

NEEDHAM PLANNING BOARD

Tuesday, August 17, 2021

7:15 p.m.

Virtual Meeting using Zoom

Meeting ID: **826-5899-3198**

(Instructions for accessing below)

To view and participate in this virtual meeting on your phone, download the “Zoom Cloud Meetings” app in any app store or at www.zoom.us. At the above date and time, click on “Join a Meeting” and enter the following Meeting ID: **826-5899-3198**

To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us click “Join a Meeting” and enter the following ID: **826-5899-3198**

Or to Listen by Telephone: Dial (for higher quality, dial a number based on your current location):

US: +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782 Then enter ID: **826-5899-3198**

Direct Link to meeting: <https://us02web.zoom.us/j/82658993198>

1. Public Hearing:

7:20 p.m. Major Project Site Plan: Needham Enterprises, LLC, 105 Chestnut Street, Suite 28, Needham, MA, Petitioner. (Property located at 1688 Central Avenue, Needham, MA). Regarding proposal to construct a new child care facility of 9,966 square feet and 30 parking spaces, that would house an existing Needham child-care business, Needham Children's Center (NCC). *Please note: this hearing was continued from the June 14, 2021 and July 20, 2021 meetings of the Planning Board.*

2. Board of Appeals – August 19, 2021.

3. Discussion of deadline for Board agenda packet and associated meeting materials.

4. Minutes.

5. Correspondence.

6. Report from Planning Director and Board members.

(Items for which a specific time has not been assigned may be taken out of order.)

July 28, 2021

Needham Planning Board
Town Hall Park
1471 Highland Avenue
Needham, MA 02492

RE: 1688 Central Avenue
SUSPENDING HEARINGS PENDING A RESOLUTION OF THE ETHICS QUESTIONS

Dear Chair Alpert and Members of the Planning Board,

I would like to clear up a few misstatements or misunderstandings that came up at the Planning Board hearing of July 20, 2021 regarding ethics. Member Marty Jacobs inquired about postponing hearings on this matter until the ethics question had been decided. Member Jacobs suggested suspending hearings in anticipation of the State Ethics Commission or Town Counsel advising on the matter. There were some misunderstandings and/or misstatements that came out of the ensuing discussion.

First, the fact that the State Ethics Commission has not informed the Town of Needham of a pending ethics inquiry does not mean that no complaint has been filed with the Commission. All complaints to the ethics commission are confidential. I can tell you personally that I filed a complaint weeks ago and the complaint is pending. Anyone is entitled to file a complaint with the State Ethics Commission confidentially. I do not know if anyone else has filed one in this matter.

Second, the fact that the ethics commission declined to advise Town Counsel on the questions posited by Chair Paul Alpert does not mean that the ethics commission will not give an opinion regarding the ethics of Mr. Borrelli and Mr. Gluesing continuing to proceed in this matter. It could simply be that the specific questions asked were not within the jurisdiction of the State Ethics Commission.

Chair Alpert asked the Ethics Commission to “advise the Planning Board as to whether (1) the Planning Board must accede to Ms. Abruzese’s request to continue the hearing scheduled for next Tuesday, July 20, 2021, or (2) the Planning Board has the authority to accede to Ms. Aburzese’s said request.”

These questions are not within the jurisdiction of the State Ethics Commission. These questions are questions about the authority and procedures of the planning board – not about whether certain prospective behavior of individual town officials would be in violation of the state ethics laws. The State Ethics Commission is empowered only to decide matters within the ethics laws, G.L.c. 268A. Since the questions were outside the authority of the State Ethics Commission, the Commission declined to answer.

Though the questions Town Counsel was directed to ask the State Ethics Commission were not ones that they are empowered to answer, there ARE questions in this matter on which Town Counsel could seek a written opinion from the State Ethics Commission. Some of the questions that Town Counsel could ask the State Ethics Commission to advise him on would be:

1. Would it be illegal for Mr. Gluesing to appear before the planning board in this application on behalf of the private interests of Needham Enterprises and Needham Children’s Center where Mr. Gluesing is a special municipal employee and the application is within his official

- responsibility as the Chair of the DRB, since the DRB reviews the plans and advises the planning board about proposed designs;
2. Would it be illegal for Mr. Gluesing to represent the interests of Needham Enterprises and Needham Children's Center in the application before the planning board if he recuses himself from participating in the related formal DRB hearings on the application where Mr. Gluesing is chair of the DRB and a special municipal employee;
 3. Would it be illegal for Mr. Borrelli (through his attorney) to appear before the planning board on his company's application for approval of a site plan on behalf of the private interests of Needham Children's Center where Mr. Borrelli is the Chair of the Select Board;
 4. Would it be illegal for Mr. Gluesing to expect or receive financial benefit from Needham Enterprises or Needham Children's Center for his work as an architect such as submitting sealed architectural drawings to the planning board and appearing before the planning board to defend the drawings in this matter where he is a special municipal employee and the application is within his official responsibility as chair of the DRB;
 5. Would it be illegal for Mr. Borrelli, through his wholly owned LLC, to expect or receive financial benefit (in the form of a future lease or otherwise) from Needham Children's Center for the work of getting project approvals from the planning board and the Town of Needham and building the requested daycare center.

Town counsel would be entitled to a written opinion of the State Ethics Commission if he requested it. Here is an example of when a Town Counsel obtained a written opinion of the State Ethics Commission about whether certain anticipated behavior of certain town officials would be legal under the ethics laws: [Letter to Brookline Town Counsel from State Ethics Commission](#).

If the answer is that it is NOT legal for Mr. Borrelli and/or Mr. Gluesing to do these things, Mr. Borrelli and Mr. Gluesing would not be able to proceed on the planning board application without breaking the law. Presumably they would not intentionally break the law and would withdraw the application from the planning board. I assume that Town Counsel would advise them that they must do so.

It would seem prudent then for the planning board to have Town Counsel obtain the opinion of the State Ethics Commission about the legality of Mr. Gluesing and Mr. Borrelli's anticipated behavior.¹ There is no need to squander the resources of this board by proceeding forward on this application before getting a determination of that question. If the State Ethics Commission or Counsel gives a full written analysis of the ethical questions and determines that Mr. Gluesing and Mr. Borrelli may proceed, then the planning board can continue hearing the matter as before. If the written opinion determines

¹ I had asked Town Counsel to let it be known when he would be issuing a written opinion on these matters pursuant to G.L. c. 268A, §22 but he took the position that he is not required to file a written opinion. His reluctance to put in writing his analysis of the ethical questions in this case (like his not providing a written opinion about the Dover Amendment as the planning board had discussed requesting) likely stems from the fact that the Town Counsel must maintain a good working relationship with the Chair of the Select Board since it is the Select Board that controls his contract and appoints him as Town Counsel. It would seem this case is ripe for the Town of Needham to consult with an independent counsel who is not ensnared in the conflicts created by the fact that it is the Chair of the Select Board's conduct at issue. The current posture of avoiding doing any analysis on issues related to this case that might affect Mr. Borrelli's application has left the Town and the planning board without the benefit of legal counsel. The Town needs to be able to obtain full, thoughtful, unbiased legal advice to guide its decision-making. This is particularly true in a case such as this one which is highly complex and contested and which involves the appearance of impropriety if not actual impropriety.

that Mr. Borrelli and Mr. Gluesing may not do the actions that would be necessary for them to proceed before the planning board without breaking the law, then the application gets withdrawn, the planning board does not need to do anything and the planning board's resources and the public's time will not have been wasted on unnecessary hearings.

One would think that Needham would be very interested in making sure that people do not appear before its boards illegally. One would also think that Needham would be very interested in making sure its proceedings have integrity. It was appalling to see DRB Chair Gluesing not only appear before the planning board on July 20 to pursue the application on behalf of his private client when he is supposed to be representing only Needham's interests, but then also attempt to utilize his position on the DRB to lend credibility to his arguments. In arguing that the petitioner had made changes sufficient to address any concerns, Mr. Gluesing talked about how "we" (meaning the DRB) often don't comment on plans and the lack of comment means that the DRB has no objections.²

Finally, there was some suggestion in Chair Alpert's emails that he felt like the planning board could never suspend hearings on this matter because in his view the board can never deny an application to build a child care center. There are a few problems with this reasoning.

First, if the petitioner withdraws the application because it is not legal for him to do the acts necessary to pursue the application then the question of whether a special permit is required or whether the planning board could deny the application becomes moot. There would be no application to act on if it were withdrawn.

Second, the bylaws do not allow a major project daycare to be built "as a right". This issue is discussed in our Objection to the Hearing of July 20, 2021.

For these reasons, we request that the Planning Board utilize the resources available to it to get a determination about whether Mr. Borrelli and Mr. Gluesing may legally do the acts necessary for them to proceed on their application in this matter and that it suspend hearings on the application until such time as a definitive answer regarding the ethics question can be obtained.

Sincerely,

Maggie and Joe Abruzese
30 Bridle Trail Rd.

² This was misleading at best since the petitioner did not give the DRB a copy of the new plans for comment.

July 28, 2021

Needham Planning Board
Town Hall Park
1471 Highland Avenue
Needham, MA 02492

RE: 1688 Central Avenue
OBJECTION TO THE HEARING OF JULY 20, 2021

Dear Chair Alpert and Members of the Planning Board,

The Planning Board is improperly deviating from what the Needham zoning bylaws require. Chair Paul Alpert unilaterally stated at the start of the hearing on July 20, 2021 that he is treating this application not as a special permit which may be denied if the board cannot make certain findings, but as an “as a right” use which cannot be denied by the board.

Needham Zoning Bylaws very clearly state that once a proposed daycare construction project reaches “Major Project” size, it is no longer permitted in residential neighborhoods as a right. See Section 3.1 (“Y” means use allowed EXCEPT if it is a Major Project in which case it is prohibited unless a special permit can be obtained), 3.2.1 (child care centers are designated as “Y”), 7.4.3 (all Major Projects require a special permit), 7.6.1 (stating that the provisions of 7.5.2, which clearly state that the special permit granting authority has the right to vote no on a special permit, apply to major project special permit hearings). The Chair has unilaterally disregarded the zoning bylaws and the zoning provisions voted on and passed by Needham’s Town Meeting members. There has been no deliberation by the board on this huge ad hoc change to the bylaws.

When the planning board voted to allow Needham Enterprises to withdraw its application for minor site review and refile as a major project, the discussion clearly stated that that was the extent of the vote. The issue of whether zoning bylaws could be changed in this case to allow a major project daycare as a right was not discussed or agreed to. In fact, Chair Paul Alpert stated on the record that the Planning Board was not giving up anything in allowing the project to be withdrawn and refiled as a major project and Member Marty Jacobs made very clear on the record that the vote did not encompass any change of the Planning Board’s authority and powers under the zoning bylaws. Member Jacobs also expressed that the Planning Board had agreed to request a written opinion from Town Counsel fully briefing the issue, but had not received the opinion.

It is not clear that the Planning Board even has the jurisdiction to evaluate the validity of Needham’s duly enacted schedule of uses and special permit bylaws. The Planning Board is created under the authority of G.L. c. 41, §81A and the Needham bylaws. The Planning Board was not created as an impartial tribunal to interpret the laws of the Commonwealth and decide a legal conflict between two parties. Rather, the Planning Board is charged with carrying out the provisions of Needham’s zoning bylaws in specific ways as set forth in those bylaws. The Planning Board in this manner represents the interests of one party – the Town of Needham.

The Town of Needham passes its bylaws through Town Meeting and all of its participants, including the town’s boards and elected Town Meeting Members. These bylaws codify what the interests of Needham

are with regard to construction projects and they mandate the specific manner by which the planning board must protect those interests, the specific uses that are permitted as a right and those that are only permitted by special permit. No where in the bylaws or Massachusetts statutes is the Planning Board given jurisdiction to interpret the laws of the Commonwealth or entertain questions of the validity of duly enacted zoning bylaws. The Planning Board follows the bylaws as written. That is its mandate. If Needham's bylaws are invalid under Massachusetts law, it is for a court of competent jurisdiction to strike the bylaw down, not the Planning Board. See generally, [Wellesley Board of Appeals, ZBA 2008-80](#) (finding that the Board of Appeals lacked jurisdiction to invalidate a zoning bylaw for an applicant trying to build a child care on an undersized lot and indicating that they could only disregard the bylaw if a court found the bylaw invalid and directed them to do so).

Even if a question of the validity of the schedule of use and the special permit bylaws were within the jurisdiction of the Planning Board, *that question could not be resolved by the Chair himself*. This is not a minor issue of procedure. The planning board must fully consider, deliberate, hold a hearing on and vote on this matter in a manner that is in accordance with open meeting laws.

This vote cannot be an afterthought at the end of a hearing on the merits of the application. Doing so would deprive the public of the chance to be heard on the issue of whether the planning board can or should invalidate Needham's zoning bylaws. Due process also requires that the planning board members, the petitioner and the public know definitively the framework under which the planning board is considering the application BEFORE the application is considered at a hearing. The level of scrutiny given to the application by the planning board, the peer review traffic engineer and the public will be very different if the planning board thinks it is powerless to deny the major project application than if the planning board is driving toward discerning whether it can make the findings required to grant a special permit.

There are other reasons to suspend hearings on the merits (ethics) which are discussed in our letter of July 28, 2021. However, if the Planning Board is going forward with hearings in this matter, the next hearing should be limited to the preliminary matters of (1) whether the Planning Board has the jurisdiction to conduct inquiry into the validity of Needham's duly passed bylaws regarding the use designation of a major project daycare and the special permit requirements of major projects; and, if it does, (2) whether the use bylaws and the special permit bylaws are invalidated by the laws of the Commonwealth given the binding Supreme Judicial Court case of [Rogers v. Town of Norfolk](#), 432 Mass 374 (2000) in which the court upheld a bylaw prohibiting daycares in residential neighborhoods once they exceeded a 2500 sq. ft. footprint.¹

¹ Ignoring [Rogers](#), petitioner has argued that Needham's bylaws are made invalid by the language of the Dover Amendment which states, "No zoning ordinance or bylaw in any city or town shall prohibit, or require a special permit for, the use of land or structures, for the primary, accessory or incidental purpose of operating a child care facility." However, if Norfolk's bylaw in [Rogers](#) which outright prohibits daycares greater than 2500 sq ft was not considered by the court to "prohibit, or require a special permit for, the use of land or structures...for the...purpose of operating a child care facility" under the Dover Amendment, then neither does Needham's bylaw which only prohibits construction of daycares in residential neighborhoods once they reach Major Project size and even then gives the applicant the opportunity to overcome the prohibition if they can make the showings required by the special permit

For these reasons, we object to the hearing as it was held on July 20, 2021 and request that the planning board hear and decide the above issues before holding any hearings on the substance of petitioner's application.

Sincerely,

Maggie and Joe Abruzese
30 Bridle Trail Rd.

process. Under Rogers, the language of the Dover amendment quoted by petitioner only applies when a town prohibits or requires a special permit for ALL daycare projects, not when it merely prohibits or requires a special permit once a project is oversized.

MEMORANDUM

To: Needham Planning Department

From: Evans Huber, Esq.

Date: August 4, 2021

Subject: Additional Changes to Proposed Project at 1688 Central Avenue Following the July 20 Hearing

As requested by email from Alex Clee dated August 3, the following is a summary of the changes that Needham Enterprises has made to the proposed project following the July 20, 2021 PB hearing, in response to input from the peer reviewer, John Diaz of GPI. This memo supplements, but does not repeat, the changes to the project (as compared to the original submission) that are set forth in the “bullet points” memo that was part of the July 20 hearing presentation materials.

- The driveway has been widened to provide three lanes;
 - a drop-off and pick-up queueing lane adjacent to the sidewalk (8 feet wide)
 - an entrance lane providing unimpeded access to the rear parking areas (11 feet wide)
 - an exit lane for exit from the rear parking areas as well as the drop-off and pickup area (11 feet wide).
 - Drop-off and pick-up will still be permitted only at the main entrance where the staff is stationed.
 - Up to the island, the main travel lanes are a combined 22 feet wide, which exceeds the required width set forth in section 5.1.3(i) of the Bylaw. To the east of the island, they remain 24 feet wide.
- The driveway entrance shape has been changed to reinforce that the pick-up and drop-off lane is separate from the main travel lane to the rear parking areas
- Yellow and white lane lines have been added to clearly differentiate travel lanes from the drop-off and pick-up lane.
- Directional arrows as shown on the plan will be painted on the various lanes.
- The island has been changed to a teardrop shape to reinforce the direction of travel for the drop-off and pick-up lane versus the rear parking area access lane.
- A Stop sign and stop line has been added to the exit from the drop-off and pick-up area, for vehicles returning to the exit lane.
- Do Not Enter signs have been added (facing the travel lanes) at the exit from the drop-off and pick-up area.
- The plantings in the island have been changed to Junipers, and the plantings closest to the barn (north side) have been changed to Creeping Junipers
- Concrete wheel stops have been added to the parking areas
- The area at the driveway curb cut has been redesigned so that stormwater runoff will not pass over the sidewalk. This was done by creating a low spot in the driveway and adding two catch basins in that low spot.

Building façade, size, and location are the same as presented at the July 20 hearing. Other than as noted above, the landscaping plan has not changed from what was presented at the July 20 hearing.

ZONING LEDGEND:				
SINGLE RESIDENCE A	REQUIRED/ALLOWED	EXISTING	PROPOSED	COMPLIANCE
MIN. AREA	43,560 S.F.	146,003 S.F.	146,003 S.F.	YES
MIN. FRONTAGE	150'	250.05'	250.05'	YES
MIN. SETBACK FRONT	30'	*105.0' **211.2' ***276.3'	64.0'	YES
MIN. SETBACK SIDE	25'	*67.5' **65.0' ***54.2'	52.3'	YES
MIN. SETBACK REAR	15'	*864.9' **763.4' ***677.0'	811.0'	YES
MAXIMUM STORIES	2-1/2	*2 **1 ***2	1	YES
MAXIMUM HEIGHT	35'	*30.7' **15.3' ***31.2'	24.7'	YES
BUILDING COVERAGE	NR	NR	NR	YES
FLOOR AREA RATIO	NR	NR	NR	YES
DRIVEWAY OPENINGS	18' – 25'	19'	24'	YES

*EXISTING HOUSE (TO BE DEMOLISHED)
**OUT BUILDING -1 (TO BE DEMOLISHED)
***OUT BUILDING -2 (TO REMAIN)

ZONING BYLAW 6.1.3 PARKING PLAN AND DESIGN REQUIREMENTS

	REQUIRED/ALLOWED	EXISTING	PROPOSED	COMPLIANCE
A) PARKING ILLUMINATION	AVG. 1 FOOT CANDLE	N/A	AVG. 1 FOOT CANDLE	YES
B) LOADING REQUIREMENTS	N/A	N/A	N/A	YES
C) HANDICAPPED REQUIREMENTS	2	N/A	2	YES
D) DRIVEWAY OPENINGS	1	1	1	YES
E) COMPACT CARS	50% (8'X16')	N/A	N/A	YES
F) PARKING SPACE SIZE	9'X18.5'	N/A	9'X18.5'	YES
G) BUMPER OVERHANG	1' OVERHANG	N/A	NONE REQUIRED	YES
H) PARKING SPACE LAYOUT	N/A	N/A	N/A	YES
I) WIDTH OF MANEUVERING AISLE	24' (90" STALL)	N/A	24' (90" STALL)	YES
J) PARKING SETBACK				
-FRONT	10'	N/A	*207.5'	YES
-SIDE	4'	N/A	26.9'	YES
-REAR	4'	N/A	609.6'	YES
-BUILDING	5'	N/A	5'	YES
K) LANDSCAPE AREA	10%	N/A	10%	YES
L) TREES	1 PER 10 SPACES (3)	N/A	3	YES
M) LOCATION	WITHIN LOT	N/A	WITHIN LOT	YES
N) BICYCLE RACKS	NONE REQUIRED	N/A	NONE REQUIRED	YES

* TO LOADING AREA

REQUIRED PARKING TO BE DETERMINED BY BUILDING INSPECTOR
PARKING PROVIDED SPACES INCLUDING 2 HANDICAP SPACES

LANDSCAPE AREA REQUIREMENT IS 10% OF REQUIRED SET BACK AREA. SET BACK AREA IS 3,939 S.F.
10% OF 3,939 IS 394 S.F. OF MAINTAINED LANDSCAPE AREA REQUIRED 25% OF THAT OR 98 S.F. TO
BE LOCATED WITHIN THE INTERIOR OF THE PARKING AREA. 860 S.F. PROVIDED WITHIN PARKING AREA

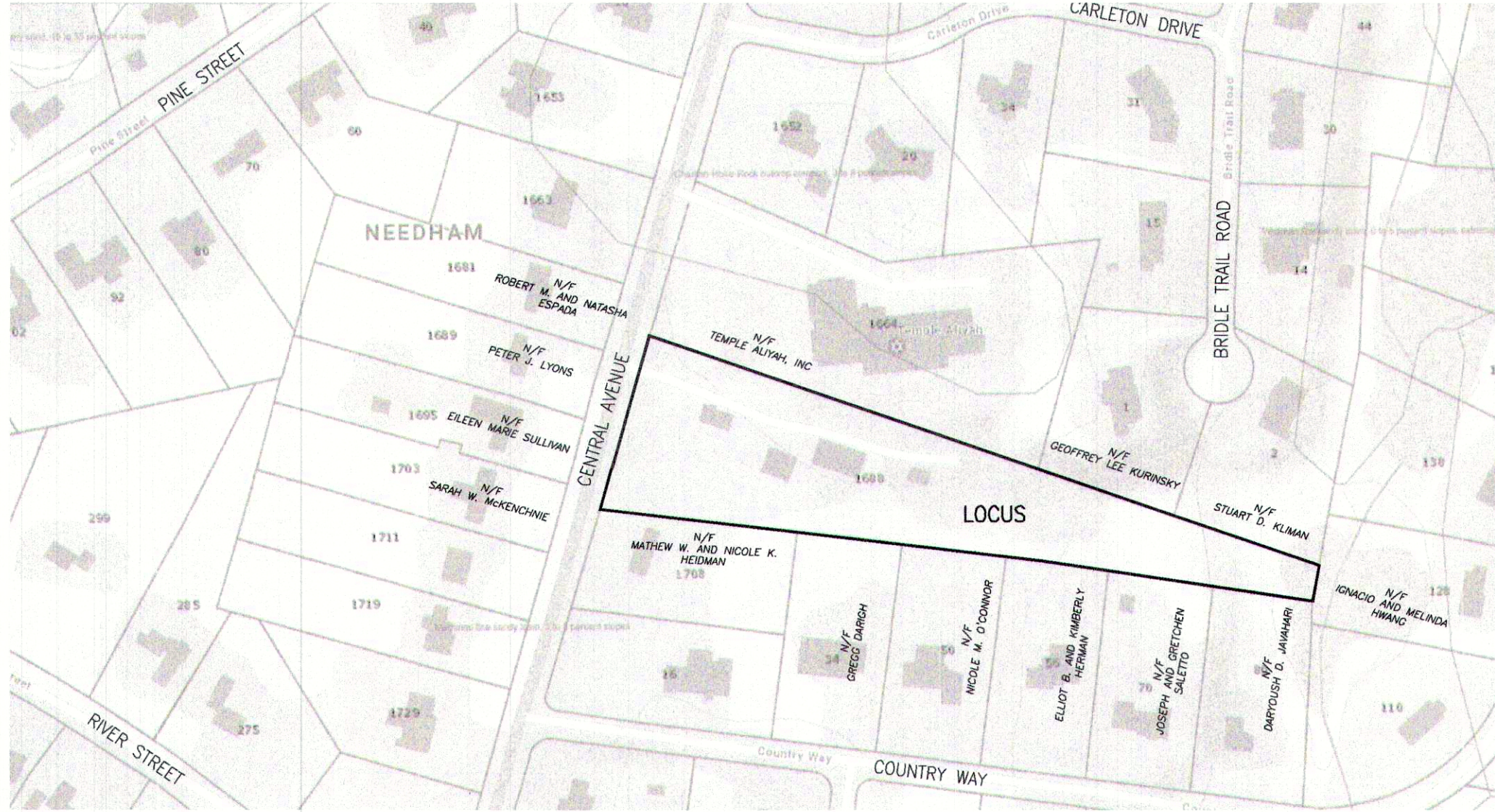
SITE DEVELOPMENT PLANS

DAYCARE

1688 CENTRAL AVENUE

NEEDHAM, MA

JUNE 22, 2020



LOCUS
N.T.S

PLAN INDEX

SHEET	1:	COVER SHEET
SHEET	2:	EXISTING CONDITIONS PLAN
SHEET	3:	SITE PLAN
SHEET	4:	GRADING AND UTILITIES PLAN
SHEET	5:	LANDSCAPE PLAN
SHEET	6 & 7:	DETAILS
SHEET	8:	SEWER PLAN AND PROFILE
SHEET	9:	CONSTRUCTION PERIOD PLAN
APPENDIX		PHOTOMETRIC AND SITE LIGHTING PLAN

NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE

OWNER:

NEEDHAM ENTERPRISES LLC
105 CHESTNUT STREET SUITE 28
NEEDHAM, MA 02492

APPLICANT:

NEEDHAM ENTERPRISES LLC
105 CHESTNUT STREET SUITE 28
NEEDHAM, MA 02492

ASSESSORS PARCELS:

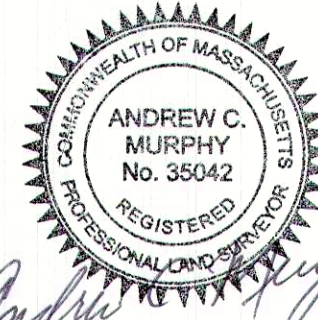
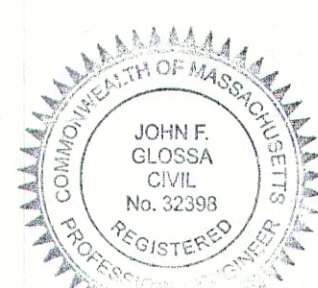
MAP 199, LOT 213

DEED REFERENCE:

BOOK 37770 PAGE 308

PLAN REFERENCE:

PLAN OF LAND DATED SEPTEMBER 28, 1933
BY P.D.G. HAMILTON, CIVIL ENGINEER

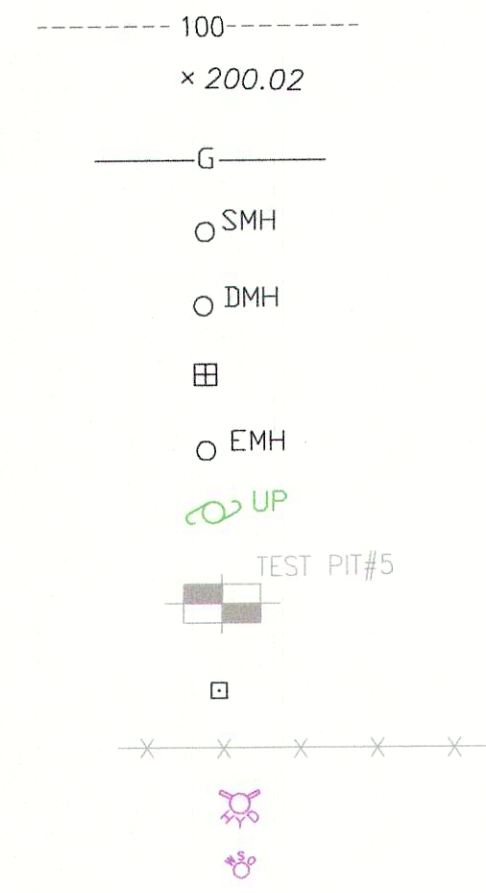


John F. Glossa
7/28/21

Andrew C. Murphy
7/28/21

PREPARED BY
GLOSSA ENGINEERING, INC.
46 EAST ST
EAST WALPOLE, MA 02032
(508) 668-4401

EXISTING	GRADE
EXISTING	SPOT GRADE
EXISTING	GAS MAIN
EXISTING	SEWER MANHOLE
EXISTING	DRAIN MANHOLE
EXISTING	CATCH BASIN
EXISTING	ELECTRIC MANHOLE
EXISTING	UTILITY POLE
EXISTING	TEST PIT
EXISTING	BOUND
EXISTING	FENCE
EXISTING	FIRE HYDRANT
EXISTING	GATE VALE



TEST PIT # 1		
0"	A SANDY LOAM 10YR 3/2	200.00
14"	B SANDY LOAM 10YR 5/8	198.33
40"	C SAND 2.5Y 5/4	199.67
112"		190.67
NO REFUSAL NO MOTTLING NO WEEPING		

TEST PIT # 2		
0"		201.00
13"	A SANDY LOAM 10YR 3/2	199.92
28"	B1 SANDY LOAM 10YR 5/8	198.67
48"	B2 SANDY LOAM 2.5Y 6/3	197.00
108"	C SAND 2.5Y 5/4	192.00
NO REFUSAL NO MOTTILING NO WEEPING		

TEST PIT # 3		
0"	A SANDY LOAM 10YR 3/2	199.50
12"	B SANDY LOAM 10YR 5/8	198.50
26"	C SAND 2.5Y 5/4	197.33
120"		189.50

NO REFUSAL
NO MOTTLING
NO WEEPING

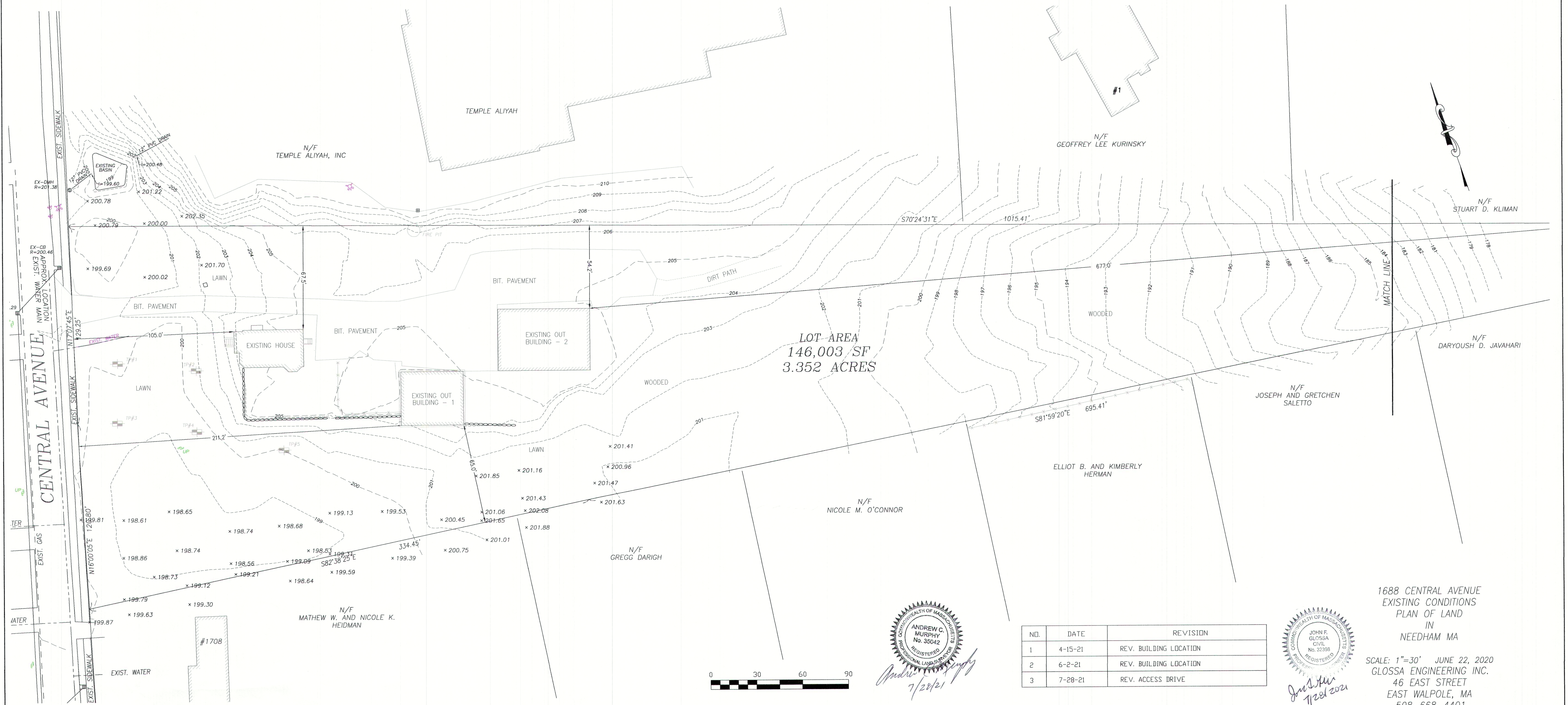
TEST PIT # 4		
0"	A SANDY LOAM 10YR 3/2	199.75
12"	B SANDY LOAM 10YR 5/8	198.75
24"	C SAND 2.5Y 5/4	197.75
114"		190.25

NO REFUSAL
NO MOTTLING
NO WEEPING

TEST PIT # 5		
0"	A SANDY LOAM 10YR 3/2	200.00
13"	B SANDY LOAM 10YR 5/8	198.92
48"	C SAND 2.5Y 5/4	196.00
136"		188.67

NO REFUSAL
NO MOTTLING
NO WEEPING

SOIL TEST PERFORMED BY JOHN F. GLOSSA P.E. SOIL EVALUATOR #890
ON 3-24-20



LOT AREA
146,003 SF
3.352 ACRES

N/F
NICOLE M. O'CONNOR

N/F
GREGG DARIGH

N/F
MATHEW W. AND NICOLE K.
HEIDMAN

ELLIOT B. AND KIMBERLY
HERMAN

N/F
JOSEPH AND GRETCHEN
SALETO

N/F
DARYOUSH D. JAVAHARI

1688 CENTRAL AVENUE
EXISTING CONDITIONS
PLAN OF LAND
IN
NEEDHAM MA

SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE

Jon S. Hur
7/28/2021

SHEET 2 OF 9

CONSTRUCTION NOTES:

1) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THIS PLAN AND THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN MAY VARY FROM THEIR FIELD LOCATION. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF THE CONSTRUCTION.

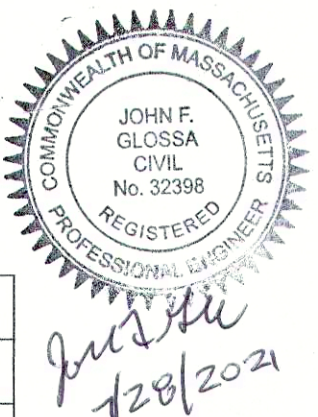
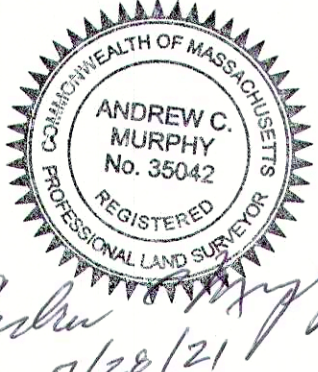
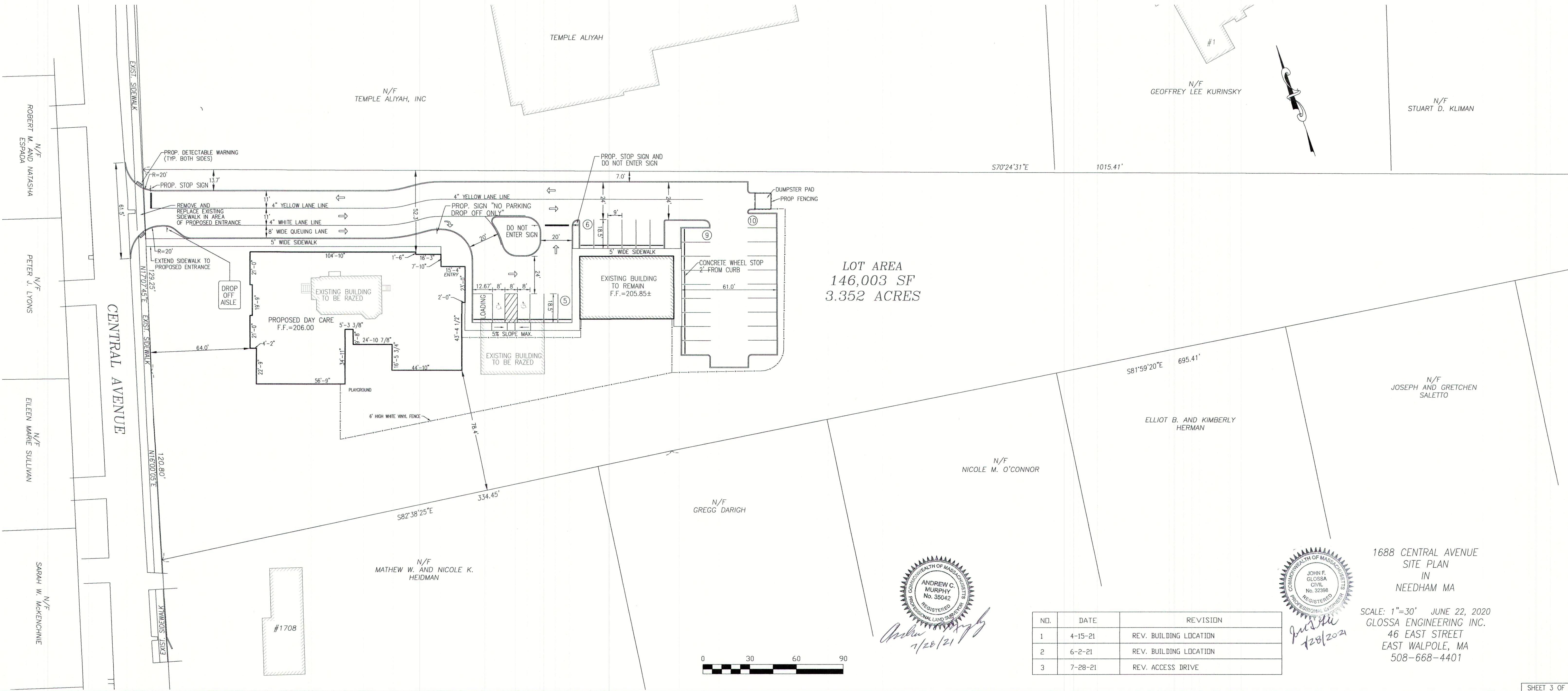
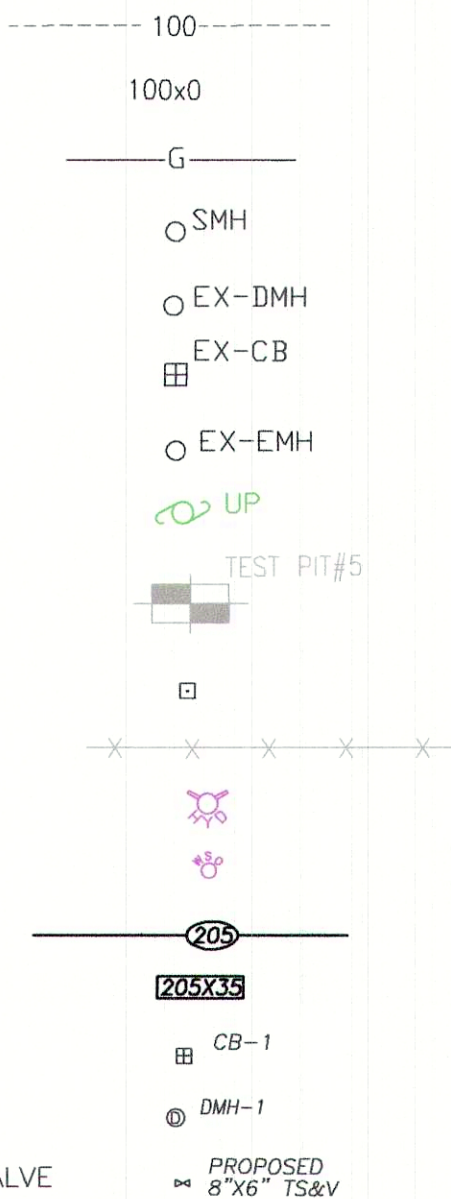
2) ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF NEEDHAM PUBLIC WORKS DEPARTMENT.

GENERAL NOTES:

1) THE PROJECT DOES NOT REQUIRE AN ELECTRICAL TRANSFORMER AND WILL NOT HAVE A GENERATOR.

LEDGEND:

- EXISTING GRADE
- EXISTING SPOT GRADE
- EXISTING GAS MAIN
- EXISTING SEWER MANHOLE
- EXISTING DRAIN MANHOLE
- EXISTING CATCH BASIN
- EXISTING ELECTRIC MANHOLE
- EXISTING UTILITY POLE
- EXISTING TEST PIT
- EXISTING BOUND
- EXISTING FENCE
- EXISTING FIRE HYDRANT
- EXISTING GATE VALE
- PROPOSED GRADE
- PROPOSED SPOT GRADE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- PROPOSED TAPPING SLEEVE AND VALVE



NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE

1688 CENTRAL AVENUE
SITE PLAN
IN
NEEDHAM MA
SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

CONSTRUCTION NOTES

1) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THIS PLAN AND THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN MAY VARY FROM THEIR FIELD LOCATION. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF THE CONSTRUCTION.

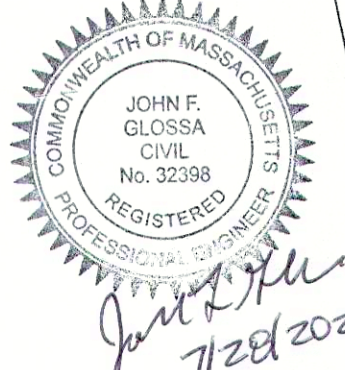
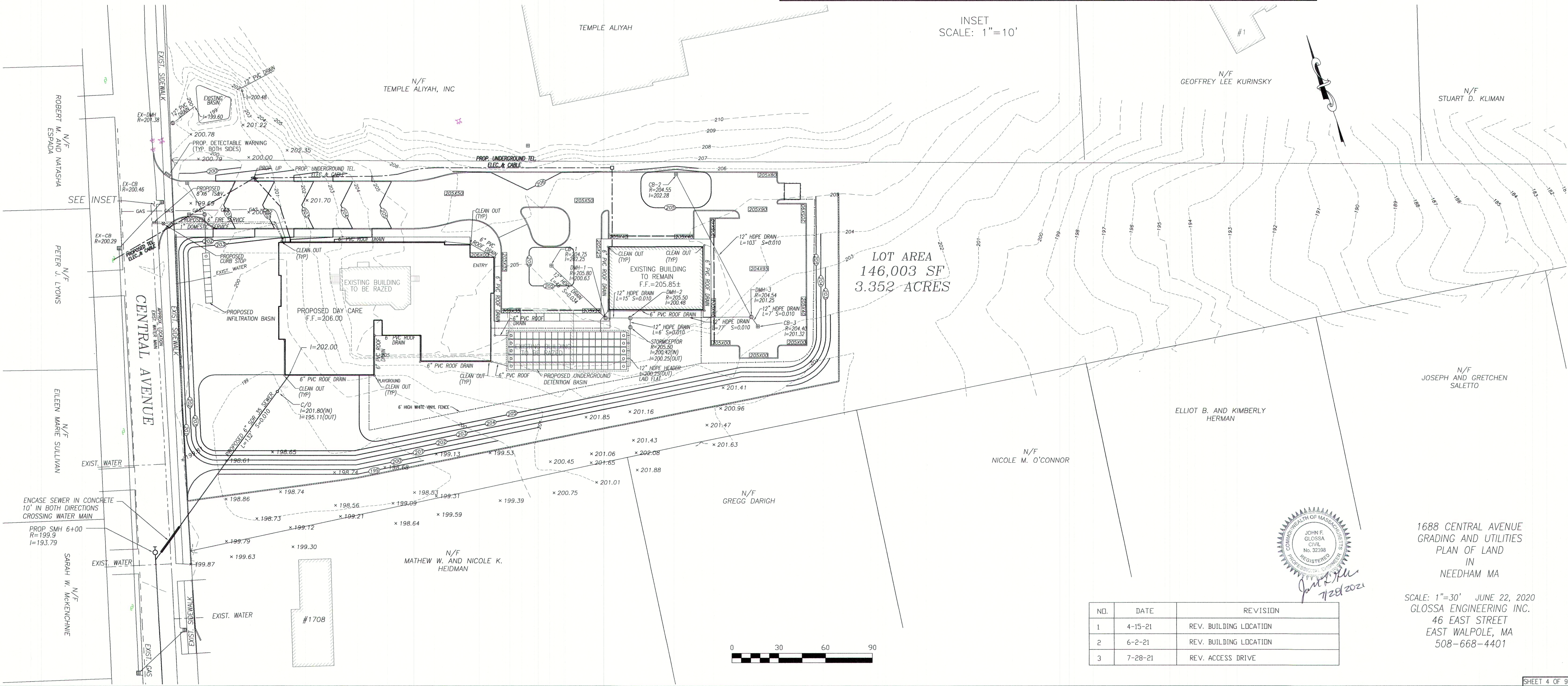
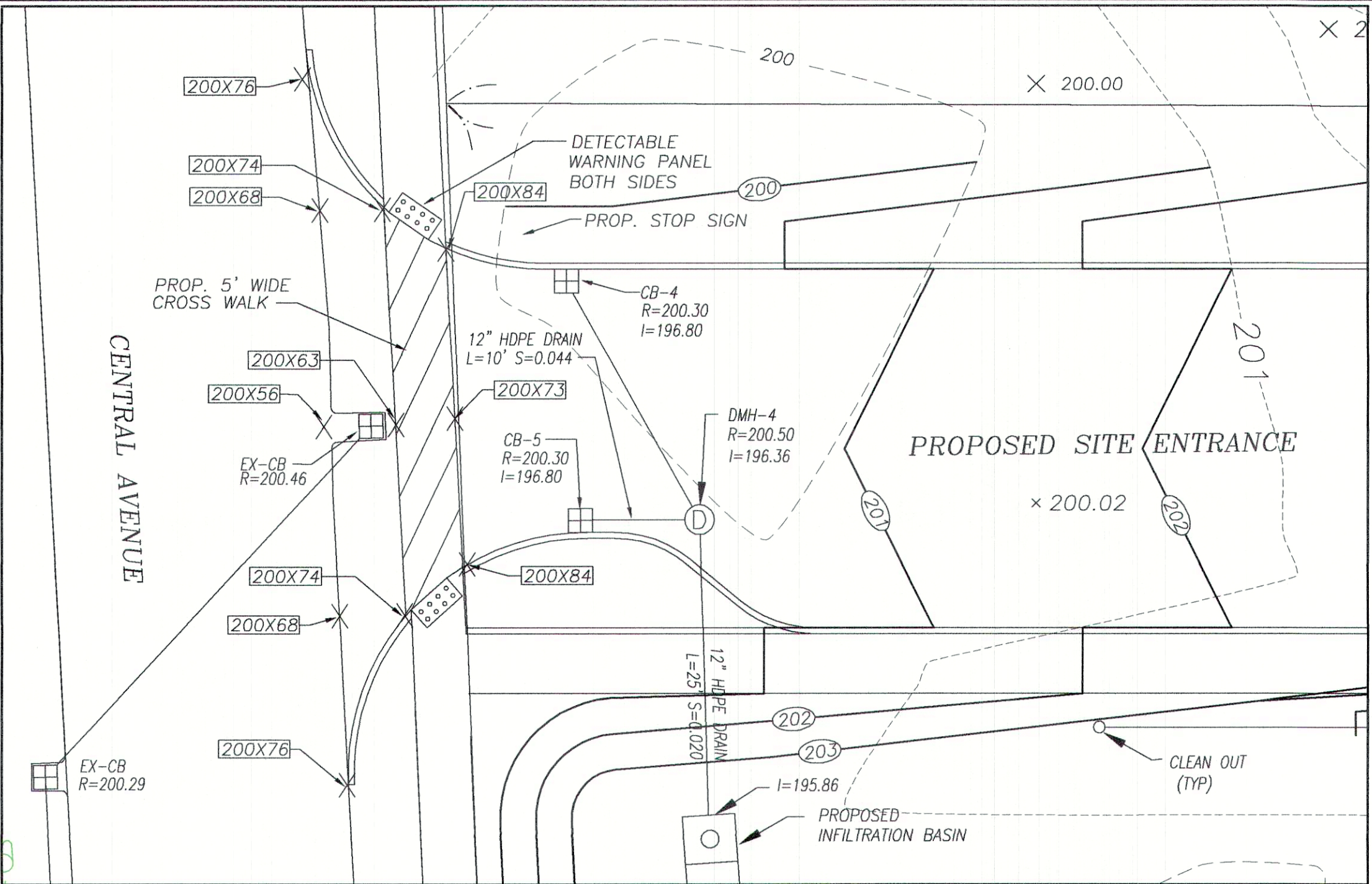
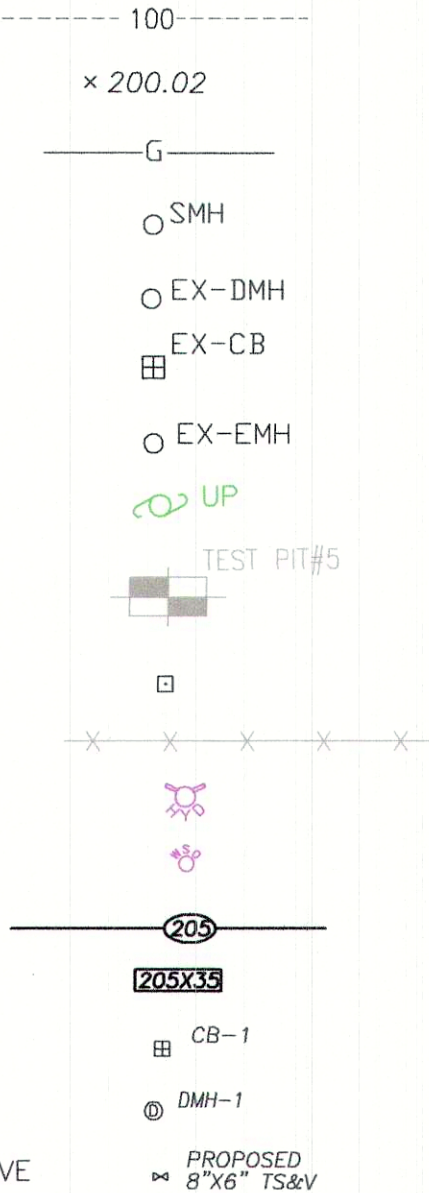
2) ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF NEEDHAM PUBLIC WORKS DEPARTMENT.

GENERAL NOTES:

1) THE PROJECT DOES NOT REQUIRE AN ELECTRICAL TRANSFORMER AND WILL NOT HAVE A GENERATOR.

LEDGEND:

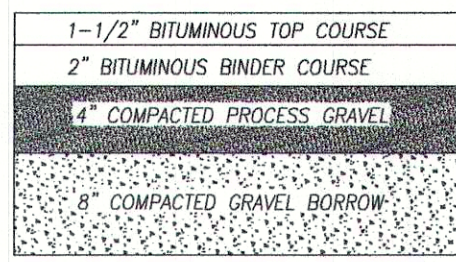
- EXISTING GRADE
EXISTING SPOT GRADE
EXISTING GAS MAIN
EXISTING SEWER MANHOLE
EXISTING DRAIN MANHOLE
EXISTING CATCH BASIN
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EXISTING UTILITY POLE
EXISTING TEST PIT
EXISTING BOUND
EXISTING FENCE
EXISTING FIRE HYDRANT
EXISTING GATE VALE
PROPOSED GRADE
PROPOSED SPOT GRADE
PROPOSED CATCH BASIN
PROPOSED DRAIN MANHOLE
PROPOSED TAPPING SLEEVE AND VALVE



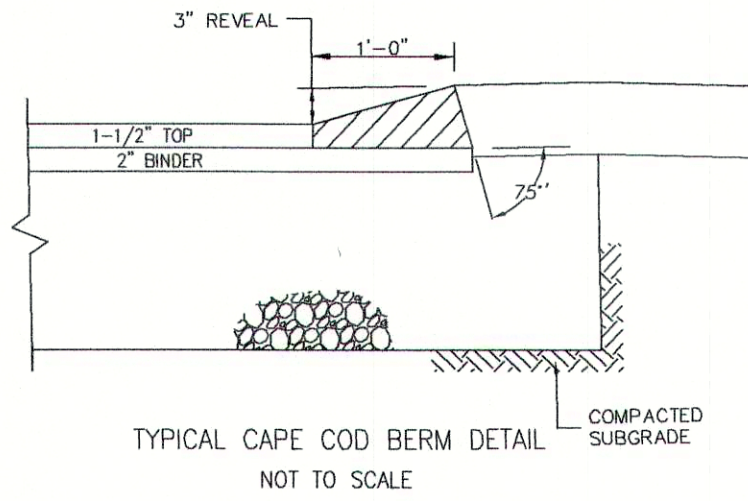
1688 CENTRAL AVENUE
GRADING AND UTILITIES
PLAN OF LAND
IN
NEEDHAM MA

SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

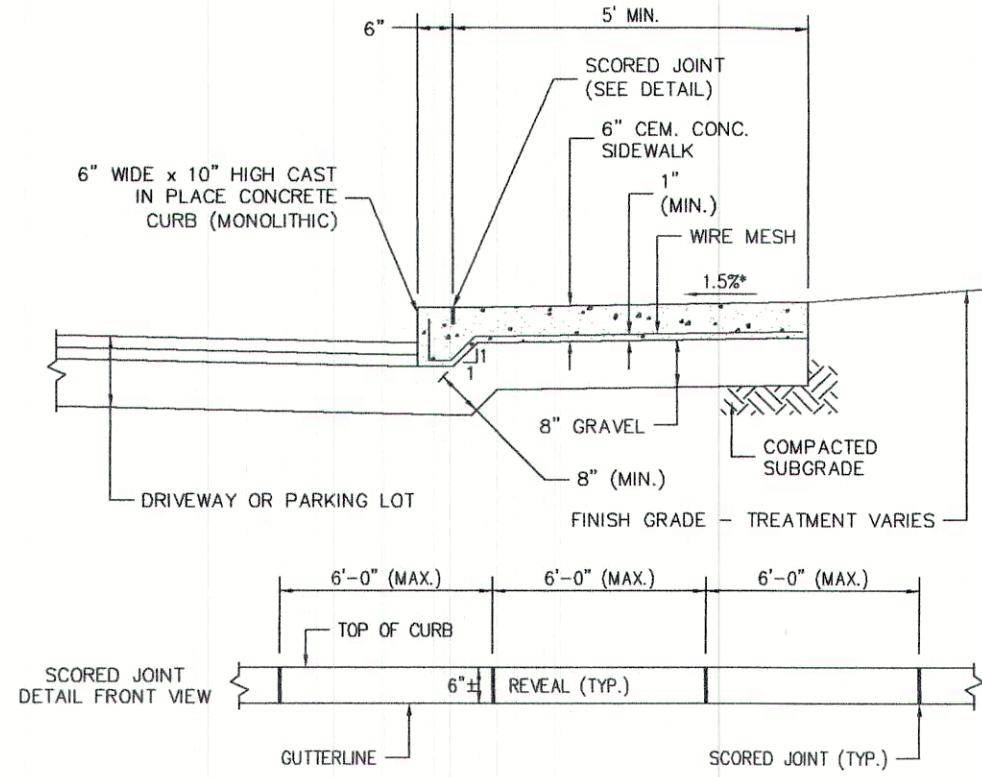
NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE



PAVEMENT DETAIL
NOT TO SCALE

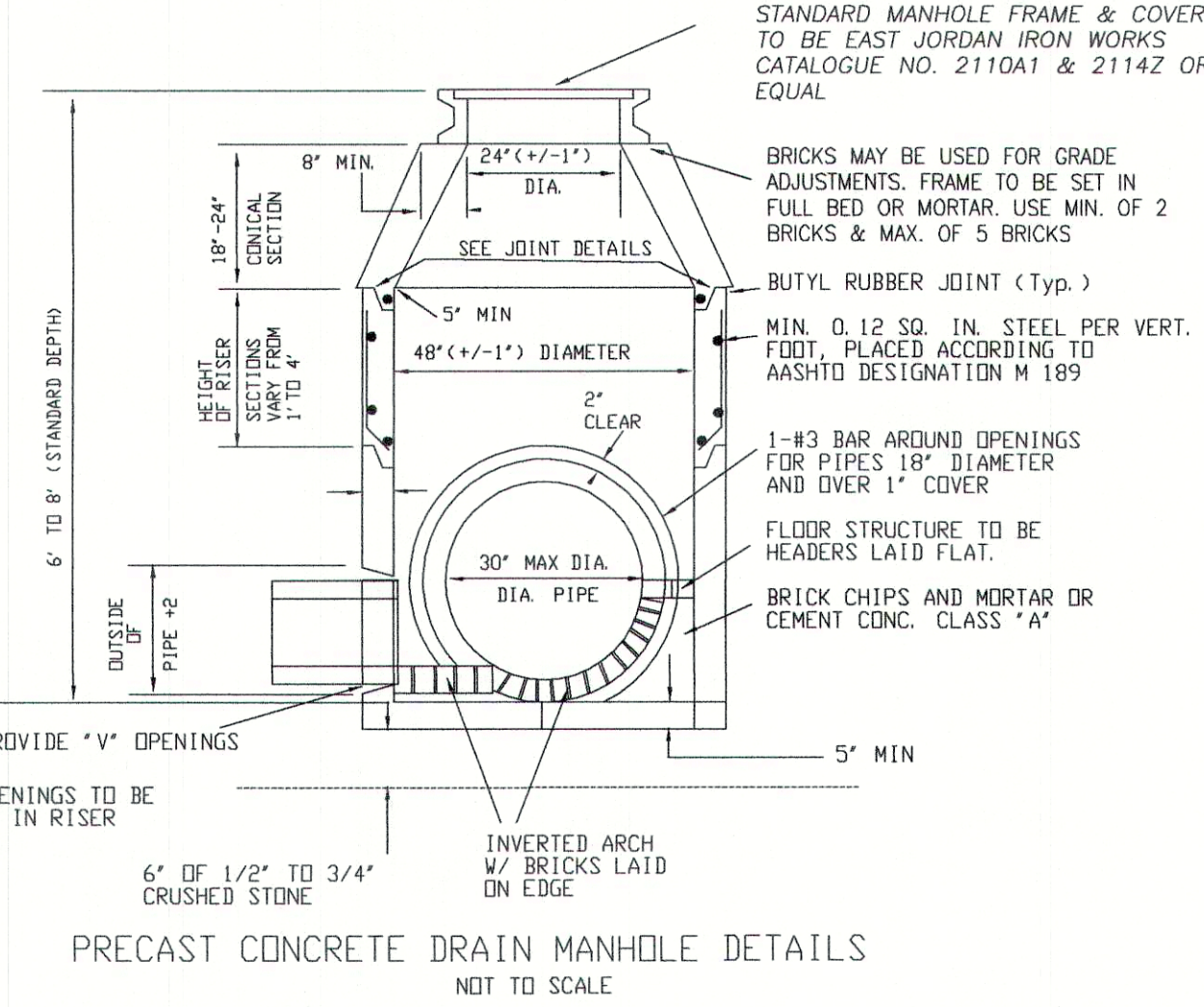
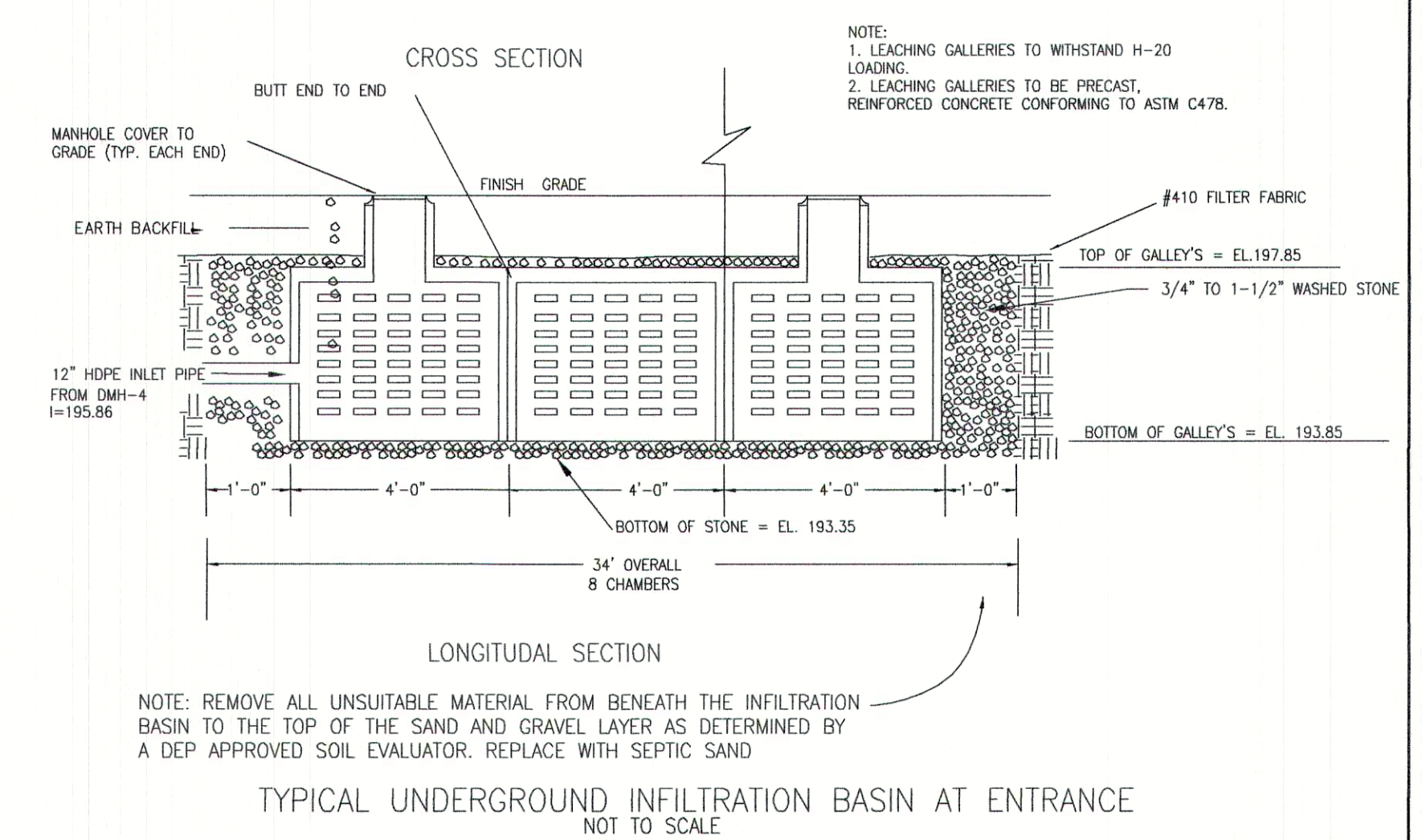
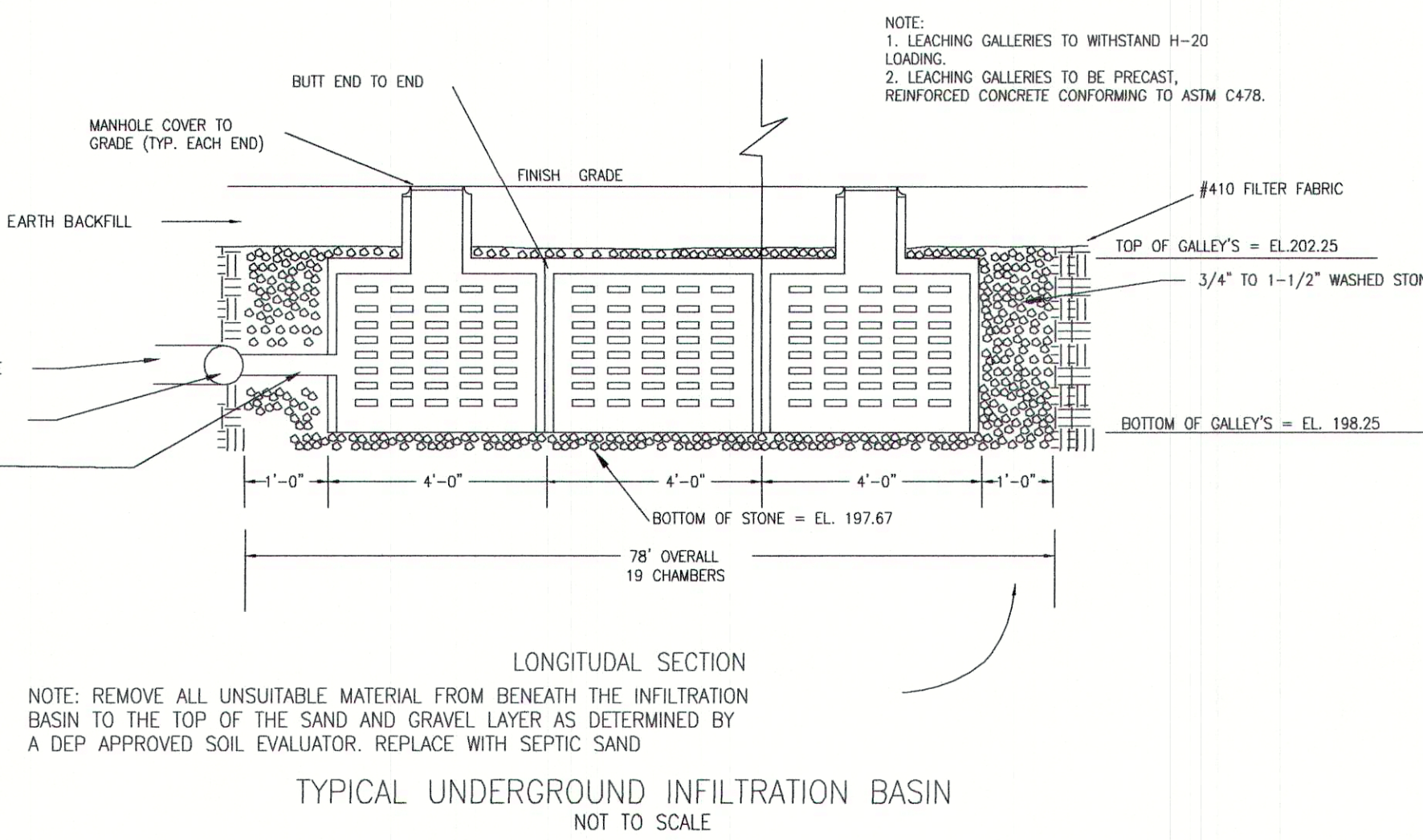
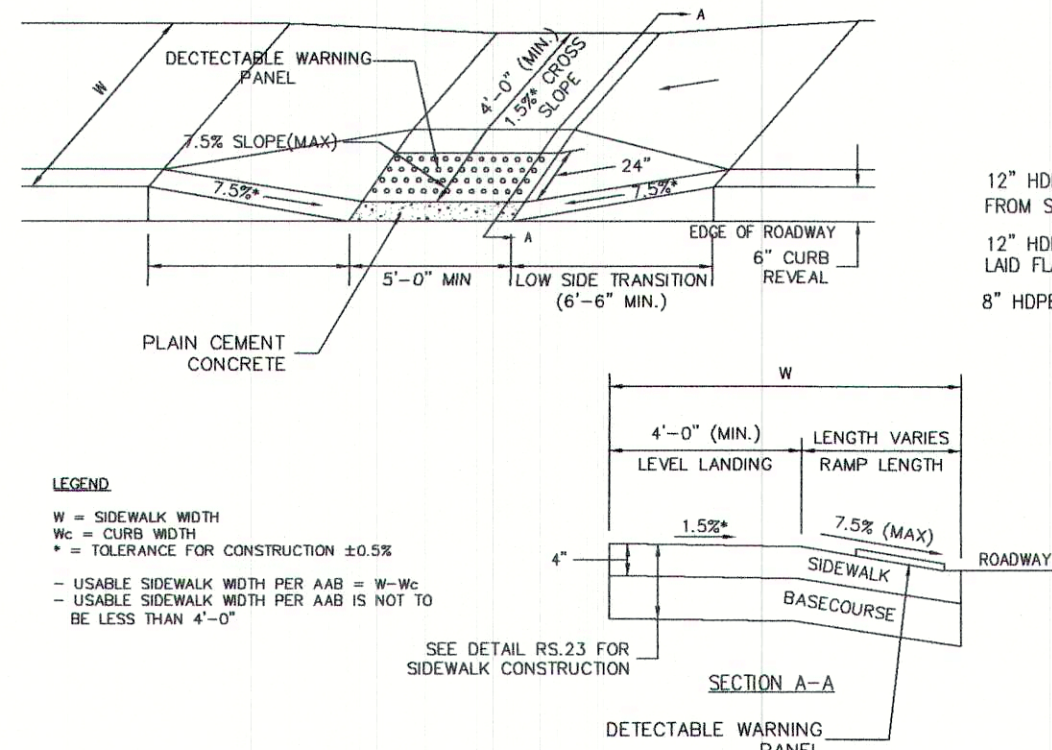


TYPICAL CAPE COD BERM DETAIL
NOT TO SCALE

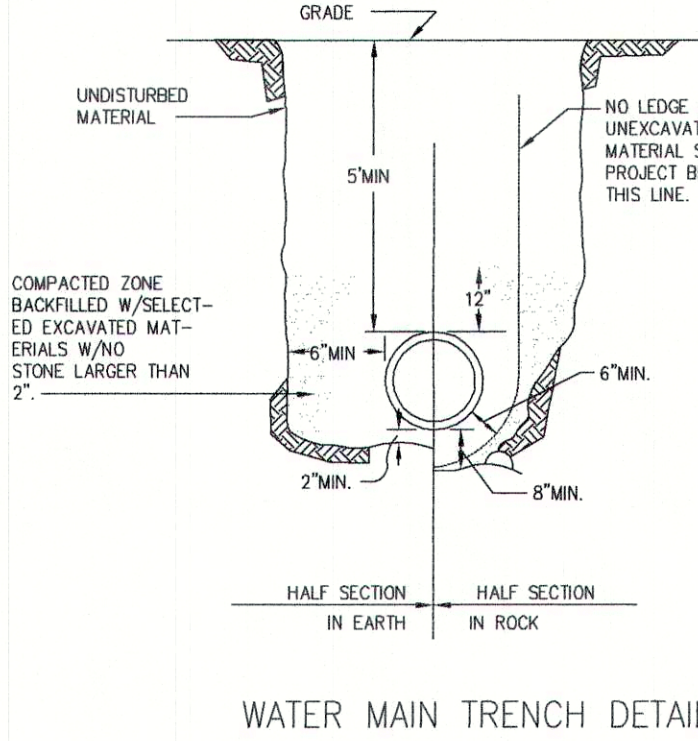


NOTE: MONOLITHIC CONCRETE CURB SHALL NOT BE USED ON ANY PUBLIC STREET OR WAY. MONOLITHIC CONCRETE CURB MAY BE USED ON PRIVATE WAYS, DRIVEWAYS AND IN PARKING LOTS.

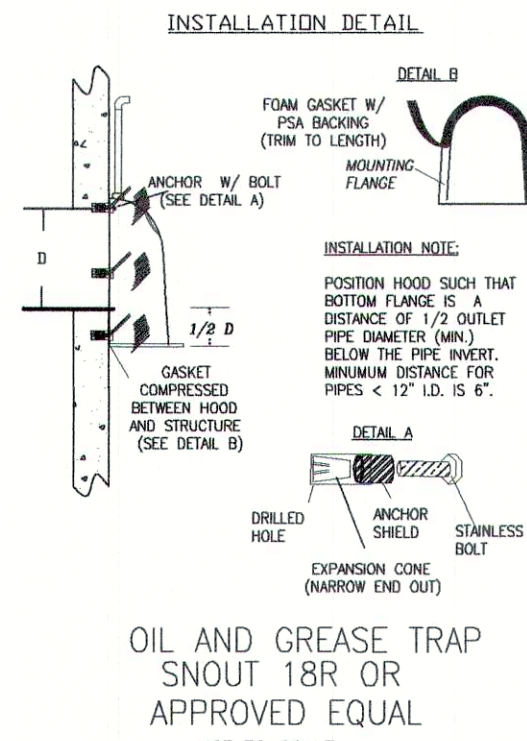
* - TOLERANCE FOR CONSTRUCTION $\pm 0.5\%$



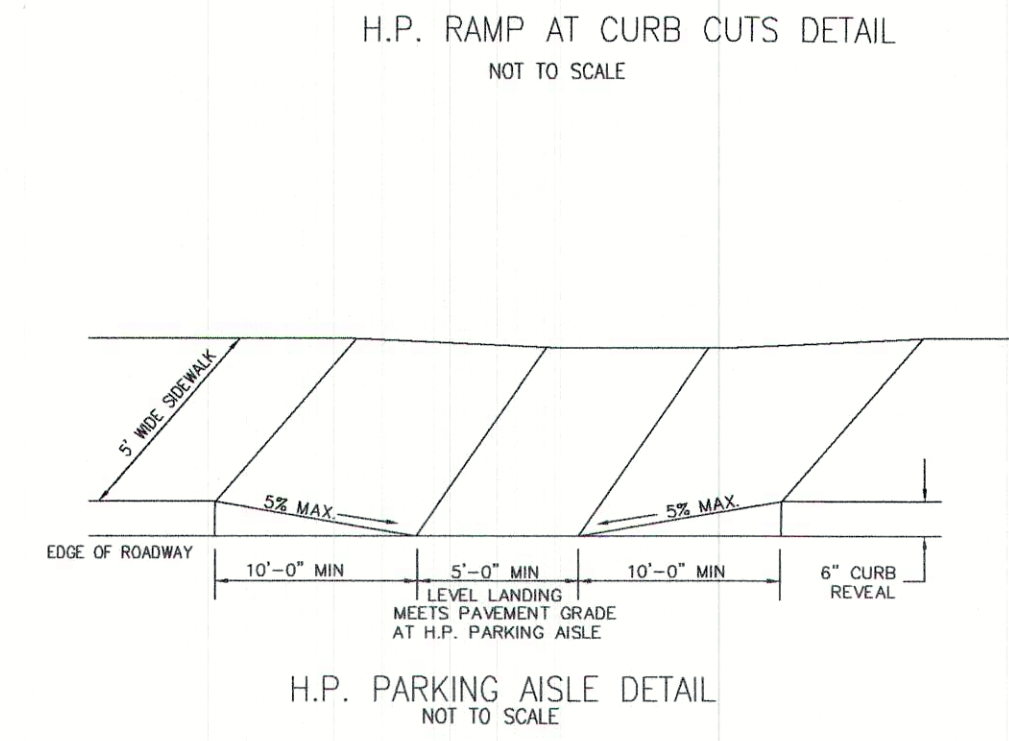
PRECAST CONCRETE DRAIN MANHOLE DETAILS
NOT TO SCALE



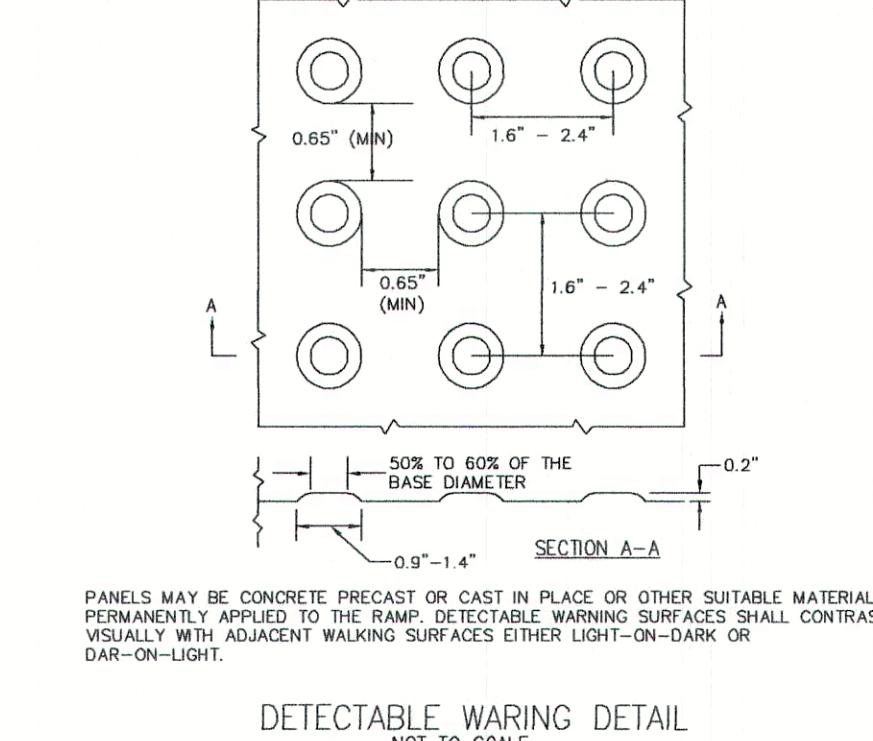
WATER MAIN TRENCH DETAIL
NOT TO SCALE



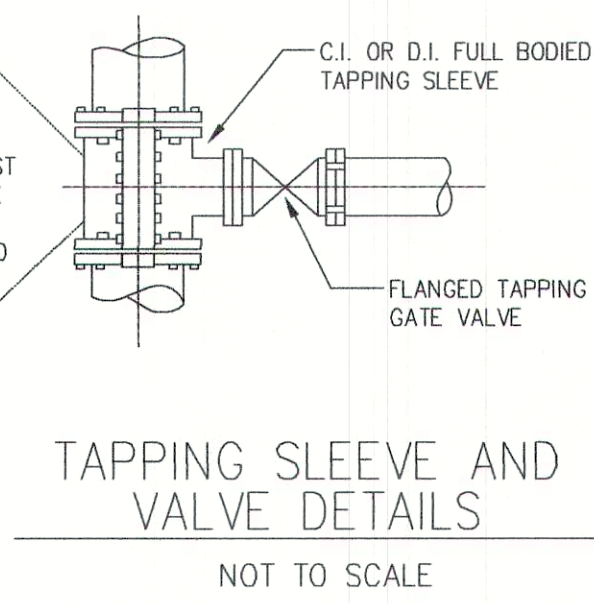
OIL AND GREASE TRAP
SNOUT 18\"/>



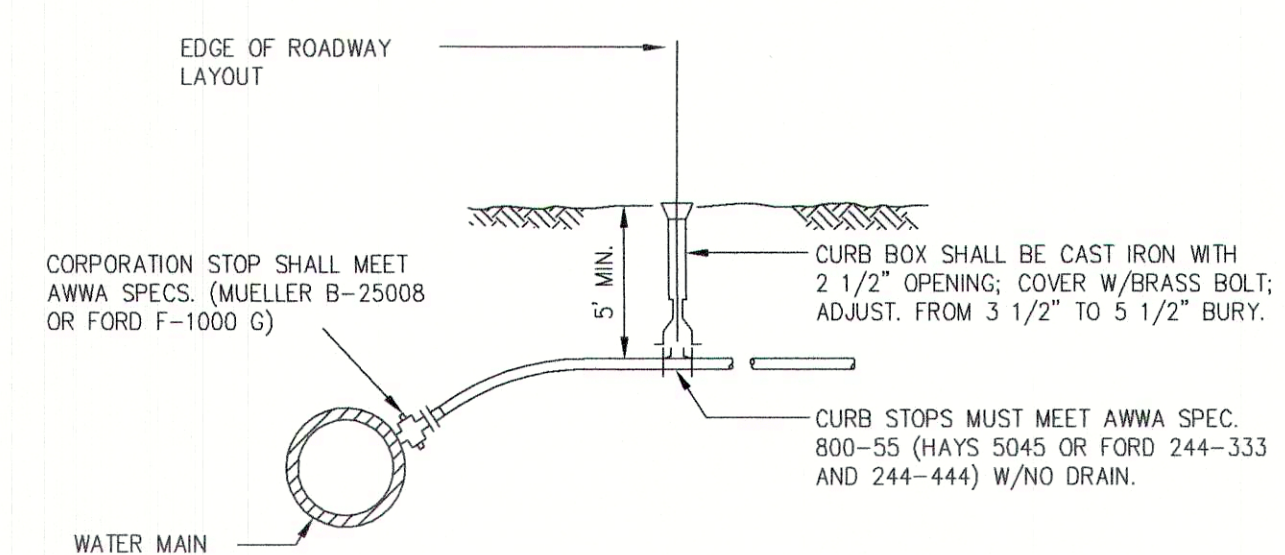
H.P. PARKING AISLE DETAIL
NOT TO SCALE



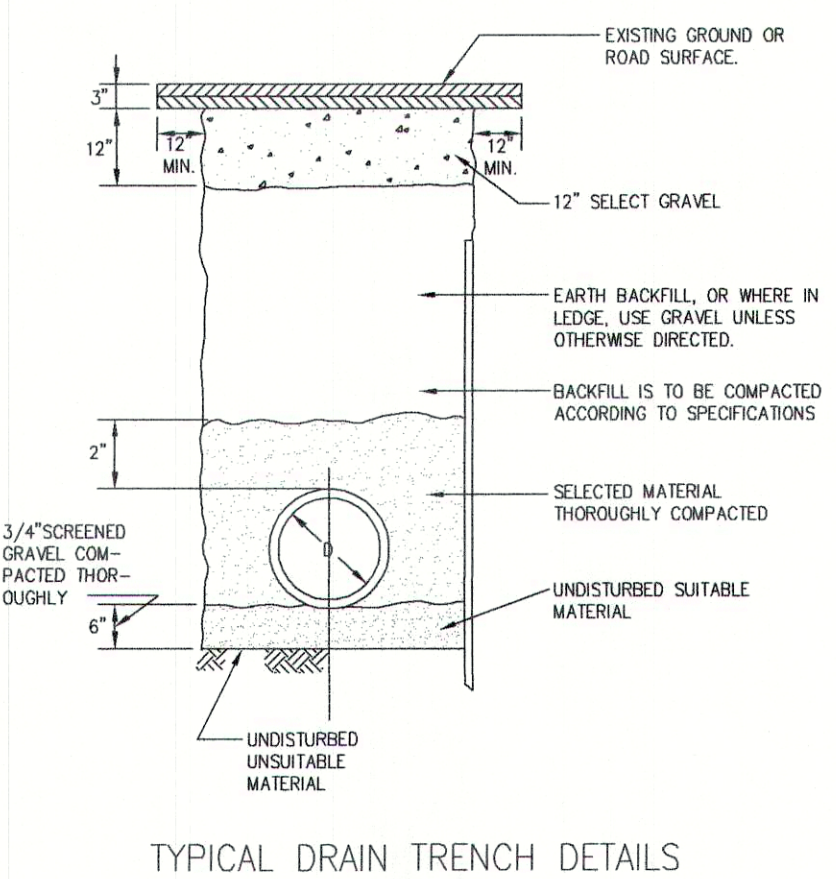
DETECTABLE WARNING DETAIL
NOT TO SCALE



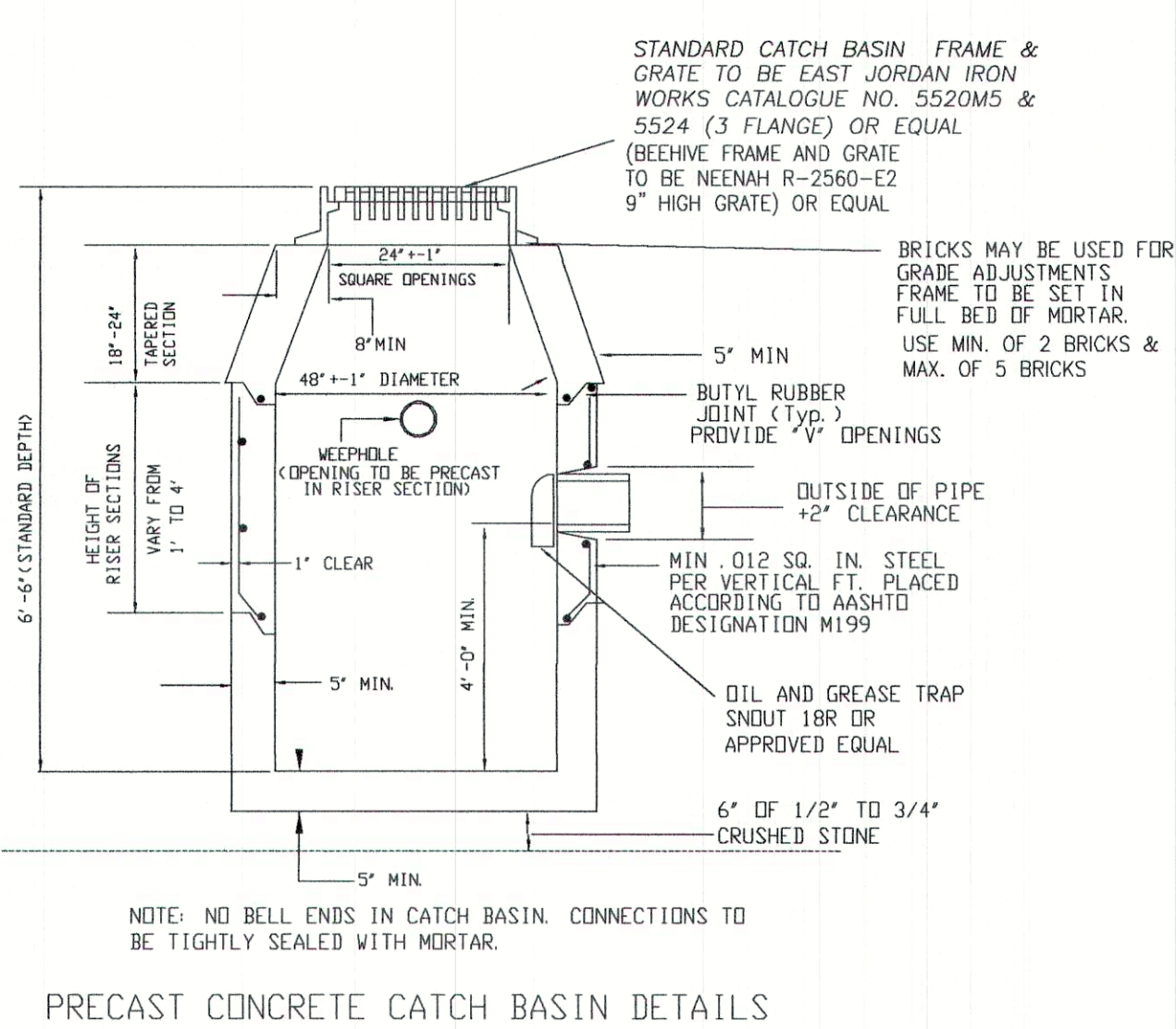
TAPPING SLEEVE AND
VALVE DETAILS
NOT TO SCALE



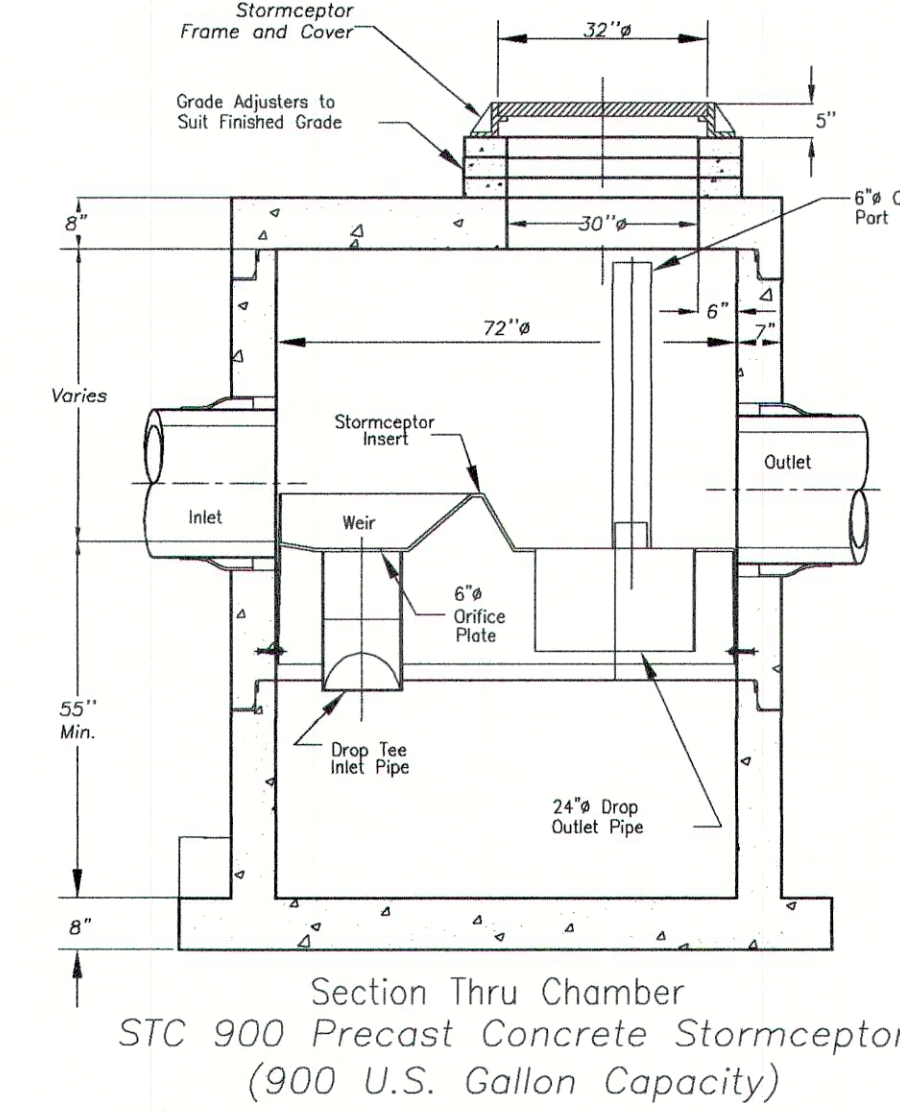
TYPICAL SERVICE CONNECTION
NOT TO SCALE



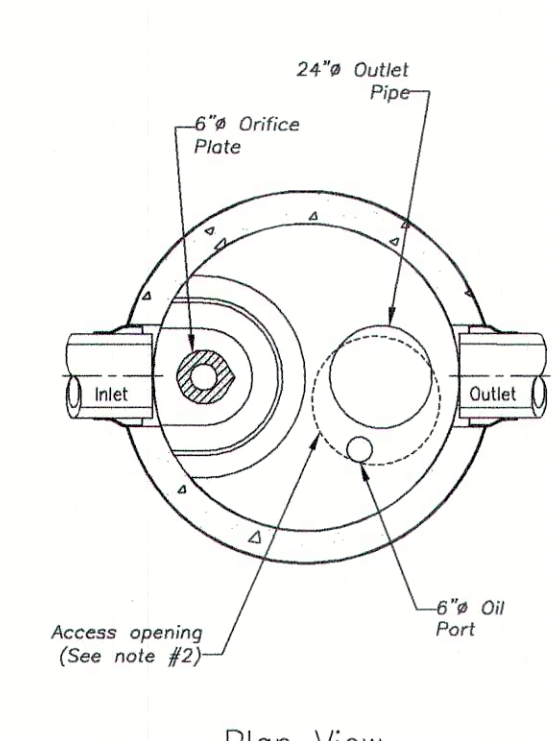
TYPICAL DRAIN TRENCH DETAILS
NOT TO SCALE



PRECAST CONCRETE CATCH BASIN DETAILS
NOT TO SCALE



Section Thru Chamber
STC 900 Precast Concrete Stormceptor
(900 U.S. Gallon Capacity)



Notes:

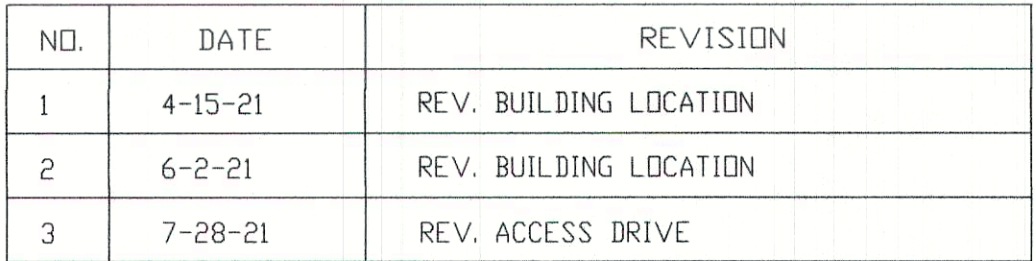
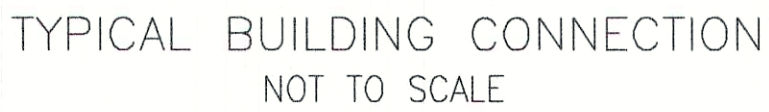
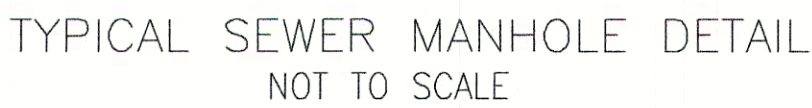
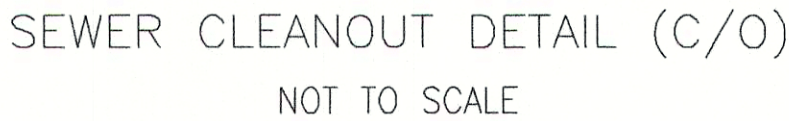
- The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
- The Cover Should be Positioned Over The Outlet Drop Pipe and The Oil Port.
- The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6088765, #6371690.
- Contact a Concrete Pipe Division representative for further details not listed on this drawing.

NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE



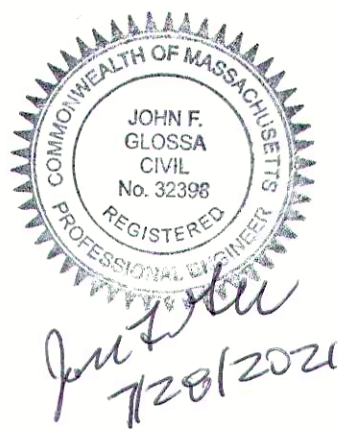
1688 CENTRAL AVENUE
CONSTRUCTION DETAILS
IN
NEEDHAM MA

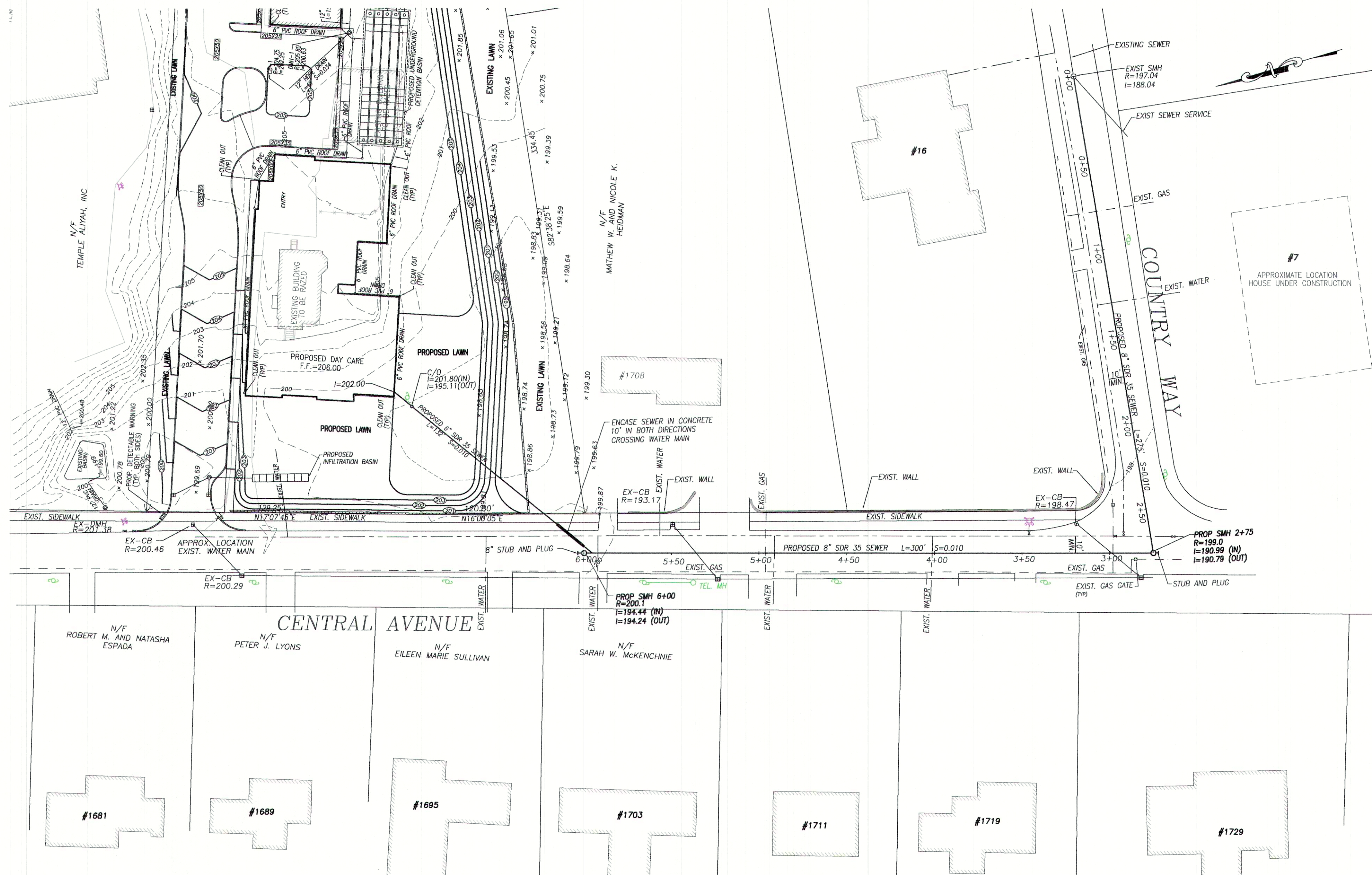
SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401



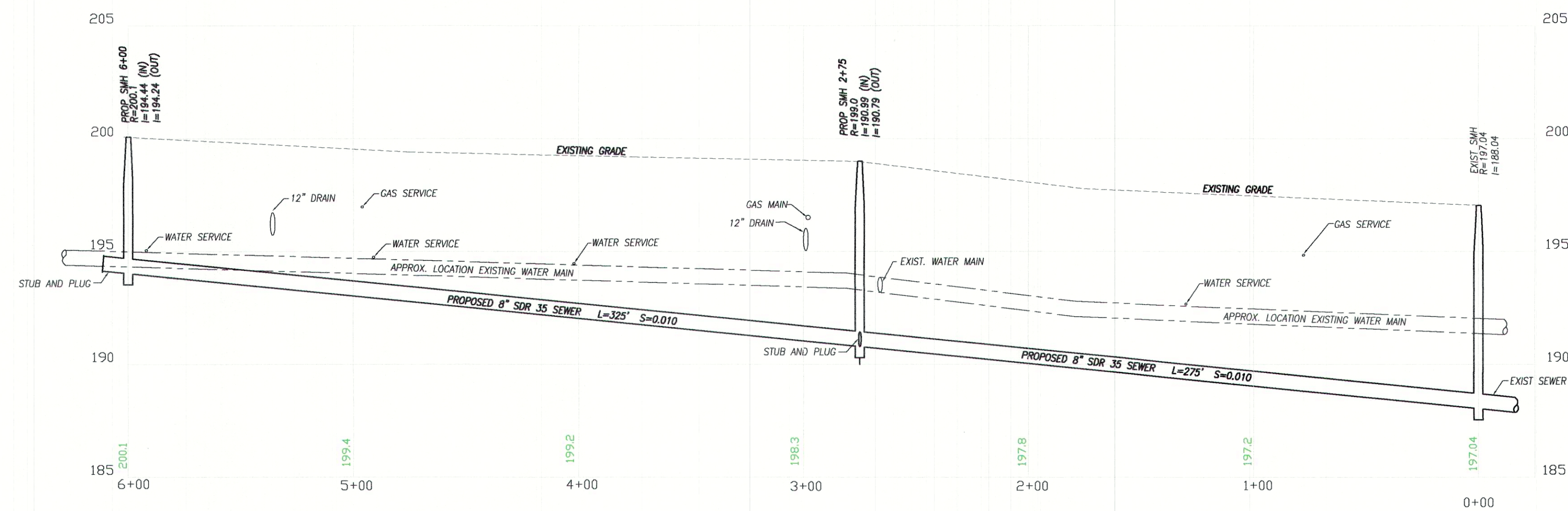
1688 CENTRAL AVENUE
CONSTRUCTION DETAILS
IN
NEEDHAM MA

SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

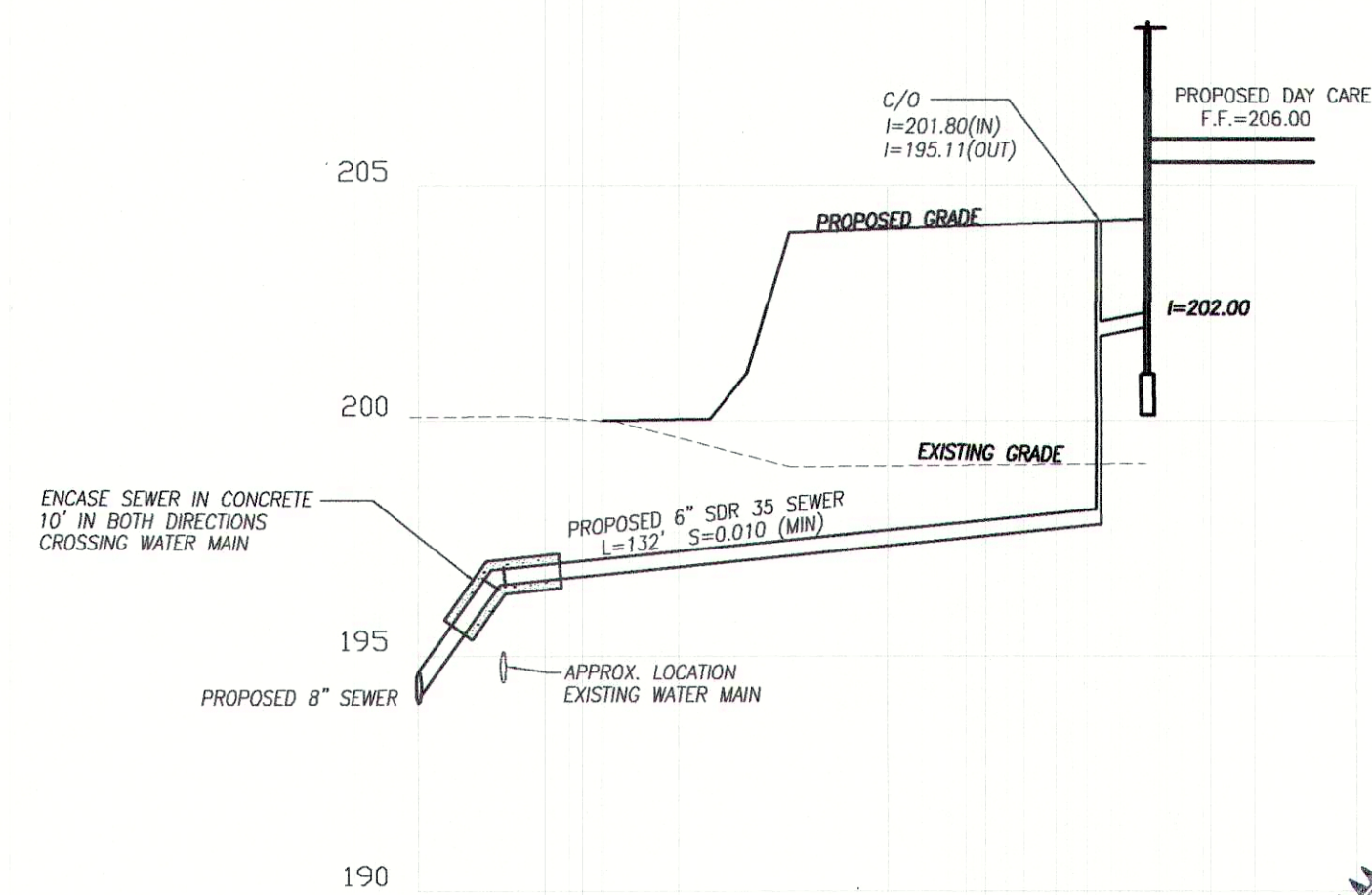




PLAN
SCALE: 1" = 40'



PROFILE
SCALE: HOR. 1" = 40'
VERT. 1" = 4'



BUILDING CONNECTION PROFILE
SCALE: HOR. 1" = 40'
VERT. 1" = 4'

NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE

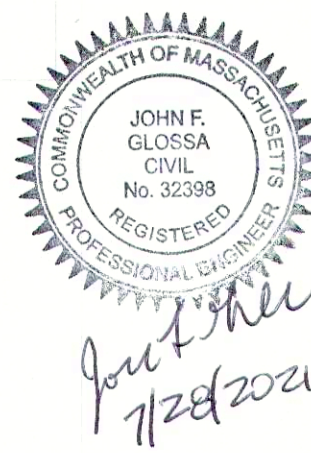


LEDGEND:

EXISTING GRADE	----- 100 -----
EXISTING SPOT GRADE	× 200.02
EXISTING GAS MAIN	-----
EXISTING GAS GATE	⊞
EXISTING SEWER MANHOLE	○ EXIST. SMH
EXISTING DRAIN MANHOLE	○ EX-DMH
EXISTING CATCH BASIN	⊞ EX-CB
EXISTING ELECTRIC MANHOLE	○ EX-EMH
EXISTING UTILITY POLE	○
EXISTING FENCE	× × × × ×
EXISTING FIRE HYDRANT	⊞
EXISTING GATE VALE	⊞
PROPOSED GRADE	----- 205 -----
PROPOSED SPOT GRADE	× 205.35
PROPOSED SEWER MANHOLE	○ PROP. SMH
PROPOSED CATCH BASIN	⊞ CB-1
PROPOSED DRAIN MANHOLE	○ DMH-1
PROPOSED TAPPING SLEEVE AND VALVE	⊞ 8"X6" TS&V

CONSTRUCTION NOTES

- 1) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THIS PLAN AND THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN MAY VARY FROM THEIR FIELD LOCATION. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF THE CONSTRUCTION.
- 2) ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF NEEDHAM PUBLIC WORKS DEPARTMENT

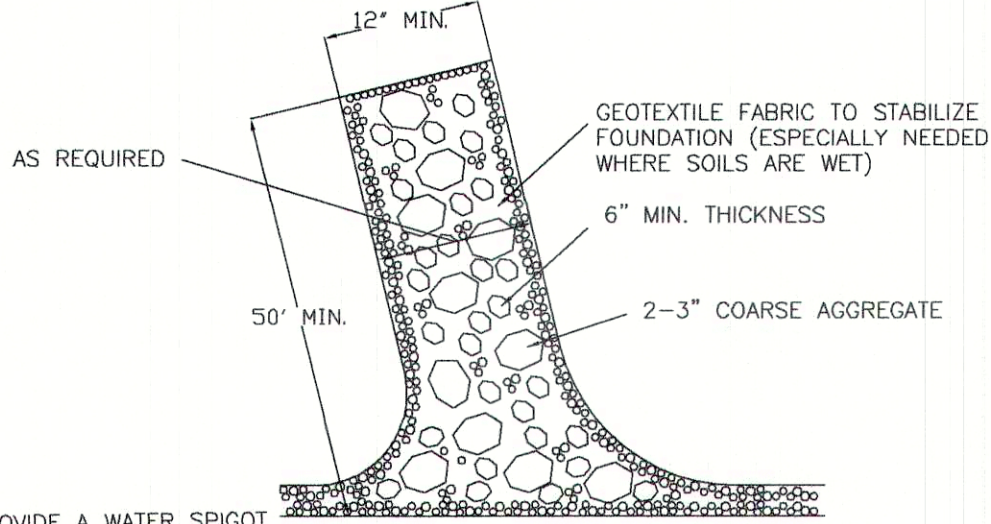


1688 CENTRAL AVENUE
SEWER EXTENSION
PLAN AND PROFILE
IN
NEEDHAM MA

SCALE: AS NOTED NOVEMBER 19, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

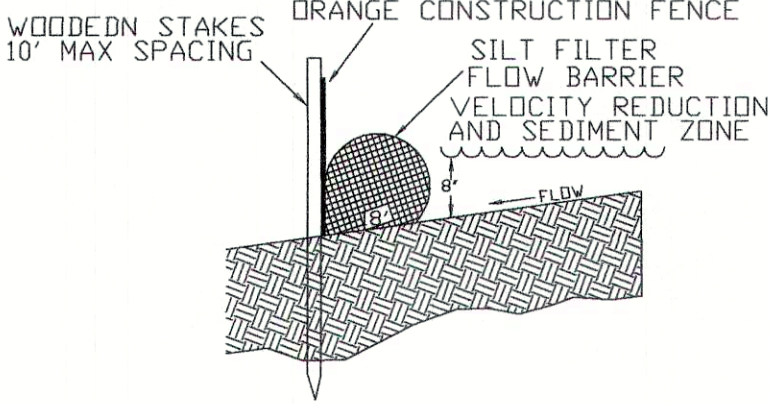
- CONSTRUCTION SEQUENCING:
1. INSTALLATION OF SILT BARRIERS AS SHOWN ON THE PLANS
 2. INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE
 3. ESTABLISHMENT OF A CONSTRUCTION STAGING AREA
 4. ESTABLISHMENT OF A MATERIALS STOCKPILE AREA
 5. REMOVAL OF EXISTING BUILDINGS
 6. CLEARING AND GRUBBING
 7. REMOVAL AND STOCKPILING OF TOP AND SUBSOILS
 8. REMOVAL OF SAND AND GRAVEL TO BRING SITE TO SUB GRADE
 9. ESTABLISHING AND STABILIZING WITH LOAM AND SEED ALL CUT AND FILL SLOPES
 10. INSTALL BINDER COURSE OF DRIVEWAY IN LOCATION OF FINAL ASPHALT DRIVEWAY
 11. CONSTRUCTION OF THE BUILDING
 12. INSTALLATION OF UNDERGROUND DETENTION BASIN
 13. INSTALLATION OF UNDERGROUND UTILITIES, IE DRAINAGE, WATER LINE, ELECTRIC, CATV AND TELEPHONE
 14. INSTALLATION OF LANDSCAPING AND GRASS AREAS
 15. FINAL COURSE OF ASPHALT FOR DRIVEWAYS
 16. CLEAN UP AND DEMOBILIZE

- CONSTRUCTION NOTES:
1. ALL AREAS TO BE ALTERED SHALL BE BROUGHT TO SUB GRADE OR FINAL GRADE AT THE START OF CONSTRUCTION
 2. AREAS ONCE BROUGHT TO GRADE THAT WILL NOT BE ALTERED AGAIN SHALL BE LOAMED AND SEEDED AND PROTECTED WITH STRAW GUARD AS NEEDED
 3. DRAINAGE BASIN AS SHOWN SHALL NOT BECOME OPERATIONAL UNTIL THE SITE IS FINISHED AND SWEEPED OF ALL DEBRIS
 4. TEMPORARY SEDIMENT BASINS SHALL BE USED AND MAINTAINED UNTIL ALL PROPOSED PAVED AREAS ARE COMPLETE AND SWEEPED OF ALL DEBRIS
 5. CATCH BASINS SHALL BE PROTECTED FROM SEDIMENTS AT ALL TIMES UNTIL CONSTRUCTION IS COMPLETE
 6. INSTALL SILT SACKS IN ALL EXISTING AND PROPOSED CATCH BASINS

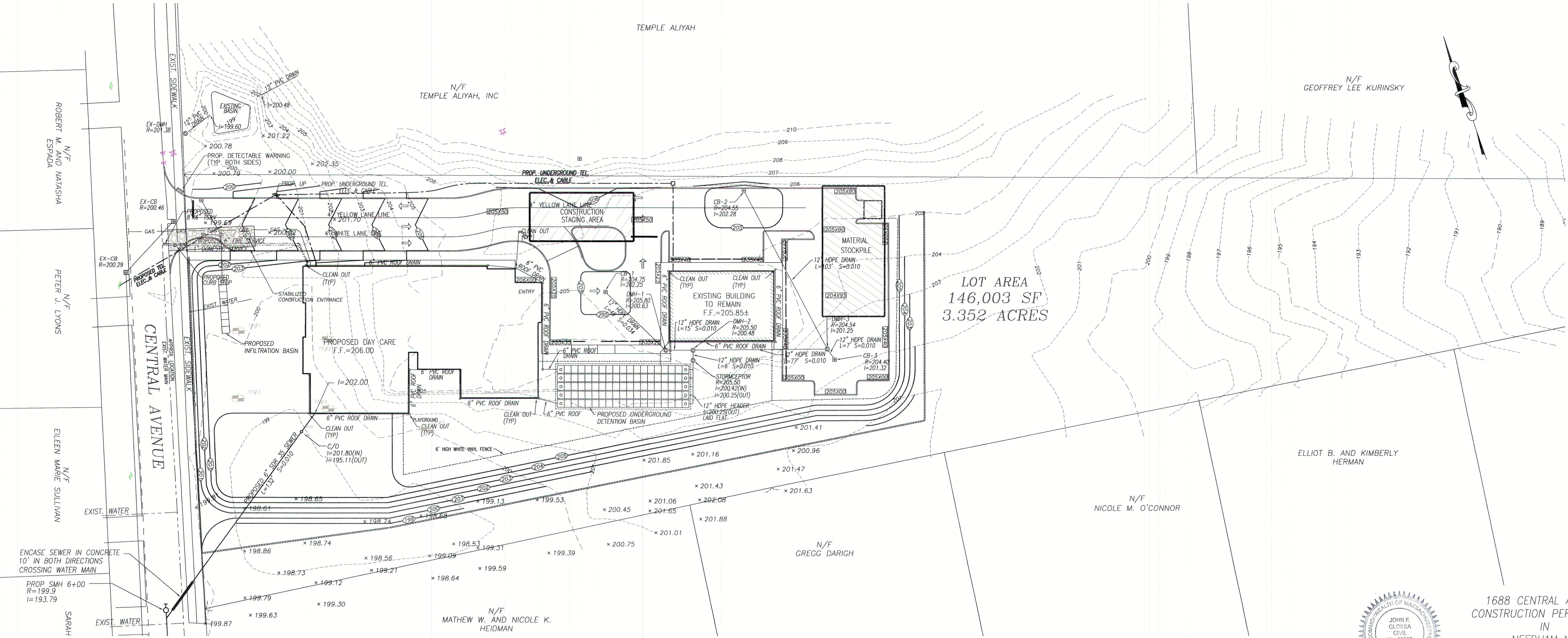


NOTE:
OWNER TO PROVIDE A WATER SPIGOT
AT THE CONSTRUCTION ENTRANCE FOR
WASHING TRUCK WHEELS PRIOR TO
EXITING TO PUBLIC ROADS.

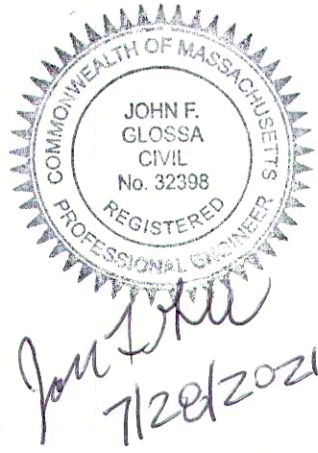
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



8\"/>



NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE



1688 CENTRAL AVENUE
CONSTRUCTION PERIOD PLAN
IN
NEEDHAM MA

SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

CONSTRUCTION NOTES:

1) ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THIS PLAN AND THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN MAY VARY FROM THEIR FIELD LOCATION. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF THE CONSTRUCTION.

2) ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE TOWN OF NEEDHAM PUBLIC WORKS DEPARTMENT.

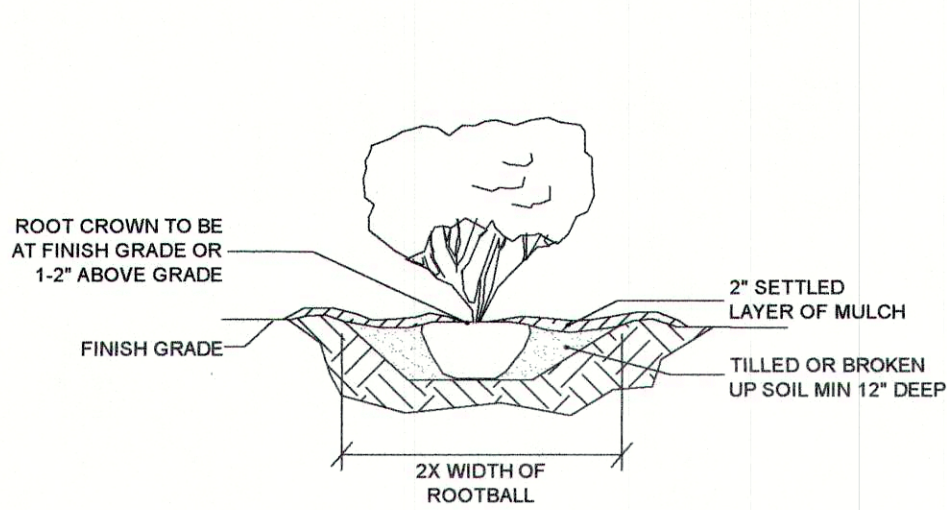
GENERAL NOTES:

1) THE PROJECT DOES NOT REQUIRE AN ELECTRICAL TRANSFORMER AND WILL NOT HAVE A GENERATOR.

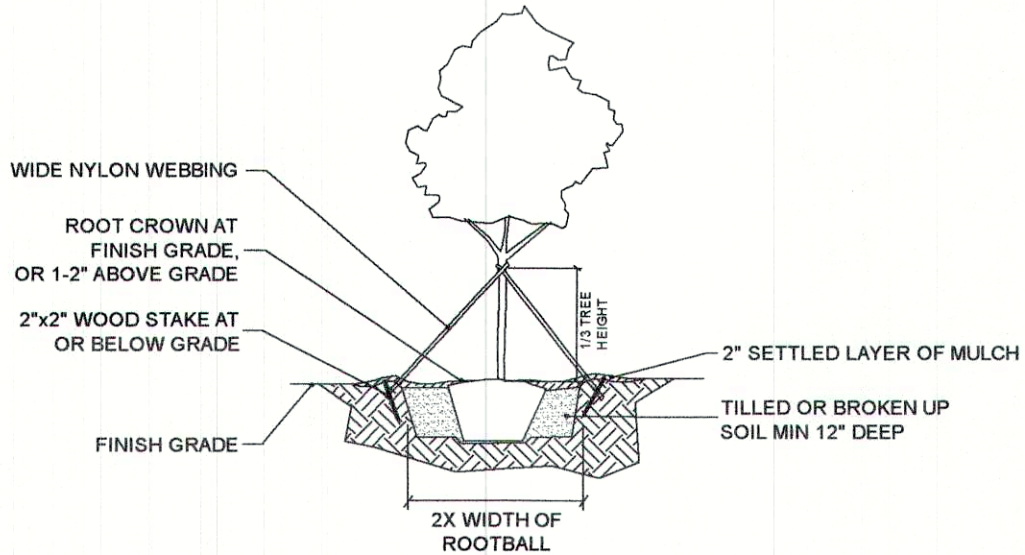
	COMMON NAME	BOTANICAL NAME	SIZE	QUANTITY
PA	PINK AZALEA	RHODODENDRON PERICLYMENOIDES	2'-3'	4
WA	WHITE AZALEA	RHODODENDRON VICOSUM	2'-3'	3
RA	RHODODENDRON	RHODODENDRON FERRUGINEUM	2'-3'	2
JA	JUNIPER	JUNIPERUS	2'-3'	6
CA	CREeping JUNIPER	JUNIPERUS HORIZONTALIS	6"-12"	6
MA	MAPLE "LEGACY"	ACER SACCHARUM	1-1/2" CAL.	4
WP	WHITE PINE	PINUS STOBUS	1-1/2" CAL.	16
CA	CRABAPPLE "DONALD WYMAN"	MALUS "DONALD WYMAN"	1-1/2" CAL.	4
EA	ARBORVITAE "EMERALD GREEN"	THIA OCCIDENTALIS SMARAGD	2'-3'	54
HA	ARBORVITAE "HETZ MIDGET"	THIA OCCIDENTALIS "HETZ MIDGET"	2'-3'	18
RC	RED CEDAR	JUNIPERUS VIRGINIANA	1-1/2" CAL.	14
CH	CHERRY	PRUNUS AVIUM	1-1/2" CAL.	2
NS	NORWAY SPRUCE	PICEA ABIES	1-1/2" CAL.	3
BS	BLUE SPRUCE	PICEA PUNGENS	1-1/2" CAL.	5

LEDGEND:

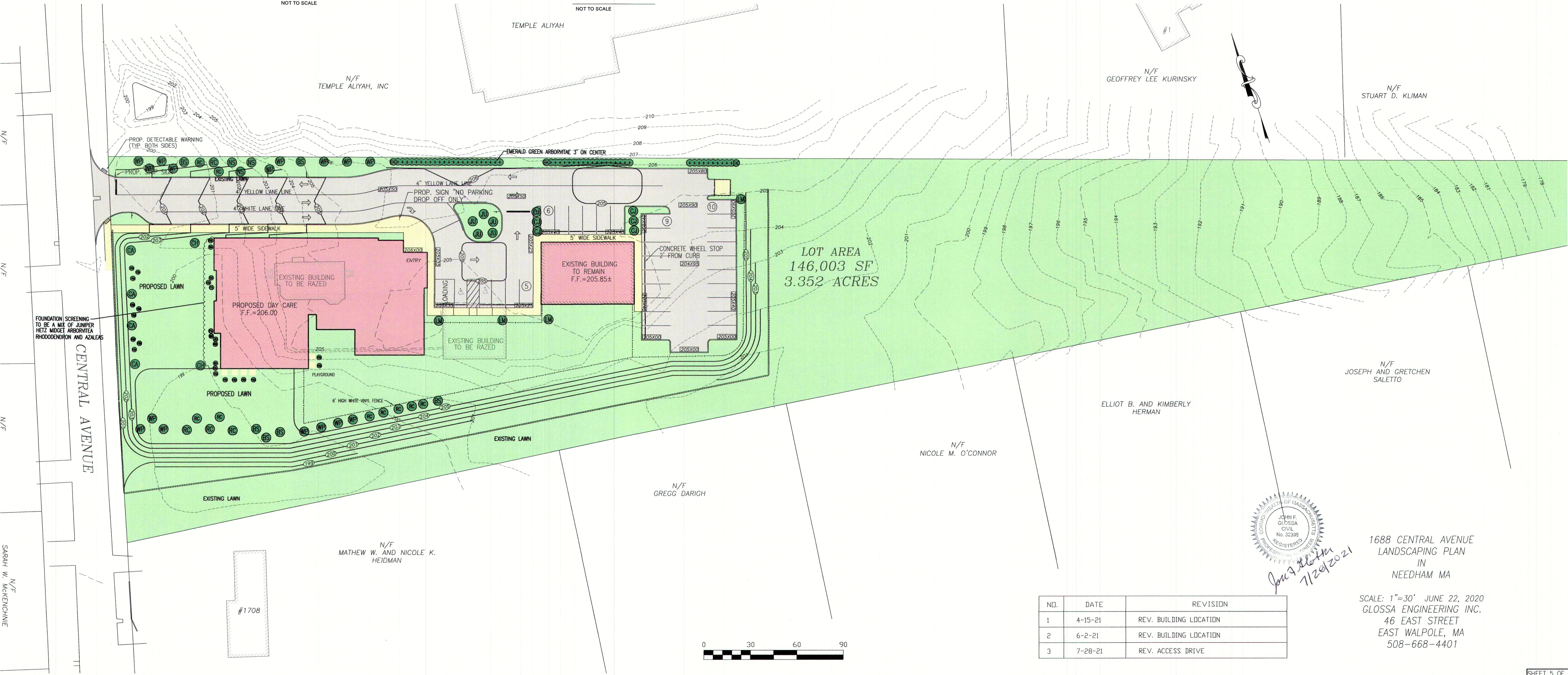
EXISTING GRADE	----- 100-----
EXISTING SPOT GRADE	× 200.02
EXISTING GAS MAIN	— G —
EXISTING SEWER MANHOLE	○ SMH
EXISTING DRAIN MANHOLE	○ EX-DMH
EXISTING CATCH BASIN	⊞ EX-CB
EXISTING ELECTRIC MANHOLE	○ EX-EMH
EXISTING UTILITY POLE	⊞ UP
EXISTING TEST PIT	⊞ TEST PIT #5
EXISTING BOUND	□
EXISTING FENCE	× × × × × × × ×
EXISTING FIRE HYDRANT	⊞
EXISTING GATE VALE	⊞
PROPOSED GRADE	----- 205-----
PROPOSED SPOT GRADE	× 205.235
PROPOSED CATCH BASIN	⊞ CB-1
PROPOSED DRAIN MANHOLE	⊞ DMH-1
PROPOSED TAPPING SLEEVE AND VALVE	⊞ PROPOSED 8"X6" TS&V



TYP. SHRUB PLANTING:
INDIVIDUAL PLANTING HOLE
NOT TO SCALE



TREE PLANTING
NOT TO SCALE



1688 CENTRAL AVENUE
LANDSCAPING PLAN
IN
NEEDHAM MA

SCALE: 1"=30' JUNE 22, 2020
GLOSSA ENGINEERING INC.
46 EAST STREET
EAST WALPOLE, MA
508-668-4401

NO.	DATE	REVISION
1	4-15-21	REV. BUILDING LOCATION
2	6-2-21	REV. BUILDING LOCATION
3	7-28-21	REV. ACCESS DRIVE

From: [Dennis Condon](#)
To: [Alexandra Clee](#)
Subject: RE: Request for comment - 1688 Central Avenue - revised plans
Date: Monday, August 9, 2021 9:52:43 AM
Attachments: [image001.png](#)
[image002.png](#)

Hi Alex,
Fire has no additional comments.

Thanks,
Dennis

Dennis Condon
Chief of Department
Needham Fire Department
Town of Needham
(W) 781-455-7580
(C) 508-813-5107
Dcondon@needhamma.gov



Follow on Twitter: Chief Condon@NeedhamFire



Watch Needham Fire Related Videos on YouTube @ Chief Condon



From: Alexandra Clee <aclee@needhamma.gov>
Sent: Wednesday, August 4, 2021 2:39 PM
To: David Roche <droche@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>
Subject: Request for comment - 1688 Central Avenue - revised plans

Dear all,

I have received the attached revised plans from the applicant for 1688 Central. The Planning Board hearing on this matter has been continued to August 17, 2021. If you wish to comment on the revised plans, please send your comments by Wednesday August 11 at the latest.

The documents attached for your review are as follows:

1. Memorandum from Attorney Evans Huber dated August 4, 2021 describing changes.
2. Plan set entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham MA," prepared by Glossa Engineering Inc., 46 East Street, East Walpole, MA, consisting of 9 sheets: Sheet 1, Cover Sheet, dated June 22, 2020; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 4, entitled "Grading and Utilities," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated "scale: as noted November 19, 2020" , revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 10, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021.
3. Plan set entitled "Needham Enterprises Daycare Center," prepared by Mark Gluesing Architects, consisting of 2 sheets: Sheet 1, Sheet A 1-0, entitled "1st Floor Plan," dated March 8, 2021, revised March 30, 2021 and May 30, 2021; Sheet 2, Sheet A 3-0, showing elevations, dated March 8, 2021, revised March 30, 2021 and May 30, 2021.

Thank you, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
www.needhamma.gov

From: Alexandra Clee

Sent: Friday, May 7, 2021 12:01 PM

To: David Roche <droche@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>

Subject: RE: Request for comment - 1688 Central Avenue - revised plans

Dear all,

We have received a memo from the attorney for this project detailing the changes that were made between the original plans and the revised plans (the revised plans as sent to you by email dated April 27, 2021). I am sending it in case it assists you. We also did receive a newly revised Landscape Plan, which I have attached.

If you have already submitted updated comments (and the attached info does not change those), or do not wish to submit additional comments, totally fine. If you wish to submit any additional comments, please do so by Wed May 12 if you can.

Thanks!

Alexandra Clee
Assistant Town Planner
Needham, MA
www.needhamma.gov

From: Alexandra Clee
Sent: Tuesday, April 27, 2021 9:31 AM
To: David Roche <droche@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>
Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>
Subject: Request for comment - 1688 Central Avenue - revised plans

Dear all,

We received an updated letter and updated plan set for the noted project; both are attached for your review. This matter is currently scheduled for May 18 in front of the Planning Board. As there is a lot of interest in this proposal, we would welcome any new/additional comments you may have as soon as you are able (but at the latest, by Wednesday May 12).

Thanks, alex.

Alexandra Clee
Assistant Town Planner
Needham, MA
www.needhamma.gov

From: Alexandra Clee
Sent: Monday, March 22, 2021 2:50 PM
To: David Roche <droche@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>;

Timothy McDonald <tmcdonald@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>;
Dennis Condon <DCondon@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>;
Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>

Subject: Request for comment - 1688 Central Avenue

Dear all,

The Planning Board will be hearing about a proposal for a new daycare at 1688 Central Avenue on April 6, 2021. More information is included in the submitted documents, detailed below, which can be attached to this email (with the exception of the Stormwater Report) and can also be found at this location K:\Planning Board Applications\Planning_1688 Central Avenue_2021. Some of the application documents are attached, as noted, but not all, as the files were too large to include all. (some of you will receive a hard copy in the inter-office mail as well).

The documents attached for your review are:

1. Application submitted by Needham Enterprises, LLC with Exhibit A. *attached*
2. Letter from Evans Huber Attorney, dated March 11, 2021. *Attached*
3. Letter from Evans Huber Attorney, dated March 12, 2021. *attached*
4. Letter from Evans Huber Attorney, dated March 16, 2021. *attached*
5. Plan set entitled "Needham Enterprises Daycare Center," prepared by Mark Gluesing Architects, consisting of 4 sheets: Sheet 1, Sheet A 1-0, entitled "1st Floor Plan," dated March 8, 2021; Sheet 2, Sheet A 1-1, entitled "Roof Plan," dated March 8, 2021; Sheet 3, Sheet A 2-1, showing Building Sections, dated March 8, 2021; Sheet 4, Sheet A 3-0, showing elevations, dated March 8, 2021. *Attached.*
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7. Traffic Impact Study, dated March, 2021. *Attached*
8. Stormwater Report, dated June 22, 2020.

I also have attached a letter from Abutters that we received today that I am sharing in case you wish to note the neighborhood concerns while you conduct your review.

The meeting where this topic will be presented to the Planning Board is April 6, 2021. If you wish to comment, please submit your comment by Wednesday March 31, 2021, so that the Petitioner has time to address any concerns or questions in advance of the hearing.

Thanks, alex.

Alexandra Clee
Assistant Town Planner
Town of Needham
500 Dedham Avenue
Needham, MA 02492
781-455-7550 Ext 271
Needhamma.gov

From: [Tara Gurge](#)
To: [Alexandra Clee](#)
Cc: [Lee Newman](#)
Subject: FW: Public Health Division's reply to Planning Boards Request for comment on Revised Documents - 1688 Central Avenue
Date: Monday, August 9, 2021 5:06:54 PM
Attachments: [image002.png](#)
[image003.png](#)
Importance: High

Alex –

The Public Health Division received the revised site development plans for the proposed project located at #1688 Central Ave. The same original comments still apply (See initial comment email that was sent back in March, below.) Also, just a quick update re: the last comment bullet point – We received additional documentation in reference the last bullet point, and this item was satisfactorily addressed. (See Note below.)

Please let us know if you need additional information or have any follow-up questions on those comments.

Thanks,



TARA E. GURGE, R.S., C.E.H.T., M.S.
ASSISTANT PUBLIC HEALTH DIRECTOR
Needham Public Health Division
Health and Human Services Department
178 Rosemary Street
Needham, MA 02494
Ph- (781) 455-7940; Ext. 211/Fax- (781) 455-7922
Mobile- (781) 883-0127
Email - tgurge@needhamma.gov
Web- www.needhamma.gov/health



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[Follow Needham Public Health on Twitter!](#)

From: Tara Gurge
Sent: Wednesday, March 24, 2021 2:12 PM

To: Alexandra Clee <aclee@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>

Subject: Public Health Division's reply to Planning Boards Request for comment - 1688 Central Avenue

Importance: High

Alex –

Here are the Public Health Division comments for the **Project Site Plan Special Permit proposal at 1688 Central Avenue**. See below:

- Prior to demolition, we will need to ensure that the applicant fills out the online Demolition permit form, through the Building Dept., via ViewPoint Cloud online permitting system, and submits the Demolition review fee along with uploading the required supplemental demolition report documents online, including septic system abandonment form and final pump report, for our review and approval (as noted on the form.)
- Ensure that a licensed pest control service company is contracted and will conduct routine site visits to the site, first initially to bait the interior/exterior of each structure to be raised prior to demolition, and also continue to make routine site visits (to re-bait/set traps) throughout the duration of the construction project. Pest reports must be submitted to the Health Division on an on-going basis for our review.
- If this proposal triggers the addition of any food to be served or prepped on site at this new facility, the owner must fill out and submit an online application for a Food Permit Plan Review packet. As part of this plan review, a food establishment permit will need to be applied for through the Public Health Division via the Town's ViewPoint Cloud online permitting system, which will require a review of the proposed kitchen layout plans, with equipment and hand sinks noted, along with any proposed seating layout plans where applicable.
- Please ensure that sufficient exterior space is provided to accommodate an easily accessible Trash Dumpster and a separate Recycling Dumpster, per Needham Board of Health Waste Hauler regulation requirements. These covered waste containers must be kept clean and maintained, and be placed on a sufficient service schedule in order to contain all waste produced on site. These containers may not cause any potential public health and safety concerns with attraction of pest activity due to improper cleaning and maintenance.
- As noted in the proposal, the applicant will be required to connect to the municipal sewer line, once it's brought up to the property, prior to building occupancy. A copy of the completed signed/dated Sewer Connection application, which shows that sewer connection fee was paid, must be forwarded to the Public Health Division for our record.
- No public health nuisance issues (i.e. odors, noise, light migration, standing water/improper on site drainage, etc.), to neighboring properties, shall develop on site during or after construction. We are in support of an extensive landscaping plan be developed on site to screen and enhance the site, and to ensure that noise and visual impacts are minimized for the benefit of the neighboring residential properties in this location. Additional buffering, by the addition of new vegetation, along with new plantings, is strongly encouraged.
- Proposed lighting on site shall not cause a public health nuisance, with lighting being allowed to migrate on to other abutting properties. If complaints are received, lighting may need to be

adjusted so it will not cause a public health nuisance.

- The applicant must meet current interior/exterior COVID-19 Federal, state and local requirements for spacing of seating, HVAC/ventilation, face covering requirements, sanitation requirements and occupancy limit requirements, etc. Please ensure that proper occupancy limits are met in order to accommodate the most updated state COVID-19 requirements for this proposed facility to ensure the health and safety for the number of proposed students and staff on site.
- The Public Health Division is also in support of the comments and concerns noted in the letter entitled, 'Neighborhood Petition Regarding Development of 1688 Central Avenue in Needham,' that was received and distributed by the Planning Board, including the excerpt on the neighboring abutters' concerns regarding the previous uses of the property with reference to potential soil contamination that may be present. We conducted a file check for this property address and we support the neighbors request for a soil test based on a concern that was investigated by the Fire Dept. that was filed back on June 24, 2003. The applicant must ensure that the property is safe, which includes conducting proper soil testing of the site prior to construction, and also follow through with any necessary mitigation measures as found to be necessary, as part of this project approval. → **Comment satisfactorily addressed.**

Please let us know if you need additional information or have any follow-up questions on those requirements.

Thanks,



TARA E. GURGE, R.S., C.E.H.T., M.S.
ASSISTANT PUBLIC HEALTH DIRECTOR
Needham Public Health Division
Health and Human Services Department
178 Rosemary Street
Needham, MA 02494
Ph- (781) 455-7940; Ext. 211/Fax- (781) 455-7922
Mobile- (781) 883-0127
Email - tgurge@needhamma.gov
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[Follow Needham Public Health on Twitter!](#)

From: Alexandra Clee <aclee@needhamma.gov>

Sent: Monday, March 22, 2021 2:50 PM

To: David Roche <droche@needhamma.gov>; Anthony DelGaizo <ADelgaizo@needhamma.gov>; Timothy McDonald <tmcdonald@needhamma.gov>; John Schlittler <JSchlittler@needhamma.gov>; Dennis Condon <DCondon@needhamma.gov>; Carys Lustig <clustig@needhamma.gov>

Cc: Lee Newman <LNewman@needhamma.gov>; Elisa Litchman <elitchman@needhamma.gov>; Thomas Ryder <tryder@needhamma.gov>; Tara Gurge <TGurge@needhamma.gov>

Subject: Request for comment - 1688 Central Avenue

Dear all,

The Planning Board will be hearing about a proposal for a new daycare at 1688 Central Avenue on April 6, 2021. More information is included in the submitted documents, detailed below, which can be attached to this email (with the exception of the Stormwater Report) and can also be found at this location K:\Planning Board Applications\Planning_1688 Central Avenue_2021. Some of the application documents are attached, as noted, but not all, as the files were too large to include all. (some of you will receive a hard copy in the inter-office mail as well).

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Thanks, alex.

Alexandra Clee
Assistant Town Planner
Town of Needham
500 Dedham Avenue
Needham, MA 02492
781-455-7550 Ext 271
Needhamma.gov



**TOWN OF NEEDHAM, MASSACHUSETTS
PUBLIC WORKS DEPARTMENT
500 Dedham Avenue, Needham, MA 02492
Telephone (781) 455-7550 FAX (781) 449-9023**

August 12, 2021

Needham Planning Board
Public Service Administration Building
Needham, MA 02492

RE: Project Site Plan Follow up Review of revised submittals
Needham Enterprises Childcare Facility-1688 Central Avenue

Dear Members of the Board,

The Department of Public Works has completed a follow up review of the above referenced site Planning Board plan permit review. The applicant proposes to construct a new 9,966 square foot building as a childcare facility. The childcare facility will have a maximum of 100-children. The support staff will be 13-employees. The plans have been mainly updated to widen the drive access with additional striping and directional traffic flow, reshape the proposed drop off areas, as well as some landscape modifications.

The review was conducted in accordance with the Planning Board's regulations and standard engineering practice. The documents submitted for review are as follows:

1. Memorandum from Attorney Evans Huber dated August 4, 2021 describing changes.
2. Plan set entitled "Site Development Plans, Daycare, 1688 Central Avenue, Needham MA," prepared by Glossa Engineering Inc., 46 East Street, East Walpole, MA, consisting of 9 sheets: Sheet 1, Cover Sheet, dated June 22, 2020; Sheet 2, entitled "Existing Conditions Plan of Land in Needham, MA," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 3, entitled "Site Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 4, entitled "Grading and Utilities," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 5, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 6, entitled "Construction Details," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 7, entitled "Sewer Extension Plan and Profile," dated "scale: as noted November 19, 2020", revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 8, entitled "Construction Period Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021; Sheet 10, entitled "Landscaping Plan," dated June 22, 2020, revised April 15, 2021, June 2, 2021 and July 28, 2021.
3. Plan set entitled "Needham Enterprises Daycare Center," prepared by Mark Gluesing Architects, consisting of 2 sheets: Sheet 1, Sheet A 1-0, entitled "1st Floor Plan," dated March 8, 2021, revised March 30, 2021 and May 30, 2021; Sheet 2, Sheet A 3-0, showing elevations, dated March 8, 2021, revised March 30, 2021 and May 30, 2021.

Our comments and recommendations are as follows:

- We understand that the traffic Engineer and Peer Engineer reviewer are still discussing the proposed updates.
- Original plans show that the facility's proposed lighting will not trespass onto the neighboring properties. However, the shields proposed should minimize visual glare to the closest neighboring properties. Provide updated plans on the lighting for the additional parking area (previously plans show as an asphalt playground).
- The project does not indicate if a generator, or if an electrical transformer is required. If found to be required, the applicant will need to provide a sound study and demonstrate sound attenuation measures for the generator, and visual screening measures for the generator or transformer.
- The plans call for collecting stormwater and mitigating the post construction storm events through onsite infiltration systems. As part of the NPDES requirements, the applicant will also need to comply with the Public Outreach & Education and Public Participation & Involvement control measures. The applicant shall submit a letter to the DPW identifying the measures selected for Public Outreach, and for Public Participation and Involvement and provide dates by which the measures will be completed.

If you have any questions regarding the above, please contact our office at 781-455-7538.

Truly yours,

Thomas Ryder
Assistant Town Engineer

Traffic Impact Assessment

For:

Child Care Facility

At:

1688 Central Avenue

In:

Needham, Massachusetts

Prepared For:

Glossa Engineering, Inc.
Walpole, Mass.

Prepared By:



Revised August 11, 2021

Child Care Facility

*1688 Central Avenue
Needham, Massachusetts*

Gillon Associates Co.
111 River Street, Weymouth, MA 02191-2104
Telephone (781) 762-8856
E-mail: jt.gillon@comcast.net

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EXECUTIVE SUMMARY

- **Central Avenue carried approximately 16,000 vehicles per day in the vicinity of the site in 2016. About eight percent of this daily volume occurs during the morning peak hour.**
- **Based on the Peer Reviewer's request to estimate trips based on ITE rates with a square-footage variable, this project would generate approximately 110 new morning peak hour trips with 58 inbound and 52 outbound. This project is also expected to generate approximately 112 new evening peak hour trips with 53 inbound and 59 outbound. However, for the reasons discussed in the Queueing analysis, we believe this projection is unnecessarily conservative.**

The proponent will have staff assist children both arriving and leaving the day care to ensure the drop-off/pick-up circulation line of vehicles keeps moving and does not stack back down the 200-plus foot long driveway. In addition, the redesigned driveway now includes a drop-off and pick-up queueing lane as well as a separate entrance lane providing unimpeded access to the rear parking areas. This eliminates any possibility of the queueing lane extending out onto Central Ave; if the queueing lane is full, entering vehicles will have a clear lane to naturally proceed to the parking areas.

- **All through traffic on Central Avenue in each direction will continue to experience a calculated "A" level of service with little delay during the weekday morning commuting peak hour. The Central Avenue southbound left-turn through lane utilized into the Site Driveway, will also operate at a "B" level resulting in no turbulence on Central Avenue during the morning peak hour and at an "A" during the evening peak hour. The Site Driveway itself will have an acceptable "E" level with longer delay during the morning peak hour and at a "C" in the evening peak hour.**

The expected maximum drop-off queue length will not exceed seven (7) vehicles. Since this lane can accommodate ten (10) vehicles this will not be a problem. In addition, as noted, if the queueing lane is full, arriving vehicles will have a separate, clear lane to access parking in the rear. These two features of the re-designed driveway, operating together, will avoid any problem at Central Avenue.

- **The required stopping sight distance at the Central Avenue / Site Driveway intersection is provided.**
- **There were no crashes reported at the Central Avenue / Site Driveway intersection.**

INTRODUCTION

Gillon Associates has evaluated the anticipated traffic impacts resulting from the proposed development of a Child Care Facility. The site is located at 1688 Central Avenue, just north of Charles River Street in Needham, Massachusetts (Figure 1).

The purpose of this report is to evaluate potential traffic impacts, which may be created by the expected addition of vehicular traffic either originating from or destined to the site. Specifically, this report assesses traffic operational characteristics of the Central Avenue intersection at the site access roadway due to any additional traffic.

This report provides an identification of the expected traffic generated by the project along with an assessment of projected traffic operating characteristics. Existing traffic volumes were obtained by manually observing and recording Central Avenue traffic volumes in fifteen-minute increments during the morning peak hour. In addition, historical counts were requested and supplied by the Town of Needham.

This August report was prepared to evaluate a revised building size of 10,034 square feet and a population of 115 children.

At the request of the Town, this report consolidates previous exercises and responds to the GPI Peer Review comments submitted on July 12, 2021. After meeting with GPI's Engineer regarding Covid-19 traffic volume adjustments, it was decided to: expand the Town's ATR conducted in 2016 by 1% per year to 2021 for existing, to 2028 for the Baseline or No-Build condition. The PM Turning Movement counts at the Central Avenue / Charles River Street intersection in 2006 were also expanded proportionately for the same analysis period. The morning counts here were not available at this intersection but the evening was more critical due to the predominate southbound movement and queueing implications during this period. The existing traffic signal timing at this intersection was provided by the Peer Review Engineer.

Their Engineer further requested that we review the site driveway based on the Institute of Transportation Engineer's Trip Projections based on 10,034 square feet and not on the number of students or operator's anticipated drop-off schedule (which the operator has indicated will be implemented if necessary).

PROJECT DESCRIPTION

The project site area is 146,003 square feet or just over three acres and includes constructing a 10,034 square-foot child care facility building. An out-building currently used as a barn will be retained for storage and ancillary purposes. The project will have a total of 30 off-street surface parking spaces. The access to this school at #1688 Central Avenue uses a 200-plus foot-long, 30-foot wide access drive to Central Avenue (Figure 2), consisting of three lanes: an 8-foot wide queueing lane that can accommodate at least ten waiting vehicles and provides access to the drop-off and pick-up area; an 11-foot wide entrance lane providing unimpeded access to the rear parking areas, and an 11-foot wide exit lane.

EXISTING TRAFFIC CONDITIONS

Regional Roadway Network

Central Avenue will continue to serve the site and provide access to both local and regional roadway facilities. To the south, Central Avenue provides linkage between the site and Charles River Street and

Dover as well as other points to the south. Central Avenue also provides access to the north with linkage to Route 135 and easterly to Needham Center.

Traffic Setting

The project is situated on the easterly side of Central Avenue. This roadway is a two-lane roadway with one lane in each direction. Central Avenue has a roadway pavement width of approximately 25 feet with a bituminous concrete sidewalk on the easterly side of the roadway.

Existing Traffic Volumes

Existing traffic volumes were obtained by manually observing and recording Central Avenue traffic volumes in fifteen-minute increments during the morning peak hour. Morning peak hour traffic volumes on Central Avenue at the site driveway as collected on February 4th are provided on Figure 3.

With considerable feedback from the neighborhood, historical and pre-covid traffic volumes were subsequently obtained from the Town of Needham Engineering Division. Of the various forms of counts provided, an Automatic Traffic Recorder (ATR) count obtained in 2016 just south of the Needham Recycling and Transfer Station proved to be the most useful. The Town also provided a Turning Movement count for the evening peak hour at the Central Avenue / Charles River Street intersection. That count is provided on Figure 3 which shows expanded counts for 2016, 2021, and 2028 as well.

The directional ATR counts in front of the site are also provided on this Figure. The schematic 2006 TMC count at the Central Avenue / Charles River Street intersection is shown on Figure 4. The 2016 directional ATR peak hour counts are provided on Figure 5. The Central Avenue / Charles River Street intersection counts as inflated proportionately for analysis years, 2016, 2021, and 2028 are provided on Figure 6. Figure 7 shows the Central Avenue projections for years 2021 and 2028 as inflated for normal growth at the site driveway.

During my observations of volume recordings, there was only one occurrence of traffic backing up on Central Avenue in the southbound direction from the traffic control signals at Charles River Street to the site driveway. This stacking or queuing back was recorded on Thursday, June 3rd from 4:51 pm until 5:01 pm. The stacking itself wasn't sustained during the entire ten minutes but flowed much like an accordion where it would move upon the green light and open as the queued vehicles began to move.

FUTURE TRAFFIC CONDITIONS

Trip Generation and Distribution

It is expected that the proposed child care facility will exhibit the same general trip generating characteristics as in other urban and suburban residential communities. In addition to local rates observed and compiled by this firm, the Institute of Transportation Engineers (ITE) provides data on a variety of land uses and there is a considerable amount of empirical data available. In addition, the proponent has found by assigning pick-up and drop-off windows for parents, there is less congestion at their current location and they will employ that technique as necessary at this site as well. At the request of the Peer Review Engineer, the trip generation summary has been revised to project trips based on the square-footage of the building which were slightly higher than trips based on the number of students. The top part of this graphic lists the ITE equations along with the resulting trip generation values for the school based on 10,034 square feet. This project is expected to generate approximately 110 new morning peak hour trips with 58 inbound and 52 outbound. This project is also expected to generate approximately 112 new evening peak hour trips with 53 inbound and 59 outbound.

Directional distribution, as shown on Figure 9, reflects the existing Central Avenue directional split of the Gan Aliyah Pre-School next door to the site at Temple Aliyah.

Site generated and projected traffic volumes at the Central Avenue / Site Driveway intersection during both the morning and evening peak commuting hour is provided on Figure 10. Projected traffic volumes at the Central Avenue / Charles River Street intersection are provided on Figure 11.

TRAFFIC OPERATIONAL ANALYSIS

This section of the report provides a quantitative analysis of anticipated traffic operational characteristics for the build scenario. These series of capacity analyses were conducted for the weekday morning and evening peak hour at the driveway and only during the evening peak hour at the Charles River Street intersection to determine the potential impact of the proposed day care facility project.

Analysis Methodology and Findings

The analysis is based on the "Highway Capacity Manual" for non-signalized intersections. This manual has been published by the Transportation Board of the National Research Council and approved by the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine. The most recent Synchro Software version 10.1 was utilized in the assessment.

At un-signalized intersections and driveways the manual assumes that the through and right-turn movements along any main street will operate unrestricted but conflicting movements will be subjected to various periods of delay depending primarily on the frequency of adequate safe gaps to complete these movements. These periods of delay are generally categorized in "Levels of Service" (LOS) ranging from "A" for very short or no delays through "F" for extensive delays. The Massachusetts Highway Design Manual indicates that a "D" Level of Service is acceptable on roadways such as those in the study area. A table comparing levels of service and seconds of delay is provided in the Appendix of this report.

As can be seen on Figure 12, all through traffic on Central Avenue in each direction will continue to experience a calculated "A" level of service with little delay during the weekday commuting peak hours. As can be seen in the capacity calculations included in the Appendix of this report, the Central Avenue southbound left-turn through-lane utilized into the Site Driveway will operate at a "B" level with about 13 seconds of delay due to opposing traffic resulting in no turbulence on Central Avenue during this morning peak hour. This southbound left-turn through-lane utilized into the Site Driveway will operate at an "A" level with about 8.7 seconds of delay during the evening peak hour. The Site Driveway itself will have an acceptable "E" level with average delay during the morning peak hour and a "C" during the evening peak hour. The Central Avenue / Charles River Street intersection will continue to operate at an overall "F" Level of Service with an overall increase in delay of only five seconds.

Expected Drop-Off Queue Length

This analysis is based on the Poisson distribution of random arrivals. Several scenarios were considered. The scenario considered most appropriate is based on actual data from the operator as to the number of children (max 55) that will be arriving during the peak morning drop-off period, which is from 7:30 a.m. to 8:50 a.m. Another group of children (max 30) will arrive after this peak drop-off period because their

programs do not start until 9:00 or later. The remaining children using the facility are after-school children (max 30) who will not arrive until the afternoon. In addition, years of data from the operator confirm that of the 55 children being dropped off during the peak 80-minute drop-off period, approximately 30 will be siblings, meaning that these 30 children will arrive in 15 vehicles. The other 25 children will arrive in one vehicle per child. Lastly, the morning staff will either have arrived prior to the beginning of drop-off, or, if they arrive during the peak period, they will proceed directly to the rear parking area, will not be in the drop-off lane, and thus need not be considered in the queueing analysis.

The analysis thus used the following assumptions:

- a. Random arrivals during the peak drop-off period (per GPI)
- b. Drop-off period is 80 minutes (per operator's schedule)
- c. 40 parent vehicles arriving during this period (per operator historical data)
- d. 60-second drop-off window (per GPI)

This evaluation (see figure 13) concludes that with these assumptions, there will never be more than 7 vehicles in the drop-off lane. Furthermore, even with considerably more conservative assumption requested by GPI as to the number of vehicles (58) arriving during the drop-off window, there will never be a back-up onto Central Ave because (1) the site has 30 parking spaces; (2) the drop-off lane can accommodate 10 vehicles; and (3) the lane accessing the rear parking areas, which is 390 feet long, can accommodate as many as an additional 19 vehicles. It is important to remember that the figure of 58 vehicles exceeds the actual number of children that will be arriving during this window, even if every child, including all siblings in the program, arrived in a separate vehicle. Also, at GPI's request, the driveway itself has been widened to formalize the separate inbound stacking or queue lane. In addition, the turn-around area has been modified at GPI's request to improve safety and circulation.

SIGHT DISTANCE EVALUATION

The approaching vehicle on Central Avenue must be able to stop in time to avoid making contact with a vehicle emerging from the reconfigured site driveway. The required stopping sight distance from either a minor street or driveway is obtained from "A Policy on Geometric Design of Highways and Streets" as published by the American Association of State Highway and Transportation Officials (AASHTO) 6th Edition published in 2011.

Unlike the minimum safe stopping distance (MSSD) along a section of roadway, stopping sight distance at a driveway is not measured along either the center line or gutter line of a roadway. On page 9-29 of the American Association of State Highway and Transportation Officials (AASHTO) manual, it is stated "If the available sight distance for an entering or crossing vehicle (at an intersection corner) is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions."

The motorist leaving the minor roadway or driveway has an eye height of 3.5 feet and he must be able to see another object (approaching vehicle) with a height of 3.5 feet from a point 14.5 feet back from the travel way. This dimension is based on most motorists stopping 6.5 feet or less from the intersecting roadway plus the eighty-fifth percentile distance of 8.0 feet from a front bumper of a vehicle to the motorist eye, thus, totaling 14.5 feet. The required stopping distance for each minor roadway is based on the formula on the following page:

$$d = 1.47 V t + 1.075 \frac{V^2}{a}$$

Where: V = Speed (mph)

t = perception & Reaction time (2.5 seconds)
a = deceleration of vehicle (11.2 ft/sec.2)

A speed survey revealed the 85th percentile speed on Central Avenue was 39 mph southbound and 37 mph northbound at the site driveway (Figure 9). Therefore, the required stopping sight distance for Central Avenue at the driveway is computed as shown below:

$$d = 1.47 * 39 * 2.5 + \frac{1.075 * (39)^2}{11.2}$$

$$d = 143 + 146 = 289 \text{ feet}$$

The Peer Review Engineer asked that we also assess the Intersection Sight Distance as recommended by AASHTO.

$$ISD = 1.47 V_{\text{Major}} t_g$$

Where: V = roadway design speed or 85th percentile, and t_g = time gap for driveway maneuver
t_g = 7.5 seconds for Left Turn from Stop, t_g = 6.5 seconds for Right Turn from Stop,

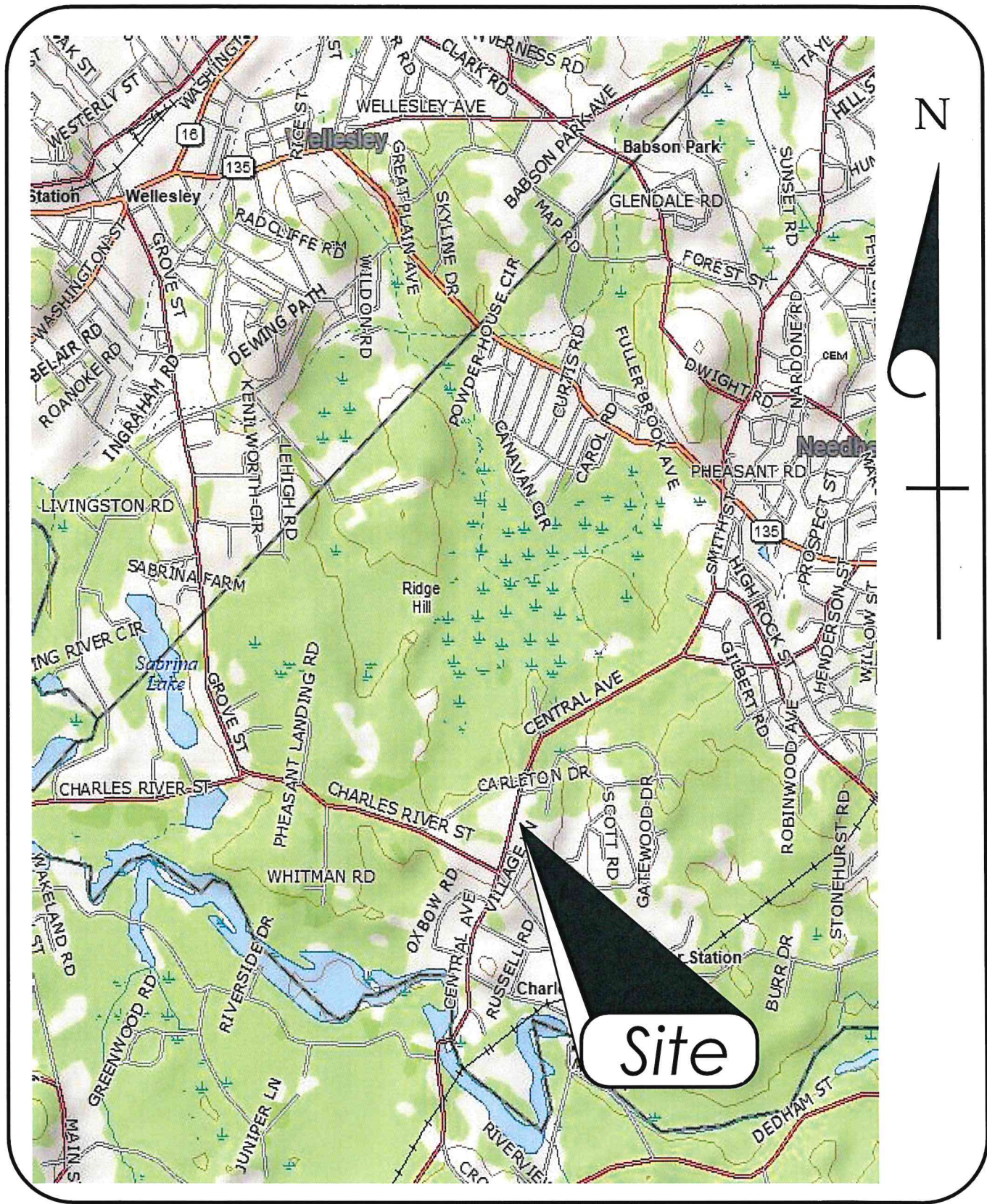
Therefore, the Left-Turn ISD = 1.47 (39) (7.5) = 430 feet.

Similarly, the Right-Turn ISD = 1.47 (37) (6.5) = 354 feet.

A field review showed that this section of Central Avenue is both straight and flat. As can be seen on Figure xx, there is well over 450 feet of stopping sight distance in both directions on Central Avenue and the stopping sight distance and is safe.

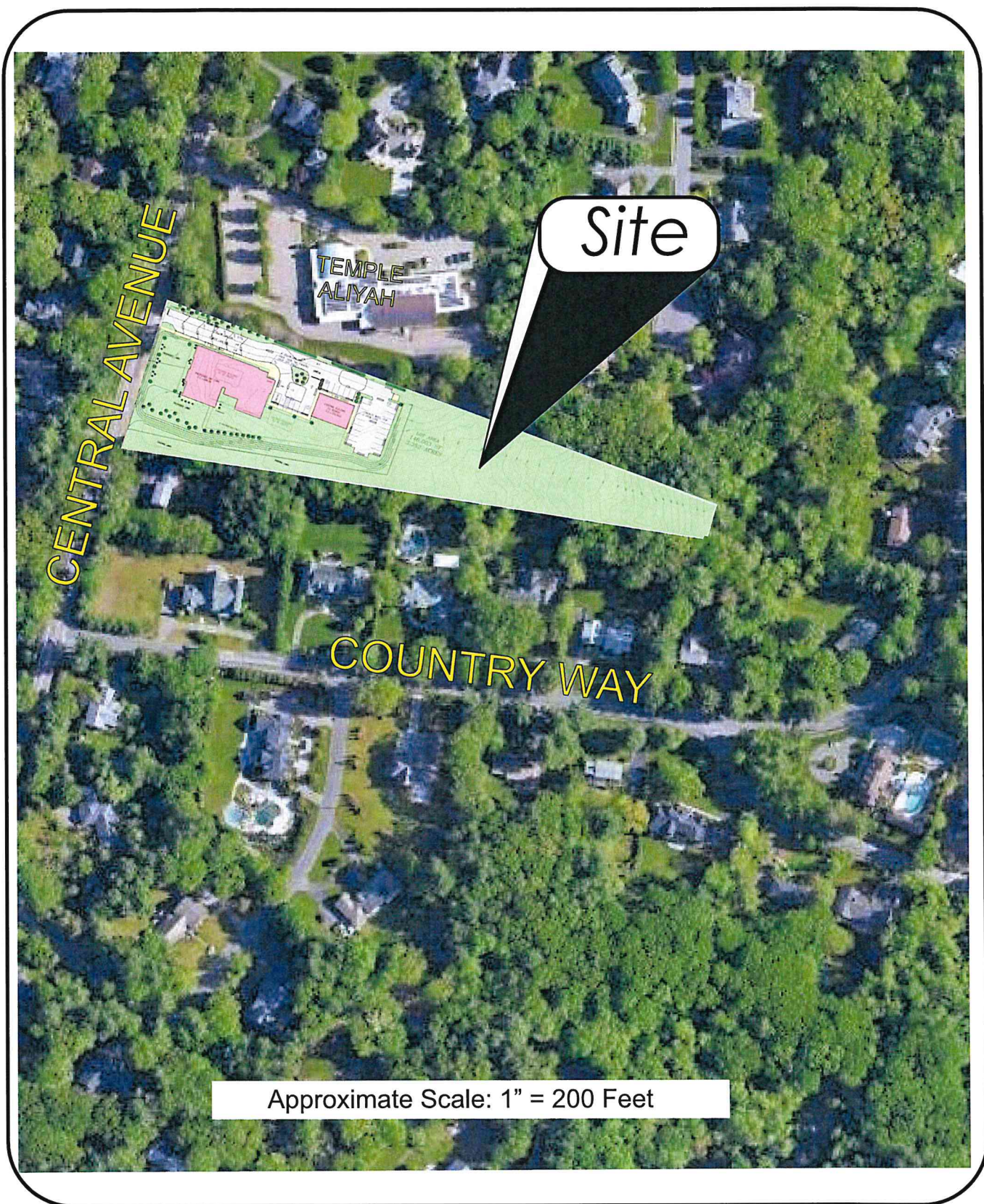
CRASH EVALUATION

A review of the Massachusetts Department of Transportation data shows there were no crashes reported at the Central Avenue / Site Driveway intersection.



General Location Map

Figure 1



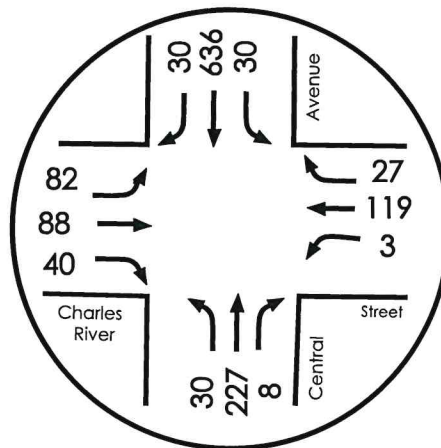
Locus Map

Figure 2

2006 Peak Hour Traffic Volumes (Expanded to 2028)
From Town of Needham Count at Recycling Center

Gillon Associates
Traffic & Parking Specialists

2006 MORNING PEAK HOUR WAS NOT AVAILABLE



2006 EVENING PEAK HOUR

<u>APPROACH</u>	<u>MOVEMENT</u>	2006
CENTRAL AVENUE SOUTHBOUND	LEFT	30
	THRU	636
	RIGHT	30
CENTRAL AVENUE NORTHBOUND	LEFT	30
	THRU	227
	RIGHT	8
CHARLES RIVER STREET EASTBOUND	LEFT	82
	THRU	88
	RIGHT	40
CHARLES RIVER STREET WESTBOUND	LEFT	3
	THRU	119
	RIGHT	27

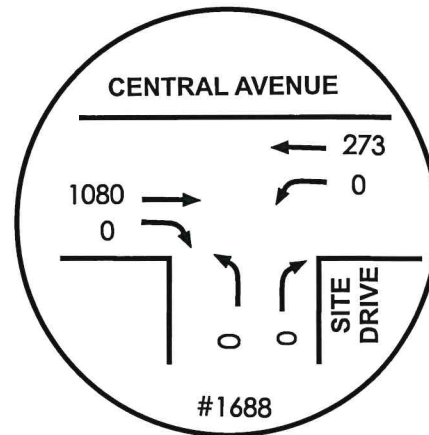
2006 Peak Hour Traffic Volumes on Central Avenue
From Town of Needham Count at Charles River Street

Figure 4

Gillon Associates
Traffic & Planning Specialists

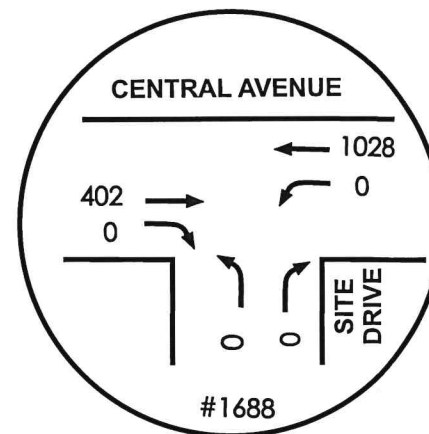
Town of Needham ADT South of RTS

		North Bd	South Bd	Total	One Hour
5/10/2016	07:00 AM	278	47	325	
5/10/2016	07:15 AM	265	48	313	
5/10/2016	07:30 AM	292	71	363	
5/10/2016	07:45 AM	279	59	338	1339
5/10/2016	08:00 AM	232	79	311	1325
5/10/2016	08:15 AM	277	64	341	1353
5/10/2016	08:30 AM	175	61	236	1226
5/10/2016	08:45 AM	244	73	317	1205
		1080	273	1353	
AM Peak Hour		2016			
Central Ave North Bd		1080			
Central Ave South Bd		273			
TOTAL		1226			



2016 MORNING PEAK HOUR

		North Bd	South Bd	Total	One Hour
5/9/2016	04:00 PM	87	226	313	
5/9/2016	04:15 PM	67	222	289	
5/9/2016	04:30 PM	68	250	318	
5/9/2016	04:45 PM	88	247	335	1255
5/9/2016	05:00 PM	90	270	360	1302
5/9/2016	05:15 PM	114	243	357	1370
5/9/2016	05:30 PM	110	268	378	1430
5/9/2016	05:45 PM	81	243	324	1419
5/9/2016	06:00 PM	108	237	345	1404
		402	1028	1430	
PM Peak Hour		2016			
Central Ave North Bd		402			
Central Ave South Bd		1028			
TOTAL		1430			



2016 EVENING PEAK HOUR

APPROACH	MOVEMENT	2006	20016	2021	2028
CENTRAL AVENUE SOUTHBOUND					
	LEFT	30	42	44	47
	THRU	636	881	926	990
	RIGHT	30	42	44	47
CENTRAL AVENUE NORTHBOUND					
	LEFT	30	42	44	47
	THRU	227	315	330	353
	RIGHT	8	11	12	12
CHARLES RIVER STREET EASTBOUND					
	LEFT	82	114	119	128
	THRU	88	122	128	137
	RIGHT	40	55	58	62
CHARLES RIVER STREET WESTBOUND					
	LEFT	3	4	4	5
	THRU	119	165	173	185
	RIGHT	27	37	39	42
Central Avenue at Site Drive					
	North Bd	336	466	489	523
	South Bd	696	965	1013	1084
	Total	1032	1430	1502	1607

Central Ave. AM Volume					
At Site Drive			2016	2021	2028
	North Bd		1166	1224	1310
	South Bd		295	310	331
	Total		1461	1534	1641
Central Ave. PM Volume					
At Site Drive		2006	2016	2021	2028
	North Bd	336	466	489	523
	South Bd	696	965	1013	1084
	Total	1032	1431	1502	1607

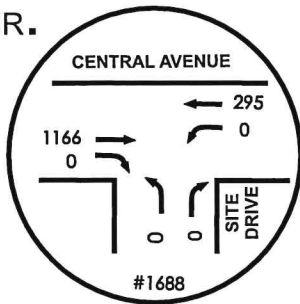
Peak Hour Traffic Volumes Expanded From
From Town of Needham Traffic Counts by 1% Per Year

Figure 6

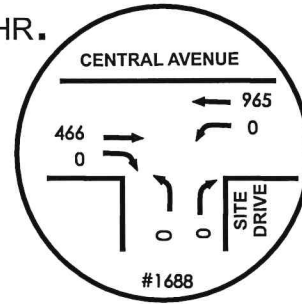


2016

AM PEAK HR.

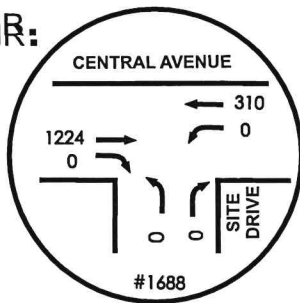


PM PEAK HR.

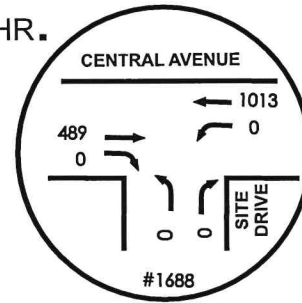


2021

AM PEAK HR.

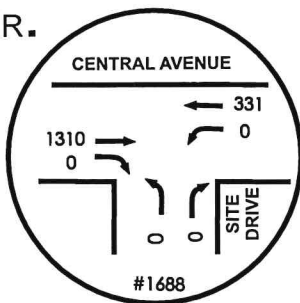


PM PEAK HR.

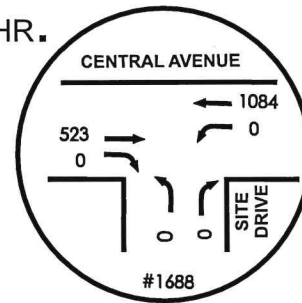


2028

AM PEAK HR.



PM PEAK HR.



Peak Hour Traffic Volumes Expanded From
From Town of Needham Count at Recycling Center

Figure 7

Gillon Associates
Traffic & Parking Specialists

Source of Data
 ITE Report (10th Edition)
 Land Use Code: 565
 Volume 2, Pages 224 - 245
 Day Care Center

Trips Based On Square Feet of Bldg. AM			PM		
<u>Peak Hour Trips</u>	<u>IN OUT TOTAL</u>		<u>IN OUT TOTAL</u>		
Trips per Unit	T = 11.0 (x)		T = 11.12 (x)		
Directional Split	53% 47%		47% 53%		
Trips Based on 10.03 KGSF	58	52 110	53	59 112	

Trips per Weekday

Trips per KGSF ITE

T = 47.62 (x) Trips Based on 10,034 SF = 478 Trips per Weekday
 (= 239 Inbound & 239 Outbound)

USE THESE PROJECTIONS

Source of Data
 ITE Report (10th Edition)
 Land Use Code: 565
 Volume 2, Pages 224 - 245
 Day Care Center

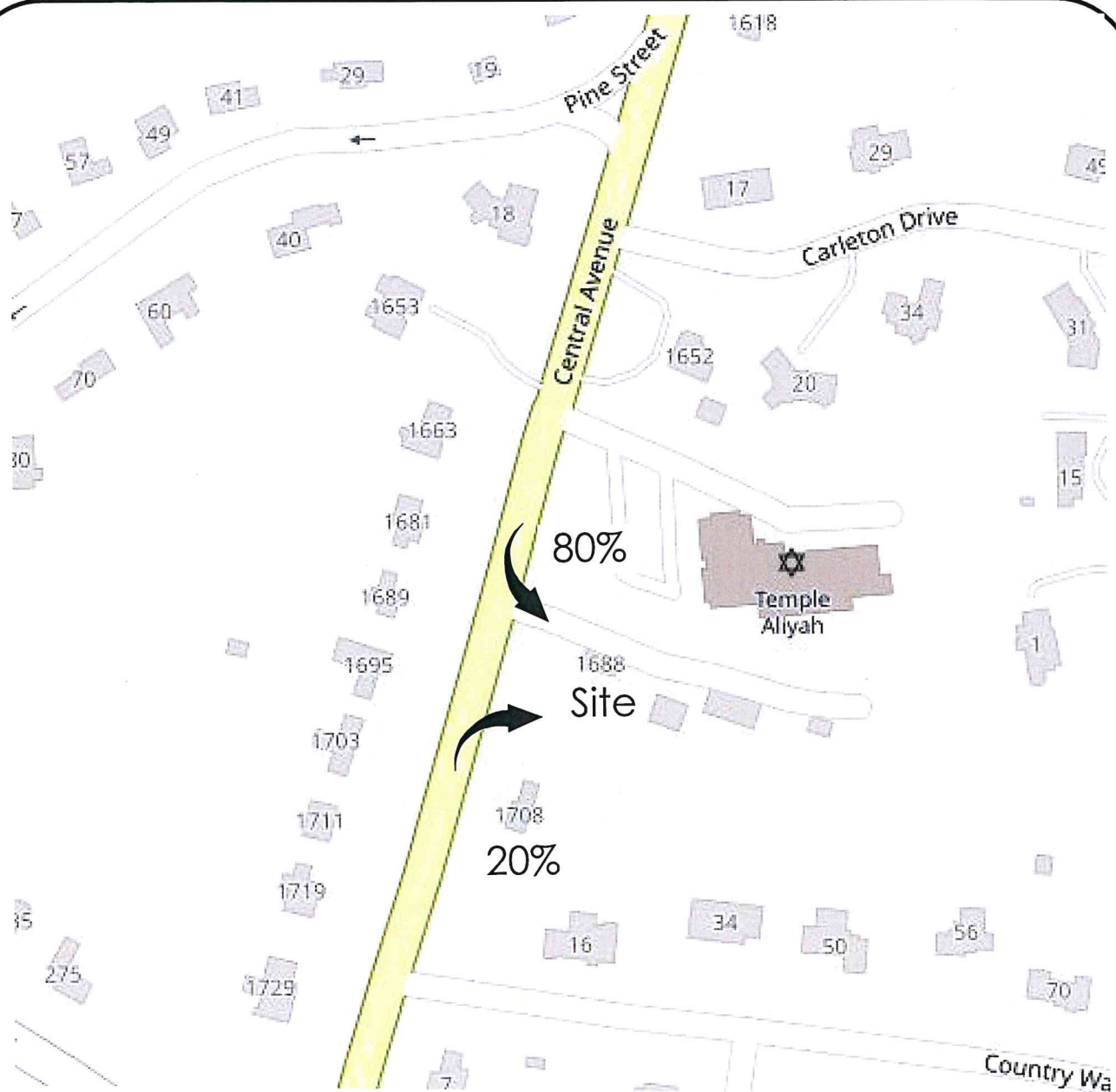
Trips Based On Students AM			PM		
<u>Peak Hour Trips</u>	<u>IN OUT TOTAL</u>		<u>IN OUT TOTAL</u>		
Trips per Unit	T = 0.66 (x) + 8.42		Ln(T) = 0.87 Ln(x) + 0.29		
Directional Split	53% 47%		47% 53%		
Trips Based on 115 Students	44	40 84	39	44 83	

Trips per Weekday

Trips per Child ITE

T = 4.09 (x) Trips Based on 115 Students = 470 Trips per Weekday
 (= 235 Inbound & 235 Outbound)

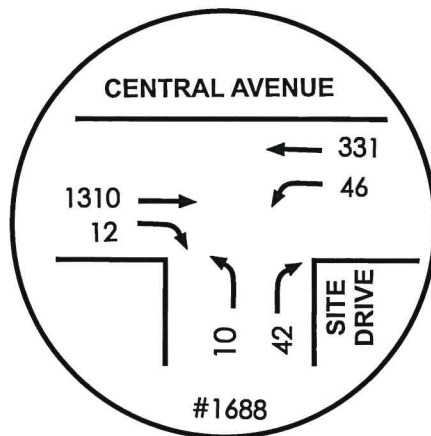
Trips Based On KGSF & Students AM			PM		
<u>Average Peak Hour Trips</u>	<u>IN OUT TOTAL</u>		<u>IN OUT TOTAL</u>		
	51	46 97	46	52 98	
<u>Trips per Weekday Average</u> = (478 + 470) / 2 = 474 (= 237 Inbound & 237 Outbound)					



Gan Aliyah Pre-School At Temple Aliyah		Oriented North			Oriented South		
		Enter	Exit	Total	Enter	Exit	Total
	AM	13	14	27	7	0	7
	PM	10	12	22	4	1	5
	TOTAL	23	26	49	11	1	12
	Percent (%)	80%			20%		

Directional Distribution

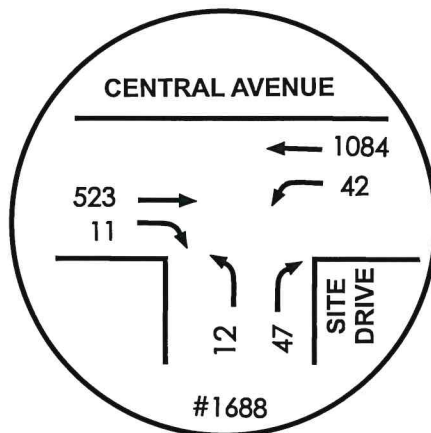
Figure 9



IN	OUT	TOTAL
58	52	110

BASED ON ITE
10, 034 Sq. Ft.

2028
MORNING PEAK HOUR



IN	OUT	TOTAL
53	59	112

BASED ON ITE
10, 034 Sq. Ft.

2028
EVENING PEAK HOUR

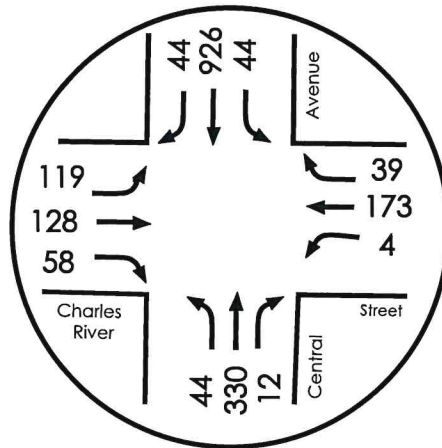
Projected Peak Hour Traffic Volumes
Central Avenue at Site Drive

Figure 10

Gillon Associates
Traffic & Parking Specialists

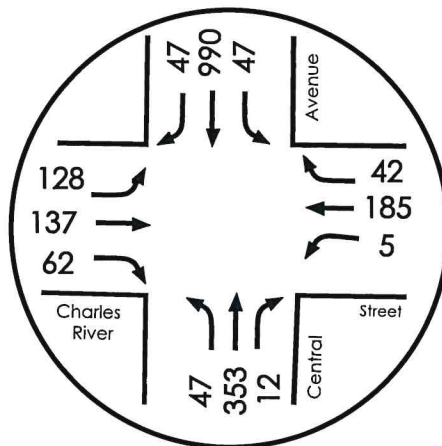
2021
Existing

PM PEAK HR.



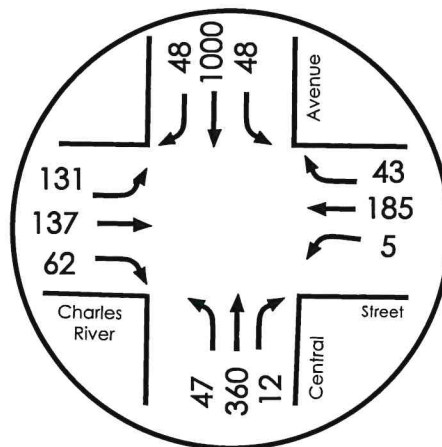
2028
No-Build

PM PEAK HR.



2028
BUILD

PM PEAK HR.



Projected 2028 Peak PM Hour Traffic Volumes
Central Avenue at Charles River Street

Figure 11

	Projected LOS	
	<u>AM</u>	<u>PM</u>
<u>Central Avenue at Site Driveway</u>		
Stop Sign Controlled		
Central Ave. Northbound (All Moves)	A	A
Central Ave. Southbound Through Movement	A	A
Left-Turn Movement	B	A
Site Drive West Bound (All Moves)	Ⓔ	Ⓒ

	Existing	Base	Projected
	Expanded		Based on ITE
	2021	2028	10.034 KGSF
	<u>PM</u>	<u>PM</u>	<u>PM</u>
<u>Central Avenue at Charles River Street—Signalized</u>			
Note: Turning Movement Counts From 2006 PM			
And Expanded Proportionately to 2016 ATR Counts			
Then By 1% Per Year Normal Growth			
AM Traffic Counts were not available			
Traffic Control Signal			
Overall Level of Service	F	F	F
Overall Delay (Seconds)	122.9	148.8	154
Charles River St East Bd. (All Moves)	B	B	B
(Overall Delay (Seconds)	12.7	13.8	13.0
Avg./95th % Queue Length (ft)	51/90	55/97	55/97
Charles River St West Bd. (All Moves)	C	C	C
(Overall Delay (Seconds)	22.4	23.0	23.1
Avg./95th % Queue Length (ft)	79/147	87/158	88/159
Central Ave. North Bd. (All Moves)	D	D	E
(Overall Delay (Seconds)	37.9	53.5	57.2
Avg./95th % Queue Length (ft)	185/321	211/365	217/374
Central Ave. South Bd. (All Moves)	F	F	F
(Overall Delay (Seconds)	215	259	268
Avg./95th % Queue Length (ft)	672/902#	1746/981	759/995#

Intersection Levels of Service

Figure 12

Queue Analysis

Weekday AM Peak Demand = 40 per 80 minute peak period, Arrival Rate = $40 \times (60/80) = 30$ per hour (q).

Serving Rate = 60 seconds per vehicle at Request of GPI = Qmax

Utilization Factor: $30 \text{ veh/hr, } 60 \text{ min./hr}$

$$\ell = q/Q = 30 / 60 = 0.5000$$

DROP-OFF RATE: $3600/30 = 120$

Use 60 seconds as Per GPI

Probability of No Vehicles:

$$P_0 = 1 - \ell = 0.5000$$

Probability of n vehicles in system:

$$P_n = \ell^n \times P_0$$

n (vehicle)	Px	
	P (x=n)	(x<or= n)
0	0.50	0.50
1	0.25	0.75
2	0.13	0.88
3	0.06	0.94
4	0.03	0.97
5	0.02	0.98
6	0.01	0.99
7	0.00	1.00
8	0.00	1.00
9	0.00	1.00
10	0.00	1.00
11	0.00	1.00
12	0.00	1.00
13	0.00	1.00
14	0.00	1.00
15	0.00	1.00
16	0.00	1.00
17	0.00	1.00
18	0.00	1.00
19	0.00	1.00
20	0.00	1.00
21	0.00	1.00
22	0.00	1.00
23	0.00	1.00
24	0.00	1.00
25	0.00	1.00
26	0.00	1.00
27	0.00	1.00
28	0.00	1.00
29	0.00	1.00
30	0.00	1.00
31	0.00	1.00
32	0.00	1.00
33	0.00	1.00
34	0.00	1.00
35	0.00	1.00
36	0.00	1.00
37	0.00	1.00
38	0.00	1.00
39	0.00	1.00
40	0.00	1.00

Findings:

- 100% of Queue Demand Less than 10 Cars
- Average 50th Percentile Queue = 0 vehicles
- Expected number in System (vehicles) = $E(n) = \ell / (1-\ell) = 0.5 / (1-0.5) = 1.0$
- Expected (Average) number in Queue (vehicles) = $E(m) = \ell^2 / (1-\ell) = (0.5)^2 / (1-0.5) = 0.5$

Source: Transportation and Traffic Engineering Handbook, ITE 1976 & Article Included herein

NOTE: First Stacking Lane = 200 Feet = 10 Vehicles

Second Inbound Lane = 380 Feet = 19 Vehicles

Total = 39 Vehicles available off-street

Design (85th Percentile Queue = 2 Vehicles Less than 10 , Therefore OK

Expected Drop-Off Queue Length

Figure 13

 **Glenn Associates**
Traffic & Parking Specialists

	26-30	31-35	36-40	41-45	Total	Speed	Cum. %
						26-30	2.33
Northbound	1	16	8	0	25	31-35	58.14
Southbound	0	8	9	1	18	36-40	97.67
	1	24	17	1	43	41-45	100.00

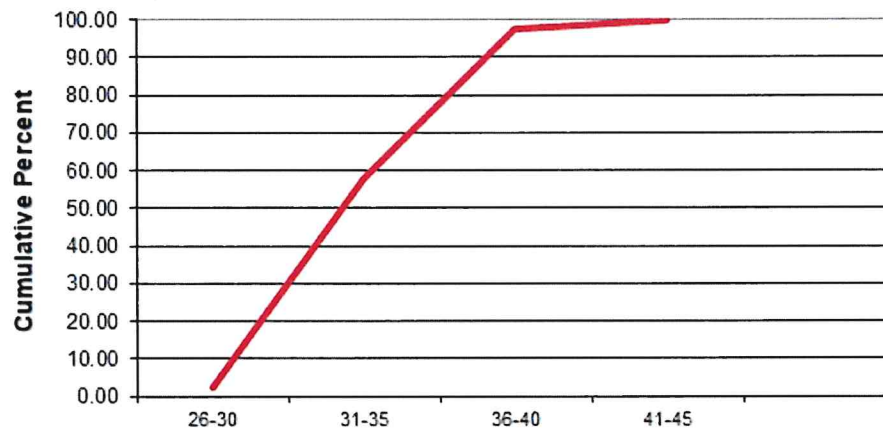
[illegible]

Figure 15



From Site Driveway Looking South (Left)



From Site Driveway Looking North (Right)

Central Avenue Stopping Sight Distance

Figure 16

Gillon Associates
Traffic & Parking Specialists

Crash Date	Crash Time	Crash Severity	Number of Vehicles	Total Nonfatal Injuries	Total Fatal Injuries	Manner of Collision	Vehicle Action Prior to Crash	Vehicle Travel Directions	Most Harmful Events	Vehicle Configuration	Road Surface Condition	Ambient Light	Weather Condition	At Roadway Intersection	Distance from Nearest Roadway Intersection
12-Jan-2016	7:40 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Travelling straight ahead / V2: Slowing or stopped in traffic	V1: Southbound / V2: Southbound	V1: Collision with other movable object / V2: Collision with other movable object	V1: Passenger car / V2: Passenger car	Snow	Dark - lighted roadway	Snow	1719 CENTRAL AVE	
29-Jan-2016	11:14 AM	Property damage only (none injured)	1	0	0	Single vehicle crash	V1: Slowing or stopped in traffic	V1: Westbound	V1: Collision with tree	V1: Single-unit truck (2-axle, 6-tire)	Dry	Daylight	Clear	1421 CENTRAL AVE	
23-Feb-2016	5:23 PM	Property damage only (none injured)	2	0	0	Rear-end	V1: Slowing or stopped in traffic / V2: Travelling straight ahead	V1: Northbound / V2: Northbound	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Passenger car / V2: Passenger car	Dry	Dusk	Clear/Unknown	1155 CENTRAL AVE	
04-Mar-2016	2:40 PM	Property damage only (none injured)	1	0	0	Single vehicle crash	V1: Parked	V1: Northbound	V1: Collision with motor vehicle in traffic	V1: Passenger car	Dry	Daylight	Clear	829 CENTRAL AVE	
04-Apr-2016	12:09 PM	Property damage only (none injured)	1	0	0	Single vehicle crash	V1: Travelling straight ahead	V1: Southbound	V1: Collision with other fixed object (wall, building, tunnel, etc.)	V1: Passenger car	Ice	Daylight	Snow/Sleet hail (freezing rain or drizzle)	259 CENTRAL AVENUE	
04-Apr-2016	1:12 PM	Property damage only (none injured)	1	0	0	Single vehicle crash	V1: Travelling straight ahead	V1: Westbound	V1: Collision with tree	V1: Passenger car	Snow	Daylight	Snow/Sleet hail (freezing rain or drizzle)	89 CENTRAL AVE	
03-Mar-2015	5:49 AM	Property damage only (none injured)	2	0	0	Angle	V1: Travelling straight ahead / V2: Travelling straight ahead	V1: Northbound / V2: Eastbound	V1: Collision with motor vehicle in traffic / V2: Collision with motor vehicle in traffic	V1: Light truck (van, mini-van, panel pickup, sport utility) with only four tires / V2: Passenger car	Dry	Dawn	Cloudy/Cloudy	CENTRAL AVE / CHARLES RIVER ST	

Central Avenue Crash Data

Figure 17

APPENDIX

Signalized Intersections

LCS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

Un-Signalized Intersections

Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

Intersection Levels of Service

Needham
Site Drive at Central Ave.

Projected
Morning Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	42	1310	12	46	331
Future Vol, veh/h	10	42	1310	12	46	331
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	0	0	2
Mvmt Flow	11	44	1379	13	48	348
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1830	1386	0	0	1392	0
Stage 1	1386	-	-	-	-	-
Stage 2	444	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	85	177	-	-	498	-
Stage 1	234	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	75	177	-	-	498	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	234	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	46.3	0		1.6		
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 140		498	-	
HCM Lane V/C Ratio	-	- 0.391		0.097	-	
HCM Control Delay (s)	-	- 46.3		13	0	
HCM Lane LOS	-	- E		B	A	
HCM 95th %tile Q(veh)	-	- 1.7		0.3	-	

Needham
Site Drive at Central Ave.

Projected
Evening Peak Hour

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	47	523	11	42	1084
Future Vol, veh/h	12	47	523	11	42	1084
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	2	0	0	2
Mvmt Flow	13	49	551	12	44	1141

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1786	557	0	0	563	0
Stage 1	557	-	-	-	-	-
Stage 2	1229	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	91	534	-	-	1019	-
Stage 1	578	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	534	-	-	1019	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	246	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.3	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	248	1019
HCM Lane V/C Ratio	-	-	0.25	0.043
HCM Control Delay (s)	-	-	24.3	8.7
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1	0.1

Needham
Central Ave at Charles River Street

Existing 2021
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	128	58	4	173	39	44	330	12	44	926	44
Future Volume (vph)	119	128	58	4	173	39	44	330	12	44	926	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.953			0.976			0.996			0.994	
Flt Protected	0.950				0.999			0.994			0.998	
Satd. Flow (prot)	1703	1708	0	0	1748	0	0	1844	0	0	1876	0
Flt Permitted	0.458				0.996			0.708			0.968	
Satd. Flow (perm)	821	1708	0	0	1742	0	0	1314	0	0	1819	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					14						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			552	
Travel Time (s)		17.9			17.3			12.8			12.5	
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.85	0.85	0.85	0.97	0.97	0.97
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	124	133	60	4	184	41	52	388	14	45	955	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	193	0	0	229	0	0	454	0	0	1045	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		D.Pm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2	6		6			4			4		
Detector Phase	5	2		6	6		4	4		4	8	

Needham
Central Ave at Charles River Street

Existing 2021
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	15.0	40.0		25.0	25.0		35.0	35.0		35.0	35.0	
Total Split (%)	20.0%	53.3%		33.3%	33.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	10.5	35.5		20.5	20.5		30.5	30.5		30.5	30.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5			4.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		Max	Max		None	None		None	None	
Act Effct Green (s)	35.5	35.5			24.6			30.5			30.5	
Actuated g/C Ratio	0.47	0.47			0.33			0.41			0.41	
v/c Ratio	0.25	0.24			0.39			0.85			1.41	
Control Delay	12.7	12.7			22.4			37.9			215.3	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	12.7	12.7			22.4			37.9			215.3	
LOS	B	B			C			D			F	
Approach Delay		12.7			22.4			37.9			215.3	
Approach LOS		B			C			D			F	
Queue Length 50th (ft)	31	51			79			185			~672	
Queue Length 95th (ft)	61	90			147			#321			#902	
Internal Link Dist (ft)		707			680			483			472	
Turn Bay Length (ft)												
Base Capacity (vph)	512	808			581			534			742	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.24	0.24			0.39			0.85			1.41	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 122.9

Intersection LOS: F

Intersection Capacity Utilization 97.8%

ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

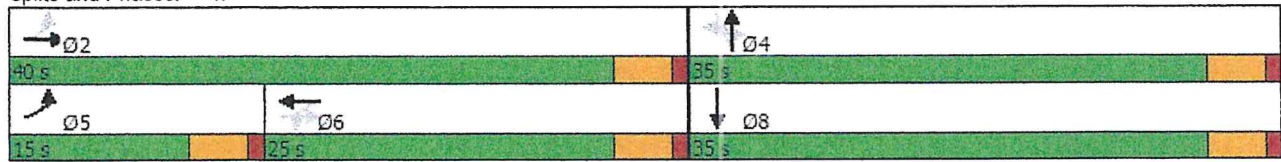
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Needham
Central Ave at Charles River Street

Existing 2021
Evening Peak Hour

Splits and Phases: 4:



Needham
Central Ave at Charles River Street

Base 2028
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	137	62	5	185	42	47	353	12	47	990	47
Future Volume (vph)	128	137	62	5	185	42	47	353	12	47	990	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.953			0.975			0.996			0.994	
Flt Protected	0.950				0.999			0.994			0.998	
Satd. Flow (prot)	1703	1708	0	0	1746	0	0	1844	0	0	1876	0
Flt Permitted	0.438				0.995			0.677			0.965	
Satd. Flow (perm)	785	1708	0	0	1739	0	0	1256	0	0	1814	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					15						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			552	
Travel Time (s)		17.9			17.3			12.8			12.5	
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.85	0.85	0.85	0.97	0.97	0.97
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	133	143	65	5	197	45	55	415	14	48	1021	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	208	0	0	247	0	0	484	0	0	1117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		D.Pm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2	6		6			4			4		
Detector Phase	5	2		6	6		4	4		4	8	

Needham
Central Ave at Charles River Street

Base 2028
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	15.0	40.0		25.0	25.0		35.0	35.0		35.0	35.0	
Total Split (%)	20.0%	53.3%		33.3%	33.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	10.5	35.5		20.5	20.5		30.5	30.5		30.5	30.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5			4.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		Max	Max		None	None		None	None	
Act Effct Green (s)	35.5	35.5			24.5			30.5			30.5	
Actuated g/C Ratio	0.47	0.47			0.33			0.41			0.41	
v/c Ratio	0.28	0.26			0.43			0.95			1.51	
Control Delay	13.0	12.9			23.0			53.5			259.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.0	12.9			23.0			53.5			259.4	
LOS	B	B			C			D			F	
Approach Delay		13.0			23.0			53.5			259.4	
Approach LOS		B			C			D			F	
Queue Length 50th (ft)	34	55			87			211			~746	
Queue Length 95th (ft)	64	97			158			#365			#981	
Internal Link Dist (ft)		707			680			483			472	
Turn Bay Length (ft)												
Base Capacity (vph)	500	808			578			510			740	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.27	0.26			0.43			0.95			1.51	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.51

Intersection Signal Delay: 148.8

Intersection LOS: F

Intersection Capacity Utilization 103.5%

ICU Level of Service G

Analysis Period (min) 15

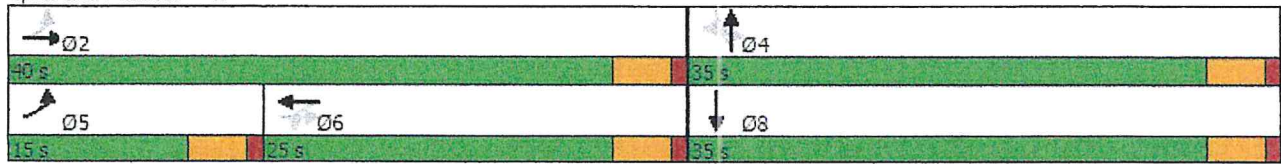
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

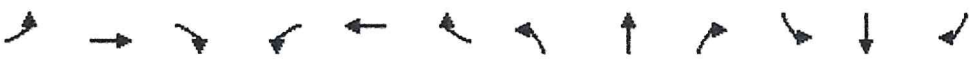
Queue shown is maximum after two cycles.

Splits and Phases: 4:



Needham
Central Ave at Charles River St

Projected w/ Day Care
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	137	62	5	185	43	47	360	12	48	1000	48
Future Volume (vph)	131	137	62	5	185	43	47	360	12	48	1000	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-3%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.953			0.975			0.996			0.994	
Flt Protected	0.950				0.999			0.994			0.998	
Satd. Flow (prot)	1703	1708	0	0	1746	0	0	1844	0	0	1876	0
Flt Permitted	0.436				0.995			0.677			0.963	
Satd. Flow (perm)	782	1708	0	0	1739	0	0	1256	0	0	1810	0
Right Turn on Red			No			Yes			No			Yes
Satd. Flow (RTOR)					15						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		787			760			563			552	
Travel Time (s)		17.9			17.3			12.8			12.5	
Peak Hour Factor	0.96	0.96	0.96	0.94	0.94	0.94	0.85	0.85	0.85	0.97	0.97	0.97
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	136	143	65	5	197	46	55	424	14	49	1031	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	208	0	0	248	0	0	493	0	0	1129	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		D.Pm	NA	
Protected Phases	5	2			6			4			8	
Permitted Phases	2	6		6			4			4		
Detector Phase	5	2		6	6		4	4		4	8	

Needham
Central Ave at Charles River St

Projected w/ Day Care
Evening Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	15.0	40.0		25.0	25.0		35.0	35.0		35.0	35.0	
Total Split (%)	20.0%	53.3%		33.3%	33.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	10.5	35.5		20.5	20.5		30.5	30.5		30.5	30.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	4.5	4.5			4.5			4.5			4.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		Max	Max		None	None		None	None	
Act Effct Green (s)	35.5	35.5			24.4			30.5			30.5	
Actuated g/C Ratio	0.47	0.47			0.33			0.41			0.41	
v/c Ratio	0.29	0.26			0.43			0.97			1.53	
Control Delay	13.1	12.9			23.1			57.2			268.3	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	13.1	12.9			23.1			57.2			268.3	
LOS	B	B			C			E			F	
Approach Delay		13.0			23.1			57.2			268.3	
Approach LOS		B			C			E			F	
Queue Length 50th (ft)	34	55			88			217			~759	
Queue Length 95th (ft)	66	97			159			#374			#995	
Internal Link Dist (ft)		707			680			483			472	
Turn Bay Length (ft)												
Base Capacity (vph)	499	808			577			510			738	
Starvation Cap Reductn	0	0			0			0			0	
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.27	0.26			0.43			0.97			1.53	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.53

Intersection Signal Delay: 154.2

Intersection LOS: F

Intersection Capacity Utilization 104.4%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

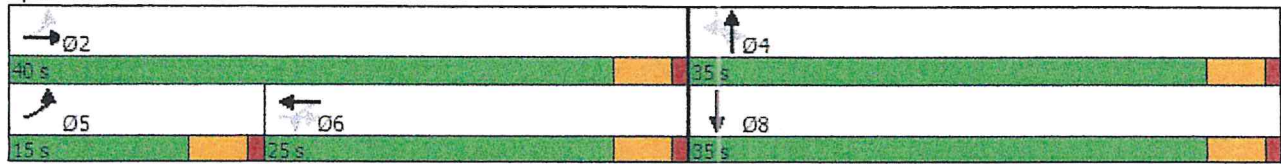
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Needham
Central Ave at Charles River St

Projected w/ Day Care
Evening Peak Hour

Splits and Phases: 4:



GPI Signal Inventory

Intersection: Charles River Road at Central Avenue
 City/Town: Needham
 Date: 7/23/2021
 Recorded By: JWD

Phase 1:
 Phase 2: Charles River Rd EB
 Phase 3:
 Phase 4: Central Ave SB
 Phase 5: Charles River Rd EB LT
 Phase 6: Charles River Road WB
 Phase 7:
 Phase 8: Central Avenue NB
 Phase 9:

Timing

	PHASE								
	1	2	3	4	5	6	7	8	9
MIN		5		5	5	5		5	
EXT		2		3	2	2		3	
MAX 1		10		15	7	10		15	
MAX 2		25		35	15	25		35	
MAX EXT									
YEL		3		3	3	3		3	
RED		2		2	2	2		2	
WALK									
FDW									
RECALL				Soft				Soft	
LOCK		Non-Lock		Non-Lock	Non-Lock	Non-Lock		Non-Lock	

Special Event Programming

Hours of Operation (7days)	Dial	Split	Offset
M-F			
0600-0900		MAX 2	
0900-1500		MAX 1	
1500-1800		MAX 2	
All Other Times & Sat & Sun		MAX 1	

Preemption

Preempt #	Phase Called

Ring Structure

	2		4
5	6		6

Coordination (Splits)

	Phase # - Splits (in seconds)										
Cycle/Split/Offset	1	2	3	4	5	6	7	8	9	Cycle	Offset

Remarks

August 12, 2021

Paul Alpert
Chair of Needham Planning Board,

Members of the Needham Planning Board,

Lee Newman
Director of Planning and Community Development
500 Dedham Avenue
Public Services Administration Building
Suite 118
Needham, MA 02492

RE: Site Review of Proposed Project at 1688 Central Avenue

Dear Chair Alpert and All Planning Board Members,

Attached please find a submission on behalf of neighbors of 1688 Central Avenue for consideration during the Planning Board's site review process of the proposed project at that location. We ask that the Planning Board reject the site plan as the proposal is prohibited by the Needham Zoning bylaws. We ask you to give careful consideration to these comments and enter them, along with their attachments, into the formal record of your meeting should there need to be further proceedings on the matter. Thank you for your consideration.

Yours truly,

Holly Clarke

The Planning Board Must Deny the Application as the Needham Zoning Bylaws Prohibit More than One Non-Residential Use or Building On a Lot in Single Residence A

Section 3 of the Needham Zoning Bylaws sets forth the Schedule of Use Regulations for all zoning districts in the town. Section 3.2.1 enumerates the uses and building configurations permitted in the district at issue here, Single Residence A (as well as other zones). The table set forth in Section 3.2.1 marks as “N” (“**Not Permitted**”) in Single Residence A:

More than one non-residential building or use on a lot where such buildings or uses are not detrimental to each other and are in compliance with all other requirements of this By-Law. (emphasis added).

This provision prohibits more than one non-residential building or use on a lot in this district, and requires the Planning Board to reject the submitted plan because it proposes more than one non-residential building or use.

As presented, the completed project would include two buildings: the daycare facility and the existing barn. Neither qualifies as a residential building.

It is uncontested that the daycare is a commercial building and not a residential building.

The barn was built in 1989 as an accessory to a residential building; however, it will lose that status when the residential home is demolished. While the proponent has been less than forthcoming about his intended use of the barn; without a residence onsite, it clearly is a non-residential building intended for a non-residential use. At the Design Review Board’s March 22 meeting, the proponent stated that the barn would be retained without any renovation, there is no intended use for the time being and it is being retained because it might be “historic” (See Design Review Board Comments).¹ At the Planning Board meeting on July 20, the proponent’s attorney stated that the barn is not going to be leased to the daycare. He thought that, “at the moment, there was an informal understanding that she could use the barn for storage”² (Planning Board Meeting of July 20, 2021 at 1:28). Using part of the barn as storage for a commercial user further confirms the building is non-residential. At the Design Review Board meeting on August 9, 2021, the proponent’s attorney stated that the barn would be used for storage. The bylaw does not include storage as a permitted use for this district. For the purposes of section 3.2, the proposed plan renders the existing 2,835 square foot barn an illegal, non-residential building. The bylaws forbid two such buildings or two such uses on a residential lot and the submitted project must be rejected.

¹ In fact, the barn was erected in 1989, not during any historic era.

² It is not clear why a brand new daycare building with extensive playrooms, indoor and outdoor play spaces, a conference room, and an entire separate storage closet would need access to a big, old two story barn as an additional storage area. For reference, the Temple daycare program next door to the property seems to utilize a common rubbermaid closet for its outdoor storage.

Applying the bylaw to the current proposal leaves the developer free to decide his own priorities. If he chooses to build the proposed daycare facility, he cannot keep the barn or replace it with a second non-residential building on the lot. The barn cannot be permitted as an “accessory” to a commercial building because it would be a second non-residential building which is forbidden by the Needham bylaws. If the proponent wishes to keep the barn, it must either be an accessory to a residential building or be a permitted use and **the only** non-residential use and non-residential building on the lot. The Needham bylaws forbid the current proposal of two non-residential buildings or uses on the one residential lot.

The submitted application must be rejected as the plan violates the Needham Zoning bylaws.

From: [Maggie Abruzese](#)
To: [Planning](#); [Lee Newman](#); [Alexandra Clee](#); psa@westonpatrick.com; mj@jacobs-thomas.com; adamjblock@kw.com; jeannemcknight@comcast.net
Cc: jabruzese@gmail.com
Subject: Authority of the Planning Board to Suspend Hearings
Date: Thursday, August 12, 2021 11:04:35 AM
Attachments: [Authority of Planning Board.pdf](#)

Dear Chair Alpert, members of the Planning Board, Ms. Newman and Ms. Clee,

In answer to the question that Chair Alpert desired to ask the Ethics Commission, attached please find a filing on the authority of the Planning Board to suspend hearings in this matter pending resolution of the ethics questions.

Please reach out if we can be of further assistance in this matter.

Sincerely,

Maggie and Joe Abruzese
30 Bridle Trail Rd

The Authority of the Planning Board to Address Ethical Issues in the 1688 Central Matter

The Planning Board has the authority to take measures to ensure that the proceedings before it are conducted in a manner that gives the appearance of being fair and is in fact fair. [Board of Selectmen of Barnstable v. Alcoholic Beverages Control Commission](#), 373 Mass 708 (1977). The Planning Board review depends on the input of several municipal employees from many different departments and boards. There is no appearance of fairness if Needham employees and officials are put in a position, as they are here, where they may consciously or unconsciously defer in their input to the interests of a conflicted Needham official (Select Board Chair Matthew Borrelli and/or DRB Chair Mark Gluesing) who is their supervisor, colleague, or fellow board member. See *id.* at 712-713. When deliberations proceed in spite of a conflict of interest – even a conflict of interest that does not rise to the level of the criteria of G.L. c. 268A – the procedure is faulty and the result lacks integrity. *Id.* at 714 and 718. This is true regardless of whether the outcome of the proceedings would have been the same if the conflict had not existed. *Id.* Whether actions would be different if there were no conflict is not even part of the inquiry. *Id.* What is to be avoided is even the suspicion of impropriety.

When unethical behavior is not called out, it hurts all of Needham. It was a sad day for the integrity of Needham government when the Chair of the Design Review Board, Mark Gluesing, was permitted to appear before the Planning Board on July 20, 2021 regarding the 1688 Central Project on behalf of his private client. The 1688 Central Project is pending before Mr. Gluesing's own board, the Design Review Board. The Design Review Board is charged with reviewing the matter and advising the Planning Board on it.

The reason for prohibiting even the appearance of a conflict of interest was illustrated quite clearly at this hearing. The appearance of a conflict of interest – that Mr. Gluesing's position on the DRB would influence deliberations in this matter – quickly crossed over into Mr. Gluesing actively drawing on his position of Chair of the DRB to (wrongly) explain the absence of DRB comment to new plans in favor of Mr. Gluesing's private client. Mr. Gluesing (misleadingly) advocated that the Planning Board should infer, from the absence of DRB comment, that the DRB felt the new plans met the concerns the DRB had previously expressed. He talked with the authority of being the Chair of the DRB about what "we" (meaning the DRB) usually do and what, therefore, one can infer based on that. See Meeting Video at 1:48:00: <https://www.needhamchannel.org/2021/07/needham-planning-board-7-20-21/> In fact, there was no comment on the new plans by the DRB because the new plans had not been given to the DRB for review. We believe the Planning Board is wise enough to see the error in Mr. Gluesing's argument, but the comment was heard by not only the Planning Board, but citizens and anyone watching the hearing. The fact that this incident happened illustrates why there is a prophylactic prohibition on even the appearance of conflict of interest.

The actions of Mr. Borrelli and Mr. Gluesing in pursuing the private interests of their client, instead of the public interests of Needham that they were elected and appointed to protect, erode the public's trust in the integrity of Needham's government processes. The Planning Board must insist that there be no appearance of a conflict of interest in proceedings before it in order to safeguard its own position in the public trust.

In Board of Selectmen of Barnstable, the Alcoholic Beverages Control Commission refused to approve liquor licenses granted by the Board of Selectmen because conflict of interest issues plagued the Board of Selectmen's hearing on the licenses. Id. at 712-713. The Board argued that the Commission didn't have authority to use that basis not to approve licenses granted by the Board. Id. The Court held that the Commission did have the authority to insist on integrity in the proceedings. Id. at 716-717. The Court held that it was such a pervasive notion that administrative proceedings should be free from conflicts of interest that the Court did not need to hunt for statutory foundations authorizing the Commission to so insist. Id.

It would defy common sense if a board such as the Planning Board were not able to insist on the integrity of its own proceedings. See id. at 716. Suspending hearings in the matter of 1688 Central until the ethical matters can be resolved appropriately ensures that decisions of the Planning Board are reached fairly and that the proceedings are free from even the appearance of impropriety.

For these reasons, and for the reasons set forth in our prior filings, the Planning Board can and must continue all hearings in this matter until such time as the ethical issues are definitively resolved.

Sincerely,

Maggie and Joe Abruzese
30 Bridle Trail Rd, Needham

This draft Agenda is for PB Use Only

**NEEDHAM
ZONING BOARD OF APPEALS
AGENDA**

**MONDAY, August 19, 2021 - 7:30PM
Zoom Meeting ID Number: 869-6475-7241**

**To view and participate in this virtual meeting on your computer, at the above date and time, go to www.zoom.us, click “Join a Meeting” and enter the Meeting ID: 869-6475-7241
Or join the meeting at link: <https://us02web.zoom.us/j/86964757241>**

AGENDA

- | | |
|-------------------|--|
| Minutes | Review and approve Minutes from July 15, 2021 meeting. |
| Case #1 – 7:30PM | 83 Rolling Lane –Matthew Stutz and Flavia Montanari, applicants, have made application to the Board of Appeals for a Special Permit under Sections 6.11.3(b), 7.5.2 and any other applicable Sections of the By-Law to allow the construction of retaining walls in excess of four feet in height within the side yard setback of the property. The property is located at 83 Rolling Lane, Needham, MA in the Single Residence A (SRA) District.. |
| Case #2 – 7:30 PM | 350 Cedar Street –ATC Watertown LLC, applicant, has made application to the Board of Appeals for a Special Permit Amendment under Sections 6.7.7 (b), 7.5.2 and any other applicable Sections of the By-Law to allow for the replacement of 100kW diesel backup generator with 300kW diesel backup generator on a 7’ x 27’ concrete pad with enclosure to match existing generators on site. The property is located at 350 Cedar Street, Needham, MA in the Single Residence B (SRB) District. |

Next Meeting: Thursday, September 16, 2021, 7:30pm

Daniel D. Klasnick

Licensed in Massachusetts, New Hampshire and New York

Desk: (781) 873-0021 - Mobile: (774) 249-2814

dklasnick@dkl-legal.com

July 26, 2021

Zoning Board of Appeals
Town Clerk's Office
Needham Town Hall
1471 Highland Avenue
Needham, MA 02492

**Re: Application for Special Permit – ATC Watertown LLC
Proposed Replacement Backup Generator to be located at
350 Cedar Street, Needham, MA**

Dear Board Members:

Enclosed please find an Application for Special Permit (“Application”) for the installation of a replacement backup generator to be located at 350 Cedar Street.

In accordance with the Application requirements, seven (7) copies are enclosed of the following:

- Application for Special Permit;
- Brief in Support of Application;
- Project Plans;
- Check for the application fee of \$500.00 payable to the Town of Needham; and
- Supporting Documentation.

The applicant has also provided an electronic copy of the application and all submittal materials to dcollins@needhamma.gov.

The Applicant would be happy to provide any additional information that you may require and would appreciate reasonable notice of any additional information you require in time to provide such information for the public hearing.

Should you require any additional information, please don't hesitate to contact me at (781) 873-0021. Thank you very much for your cooperation.

Very truly yours,

DUVAL & KLASNICK LLC



By: Daniel D. Klasnick
Attorney at Law



ZBA Application For Hearing

Applicants must consult with the Building Inspector prior to filing this Application. Failure to do so will delay the scheduling of the hearing.

Applicant Information

Applicant Name	ATC Watertown LLC			Date:
Applicant Address	10 Presidential Way, Woburn, MA 01801			
Phone	(781) 873-0021	email	dklasnick@dk-legal.com	
Applicant is ☒ Owner; ☐ Tenant; ☐ Purchaser; ☐ Other _____				
If not the owner, a letter from the owner certifying authorization to apply must be included				
Representative Name	Daniel D. Klasnick			
Address	P.O. Box 254, Boxford, MA 01921			
Phone	(781) 873-0021	email	dklasnick@dk-legal.com	
Representative is ☒ Attorney; ☐ Contractor; ☐ Architect; ☐ Other _____				
Contact ☐ Me ☒ Representative in connection with this application.				

Subject Property Information

Property Address	350 Cedar Street		
Map/Parcel Number	227.0/0001/00000	Zone of Property	SRB
Is property within 100 feet of wetlands, 200 feet of stream or in flood Plain? ☐ Yes ☒ No			
Is property ☐ Residential or ☒ Commercial			
If residential renovation, will renovation constitute "new construction"? ☐ Yes ☐ No			
If commercial, does the number of parking spaces meet the By-Law requirement? ☐ Yes ☐ No N/A			
Do the spaces meet design requirements? ☐ Yes ☐ No N/A			
Application Type (select one): ☒ Special Permit ☐ Variance ☐ Comprehensive Permit ☒ Amendment ☐ Appeal Building Inspector Decision			



ZBA Application For Hearing

Existing Conditions: Communications Facility and guyed tower with 100kW backup diesel generator. There are also additional existing backup generators located at the property.

Statement of Relief Sought: Special Permit for replacement of 100kW diesel backup generator with 300kW diesel backup generator on 7' x 27' concrete pad with enclosure to match existing generators on site.

Applicable Section(s) of the Zoning By-Law: Special permit under Section 6.7.7(b), 7.5.2 and any other applicable sections of the By-Law.

If application under Zoning Section 1.4 above, list non-conformities:

	Existing Conditions	Proposed Conditions
Use	N/A	N/A
# Dwelling Units	N/A	N/A
Lot Area (square feet)	N/A	N/A
Front Setback (feet)	N/A	N/A
Rear Setback (feet)	N/A	N/A
Left Setback (feet)	N/A	N/A
Right Setback (feet)	N/A	N/A
Frontage (feet)	N/A	N/A
Lot Coverage (%)	N/A	N/A
FAR (Floor area divided by the lot area)	N/A	N/A
Numbers must match those on the certified plot plan and supporting materials		



ZBA Application For Hearing

Date Structure Constructed including additions:

Date Lot was created:

Submission Materials	Provided
Certified Signed Plot Plan of Existing and Proposed Conditions <i>(Required)</i>	✓
Application Fee, check made payable to the Town of Needham Check holders name, address, and phone number to appear on check and in the Memo line state: "ZBA Fee – Address of Subject Property" <i>(Required)</i>	✓
If applicant is not the owner, a letter from the owner certifying authorization <i>(Required)</i>	N/A
An electronic copy of the application and all submitted materials <i>(Required)</i>	✓
Elevations of Proposed Conditions <i>(when necessary)</i>	
Floor Plans of Proposed Conditions <i>(when necessary)</i>	

Feel free to attach any additional information relative to the application.
Additional information may be requested by the Board at any time during the
application or hearing process.



I hereby request a hearing before the Needham Zoning Board of Appeals. I have
reviewed the Board Rules and instructions.

I certify that I have consulted with the Building Inspector July 21, 2021
date of consult

Date: July 26, 2021 Applicant Signature

*An application must be submitted to the Town Clerk's Office at
townclerk@needhamma.gov and the ZBA Office at dcollins@needhamma.gov*



ZBA Application Fees

TYPE OF APPLICATION	SINGLE FAMILY RESIDENTIAL	MULTI-DWELLING RESIDENTIAL	COMMERCIAL
Appeal of the Building Inspector's Decision	\$200	\$200	\$200
Amendment, Modification, Transfer	\$200	\$200	\$200
Special Permit	\$200	\$500	\$500
Variance	\$200	\$200	\$200
Comprehensive Permit		\$2,000 + \$100/unit	

In addition to the above stated filing fees, the applicant shall be responsible to pay the cost of publishing public notices in the *Needham Times*.

Staff will prepare the notice and arrange for two publications in the *Needham Times*. The newspaper will invoice the applicant directly.

TOWN OF NEEDHAM

BRIEF IN SUPPORT OF APPLICATION FOR SPECIAL PERMIT

APPLICANT: ATC Watertown LLC

SITE ADDRESS: 350 Cedar Street

ASSESSOR'S LOT I.D.: Map 227.0, Block 0001, Lot 0000.0

ZONING DISTRICT: SRB

This Brief is submitted in support of an application for a special permit and amendment thereto, with all rights reserved, pursuant to the Town of Needham Zoning By-laws for the installation of a 300kW generator on a 7' x 27' concrete pad to match the existing generators on site on the property owned by ATC Watertown LLC to the Town of Needham, Zoning Board of Appeals ("Board").

ZONING DETERMINATION

ATC received a determination from the Town of Needham Building Department on July 21, 2021 that its proposal to install a replacement diesel back-up generator in the SRB Zoning District requires a special permit under Section 6.7.7 of the Needham Zoning By-laws as follows:

6.7.7 Modifications A modification to a wireless communication facility shall be considered equivalent to an application for a new wireless communication facility and will require a special permit when the following events apply:

(b) The applicant wants to add any equipment or additional height not specified in the original design filing.

APPLICANT'S INTEREST IN THE PROPERTY

ATC Watertown LLC ("ATC") owns the property and tower located at 350 Cedar Street.

See Exhibit 1, Deed (Book 34151, Page 545)

PROJECT SUMMARY

ATC proposes to install a 300Kw Generac SD300 diesel powered emergency generator that will be located on a proposed concrete pad (7' x 27') on the property. This proposal is an upgrade to an existing 100kW generator that is currently installed on the property. Because of increased HVAC loading in Building 4, the existing 100Kw generator is not sufficient to provide backup power. Upon the installation of the 300Kw generator the 100Kw will be removed from the property. The generator will be integrated into the existing electrical infrastructure at the site. The generator will be used for back-up power only in the event of an emergency. The diesel fuel tank is an approximately 1592-gallon sub-based fuel tank, UL 142 listed and doubled walled for containment. The approximate tank dimensions are 24.5'L x 3'W x 3'-6"H. The proposed tank will sit on the concrete slab.

The proposed generator has been designed to minimize the effect on the sound environment and will be placed in a sound attenuated enclosure. Most of the time, the generator will make no sound. The generator will be tested approximately one time per week for maintenance for a period of approximately 30 minutes. As will be supported by the Environmental Sound Assessment, the generator has three sources of sound. The primary source is the release of combustion exhaust, which will be vented after passing through an exhaust silencer. The second source of sound is the engine. The engine will operate within what Generac terms a Sound Attenuated Enclosure. This enclosure is designed to provide sound reduction to the equipment sound. The third source of sound is from the cooling air moving through the radiator and vented through the enclosure. Within the enclosure are sound blocking and sound absorptive materials that are designed to allow the free flow of air within the unit while removing the sound.

The proposed generator is highly mitigated for sound, so it is expected to emit sound levels that correspond to a much smaller unit.

The Environmental Sound Assessment supports that the potential sound from the proposed generator will comply with all federal, state and local requirements with respect to sound.

ATC will maintain the emergency generator. The emergency generator will be installed in an acoustically treated enclosure. The emergency generator will only be used for back-up power and only in the event of an emergency.

See Exhibit 2, Plans

See Exhibit 3, Generator Specifications

See Exhibit 4, Environmental Sound Assessment

SATISFACTION OF SPECIAL PERMIT STANDARDS

Pursuant to Section 7.5.2 of the Needham Zoning By-laws, the Board of Appeals may hear and decide an application for a special permit. Prior to granting a special permit, the Board of Appeals shall make a finding and determination that the proposed use, building, structure, off-street parking or loading, modification of dimensional standards, screening or landscaping, or other activity, which is the subject of the application for the special permit:

(a) complies with such criteria or standards as may be set forth in the section of this By-Law which refers to the granting of the requested special permit;

Pursuant to Section 6.7.7, a special permit in compliance with the decision criteria contained in Section 6.7.5 is required when the applicant wants to add any equipment not specified in the original design filing for a wireless communications facility. Where the proposed replacement generator was not specified in the original design filing, the Applicant is requesting a special permit.

(b) is consistent with: 1) the general purposes of this By-Law as set forth in subparagraph 1.1, and 2) the more specific objectives and purposes applicable to the requested special permit which may be set forth elsewhere in this By-Law, such as, but not limited to, those at the beginning of the various sections;

The replacement generator shall be installed, erected, maintained and used in compliance with all applicable federal laws, state laws, town bylaws and regulations.

(c) is designed in a manner that is compatible with the existing natural features of the site and is compatible with the characteristics of the surrounding area.

The 300Kw diesel backup generator will be installed on a 7' x 27' concrete pad with enclosure to match the existing onsite backup generators.

Where the Board of Appeals determines that one or more of the following objectives are applicable to the particular application for a special permit, the Board of Appeals shall make a finding and determination that the objective will be met:

(d) the circulation patterns for motor vehicles and pedestrians which would result from the use or structure which is the subject of the special permit will not result in conditions that unnecessarily add to traffic congestion or the potential for traffic accidents on the site or in the surrounding area; and

There will be no additional traffic or impact on the circulation of motor vehicles or pedestrians resulting from the installation of the replacement generator.

(e) the proposed use, structure or activity will not constitute a demonstrable adverse impact on the surrounding area resulting from: 1) excessive noise, level of

illumination, glare, dust, smoke, or vibration which are higher than levels now experienced from uses permitted in the surrounding area, 2) emission or discharge of noxious or hazardous materials or substances, or 3) pollution of water ways or ground water.

There will be no hazardous waste discharged on site. Further, the diesel fuel will be fully contained. The Applicant submits that the proposed generator will meet all local bylaw, state and federal standards for sound and has been designed to minimize its effect on the sound environment as described above. The backup generator will meet or exceed air quality standards promulgated by the state Department of Environmental Protection.

In today's competitive business environment, it is essential that there is the necessary infrastructure in a community to ensure access to reliable services. The direct and indirect financial benefits to the Town of Needham to provide reliable services and infrastructure is indicative of the very nature of the use by the public and private sector.

Unlike many other proposed uses, the proposed replacement of the backup generator will not adversely impact the Town, for unlike a new business or residence, ATC's proposed use is passive. There will be no additional burden on municipal services, such as sewers, police, or fire protection. No additional foot traffic or vehicle traffic will occur. In short, this modification to the existing wireless and broadcast communication facility may be implemented without increasing demands upon municipal services.

The replacement of the backup generator at 350 Cedar Street will ensure continuing operation of ATC's facility during power outages.

In an area of Town that is already recognized as a suitable location for this facility, this proposal protects aesthetics, encourages use of property that is in the area currently utilized for non-municipal utilities and purposes and minimizes the adverse impacts on the residents of Needham.

ATC operates in compliance with all federal and state regulations, standards and mandates. The proposed installation of the replacement backup generator will be designed in compliance with all applicable town bylaws, federal and state regulations, including the state building code and any applicable fuel storage license.

The replacement backup generator has been sited and designed in a manner that minimizes its visibility and will not be injurious, obnoxious, offensive, dangerous, or a nuisance to the community or the neighborhood through noise, vibration, concussion, odors, fumes, smoke, gases, dust, harmful fluids or substances, danger of fire or explosion or other objectionable feature detrimental to the community or neighborhood health, safety, convenience, morals or welfare. The installation of the replacement backup generator will result in no net increase in sound levels.

FINDING AND DETERMINATION

Prior to granting the special permit, pursuant to Section 7.5.2.1, the Applicant respectfully requests that Board make a finding and determination that the proposed installation of the replacement backup generator complies with all the special permit standards set forth in the By-laws, is consistent with the general purposes and objectives of the By-Laws and is compatible with the characteristics of the surrounding area.

CONCLUSION

The proposed installation of the backup generator meets all of the standards for a special permit pursuant to the Massachusetts General Laws Chapter 40A and the Town of Needham Zoning By-laws. The installation of the replacement backup generator will have minimal visual impact on the community and will comply with all applicable laws and regulations resulting in no net increase in sound levels.

Further, the Federal Middle Class Tax Relief and Job Creation Act of 2012 (also known as the “Spectrum Act”) provides that “a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.” The Federal Communications Commission has specifically found that the Spectrum Act includes the deployment of backup generators. The proposed replacement generator therefore qualifies as an eligible facilities request under the Spectrum Act.

Based upon all the above reasons, ATC therefore respectfully requests that the Board grant its application for a special permit and amendment thereto to install the replacement backup generator.

Exhibit 1
“Property Deed”

Prepared by and Return to:

American Tower
10 Presidential Way
Woburn, MA 01801
Attn: Land Management/Richard P. Palermo, Esq.
ATC Site No: 282685 and 282729
ATC Site Name: BOSTON T1 MA/BOSTON T2 MA

Assessor's Parcel No(s): 000227-000000-000001

Send Tax Bill to:

American Tower
Attention: Property Tax
P.O. Box 723597
Atlanta, GA 31139

See Reference Book 34151 Page 645
Address: 350 Cedar Street, MA
Neaham Heights 01494
COMMONWEALTH OF MASSACHUSETTS

COUNTY OF NORFOLK

GENERAL WARRANTY DEED

THIS DEED is made on this 09 day of December, 2017, by and between RTM Boston Holdco, LLC, a Delaware limited liability company (hereinafter referred to as "Grantor") and ATC Watertown LLC, a Delaware limited liability company (herein after referred to as "Grantee").
Grantee address: 10 Presidential Way, Woburn MA 01801
NOW THEREFORE, the parties agree as follows:

THAT GRANTOR, for and in consideration of the sum of Ten and No/100 Dollars (\$10.00) paid by Grantee to Grantor and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, does hereby grant, bargain, deed and convey to the said GRANTEE with warranty covenants, all that tract or parcel of land lying and being in Norfolk County, Massachusetts, and being more particularly described on Exhibit A attached hereto and by this reference made a part

27009223

hereon (the "**Property**"), together with, to the extent applicable, any of Grantor's right, title and interest in the telecommunications tower and other related improvements situated upon the Property and any fixtures, systems and facilities owned by the Grantor which serve the same and are located on the Property.

Grantor, for itself and its heirs, hereby covenants with Grantee, its heirs and assigns, that Grantor is lawfully seized in fee simple of the above described property; that it has a good right to convey, that the property is free from all encumbrances; that the Grantors and its heirs, and all persons acquiring any interest in the property granted, through or for Grantor, will, on demand of Grantee, or its heirs or assigns, and at the expense of Grantee, its heirs or assigns, execute and instrument necessary for the further assurance of the title to the property that may be reasonably required; and that Grantor and its heirs will forever warrant and defend all of the Property so granted to Grantee, its heirs, against every person lawfully claiming the same or any part thereof.

[SIGNATURE ACKNOWLEDGEMENTS TO FOLLOW]

IN WITNESS WHEREOF, the Grantor has executed this Deed under seal as of the day and year set forth below.

GRANTOR:

RTM Boston Holdco, LLC
a Delaware limited liability company

Signature: [Signature]
Print Name: Shawn Lanier
Title: Vice President - Legal
Date: 12-29-17

WITNESS:

Signature: _____
Print Name: _____
Signature: _____
Print Name: _____

WITNESS AND ACKNOWLEDGEMENT

Commonwealth of Massachusetts

County of Middlesex

On this 29 day of Dec, 2016, before me, Donna Long
the undersigned Notary Public, personally appeared Shawn Lanier personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument, the person(s) or the entity upon which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]
Notary Public
Print Name: _____
My commission expires: _____

[SEAL]

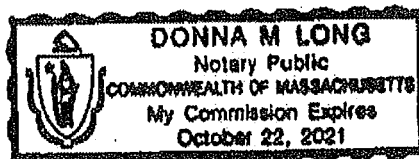


Exhibit 2

“Plans”

CONSTRUCTION DRAWINGS

SITE NAME:

BOSTON T1 MA (NEEDHAM HEIGHTS) - BUILDING #4

SCOPE OF WORK:

ADD NEW HOUSE GENERATOR

SITE NUMBER:

282685

SITE ADDRESS:

**350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)
N42°18'37.19", W71°14'11.69"**

INDEX OF SHEETS		
NO.	SHEET TITLE	REV
T-1	TITLE SHEET	2
C-1	OVERALL SITE LAYOUT	2
C-2	EXISTING BUILDING 4 LAYOUT	2
C-3	PROPOSED BUILDING 4 LAYOUT	2
C-4	EXISTING ELECTRICAL ROOM LAYOUT	2
C-5	PROPOSED ELECTRICAL ROOM LAYOUT	2
S-1	CONCRETE SLAB DETAIL	2
S-2	CONCRETE PAD STUB UP LOCATION	2
S-3	UNDERGROUND CONDUIT(S) TRENCH DETAIL	2
E-1	ELECTRICAL NOTES	2
E-2	EXISTING ONE LINE-DIAGRAMS	2
E-3	PROPOSED ONE LINE-DIAGRAMS	2
E-4	EXISTING & PROP. ELECTRICAL ROOM ROUTING	2
E-5	PROPOSED ELECTRICAL ROOM ROUTING	2
E-6	EXISTING PANEL SCHEDULES	2

[illegible]

PROJECT TEAM

CONSTRUCTION MANAGER:

NAME	AMERICAN TOWER CORPORATION
CONTACT	JEFFREY D. JOHNSON, P.E.
PHONE	(972) 999-8900
EMAIL	JEFFREY.JOHNSON@AMERICANTOWER.COM

ENGINEERING FIRM PROJECT MANAGER:

NAME	TOWER ENGINEERING PROFESSIONALS, INC.
ADDRESS	326 TRYON ROAD
CITY, STATE, ZIP	RALEIGH, NC 27603
CONTACT	MARK S. QUAKENBUSH, P.E.
PHONE	(919) 703-4135
EMAIL	MQUAKENBUSH@TEPGROUP.NET

ENGINEER OF RECORD:

NAME	TOWER ENGINEERING PROFESSIONALS, INC.
ADDRESS	326 TRYON ROAD
CITY, STATE, ZIP	RALEIGH, NC 27603
CONTACT	GRAHAM M. ANDRES, P.E.
PHONE	(919) 661-6351

PLANS PREPARED FOR:



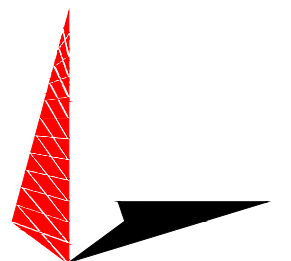
3500 REGENCY PKWY, STE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**

350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



June 17th, 2021

2	06-17-21	CONSTRUCTION
1	06-14-21	PRELIMINARY
0	05-26-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: TDL	CHECKED BY: ---
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SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1

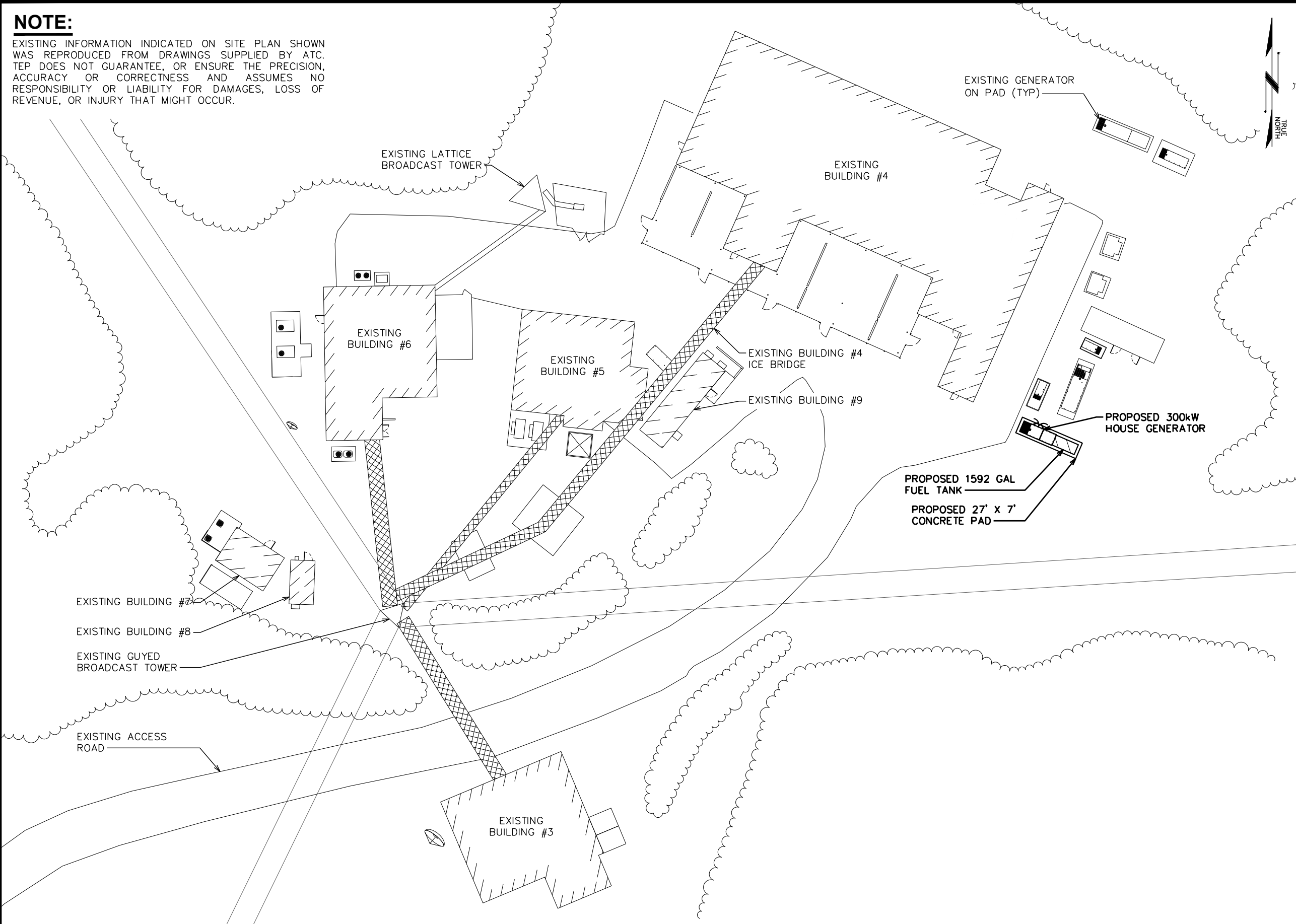
REVISION:

2

TEP#: 65105.203567

NOTE:

EXISTING INFORMATION INDICATED ON SITE PLAN SHOWN WAS REPRODUCED FROM DRAWINGS SUPPLIED BY ATC. TEP DOES NOT GUARANTEE, OR ENSURE THE PRECISION, ACCURACY OR CORRECTNESS AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DAMAGES, LOSS OF REVENUE, OR INJURY THAT MIGHT OCCUR.



OVERALL SITE LAYOUT

SCALE: 1" = 40'



PLANS PREPARED FOR:

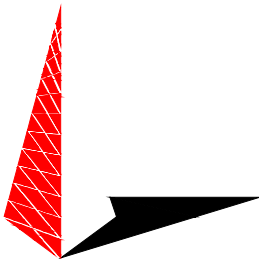


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



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326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

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DRAWN BY: TDL CHECKED BY: MSG

SHEET TITLE:

**OVERALL SITE
LAYOUT**

SHEET NUMBER:

C-1

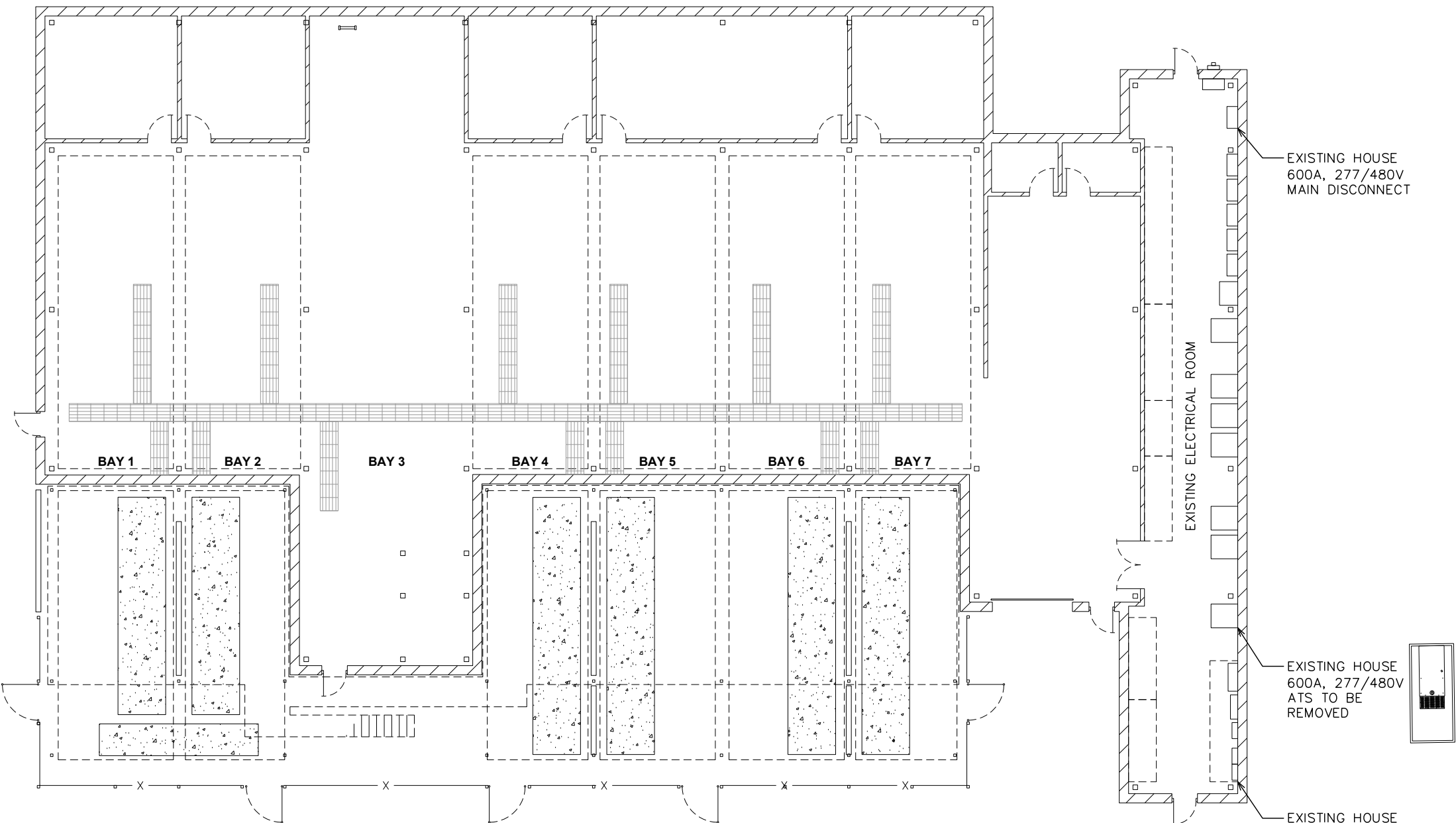
REVISION:

2

TEP#: 65105.203567

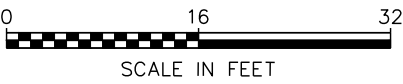
NOTE:

WFXT MOVED IN TO BAY 6 IN PHASE 1. SEE PLANS
BY TEP DATED SEPTEMBER 4, 2018 FOR DETAILS.



EXISTING BUILDING 4 LAYOUT

SCALE: 1/16" = 1'-0"



PLANS PREPARED FOR:

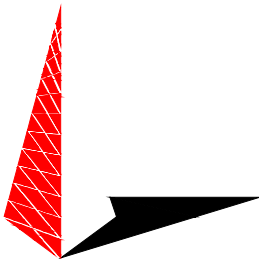


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



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326 TRYON ROAD
RALEIGH, NC 27603-3530
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www.tepgroup.net

SEAL:



June 17th, 2021

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0	05-26-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**EXISTING BUILDING 4
LAYOUT**

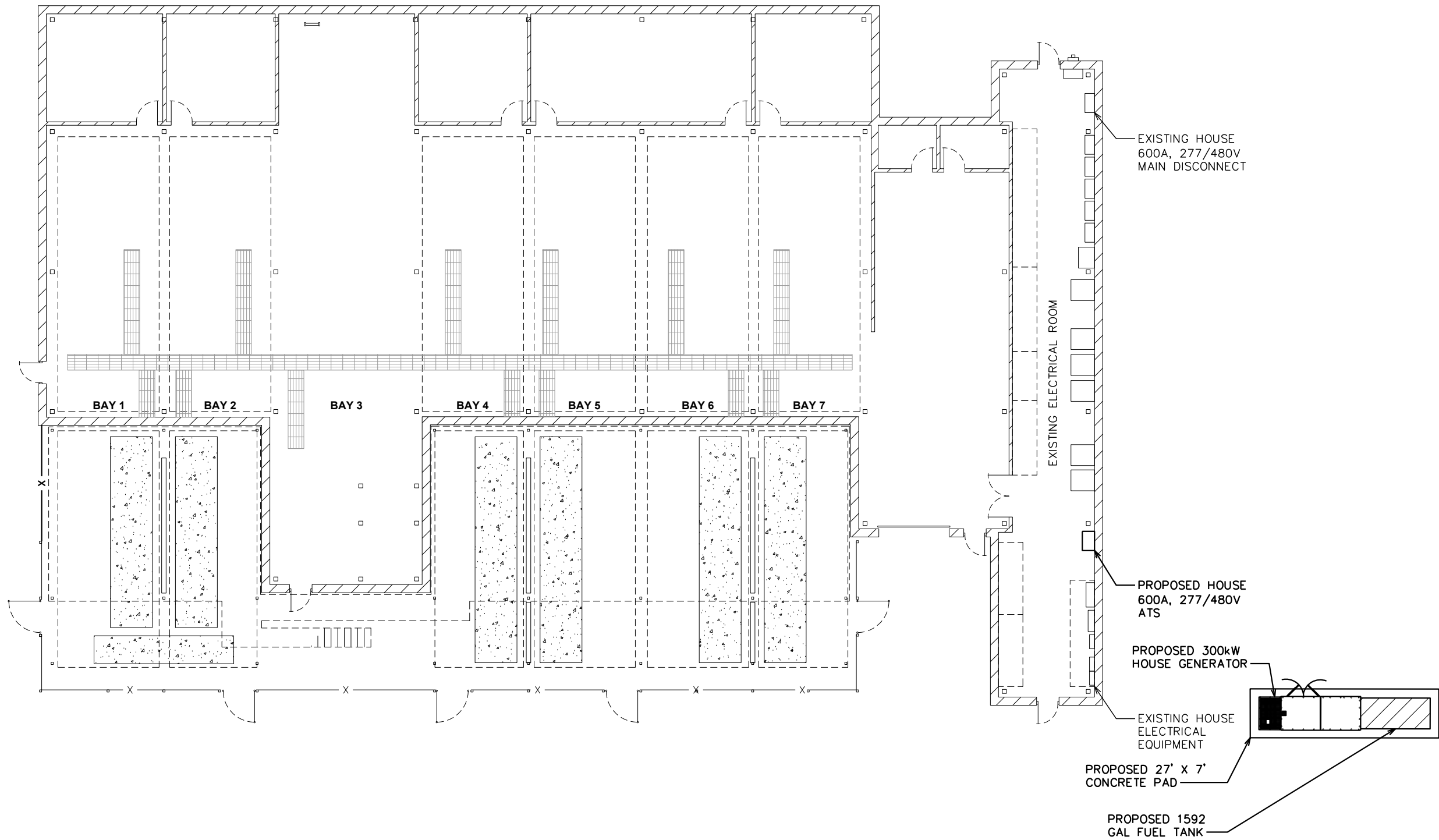
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C-2

REVISION:

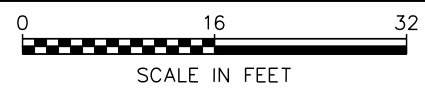
2

TEP#: 65105.203567



PROPOSED BUILDING 4 LAYOUT

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:



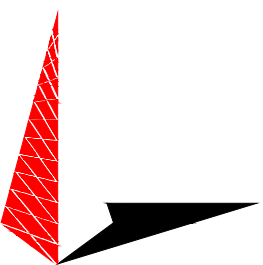
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

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(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**

350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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SEAL:



June 17th, 2021

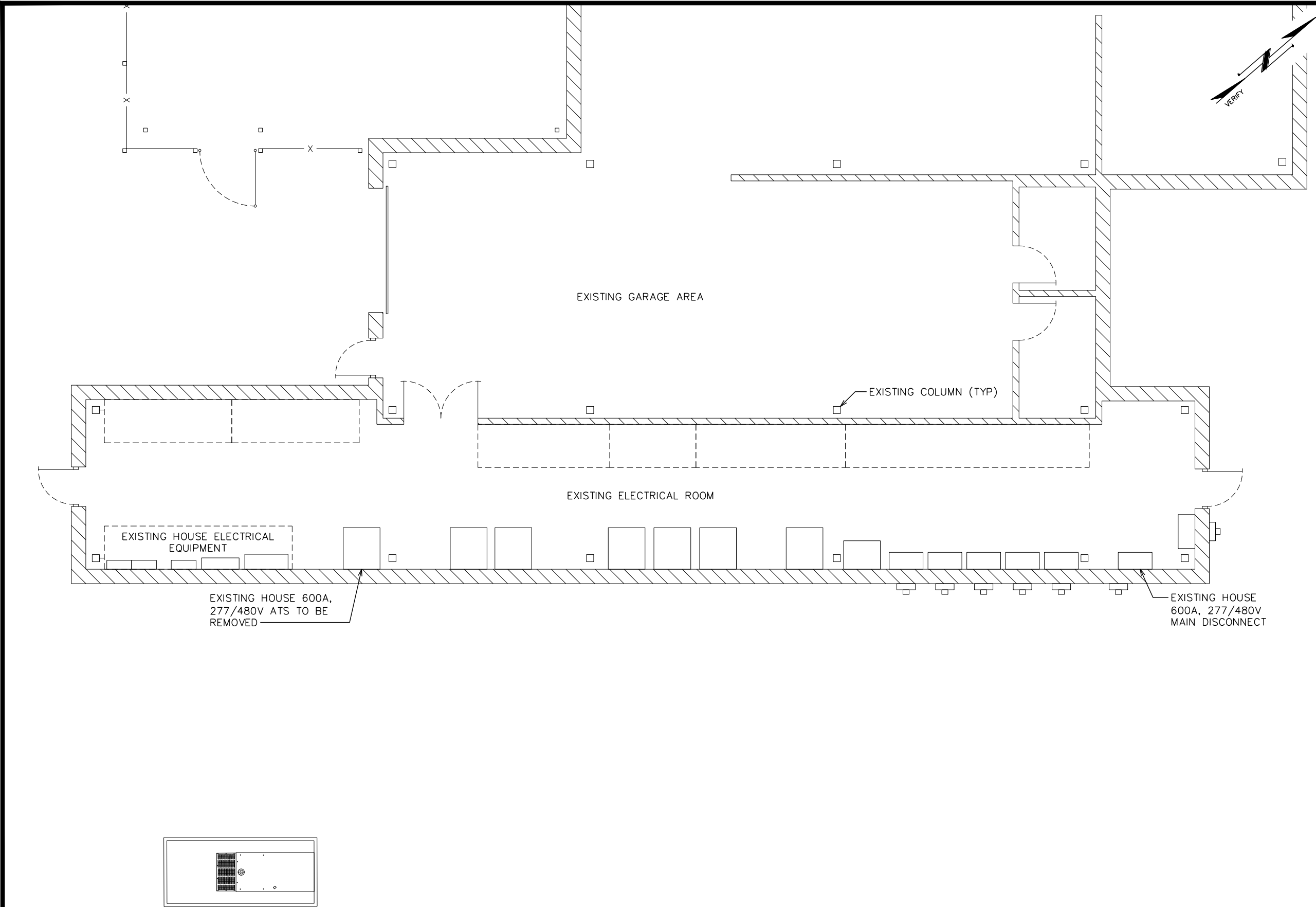
REV	DATE	ISSUED FOR:
2	06-17-21	CONSTRUCTION
1	06-14-21	PRELIMINARY
0	05-26-21	PRELIMINARY

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**PROPOSED
BUILDING 4
LAYOUT**

SHEET NUMBER: C-3	REVISION: 2 TEP#: 65105.203567
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EXISTING ELECTRICAL ROOM LAYOUT

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:

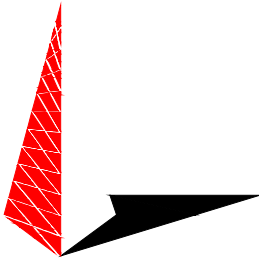


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CARY, NC 27518
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PROJECT INFORMATION:

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BLDG #4 - SITE #: 282685**
350 CEDAR STREET
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PLANS PREPARED BY:



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DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**EXISTING ELECTRICAL
ROOM LAYOUT**

SHEET NUMBER:

C-4

REVISION:

2

TEP#: 65105.203567

EXISTING GARAGE AREA

EXISTING COLUMN (TYP)

EXISTING ELECTRICAL ROOM

EXISTING HOUSE ELECTRICAL EQUIPMENT

PROPOSED HOUSE ATS
600A, 277/480V

EXISTING HOUSE
600A MAIN
DISCONNECT
AND METER

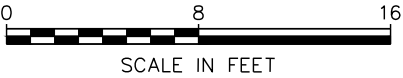
PROPOSED 27' X 7'
CONCRETE PAD

PROPOSED 300kW
HOUSE GENERATOR

PROPOSED 1592 GAL
FUEL TANK

PROPOSED ELECTRICAL ROOM LAYOUT

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:



AMERICAN TOWER CORPORATION

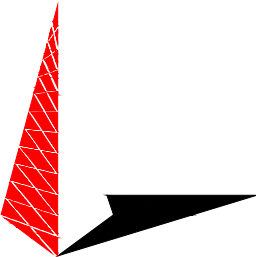
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**

350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSG

SHEET TITLE:

**PROPOSED
ELECTRICAL ROOM
LAYOUT**

SHEET NUMBER:

C-5

REVISION:

2

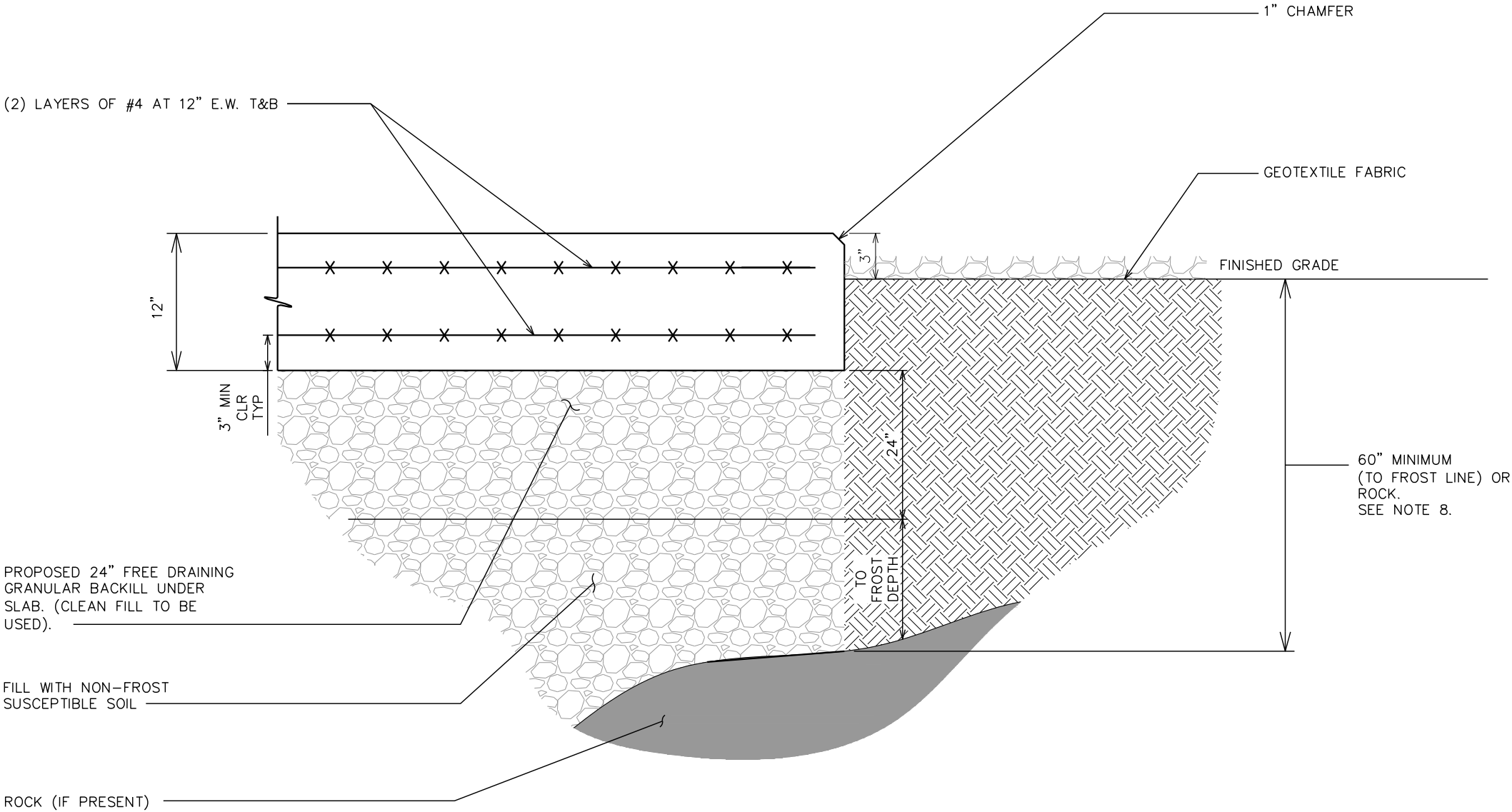
TEP#: 65105.203567

FOUNDATION NOTES:

- 1. FOUNDATION DESIGN BASED ON 2,000 PSF SOIL BEARING CAPACITY.
- 2. CONCRETE SHALL BE 4,000 PSI.
- 3. REINFORCING STEEL Fy = 60,000 PSI
- 4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.
- 5. SURFACE OF FINISHED SLAB SHALL BE LEVEL AND FLAT WITHIN ¼"
- 6. CONTRACTOR SHALL VERIFY WITH MANUFACTURER ACTUAL DIMENSIONS OF EQUIPMENT PRIOR TO LAYING OUT FOUNDATION.
- 7. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 318-11.
- 8. IF ROCK IS FOUND ABOVE MINIMUM FROST DPETH REQUIREMENT, CONTRACTOR MAY POUR CONCRETE DIRECTLY ONTO ROCK.

SPECIAL INSPECTOR NOTES:

- 1. THE CONTRACTOR WILL RETAIN A THIRD PARTY SPECIAL INSPECTOR TO PERFORM THE FOLLOWING SPECIAL INSPECTIONS FOR THIS PROJECT:
 - A. THE SPECIAL INSPECTOR WILL VERIFY THE SOIL BEARING OF 2,000 PSF OR NOTIFY TEP OF DEFICIENCIES; MONITOR BACKFILL & COMPACTION UNDERNEATH SLAB.
 - B. THE SPECIAL INSPECTOR WILL CONFIRM THE FORM WORK AND REINFORCING FOR THE PAD MATCHES THE DESIGN SHOWN IN THE PLAN PRIOR TO THE CONCRETE POUR; ANY DEFICIENCIES MUST BE COMMUNICATED TO ATC, BCM, AND TEP.
 - C. THE SPECIAL INSPECTOR WILL COLLECT SAMPLES (CYLINDERS) OF THE CONCRETE ON SITE, PERFORM BREAK TESTS ON THOSE SAMPLES, AND PROVIDE ATC WITH A REPORT OF THE BREAK TEST STRENGTH TO CONFIRM SLAB MEETS THE 4000 PSI REQUIREMENT.



CONCRETE SLAB DETAIL

SCALE: 1" = 1'



PLANS PREPARED FOR:

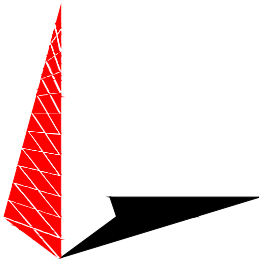


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



June 17th, 2021

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REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**CONCRETE SLAB
DETAIL**

SHEET NUMBER:

S-1

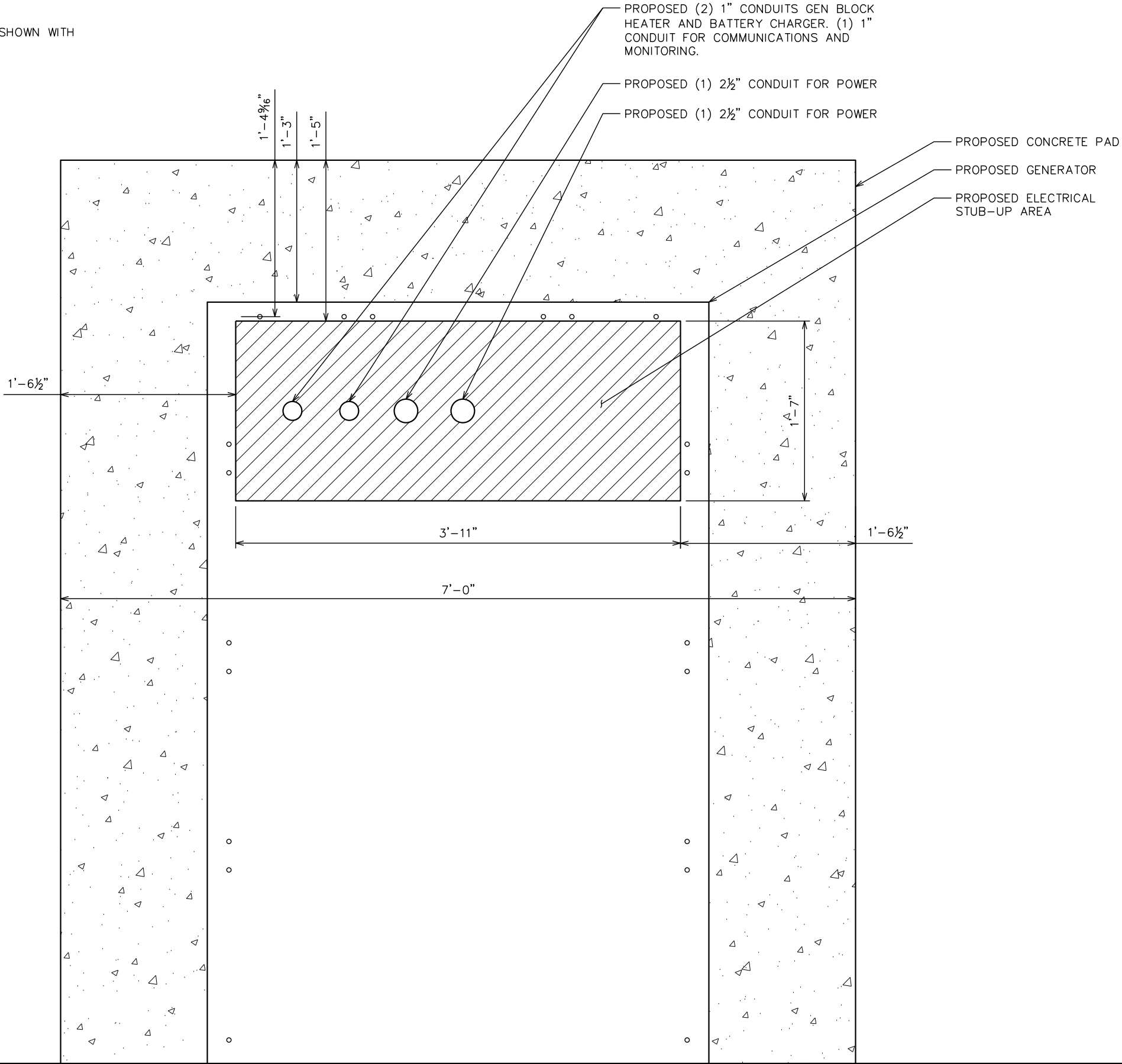
REVISION:

2

TEP#: 65105.203567

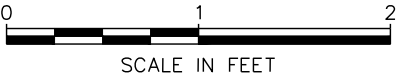
NOTE:

CONTRACTOR TO CONFIRM ALL DIMENSIONS SHOWN WITH
FINAL GENERATOR TANK DESIGN DRAWINGS



CONCRETE PAD STUB UP LOCATION

SCALE: 1" = 1'



PLANS PREPARED FOR:

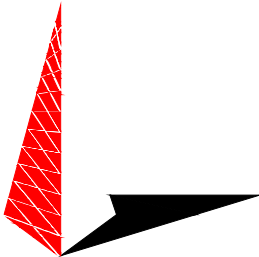


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

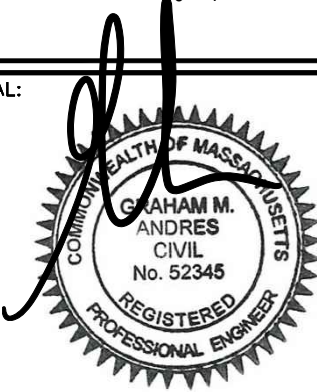
**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



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326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



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REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**CONCRETE SLAB
STUB UP LOCATION**

SHEET NUMBER:

S-2

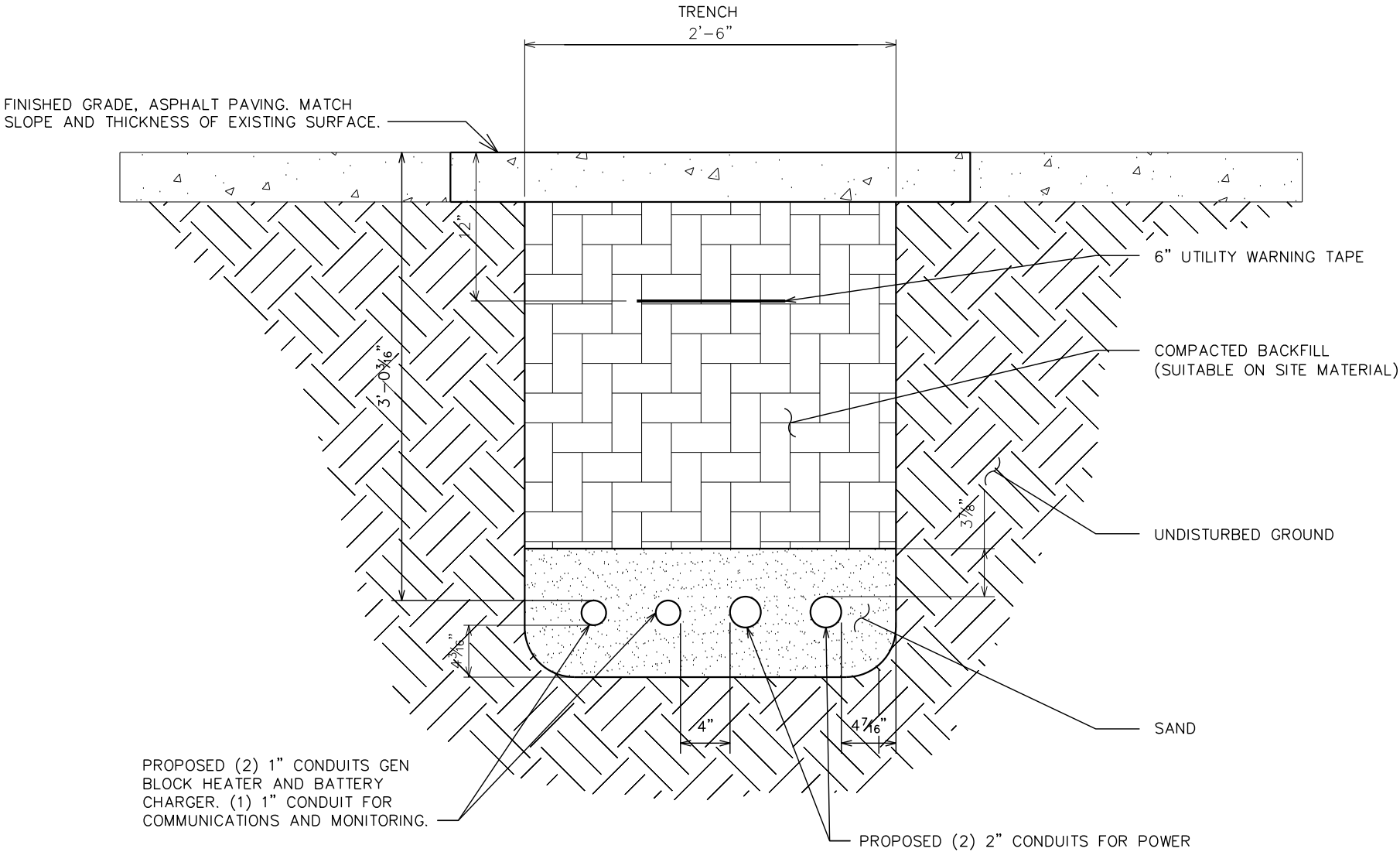
REVISION:

2

TEP#: 65105.203567

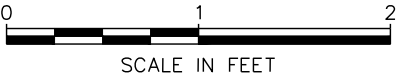
NOTE:

- 1. ACTUAL SEPARATION OF CONDUITS TO BE DETERMINED BY SITE SPECIFIC REQUIREMENTS.
- 2. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
- 3. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLES, EQUIPMENT, ETC.)
- 4. PROVIDE RGS CONDUIT FOR INSTALLATIONS BELOW PARKING LOTS AND ROADWAYS.



UNDERGROUND CONDUIT(S) TRENCH DETAIL

SCALE: 1" = 1'



PLANS PREPARED FOR:

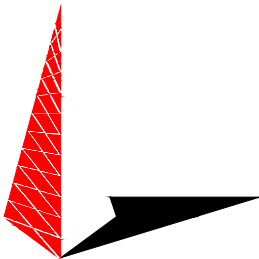


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

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DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**UNDERGROUND
CONDUIT(S) TRENCH
DETAIL**

SHEET NUMBER:

S-3

REVISION:

2

TEP#: 65105.203567

SCOPE:

1. PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

CODES:

1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
- A. THE NATIONAL ELECTRICAL SAFETY CODE

B. THE NATIONAL ELECTRIC CODE – NFPA-70

C. REGULATIONS OF THE SERVING UTILITY COMPANY

D. LOCAL AND STATE AMENDMENTS

E. THE INTERNATIONAL ELECTRIC CODE – IEC (WHERE APPLICABLE)
2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

TESTING:

1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST THE EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. THE TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

GUARANTEE:

1. IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER AND WITHOUT EXPENSE TO THE OWNER.
2. THE WARRANTEE CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

UTILITY CO-ORDINATION:

1. CONTRACTOR SHALL COORDINATE WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH THE SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

EXAMINATION OF SITE:

1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH THE CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS SECTION WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING THE WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

CUTTING, PATCHING AND EXCAVATION:

1. COORDINATION OF SLEEVES, CHASES, ETC., BETWEEN SUBCONTRACTORS WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
2. NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE ELECTRICAL WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING.
3. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS, ETC., WITH APPROVED METHOD AS LISTED BY UL.

RACEWAYS / CONDUITS GENERAL:

1. CONDUCTORS SHALL BE INSTALLED IN LISTED RACEWAYS. CONDUIT SHALL BE RIGID STEEL, EMT, SCH40 PVC, OR SCH80PVC AS INDICATED ON THE DRAWINGS. THE RACEWAY SYSTEM SHALL BE COMPLETE COMPLETE BEFORE INSTALLING CONDUCTORS.
2. EXTERIOR RACEWAYS AND GROUNDING SLEEVES SHALL BE SEALED AT POINTS OF ENTRANCE AND EXIT. THE RACEWAY SYSTEM SHALL BE BONDED PER NEC.

EXTERIOR CONDUIT:

1. EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.
2. THE CONDUIT SHALL BE RIGID STEEL AT GRADE TRANSITIONS OR WHERE EXPOSED TO DAMAGE.
3. UNDERGROUND CONDUITS SHALL BE RIGID STEEL, SCH40 PVC, OR SCH80 PVC AS INDICATED ON THE DRAWINGS.
4. BURIAL DEPTH OF CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION, BUT SHALL NOT BE LESS THAN THE FROST DEPTH AT THE SITE.
5. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY ROUTES BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND/OR BUILDING OWNER.

INTERIOR CONDUIT:

1. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.
2. CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
3. PROVIDE SUPPORTS FOR CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

EQUIPMENT:

1. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
2. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK. CONTRACTOR WILL VERIFY THAT EXISTING CIRCUIT BREAKERS ARE RATED FOR MORE THAN AVAILABLE FAULT CURRENT AND REPLACE AS NECESSARY.
3. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY.

CONDUCTORS:

1. FURNISH AND INSTALL CONDUCTORS SPECIFIED IN THE DRAWINGS. CONDUCTORS SHALL BE COPPER AND SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
2. THE USE OF ALUMINUM CONDUCTORS SHALL BE LIMITED TO THE SERVICE FEEDERS INSTALLED BY THE UTILITY.
3. CONDUCTORS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
- A. MINIMUM WIRE SIZE SHALL BE #12 AWG.

B. CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED.

C. CONNECTION FOR #10 AWG #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.

D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
4. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

UL COMPLIANCE:

1. ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLIANCES, AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (I.E., LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY.

GROUNDING:

1. ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED AT A SINGLE POINT.
2. PROVIDE GROUND CONDUCTOR IN RACEWAYS PER NEC.
3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 – "LIGHTNING PROTECTION" AS A MINIMUM.
4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, RADIO EQUIPMENT MANUFACTURERS, AND MOTOROLA R56 (AS APPLICABLE).

ABBREVIATIONS AND LEGEND

A	–	AMPERE	PNLBD	–	PANELBOARD
AFG	–	ABOVE FINISHED GRADE	PVC	–	RIGID NON-METALLIC CONDUIT
ATS	–	AUTOMATIC TRANSFER SWITCH	RGS	–	RIGID GALVANIZED STEEL CONDUIT
AWG	–	AMERICAN WIRE GAUGE	SW	–	SWITCH
BCW	–	BARE COPPER WIRE	TGB	–	TOWER GROUND BAR
BFG	–	BELOW FINISHED GRADE	UL	–	UNDERWRITERS LABORATORIES
BKR	–	BREAKER	V	–	VOLTAGE
C	–	CONDUIT	W	–	WATTS
CKT	–	CIRCUIT	XFMR	–	TRANSFORMER
DISC	–	DISCONNECT	XMTR	–	TRANSMITTER
EGR	–	EXTERNAL GROUND RING			
EMT	–	ELECTRIC METALLIC TUBING			
FSC	–	FLEXIBLE STEEL CONDUIT			
GEN	–	GENERATOR			
GPS	–	GLOBAL POSITIONING SYSTEM			
GRD	–	GROUND			
IGB	–	ISOLATED GROUND BAR			
IGR	–	INTERIOR GROUND RING (HALO)			
KW	–	KILOWATTS			
NEC	–	NATIONAL ELECTRIC CODE			
PCS	–	PERSONAL COMMUNICATION SYSTEM			
PH	–	PHASE			
PNL	–	PANEL			

-----E-----	UNDERGROUND ELECTRICAL CONDUIT
-----T-----	UNDERGROUND TELEPHONE CONDUIT
	KILOWATT-HOUR METER
-----	UNDERGROUND BONDING AND GROUNDING CONDUCTOR.
	GROUND ROD
	CADWELD
	GROUND ROD WITH INSPECTION WELL

PLANS PREPARED FOR:

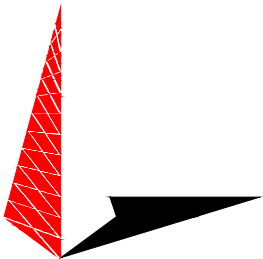


3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

**BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685**
350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tengroup.net

SEAL:



June 17th, 2021

2	06-17-21	CONSTRUCTION
1	06-14-21	PRELIMINARY
0	05-26-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

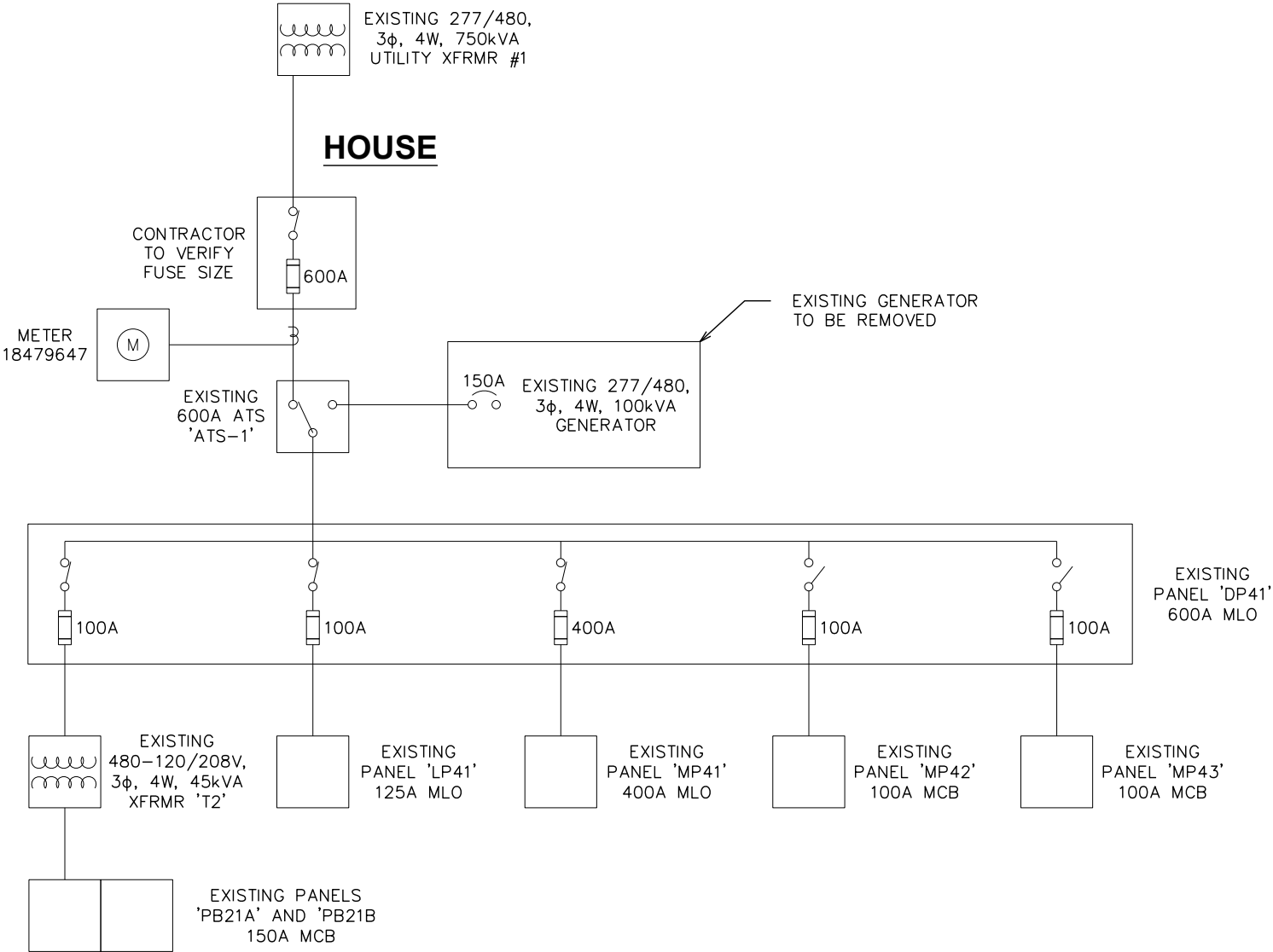
SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER:	REVISION:
E-1	2
	TEP#: 65105.203567

NOTE:

THE RATING OF THE SERVICE DISCONNECT IS DEPENDENT ON THE RATING OF THE INSTALLED FUSES WHICH IS NOT KNOWN. THE CONTRACTOR WILL VERIFY THAT THE CORRECT RATING OF FUSE IS CURRENTLY INSTALLED FOR ALL EQUIPMENT.



PLANS PREPARED FOR:

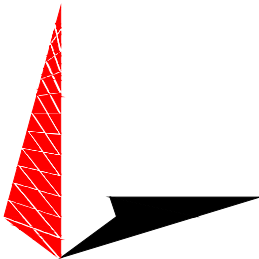


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SHEET TITLE:

**EXISTING ONE-LINE
DIAGRAMS**

SHEET NUMBER:

E-2

REVISION:

2

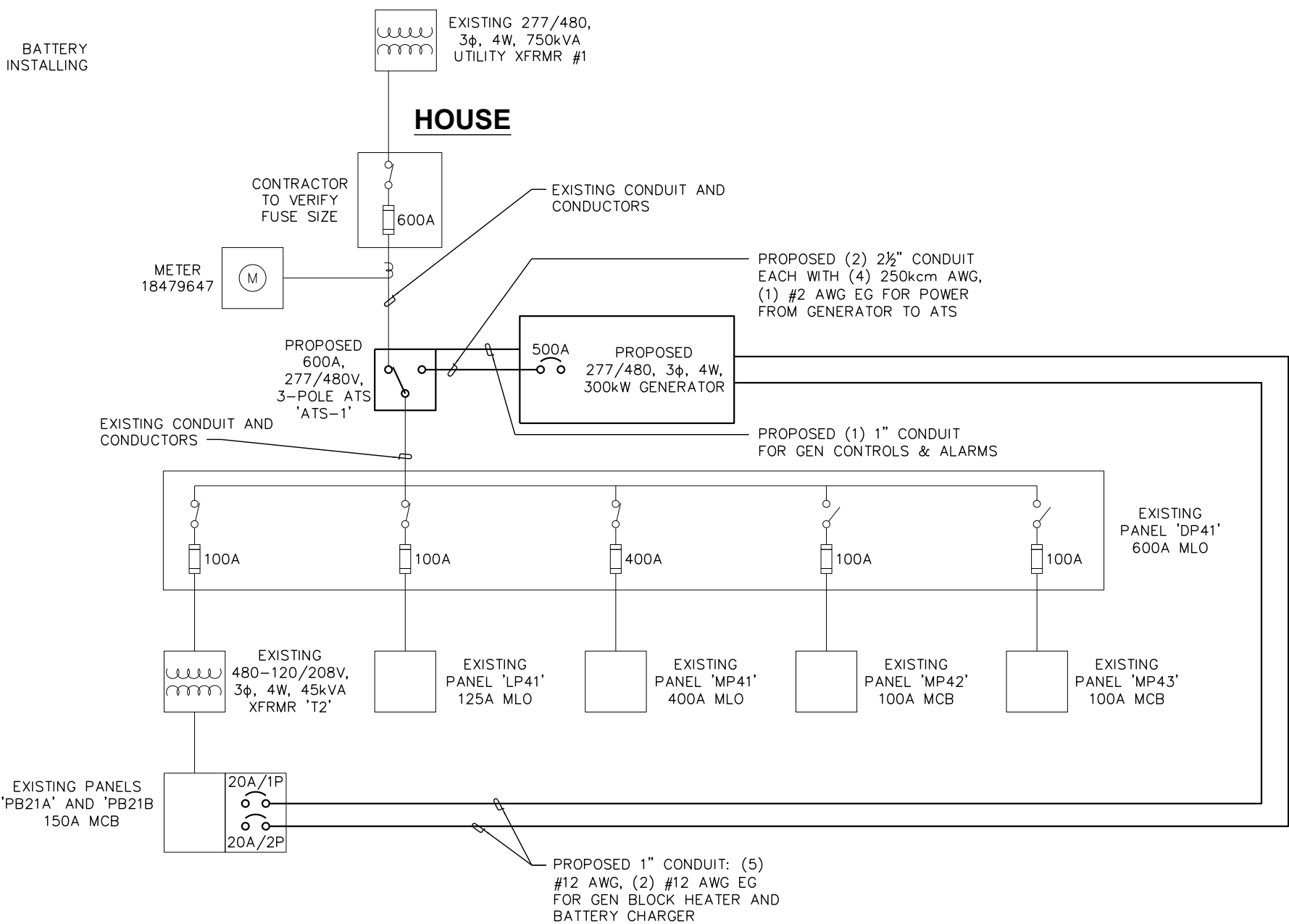
TEP#: 65105.203567

EXISTING ONE-LINE DIAGRAMS

SCALE: N.T.S.

NOTE:

CONFIRM GENERATOR BLOCK HEATER AND BATTERY CHARGER BREAKER SIZE WITH GENERATOR INSTALLING REQUIREMENTS.



PROPOSED ONE-LINE DIAGRAMS

SCALE: N.T.S.

PLANS PREPARED FOR:

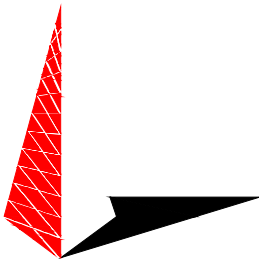


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SHEET TITLE:

**PROPOSED ONE-LINE
DIAGRAMS**

SHEET NUMBER:

E-3

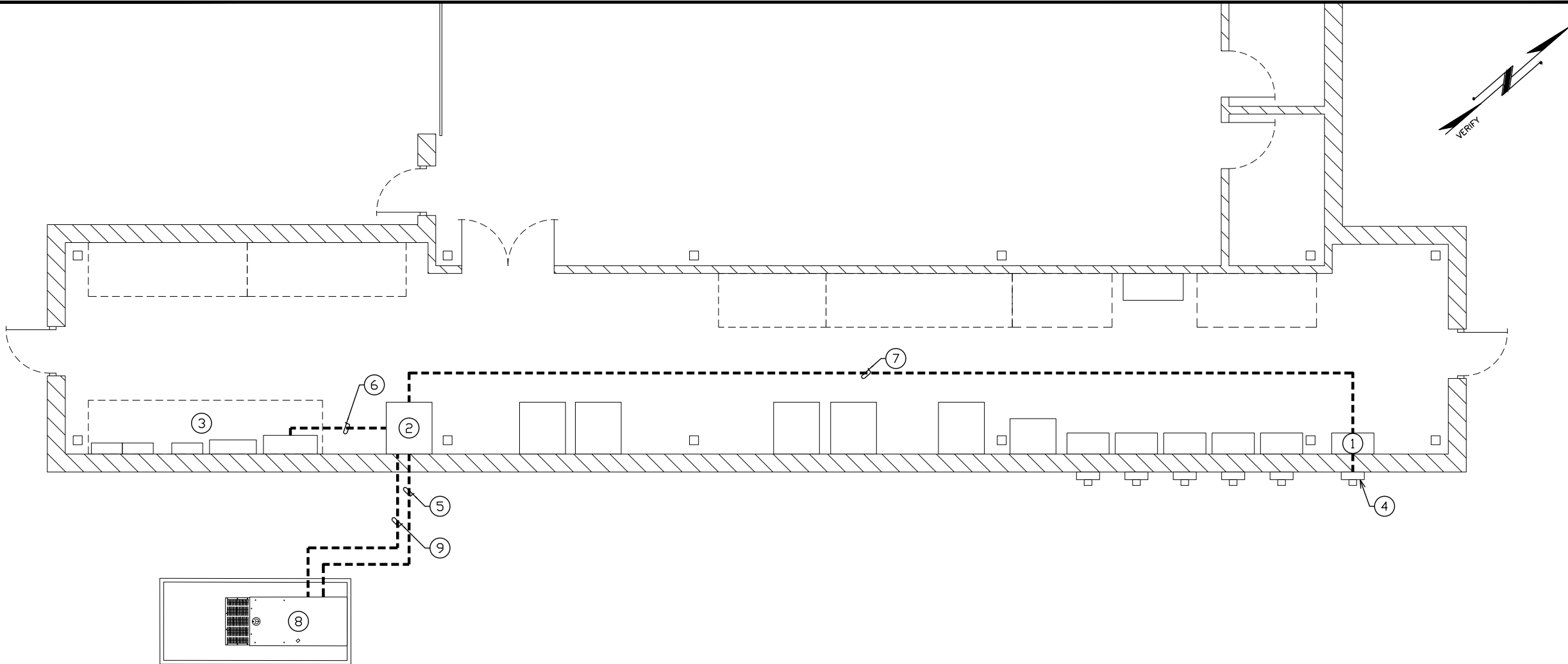
REVISION:

2

TEP#: 65105.203567

DRAWING NOTES:

- 1 EXISTING HOUSE SERVICE ENTRANCE DISCONNECT, 600A, 277/480V, 3φ, 4W
- 2 EXISTING HOUSE 'ATS-1' 600A, 277/480V, 3φ, 4W ATS
- 3 EXISTING HOUSE POWER EQUIPMENT. SEE SHEET E-2 FOR ONE-LINE DIAGRAM.
- 4 EXISTING HOUSE CT-STYLE METER
- 5 EXISTING FEED TO HOUSE GENERATOR
- 6 EXISTING HOUSE 'ATS-1' TO DP-41
- 7 EXISTING HOUSE SERVICE ENTRANCE DISCONNECT TO 'ATS-1'
- 8 EXISTING HOUSE GENERATOR, 277/480V, 3φ, 4W, 100kVA
- 9 EXISTING COMMUNICATIONS CONDUIT



EXISTING ELECTRICAL ROOM ROUTING

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:

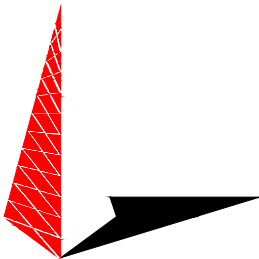


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SHEET TITLE:

**EXISTING ELECTRICAL
ROOM ROUTING**

SHEET NUMBER:

E-4

REVISION:

2

TEP#: 65105.203567

DRAWING NOTES:

- 1

EXISTING HOUSE SERVICE ENTRANCE DISCONNECT, 600A, 277/480V, 3φ, 4W
- 2

PROPOSED HOUSE 'ATS-1' ATS
- 3

EXISTING HOUSE POWER EQUIPMENT. SEE SHEET E-2 FOR ONE-LINE DIAGRAM.
- 4

EXISTING HOUSE CT-STYLE METER
- 5

PROPOSED (2) 2½" CONDUIT FEED TO HOUSE GENERATOR
- 6

EXISTING HOUSE 'ATS-1' TO DP-41
- 7

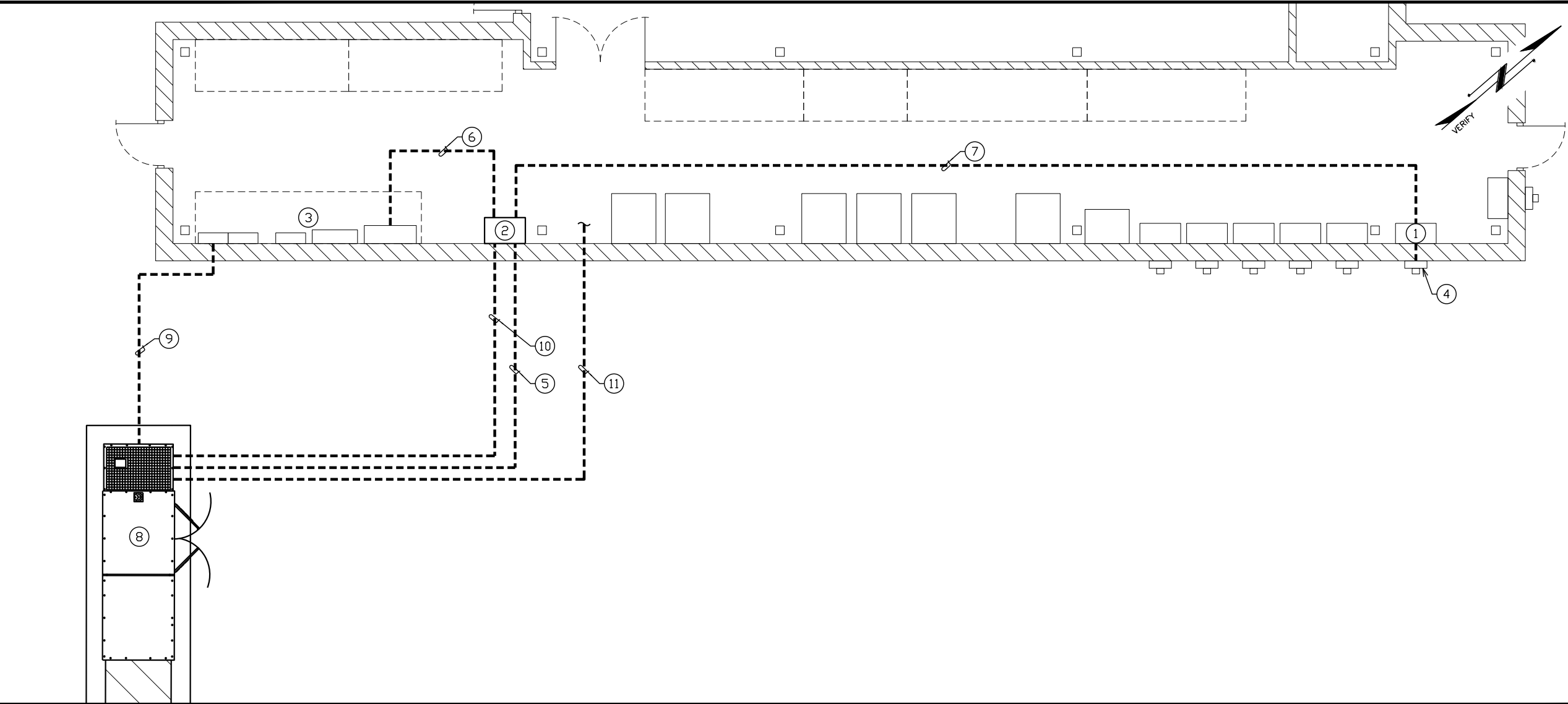
EXISTING HOUSE SERVICE ENTRANCE DISCONNECT TO 'ATS-1'
- 8

PROPOSED HOUSE GENERATOR, 277/480V, 3φ, 4W, 300kVA
- 9

PROPOSED (1) 1" CONDUIT FOR GENERATOR HEATER & BATTERY CHARGER FROM PB21-B TO GENERATOR.
- 10

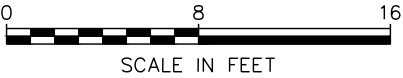
EXISTING COMMUNICATIONS CONDUIT
- 11

PROPOSED COMMUNICATIONS CONDUIT FOR MONITORING DEVICE



PROPOSED ELECTRICAL ROOM ROUTING

SCALE: 1/8" = 1'-0"



PLANS PREPARED FOR:

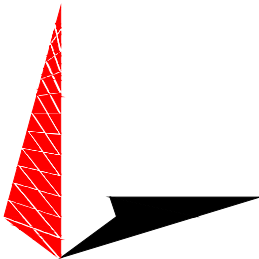


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PLANS PREPARED BY:



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326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



June 17th, 2021

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0	05-26-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**PROPOSED
ELECTRICAL ROOM
ROUTING**

SHEET NUMBER:

E-5

REVISION:

2

TEP#: 65105.203567

EXISTING 'DP-41' HOUSE PANEL SCHEDULE												
277/480 VOLTS 3 PHASE					4 WIRE SURFACE MOUNTED					600A, 3 POLE MAIN BREAKER		
NO.	LOAD SERVED	AMP / POLE	COND.	GND	ØA VA	ØB VA	ØC VA	GND	COND.	AMP / POLE	LOAD SERVED	NO.
1	MP-42	100/3	-	-	39960	-	-	-	-	100/3	LP-41	2
3					-	39960	-					4
5					-	-	39960					6
7	MP-43	100/3	-	-	32186	-	-	-	-	100/3	T2	8
9					-	32186	-					10
11					-	-	32186					12
13	MP-41	400/3	-	-	26064	-	-					14
15					-	26064	-					16
17					-	-	26064					18
											CONNECTED LOADS	
											PHASE A:	98210
											PHASE B:	98210
											PHASE C:	98210
											PEAK:	98210
											DEMAND:	354
											DEMAND (LOAD):	443

NOTE:
PEAK 98210kWH IS ESTIMATED FROM PAST UTILITY
BILLS

HOUSE PANEL SCHEDULE

SCALE: N.T.S.

PLANS PREPARED FOR:



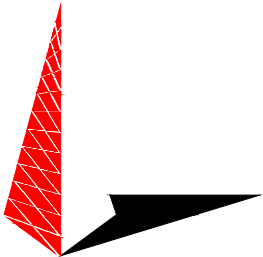
AMERICAN TOWER CORPORATION

3500 REGENCY PARKWAY, SUITE 100
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REV	DATE	ISSUED FOR:

DRAWN BY: TDL CHECKED BY: MSQ

SHEET TITLE:

**HOUSE PANEL
SCHEDULE**

SHEET NUMBER:	REVISION:
E-6	2
	TEP#: 65105.203567

NOTE:
THE CONTRACTOR WILL CONFIRM THAT THE COMBINED EXISTING LOAD ON PANELS PB21-A AND PB21-B DOES NOT EXCEED 105A. THE CONTRACTOR WILL CONTACT TEP FOR CORRECTIVE ACTION IF THE PANEL LOAD MAY REASONABLY EXCEED 105A.

EXISTING 'PB21-A' HOUSE PANEL SCHEDULE												
120/208 VOLTS 3 PHASE					4 WIRE SURFACE MOUNTED					150A, 3 POLE MAIN BREAKER		
NO.	LOAD SERVED	AMP / POLE	COND.	GND	ØA VA	ØB VA	ØC VA	GND	COND.	AMP / POLE	LOAD SERVED	NO.
1	FPB-1	20/2	-	-	3840	-	-	-	-	20/2	FPB-4	2
3					-	3840	-					4
5	FPB-2	20/2	-	-	-	-	3840	-	-	20/2	FPB-5	6
7					3840	-	-					8
9	FPB-3	20/2	-	-	-	3840	-	-	-	20/2	FPB-6	10
11					-	-	3840					12
13	EF-3 REST ROOM	20/1	-	-	3840	-	-	-	-	20/2	WATER HEATER	14
15	ROOFTOP RECEPTACLES	20/1	-	-	-	-	-					16
17	SPARE (OFF)	20/3	-	-	-	-	-	-	-	20/1	STORAGE RM RECEPT	18
19										20/1	WGBH GEN ELECT BOX	20
21										20/1	WGBH GEN ELECT BOX	22
23	X-MITTER RECEPTACLE	20/1	-	-	-	-	360	-	-	20/1	X-MITTER AREA RECEPT	24
25	SERVICE AREA RECEPT.	20/1	-	-	-	-	-	-	-	20/1	ELECT ROOM RECEPTACLE	26
27	SERV/STOR AREA RECEPT	20/1	-	-	-	360	-	-	-	20/1	ELECT ROOM RECEPTACLE	28
29	EXTERIOR RECEPTACLE	20/1	-	-	-	-	280	-	-	20/1	FIRE ALARM CONTROL PNL	30
31	RESTROOM RECEPTACLE	20/1	-	-	280	-	-	-	-	20/1	HOUSE GEN ALARM PANEL	32
33	EXTERIOR LIGHTING	20/1	-	-	-	680	-	-	-	20/1	EQUIP PLTFM RECEPTACLE	34
35	EXTERIOR LIGHTING	20/1	-	-	-	-	680	-	-	20/1	WCUB SHOP RECEPTACLE	36
37	CONTRACTOR C2	20/1	-	-	2100	-	-	-	-	20/1	WCUB SHOP RECEPTACLE	38
39	EF 1&2 CONTROL CKT	20/1	-	-	-	280	-	-	-	20/1	WCUB SHOP RECEPTACLE	40
41	WGBH SHOP RECEPTACLE	20/1	-	-	-	-	360	-	-	20/1	WCUB SHOP RECEPTACLE	42
											CONNECTED LOADS	
											PHASE A:	16180
											PHASE B:	13020
											PHASE C:	9540
											PEAK:	16180
											DEMAND:	134
											DEMAND (x125%):	167

EXISTING 'PB21-B' HOUSE PANEL SCHEDULE												
120/208 VOLTS 3 PHASE					4 WIRE SURFACE MOUNTED					150A, 3 POLE MAIN BREAKER		
NO.	LOAD SERVED	AMP / POLE	COND.	GND	ØA VA	ØB VA	ØC VA	GND	COND.	AMP / POLE	LOAD SERVED	NO.
43	WGBH SHOP RECEPTACLE	20/1	-	-	360	-	-	-	-	20/1	WBZ SHOP RECEPTACLE	44
45	WGBH SHOP RECEPTACLE	20/1	-	-	-	360	-	-	-	20/1	WBZ SHOP RECEPTACLE	46
47	WGBH SHOP RECEPTACLE	20/1	-	-	-	-	360	-	-	20/1	WBZ SHOP RECEPTACLE	48
49	WGBH SHOP RECEPTACLE	20/1	-	-	360	-	-	-	-	20/1	WBZ SHOP RECEPTACLE	50
51	WGBH SHOP RECEPTACLE	20/1	-	-	-	360	-	-	-	20/1	WBZ SHOP RECEPTACLE	52
53	SAT PIG TALE BOTTOM OF PANEL (OFF)	50/2	-	-	-	-	1500	-	-	20/1	WBZ SHOP RECEPTACLE	54
55					180	-	-	-	-	20/1	WBZ SHOP RECEPTACLE	56
57	WCUB DEDICATED RECEPT	20/1	-	-	-	-	200	-	-	20/1	WBZ SHOP RECEPTACLE	58
59	WCUB DEDICATED RECEPT	20/1	-	-	-	-	-	-	-	20/1	WBZ DEDICATED RECEPT	60
61	WCUB DEDICATED RECEPT	20/1	-	-	-	-	-	-	-	50/2	SPARE	62
63	GEN HEATER/BATT CHGR	20/1	-	-	-	-	-	-	-	50/2	SPARE	64
65	SPARE	100/3	-	-	-	-	920	-	-	20/1	WGBH BATT CHARGER	66
67							-	-	-	60/2	HOUSE SUBPANEL 1A	68
69							5760	-	-	60/2	HOUSE SUBPANEL 1A	70
71	GEN BLOCK HEATER	20/2	-	-	1500	-	-	-	-	-	EMPTY	72
73										-	EMPTY	74
75	GEN BAT CHARGER	20/1	-	-	-	1200	-	-	-	-	EMPTY	76
77	EMPTY	-	-	-	-	-	-	-	-	-	EMPTY	78
79	EMPTY	-	-	-	-	-	-	-	-	-	EMPTY	80
81	EMPTY	-	-	-	-	-	-	-	-	-	EMPTY	82
83	EMPTY	-	-	-	-	-	-	-	-	-	EMPTY	84
											CONNECTED LOADS	
											PHASE A:	10080
											PHASE B:	9780
											PHASE C:	6060
											PEAK:	10080
											DEMAND:	84
											DEMAND (x125%):	105

PLANS PREPARED FOR:



AMERICAN TOWER
CORPORATION

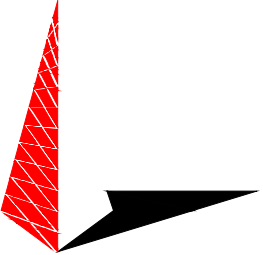
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518
(919) 466-5163

PROJECT INFORMATION:

BOSTON T1 MA
(NEEDHAM HEIGHTS)
BLDG #4 - SITE #: 282685

350 CEDAR STREET
NEEDHAM, MA 02494
(NORFOLK COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

SEAL:



GRAHAM M.
ANDRES
CIVIL
No. 52345
REGISTERED
PROFESSIONAL ENGINEER

June 17th, 2021

2	06-17-21	CONSTRUCTION
1	06-14-21	PRELIMINARY
0	05-26-21	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: TDL

CHECKED BY: MSQ

SHEET TITLE:

HOUSE PANEL
SCHEDULE

SHEET NUMBER:

E-7

REVISION:

2

TEP#: 65105.203567

HOUSE PANEL SCHEDULE

SCALE: N.T.S.

Exhibit 3
“Generator
Specifications”

SD300 | 10.3 | 300 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC® | **INDUSTRIAL
POWER**

Standby Power Rating
300 kW, 375 kVA, 60 Hz

Prime Power Rating*
270 kW, 338 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the US or its Territories

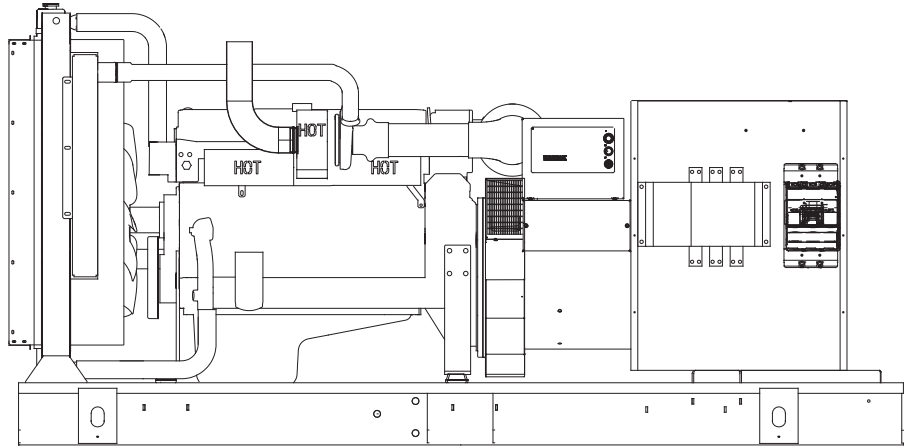


Image used for illustration purposes only

Codes and Standards

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL489



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



IBC 2009, CBC 2010, IBC 2012,
ASCE 7-05, ASCE 7-10,
ICC-ES AC-156 (2012)

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil & Coolant
- Radiator Duct Adapter (Open Set Only)

Fuel System

- Fuel Lockoff Solenoid
- Primary Fuel Filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze
- 120 VAC Coolant Heater

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- GENprotect[™]
- 12 Leads (3-Phase, Non 600V)
- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Auxiliary Voltage Regulator Power Winding
- Permanent Magnet Excitation
- Sealed Bearing
- Automated Manufacturing (Winding, Insertion, Lacing, Varnishing)
- Rotor Dynamically Spin Balanced
- Amortisseur Winding
- Full Load Capacity Alternator
- Protective Thermal Switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Only)

ENCLOSURE (if selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- Rhino Coat[™] - Textured Polyester Powder Coat Paint

TANKS (if selected)

- UL 142
- Double Wall
- Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested (2 psi)
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- Rhino Coat[™] - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

CONTROL SYSTEM



Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- 3 Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors

- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus[®] protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms & Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms & Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Oil Make-Up System
- Oil Heater
- Critical Exhaust Silencer

FUEL SYSTEM

- Flexible Fuel Lines
- Primary Fuel Filter

ELECTRICAL SYSTEM

- 10A UL Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- GenLink® Communications Software (English Only)
- Extended Factory Testing
- IBC Seismic Certification
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty
- 7 Year Extended Warranty
- 10 Year Extended Warranty

ENCLOSURE

- Standard Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating*
- AC/DC Enclosure Lighting Kit
- 12 VDC Enclosure Light Kit
- 120 VAC Enclosure Light Kit

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

TANKS (SIZE ON LAST PAGE)

- Electric Fuel Level
- Mechanical Fuel Level
- 8" Fill Extension
- 13" Fill Extension
- 19" Fill Extension

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing

ENCLOSURE

- Motorized Dampers

TANKS

- Overfill Protection Valve
- UL2085 Tank
- ULC S-601 Tank
- Special Fuel Tanks
- Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition.

*Consult factory for availability

SD300 | 10.3L | 300 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Iveco/FPT
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	6
Type	In-Line
Displacement - L (cu. in)	10.3 (628.54)
Bore - mm (in)	125 (4.92)
Stroke - mm (in)	140 (5.51)
Compression Ratio	16.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head	4-Valve
Piston Type	Aluminum
Crankshaft Type	Dropped Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	30 (31.68)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2250
Fan Diameter - mm (in)	762 (30.0)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump Make	Electronic
Fuel Pump Type	Engine Driven Gear
Injector Type	Common Rail
Engine Type	Direct Injection
Fuel Supply Line - mm (in.)	12.7 (0.5) NPT
Fuel Return Line - mm (in.)	12.7 (0.5) NPT

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	520 mm Generac
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	< 50

Standard Excitation	Permanent Magnet Excitation
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SD300 | 10.3 | 300 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

		Standby		Prime	
Three-Phase 120/208 VAC @0.8pf	300 kW	Amps: 1041	270 kW	Amps: 937	
Three-Phase 120/240 VAC @0.8pf	300 kW	Amps: 902	270 kW	Amps: 812	
Three-Phase 277/480 VAC @0.8pf	300 kW	Amps: 451	270 kW	Amps: 406	
Three-Phase 346/600 VAC @0.8pf	300 kW	Amps: 361	270 kW	Amps: 325	

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

480 VAC								208/240 VAC							
Alternator	kW	10%	15%	20%	25%	30%	35%	Alternator	kW	10%	15%	20%	25%	30%	35%
Standard	350	383	575	767	958	1150	1342	Standard	350	280	410	535	640	770	900
Upsize 1	400	387	581	775	968	1162	1356	Upsize 1	400	210	350	500	680	875	1100
Upsize 2	500	457	686	914	1143	1371	1600	Upsize 2	450	345	570	835	1100	1460	1710

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m)		Diesel - gal/hr (l/hr)		
3 (1)		Percent Load	Standby	Prime
Total Fuel Pump Flow (Combustion + Return) - gal/hr (l/hr)		25%	7.6 (28.7)	6.9 (26.1)
31 (117)		50%	12.6 (47.7)	11.6 (43.9)
		75%	17.4 (65.9)	15.8 (59.8)
		100%	22.1 (83.7)	19.9 (75.3)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby	Prime
Coolant Flow per Minute	gal/min (l/min)	95 (360)	95 (360)
Coolant System Capacity	gal (l)	16.6 (63)	16.6 (63)
Heat Rejection to Coolant	BTU/hr	814,783	733,673
Inlet Air	cfm (m³/hr)	14,505 (411)	14,505 (411)
Maximum Radiator Backpressure	in H ₂ O	0.5	0.5

COMBUSTION AIR REQUIREMENTS

	Standby	Prime
Flow at Rated Power cfm (m³/min)	850 (24.07)	765 (21.67)

ENGINE

		Standby	Prime
Rated Engine Speed	rpm	1800	1800
Horsepower at Rated kW**	hp	480	432
Piston Speed	ft/min	1654	1654
BMEP	psi	336	302

EXHAUST

		Standby	Prime
Exhaust Flow (Rated Output)	cfm (m³/min)	2240 (63.4)	2016 (57.1)
Max. Backpressure (Post Silencer)	in Hg (Kpa)	1.5 (5.1)	1.5 (5.1)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1020 (549)	918 (492)
Exhaust Outlet Size (Open Set)	mm (in)	101.6 (4)	101.6 (4)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

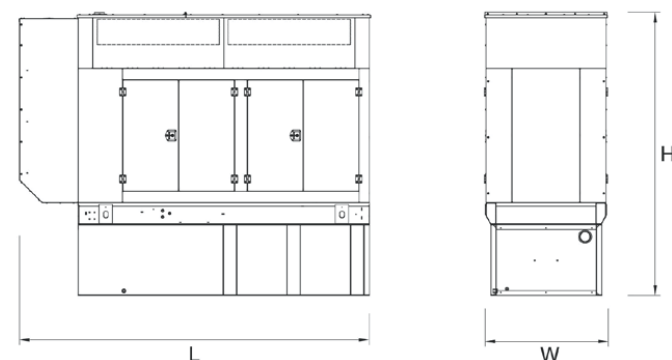
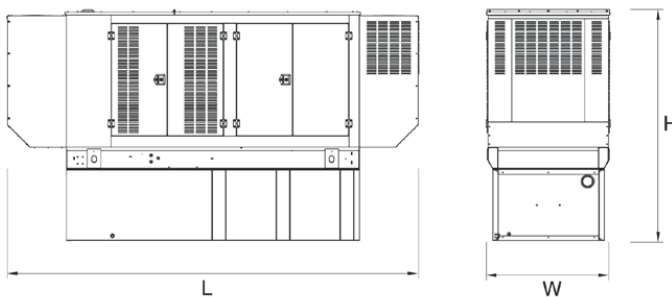
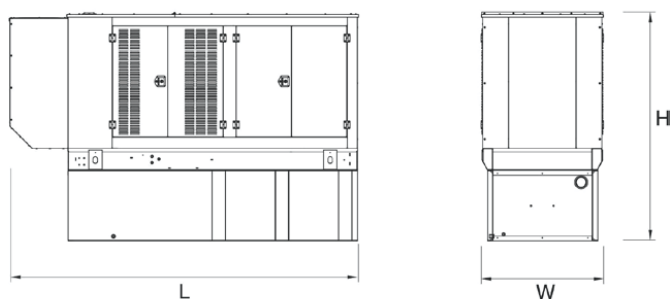
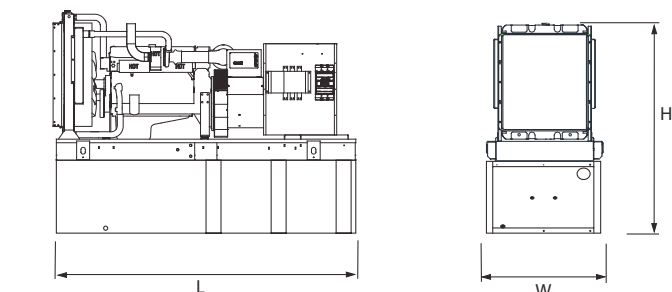
Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

SD300 | 10.3L | 300 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



* All measurements are approximate and for estimation purposes only.

OPEN SET (Includes Exhaust Flex)

Run Time Hours	Usable Capacity Gal (L)	L x W x H in (mm)	Weight lbs (kg)
No Tank	-	136 (3454) x 58 (1473) x 68 (1727)	5816 (2638)
8	183 (693)	136 (3454) x 58 (1473) x 81 (2057)	6764 (3068)
20	438 (1659)	136 (3454) x 58 (1473) x 93 (2362)	7076 (3210)
31	693 (2624)	136 (3454) x 58 (1473) x 105 (2667)	7379 (3347)
43	946 (3518)	208 (5283) x 58 (1473) x 108 (2743)	8841 (4010)
60	1325 (5015)	278 (7061) x 58 (1473) x 108 (2743)	9856 (4471)

STANDARD ENCLOSURE

Run Time Hours	Usable Capacity Gal (L)	L x W x H in (mm)	Weight lbs (kg)	
			Steel	Aluminum
No Tank	-	175 (4445) x 58 (1473) x 78 (1981)	1295 (588)	501 (227)
8	183 (693)	175 (4445) x 58 (1473) x 91 (2311)		
20	438 (1659)	175 (4445) x 58 (1473) x 103 (2616)		
31	693 (2624)	175 (4445) x 58 (1473) x 115 (2921)		
43	946 (3518)	208 (5283) x 58 (1473) x 118 (2997)		
60	1325 (5015)	278 (7061) x 58 (1473) x 118 (2997)		

LEVEL 1 ACOUSTIC ENCLOSURE

Run Time Hours	Usable Capacity Gal (L)	L x W x H in (mm)	Weight lbs (kg)	
			Steel	Aluminum
No Tank	-	200 (5080) x 58 (1473) x 78 (1981)	1470 (667)	935 (425)
8	183 (693)	200 (5080) x 58 (1473) x 91 (2311)		
20	438 (1659)	200 (5080) x 58 (1473) x 103 (2616)		
31	693 (2624)	200 (5080) x 58 (1473) x 115 (2921)		
43	946 (3518)	234 (5944) x 58 (1473) x 118 (2997)		
60	1325 (5015)	304 (7722) x 58 (1473) x 118 (2997)		

LEVEL 2 ACOUSTIC ENCLOSURE

Run Time Hours	Usable Capacity Gal (L)	L x W x H in (mm)	Weight lbs (kg)	
			Steel	Aluminum
No Tank	-	180.6 (4588) x 57.6 (1463) x 107.2 (2724)	2515 (1141)	1131 (514)
8	183 (693)	180.6 (4588) x 57.6 (1463) x 120 (3048)		
20	438 (1659)	180.6 (4588) x 57.6 (1463) x 132 (3353)		
31	693 (2624)	180.6 (4588) x 57.6 (1463) x 144 (3658)		
43	946 (3518)	208 (5283) x 57.6 (1463) x 148 (3759)		
60	1325 (5015)	278 (7061) x 57.6 (1463) x 146 (3708)		

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

Exhibit 4
“Environmental Sound
Assessment”

TO BE PROVIDED PRIOR TO HEARING

NEEDHAM PLANNING BOARD MINUTES

June 1, 2021

The Needham Planning Board Virtual Meeting using Zoom was remotely called to order by Paul Alpert, Chairman, on Tuesday June 1, 2021, at 7:15 p.m. with Messrs. Jacobs and Block and Mmes. McKnight and Espada, as well as Planning Director, Ms. Newman and Assistant Planner, Ms. Clee.

Mr. Alpert took a roll call attendance of the Board members and staff. He noted this is an open meeting that is being held remotely because of Governor Baker's executive order on March 12, 2020 due to the COVID Virus. All attendees are present by video conference. He reviewed the rules of conduct for ~~Z~~zoom meetings. He noted this meeting does include a public hearing so there will be an opportunity for public comment. If any votes are taken at the meeting the vote will be conducted by roll call.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to automatically continue the meeting to 6/14/21 at 7:15 p.m. with the same zoom ID number if any technical difficulties arise that keep the Planning Board from continuing this meeting tonight.

Public Hearing:

7:20 p.m. -- Amendment to Major Project Site Plan Review No. 2018-05: Town of Needham, 1471 Highland Avenue, Needham, Massachusetts, Petitioner (Property located at 28 Glen Gary Road, Needham, Massachusetts).

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to waive the reading of the public hearing notice.

Christopher Heep, Town Counsel and representative for the Select Board, noted this is the former Hillside Elementary School. In 2018 ~~it was authorized for~~ use of the property **was authorized** as a temporary headquarters for the police and fire departments. Given the temporary nature, the Planning Board added a condition that when the temporary use ceased the property was to be returned to the existing conditions prior to the temporary use. The temporary use will be concluding next winter. The applicant would like Condition 3.16 amended for a different close-out condition. There is no planned use coming in after the temporary police and fire. Previously there were 2 grassy islands where the buses turned around off Glen Gary Road, rows of parking spaces top to bottom of the plan, and topography changes. The applicant would like to propose a substitute plan.

Mr. Heep noted the substitute plan would have no replacement of the grass islands, a row of parking from left to right and a concrete retaining wall with a 4-foot grade change from the upper to the lower lots. There will be a wood rail fence running along the retaining wall. He noted the former use of the property was an elementary school. The school will not be returning to this site, and it will not be an elementary school use again. There are no current plans to do anything with this property once the police and fire leave. If it were to be used it would need a lot of design review, permits and conditions from the **Planning** Board. He would like to bring it to condition C which would require the least work and construction. This would be less disruptive to the abutters and should be close to what is there now. This would be about a \$120,000 savings to do this. He feels this modification is in the best interests of the site.

Mr. Alpert stated he was fine with this change. Ms. McKnight noted extensive wetlands on site. She asked if this would require a permit or approval from the Conservation Commission. Mr. Heep does not believe so. Ms. McKnight noted people park and use the playground and play fields. She wants to confirm this will still be open for people to park and use. Mr. Heep does not feel there will be an issue with parking or use of the field. Ken Sargent, Project Manager, stated access will still be there but after the police leave. One condition was that access be maintained during use. Ms. McKnight noted the site is surrounded by a construction fence. The sidewalk is outside the construction fence and people can get to the play area. Mr. Heep stated pedestrian access will remain and may be

enhanced. The gates will be unlocked. Mr. Alpert clarified the applicant's response that the playground will still be there and be maintained.

Ms. McKnight asked why the fencing would remain. Mr. Sargent stated they do not know what will be happening with the site so the Town decided to keep the fencing so they would not have to pay again if it was decided to do something with the building. Mr. Alpert noted, as a member of the Community Preservation Committee, they have discussed the potential of the Emory Grover building's substantial renovation and possibly having the school administration going into the former Hillside School building ~~there~~ on a temporary basis. The Town is looking at potential uses. Ms. Espada stated the plans are useful and a good strategy. She asked if the impervious parking area would be increased or remain the same. Mr. Sargent noted it is an increase from what it is now but not from prior. Ms. Espada asked if all the soils from the wall will be kept on site. Mr. Sargent noted the wall is existing. The stone that was brought in will need to be removed but is not part of the existing wall. Mr. Jacobs stated he does not like the fencing staying in place. There was a discussion at the time that there were concerns it look as good as it can. That would not be the case if the fencing stays up. Mr. Sargent stated there is no use contemplated but it makes sense to keep the fence up rather than pay twice to take it down and have it put back up. Mr. Jacobs commented it could be years and he would like to see the fencing come down. Mr. Alpert noted the Emory Grover project is not that far off. The Board could put a condition that when the police and fire leave the Town can come back to discuss if there is a better idea of the time frame. The fence could remain until that time. Mr. Jacobs is not opposed to that idea but he does not want this open ended. Ms. McKnight agreed.

Ms. Newman stated she could add a condition on the use itself that may trigger a major project review. She asked if the Town is prepared to come forward with a request for a reuse of the building if it does not trigger site plan review on its face. Mr. Heep assumes any revision would trigger the threshold and they would go back asking for relief. Ms. Newman stated the decision could be modified to link it to the temporary use and a substitute use going in triggers an amendment. Mr. Heep has no issue with that. Mr. Jacobs asked if the town is going to make any use of the parking area as an open and unused parking lot. Mr. Heep stated there is no plan to use the spaces for any municipal purpose. The public can park and use the playground. Mr. Jacobs would like that as a condition. Steven Popper, of the Permanent Public Building Committee (PPBC), noted there may be some incidental use by the school department for storage. Primarily of IT equipment brought on by Covid. There may be some continued incidental use. There will be no overnight use. Mr. Block understands the cost savings solution and agrees with a condition with respect to the fence.

Mr. Heep noted the petitioners have 6 months from the conclusion of the use to restore the site. He is content to come back and give a status update to the Board. Julie Trow, of 17 Hasenfus Circle, asked what the plans are to keep the area free of trash and litter and reasonably well maintained. Mr. Sargent assumes the facilities department will keep up the maintenance. It is still a public building and will not be abandoned. Ms. Trow commented it is fairly neglected now. Mr. Sargent stated a gate was installed so facilities could get out there with a mower and maintain it. Sean Donovan, of 1 Castle Place, noted he sat in the original meetings where the neighborhoods were told it would be put back to the way it was. Mr. Heep said the Town has no plans but it seems the school administration will go there. Mr. Donovan stated the inside of the school will be the only work done if the schools move in there. Why keep the fence if there will be no construction outside the school? Mr. Sargent stated there may be outside work. They do not know what is going in there if anything. Mr. Heep noted the current permit has 6 months built in. At the end of the 6 months the applicant will come back to the Board to explain what is going on. Mr. Donovan commented that is reasonable. He noted the fence has started to rip and does not look that great. Mr. Alpert stated there would be a condition the applicant come back to discuss the fence.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to close the hearing.

Decision: Major Project Site Plan Special Permit No. 2021-02: Katherine Pennington Klein, 40 Eaton Road, Needham, MA, Petitioner (Property located at 32 Chestnut Street, Needham, MA). Regarding property renovation of approximately 1,751 square feet of existing first floor commercial space, in an existing commercial building, for use as an orthodontics practice.

George Giunta Jr., representative for the applicant, reviewed the decision and has 2 comments. In paragraph 3.4, there is a limitation on the maximum number of staff on site at any one time. This should apply to only one dentist on site as there may be a need to bring an additional staff member on site occasionally. It makes sense to limit the use to one dentist but limiting the staff does not make sense. This allows flexibility. In paragraph 3.5, the permit runs to Dr. Klein and cannot be transferred without coming back to the Board. Mr. Alpert noted the Board usually tailor's decisions based on information given to us. The applicant stated 3 employees. He is perfectly happy with more flexibility but not open ended. With 4 exam rooms he can see there may be a need for 4 assistants on site with a receptionist and dentist. He hopes this gets very successful. He would say between 3 and 7 staff at any one time and the maximum number of parking stickers.

Mr. Jacobs stated he has no problem with the first issue and agrees with Mr. Giunta Jr. on the second issue. For restaurants the Board just asks the new owner sign off saying they will follow all conditions in the permit. Mr. Block agreed. Ms. Newman suggested they could ask the new owner to sign an affidavit they understand the conditions and will abide by them. Mr. Alpert is ok with a change or transfer to another Board Certified Dentist with just a signature. Ms. McKnight noted Section 3.3 says "orthodontic use." A discussion ensued as to whether this should be limited to orthodontic use or open it to "dentist" also. Mr. Jacobs noted the applicant is not asking for a change from orthodontic to add dentist. Mr. Alpert reviewed the changes that have been made.

Upon a motion made by Ms. McKnight, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to grant (1) the requested Special Permit for Site Plan Review, pursuant to Section 7.4 of the By-Law and Section 3.2 of Site Plan Special Permit No. 98-10; (2) the requested Special Permit under Section 3.2.2 of the By-Law for more than one nonresidential use on a lot; and (3) the requested Special Permit pursuant to Section 5.1.1.6 of the By-Law to waive strict adherence with the requirements of Section 5.1.2 (Required Parking), subject to and with the benefit of the following plan modifications, conditions and limitations as set forth in the decision.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to approve the decision with the modification discussed.

De Minimus Change: Amendment to Major Project Site Plan Review No. 2013-02: Town of Needham, 1471 Highland Avenue, Needham, Massachusetts, Petitioner (Property located at 1407 Central Avenue, Needham, Massachusetts).

Steven Gentile, representative for the applicant, noted the town wants to install solar panels on the Jack Cogswell Building. There are a couple of slanting roofs one to the north and one to the west, designed so the installations will not be seen from Central Avenue. This is consistent with Section 4.2.8 of the By-Law regarding height exceptions. The panels will be 6 inches above the roof and set back from the edge of the roof a minimum of 4 feet. There will be 496 solar panels mounted to the standing seam metal roof. Hank Haff, representative for the applicant, noted the panels will follow the slope of the roof. Mr. Gentile noted there will be solar **photovoltaic** to the grid and will be through buried conduit. There is no change to the footprint, FAR or parking. The Town is looking at sustainability issues and invited the Planning Board to the PPBC meeting last week to go over net zero.

Ms. McKnight noted the trees that were to be planted along Central Avenue are not doing well. The area shown on the plan is doing the worst. She wants to see the landscape area looking better when the applicant comes back for a permanent Certificate of Occupancy. Mr. Gentile stated there was a replacement of some trees. Ms. McKnight noted the grasses are dried out and there are a lot of weeds. Mr. Gentile will keep an eye on it.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to accept the amendment for a deminimus change.

Upon a motion made by Mr. Block, and seconded by Mr. Jacobs, it was by a roll call vote of the five members present unanimously:

VOTED: to grant the requested modifications as requested.

Request to Extend Temporary occupancy permit: Amendment to Major Project Site Plan Review No. 2013-02: Town of Needham, 1471 Highland Avenue, Needham, MA, Petitioner (Property located at 1407 Central Avenue, Needham, MA).

Mr. Gentile, representative, noted this is the 7th extension of the temporary Occupancy Permit. Mr. Heep is working with the land court. There is an easement issue with the DEP. Mr. Heep thought it was minor but a judge thought otherwise. The applicant is requesting 120 days and hopefully the legalities will be worked out.

Upon a motion made by Mr. Jacobs, and seconded by Mr. Block, it was by a roll call vote of the five members present unanimously:

VOTED: to approve the request for a 120-day extension.

Mr. Jacobs left the meeting at 9:00 p.m.

Discussion about planning studies to undertake this year.

Ms. Newman shared a memo she had prepared for the Finance Committee and what the priorities are for the next year including affordable housing issues and sustainability. For (1) she updated the current affordable housing plan to articulate the goals and strategies and (2) she looked at inclusionary zoning in Needham and what other towns have adopted, and made adjustments across the districts. She has looked at the rezoning done for Chestnut Street and the Needham Center corridor to identify any regulatory barriers and parking kinds of issues. She looked at the Business District along Highland Avenue. Rosemary Street to Webster Street is the only Business District that remains in Needham from the 1950s. The Board needs policy goals for that area. She asked what the priorities are for the next year. The Board needs to put together a schedule and timeline. She has laid it out to discuss. Ms. McKnight asked if the Board should be revisiting the rules on accessory dwelling units (ADUs). It has been a year since the first permit was given out. Mr. Alpert noted it has only been a year and ~~the rules were~~ discussed at length when adopted. The Board has changed since then but there is so much on their plates with what Ms. Newman put together. That process (of adopting zoning provisions to allow ADU's) took a few years and he is not ready to revisit it. The Board did their job on that.

Ms. McKnight noted discussion of ADUs began in 2015 and nothing really happened until 2017. The Board of Health and Council on Aging wanted the elderly to be able to have a small unit to rent out to help out. Do we really need to put people through a special permit process for ADU's to be occupied by family members or caretakers, or could it just be an approval by the Building Department?

Mr. Block stated Ms. Newman has a number of areas for study. The Council of Economic Advisors (CEA) will also be looking at various commercial districts over a long period. The CEA may be a resource for the Board. Ms. Espada noted the Board needs to work on community outreach. Some of this is reviewing precedents. The Board needs to create a master work plan. Ms. Newman sees the housing plan as a community project overseen by a broad committee. There will be community meetings and reports with strategy recommendations.

Mr. Alpert suggested the members focus on the materials Ms. Newman supplied and give their thoughts to Ms. Newman, and copy him, on their priorities to study now and what could wait a year. Ms. Newman, Mr. Block and Mr. Alpert can discuss these priorities at the Chair/Vice-Chair meeting. Then a fuller Board discussion could be had at the meeting on 6/29/21. Ms. McKnight stated she has already shared a spreadsheet she had prepared regarding all districts and if apartments are allowed and what kinds. Ms. Newman will resend that out tomorrow to all members. Mr. Alpert noted the sustainability amendment does not seem to need a lot of time. He feels the Board can fine tune that and have it ready for the next Spring Town Meeting. Ms. Espada agreed and noted the Board should talk with Green Needham also. Housing will take a lot of time.

Mr. Alpert suggested, for the housing, an ad hoc committee should be put together consisting of one member from the Select Board, the School Committee, the Finance Committee and the Planning Board. Also someone from Equal Justice Needham. They could start having meetings and see where we are going starting with Ms. McKnight's spreadsheet. All zones should be made the same. Ms. McKnight noted the League of Women Voter's is putting together a program for the Fall on housing. Mr. Block suggested asking Green Needham or Steven Frail, on the sustainability piece, to come and present their ideas as a first step. The second step should be to speak to existing resources in town like the Building Inspector and DPW and identify what is feasible, the impacts and how to implement any changes.

Ms. Espada stated the Board needs to align with others doing the same work. There are a lot of resources right now. Sustainability initiatives and housing are the big issues. Mr. Alpert would like to see the CEA focus on mixed use districts and incorporate housing into those districts.

Revise temporary outdoor seating/outdoor display policy to extend applicability date to October 31, 2021 or another later date deemed appropriate by the Board.

Mr. Alpert noted there is a proposal in the packet with changes to the current policy. It is fine with him.

Upon a motion made by Mr. Alpert, and seconded by Ms. McKnight, it was by a roll call vote of the four members present unanimously:

VOTED: to approve changes made to the temporary outdoor seating and outdoor display policy enacted 5/20/20.

Committee Appointments

Ms. Newman noted the position held by Steven Tanner on the Design Review Board (DRB) expires on 6/30 and the position held by Stephen McKnight on the Transportation Committee expired on 5/31. They would both like to continue on the committees. Ms. Newman explained the process for Ms. Espada. After discussion, Ms. Espada feels others that may want to get involved should be given the opportunity to apply to determine who is the best candidate. Mr. Alpert feels it is a good idea to open it up rather than just reappoint. Ms. Newman will put a notice in the paper with a timeline and will follow up with the Town Manager. Mr. Alpert commented the Board never receives updates from the Board appointees and asked if they are supposed to report to the Board. Ms. Newman stated the appointees have never reported in her tenure here. She suggested the Board could change that. Mr. Block noted he is not going to continue to be the Planning Board representative to the Community Preservation Committee. He nominated Ms. McKnight for the position. Ms. McKnight agreed to serve.

Correspondence

Mr. Alpert noted the following correspondence for the Glen Gary Road matter: communication from the Chief of Police, Tara Gurge of the Health Department and Thomas Ryder of the DPW. All had no issues.

Minutes

Ms. McKnight noted in the minutes of 2/16/21, under the Highway Commercial 1 discussion, the sentence where Ms. Newman is noting the use changes should be deleted as it is unclear. Also, on the Hunnewell Street discussion, it says pre-existing, non-conforming use but it should be pre-existing, non-conforming structure. This was agreed.

Upon a motion made by Ms. McKnight, and seconded by Mr. Block, it was by a roll call vote of the four members present unanimously:

VOTED: to accept the minutes of 2/16/21 with the 2 changes discussed.

Upon a motion made by Ms. McKnight, and seconded by Mr. Block, it was by a roll call vote of the four members present unanimously:

VOTED: to accept the minutes of 3/2/21.

Report from Planning Director and Board members

Ms. Newman noted the Select Board meeting on 6/8 will have a discussion on allowing remote participation under the current meeting law. The Community Development staff is transitioning back to working in the office. They will be working on site and remotely. The office will be staffed by one person every day and all will be back in 2 weeks.

Ms. McKnight noted the Select Board can adopt regulations that would require a quorum to be present in person but others to participate remotely. If members participate remotely the public would be allowed to participate remotely also. Mr. Alpert stated he is in favor of the Select Board adopting what they can under current laws. It is good in situations such as when a member is away. If the member can call in that is what is best for the Board.

Upon a motion made by Mr. Block, and seconded by Ms. McKnight, it was by a roll call vote of the four members present unanimously:

VOTED: to adjourn the meeting at 10:15 p.m.

Respectfully submitted,
Donna J. Kalinowski, Notetaker

Adam Block, Vice-Chairman and Clerk

From: [Monica Tibbits-Nutt](#)
To: [Alexandra Clee](#)
Cc: [Lee Newman](#); [Amy Haelsen](#); [Lisa Stiglich](#)
Subject: Bulfinch Update: Needham Shuttle Special Permit Requirement
Date: Tuesday, July 27, 2021 11:50:50 AM
Attachments: [image001\[44\].png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
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[image014.png](#)
[image015.png](#)
[image016.png](#)

Alex-

I hope you are well. We want to follow up on the discussion we had earlier this year regarding permit requirements for the Needham Shuttle. Here is the status of three of them:

Homewood Suites:

4/6/21 Received a call from Jennifer Hartley requesting reinstatement of membership and shuttle service

6/1/21 Membership and shuttle stop reinstated (200 First Ave)

Trip Advisor:

5/28/20 Received a call from Bri Murphy requesting pricing for membership and shuttle participation

7/23/21 Kayla Malone confirmed participation beginning 8/30/21 (400 First Ave)

Bulfinch:

12/3/20 Received email from Jim Cronin stating they would not be participating until further notice (250 First Ave and 117 Kendrick Street)

3/18/21 Received an email from Jim Cronin telling us that they were considering resuming participation on July 1

6/18/21 Sent Jim an email with pricing for Q3 2021

7/12/21 Set up a call with Robert Schlager to discuss their participation (Jim Cronin is no longer with Bulfinch)

7/13/21 Call with Robert Schlager regarding reinstating membership and shuttle stops at 250 First and 117 Kendrick. He said they would not participate and intimated that the Town understands the business climate and why it makes no sense for them to participate.

We want the Town to be aware of where we are with these properties and seek any guidance you might have in moving forward with Bulfinch. Thank you for your time and consideration.

Best-

Monica

Please note: If there are other recipients cc'd on this message, it is important to respond to all.

Monica G. Tibbits-Nutt, AICP, LEED AP BD+C

Pronouns: She/Her ([Here's why!](#))

Executive Director

128 Business Council

✉ mtibbits@128bc.org

🌐 www.128bc.org



From: Alexandra Clee <aclee@needhamma.gov>

Date: Friday, March 19, 2021 at 10:57 AM

To: Monica Tibbits-Nutt <mtibbits@128bc.org>, Amy Haelsen <ahaelsen@needhamma.gov>

Cc: Lisa Stiglich <lstiglich@128bc.org>, Lee Newman <LNewman@needhamma.gov>

Subject: RE: Needham Shuttle Special Permit Requirement

Hi Monica and Lisa,

Lee discussed this issue with the Planning Board on Tuesday night. Generally speaking, the Board was unhappy that conditions of the permits are not being followed. They are going to ask the property owners to attend a Zoom Planning Board meeting to explain why they are not, or explain some alternate shuttle arrangement they may have made. I think the plan is to have them attend at the Board's second meeting in April, which is April 20. I know you may have hoped to have this resolved sooner, but the Planning Board is in the midst of a very busy season and that was the soonest they felt they could do it.

When the Town uploads the meeting to youtube (likely this weekend), I can send you the link in case you wish to see the discussion. It was the 5 or so minutes at the end of the meeting.

Lee has asked me to see if you can send us a list of all Needham Participants and the locations.

Thank you. Alex.

Alexandra Clee

Assistant Town Planner

Needham, MA

www.needhamma.gov

From: Monica Tibbits-Nutt <mtibbits@128bc.org>

Sent: Monday, March 15, 2021 1:16 PM

To: Amy Haelsen <ahaelsen@needhamma.gov>; Alexandra Clee <aclee@needhamma.gov>
Cc: Lisa Stiglich <lstiglich@128bc.org>; Lee Newman <LNewman@needhamma.gov>
Subject: Re: Needham Shuttle Special Permit Requirement

I want to thank all of you for taking the time on Friday to meet with us. I have attached the memo. Please let us know if you need anything else.

Best-

Monica

Please note: If there are other recipients cc'd on this message, it is important to respond to all.

Monica G. Tibbits-Nutt, AICP, LEED AP BD+C

Pronouns: She/Her ([Here's why!](#))

Executive Director
128 Business Council

 mtibbits@128bc.org

 www.128bc.org



From: Amy Haelsen <ahaelsen@needhamma.gov>

Date: Tuesday, March 9, 2021 at 8:42 AM

To: Alexandra Clee <aclee@needhamma.gov>, Monica Tibbits-Nutt <mtibbits@128bc.org>

Cc: Lisa Stiglich <lstiglich@128bc.org>, Lee Newman <LNewman@needhamma.gov>

Subject: RE: Needham Shuttle Special Permit Requirement

Yes, I plan on attending.

Thank you,
Amy

Amy Haelsen
Economic Development Manager
Town of Needham
1471 Highland Avenue
Needham, MA 02492
Office: (781) 455-7500 ext 255
Cell: (781) 514-0498
ahaelsen@needhamma.gov

From: Alexandra Clee <aclee@needhamma.gov>
Sent: Monday, March 8, 2021 5:41 PM
To: Amy Haelsen <ahaelsen@needhamma.gov>; Monica Tibbits-Nutt <mtibbits@128bc.org>
Cc: Lisa Stiglich <lstiglich@128bc.org>; Lee Newman <LNewman@needhamma.gov>
Subject: Re: Needham Shuttle Special Permit Requirement

No problem, great.

Amy, are you available? If not, we will move forward and update you, if that's OK. Lee will send out a zoom invite.

Thanks.

Alexandra Clee
Assistant Town Planner
Town of Needham, MA
Google voice phone: 339-225-9522

From: Monica Tibbits-Nutt <mtibbits@128bc.org>
Sent: Monday, March 8, 2021 5:10:47 PM
To: Alexandra Clee <aclee@needhamma.gov>; Amy Haelsen <ahaelsen@needhamma.gov>
Cc: Lisa Stiglich <lstiglich@128bc.org>; Lee Newman <LNewman@needhamma.gov>
Subject: Re: Needham Shuttle Special Permit Requirement

Friday at 11:30 AM works on our end. Thank you for making the time.

Best-

Monica

Please note: If there are other recipients cc'd on this message, it is important to respond to all.

Monica G. Tibbits-Nutt, AICP, LEED AP BD+C

Pronouns: She/Her ([Here's why!](#))

Executive Director
128 Business Council

✉ mtibbits@128bc.org

🌐 www.128bc.org



From: Alexandra Clee <aclee@needhamma.gov>

Date: Monday, March 8, 2021 at 5:05 PM

To: Amy Haelsen <ahaelsen@needhamma.gov>, Monica Tibbits-Nutt <mtibbits@128bc.org>

Cc: Lisa Stiglich <lstiglich@128bc.org>, Lee Newman <LNewman@needhamma.gov>

Subject: Re: Needham Shuttle Special Permit Requirement

Hi there,

Would either 11:30 am Friday or 1:15pm that same day work for you? Lee and also the Planning Board chair, Jeanne McKnight, are available at those times, with the earlier time being the preference.

Let me know, thanks.

Alexandra Clee
Assistant Town Planner
Town of Needham, MA
Google voice phone: 339-225-9522

From: Monica Tibbits-Nutt <mtibbits@128bc.org>

Sent: Monday, March 8, 2021 11:27:03 AM

To: Alexandra Clee <aclee@needhamma.gov>; Amy Haelsen <ahaelsen@needhamma.gov>

Cc: Lisa Stiglich <lstiglich@128bc.org>; Lee Newman <LNewman@needhamma.gov>

Subject: Re: Needham Shuttle Special Permit Requirement

Thank you so much!

Best-

Monica

Please note: If there are other recipients cc'd on this message, it is important to respond to all.

Monica G. Tibbits-Nutt, AICP, LEED AP BD+C

Executive Director

128 Business Council

 mtibbits@128bc.org

 www.128bc.org



From: Alexandra Clee <aclee@needhamma.gov>

Date: Thursday, March 4, 2021 at 12:59 PM

To: Monica Tibbits-Nutt <mtibbits@128bc.org>, Amy Haelsen <ahaelsen@needhamma.gov>
Cc: Lisa Stiglich <lstiglich@128bc.org>, Lee Newman <LNewman@needhamma.gov>
Subject: RE: Needham Shuttle Special Permit Requirement

Hi there,

We have received this email. We will look at dates and get back to you.

Thank you,

Alex.

Alexandra Clee
Assistant Town Planner
Town of Needham
Google Voice Phone: 339-225-9522

**** Please note: Due to Covid-19, I am working primarily remotely. Email is the quickest way to reach me.**

From: Monica Tibbits-Nutt <mtibbits@128bc.org>
Sent: Wednesday, March 03, 2021 10:57 AM
To: Alexandra Clee <aclee@needhamma.gov>; Amy Haelsen <ahaelsen@needhamma.gov>
Cc: Lisa Stiglich <lstiglich@128bc.org>
Subject: Needham Shuttle Special Permit Requirement

Amy-

I wanted to follow up with you about a permit conversation we had towards the end of last year and give an update.

Background

128 Business Council offers commuter shuttle bus service for numerous developers and corporate member locations in the area. Many of our members have special building permit requirements, stating that they need to provide shuttle service to their sites as part of their TDM plan to reduce traffic congestion. Many of them meet this requirement by participating in our shuttle services, an effective and affordable way to satisfy the permit requirement. By participating in our group/shared service each member pays a fraction of the cost and receives more robust service than they would by funding something alone.

Needham Shuttle Service

Our Needham shuttle is in its 21st year of serving businesses and reducing traffic congestion in the

area. The success of this program is due to the continued participation of all members. Before March 2020, the service consisted of two 30-passenger vehicles that provided seven morning departures from the Newton Highlands Green Line Station and seven afternoon/evening departures back to the station. As a result of the pandemic, in June 2020 we had to reduce service operation to less equipment (one bus) and significant disease prevention protocols. We plan to operate the same way through at least Q2 2021.

Pandemic Service Impact

Late last year, two members with special permit requirements for shuttle service with the town decided not to continue participating in our service. In Q1 this has resulted in a significant financial loss to our non-profit organization. In addition, as we move to Q2 2021, the remaining members will have to cover the resulting loss of participation dollars to keep the service going. This means a 53% increase to their shuttle costs.

In November of 2020 we reached out to you and others in the planning and economic development departments regarding whether there would be any change to these special building permit requirements for 2021. The response was that the town would not be modifying the enforcement of its special permit requirements for shuttle service in 2021. (See entire conversation in the attached file.)

We are working diligently to ensure our service is available for commuters who need it in 2021 and beyond. We expect that traffic congestion levels will worsen post-COVID and need to be ready to meet that demand.

Next Steps

I'd like to schedule a Zoom meeting to discuss this with you further and determine if you may be able to assist us with encouraging these members to return to shuttle service participation. Please propose a few times that you are available, and I will set it up. Thanks for your understanding and cooperation as we attempt to preserve this important service to the area.

Best-

Monica

Please note: If there are other recipients cc'd on this message, it is important to respond to all.

Monica G. Tibbits-Nutt, AICP, LEED AP BD+C

Executive Director

128 Business Council

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