

LOCUS MAP  
N.T.S.

PROJECT LOCATION

INGALLS COURT — METHUEN  
MAP 716, BLOCK 115, LOT 2A

OWNER OF RECORD

HENRY C NEVINS HOME INC.  
10 INGALLS COURT  
MTHUEN, MA 01844  
BK. 1386 PG. 191

PLAN INDEX

SHEET NO.	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	ANR PLAN
4	SITE PLAN (PHASE 1)
5	SITE PLAN (PHASE 2)
6	GRADING PLAN
7	UTILITIES PLAN
8	DEMOLITION PLAN (PHASE 1)
9	DEMOLITION PLAN (PHASE 2)
10	EROSION CONTROL PLAN
11	FIRE TRUCK TURNING ANALYSIS PLAN
12–14	CONSTRUCTION DETAILS
L–1	LANDSCAPE PLAN

# SITE PLAN FOR Y.W.C.A. RESIDENCES AT INGALLS COURT IN METHUEN, MA JULY 2021

METHUEN BOARD OF APPEALS APPROVAL

DATE

ZONING TABLE: LOT A (PHASE 1)

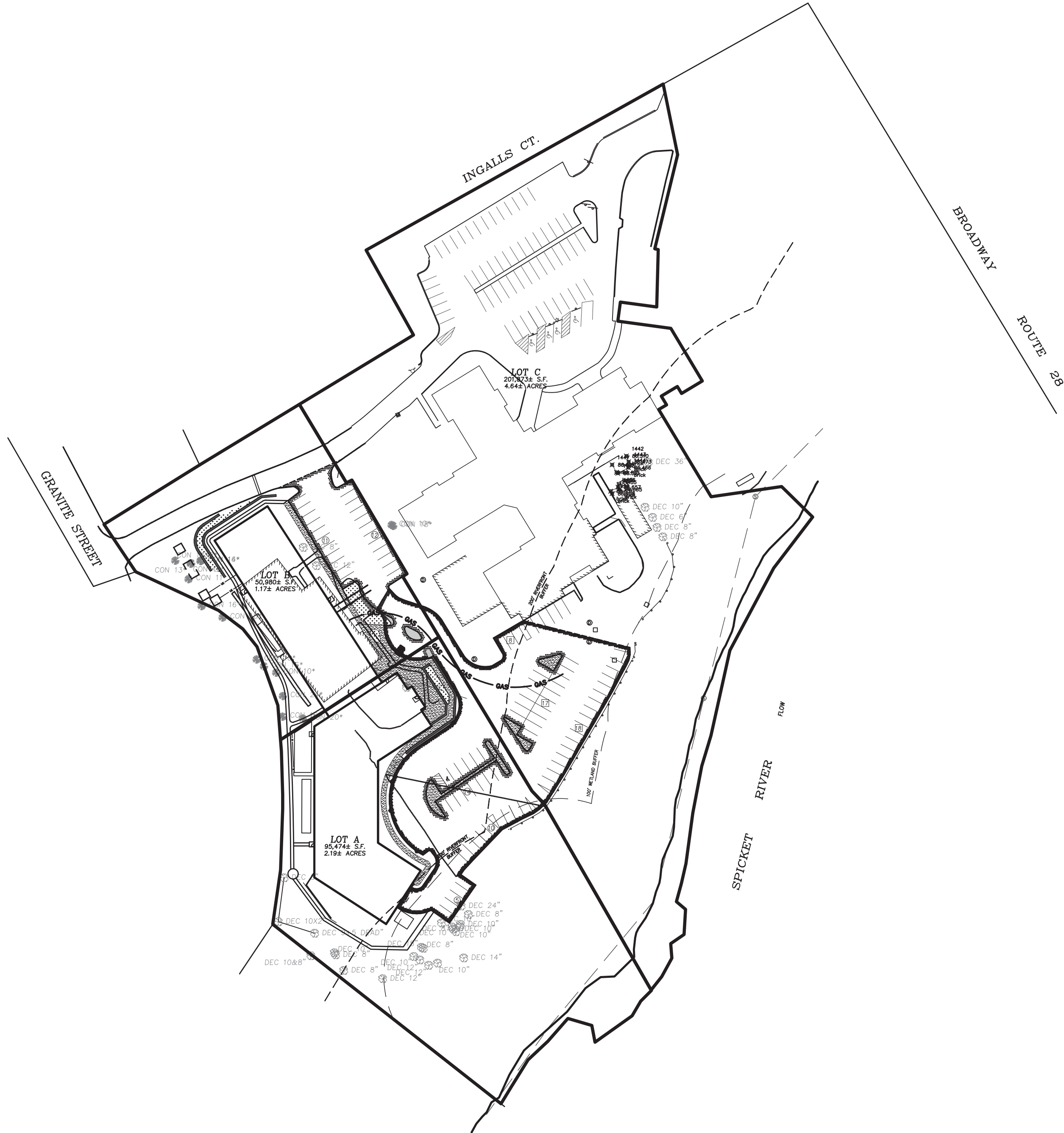
INGALLS COURT ZONIGN DISTRICT: MB			
	REQUIRED	EXISTING	PROPOSED
LOT AREA:	43,560 S.F.	289,082 S.F.	95,474 S.F.
LOT FRONTAGE:	150 FT.	334.52	0 FT.
LOT WIDTH:	150 FT.	>150 FT	>150 FT.
FRONT SETBACK:	30 FT.	60.7 FT	N/A
SIDE A:	25 FT.	N/A	31.5 FT.
SIDE B:	25 FT.	N/A	0 FT.
SIDE C:	25 FT.	N/A	51.4 FT.
SIDE D:	25 FT.	N/A	192.6 FT.
REAR SETBACK:	30 FT.	123.2 FT	N/A
MAX. COVERAGE:	40% MAX.	41.3%	43.5%
BUILDING HEIGHT:	40 FT.	N/A	66.84 FT.
LANDSCAPED OPEN SPACE:	30% MIN.	58.1%	56.5%
MAX. STORIES:	3	N/A	5

ZONING TABLE: LOT B (PHASE 2)

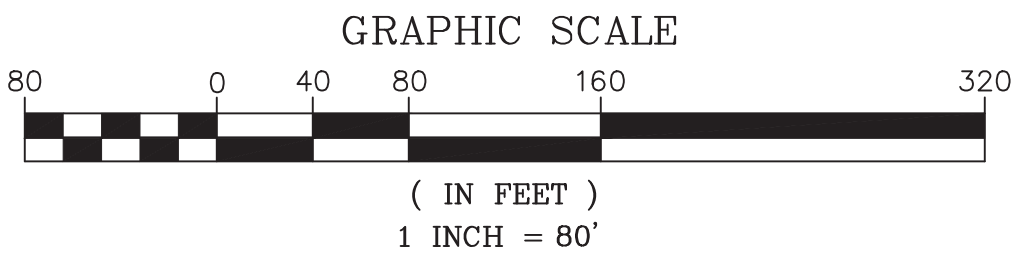
INGALLS COURT ZONIGN DISTRICT: MB			
	REQUIRED	EXISTING	PROPOSED
LOT AREA:	43,560 S.F.	59,245 S.F.	50,980 S.F.±
LOT FRONTAGE:	150 FT.	56.1± FT	56.1± FT
LOT WIDTH:	150 FT.	>150 FT	>150 FT
FRONT SETBACK:	30 FT.	101.1 FT	83.3 FT
SIDE SETBACK:	25 FT.	19.1 FT	0 FT.
REAR SETBACK:	30 FT.	64.2 FT	58.2 FT.
MAX. COVERAGE:	40% MAX.	39.5%	58%
BUILDING HEIGHT:	40 FT.	<40 FT.	62.0 FT.
LANDSCAPED OPEN SPACE:	30% MIN.	60.5%	42%
MAX. STORIES:	3	1	4

ZONING TABLE: LOT C

INGALLS COURT ZONIGN DISTRICT: MB			
	REQUIRED	EXISTING	PROPOSED
LOT AREA:	43,560 S.F.	289,082 S.F.	201,873 S.F.±
LOT FRONTAGE:	150 FT.	334.52	334.52
LOT WIDTH:	150 FT.	>150 FT	>150 FT
FRONT SETBACK:	30 FT.	60.7 FT	60.7 FT
SIDE SETBACK:	25 FT.	0 FT	0 FT.
REAR SETBACK:	30 FT.	123.2 FT	123.2 FT.
MAX. COVERAGE:	40% MAX.	41.3%	49.7%
BUILDING HEIGHT:	40 FT.	N/A	N/A
LANDSCAPED OPEN SPACE:	30% MIN.	58.1%	50.3%
MAX. STORIES:	3	2	N/A



PROGRESS  
PRINT



PREPARED FOR

L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA

NO.	DATE	DESCRIPTION	BY
2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C



MILLENNIUM ENGINEERING, INC.  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'	DESIG. BY: J.T.M.	PROJECT: M213895
DATE: JUNE 30, 2021	CHKD. BY: E.W.B.	

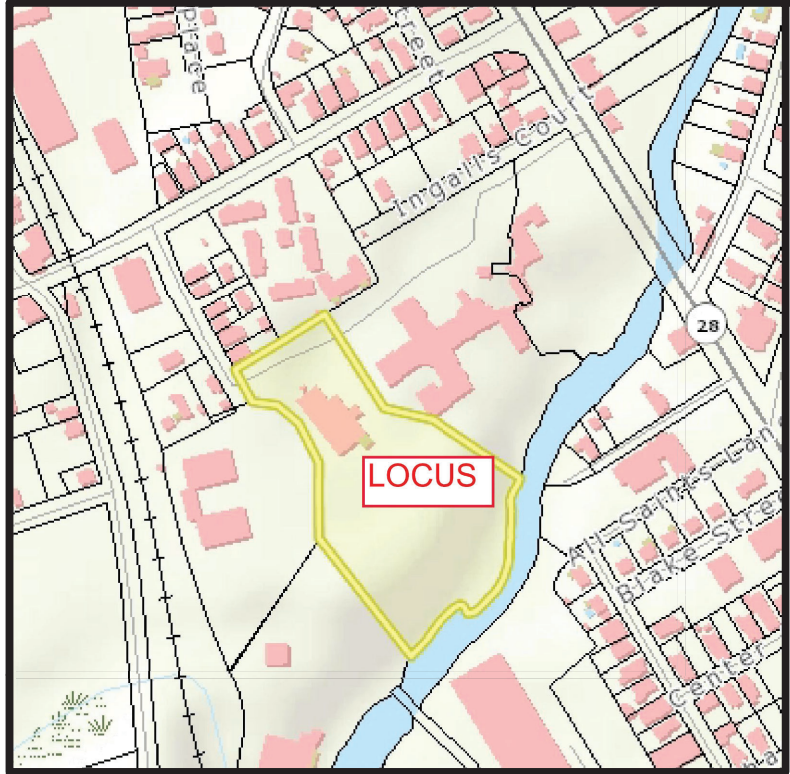
SITE PLAN  
IN  
METHUEN, MA

AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

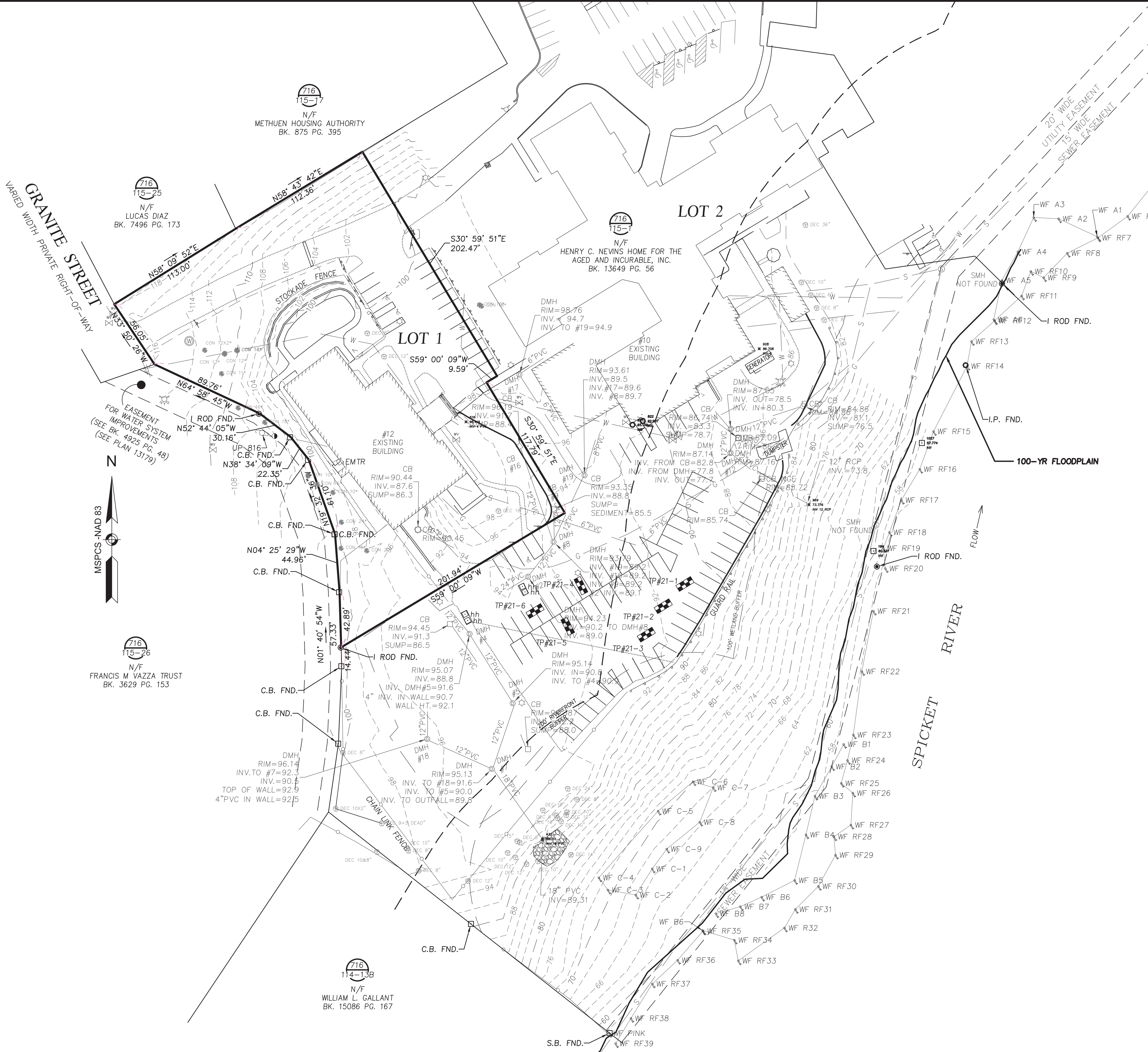
COVER  
SHEET

SHEET: 1 OF 14





LOCUS MAP  
N.T.S.



**BASIS OF BEARINGS**  
MASS. STATE PLANE COORD. SYSTEM  
NAD 83

**OWNER OF RECORD**  
HENRY C NEVINS HOME INC.  
10 INGALLS COURT  
METHUEN, MA 01844  
BK. 13649 PG. 56  
WITH EXCEPTION AT  
BK. 15594 PG. 192

**PLAN REFERENCES**  
PLAN NO. 17827  
PLAN NO. 12503  
PLAN NO. 11951  
PLAN NO. 8121

WETLAND DELINEATED BY:  
SEEKAMP ENVIRONMENTAL  
CONSULTING, INC.  
129 ROUTE 125  
KINGSTON, NH. 03848  
(603) 642-8300  
(DELINEATED ON: MARCH 2021)

NOTES:

THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

RECORD UTILITY INFORMATION HAS BEEN OBTAINED FOR LOCUS. VISIBLE SURFACE STRUCTURES HAVE BEEN LOCATED AND ARE SHOWN HEREON HOWEVER.

THE CERTIFICATIONS SHOWN HEREON ARE NOT INTENDED AS CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN/CITY ASSESSORS RECORDS.

I CERTIFY:  
THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN MARCH 24, 2021, AND APRIL 12, 2021, AND THAT THE STRUCTURES AND PHYSICAL FEATURES ARE LOCATED AS SHOWN TO THE BEST OF MY ABILITY AND BELIEF.

I CERTIFY:  
THAT THE PROPERTY LINES SHOWN ARE THE LINES OF EXISTING OWNERSHIP AND THE LINES OF STREETS AND WAYS SHOWN ARE THE LINES OF STREETS AND WAYS ALREADY EXISTING AND THAT NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW STREETS OR WAYS ARE SHOWN.

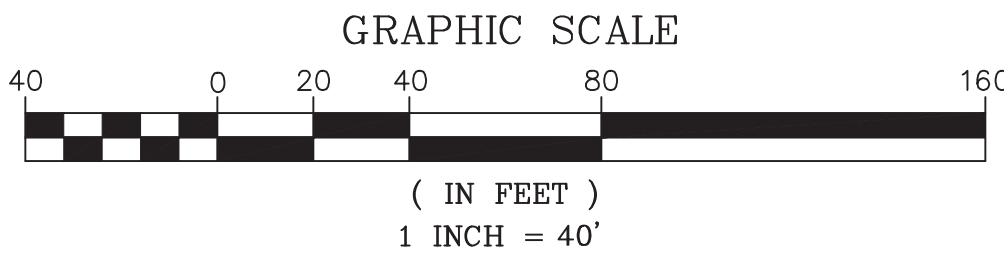
THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

**PROGRESS PRINT**

PROFESSIONAL LAND SURVEYOR DATE

**LEGEND**

- C.B. CONCRETE BOUND
- S.B. STONE BOUND
- I.P. IRON PIPE
- I. ROD IRON ROD
- FND. FOUND
- N/F NOW OR FORMERLY
- H.H. ELECTRIC HANDHOLE
- LP LIGHTPOLE
- UPOLE UTILITY POLE
- D DRAINAGE
- W WATER
- S SEWER
- G GAS
- OHW OVERHEAD WIRE
- CB CATCH BASIN
- DMH DRAIN MANHOLE
- SMH SEWER MANHOLE
- MONITORING WELL
- HYDRANT
- WATER SHUT OFF
- WATER VALVE
- ASSESSORS MAP#
- BLOCK# PARCEL#



PREPARED FOR  
**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA 01451

NO.	DATE	DESCRIPTION	BY
2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	RESPONSE TO PEER REVIEW	J.T.M.

**MEI** **MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'  
DATE: JUNE 15, 2021  
CALC. BY: P.D.B.  
CHKD. BY: J.S.H.  
PROJECT: M213895

**SITE PLAN**  
IN  
**METHUEN, MA**  
  
AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

**EXISTING CONDITIONS**  
  
SHEET: 2 OF 14





LOCUS MAP  
N.T.S.

716  
115-17  
N/F  
METHUEN HOUSING AUTHORITY  
BK. 875 PG. 395

716  
115-25  
N/F  
LUCAS DIAZ  
BK. 7496 PG. 173

GRANITE STREET  
VARIED WIDTH PRIVATE RIGHT-OF-WAY

716  
115-26  
N/F  
FRANCIS M VAZZA TRUST  
BK. 3629 PG. 153

### LEGEND

- |  |                                  |
|--|----------------------------------|
|  | CONCRETE BOUND                   |
|  | STONE BOUND                      |
|  | IRON PIPE                        |
|  | IRON ROD                         |
|  | FOUND                            |
|  | NOW OR FORMERLY                  |
|  | ELECTRIC HANDHOLE                |
|  | LIGHT POLE                       |
|  | UTILITY POLE                     |
|  | DRAINAGE                         |
|  | WATER                            |
|  | SEWER                            |
|  | GAS                              |
|  | OVERHEAD WIRE                    |
|  | CATCH BASIN                      |
|  | DRAIN MANHOLE                    |
|  | SEWER MANHOLE                    |
|  | MONITORING WELL                  |
|  | HYDRANT                          |
|  | WATER SHUT OFF                   |
|  | WATER VALVE                      |
|  | ASSESSORS MAP#<br>BLOCK# PARCEL# |

GRAPHIC SCALE



( IN FEET )  
1 INCH = 60'

PREPARED FOR

**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA 01451

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C.
NO	DATE	DESCRIPTION	BY



**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=60'

CALC. BY: P.D.B.

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# SITE PLAN IN METHUEN, MA

AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

LOT  
LINE  
ADJUSTMENT

SHEET: 3 OF 14

## BASIS OF BEARINGS

MASS. STATE PLANE COORD. SYSTEM  
NAD 83

OWNER OF RECORD

HENRY C NEVINS HOME INC.  
10 INGALLS COURT  
METHUEN, MA 01844  
BK. 13649 PG. 56  
WITH EXCEPTION AT  
BK. 15594 PG. 192

## PLAN REFERENCES

PLAN NO. 17827  
PLAN NO. 12503  
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PLAN NO. 8121

WETLAND DELINEATED BY:  
SEEKAMP ENVIRONMENTAL  
CONSULTING, INC.  
129 ROUTE 125  
KINGSTON, NH. 03848  
(603) 642-8300  
(DELINEATED ON: MARCH 2021)

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OF PROPERTY SHOWN. OWNERS OF ADJOINING  
PROPERTIES ARE ACCORDING TO CURRENT CITY OF  
METHUEN ASSESSORS RECORDS.

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STRUCTURES AND PHYSICAL FEATURES  
ARE LOCATED AS SHOWN TO THE BEST OF  
MY ABILITY AND BELIEF.

THAT THIS PLAN CONFORMS TO THE  
RULES AND REGULATIONS OF THE  
REGISTRY OF DEEDS.

PROGRESS  
PRINT

---

PROFESSIONAL LAND SURVEYOR
DATE



DATE

PARKING CALCULATIONS PHASE I

LOT A:		
<u>USE</u>	<u># OF SPACES REQUIRED</u>	<u># OF SPACES PROVIDED</u>
RESIDENTIAL	48 SPACES	45 SPACES (43 GARAGE, 2 SURFACE)
FLEXIBLE NON-RES.		27 SPACES
LOT B:		
<u>USE</u>	<u># OF SPACES REQUIRED</u>	<u># OF SPACES PROVIDED</u>
NON-RES.	20 SPACES	17 SPACES
LOT C:		
<u># OF EXISTING SPACES</u>	<u># OF SPACES PROVIDED</u>	
121 SPACES	101 SPACES	
*ALL SPACES ON LOT C ARE RESERVED FOR NEVINS NURSING HOME		

- PARKING SPACES ALLOCATED TO LOTS A & B
- PARKING SPACES ALLOCATED TO LOT C

HATCH LEGEND

- CONCRETE WALK/PATIO
- LANDSCAPED AREA
- DESIGNATED SNOW STORAGE AREA
- PROPOSED PAVEMENT

LEGEND

EXISTING

PROPOSED

CB

CATCH BASIN (OR GUTTER INLET, OR LEACHING BASIN)

CBCL (OR GIC)

CATCH BASIN (OR GUTTER INLET) WITH CURB INLET

CURB (OR BERM) - TYPE NOTED

EDGE OF ROAD

CONTOUR

SEWER MANHOLE

DRAINAGE MANHOLE

GAS GATE

WATER GATE

HYDRANT

FA

FIRE ALARM BOX

POST MOUNTED PEDESTRIAN LIGHT

UTILITY POLE

D

DRAIN PIPE

S

SEWER MAIN

FM

SEWER FORCE MAIN

UD

UNDERDRAIN

W

WATER MAIN

E/T

ELECTRIC/TELEPHONE DUCT

MB

MAIL BOX

HIGHWAY GUARD (TYPE NOTED)

FENCE (SIZE AND TYPE NOTED)

EASEMENT LINE

PROPERTY LINE

100 FT BUFFER ZONE

TEST PIT

SF

SILTATION BARRIER/LIMIT OF WORK

WETLAND

SURVEY

120

WETLAND DELINEATION FLAG

C.B.

CONCRETE BOUND

S.B.

STONE BOUND

D.H.

DRILL HOLE

PK

MASONRY NAIL

I.P.

IRON PIPE

I ROD

IRON ROD

FND.

FOUND

N/FND.

NOT FOUND

00

ASSESSORS MAP AND PARCEL

PROGRESS PRINT

GRAPHIC SCALE

40

0

20

40

80

160

( IN FEET )

1 INCH = 40'

PREPARED FOR

L.D. RUSSO, INC.

198 AYER ROAD

HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		

MILLENNIUM ENGINEERING, INC.

ENGINEERING AND LAND SURVEYING

62 ELM ST. SALISBURY, MA 01952 (978) 463-8980

13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SITE PLAN

IN

METHUEN, MA

AT

12 INGALLS COURT

(MAP 716, BLOCK 115, LOT 2A)

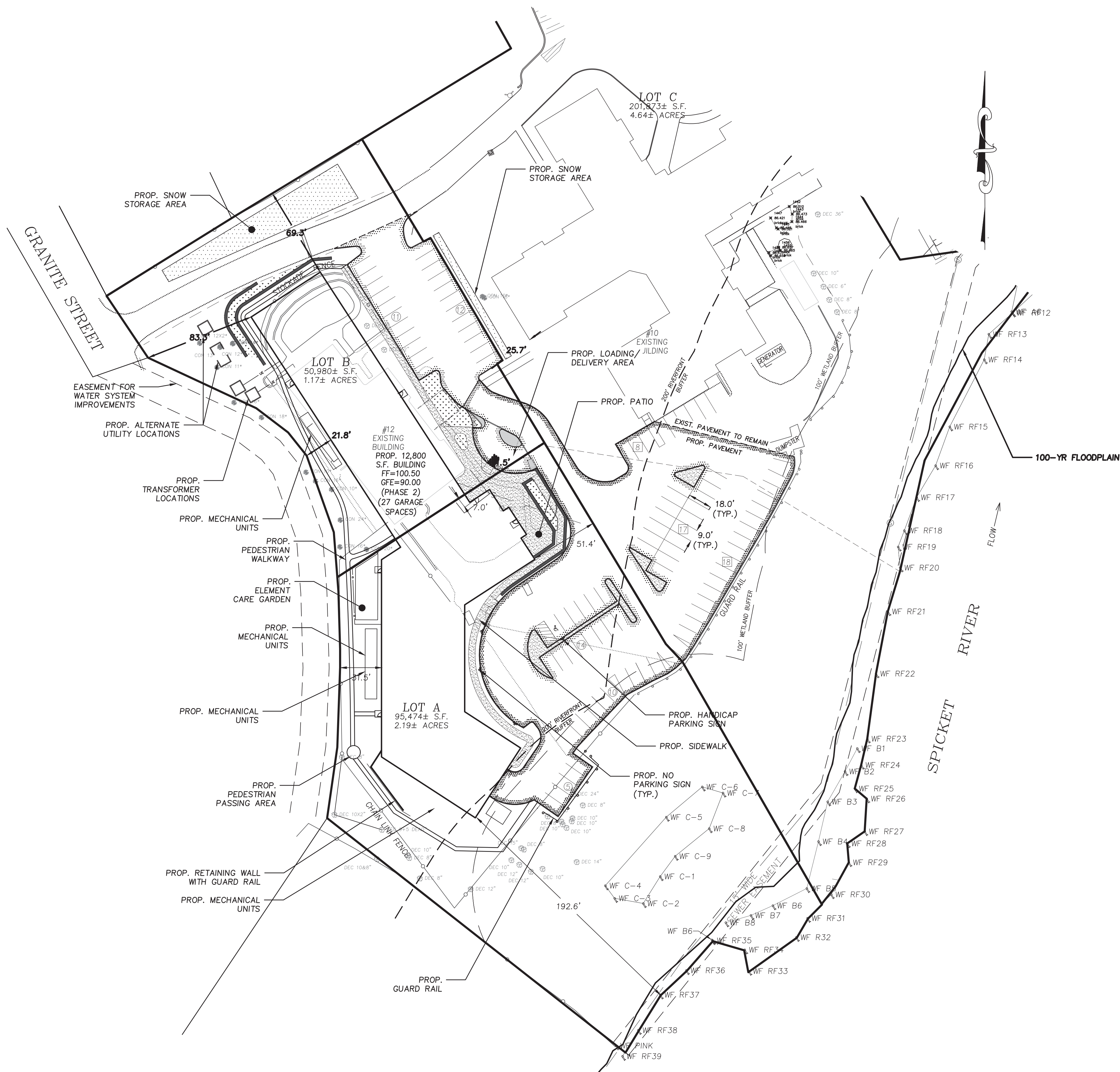
SITE PLAN

PHASE I

SHEET: 4 OF 14



DATE



**PARKING CALCULATIONS PHASE II**

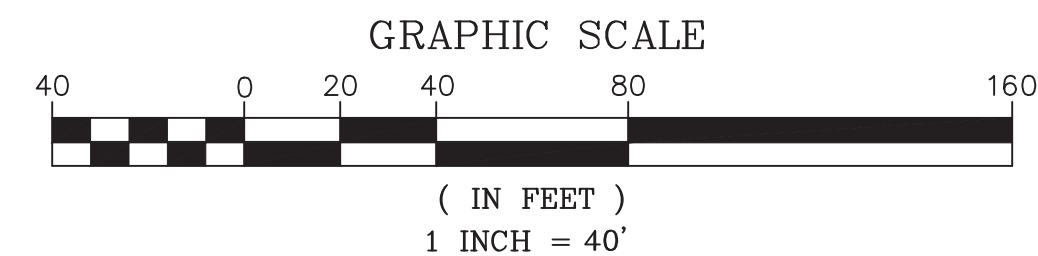
<b>LOT A:</b>		
USE	# OF SPACES REQUIRED	# OF SPACES PROVIDED
RESIDENTIAL	48 SPACES	45 SPACES (43 GARAGE, 2 SURFACE)
FLEXIBLE NON-RES.		27 SPACES
<b>LOT B:</b>		
USE	# OF SPACES REQUIRED	# OF SPACES PROVIDED
RESIDENTIAL	48 SPACES	29 SPACES (27 GARAGE, 2 SURFACE)
FLEXIBLE NON-RES.		23 SPACES
<b>LOT C:</b>		
# OF EXISTING SPACES	# OF SPACES PROVIDED	
121 SPACES	101 SPACES	

\*ALL SPACES ON LOT C ARE RESERVED FOR NEVINS NURSING HOME

**HATCH LEGEND**

- CONCRETE WALK/PATIO
- LANDSCAPED AREA
- DESIGNATED SNOW STORAGE AREA
- PROPOSED PAVEMENT

PROGRESS  
PRINT



PREPARED FOR

**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C
NO.	DATE	DESCRIPTION	BY

**MEI** MILLENNIUM ENGINEERING, INC.  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'  
DATE: JUNE 30, 2021

DES. BY: J.T.M.  
CHKD. BY: E.W.B.

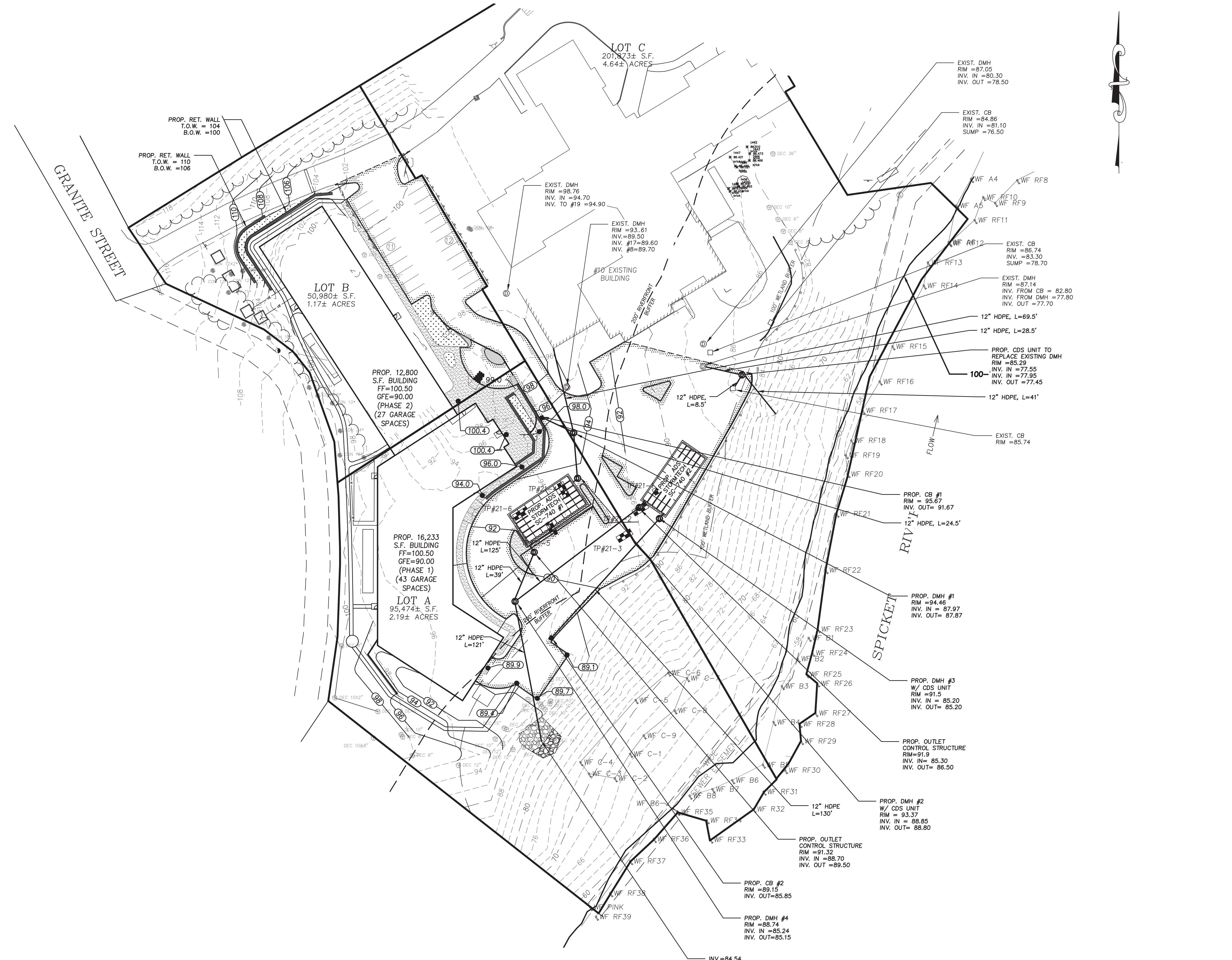
PROJECT: M213895

**SITE PLAN**  
IN  
**METHUEN, MA**

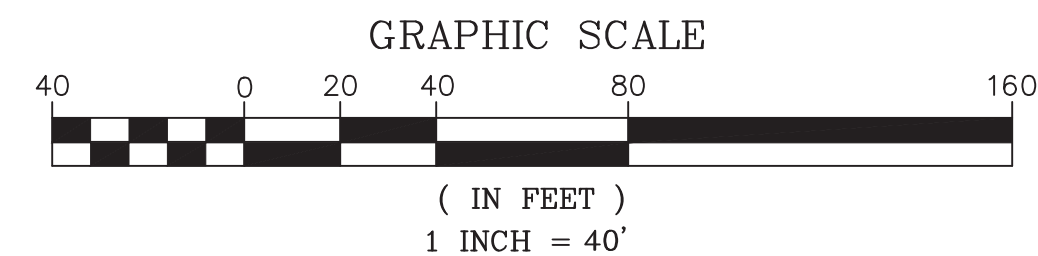
AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)



DATE




PROGRESS  
PRINT



PREPARED FOR  
  
**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		



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62 ELM ST. SALESBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'	DESIG. BY: J.T.M.	PROJECT: M213895
DATE: JUNE 30, 2021	CHKD. BY: E.W.B.	

**SITE PLAN**  
IN  
**METHUEN, MA**  
  
AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

**GRADING  
AND  
DRAINAGE  
PLAN**  
  
SHEET: 6 OF 14



GENERAL NOTES

1. ALL WORK SHALL CONFORM TO; THE NEWBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, THE WETLANDS PROTECTION ACT (310 CMR 10.00), THE ORDER OF CONDITIONS ISSUED BY THE NEWBURY CONSERVATION COMMISSION, AND THESE PLANS.
2. THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS TO THE WORK SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND REGULATING MUNICIPAL AND/OR STATE AGENCIES.
3. THE LOCATION OF ALL UTILITIES, AS SHOWN ON THESE PLANS, ARE BASED UPON PLANS AND RECORD INFORMATION PROVIDED BY MUNICIPAL AND PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. NO WARRANTY IS MADE TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL NOT RELY ON THESE PLANS FOR SUCH INFORMATION AND SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY COMPANIES AND INDIVIDUALS, AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
4. THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE NEW WORK. HE/SHE SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.
5. THE CONTRACTOR IS RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PUBLIC, EMPLOYEES, AND ALL OTHER PERSONS ASSOCIATED WITH THE PROJECT. HE/SHE SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING "DIG-SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE TELEPHONE NUMBER: 1-888-344-7233.
7. 14 DAYS PRIOR TO COMMENCING CONSTRUCTION, THE OWNER/DEVELOPER SHALL PRESENT A CONSTRUCTION SCHEDULE TO THE PLANNING DEPARTMENT.
8. TWO HARD COPIES OF AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL INCLUDE ALL LANDBASE AND UTILITIES INFORMATION.
9. ONSITE BURIAL OF STUMPS OR ANY OTHER DEBRIS IS PROHIBITED.
10. THE PROPERTY DOES NOT LIE WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 25009C0117G.
11. ELEVATIONS ARE BASED UPON AN 1988 NAV DATUM.
12. SIZE AND LOCATION OF THE FIRE SERVICE TO BE DESIGNED BY A FIRE PROTECTION DESIGNER. PIPE SHALL BE DR18 IN 40' LENGTHS WITH FUSED JOINTS.
13. WATER AND SEWER MAINS SHOWN ARE APPROXIMATE. FURTHER INFORMATION IS REQUIRED FROM NEWBURYPORT DPS PRIOR TO CONSTRUCTION TO VERIFY SIZE AND LOCATION OF THESE UTILITIES.

WATER INSTALLATION NOTES

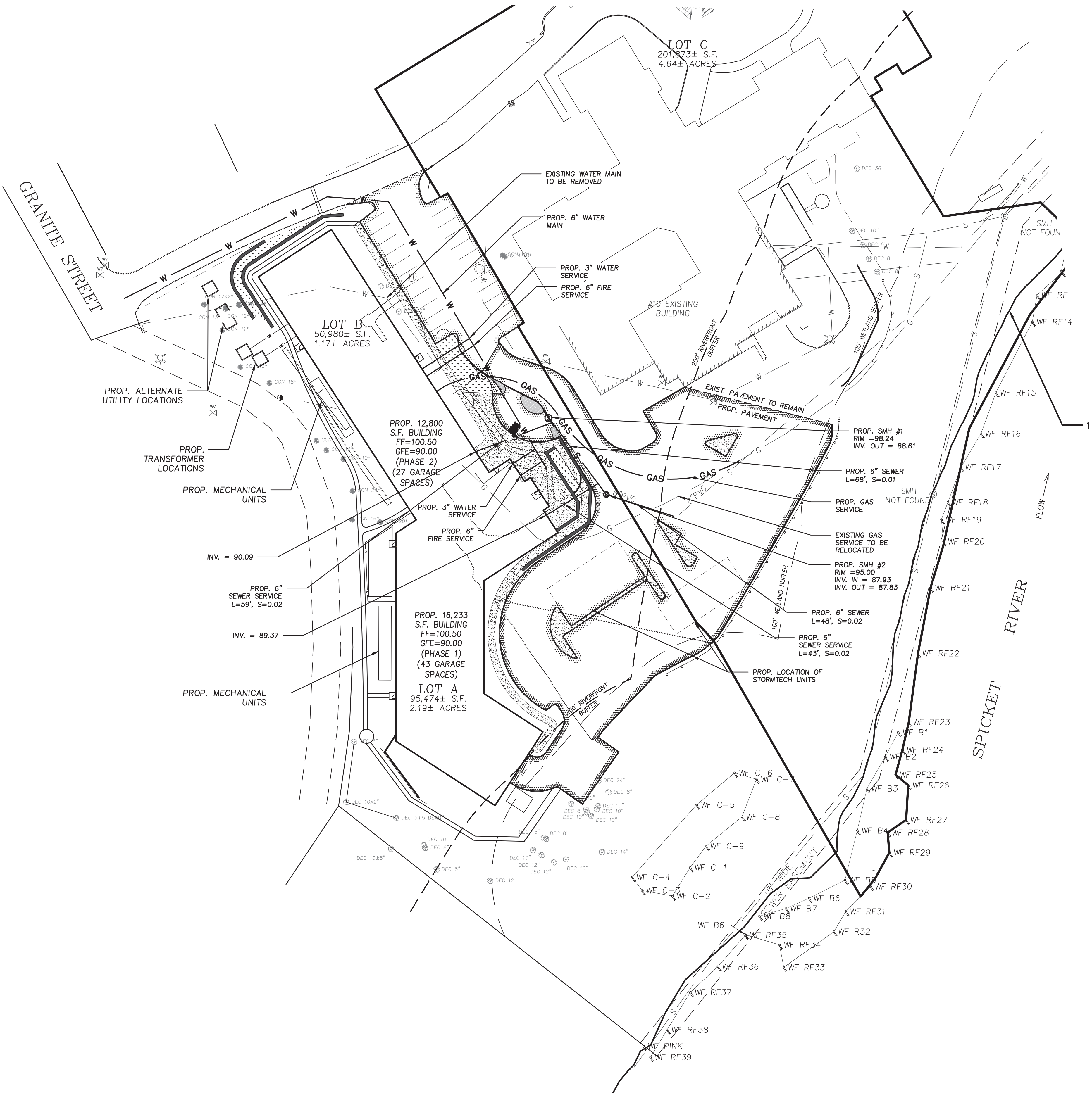
1. THE SIZE OF THE FIRE SERVICE SHALL BE SIZED AND DESIGNED BY A FIRE PROTECTION PROFESSIONAL. THE PROPOSED SIZE IS APPROXIMATE.
2. THE SIZE OF THE DOMESTIC SERVICE SHALL BE DESIGNED ONCE ADDITIONAL MEP INFORMATION FOR THE BUILDING IS PROVIDED.
3. THE SIZE AND LOCATION OF EXISTING WATER MAINS AND SERVICES ARE BASED ON WATER INFORMATION FROM THE CITY OF METHUEN AND FIELD VERIFICATION.

GAS INSTALLATION NOTES

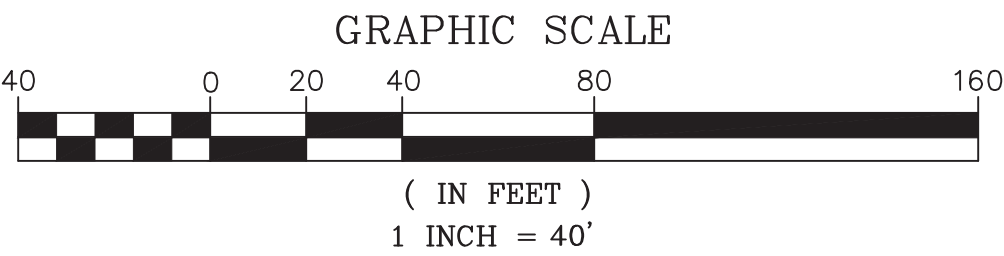
1. THE SIZE AND LOCATION OF THE EXISTING GAS SERVICE IS APPROXIMATE.
2. FINAL DESIGN OF PROPOSED GAS SERVICE TO BE PROVIDED BY GAS COMPANY.

METHUEN BOARD OF APPEALS APPROVAL

DATE



PROGRESS  
PRINT



PREPARED FOR

L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		



MILLENNIUM ENGINEERING, INC.  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SAUSBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'  
DATE: JUNE 30, 2021  
DESIG. BY: J.T.M.  
CHKD. BY: E.W.B.  
PROJECT: M213895

SITE PLAN  
IN  
METHUEN, MA

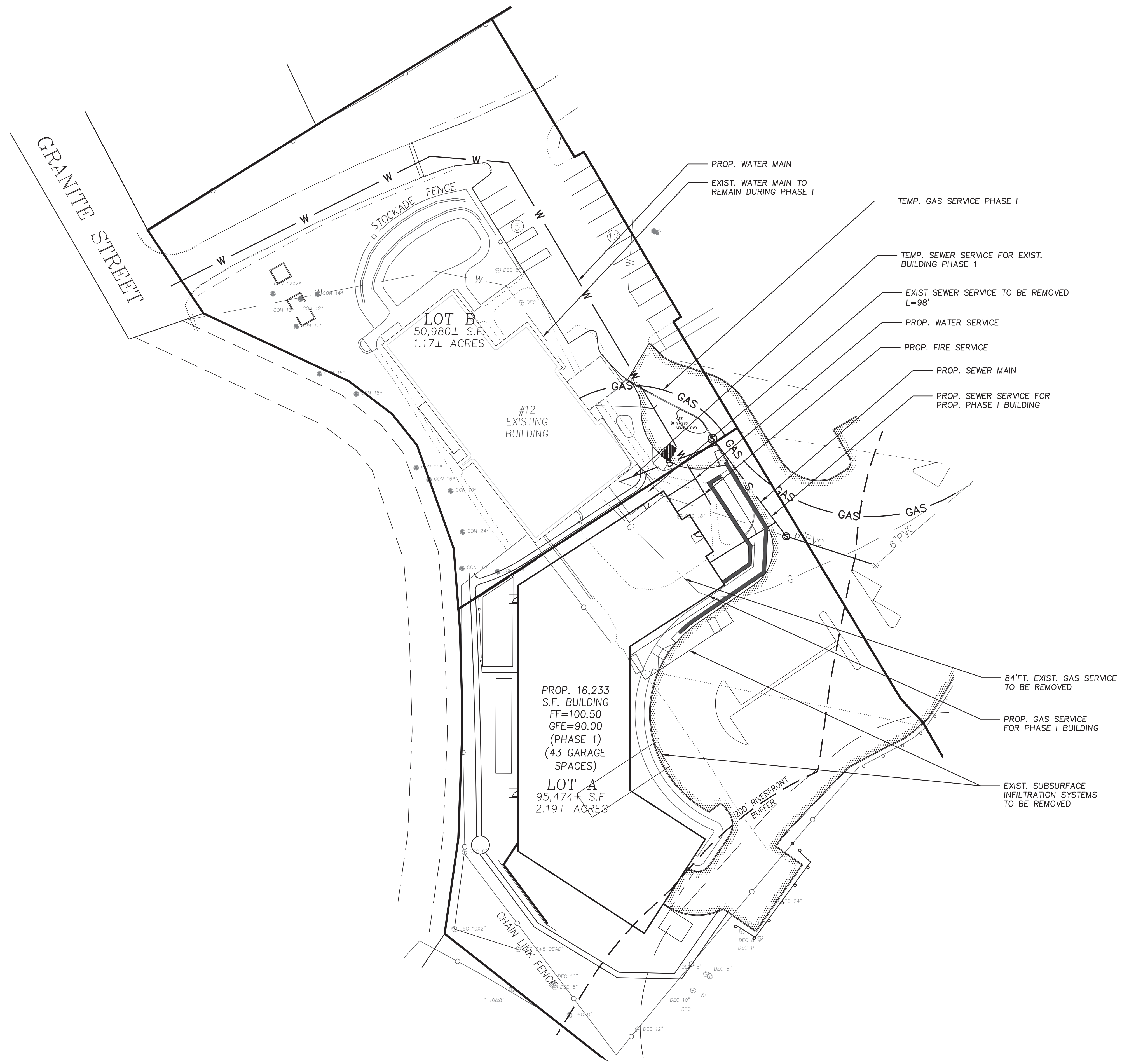
AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

UTILITIES  
PLAN

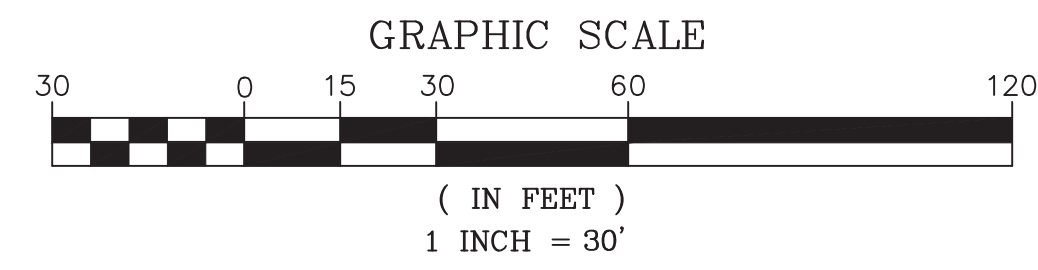
SHEET: 7 OF 14



DATE




PROGRESS  
PRINT



PREPARED FOR  
  
**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		



**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=30'	DES. BY: S.R.C.	PROJECT: M213895
DATE: OCT. 19, 2021	CHKD. BY: J.T.M.	

**SITE PLAN**  
IN  
**METHUEN, MA**

---

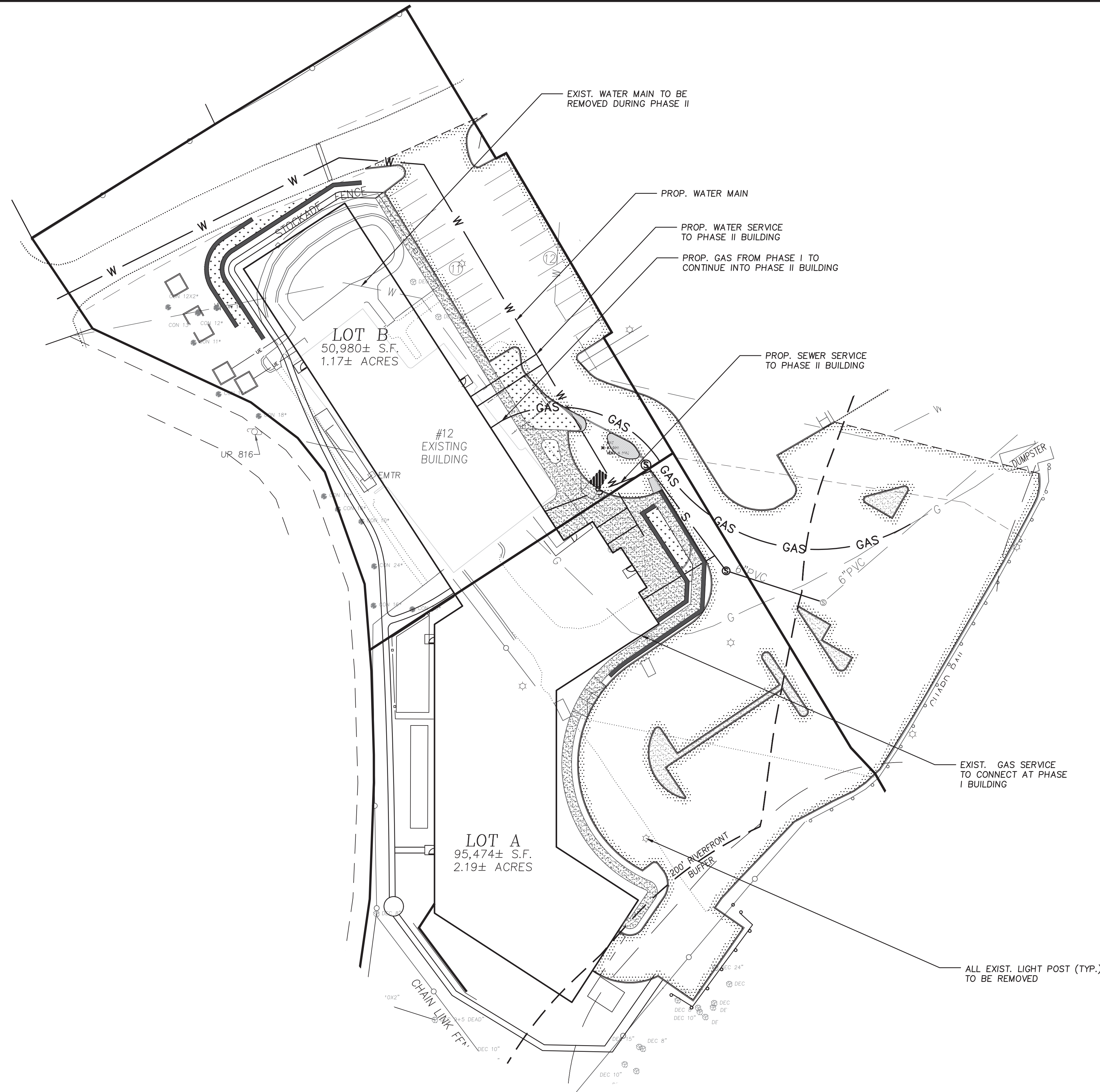
AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

**DEMOLITION  
PLAN  
PHASE I**

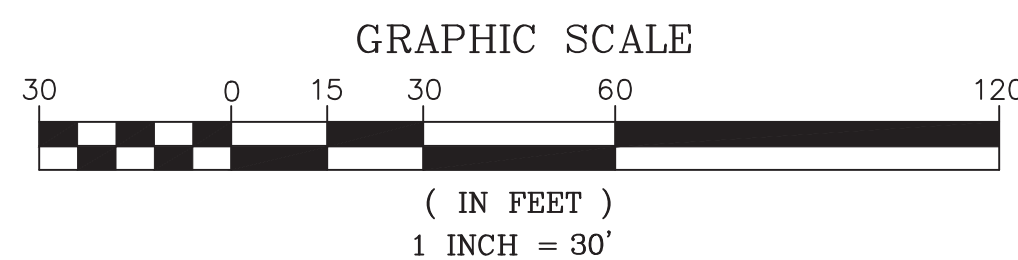
SHEET: 9 OF 14



DATE



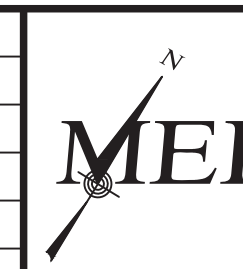
PROGRESS  
PRINT



PREPARED FOR

L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA

NO.	DATE	DESCRIPTION	BY
2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C

 <b>MILLENNIUM ENGINEERING, INC.</b> ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528			SCALE: 1"=30'		DESIG. BY: S.R.C.	PROJECT: M213895
			DATE: OCT. 19, 2021		CHKD. BY: J.T.M.	

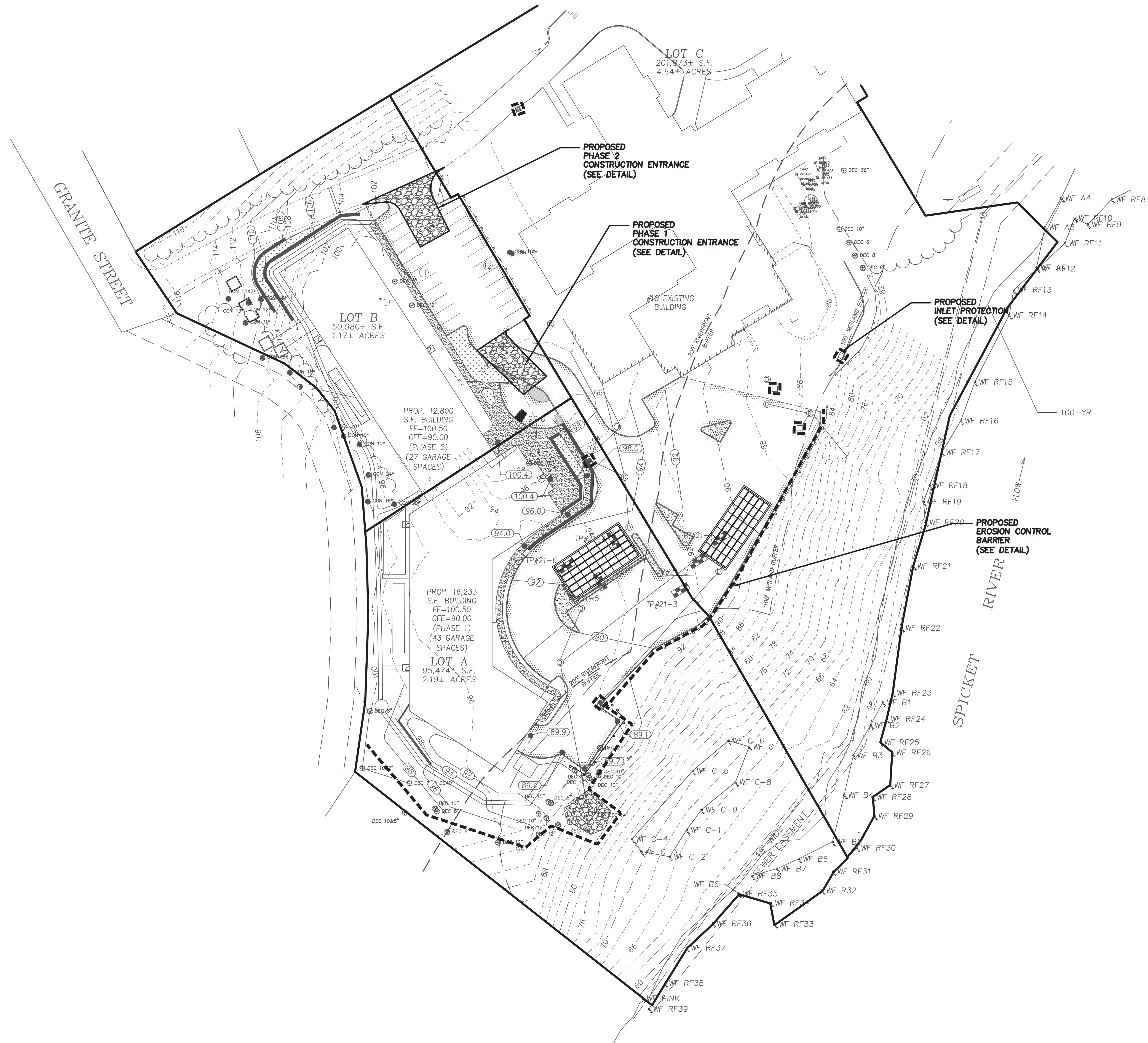
SITE PLAN  
IN  
METHUEN, MA

AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

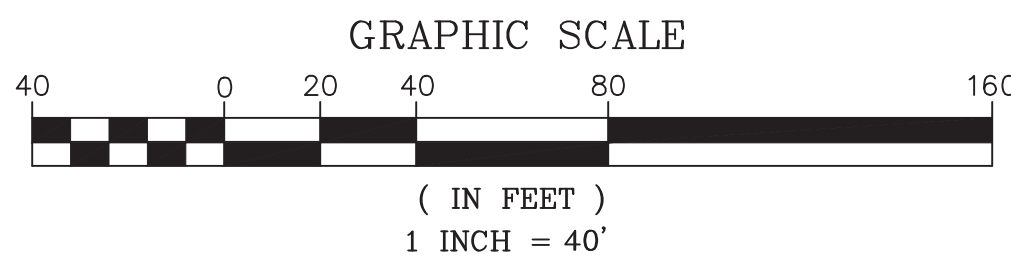
DEMOLITION  
PLAN  
PHASE II



DATE




PROGRESS  
PRINT



PREPARED FOR

L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		

 <b>MILLENNIUM ENGINEERING, INC.</b> ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528			SCALE: 1"=40'		
DATE: JUNE 30, 2021			DESIGN: BY: J.T.M. CHKD. BY: E.W.B.		
			PROJECT: M213895		

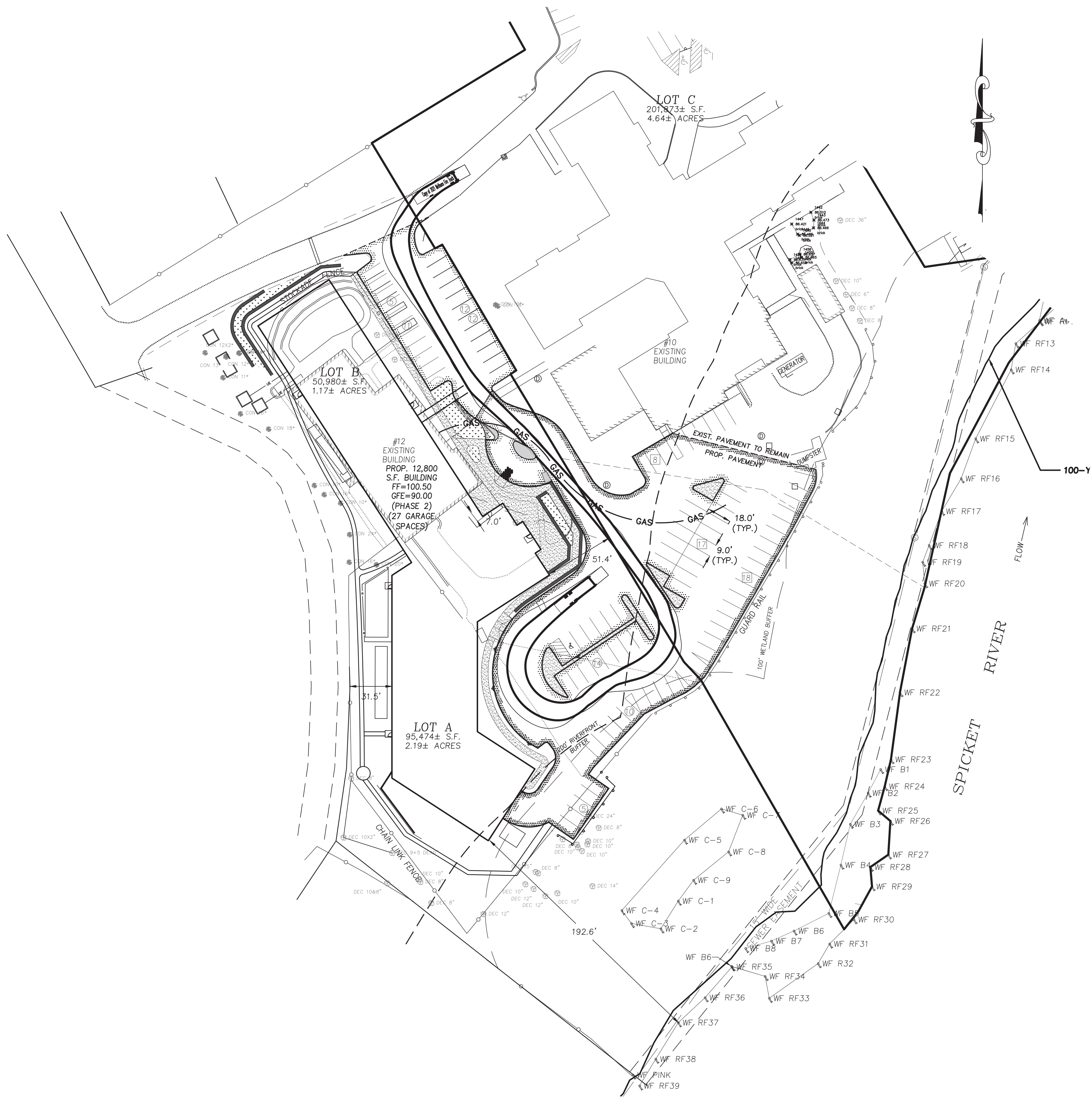
SITE PLAN  
IN  
METHUEN, MA

AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

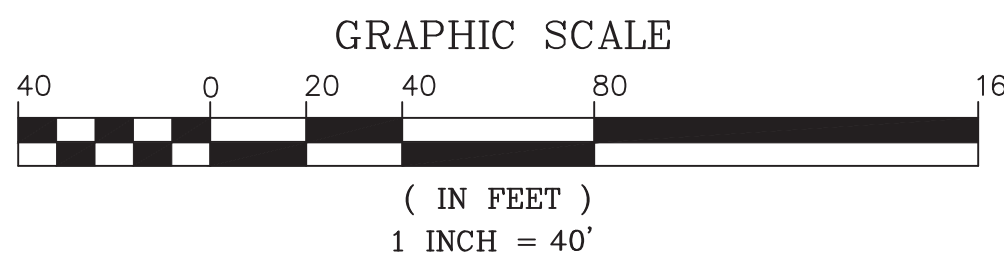
EROSION  
&  
SEDIMENTATION  
CONTROL PLAN



DATE




PROGRESS  
PRINT



PREPARED FOR  
  
**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	VEHICLE DETAILS	J.T.M.		
NO.	DATE	DESCRIPTION	BY		



**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'	DESIG. BY: J.T.M.	PROJECT: M213895
DATE: SEPT. 2, 2021	CHKD. BY: E.W.B.	

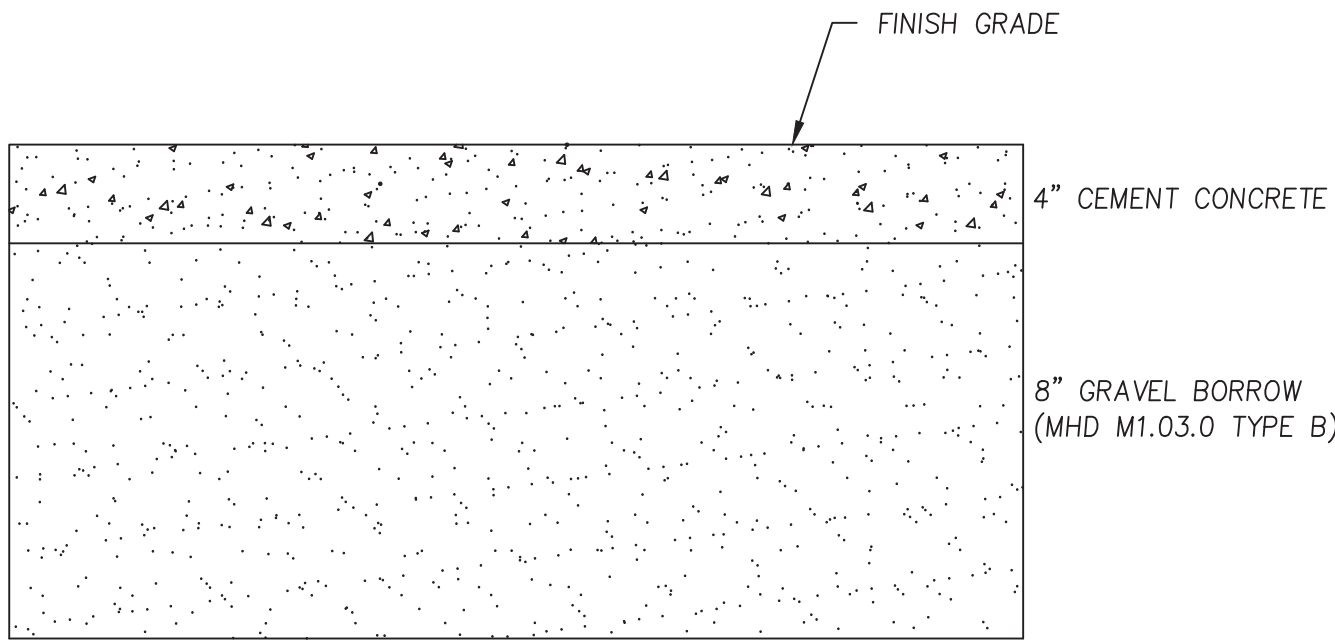
**SITE PLAN**  
IN  
**METHUEN, MA**

AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

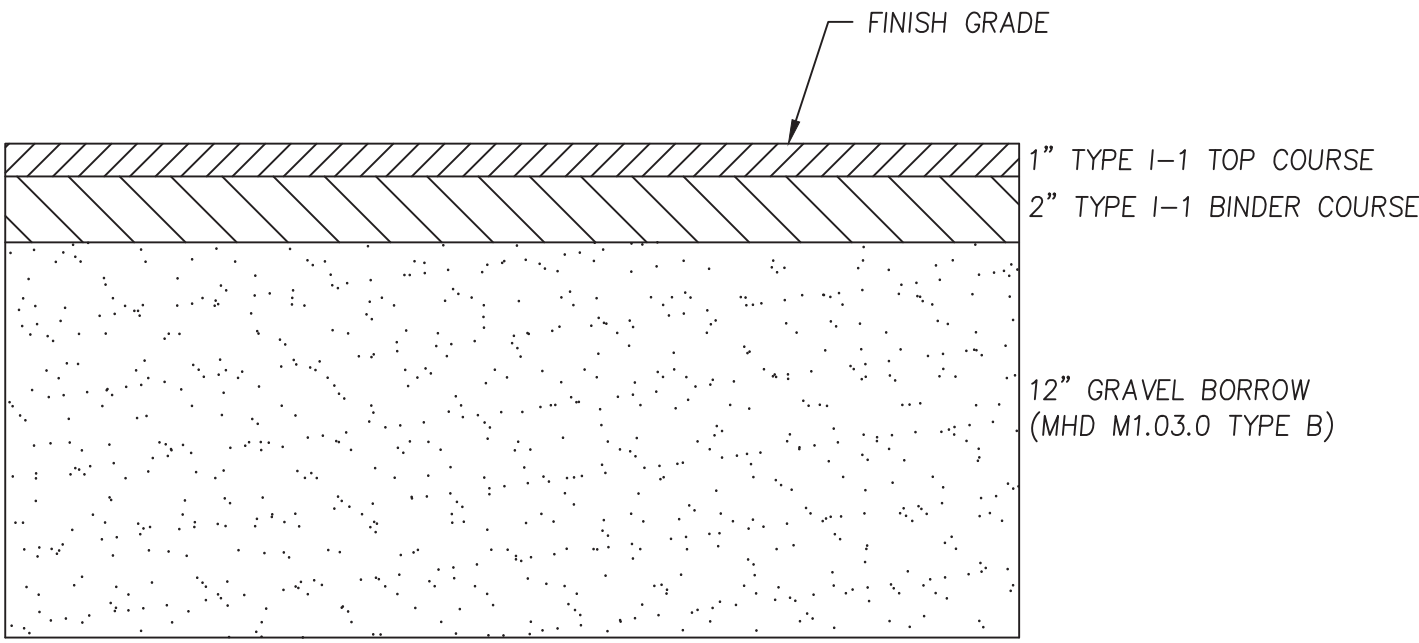
**FIRE TRUCK  
TURNING  
ANALYSIS  
PLAN**

SHEET: 11 OF 14





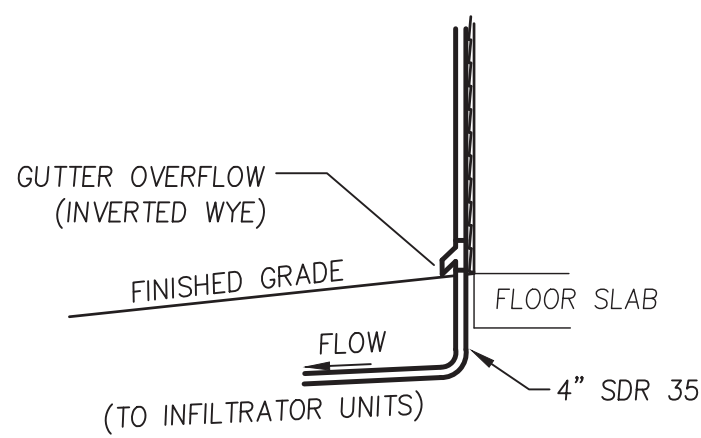
CONCRETE SIDEWALK  
DETAIL N.T.S.



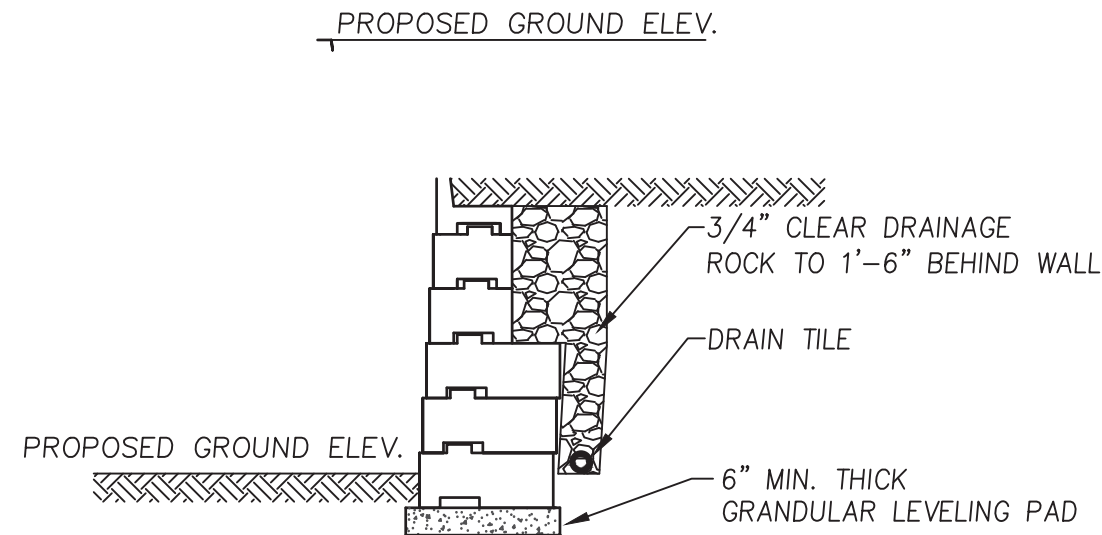
PAVEMENT  
DETAIL N.T.S.

PAVEMENT NOTES

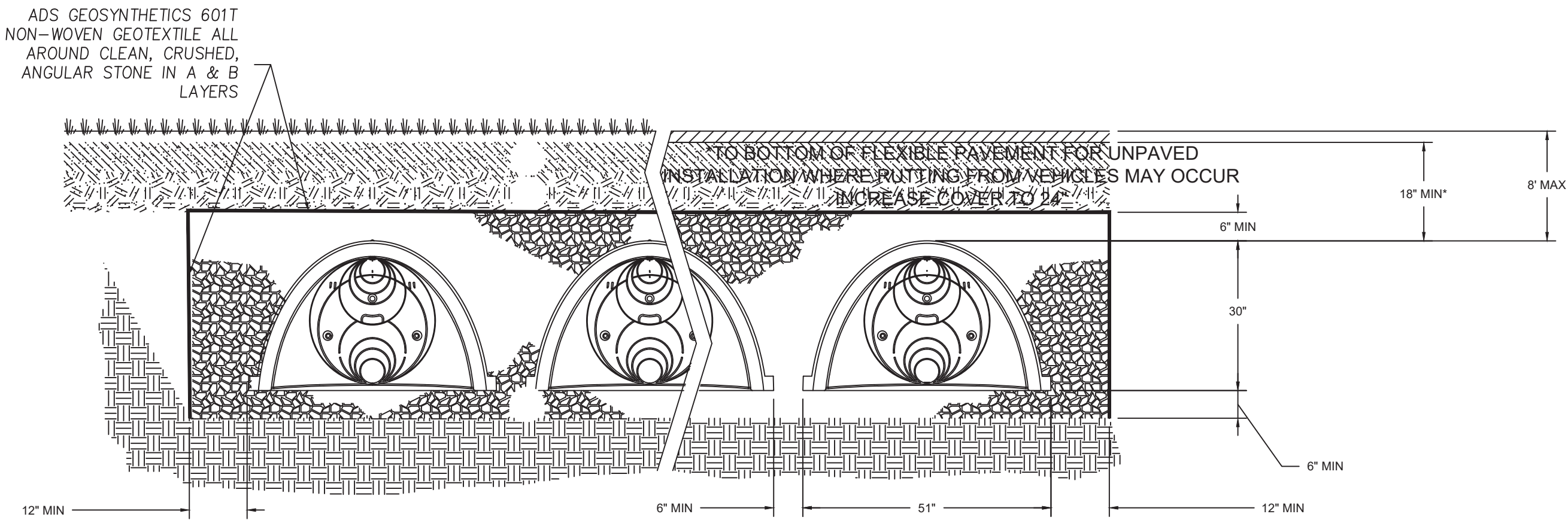
- 1.) ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED PAVEMENT GRADE.
- 2.) PAVEMENT SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.
- 3.) GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.
- 4.) ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.
- 5.) AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE TRACK WILL EFFECTIVELY BE DRAINED.
- 6.) THE CONTRACTOR SHALL REFER TO THE NEWBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, ARTICLES I – VIII.



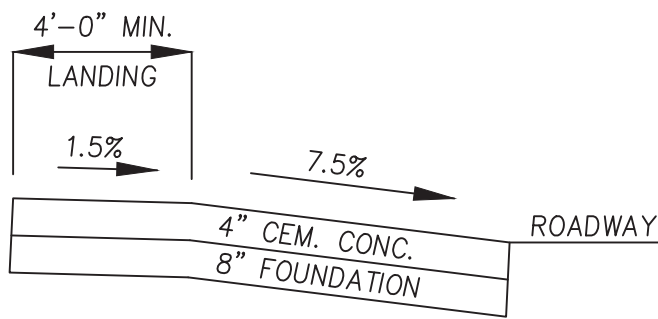
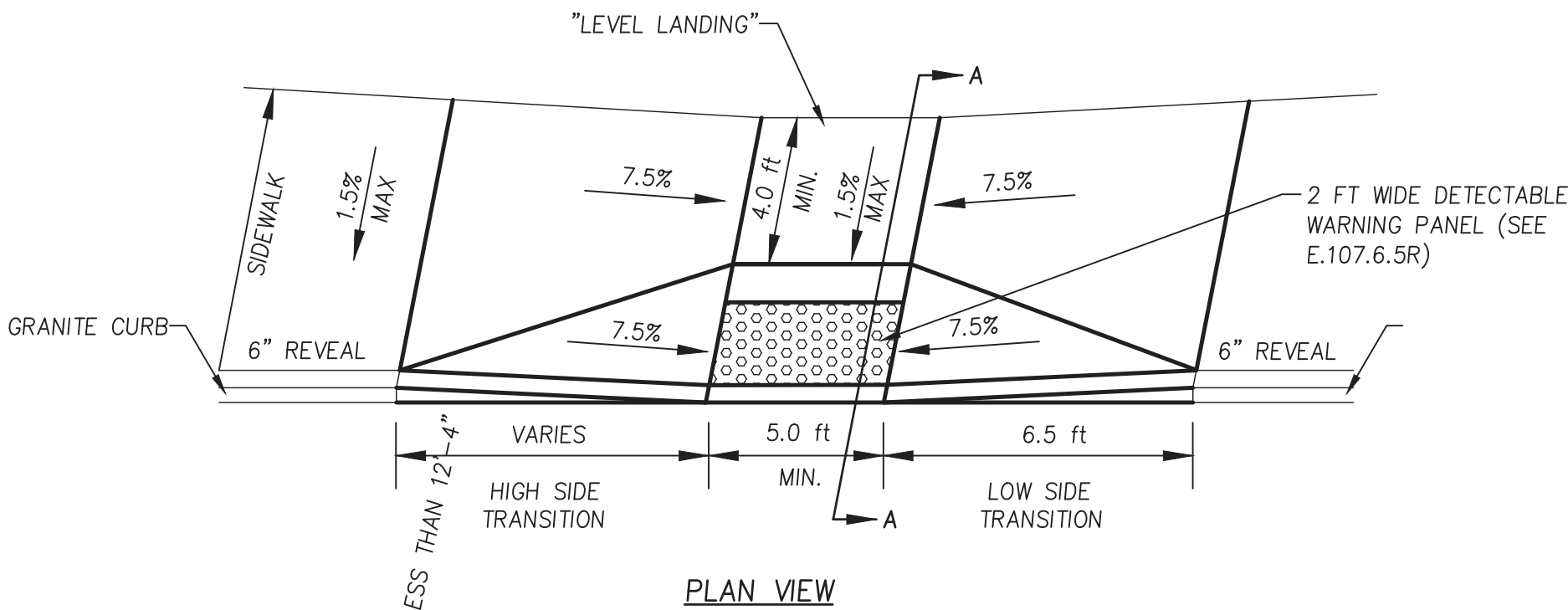
GUTTER DOWN  
SPOUT DETAIL N.T.S.



SEGMENTAL BLOCK  
RETAINING WALL N.T.S.



STORMTECH SC 740  
INFILTRATION CHAMBER N.T.S.

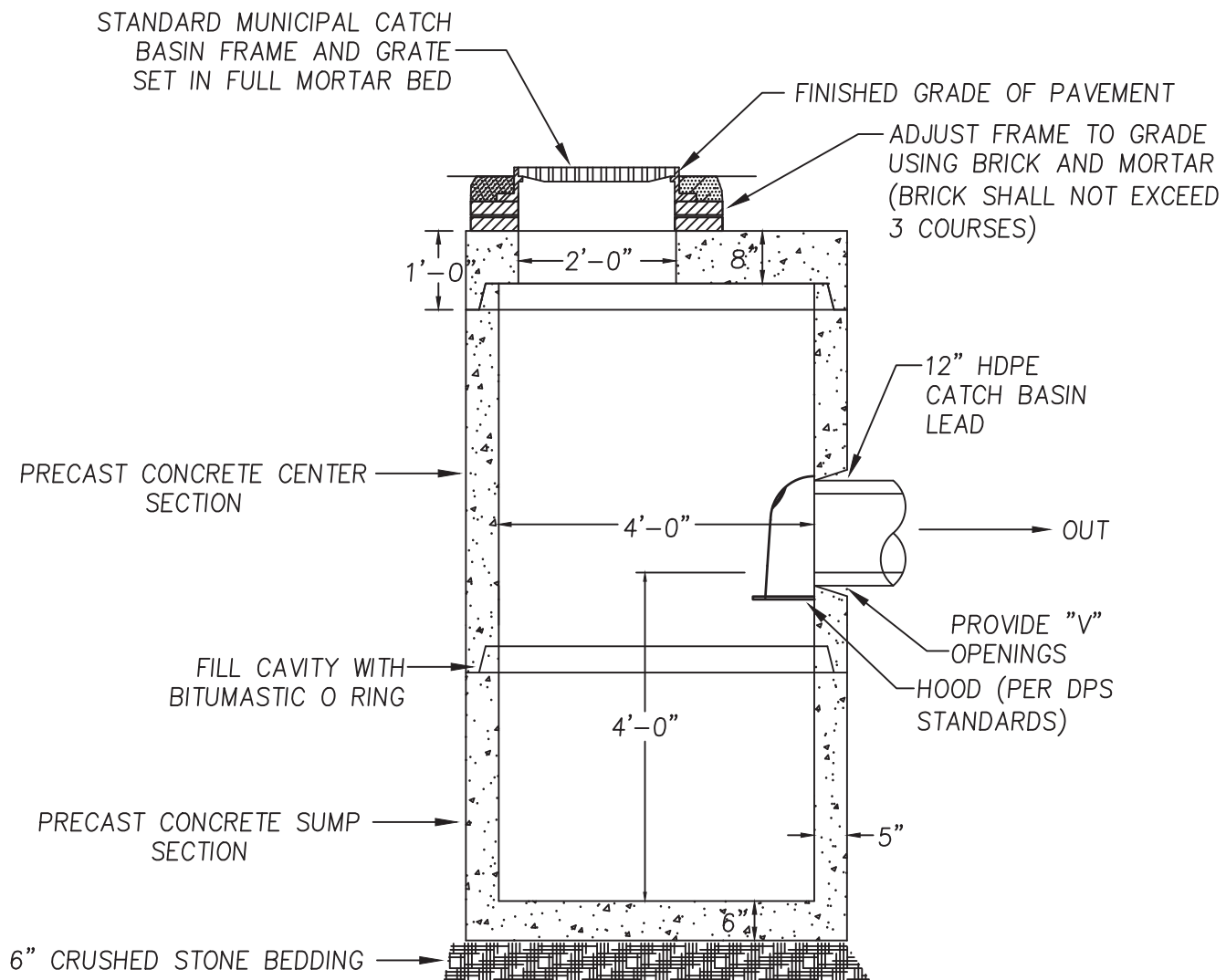


SECTION A-A

NOTES:

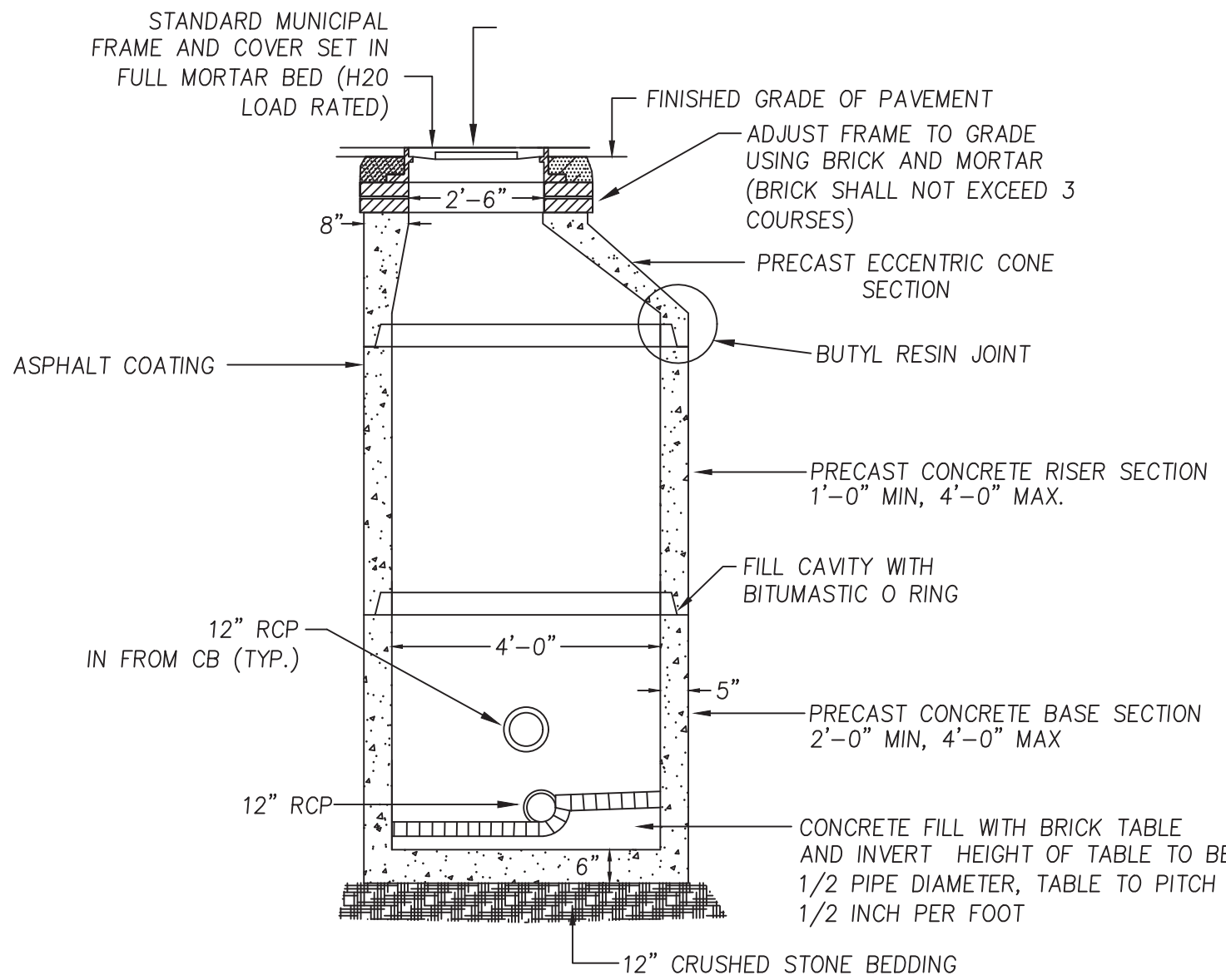
- RAMP CROSS SECTION TO BE SAME AS SIDEWALK; I.E. DEPTH OF SURFACE AND FOUNDATION.
- BASE OF RAMP SHALL MEET PAVEMENT GUTTER SUCH THAT THERE IS NO DIFFERENCE IN ELEVATION. RAMP SHALL BE CONSTRUCTED SUCH THAT WATER DOES NOT "PUDDLE" AT THE BASE OF THE RAMP.
- THE PAVEMENT AT THE BASE OF THE RAMP SHALL BE PART OF THE CONTINUOUS TOP COURSE. THE USE OF A "PAVEMENT PATCH" TO COMPLY WITH THE CONDITIONS IN NOTE 2, ABOVE IS PROHIBITED.
- RAMPS SHALL CONFORM TO MASS DOT WHEELCHAIR RAMP STANDARDS – LATEST REVISIONS.

CEMENT CONCRETE WHEELCHAIR  
RAMP DETAIL N.T.S.



- NOTES: 1) CATCH BASINS SHALL CONFORM TO ASTM C478 AND ASTM C185
- 2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
- 3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST CATCH  
BASIN DETAIL N.T.S.



- NOTES: 1) DRAIN MANHOLES SHALL CONFORM TO ASTM C478 AND ASTM C185
- 2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
- 3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST DRAIN  
MANHOLE DETAIL N.T.S.


METHUEN BOARD OF APPEALS APPROVAL

DATE

PROGRESS  
PRINT

PREPARED FOR  
  
L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		

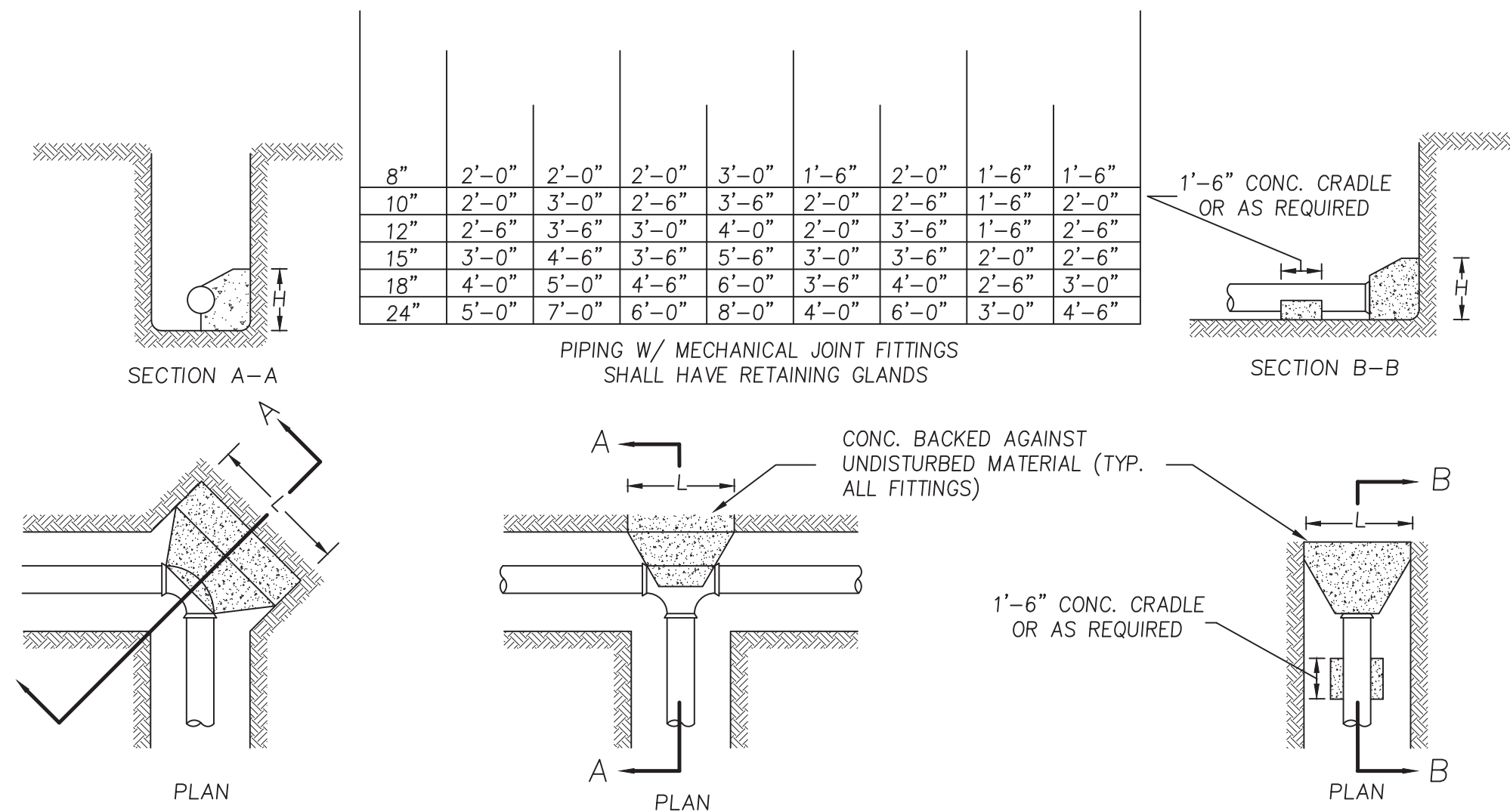
 MILLENNIUM ENGINEERING, INC. ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528					
SCALE: AS SHOWN		DES. BY: J.T.M.			
DATE: JUNE 30, 2021		CHKD. BY: E.W.B.		PROJECT: M213895	

SITE PLAN  
IN  
METHUEN, MA  
  
AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

CONSTRUCTION  
DETAILS

SHEET: 12 OF 14



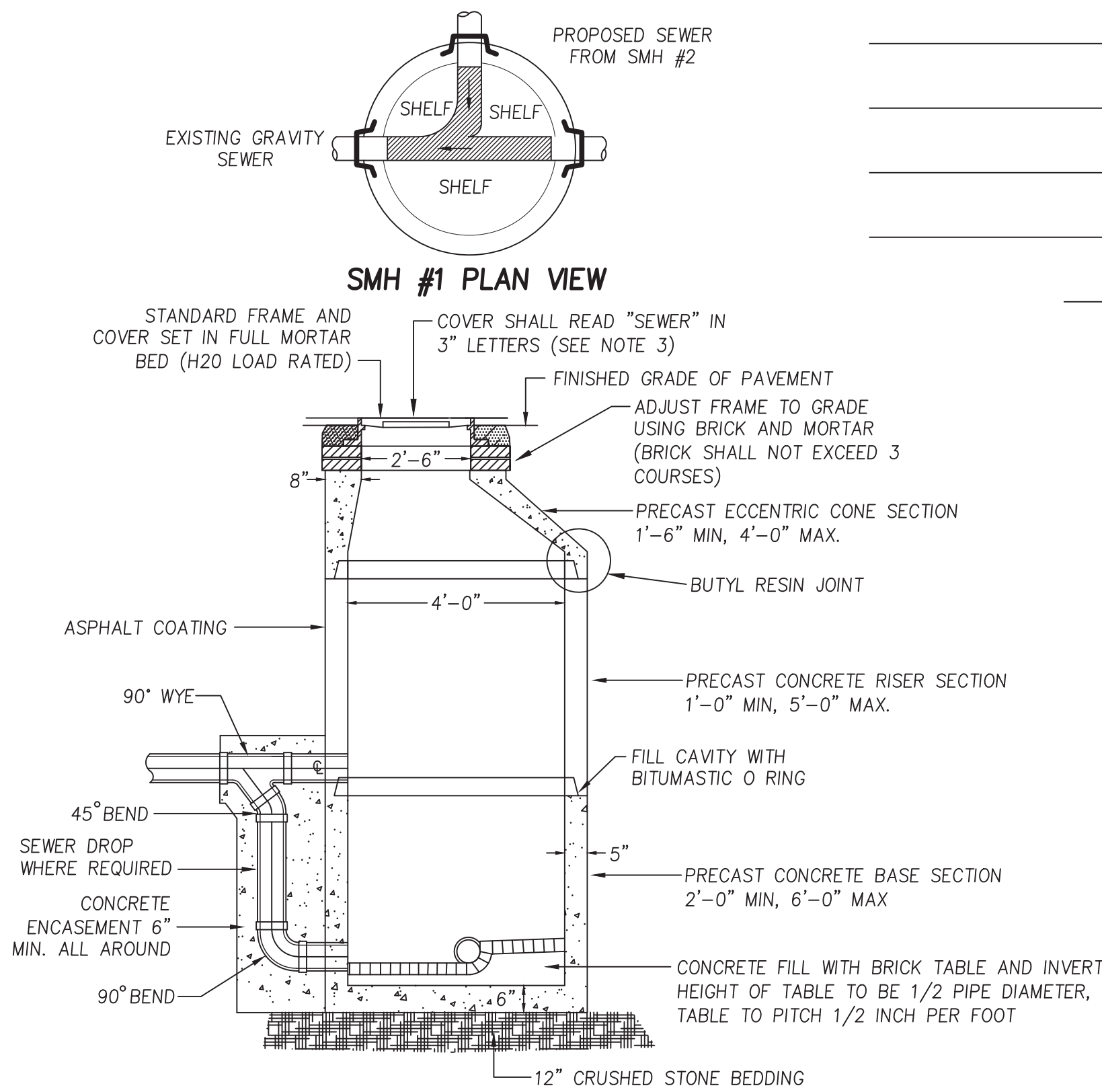
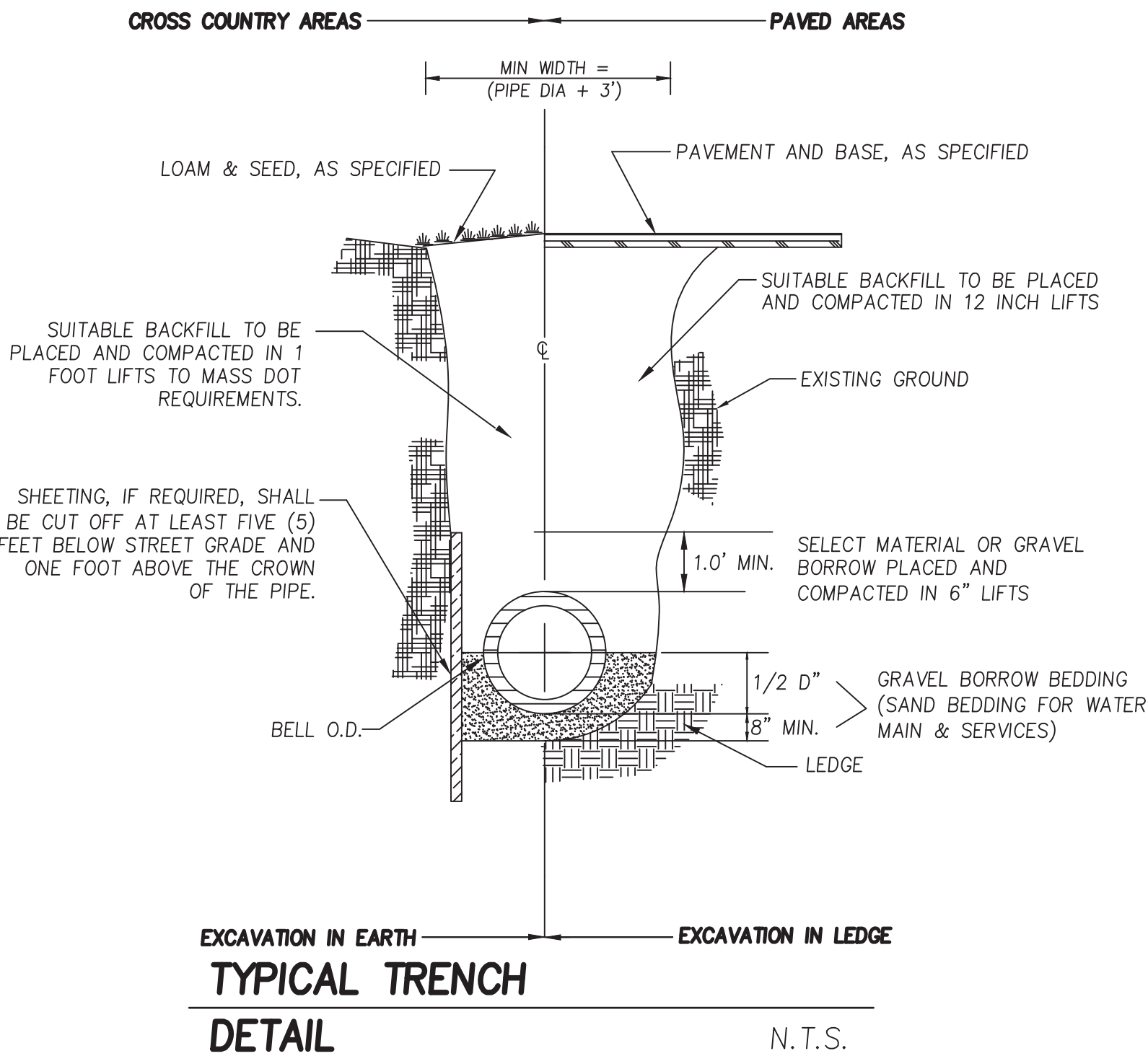


NOTES

- VALUES SHOWN ARE FOR TEST PRESSURE OF 150 PSI WITH A 100 PSI SURGE ALLOWANCE.
- THRUST BLOCKS SHALL NOT BE PLACED AGAINST THE FOLLOWING SOILS: PEAT, ORGANIC SILT AND ORGANIC SOILS, SOFT CLAY, RUBBISH FILL AND OTHER UNSUITABLE ARTIFICIAL FILL, SHATTERED SHALE, INORGANIC SILT AND VERY FINE SANDS.
- POURED CONCRETE THRUST BLOCKS SHALL NOT COVER ANY JOINTS, CLAMPS, NUTS, BOLTS, ETC.

THRUST BLOCK  
DETAILS

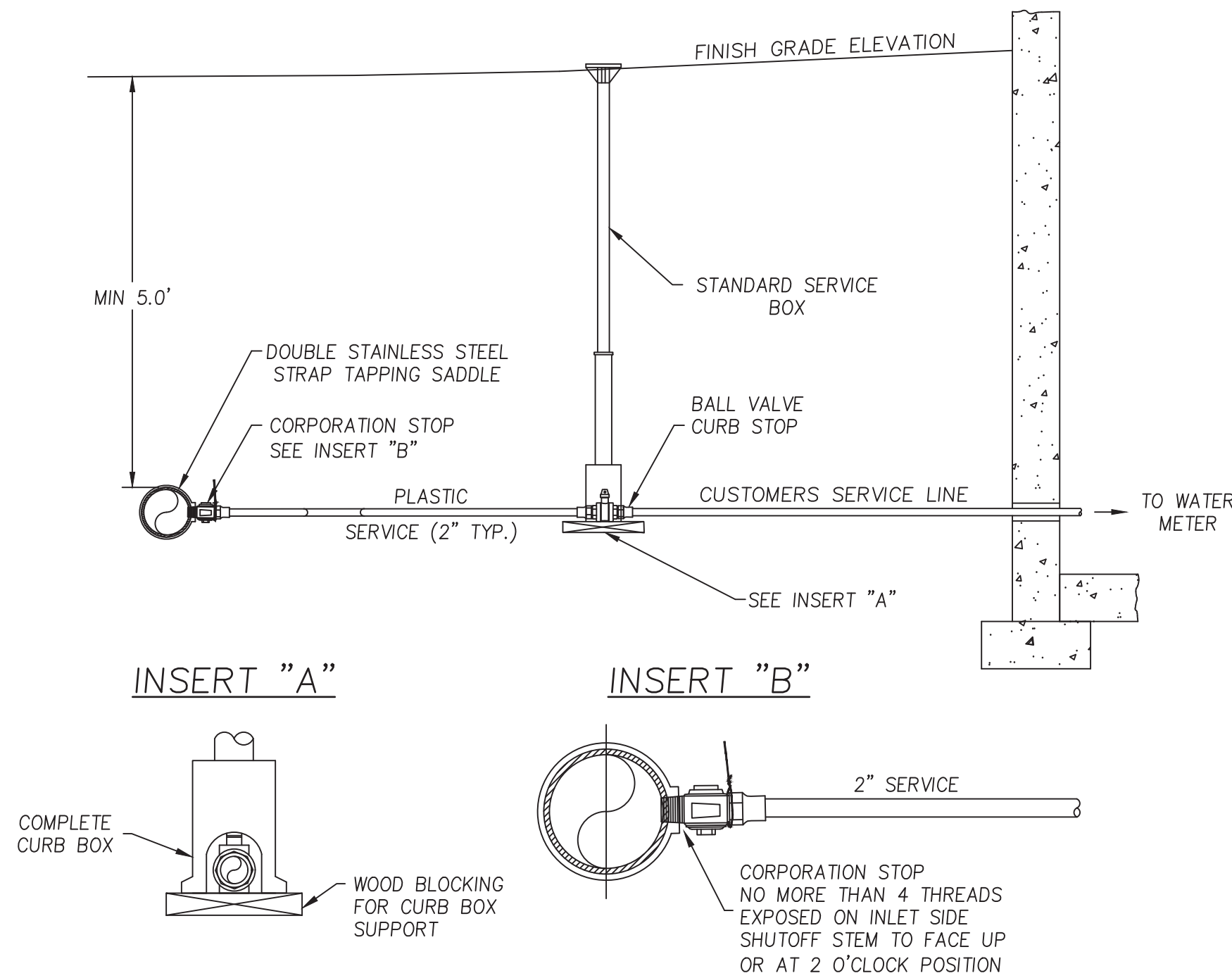
N.T.S.



- NOTES:
- SEWER MANHOLES SHALL CONFORM TO ASTM C478 AND ASTM C185
  - STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEPS SHALL CONFORM TO LATEST ASTM C478 SPEC.
  - COVER SHALL BE LEBARON FOUNDRY (MODEL NO. LA246), MECHANICS IRON FOUNDRY, NEEHAN FOUNDRY, OR EQUAL.
  - ALL PENETRATIONS IN THE MANHOLE FOR INSERTION OF PIPING SHALL BE SEALED WITH KOR-N-SEAL FLEXIBLE PIPE CONNECTION.
  - FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
  - CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

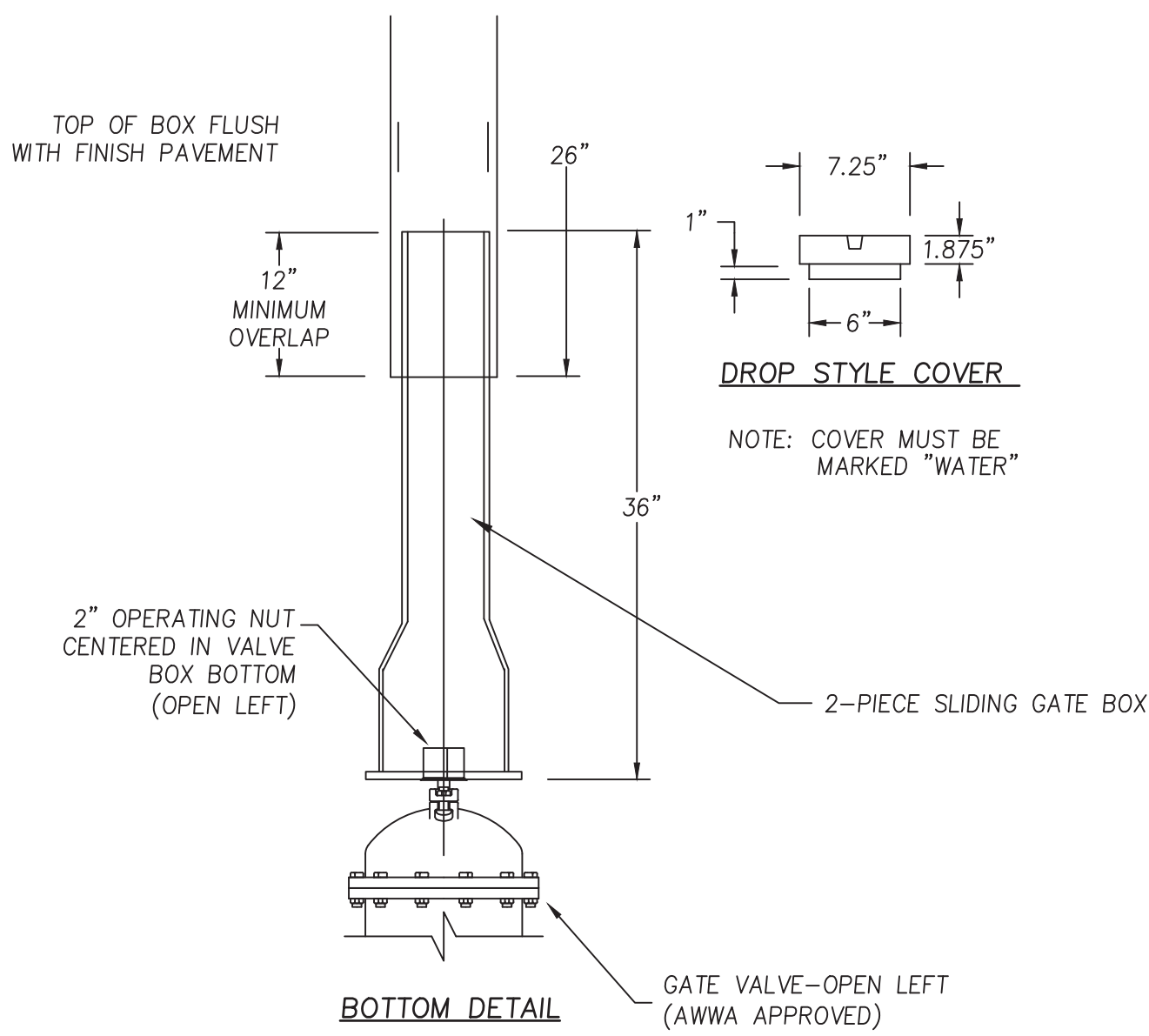
PRECAST SEWER  
MANHOLE DETAIL

N.T.S.



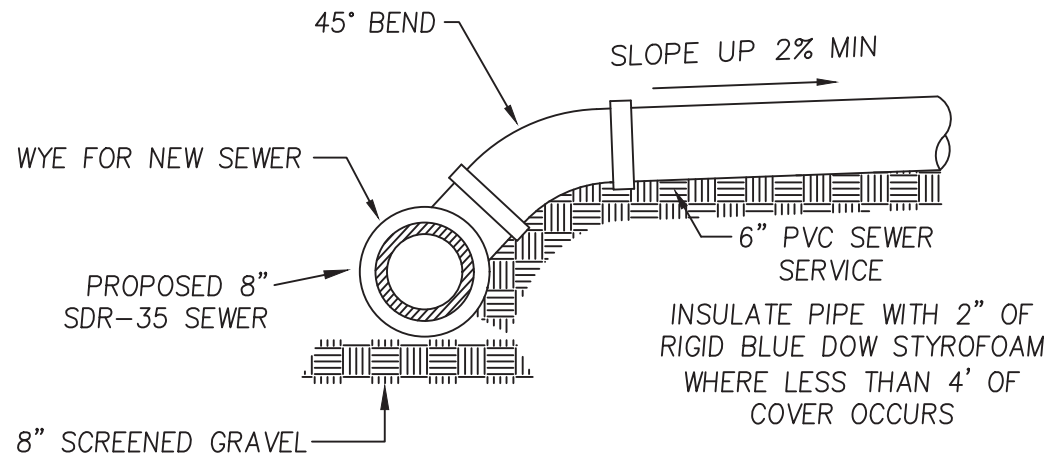
TYPICAL WATER  
SERVICE CONNECTION

N.T.S.



TYPICAL GATE VALVE  
BOX DETAIL

N.T.S.



SEWER SERVICE  
DETAIL

N.T.S.

PROGRESS  
PRINT

PREPARED FOR

L.D. RUSSO, INC.  
198 AYER ROAD  
HARVARD, MA



MILLENNIUM ENGINEERING, INC.  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SITE PLAN  
IN  
METHUEN, MA

AT  
12 INGALLS COURT  
(MAP 716, BLOCK 115, LOT 2A)

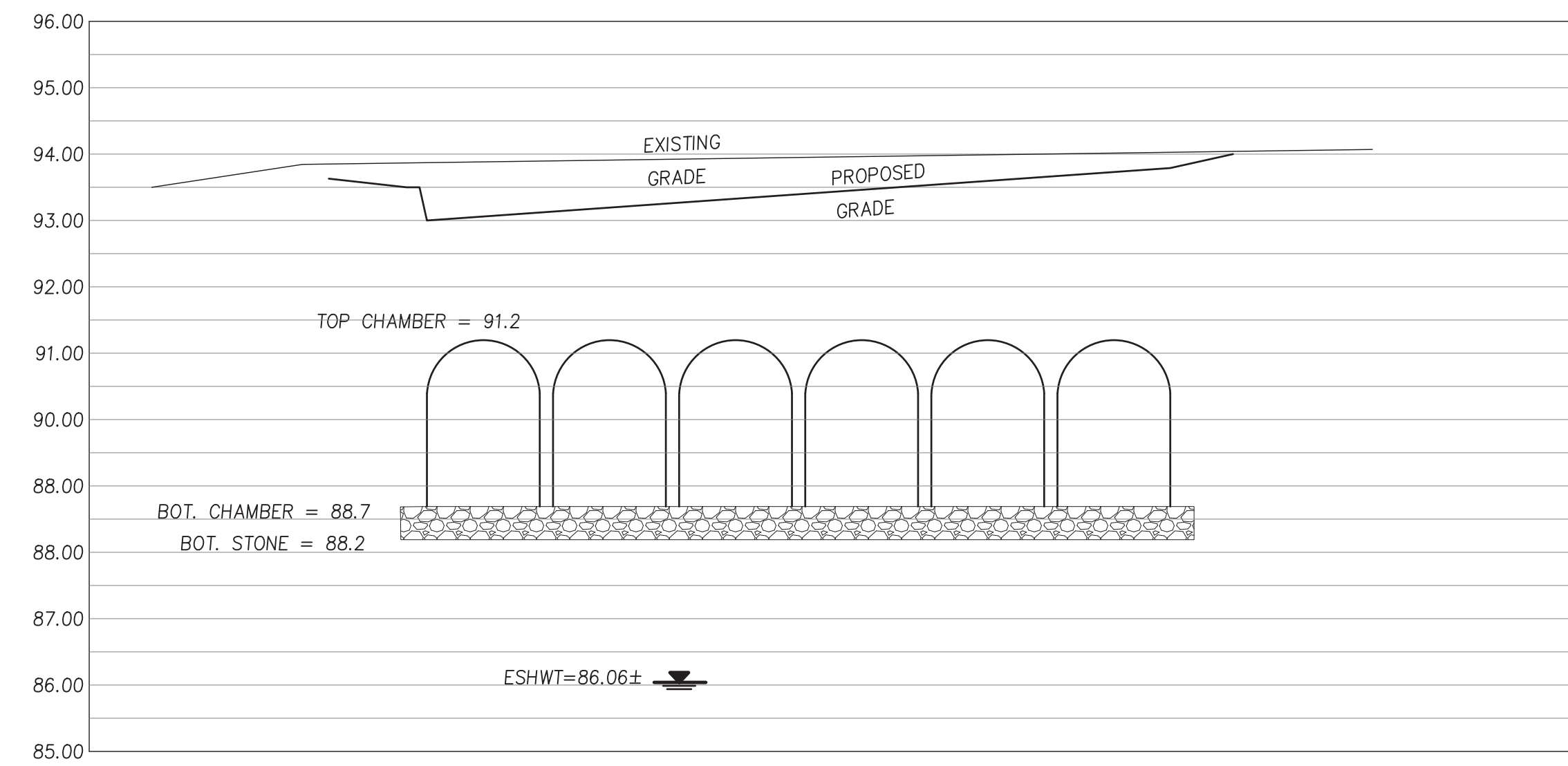
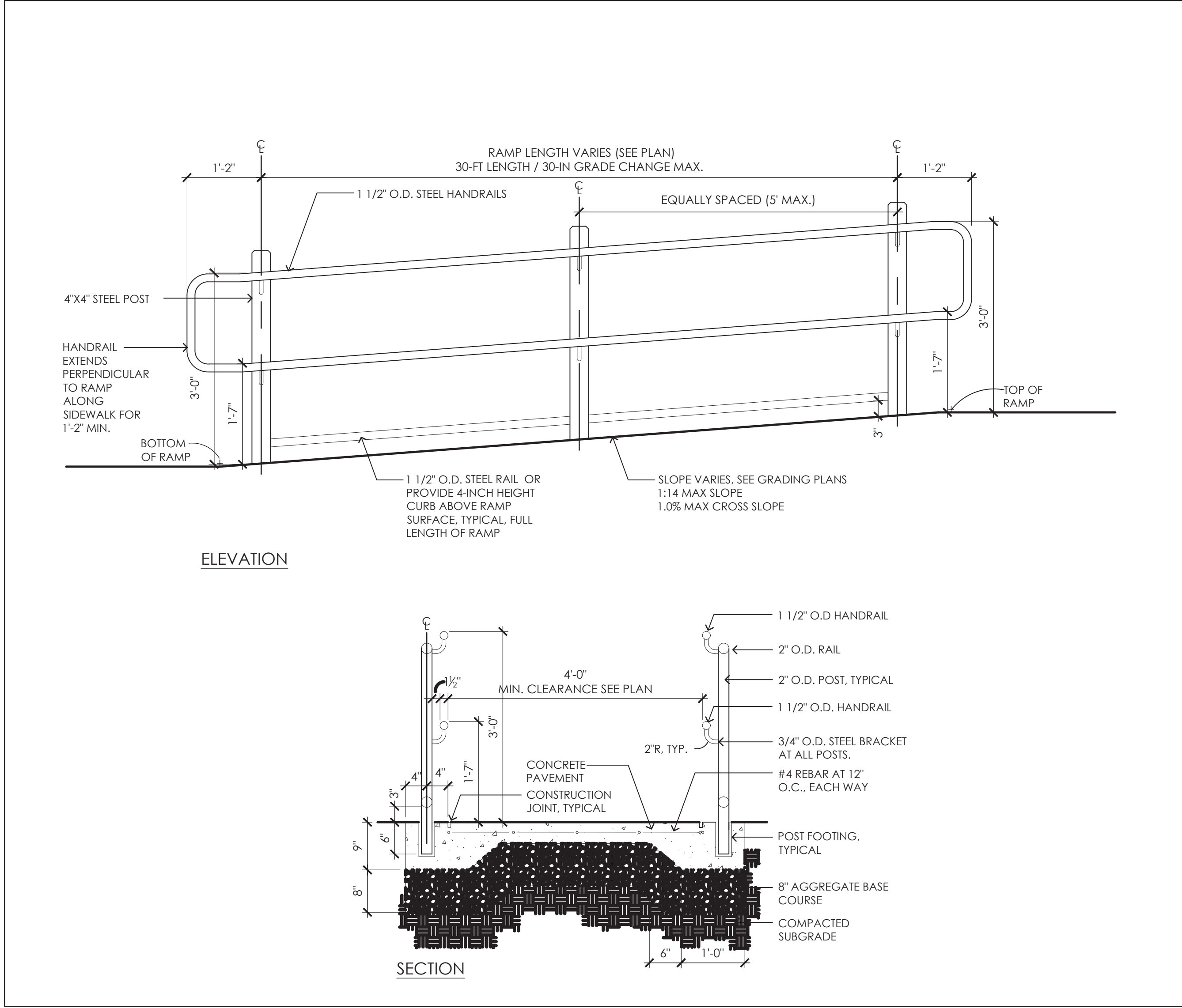
CONSTRUCTION  
DETAILS

SHEET: 13 OF 14

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C
NO.	DATE	DESCRIPTION	BY

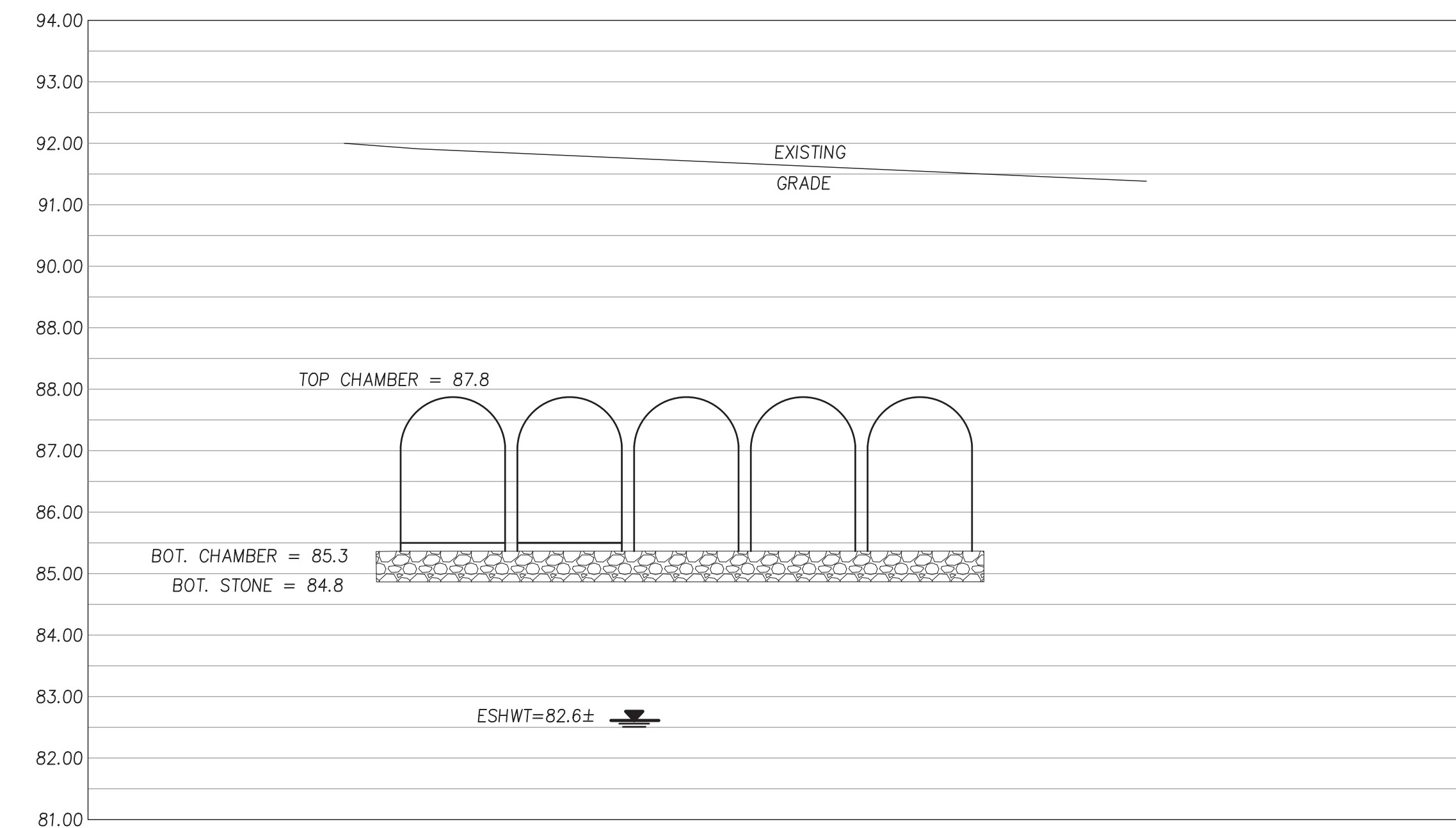
SCALE: AS SHOWN	DES. BY: J.T.M.	PROJECT: M213895
DATE: JUNE 30, 2021	CHKD. BY: E.W.B.	





**SUBSURFACE INFILTRATION**  
**AREA 1 CROSS-SECTION**

HORIZ. SCALE: N.T.S.  
VERT. SCALE: 1"=2'



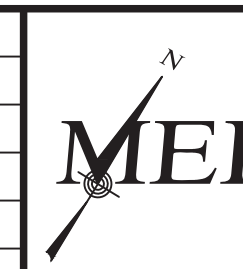
**SUBSURFACE INFILTRATION**  
**AREA 2 CROSS-SECTION**

HORIZ. SCALE: N.T.S.  
VERT. SCALE: 1"=2'

PROGRESS  
PRINT

PREPARED FOR  
  
**L.D. RUSSO, INC.**  
198 AYER ROAD  
HARVARD, MA

2	11/9/21	RESPONSE TO PEER REVIEW	J.T.M.		
1	10/12/21	REVISIONS FROM PEER REVIEW	S.R.C		
NO.	DATE	DESCRIPTION	BY		

 <b>MILLENNIUM ENGINEERING, INC.</b> ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528			SCALE: AS SHOWN			DESIG. BY: J.T.M.	PROJECT: M213895
			DATE: JUNE 30, 2021			CHKD. BY: E.W.B.	

**SITE PLAN**  
IN  
**METHUEN, MA**

AT  
**12 INGALLS COURT**  
(MAP 716, BLOCK 115, LOT 2A)

**CONSTRUCTION  
DETAILS**

SHEET: 14 OF 14