OF THE PROJECT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE PREPARATION, THE FIELD STAKING OF THE FACILITIES, THE COORDINATION AND INSTALLATION OF ALL UTILITY CONNECTIONS, AND RELATED WORK INCLUDING BUT NOT LIMITED TO ALL NECESSARY SHORING, BRACING AND DEWATERING FOR THE COMPLETE INSTALLATION OF THE PROJECT FACILITIES DURING CONSTRUCTION.
15. THE CONTRACTOR SHALL MAKE APPLICATION FOR AND PAY ALL FEES FOR PERMITS REQUIRED TO CONSTRUCT THIS PROJECT.
16. AFTER THE CONTRACTOR HAS STAKED OUT THE FACILITIES TO BE CONSTRUCTED AND HAS THE APPROVED MATERIALS ON THE JOB, THE OWNERS REPRESENTATIVE SHALL BE NOTIFIED AT LEAST TWO WORKING DAYS IN ADVANCE OF CONSTRUCTION TO ARRANGE FOR AN INSPECTION.
17. STANTEC IMPLIES NO WARRANTY OR CERTIFICATION AS TO THE ACCURACY OF ANY BASE MAPS, UTILITY DESIGN OR RECORD PROPERTY LINE DATA SHOWN ON THESE PLANS.
18. STANTEC ASSUMES NO RESPONSIBILITY FOR THE USE OF THESE PLANS FOR ACTUAL CONSTRUCTION WITHOUT WRITTEN APPROVAL FOR CONSTRUCTION ISSUED BY STANTEC AND THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION.
19. UNLESS OTHERWISE NOTED, ANY EXISTING BITUMINOUS PAVEMENT AND CURBING SHALL BE REMOVED AND DISPOSED AT A LOCATION APPROVED BY THE ENGINEER.
20. ANY ERRORS, OMISSIONS AND CHANGES IN CONDITIONS AT THE SITE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PERFORMING THE RELATED WORK.
21. ALL OPEN EXCAVATIONS SHALL BE ADEQUATELY SAFEGUARDED BY PROVIDING TEMPORARY BARRICADES, CAUTION SIGNS, LIGHTS AND OTHER MEANS TO PREVENT ACCIDENTS TO PERSONS AND DAMAGE TO PROPERTY. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE SUITABLE AND SAFE BRIDGES AND OTHER CROSSINGS FOR ACCOMMODATING TRAVEL BY PEDESTRIANS AND WORKMEN AND PROVIDE POLICE DETAILS AS NECESSARY.
22. ALL PROPOSED WATER SERVICES SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE REGULATIONS OF THE TOWN OF WESTON AND THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION.

**DESIGN FLOW**

DESIGN CRITERIA FOR THE PROPOSED WASTEWATER TREATMENT FACILITY (WWTF) WAS ESTABLISHED IN ACCORDANCE WITH THE "GUIDELINES FOR THE DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF SMALL SEWAGE TREATMENT FACILITIES WITH LAND DISPOSAL" PUBLISHED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MASSDEP).

THE PROPOSED RESIDENTIAL APARTMENT DEVELOPMENT WILL CONSIST OF TWO HUNDRED THIRTY FIVE (235) BEDROOMS.

THE PROPOSED WWTF WILL HAVE A DESIGN CAPACITY OF 25,850 GALLONS PER DAY (GPD). THE DESIGN FLOWS HAVE BEEN CALCULATED AS FOLLOWS:

$$235 \text{ BEDROOMS} \times 110 \text{ GPD/BEDROOM} = 25,850 \text{ GPD}$$

**WASTEWATER CHARACTERISTICS**

	CONCENTRATION
DESIGN FLOW, MAX. DAILY FLOW (MDF)	25,850 GPD
TOTAL BIOCHEMICAL OXYGEN DEMAND (BOD)	250 MG/L
TOTAL SUSPENDED SOLIDS	250 MG/L
TOTAL NITROGEN (AS NITROGEN)	35 MG/L
AMMONIA NITROGEN (AS NITROGEN)	35 MG/L
TOTAL PHOSPHORUS	8 MG/L
ALKALINITY (AS CaCO3)	300 MG/L
TEMPERATURE	55° F

**DESIGN EFFLUENT CHARACTERISTICS**

	PERMIT LIMIT	DESIGN TARGET
TOTAL BIOCHEMICAL OXYGEN DEMAND (BOD)	10 MG/L	< 5 MG/L
TOTAL SUSPENDED SOLIDS	10 MG/L	< 5 MG/L
TOTAL NITROGEN (AS NITROGEN)	10 MG/L	< 5 MG/L
AMMONIA NITROGEN (AS NITROGEN)	-	< 2 MG/L
PH (STANDARD UNITS)	6.5 TO 8.5	-
FECAL COLIFORM BACTERIA	0/100 ML	0/100 ML

**OVIVIO MICRO-BLOX TREATMENT SYSTEM**

COMPLETE SYSTEM DESIGN DATA IS INCLUDED IN THE BIOWN DESIGN REPORT THAT HAS BEEN PREPARED FOR THIS PROJECT. A BRIEF SUMMARY OF THE SYSTEM PER OVIVIO microBLOX MODEL NUMBER FOLLOWS:


- 4Z FOUR ZONE SYSTEM
- V1 480 VAC / 3PH / 60HZ
- F2 DUAL FINE SCREEN - FS 600
- D1 ZONE 1 - DUAL MEMBRANES OV104
- D1 ZONE 2 - DUAL MEMBRANES OV104
- WA ZONE 3 - WASTE ACTIVATED SLUDGE 4,200 GALLONS
- AX ZONE 4 - ANOXIC 4,000 GALLONS
- T2 DUAL 10 HP TRANSFER PUMPS
- P2 DUAL 10 HP PERMEATE PUMPS
- U2 DUAL ULTRAVIOLET DISINFECTION UNITS 30+
- S3 DUAL 10 HP IR PUMP + O<sub>2</sub> + INJECTOR
- B3 TRIPLE BLOWER
  - 1 INCLUDES ANALYTICS FOR DISSOLVED OXYGEN
  - 1 INCLUDES ANALYTICS FOR TURBIDITY
  - 1 INCLUDES ANALYTICS FOR TOTAL SUSPENDED SOLIDS
  - 1 INCLUDES ANALYTICS FOR INFLUENT MONITORING
  - 1 INCLUDES ANALYTICS FOR EFFLUENT MONITORING
  - 1 INCLUDE CARBON ADDITION
  - 2 EXCLUDE FLUX ENHANCER
  - 2 EXCLUDE ALUM ADDITION (PHOSPHORUS REDUCTION)
  - 1 INCLUDE PH ADJUSTMENT
  - 1 INCLUDE SEALED AND VENTED COVERS
  - 1 INCLUDE WALKWAY WITH RAILS
  - 2 EXCLUDE STAINLESS STEEL FASTENERS
  - 2 EXCLUDE HEAT TRACING
  - 1 INCLUDE REMOTE DISCONNECTS
  - 1 INCLUDE STAIRS
  - 2 EXCLUDE LADDER
  - 6 GREY (STANDARD COLOR)

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

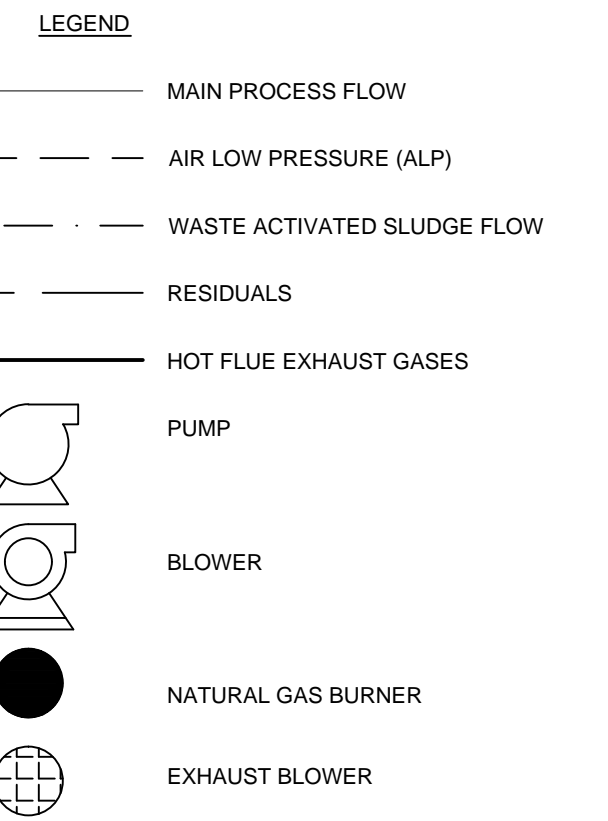
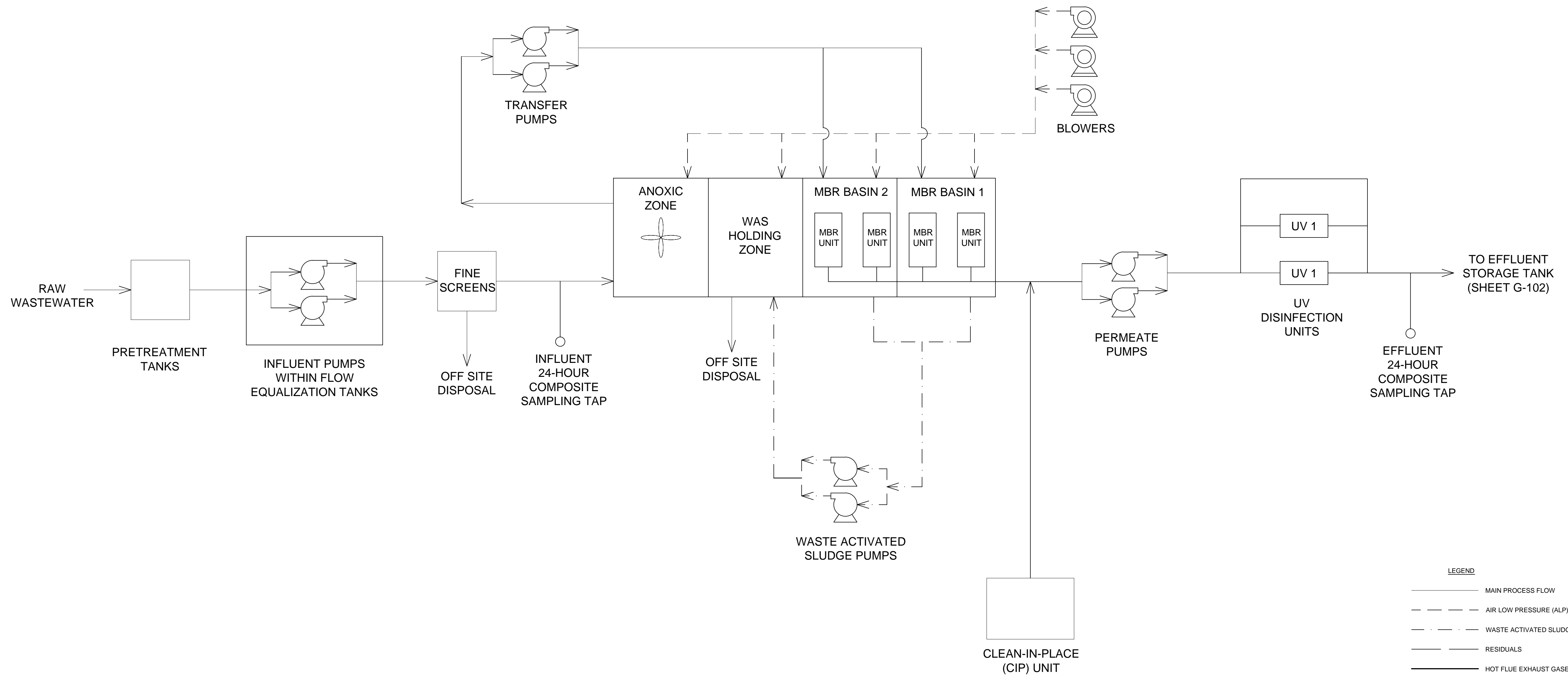
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

---

File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title		
NOTES AND CALCULATIONS		
Project No.	Scale	
195150441	NOT TO SCALE	
Drawing No.	Sheet	Revision
N-01	5 of 14	0




I:\19150441\WWT\Process Design\CAD\Design\Process\19150441 PROCESS.dwg  
2017.04.14 14:54:39  
19150441.dwg  
2017.04.14 14:54:39

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

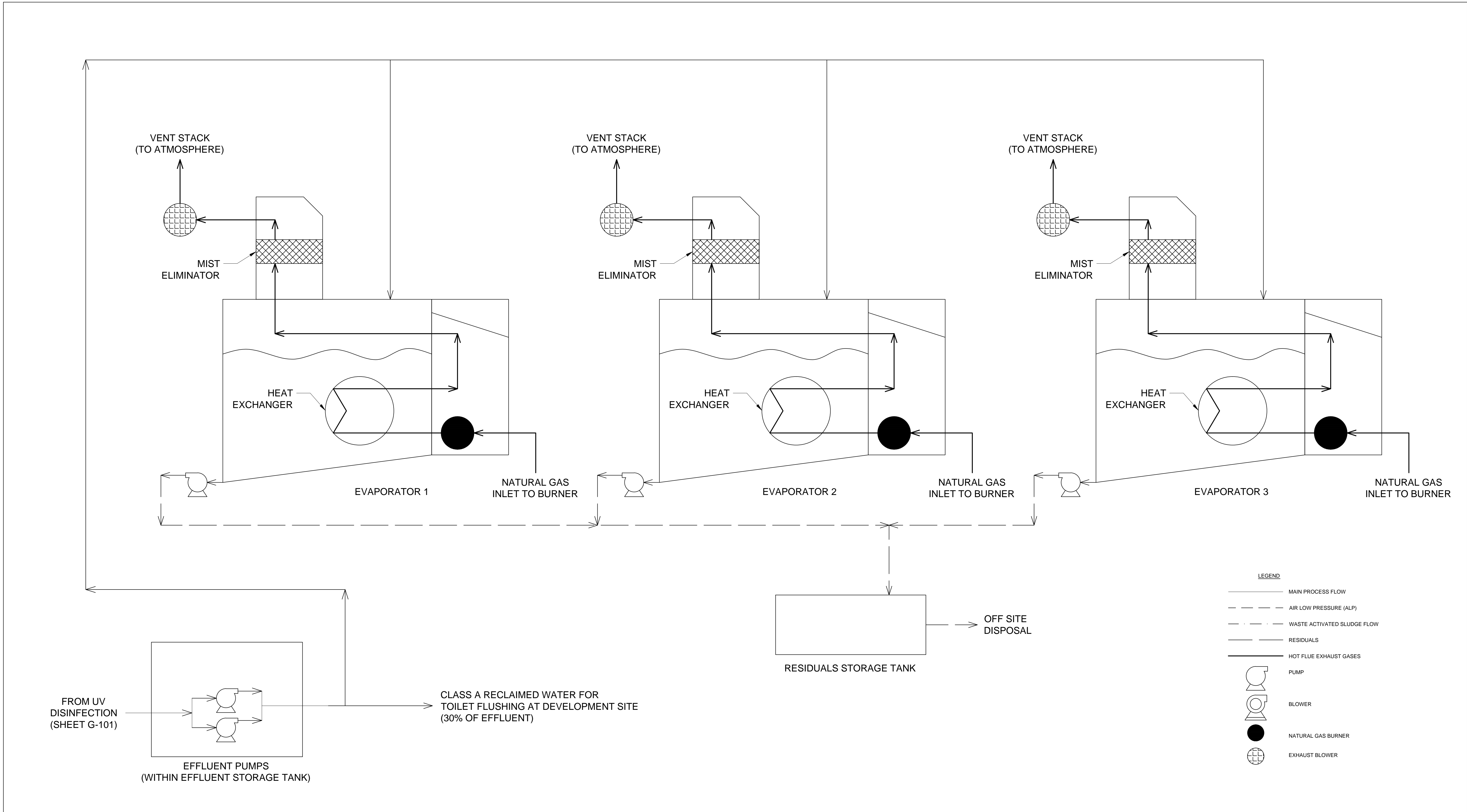
Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 19150441 PROCESS     K.M.K.     K.P.K.     D.M.     2017.04.14  
Dwn.     Chkd.     Dsgn.     YYYY.MM.DD

Title

PROCESS FLOW DIAGRAM 1 OF 2

Project No. 19150441	Scale NOT TO SCALE
Drawing No. G-101	Sheet 6 of 14
	Revision 0



I:\195150441\WWT\Process Design\CAD\Design\Process\195150441 PROCESS.dwg  
2017.04.14 14:24:44 PM by: [unclear]


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

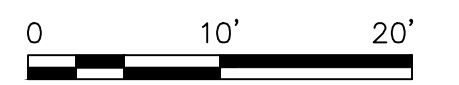
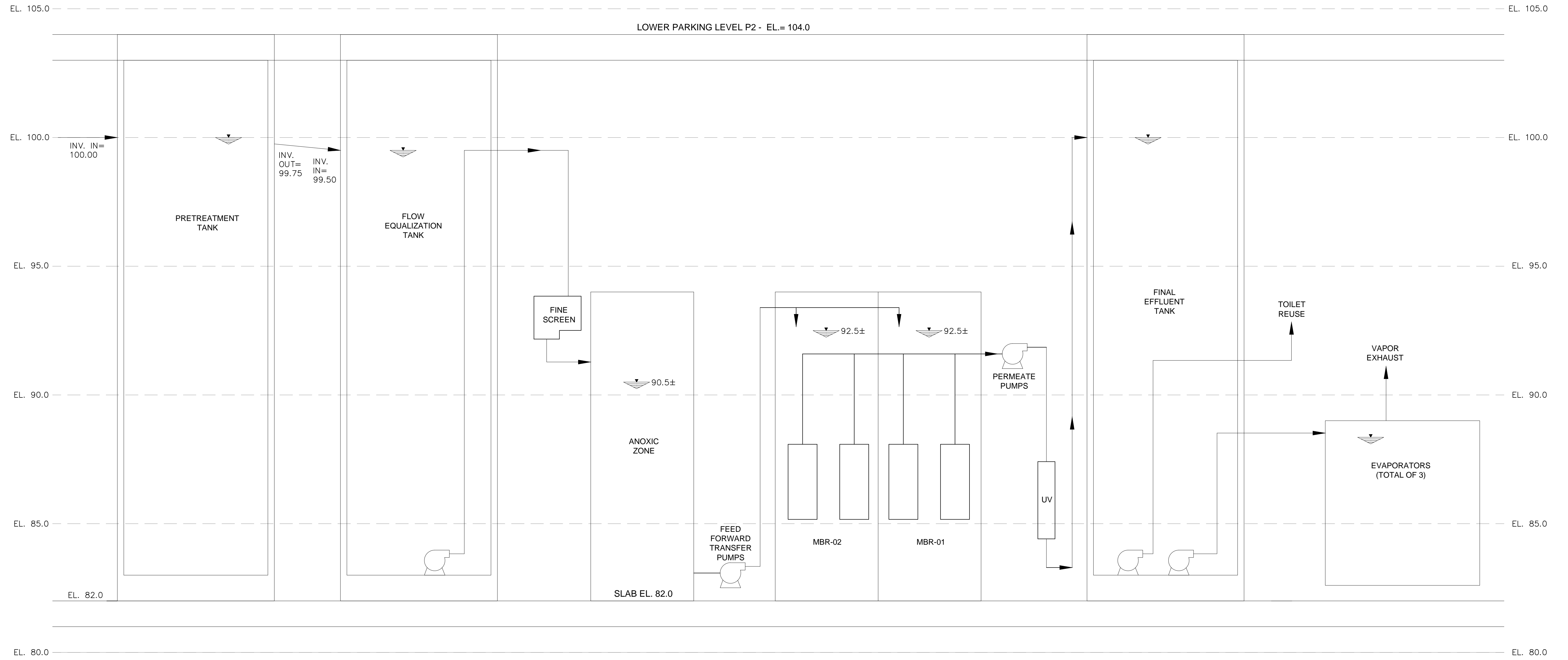
Client/Project  
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468  
Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title  
**PROCESS FLOW DIAGRAM 2 OF 2**

Project No. 195150441	Scale NOT TO SCALE
Drawing No. G-102	Sheet 7 of 14
Revision 0	





I:\195150441\WWT\Profile Design\CAD\Design\Process\195150441 PROCESS.dwg  
2017/04/14 10:20 AM JPM (JPM)


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

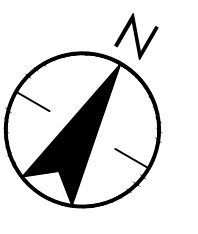
File Name: 195150441 PROCESS	K.M.K. Dwn.	K.P.K. Chkd.	D.M. Dsgn.	2017.04.14 YYYY.MM.DD
------------------------------	----------------	-----------------	---------------	--------------------------

Title

**HYDRAULIC PROFILE**

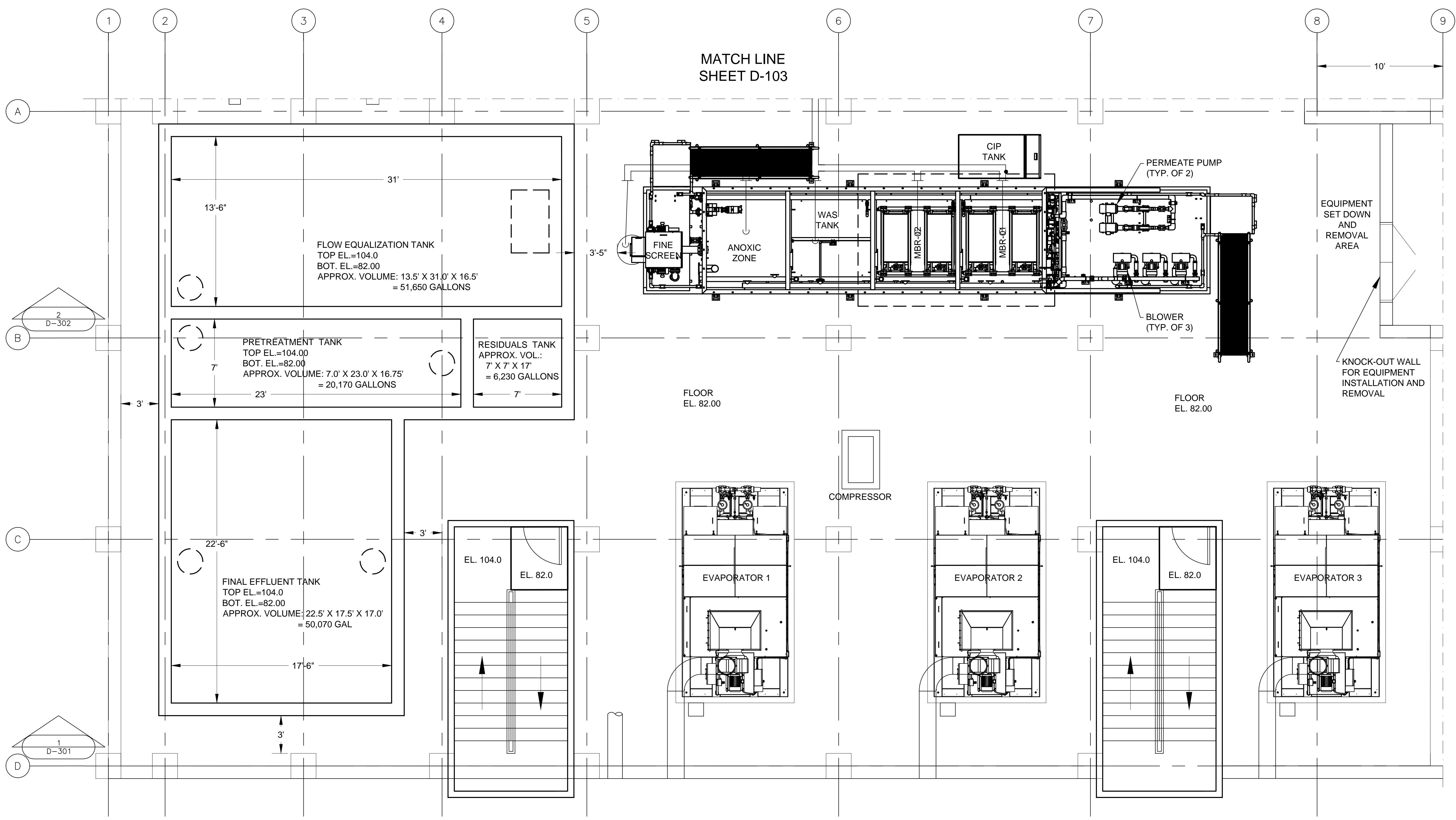
Project No. 195150441	Scale VERTICAL: 1" = 10'
Drawing No. G-103	Sheet 8 of 14
	Revision 0





MATCH LINE  
SHEET D-103

10'



MATCH LINE  
SHEET D-102



I:\195150441\WWT\Process\Design\CAD\Design\Process\195150441 PROCESS.dwg  
2017.04.14 14:30:17 PM YYY.MM.DD

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants

5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 195150441 PROCESS  
K.M.K. Dwn.  
K.P.K. Chkd.  
D.M. Dsgn.  
2017.04.14  
YYYY.MM.DD

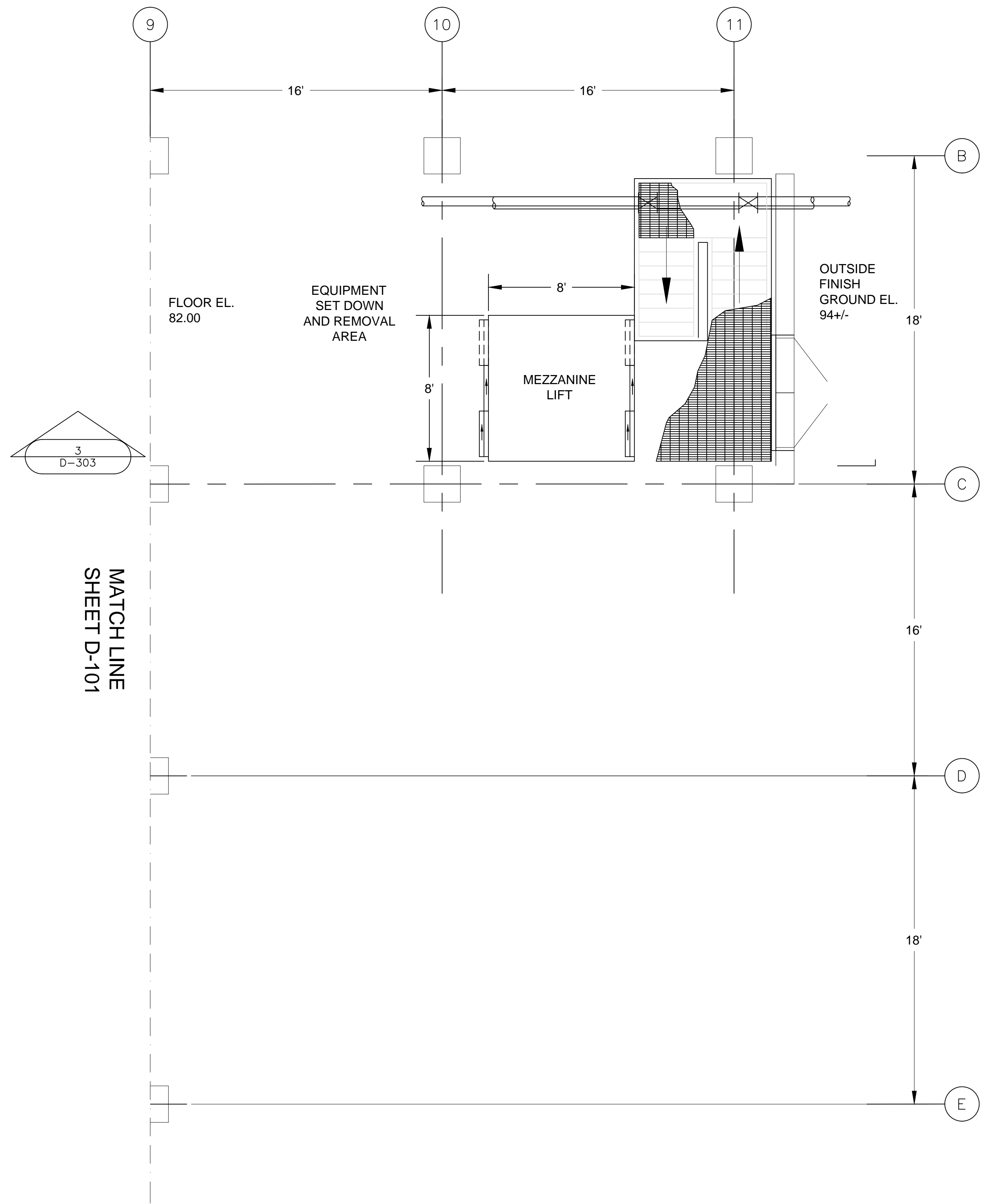
Title

PROCESS BUILDING PLAN 1 OF 3

Project No. 195150441  
Drawing No. D-101

Scale 1" = 4'  
Sheet 9 of 14

Revision 0



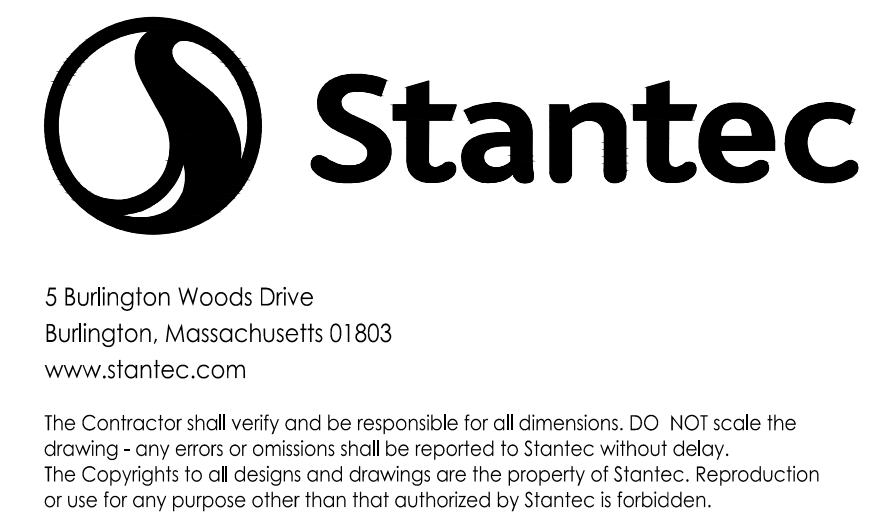
I:\19515041\WWT\Bldg\Design\CAD\Design\Process\19515041 PROCESS.dwg  
 2017.04.14 3:28 PM By: YYY/MM/DD

Revision	By	Appd.	YY.MM.DD	Issued	By	Appd.	YY.MM.DD

Permit-Seal

**CONCEPTUAL DESIGN SUBMITTAL**

Consultants



Client/Project  
 104 Stony Brook, LLC  
 P.O. Box 158, Waban, MA 02468

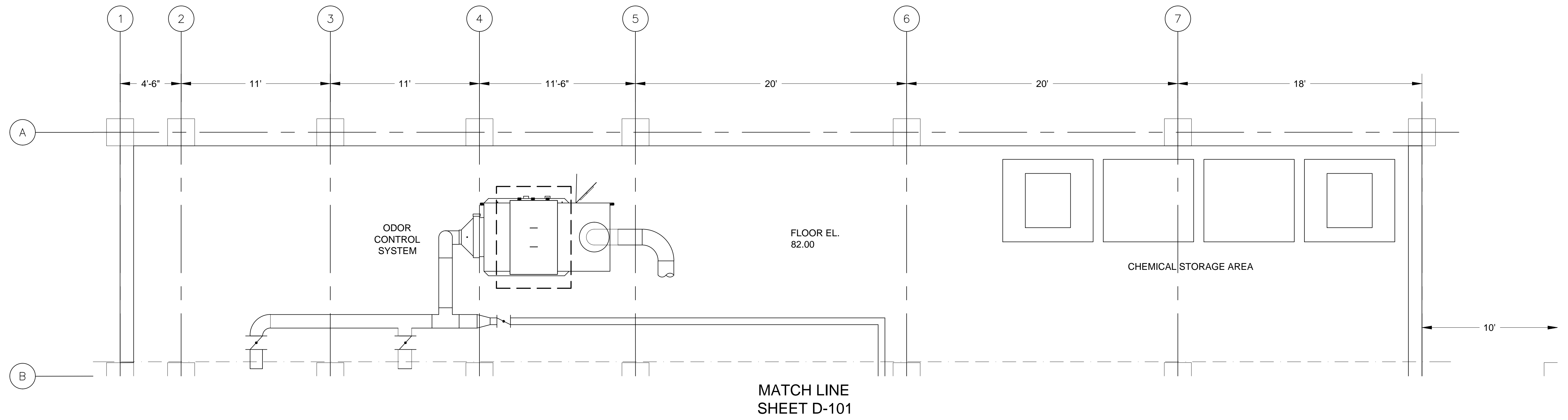
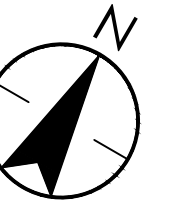
Proposed Wastewater Treatment Facilities  
 Stony Brook Apartments  
 104 Boston Post Road, Weston, MA

File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title  
**PROCESS BUILDING PLAN 2 OF 3**

Project No. 195150441      Scale 1" = 4'

Drawing No. D-102      Sheet 10 of 14      Revision 0



I:\195150441\WWT\Process\Design\CAD\Design\Process\195150441 PROCESS.dwg  
 2017.04.14 10:03 PM By: [redacted]


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.  
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project  
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

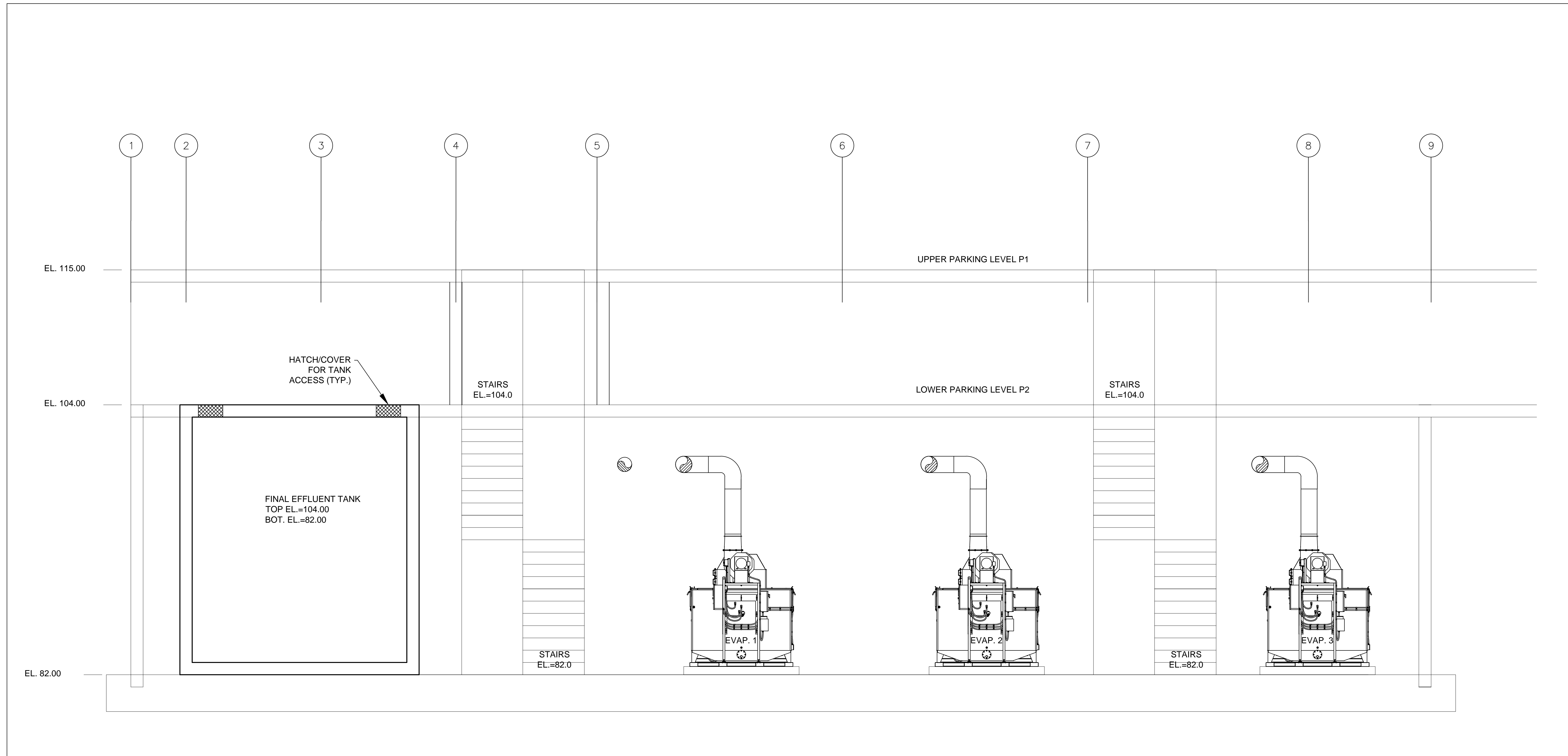
File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title  
PROCESS BUILDING PLAN 3 OF 3

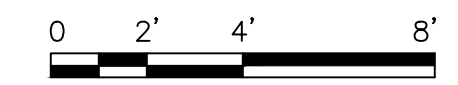
Project No. 195150441      Scale 1" = 4'

Drawing No. D-103      Sheet 11 of 14      Revision 0





1 SECTION  
D-101 1/4"=1'-0"



I:\195150441\WWT\Process\Design\CAD\Design\Process\195150441 PROCESS.dwg  
 2017.04.14 14:33:37 PM J. K. M. K.


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

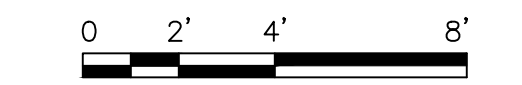
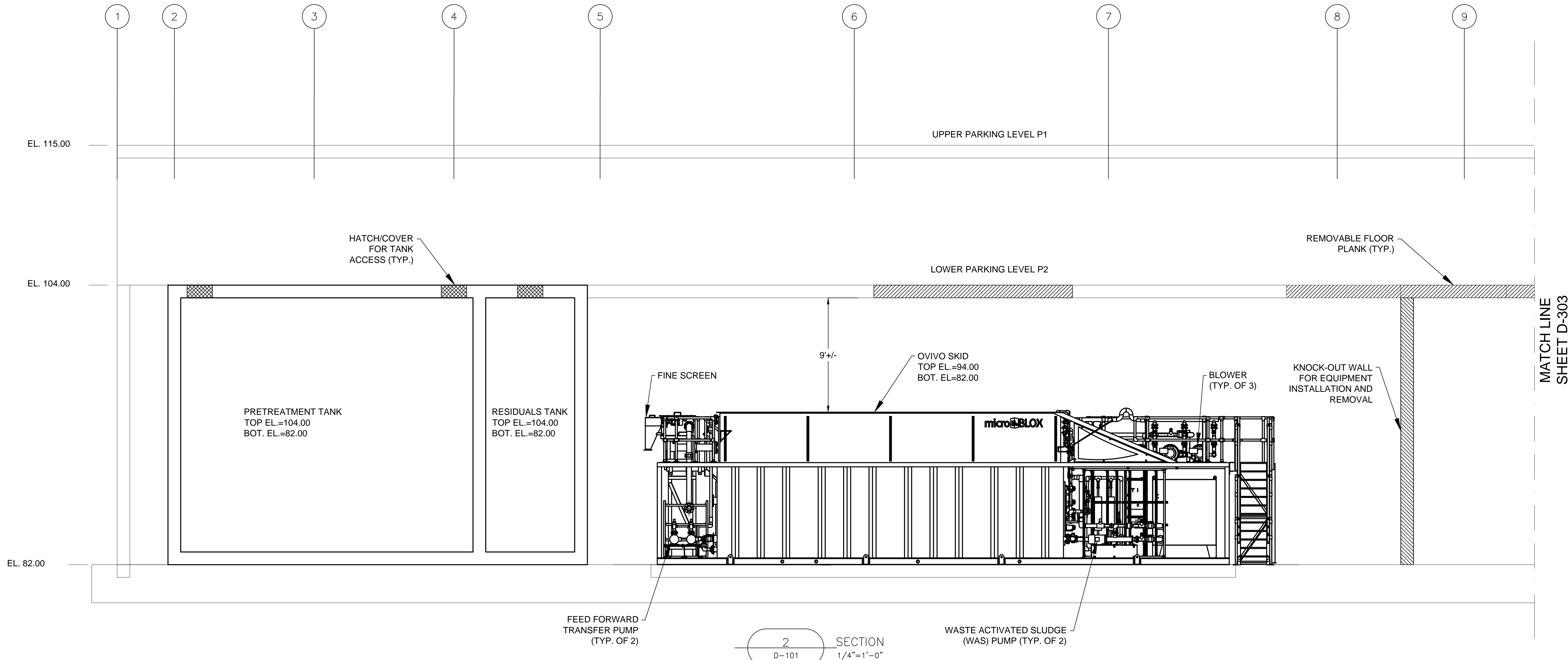
File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title

PROCESS BUILDING SECTION 1 OF 3

Project No. 195150441      Scale 1" = 4'

Drawing No. D-301      Sheet 12 of 14      Revision 0



I:\195150441\WWT\Process Design\CAD\Design\Process\195150441 PROCESS.dwg  
2017.04.14 14:33:37 PM J. Y. Y. (JYY)


Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project

104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

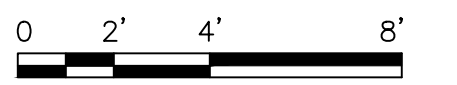
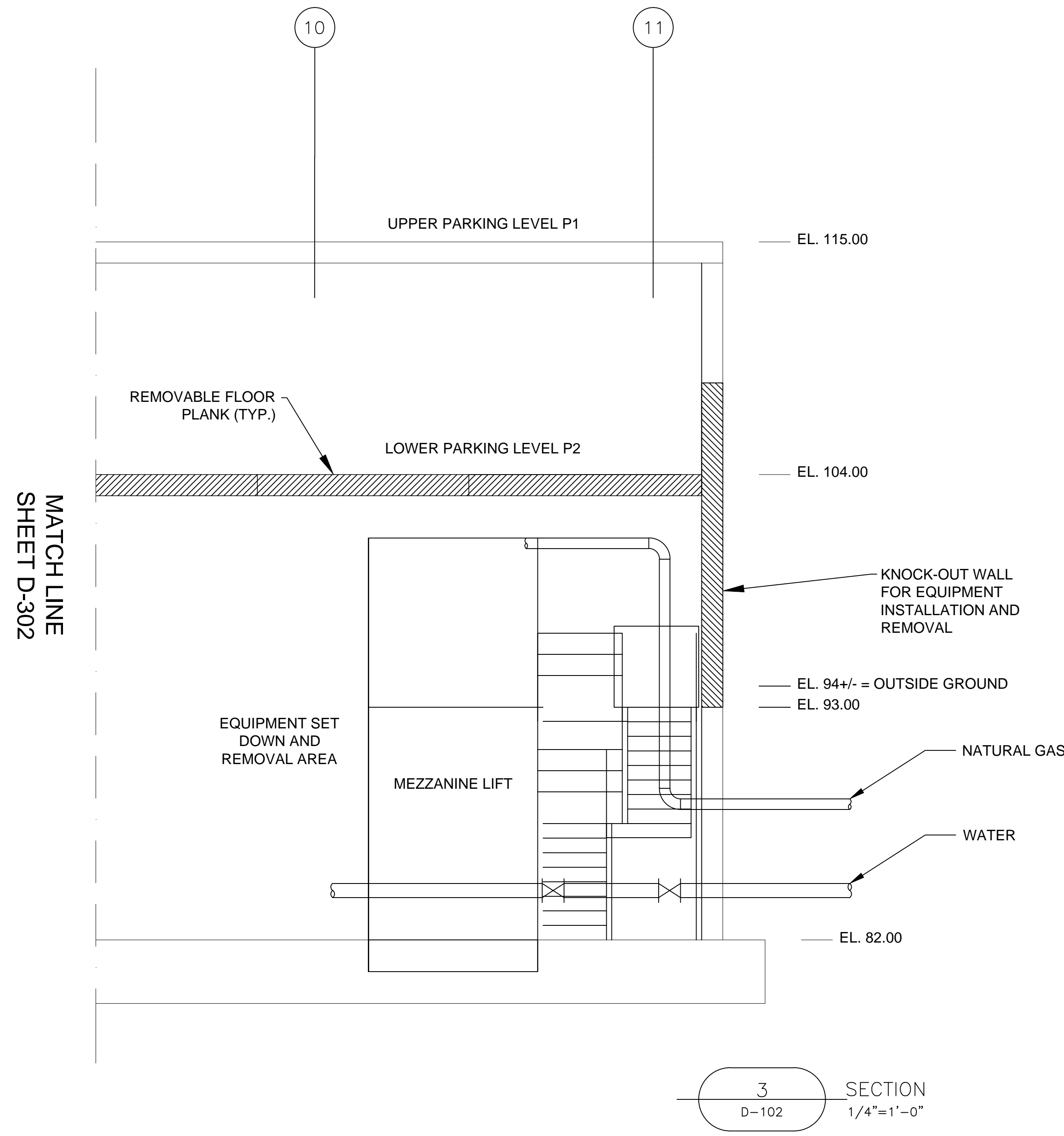
File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title

PROCESS BUILDING SECTION 2 OF 3

Project No. 195150441      Scale 1" = 4'

Drawing No. D-302      Sheet 13 of 14      Revision 0



I:\195150441\WWT\Process\Design\CAD\Design\Process\195150441 PROCESS.dwg  
2017.04.14 10:28:43 AM By: [redacted]

Revision	By	Appd.	YY.MM.DD

Issued	By	Appd.	YY.MM.DD

Permit-Seal

CONCEPTUAL  
DESIGN  
SUBMITTAL

Consultants



5 Burlington Woods Drive  
Burlington, Massachusetts 01803  
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Client/Project  
104 Stony Brook, LLC  
P.O. Box 158, Waban, MA 02468

Proposed Wastewater Treatment Facilities  
Stony Brook Apartments  
104 Boston Post Road, Weston, MA

File Name: 195150441 PROCESS      K.M.K.      K.P.K.      D.M.      2017.04.14  
Dwn.      Chkd.      Dsgn.      YYYY.MM.DD

Title  
**PROCESS BUILDING SECTION 3 OF 3**

Project No. 195150441      Scale 1" = 4'

Drawing No. D-303      Sheet 14 of 14      Revision 0