



CITY OF DOVER

PLANNING TECHNICAL REVIEW COMMITTEE –AGENDA

Meeting Type: Regular Meeting
Meeting Location: 1st Floor Conference Room – City Hall, Dover NH
Meeting Date: **Thursday, April 18, 2019**
Meeting Time: **10:30 am**

1. 1. 10:30 AM - 11:15 AM: Site Review for One First Dover, LLC, Assessor's Map 6, Lot 20, zoned CDB-G, and located at 1 First Street. (Proposal is to raze the existing building and construct a five to six story building containing 71 residential units and 4 street-level commercial spaces totaling 6,199 sq. ft. The proposal also includes a lower level parking garage containing 29 parking spaces. A CUP application for the additional sixth story will also appear before the Planning Board).
[Previously heard on March 07, 2019] (P19-16)

March 29, 2019

Christopher G. Parker AICP – Director of Planning
City of Dover
288 Central Avenue
Dover, NH 03820

Re: Dover Heights (P-19-15)
Redevelopment of 1 First Street, Dover, NH
Technical Review Committee Minutes, Site Plan Review, March 7, 2019
KNA Project No. 17-1219-1

Dear Mr. Parker,

This office is in receipt of various comments from the March 7, 2019 TRC meeting. Attached to this cover please find the following items, which we believe appropriately address the various review comments:

1. (8) full-size copies of the revised Residential Site Plan set;
2. (1) 11x17 set of the revised Residential Site Plans;
3. (8) full-size copies of revised Architectural Plans;
4. (1) 11x17 set of the revised Architectural Plans;
5. (2) copies of the revised Stormwater Management Report;
6. (6) copies of the revised TIAS summary;
7. (1) copy of the Eversource letter to serve; and
8. (1) CD with PDF copies of all submittal documents.

Under each of the comments listed below, we offer a brief explanation of our efforts to address the concern, to ease in your review of the same.

Planning Comments

1. Impact Fees

Impact Fee calculation chart has been included on the Master Plan, Sheet 1.

2. Water and Sewer Investment fees

Fee calculation has been included on Utility Plan, Sheet 7.

3. Condo documents will be required as a condition of approval if condominium.

No condominium is intended.

4. Will Eversource permit landscaping around transformer?

Eversource requirements do not mention landscaping. Also, transformer on abutting lot is landscaped.

5. Are tenants responsible for bringing trash to Dumpster? Recycling?

Yes. Language will be included in the lease to address this.

6. Please revise application to include:

- a. Provide Traffic Impact Assessment.

Revised TIAS included in package.

- b. Letter from Eversource regarding ability to provide services.

Included in package.

- c. Building materials on elevations for all sides of all buildings.

The architectural elevations were revised to indicate materials

- d. Provide draft lease language regarding street parking prohibited for residential tenants.

Please see attached draft lease language regarding parking for residential tenants.

7. Please revise plan set to:

- a. Add Planning number throughout (P19-16).

The planning number has been added to all title blocks.

- b. Ensure that the landscaping was created using the revised landscape regulations from 2018.

Landscape architect confirmed using 2018 regulations.

- c. Provide compliant neighborhood plan.

Neighborhood plan revised.

- d. Add common site plan notes 6, 7, 11, 22, 23, 24, 26, 33.

6 - Reference plans listed on Existing Conditions Plan (sheet 2).

- 7 - Temporary Construction easements are shown on Master Plan and discussed in note 17 (sheet 1).
 - 11 - Note 22 on Master Plan (sheet 1) added stating no wetlands on site.
 - 22 - Note 23 added to Master Plan (sheet 1) referencing recording of Stormwater Management Plan notice.
 - 23 - Note 19 added to Removals/Demolition Plan (sheet 3) regarding limits of construction markings.
 - 24 - Note 3 added to Grading and Drainage Plan (sheet 5) regarding swales.
 - 25 - Note 11 on Removals/Demolition Plan (sheet 3) about letter of credit.
 - 26 - Note 24 added to Master Plan (sheet 1) and sign detail modified (sheet 14) to note hours of operation.
 - 33 - Note 21 added to Master Plan (sheet 1) regarding building addresses.
- e. Add a note that this plan supercedes the previously approved plan (P16-15) for this site.
- Note 21 added to Master Plan (sheet 1).*
- f. Clarify bench locations/materials (provide detail if not granite).
- All benches labeled and note 4 added on Site Layout Plan (sheet 4). Both a Granite Bench Detail and a Bench Alternate detail are in Construction Details (sheet 11).*
- g. Indicate brick sidewalk on First street on plan and rendering.
- First Street sidewalk changed to brick and noted on Site Layout Plan (sheet 4)..*
- h. Indicate trees will meet minimum 3.5" caliper.
- The Landscape Plan (sheet 8) legend was updated.*
- i. Correct floor numbers on floor plan.
- The floor plans have been revised.*
- j. Indicate materials on building elevations.
- The architectural elevations were revised to indicate materials.*
- k. Correct parking on. 2nd Street rendering.
- The rendering has been revised.*
- l. Revise note regarding no Saturday or Sunday site work hours.
- Note 24 on Master Plan (sheet 1) has been added to reflect hours as stated on the Common Site Plan notes #26.*

- m. Engineer, LLS, and Landscape Architect to sign and stamp final plan set.

Understood.

Police Department Comments

1. Is dumpster pad intended to accommodate a truck for direct loading?

No, dumpsters will be wheeled to truck.

2. Provide signage for paved alley to facilitate (or restrict) temporary resident parking for loading/unloading.

Wall mounted sign shown on Site Layout Plan and sign detail added to Construction Details sheet 11.

3. Provide detail of side walls on base floor. Does not appear to provide ventilation at garage level.

The garage will be mechanically ventilated.

4. Sheet 1 of 15, note 7: "Applicant shall require that street parking is prohibited for residents. How will that be accomplished?"

Note 7 on Master Plan (sheet 1) states that the lease documents include that restriction. Also, discussions with the City are addressing the possibility of putting time limits on parking spaces.

5. Applicant will source nearly all resident parking permits from the Dover Transportation Center lot. Provide contribution toward Chestnut/First pedestrian signal infrastructure upgrades. (Traffic Impact, Access and Parking Study p. 5 indicates that none of the curb ramps are ADA compliant).

This issue is necessarily integral with the agreement for parking at the lot in question and needs to be discussed as part of that agreement.

6. TIAS p. 11: Local collision data would provide more robust summary for trend patterns than NHDOT data. 3-year DPD data (2014-2016): Chestnut/First = 10, Chestnut/Second = 8, Central/First = 5, Central/Second = 15. Consider updating TIAS with local data.

The report has been revised to include the local data.

7. TIAS p. 41 states that unoccupied resident parking can be shared with retail uses during the day. How will this be possible with overhead doors controlling access to the garage parking?

Only employees for the commercial spaces will be granted access to the garage.

8. TIAS p. 42: Parking Supply Summary assumes 68 spaces in Third St. Lot. Actual number is 29.

The discrepancy occurred because of a difference in which lot is referred to as the "third Street Lot". The report has been modified to clarify.

Fire/Inspections Comments

1. Plan sheet 4, clarify which utilities are exterior/interior.

Water meters are noted as internal and gas as external on Utility Plan (sheet 7).

2. If gas is to be mounted on the exterior indicate the number and size of gas meters in the dumpster truck path to dumpster pad.

Gas service needs have yet to be determined. Trash containers to be wheeled to truck.

3. Indicate dumpster screening on detail sheet.

PVC Dumpster Enclosure Fence detail added to Construction Details sheet 14.

4. Plan sheet 4 indicates overhead lines to be relocated. Sheet 7 does not appear to indicate underground electric distribution, please clarify.

Underground service will be provided across First St. per Eversource. Sheet 7 has been revised to reflect this.

5. Plan sheet 4 accessible space to be relocated closer to elevator in accordance w/ accessibility.

The accessible space next to the entrance has been moved next to the stairwell, which is close to the elevator.

6. Plan sheet 7, FDCs may be required on each street at the front.

A second FDC has been noted on the Second St. side of the building at the walk accessing the residential space (sheet 7).

7. Plan sheet 11 note 3: indicate a building permit is required for retaining walls 4' or greater.

Note 5 added to Redi-Rock Retaining Wall detail (sheet 11).

8. Plan sheet 11 detail indicates design widths for access aisle.

Parking Striping Notes added to sheet 11. Note 2 lists aisle widths.

9. Site plans shall indicate design compliance with the applicable accessibility regulations, (i.e. '09 IBC Chapter 11 w/ NH Amendments and ANSI) as well as compliance with NH RSA 155-A:5.

Note 11 on Master Plan (sheet 1) updated to include NH RSA 155-a:5..

10. Project will require pre baiting and an integrated pest management plan.

Note 18 on the Removals/Demolition Plan (sheet 3) refers to pest control.

11. Indicate the type of siding for the first and second story.

The architectural elevations were revised to indicate siding materials.

12. Is the use / classification category known of the commercial tenancies (i.e. A, B, M, etc.)

Not at this time.

13. Clarify fire department access to parking garage.

Note 19 on Master Plan (sheet 1) states that the contractor and owner shall coordinate access with the Fire Department prior to issuance of C.O.

Engineering Comments

1. Sidewalk location needs to be adjusted.

See responses to 2 and 3 below.

2. The loading zone on the sidewalk needs to be removed.

The loading zone was laid out when First St. was narrowed to include the parking spaces on the other side of the street and services all the businesses in the area.

3. Extend the sidewalk and close up the alley driveway by the loading zone.

The alley drive services businesses to the east as well as proposed building. We have proposed installing heavy duty concrete in the loading area to address City concern of sidewalk failure.

4. Why a 30 inch drain?

The 30" pipe acted as storage to match flows to the existing catch basin. Since the City has indicated a small increase in flow will be allowed, the pipe has been reduced to 15".

5. Look at including some type of infiltration for the drainage.

No on-site testing of soils has been performed and it is believed to be poor material for infiltration. Additionally, with the only available area for infiltration being adjacent to First Street, we were concerned with introducing groundwater in such close proximity to the brick walkway and roadway base materials, which could cause potential issues.

6. How is the roof drainage and foundation drain addressed?

The roof drainage and foundation drains tie into the proposed drain manhole in the proposed driveway.

7. Push back the tree wells on First Street to make it more pedestrian friendly.

The tree wells have been moved back as requested.

We trust the content of this response to the comments and its attachments will serve to address concerns as noted. Should you or anyone else have any questions or require further information, please do not hesitate to contact our office.

Respectfully,



Tucker McCarthy
Project Manager

REF.: MAX-2018021

March 28, 2019

Mr. Thomas Bolduc
One First Dover, LLC
157 Main Dunstable Road, Suite 102
Nashua, New Hampshire 03060

SUBJECT: Supplemental Traffic Letter
Proposed Dover Heights Development
1 First Street, Dover, New Hampshire

Dear Mr. Bolduc:

Greenman-Pedersen, Inc. (GPI) previously prepared a *Traffic Impact, Access, and Parking Study*¹ (TIAS) for the proposed mixed-use development to be located at 1 First Street in Dover, New Hampshire. At the March 7, 2019 Technical Review Committee (TRC) meeting with City of Dover Officials, Officer Marn Speidel of the Dover Police Department provided three comments on the TIAS related to collision patterns at the study area intersections and the parking demand evaluation. The intent of this letter is to respond to those comments. Each comment is summarized below with a response.

Collision History

Officer Speidel noted that the collision data evaluated within the TIAS was based on New Hampshire Department of Transportation (NHDOT) records, which do not provide sufficient information to draw conclusions about the particular collision patterns at the intersections. A request was made to utilize local police records to provide a more robust summary of trend patterns. GPI obtained collision information for the study area intersections from the Dover Police Department for the most recent three years on file (2016 to 2018). An updated summary of the collision patterns is provided below and is summarized in Table 1.

The intersection of Central Avenue (NH Route 9/108) at First Street experienced an average of 7.3 collisions per year over the three-year study period. Approximately 55 percent (12 of 22) of the collisions were rear-ends. The collisions were a mixture of vehicles stopping in traffic, stopping for a pedestrian in a crosswalk, and striking a vehicle as they attempted to reverse out of a parking space. Approximately one-quarter (5 of 22) of the collisions occurred during commuter peak hours.

¹ Greenman-Pedersen, Inc. (GPI), *Traffic Impact, Access, and Parking Study, Proposed Dover Heights Development, Dover, New Hampshire*. January 31, 2019.

Mr. Thomas Bolduc

March 28, 2019

Page 2 of 4

The intersection of Central Avenue (NH Route 9/108) at Second Street / Franklin Plaza Drive experienced an average of 12 collisions per year over the three-year study period. Approximately 28 percent (10 of 36) of the collisions involved striking parked vehicles. The close proximity of on-street parking to the signalized intersection could be a factor. In addition, approximately 22 percent (8 of 36) of the collisions were either rear-end or angled collisions which could be related to issues with clearance intervals and/or signal phasing.

The intersection of Chestnut Street at First Street experienced an average of 3 collisions per year over the three-year study period. Approximately 44 percent (4 of 9) of the collisions were rear-ends which could be related to issues with clearance intervals and/or signal phasing. The roadway striping along Chestnut Street was modified July 2016 to address issues of sideswipe collisions. The traffic signal currently provides one phase per approach. Approximately one-third (3 of 9) of the collisions occurred during commuter peak hours.

The intersection of Chestnut Street at Second Street experienced an average of 3 collisions per year over the three-year study period. Sixty percent (6 of 10) of the collisions were recorded as angled. However, 80 percent (8 of 10) of the collisions involved a vehicle attempting a left-turn from Second Street onto Chestnut Street. In addition, 40 percent of the collisions occurred during commuter peak hours.



Mr. Thomas Bolduc
March 28, 2019
Page 3 of 4

Table 1
COLLISION SUMMARY

Location	Number of Collisions		Severity ^a				Collision Type ^b						Percent During	
	Total	Average per Year	PD	PI	F	NR	SS	RE	CM	Bike/ Ped	SV	PV	Commuter Peak ^c	Wet/Icy Conditions ^d
Central Avenue (NH Route 9/108) at First Street	22	7.3	21	1	--	--	4	12	3	-	--	3	23%	9%
Central Avenue (NH Route 9/108) at Second Street / Franklin Plaza Drive	36	12.0	32	4	--	--	8	8	7	3	--	10	11%	14%
Chestnut Street at First Street	9	3.0	7	2	--	--	1	4	2	1	1	--	33%	0%
Chestnut Street at Second Street	10	3.3	9	1	--	--	1	2	6	1	--	--	40%	10%
Chestnut Street at Dover Transportation Center north driveway	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Source: City of Dover Police Department (2016-2018).

^a PD = property damage only; PI = personal injury; F = fatality, NR = not reported.

^b SS = sideswipe; RE = rear end; CM = cross movement/angle; SV = single vehicle; PV = Parked Vehicle

^c Percent of vehicle incidents that occurred during the weekday AM (7:00 AM-9:00 AM) and weekday PM (4:00 PM -6:00 PM) commuter peak periods.

^d Represents the percentage of only “known” collisions occurring during inclement weather conditions.

Mr. Thomas Bolduc

March 28, 2019

Page 4 of 4

Proposed Parking Supply

Officer Speidel noted that page 41 of the TIAS indicates that unoccupied resident parking spaces can be shared by retail uses during the day, and questioned how this would be possible with overhead doors controlling access to the garage parking. To clarify this issue, retail patrons and employees will not be able to park within the garaged parking spaces on-site as these will be reserved for resident parking only. A prior site plan proposal considered sharing of parking spaces on-site and this statement was inadvertently left in the report from a prior proposal. All retail parking was assumed to occur in on-street parking spaces along the surrounding area roadways. All calculations and analyses contained within the TIAS were based on resident-only parking on-site and retail parking occurring within on-street parking spaces.

Existing Parking Supply

Officer Speidel also noted that page 42 of the TIAS indicates that the “Third Street Lot” contains 68 parking spaces, while only 29 parking spaces are provided in this lot. As shown in the figure below, the “Third Street Lot” to which Officer Speidel is referring is a municipal parking lot located on the easterly side of Chestnut Street between Third and Fourth Streets, with access provided to Chestnut Street. The lot that was counted is a privately-owned parking lot containing 68 spaces and located on Third Street south of the railroad tracks, with access on Third Street. However, based on the findings of the existing parking demand survey, all of the anticipated residential parking overflow (beyond the spaces provided on-site) can be accommodated within the Dover Transportation Center parking lot without utilizing the Third Street lot. The calculations and analyses contained within the TIAS assume that all residential overflow parking will utilize the DTC parking lot, and no traffic will utilize the Third Street Lot.



Mr. Thomas Bolduc

March 28, 2019

Page 5 of 4



Should you have any questions, or require additional information, please contact me at (978) 570-2946.

Sincerely,

GREENMAN – PEDERSEN, INC.

A handwritten signature in blue ink, appearing to read 'Rebecca L. Brown'.

Rebecca L. Brown, P.E., PTOE
Senior Project Manager

Attachment(s)

**CRASH DATA - Dover Police Department
selected intersections**

January 2016 - December 2018

	<i>Date</i>	<i>DPD case#</i>	<i>Hour</i>	<i>DOW</i>	<i>Crash Type</i>	<i># Veh</i>	<i>Severity</i>	<i>Towed?</i>	<i>Weather / Surface</i>	<i>Summary (ex: EB = Eastbound, FTY = Failure to Yield)</i>
Location: Central Avenue at Second Street										
1	1/16/2016	16001355	2000	Saturday	Parked Veh	2	Property	No	Snow/Icy	SB makes right turn onto Second, slides into parked veh
2	2/5/2016	16003339	0900	Friday	Parked Veh	2	Property	No	Snow/Wet	WB Franklin Plaza thru on Second, avoids pedestrian, hits parked veh
3	2/6/2016	16003192	1000	Saturday	Rear End	2	Property	No	Clear/Snow	Central SB slides on slushy road, rear ends veh stopped in traffic
4	3/11/2016	16005970	1100	Friday	Sideswipe	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza v. WB left turn, improper lane use
5	4/7/2016	16008239	1000	Thursday	Pedestrian	1	Injury	No	Clear/Dry	WB left turn from Franklin Plaza v. pedestrian EB in crosswalk
6	6/10/2016	16013520	2000	Friday	Parked Veh	2	Property	No	Clear/Dry	Central SB makes right turn onto Second, strikes parked veh
7	6/22/2016	16014674	2000	Wednesday	Parked Veh	2	Property	No	Clear/Dry	Car backs out of Central Av pkg space hits adjacent parked car
8	10/2/2016	16023870	1100	Sunday	Rear End	2	Property	No	Clear/Dry	Central Av SB v. SB stopped in traffic
9	12/5/2016	16029060	0900	Monday	Sideswipe	2	Property	No	Clear/Dry	WB Franklin Plaza to go thru on Second, v. WB, improper lane use
10	12/6/2016	16029139	1300	Tuesday	Rear End	2	Property	No	Clear/Dry	Central SB stops abruptly for pedestrian at crosswalk, rear ended
11	12/29/2016	16030732	1500	Thursday	Parked Veh	2	Property	No	Snow/Icy	SB makes right turn onto Second, slides into parked veh
12	2/4/2017	17002860	1900	Saturday	Parked Veh	3	Property	Yes	Clear/Dry	Central SB strikes 2 parked cars W side (arrested DWI)
13	4/11/2017	17007858	1900	Tuesday	Parked Veh	2	Property	No	Clear/Dry	WB veh makes U-turn at mouth of Second St, strikes parked veh
14	4/21/2017	17008812	1200	Friday	Parked Veh	2	Property	No	Clear/Dry	TT unit making right turn onto Second St v. parked veh
15	4/29/2017	17009476	1600	Saturday	Rear End	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza v. SB veh stopped for ped at crosswalk
16	6/13/2017	17013249	2200	Tuesday	Angle	2	Injury	Yes	Clear/Dry	WB left turn from Franklin Plaza FTY to SB motorcycle
17	7/27/2017	17017027	1100	Thursday	Rear End	2	Property	No	Clear/Dry	Central SB stops abruptly for veh backing out of space, rear ended
18	10/9/2017	17023238	1600	Monday	Rear End	2	Property	No	Clear/Dry	Central Av SB v. SB stopped in traffic
19	10/11/2017	17023385	1600	Wednesday	Angle	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza FTY to Central SB
20	12/2/2017	17027248	1800	Saturday	Bicycle	2	Injury	No	Clear/Dry	Central Av SB pulling into angle parking space, into path of bicyclist SB
21	1/9/2018	18000496	0600	Tuesday	Angle	3	Property	No	Cloudy/Slush	WB left turn from Franklin Plaza FTY to Central SB, which hits parked
22	1/20/2018	18001371	1700	Saturday	Sideswipe	2	Property	No	Clear/Dry	Central SB sideswiped by truck in adjacent lane
23	1/24/2018	18001615	1200	Wednesday	Sideswipe	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza v. WB left turn, improper lane use
24	1/25/2018	18001695	1200	Thursday	Sideswipe	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza v. WB left turn, improper lane use
25	3/6/2018	18004511	1700	Tuesday	Angle	2	Property	No	Clear/Dry	Car backs out of Central Av pkg space FTY to Central SB
26	3/8/2018	18004620	0900	Thursday	Angle	2	Property	No	Clear/Dry	WB Franklin Plaza to go thru on Second, FTY to Central SB
27	5/9/2018	18009674	1300	Wednesday	Sideswipe	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza v. WB left turn, improper lane use
28	5/17/2018	18010238	1800	Thursday	Angle	2	Property	No	Clear/Dry	WB left turn from Franklin Plaza FTY to Central SB
29	6/14/2018	18012680	1700	Thursday	Rear End	2	Property	No	Clear/Dry	Central Av SB v. SB stopped in traffic
30	7/14/2018	18015487	1200	Saturday	Bicycle	1	Injury	No	Clear/Dry	Central Av SB pulling into angle parking space, into path of bicyclist SB
31	8/15/2018	18018184	1300	Wednesday	Parked Veh	2	Property	No	Clear/Dry	Trying to parallel park E side near Second, strikes parked veh
32	8/17/2018	18018375	1400	Friday	Angle	2	Property	No	Clear/Dry	Car backs out of Central Av pkg space FTY to Central SB
33	9/11/2018	18020542	0600	Tuesday	Sideswipe	2	Property	No	Clear/Dry	Central SB passes veh on right which slowed to pull into W pkg space
34	9/22/2018	18021600	0900	Saturday	Sideswipe	2	Property	No	Clear/Dry	WB Franklin Plaza to go thru on Second, v. WB, improper lane use
35	9/27/2018	18022037	1900	Thursday	Parked Veh	2	Property	No	Clear/Dry	Transit bus Central SB turns right onto Second, strikes parked veh
36	12/29/2018	18029246	1900	Saturday	Rear End	2	Property	No	Clear/Dry	Central SB stops abruptly for pedestrian at crosswalk, rear ended

**CRASH DATA - Dover Police Department
selected intersections**

January 2016 - December 2018

	<i>Date</i>	<i>DPD case#</i>	<i>Hour</i>	<i>DOW</i>	<i>Crash Type</i>	<i># Veh</i>	<i>Severity</i>	<i>Towed?</i>	<i>Weather / Surface</i>	<i>Summary (ex: EB = Eastbound, FTY = Failure to Yield)</i>
Location: Central Avenue at First Street										
1	1/20/2016	16001663	1800	Wednesday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB stopped in traffic
2	5/14/2016	16011224	1500	Saturday	Rear End	3	Minor injury	No	Clear/Dry	Central SB rear ends Central SB stopped at crosswalk
3	8/28/2016	16020926	1300	Sunday	Sideswipe	2	Property	No	Clear/Dry	Central SB changes lanes, FTY to Central SB
4	9/9/2016	16022018	1600	Friday	Angle	2	Property	No	Clear/Dry	Veh backs out of pkg space on Central, strikes SB stopped in traffic
5	9/24/2016	16023272	0900	Saturday	Parked Veh	2	Property	No	Clear/Dry	Veh strikes parked car on Central west while backing out of pkg space
6	3/31/2017	17007010	1800	Friday	Rear End	3	Property	No	Snow/Wet	Central SB rear ends Central SB stopped in traffic
7	6/2/2017	17012248	0900	Friday	Sideswipe	2	Property	No	Clear/Dry	Construction zone, Central SB changes lanes, FTY to Central SB
8	7/3/2017	17014951	1500	Monday	Parked Veh	2	Property	No	Clear/Dry	Veh strikes parked car on Central west while backing out of pkg space
9	8/1/2017	17017451	1000	Tuesday	Parked Veh	2	Property	No	Clear/Dry	Construction zone, box truck strikes parked box truck in loading zone
10	8/19/2017	17019048	0900	Saturday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB which stopped abruptly (road rage)
11	9/2/2017	17020063	1500	Saturday	Angle	2	Property	No	Clear/Dry	Veh turning from Central onto First v. veh backing out of First St space
12	10/10/2017	17023323	1700	Tuesday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB stopped in traffic
13	12/22/2017	17028425	1000	Friday	Rear End	2	Property	No	Snow/Wet	Central SB rear ends Central SB stopped in traffic
14	2/5/2018	18002490	1200	Monday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB stopped in traffic
15	4/21/2018	18008111	1200	Saturday	Rear End	3	Property	No	Clear/Dry	Central SB rear ends Central SB stopped in traffic
16	8/18/2018	18018486	1900	Saturday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB stopped at crosswalk
17	8/24/2018	18018954	1300	Friday	Angle	2	Property	No	Clear/Dry	Car backs out of Central Av pkg space FTY to Central SB
18	12/3/2018	18027219	1700	Monday	Rear End	2	Property	No	Clear/Dry	Central SB rear ends Central SB stopped at crosswalk
19	12/7/2018	18027522	1100	Friday	Rear End	2	Property	No	Clear/Dry	Central SB misjudges while overtaking veh pulling into angle space
20	12/11/2018	18027871	1700	Tuesday	Rear End	2	Property	No	Clear/Dry	Veh pulling into angle space struck by adjacent veh backing out
21	12/12/2018	18027916	0800	Wednesday	Sideswipe	2	Property	No	Clear/Dry	Central SB passes veh on right which slowed to pull into W pkg space
22	12/14/2018	18028129	1700	Friday	Sideswipe	2	Property	No	Clear/Dry	Car backs out of Central Av pkg space FTY to Central SB
Location: Chestnut Street @ Second Street										
1	2/3/2016	16002959	1700	Wednesday	Pedestrian	1	Minor injury	No	Rain/Wet	WB left turn from Second St v. pedestrian crossing Chestnut W to E
2	3/24/2016	16007069	1300	Thursday	Angle	3	Property	Yes	Clear/Dry	Left turn from Second FTY to Chestnut NB
3	5/27/2016	16012303	1300	Friday	Angle	3	Property	Yes	Clear/Dry	Left turn from Second FTY to Chestnut NB
4	10/3/2016	16023951	1700	Monday	Angle	2	Property	No	Clear/Dry	WB making left turn from Second St FTY to NB
5	12/19/2016	16030064	1400	Monday	Sideswipe	2	Property	No	Clear/Dry	WB TT unit sideswipes WB at Second St stop sign
6	12/27/2016	16030585	1700	Tuesday	Rear End	2	Property	No	Clear/Dry	SB rear ends SB that was stopped in traffic from red light
7	1/27/2017	17002273	1600	Friday	Angle	2	Property	No	Clear/Dry	Left turn from Second FTY to Chestnut NB
8	4/25/2018	18008430	0900	Wednesday	Angle	2	Property	No	Clear/Dry	WB making left turn from Second St FTY to SB
9	9/28/2018	18022132	2000	Friday	Angle	2	Property	No	Clear/Dry	WB making left turn from Second St FTY to NB in center turn lane
10	10/23/2018	18024125	1000	Tuesday	Rear End	2	Property	No	Clear/Dry	NB rear ends NB stopped in traffic for RR crossing

**CRASH DATA - Dover Police Department
selected intersections**

January 2016 - December 2018

	<i>Date</i>	<i>DPD case#</i>	<i>Hour</i>	<i>DOW</i>	<i>Crash Type</i>	<i># Veh</i>	<i>Severity</i>	<i>Towed?</i>	<i>Weather / Surface</i>	<i>Summary (ex: EB = Eastbound, FTY = Failure to Yield)</i>
Location: Chestnut Street at First Street										
1	4/1/2016	16007716	1000	Friday	Rear End	2	Property	No	Clear/Dry	NB rear ends NB stopped at red light
2	4/30/2016	16010097	1600	Saturday	Sideswipe	2	Property	No	Clear/Dry	SB attempts right turn to #47 and sideswipes SB on Chestnut
3	5/30/2016	16012576	1500	Monday	Fixed Object	1	Property	No	Clear/Dry	TT unit making right turn from SB into #47 strikes utility pole
4	2/2/2017	17002691	1000	Thursday	Rear End	2	Injury	Yes	Clear/Dry	Chestnut SB rear ends veh at red light
5	3/17/2017	17005899	1700	Friday	Rear End	2	Property	No	Clear/Dry	Chestnut SB rear ends veh at red light (DWI)
6	10/25/2018	18024382	1500	Thursday	Angle	2	Property	No	Clear/Dry	Left on red from #47 v. right on red from First St (signals frozen)
7	10/26/2018	18024469	1600	Friday	Angle	2	Property	No	Clear/Dry	Left turn from First (green light) v. right turn from #47 (red light)
8	11/25/2018	18026605	1200	Sunday	Pedestrian	1	Minor injury	No	Clear/Dry	Right turn from First (red light) v. pedestrian SB crossing against signal
9	12/18/2018	18028459	1600	Tuesday	Rear End	2	Property	No	Clear/Dry	Both turning left from #47, lead veh stops in traffic and is rear-ended

March 7, 2019

Katherine Cooper
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

Dear Mrs. Cooper:

I am responding to your request to confirm the availability of electric service for the proposed Dover Heights project, located at 1 First Street, Dover, New Hampshire, being constructed for/by One First Dover, LLC.

The proposed project consists of a 6-story building with 71 residential units and parking space below grade. The proposed development will be constructed along First Street & Second Street.

The developer will be responsible for the installation of all underground facilities and infrastructure required to service the new building. The service will be as shown on attached marked up Utility Plan. The proposed building service will be fed from Eversource's underground distribution system. Eversource will work with the City of Dover to upgrade existing underground facilities along First Street to accommodate the removal of the existing overhead line in the alleyway between First and Second Street. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed transformer and underground facilities shown on attached utility plan.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled "Utility Plan Dover Heights" dated 1/22/2019, shows transformer locations to service your proposed project.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (<https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2>).

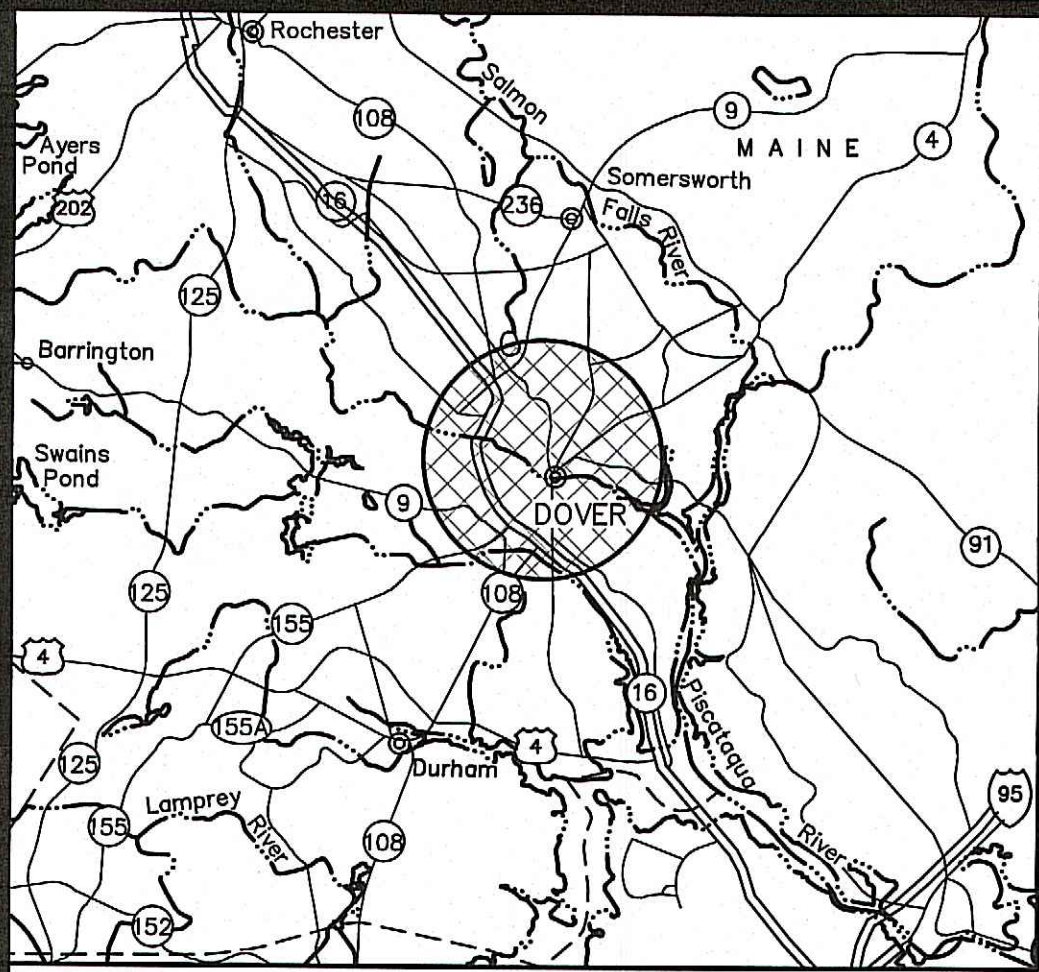
If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-436-7708 Ext. 555-5678

Respectfully,



Michael J. Busby, PE
NH Eastern Regional Engineering and Design Manager, Eversource

cc: (via e-mail)
Michael Lee, Eastern Region Operations Manager, Eversource
Mary Jo Hanson, Field Supervisor, Electric Design, Eversource



VICINITY PLAN
NOT TO SCALE

ABUTTERS:

- 3-64 PILLAR INVESTMENT CORP
340 CENTRAL AVENUE #202, DOVER, NH 03820
- 3-66 COCHECO MILLS HOLDINGS LLC
3 PENSTOCK WAY, NEWMARKET, NH 03857-4416
- 3-67 421 CENTRAL AVENUE LLC
113 BUNKER HILL AVENUE, STRATHAM, NH 03885
- 6-1 BRIAN & STEPHANIE FISCHER
46 NORTH RIVER ROAD, LEE, NH 03824
- 6-3 RIPARIA-ONE HUNDRED FIRST STREET, LLC
446 CENTRAL AVENUE, STE 12 DOVER, NH 03820
- 6-15 KAB REALTY MANAGEMENT LLC
35 THIRD STREET, DOVER, NH 03820-3316
- 6-16 CONNORS COLLEEN F & CONNORS AILLINN
21 FIRST STREET, DOVER, NH 03820
- 6-17 HOLGATE LIMITED PARTNERSHIP
130 CENTRAL AVENUE, DOVER, NH 03820
- 6-18 SOUDAKIM LLC
310 DOVER POINT ROAD, DOVER, NH 03820
- 6-19 TROY S. & ROXANE E. DILLOW
P.O. BOX 1464, ROCHESTER, NH 03866
- 6-21-1 BUILD UPON, LLC
56 SUMMER STREET, DOVER, NH 03820
- 6-21-2 MARKER 21 HOLDINGS, LLC
130 CENTRAL AVENUE, DOVER, NH 03820
- 6-21-3 CARTELLI'S, LLC
356 TOLAND ROAD, DOVER, NH 03820
- 6-21A PETER T. & JOAN HENRY
454 CENTRAL AVENUE, DOVER, NH 03820
- 6-22 WEST CONCORD INVESTMENTS, LLC
222 CASS STREET, PORTSMOUTH, NH 03801-4945
- 6-24, 25 DAVID R. & STACEY L. CAMIRE
281 WASHINGTON STREET, DOVER, NH 03820
- 6-26 JEAN FIELD
24 SECOND STREET, DOVER, NH 03820
- 6-33, 38 ROSS FURNITURE COMPANY INC.
& 39 38 THIRD STREET, DOVER, NH 03820
- 6-34 WOODS PHYLLIS L TRUSTEE WOODS PHYLLIS L REV TRUST
1 BARRY STREET, DOVER, NH 03820
- 6-35 SOUDAKIM, LLC
P.O. BOX 1813, DOVER, 03821-1813
- 6-35A, BAMFORD INVESTMENT CO., LLC
36 & 36A 466 CENTRAL AVENUE, SUITE 12, DOVER, NH 03820
- 6-37 ANBELWOLD LLC
334 ROUTE 108, MADBURY, NH 03823

OWNER/APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE ROAD
SUITE 102
NASHUA, NH 03060

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881

ARCHITECT:
DESTEFANO ARCHITECTS
22 LADD STREET
PORTSMOUTH, NH 03801

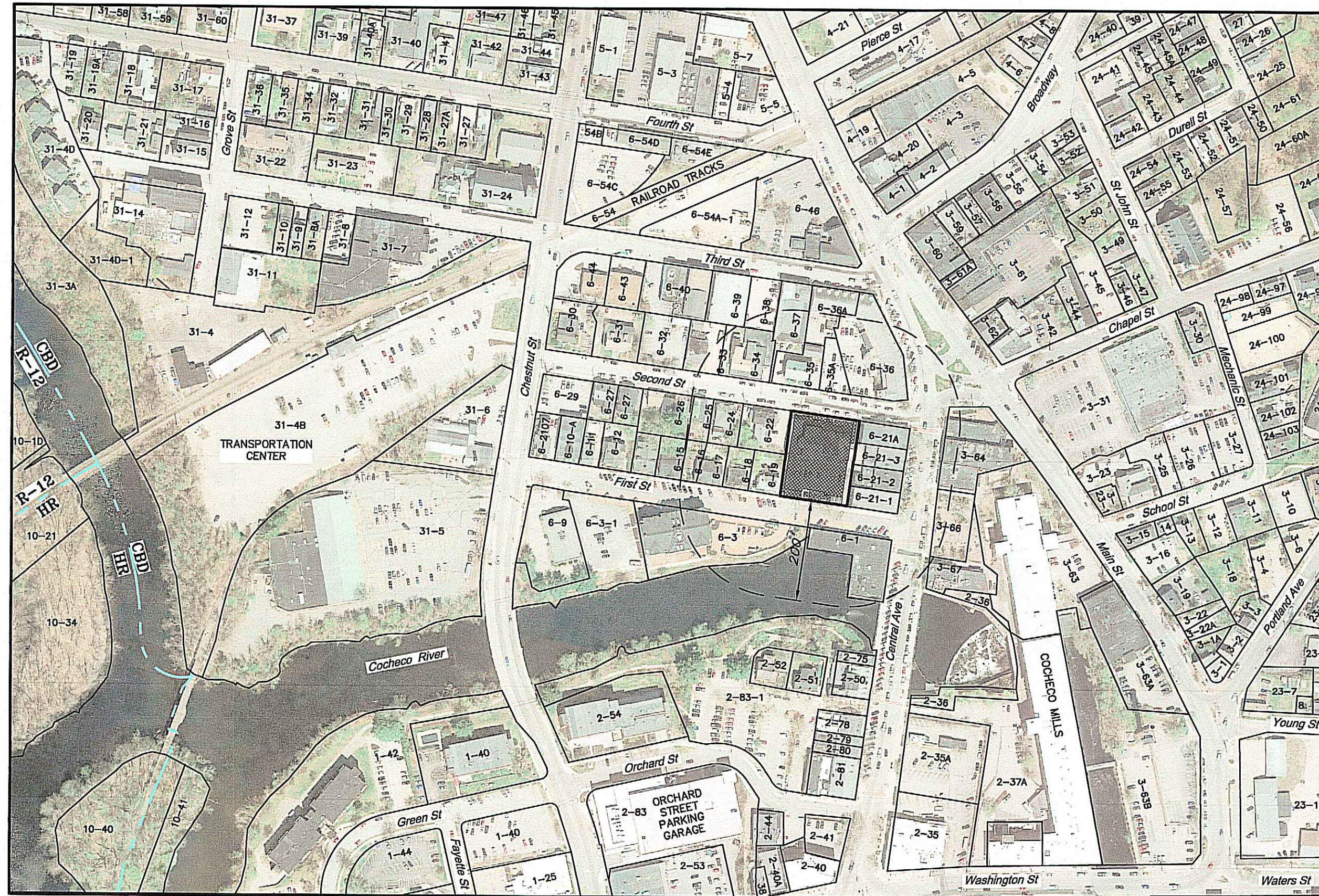
RESIDENTIAL SITE PLAN

DOVER HEIGHTS

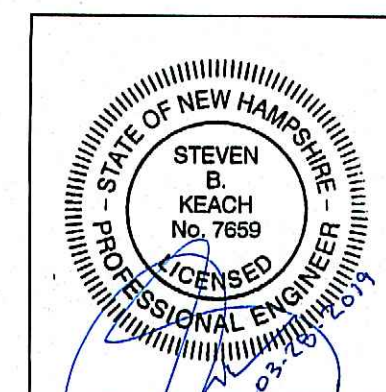
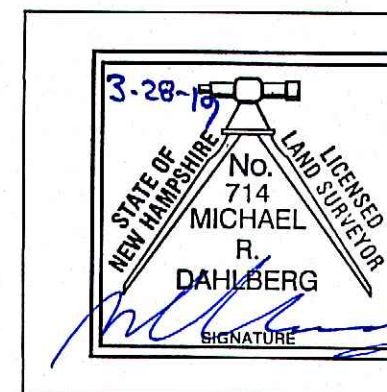
MAP 6 LOT 20

1 FIRST STREET

DOVER, NEW HAMPSHIRE

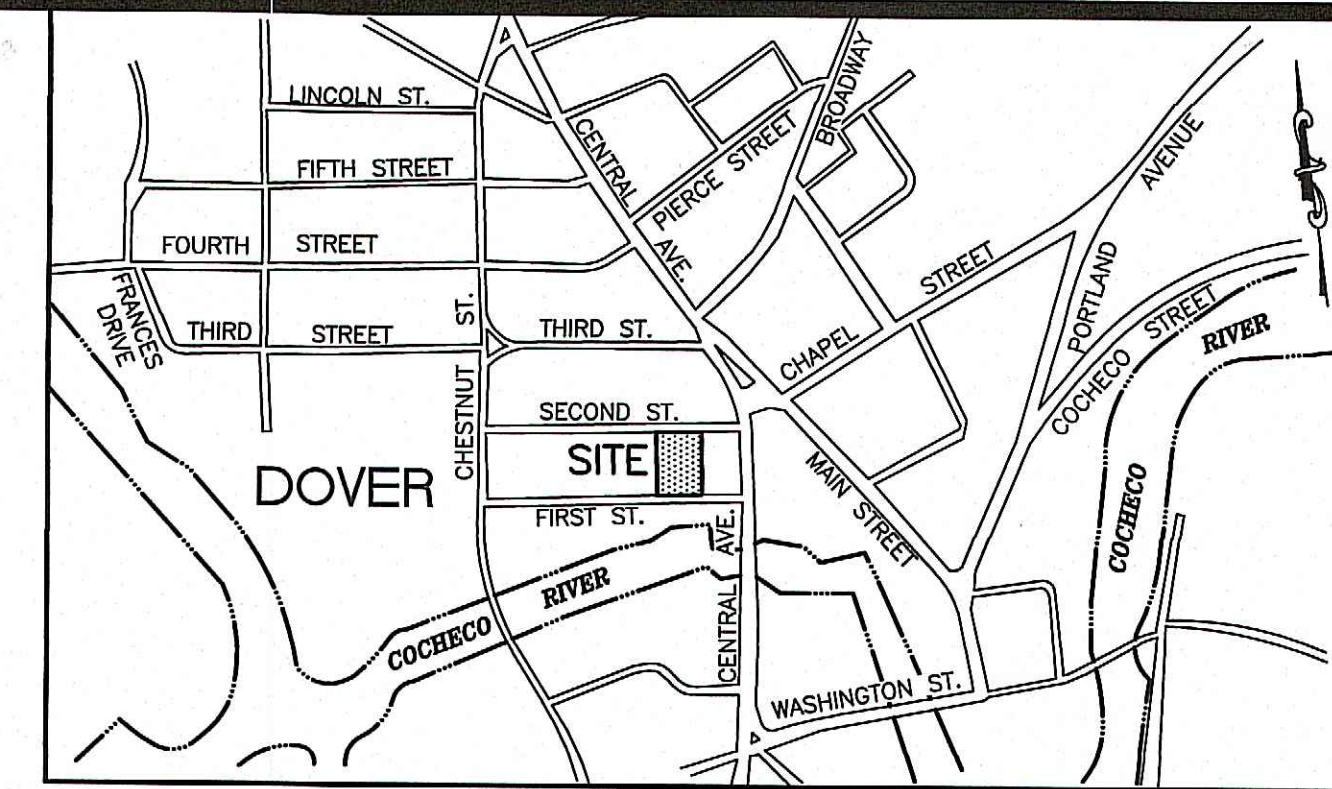


TAX MAP SKETCH & NEIGHBORHOOD MAP
SCALE: 1" = 200'±



KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

JANUARY 22, 2019
REVISED: MARCH 22, 2019
PROJECT NO. 17-1219-1



VICINITY MAP
SCALE: 1"=500'±



SHEET TITLE

MASTER PLAN
EXISTING CONDITIONS PLAN
REMOVALS / DEMOLITION PLAN
SITE LAYOUT PLAN
GRADING & DRAINAGE PLAN
EROSION CONTROL PLAN
UTILITY PLAN
LANDSCAPE PLAN
LIGHTING PLAN
PROFILES
CONSTRUCTION DETAILS

SHEET No.

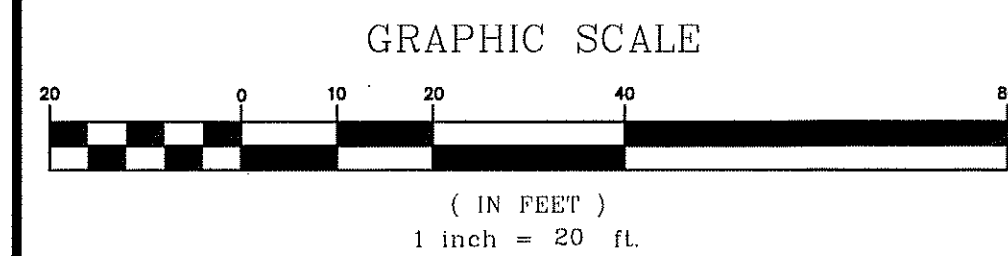
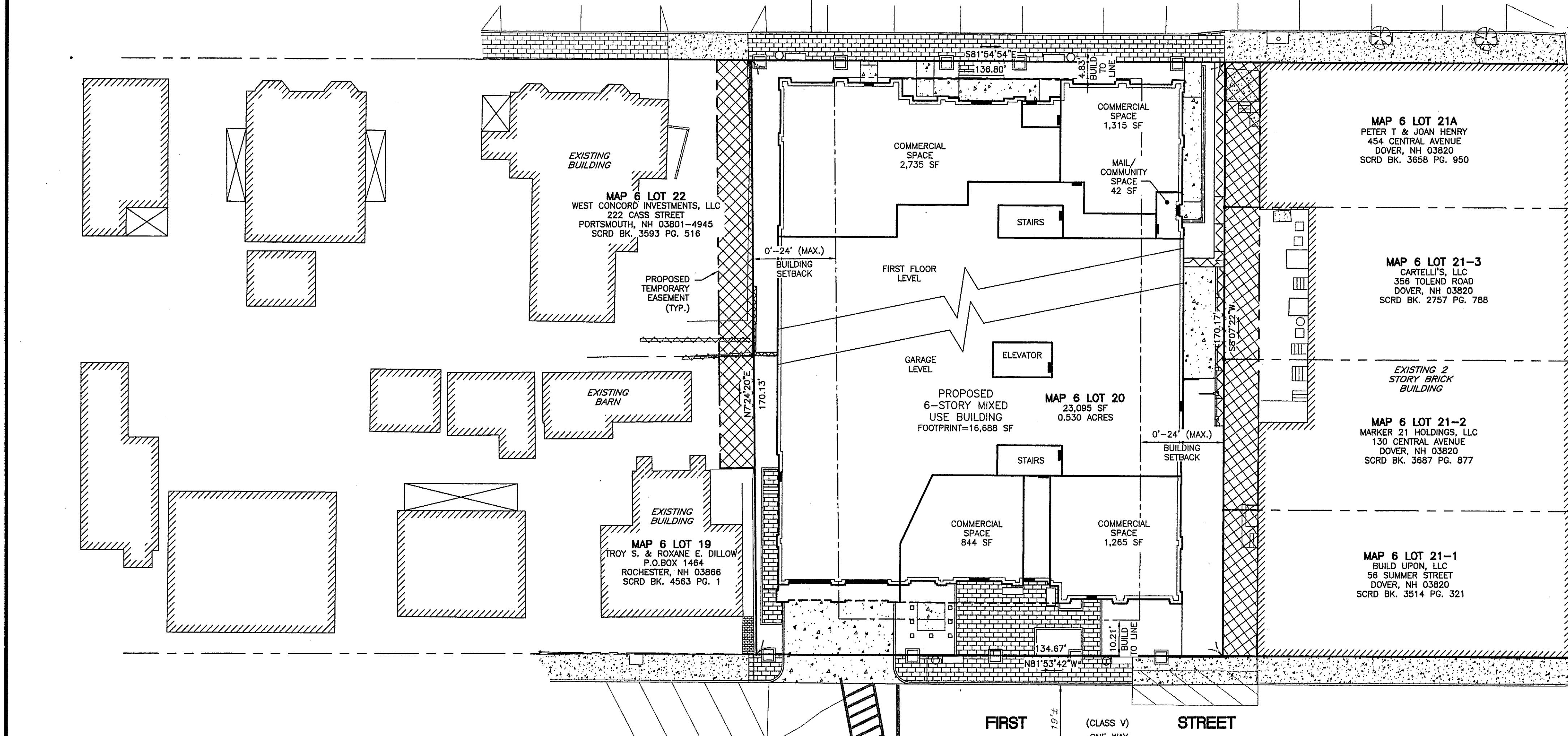
1
2
3
4
5
6
7
8
9
10
11 - 15

CITY OF DOVER IMPACT FEE SCHEDULE				
TYPE OF DEVELOPMENT	PUBLIC SAFETY	SCHOOL	RECREATION	TOTAL IMPACT FEE ASSESSMENTS
RESIDENTIAL PER UNIT				
APARTMENTS OVER 1st FLOOR NON-RESIDENTIAL USE	\$726.00	\$649.00	\$872.00	\$2,247.00
NON-RESIDENTIAL PER SQ.FT.				
RETAIL, INCLUDING RESTAURANTS, CLUBS	\$1.58			\$1.58
OFFICES AND COMMERCIAL SERVICES	\$0.92			\$0.92

PROJECT IMPACT FEE CALCULATION		
RESIDENTIAL PER UNIT	71 UNITS	\$159,537.00
NON-RESIDENTIAL PER SQ.FT.		
RETAIL, INCLUDING RESTAURANTS, CLUBS	6,199 SQ.FT.	\$9,794.42
OFFICES AND COMMERCIAL SERVICES	6,199 SQ.FT.	\$5,703.08

LEGEND

DECIDUOUS TREE
 ABUTTER LINE
 PROPERTY LINE
 BUILDING SETBACK LINE
 RETAINING WALL
 EDGE OF PAVEMENT
 VERTICAL GRANITE CURB
 PROPOSED EDGE OF PAVEMENT
 PROPOSED EASEMENT



OWNER OF MAP 6 LOT 20

SIGNATURE:

DATE: 2-7-19

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING FEBRUARY OF 2018. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1:10,000).

3-28-19

LICENSED LAND SURVEYOR

DATE



MAP 6 LOT 3
RIPARIA-ONE HUNDRED FIRST STREET LLC
446 CENTRAL AVENUE, STE 12
DOVER, NH 03820
SCRD BK. 4228 PG. 704
SCRD BK. 4228 PG. 710

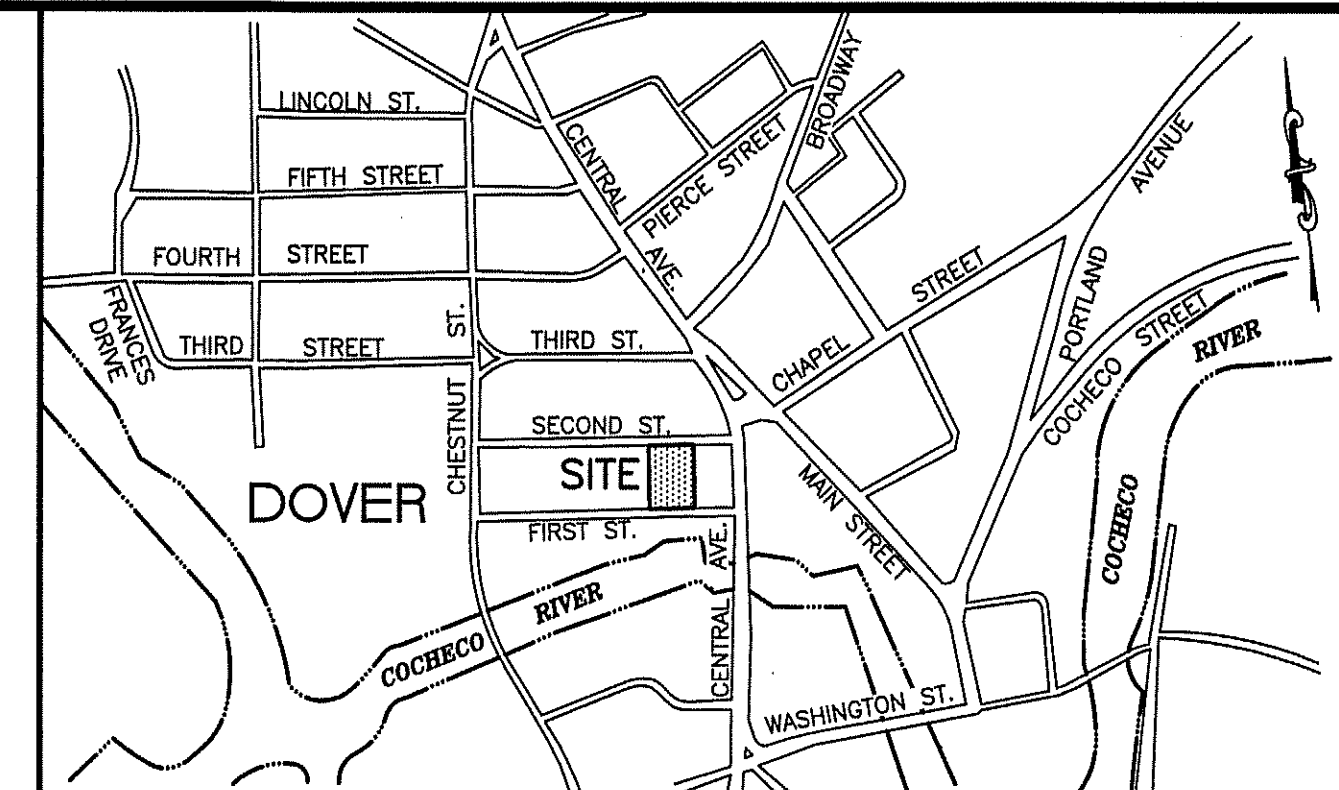
MAP 6 LOT 1
BRIAN & STEPHANIE FISCHER
46 NORTH RIVER ROAD
LEE, NH 03824
SCRD BK. 1987 PG. 289

NOTES: (CONTINUED)

22. THERE ARE NO WETLANDS ON-SITE BASED ON A SITE EVALUATION DONE ON MARCH 18, 2019 BY JOSHUA BRIEN, CERTIFIED WETLAND SCIENTIST #256 OF KEACH-NORDSTROM ASSOCIATES, INC.

23. THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVE STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.

24. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 PM AND SATURDAY 9 AM-4PM. NO CONSTRUCTION SHALL OCCUR ON SUNDAY OR CITY DESIGNATED HOLIDAYS.



- NOTES:

SCALE: 1"=500'±
- THE PURPOSE OF THIS PLAN IS TO SHOW A PROPOSED SIX-STORY 71-UNIT RESIDENTIAL BUILDING WITH STREET LEVEL COMMERCIAL SPACE AND A LOWER LEVEL PARKING GARAGE OFF FIRST STREET ON MAP 6 LOT 20.
 - OWNER OF RECORD:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE ROAD, STE. 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565
 - REFERENCE SUBJECT PARCEL AS MAP 6 LOT 20 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
 - AREA OF PARCEL = 0.5301 ACRES OR 23,095 SQUARE FEET.
 - CURRENT ZONING: CENTRAL BUSINESS DISTRICT (CBD) GENERAL SUB-DISTRICT
- | MINIMUM LOT REQUIREMENTS: | MINIMUM | PROPOSED |
|-----------------------------------|------------------------|-----------------------------------|
| LOT SIZE: | N/A | 23,095 SF |
| LOT COVERAGE: | 75% | 75.3% |
| FRONTAGE BUILD OUT: | 70% MINIMUM | 87% (FIRST ST.), 84% (SECOND ST.) |
| MINIMUM BUILDING SETBACKS: | | |
| FRONT BUILD TO LINE | 10.21 FT (FIRST ST.) | 14.92 FT (FIRST ST.) |
| REAR | 4.83 FT (SECOND ST.) | 5.00 FT (SECOND ST.) |
| SIDE | 0 FT - 24 FT (MAXIMUM) | 5.93 FT (WEST), 11.74 FT (EAST) |
| REAR | N/A | |
| MAXIMUM BUILDING HEIGHT: | 5 STORIES | 6 STORIES * |
| * CONDITIONAL USE PERMIT REQUIRED | | |
- PARKING:
MAXIMUM ALLOWED:
RESIDENTIAL (CBD-G):
1.25 SPACES/UNIT x 71 UNITS + 0.4 VISITOR SPACES/UNIT x 71 UNITS = 117.15 SPACES
RETAIL/SERVICES:
6,199 SF @ 1 SPACE/275 SF = 22.54 SPACES
MAXIMUM TOTAL SPACES ALLOWED: = 117 SPACES **
TOTAL SPACES PROVIDED:
1.1 SPACE/UNIT x 71 UNITS + 0.4 VISITOR SPACE/UNIT x 71 UNITS = 106.5 SPACES
29 SPACES PROVIDED IN GARAGE (INCLUDES 2 HANDICAP SPACES)
78 SPACES LEASED FROM CITY WITH 5 YEAR AGREEMENT
** WHERE COMMERCIAL AND RESIDENTIAL USES ARE CO-LOCATED ONLY THE RESIDENTIAL PARKING SHALL BE PERMITTED.
 - THE APPLICANT SHALL REQUIRE THROUGH LEASE DOCUMENTS THAT STREET PARKING IS PROHIBITED FOR RESIDENTIAL TENANTS, GUESTS AND COMMERCIAL SPACE EMPLOYEES. STREET PARKING IS INTENDED FOR COMMERCIAL CUSTOMERS ONLY.
 - ANY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A NH LICENSED LAND SURVEYOR AFTER ALL CONSTRUCTION ACTIVITY WHICH COULD FURTHER DISTURB THEM HAS BEEN COMPLETED.
 - THE SITE IS SERVICED BY MUNICIPAL WATER AND SEWER.
 - COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
 - THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS AS WELL AS COMPLIANCE WITH NH RSA 155-A:5. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS.
 - AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF THE PROJECT AS SPECIFICATIONS.
 - A CONDITIONAL USE PERMIT IS REQUESTED FOR SECTION 170-20.D BUILDING HEIGHT.
 - REQUIRED PERMITS
NHDES SEWER CONNECTION PERMIT
FAA NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION (FORM 7460-1)
 - SHOULD THE VOLUME OF SNOW EXCEED THE CAPACITY OF THE ON-SITE STORAGE AS SHOWN, THE EXCESS SNOW SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH STATE, LOCAL AND FEDERAL LAWS
 - THE PROJECTED DISTURBANCE IS LESS THAN 1 ACRE, THEREFORE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT IS NOT REQUIRED.
 - TEMPORARY CONSTRUCTION EASEMENTS LISTED ON PLANS HAVE BEEN DISCUSSED WITH ABUTTERS, FORMAL AGREEMENTS WILL BE FINALIZED PRIOR TO FINAL APPROVAL.
 - DUMPSTERS TO BE SIZED TO MEET ADA REACH REGULATION.
 - CONTRACTOR AND OWNER SHALL COORDINATE METHOD OF FIRE DEPARTMENT ACCESS TO PARKING GARAGE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
 - BUILDING ADDRESSES SHALL BE DETERMINED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
 - THIS PLAN SUPERCEDES THE PREVIOUSLY APPROVED PLAN (P16-15) FOR THIS SITE.

MASTER PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC
DATE: JANUARY 22, 2019		SCALE: 1" = 20'	
PROJECT NO: 17-1219-1		SHEET 1 OF 15	

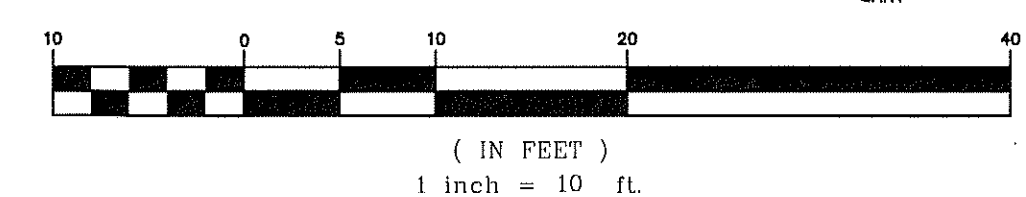
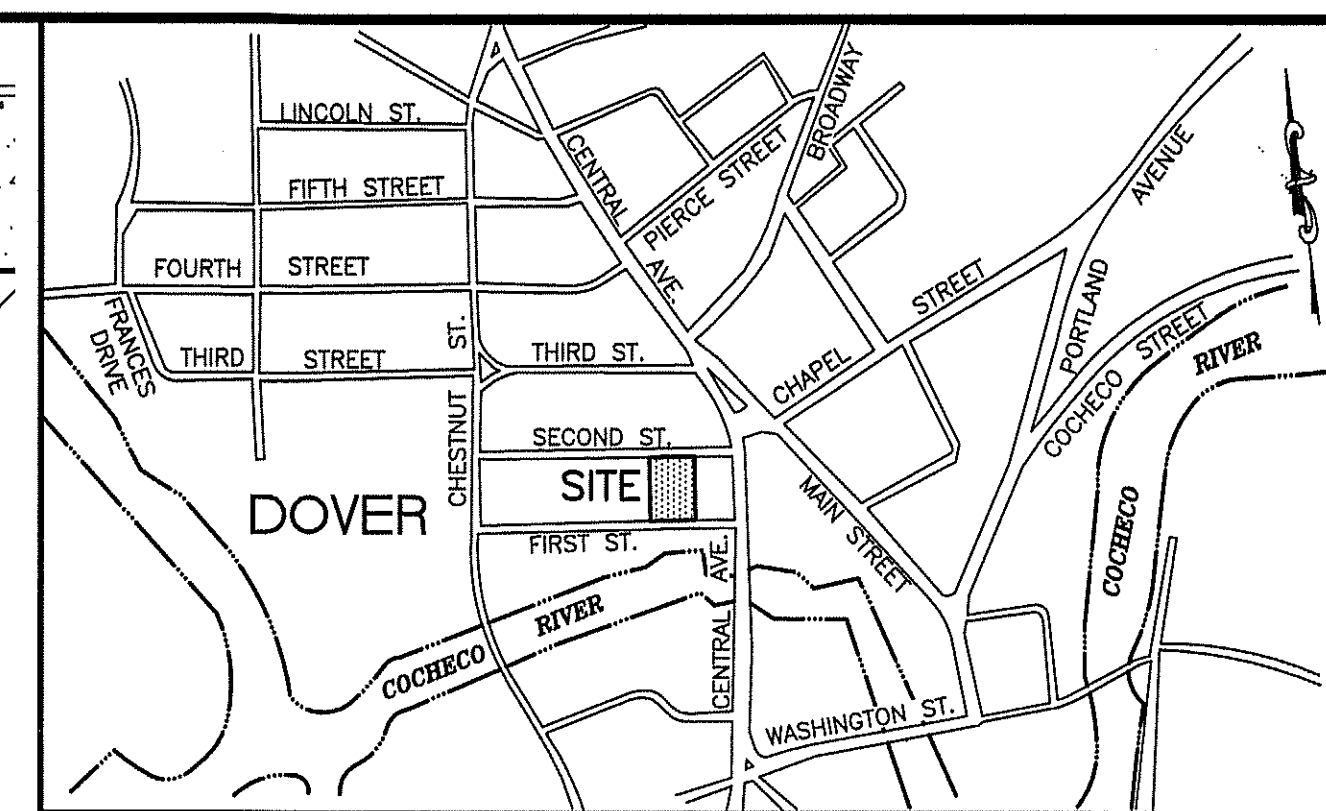
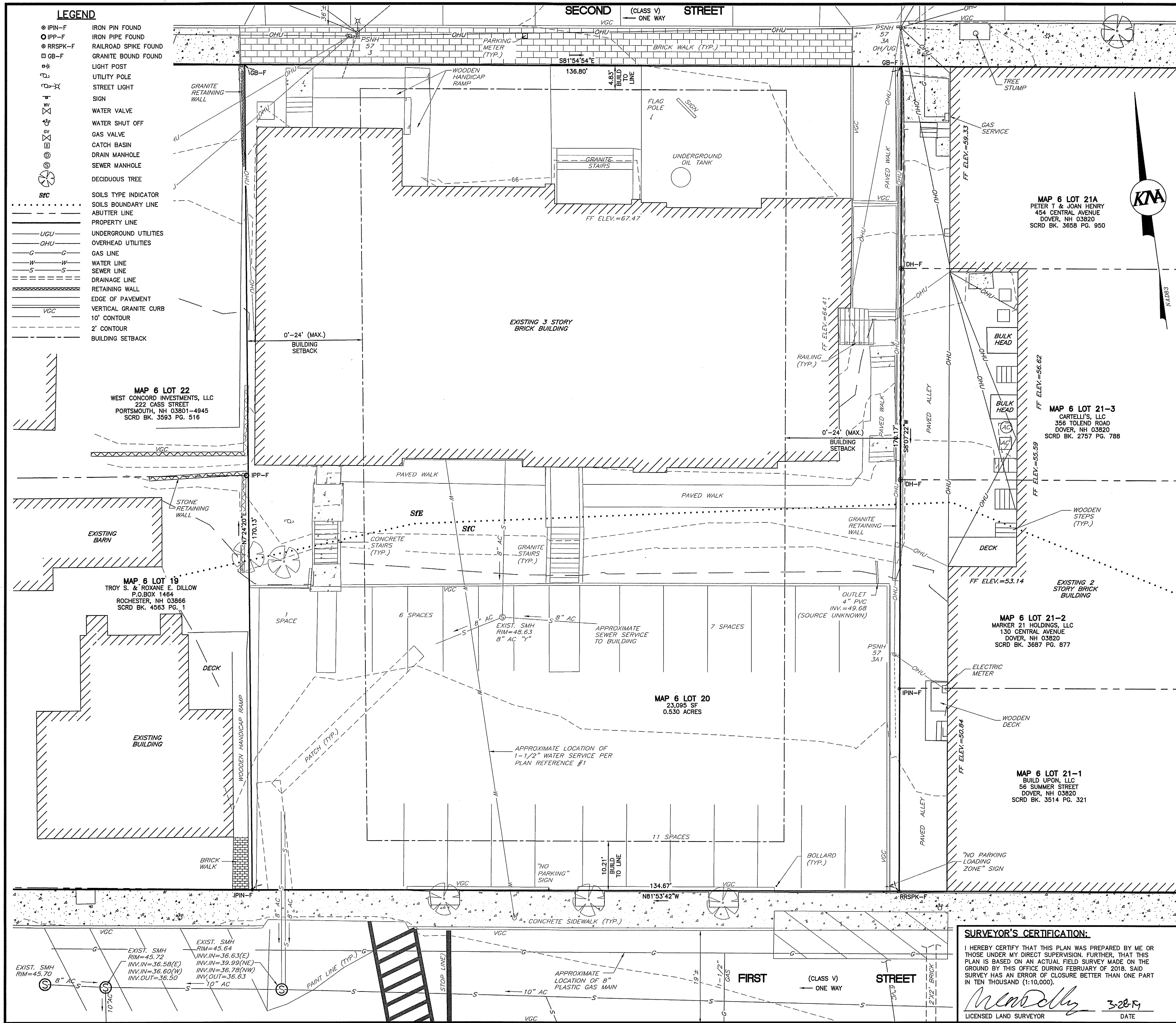


TABLE 1. Continued	TABLE 2. Continued
TABLE 1. Continued	TABLE 2. Continued

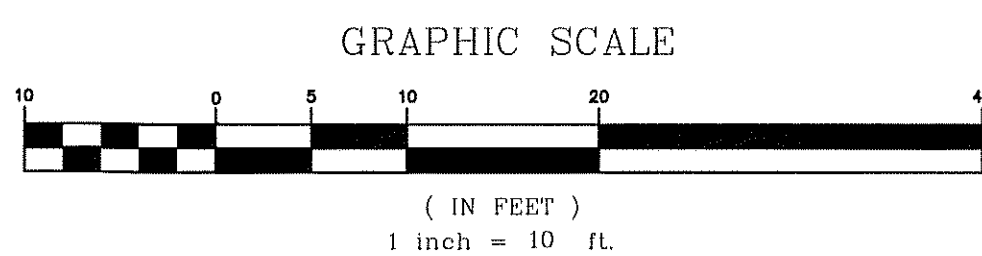
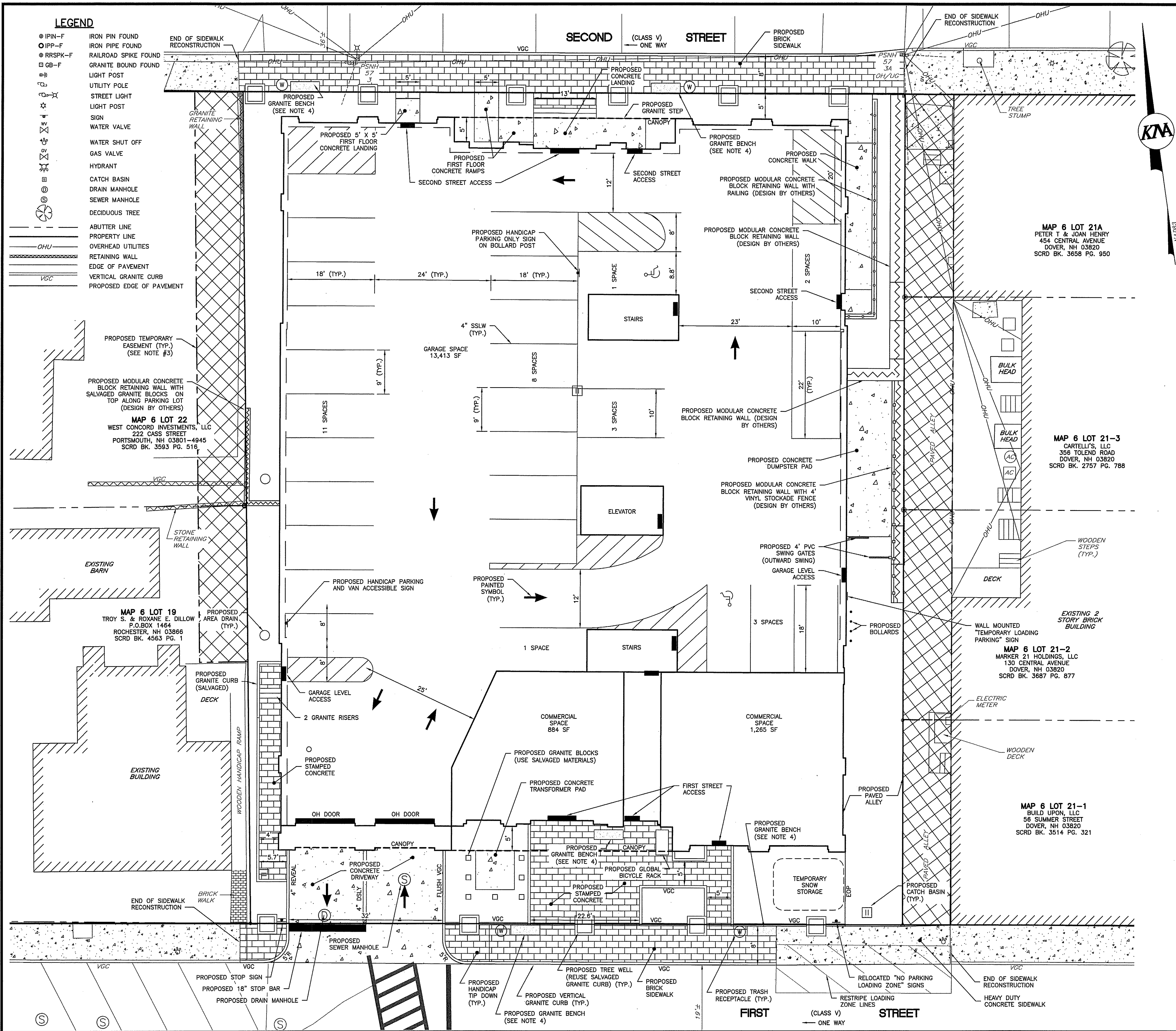
Mentelby 3-28-19
LICENSED LAND SURVEYOR DATE

LEGEND

- IPIN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- RRSFK-F RAILROAD SPIKE FOUND
- GB-F GRANITE BOUND FOUND
- LIGHT POST
- UTILITY POLE
- STREET LIGHT
- LIGHT POST
- SIGN
- WATER VALVE
- WATER SHUT OFF
- GAS VALVE
- HYDRANT
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- DECIDUOUS TREE
- ABUTTER LINE
- PROPERTY LINE
- OVERHEAD UTILITIES
- RETAINING WALL
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- PROPOSED EDGE OF PAVEMENT

NOTES:

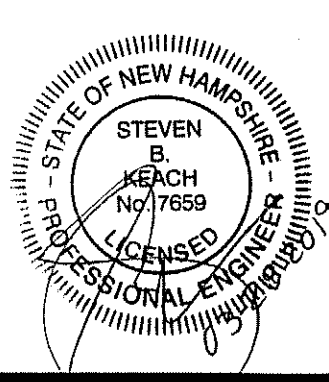
1. THE PURPOSE OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS AND THE PARKING GARAGE LAYOUT.
2. A DRIVEWAY PERMIT IS REQUIRED TO MODIFY DRIVEWAY.
3. TEMPORARY EASEMENTS ON ABUTTER PROPERTIES HAVE BEEN DISCUSSED WITH EACH ABUTTER. FINAL AGREEMENT TO BE SIGNED PRIOR TO FINAL APPROVAL. THE FOLLOWING SHALL BE INCLUDED:
 - NO DISRUPTION TO ONGOING BUSINESSES OR USE OF ALLEY DURING WORKING HOURS;
 - NOTIFY INDIVIDUALS PRIOR TO USE OF TEMPORARY EASEMENT;
 - USE OF TEMPORARY EASEMENT IS FOR INCIDENTAL CONSTRUCTION ACTIVITIES ONLY;
 - MEASURES TO BE IN PLACE TO PREVENT DUST;
 - MEASURES TO BE TAKEN TO DOCUMENT CURRENT ABUTTING PROPERTY CONDITIONS AND ANY ACCIDENTAL DAMAGE WILL BE UPON THE OWNER/APPLICANT AND CONTRACTOR TO FIX.
4. THE PROPOSED BENCHES ARE INTENDED TO BE GRANITE BLOCKS SALVAGED FROM THE SITE. IF APPROPRIATE GRANITE BLOCKS CANNOT BE SALVAGED, AN ALTERNATE BENCH MAY BE USED (SEE DETAILS).



SITE LAYOUT PLAN DOVER HEIGHTS MAP 6 LOT 20 1 FIRST STREET DOVER, NEW HAMPSHIRE STRAFFORD COUNTY PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC
DATE: JANUARY 22, 2019		SCALE: 1" = 10'	
PROJECT NO: 17-1219-1		SHEET 4 OF 15	

LEGEND

- LIGHT POST
- UTILITY POLE
- STREET LIGHT
- LIGHT POST
- SIGN
- WATER VALVE
- WATER SHUT OFF
- GAS VALVE
- HYDRANT
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- DECIDUOUS TREE
- ABUTTER LINE
- PROPERTY LINE
- OVERHEAD UTILITIES
- RETAINING WALL
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- 10' CONTOUR
- 2' CONTOUR
- PROPOSED SEWER MANHOLE
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED EDGE OF PAVEMENT
- PROP. VERTICAL GRANITE CURB
- PROPOSED 2' CONTOUR
- PROPOSED SWALE

SECOND (CLASS V) STREET

ONE WAY

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE GRADING AND PARKING GARAGE GRADING.
2. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
3. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.

CONSTRUCTION SEQUENCE:

1. PERFORM EARTHWORK TO PREPARE FOR BUILDING FOUNDATION AND RETAINING WALLS.
2. BEGIN BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION.
3. ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
4. INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
5. CONSTRUCT BUILDING.
6. PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESSES.
7. COMPLETE EXCAVATION/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRIABLE LOAM.
8. FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
9. INSTALL CONCRETE WALKS AND PADS, BRICK WALKS AND CURBING.
10. INSTALL THE BINDER COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
11. CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
12. INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
13. COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.
14. INSTALL SILTATION CONTROL MEASURES WHERE NECESSARY FOR SEDIMENT CONTROL.
15. DUST SHALL BE CONTROLLED THROUGHOUT THE DEMOLITION PHASE, IN ACCORDANCE WITH ENV-A 1002.
16. PERIODICALLY SWEEP FIRST & SECOND STREETS AND ALLEY TO LIMIT SEDIMENT MIGRATION.

MAP 6 LOT 21A
PETER T & JOAN HENRY
454 CENTRAL AVENUE
DOVER, NH 03820
SCRD BK. 3658 PG. 950

KMA

MAP 6 LOT 21-3
CARTELLI'S, LLC
356 TOLAND ROAD
DOVER, NH 03820
SCRD BK. 2757 PG. 788

SEE SHEET 6 FOR GARAGE
DRAIN SEWER TIE-IN



GRAPHIC SCALE



(IN FEET)
1 inch = 10 ft.

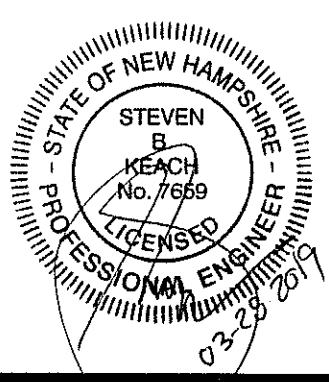
GRADING & DRAINAGE PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-18

OWNER OF RECORD & APPLICANT:

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KMA
KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

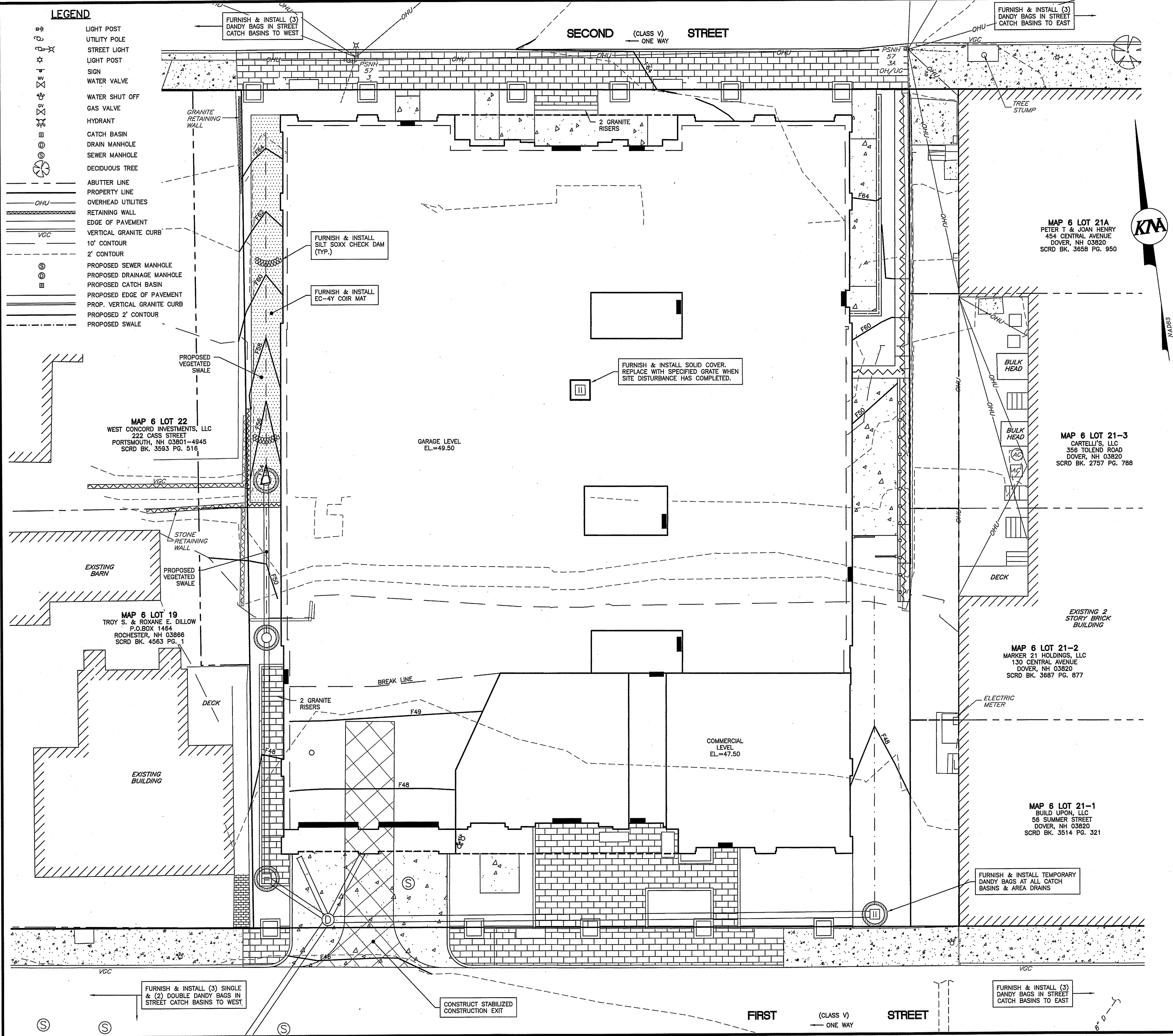


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC
DATE: JANUARY 22, 2019		SCALE: 1" = 10'	
PROJECT NO: 17-1219-1		SHEET 5 OF 15	

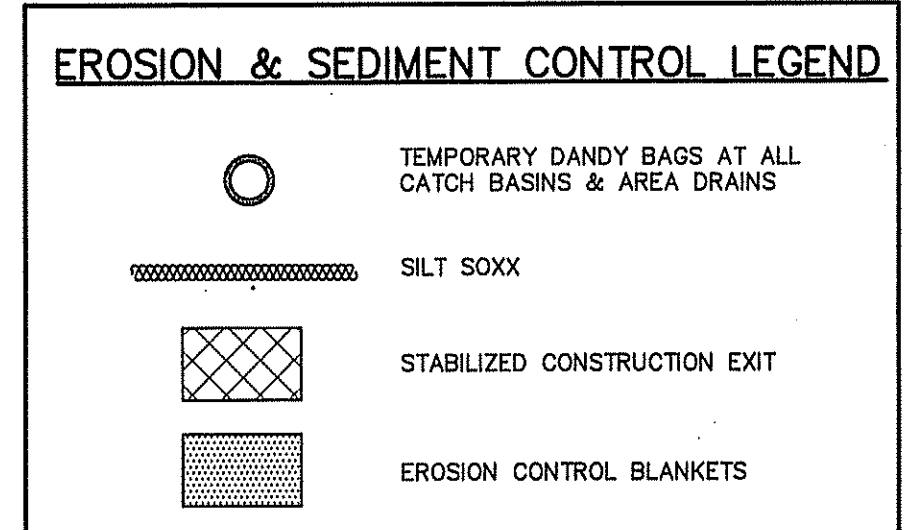
FIRST (CLASS V) STREET

ONE WAY

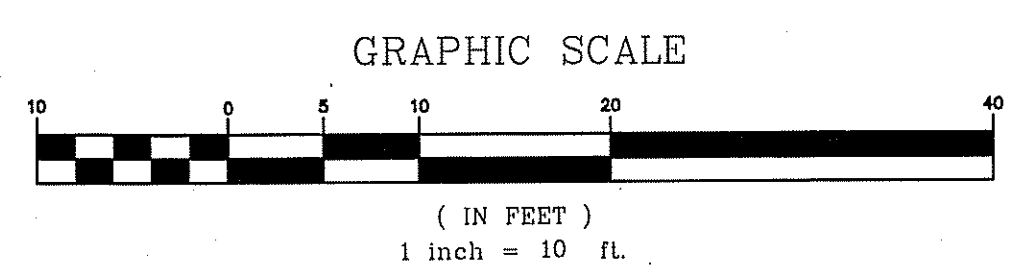
STREET



- NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ON-SITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES.
 2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2010, AS AMENDED FROM TIME TO TIME.
 3. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
 4. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
 5. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
 6. OFF-SITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSIDE DRAINAGE SYSTEMS SHALL BE MAINTAINED.
 7. TEMPORARY WATER DIVERSION MUST BE USED AS NECESSARY UNTIL SOILS ARE STABILIZED.
 8. ON-SITE DE-WATERING SHALL NOT BE DISCHARGED TO DRAINAGE STRUCTURES, INSTEAD SHALL BE DIRECTED TO A TEMPORARY SEDIMENT TRAP ON-SITE.
 9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
 10. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
 11. DUST SHALL BE CONTROLLED THROUGHOUT THE DEMOLITION AND CONSTRUCTION PHASES, IN ACCORDANCE WITH ENV-A 1002.
 12. PERIODICALLY SWEEP FIRST & SECOND STREETS AND ALLEY TO LIMIT SEDIMENT MIGRATION.
 13. THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.



SEE SHEET 15 FOR EROSION CONTROL NOTES AND DETAILS



EROSION CONTROL PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16

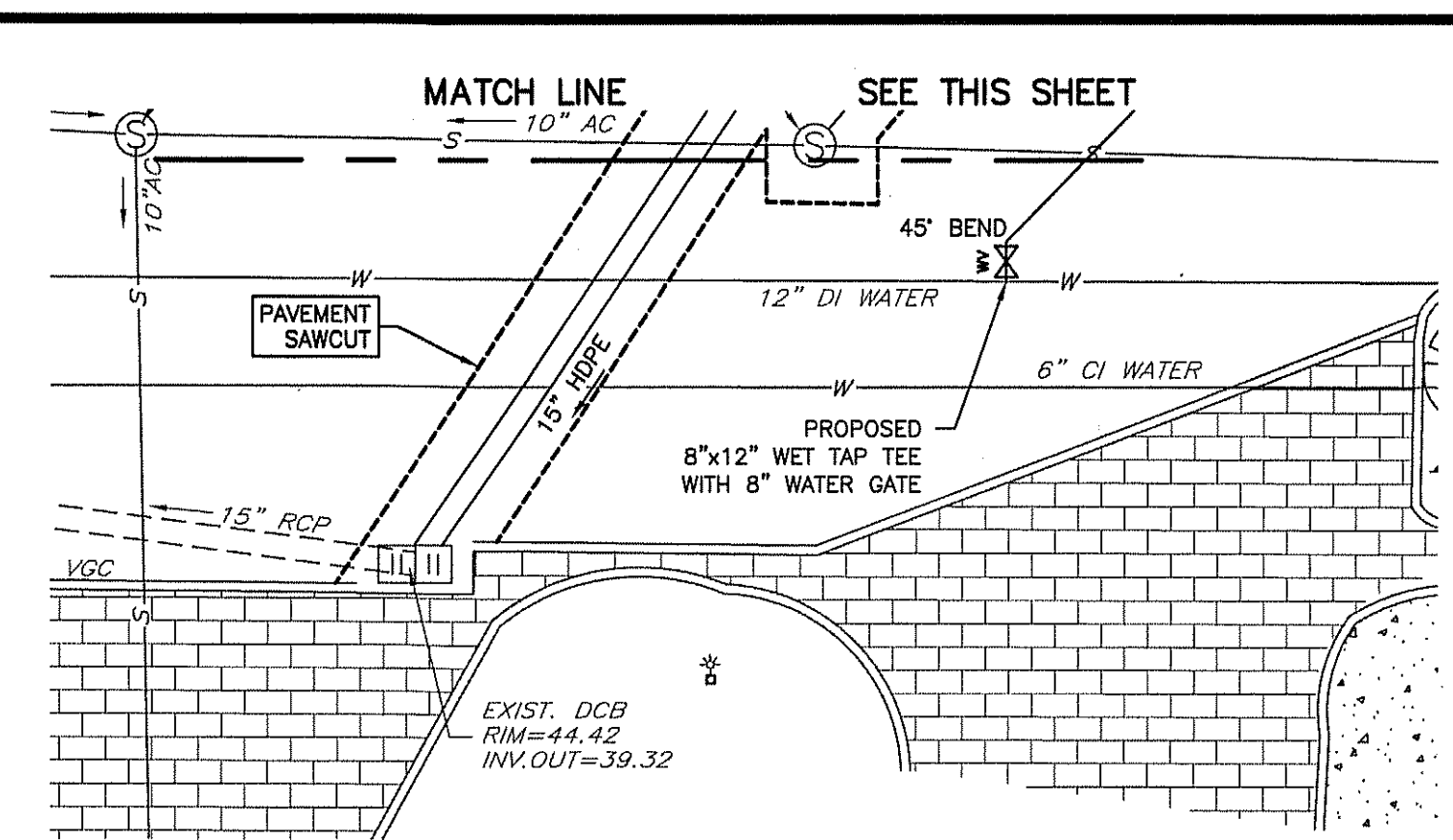
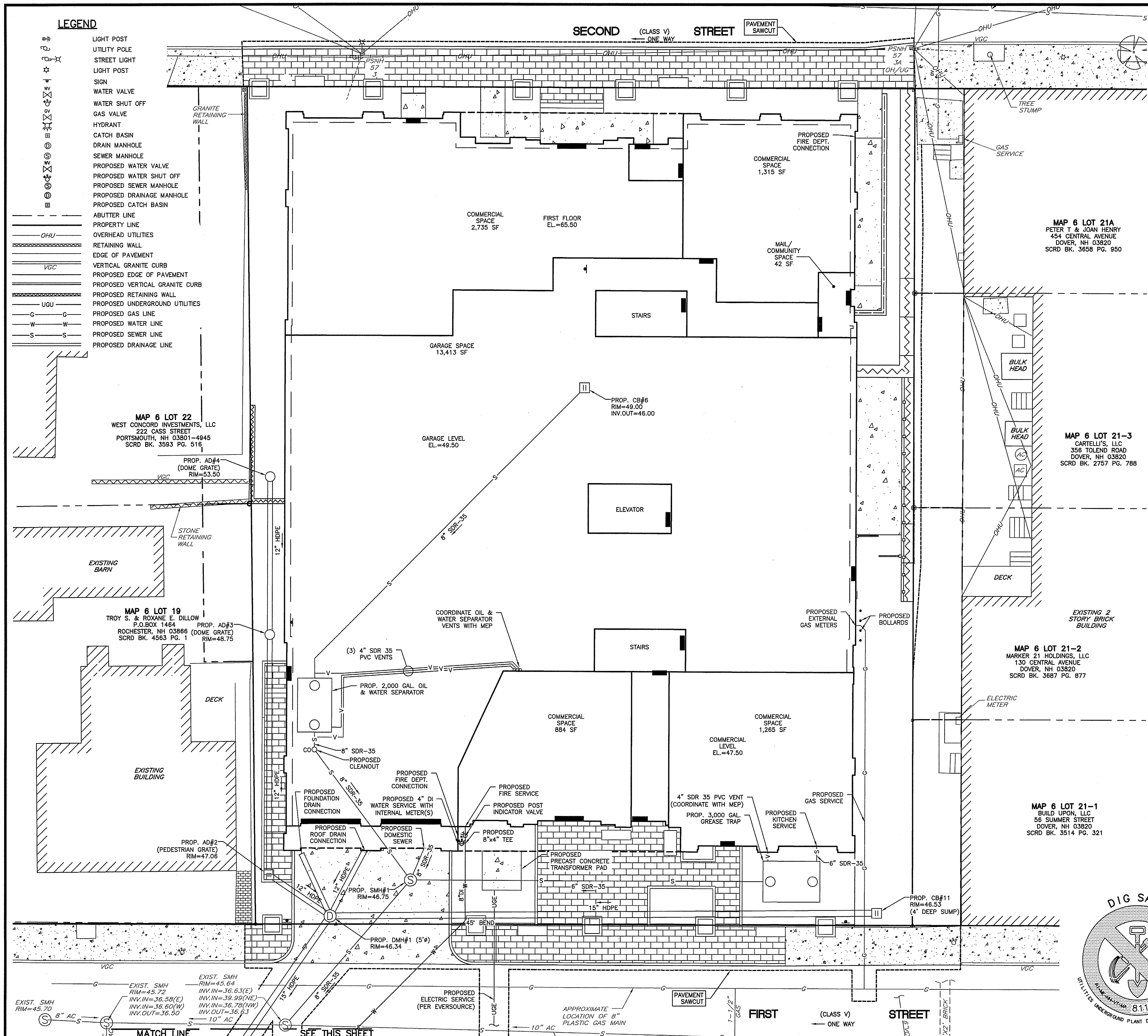
OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC

DATE: JANUARY 22, 2019 SCALE: 1" = 10'
PROJECT NO: 17-1219-1 SHEET 6 OF 15

T:\project\1712191\dwg\Production Drawings\1712191-STEPLAN.dwg, EROSION, 3/27/2019 12:00:56 PM, mchamberlain

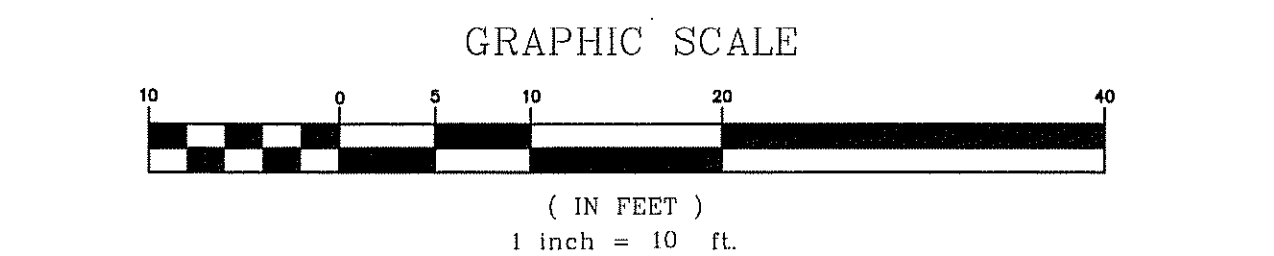


- NOTES:**
1. ALL WORK SHALL CONFORM TO THE CITY OF DOVER, LATEST EDITION, CONSTRUCTION STANDARDS AND DETAILS. IN THE ABSENCE OF A CITY STANDARD/SPECIFICATION, WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED BY THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, ARE HEREBY INCORPORATED BY REFERENCE.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 3. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 4. CONTRACTOR TO VERIFY SIZE OF WATER AND GAS SERVICE LINES WITH MECHANICAL CONTRACTOR/FIRE SUPPRESSION ENGINEER PRIOR TO THE START OF CONSTRUCTION.
 5. PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO ORDERING ANY WATER SYSTEM/SERVICE PARTS, THE PROPOSED SIZE OF THE VARIOUS WATER SERVICES SHALL BE CONFIRMED BY THE PROJECT FIRE SUPPRESSION ENGINEER. ANY ADJUSTMENTS TO THE DESIGN MUST BE APPROVED BY THE CITY OF DOVER.
 6. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
 7. THE PROPOSED STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED UNDER CHAPTER 109-30 OF THE CODE OF THE CITY OF DOVER AND THE 2015 STATE BUILDING CODES.
 8. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED.
 9. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13.
 10. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 58, ARTICLE I, SECTION 58-2 OF THE CODE OF THE CITY OF DOVER.
 11. CB #11 TO RECEIVE A SNOUT OIL AND DEBRIS STOP.
 12. UNDERGROUND UTILITIES TO BE PROPOSED BY EVERSOURCE. COORDINATION TO CONTINUE. FINAL LOCATION TO BE APPROVED BY THE CITY PRIOR TO FINAL APPROVAL.

- WATER & SEWER INVESTMENT FEES:**
1. FLOW RATE DETERMINED BASED ON NHDES EnvWq 1000 TABLE 100B-1 PER DOVER UTILITIES COMMISSION RULES.
 2. EXISTING USE DATA FROM CITY OF DOVER COMMERCIAL PROPERTY RECORD CARD.
 3. FLOW CALCULATION:
PROPOSED COMMERCIAL:
UNSPECIFIED OFFICE SPACE = 5 GPD/100 SF
6,199 SF x 5 GPD/100 SF = 310 GPD
PROPOSED RESIDENTIAL:
APARTMENT - (STUDIO OR ONE BR) = 225 GPD
38 UNITS (1 STUDIO & 37 1 BR) x 225 GPD/UNIT = 8,550 GPD
APARTMENT - (TWO OR MORE BRS) = 150 GPD/BR
33 UNITS (24 1+ BR & 9 2 BR) x 300 GPD/UNIT = 9,900 GPD
TOTAL PROPOSED FLOW = 18,760 GPD

EXISTING FLOW = 17,709 SF x 5 GPD/100 SF (UNSPECIFIED OFFICE SPACE) = 885 GPD
+ 1 ONE BEDROOM APARTMENT = 225 GPD
TOTAL EXISTING FLOW = 1,110 GPD

INCREASED FLOW SUBJECT TO INVESTMENT FEES = 17,650 GPD
4. INVESTMENT FEE CALCULATION:
WATER \$5.05/GPD x 17,650 GPD = \$89,132.50
SEWER \$8.65/GPD x 17,650 GPD = \$152,672.50



UTILITY PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

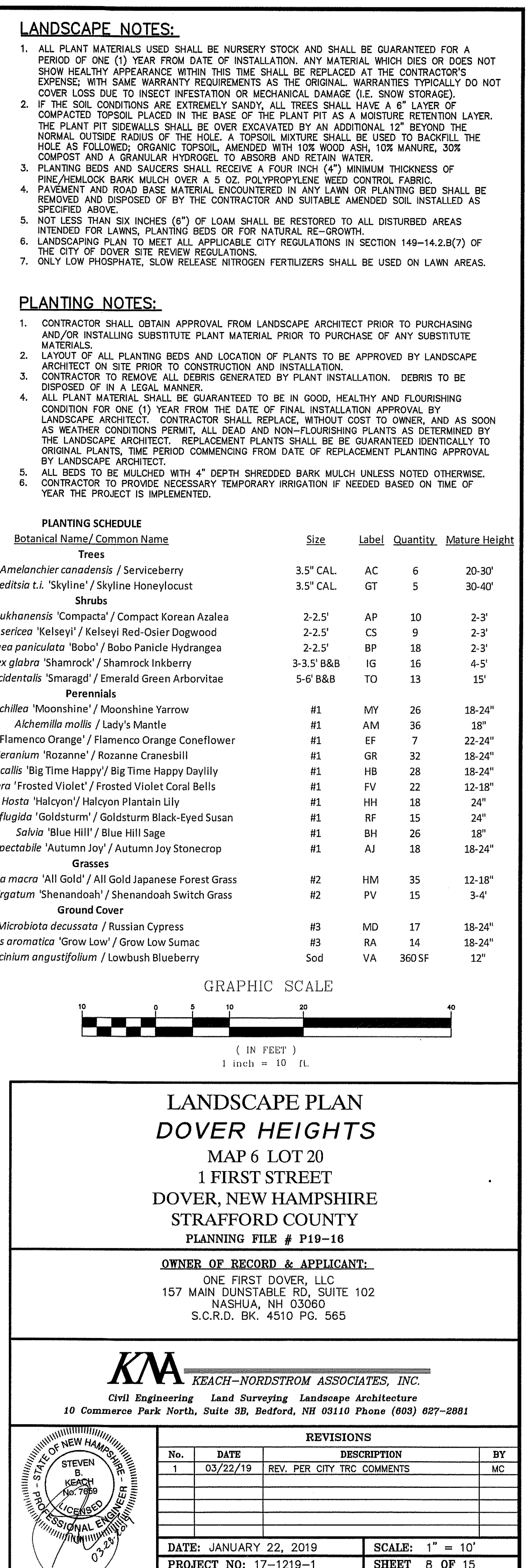
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC

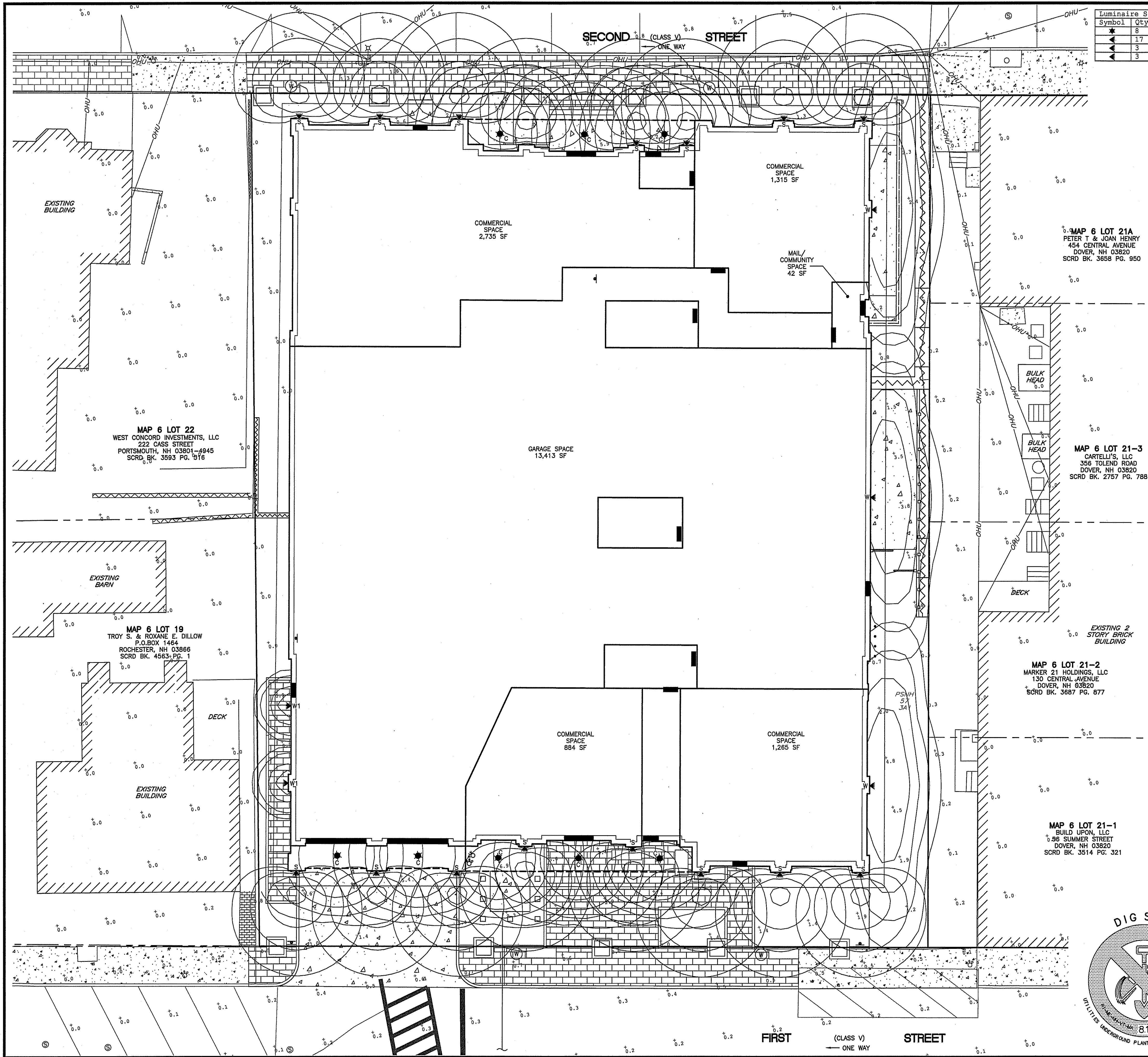
DATE: JANUARY 22, 2019 SCALE: 1" = 10'

PROJECT NO: 17-1219-1 SHEET 7 OF 15

T:\project\171219.dwg Production Drawings\171219-1-SITEPLAN.dwg, UTILITY, 3/7/2019 12:00:41 PM, mchamberlain



F:\project\1712191\dwg\Production Drawings\1712191-LAND-LIGHT.dwg, LIGHTING, 3/29/2019 2:12:51 PM, mchamberlin



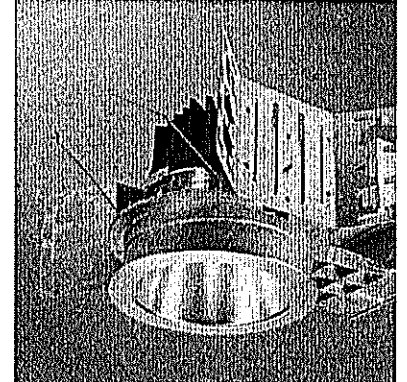
Luminaire Schedule				
Symbol	Qty	Label	Lamp	Arrangement
8	C	LED-19W	SINGLE	LD4B15D010 EU4B10208035 4LEDWLLI/ CANOPY MOUNTED
17	S	LED-14W	SINGLE	674-31-WP-L3-835-UNV-ALP/ WALL MTD 7' CENTER OF FIXTURE AFG
3	W	LED-4.6W	SINGLE	MERU-LED-AC-DB/ WALL MTD 12' AFG
3	W1	LED-17W	SINGLE	33579-4K / WALL MTD 10' AFG

LIGHTING NOTES:

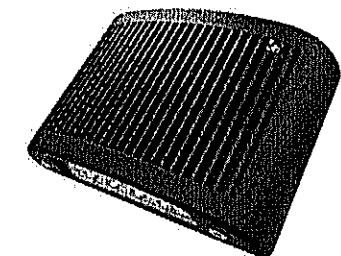
- ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY CHARRON LLC.
- EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 149-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.



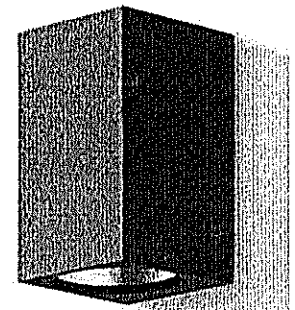
**SHAPER 674-WP
WALL SCONCE**
NOT TO SCALE



**PORTFOLIO
RECESSED DOWNLIGHT**
NOT TO SCALE



**MULE MERU-LED
WALL LIGHT**
NOT TO SCALE



**BEGA 33579
WALL LUMINAIRE**
NOT TO SCALE

GRAPHIC SCALE



(IN FEET)
1 inch = 10 ft.

IN ASSOCIATION WITH:



P.O. BOX 4550
MANCHESTER, NH 03108
(603) 624-4827
FAX (603) 624-8764
SALES@CHARRONING.COM

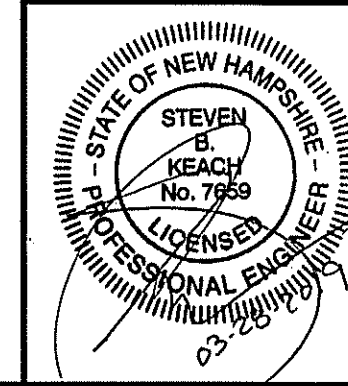
**LIGHTING PLAN
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16**

OWNER OF RECORD & APPLICANT:

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565



Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



REVISIONS

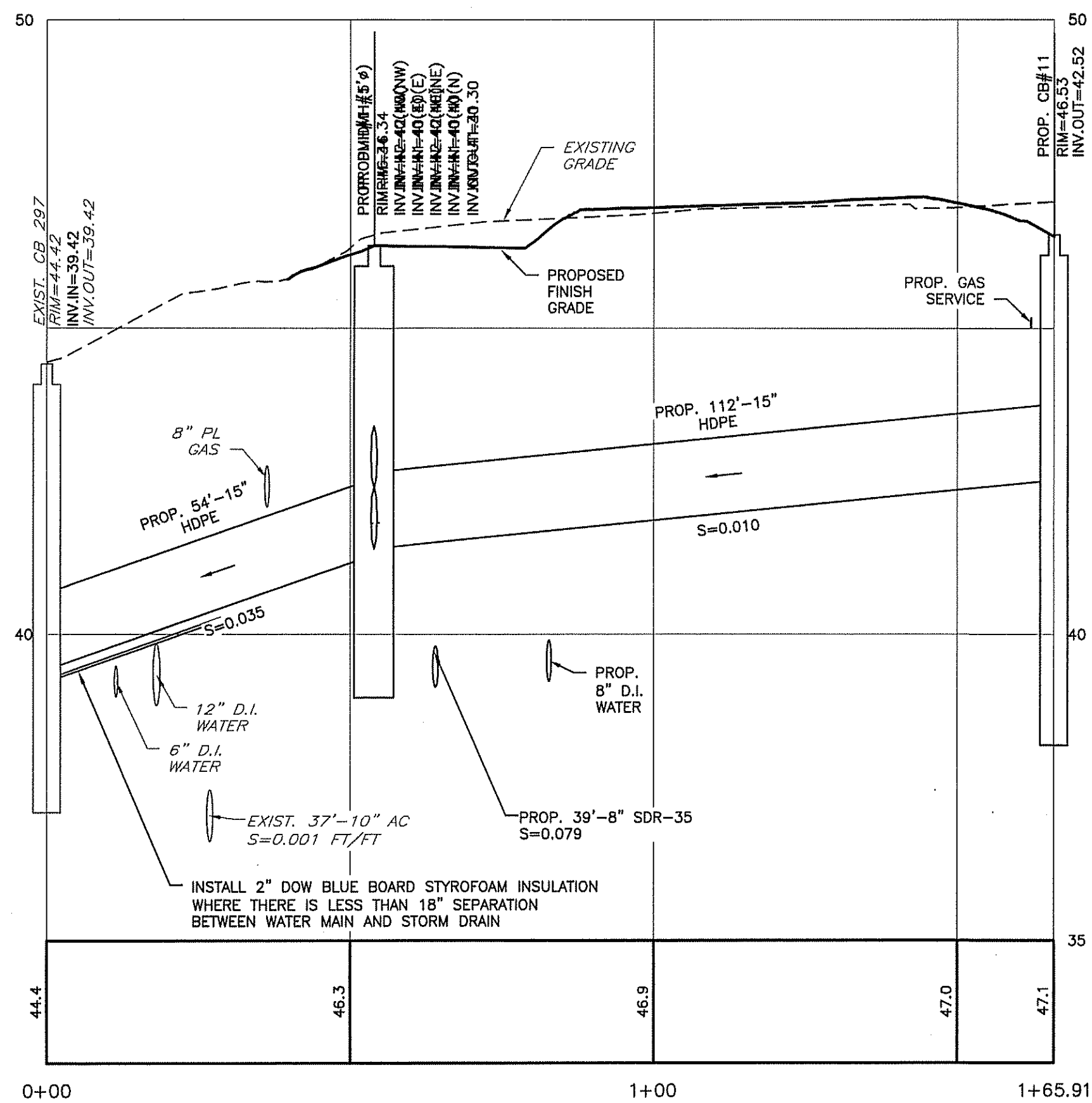
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC

DATE: JANUARY 22, 2019

SCALE: 1" = 10'

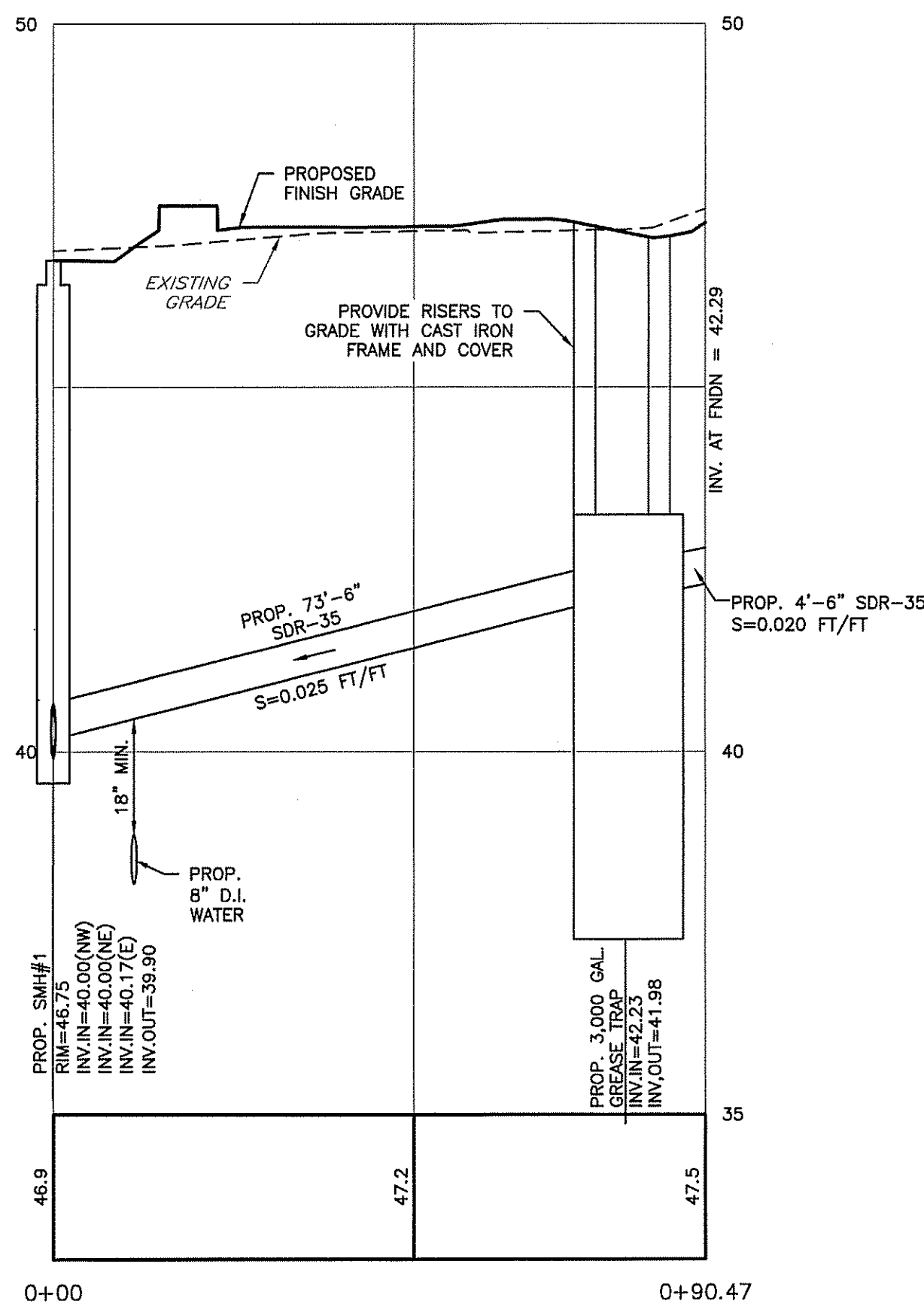
PROJECT NO: 17-1219-1

SHEET 9 OF 15



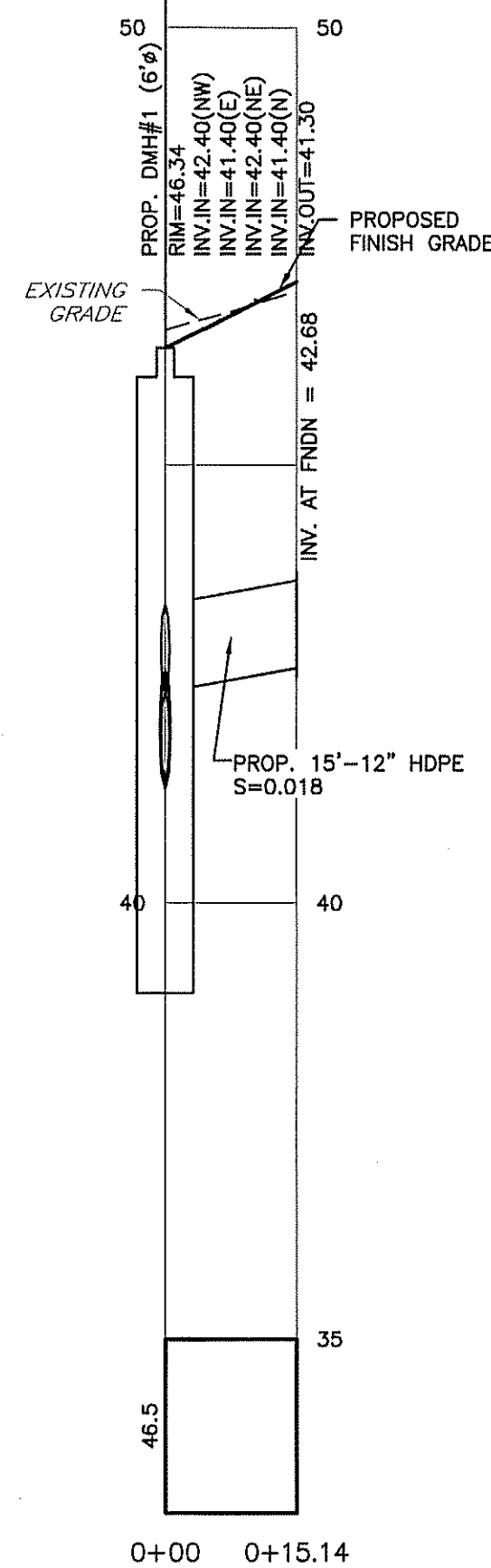
DRAINAGE PROFILE
(EXIST. CB TO PROP. CB#11)

SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



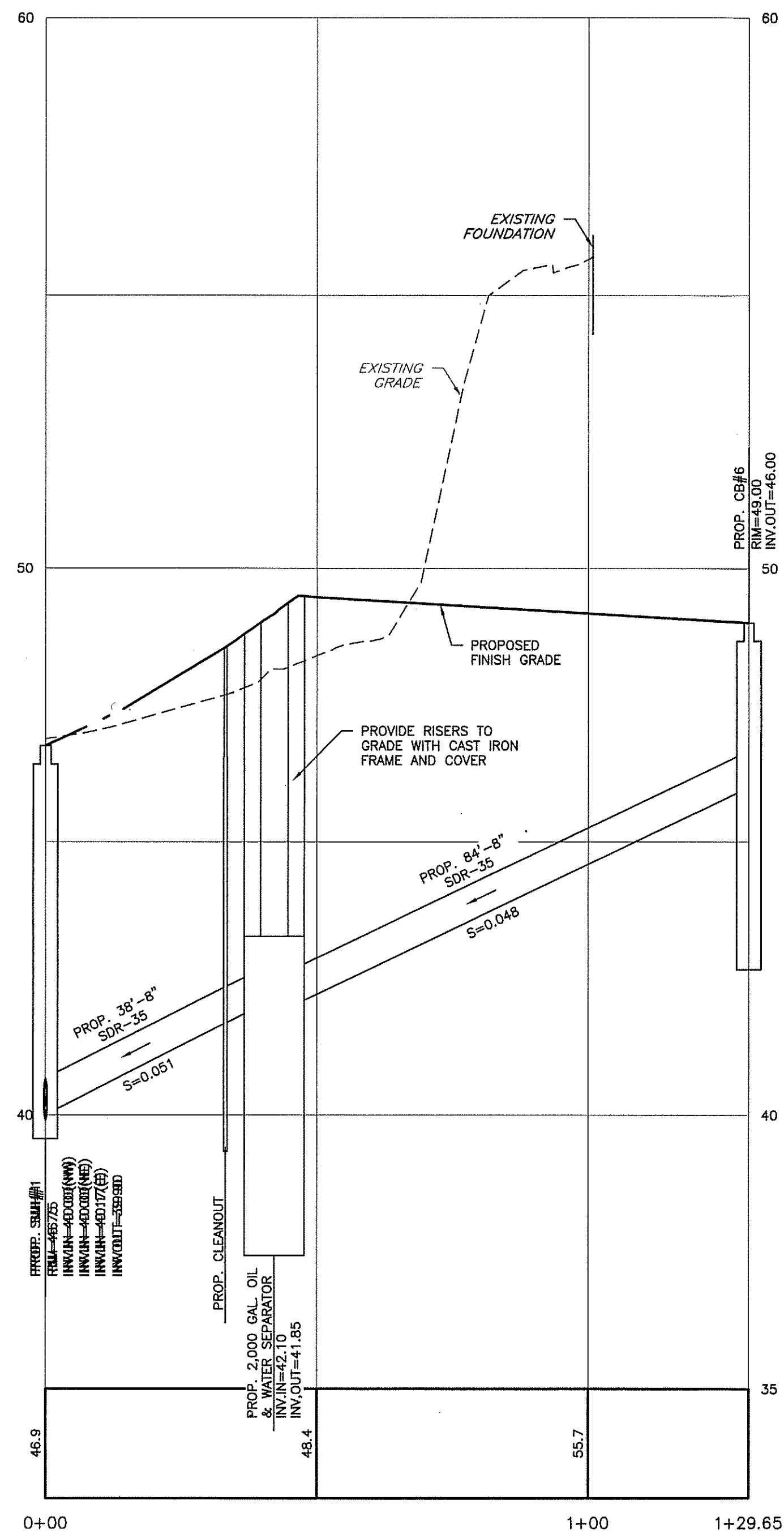
SEWER PROFILE
(PROP. SMH#1 TO KITCHEN SERVICE)

SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



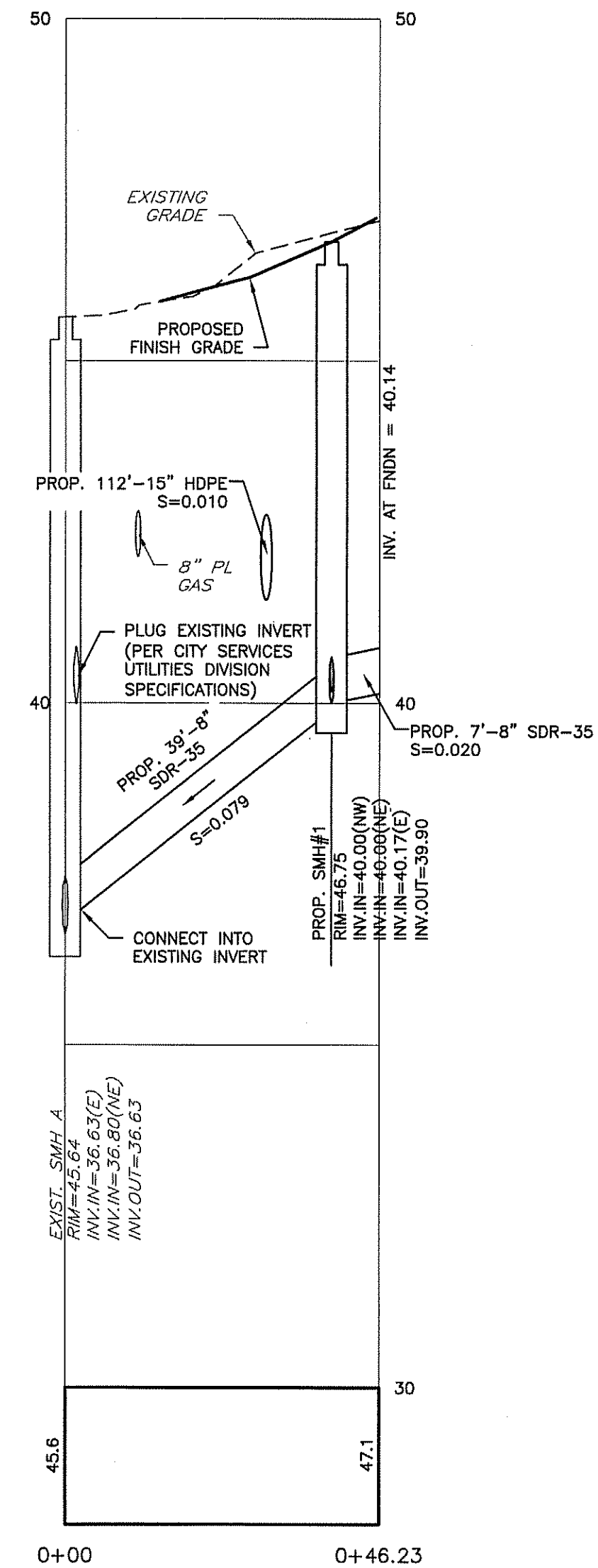
DRAINAGE PROFILE
(PROP. DMH#1 TO ROOF DRAIN)

SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



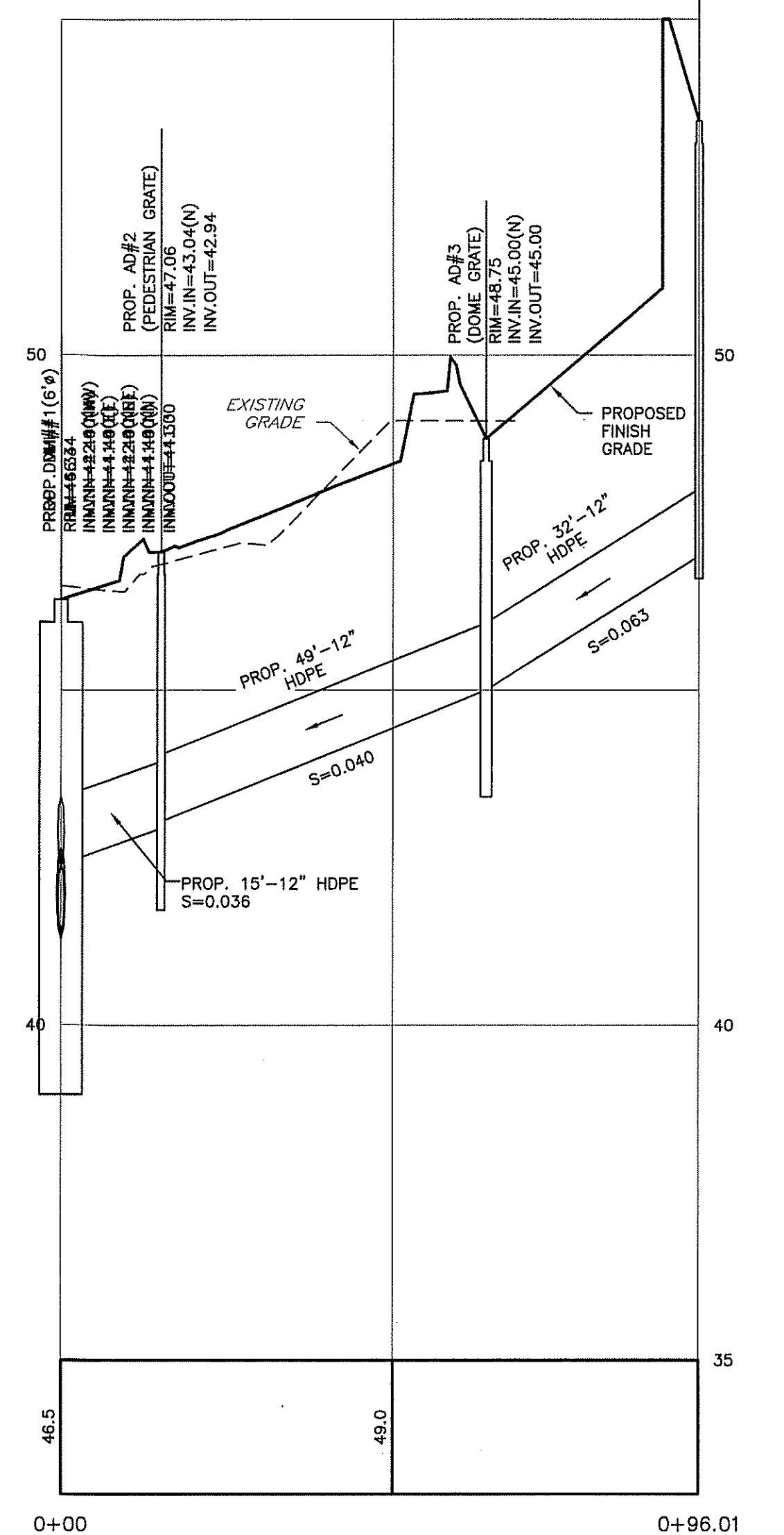
SEWER / DRAINAGE PROFILE
(PROP. SMH#1 TO PROP. CB#6)

SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



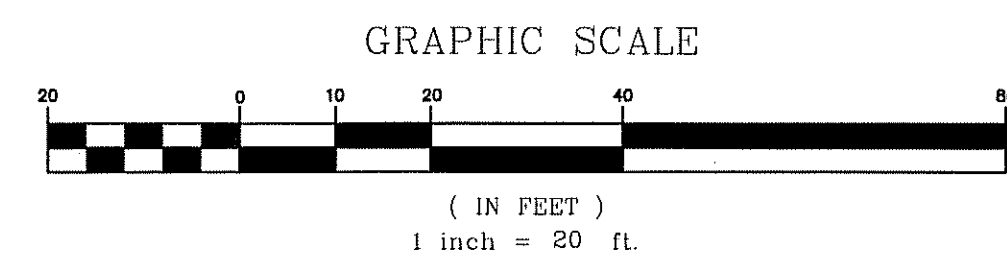
SEWER PROFILE
(EXIST. SMH TO PROP. BUILDING)

SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



DRAINAGE PROFILE
(PROP. DMH#1 TO PROP. AD#3)

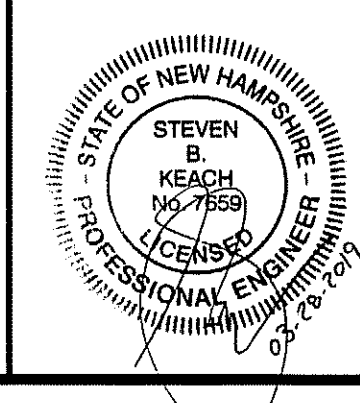
SCALE: 1" = 20' (HORIZ.)
1" = 2' (VERT.)



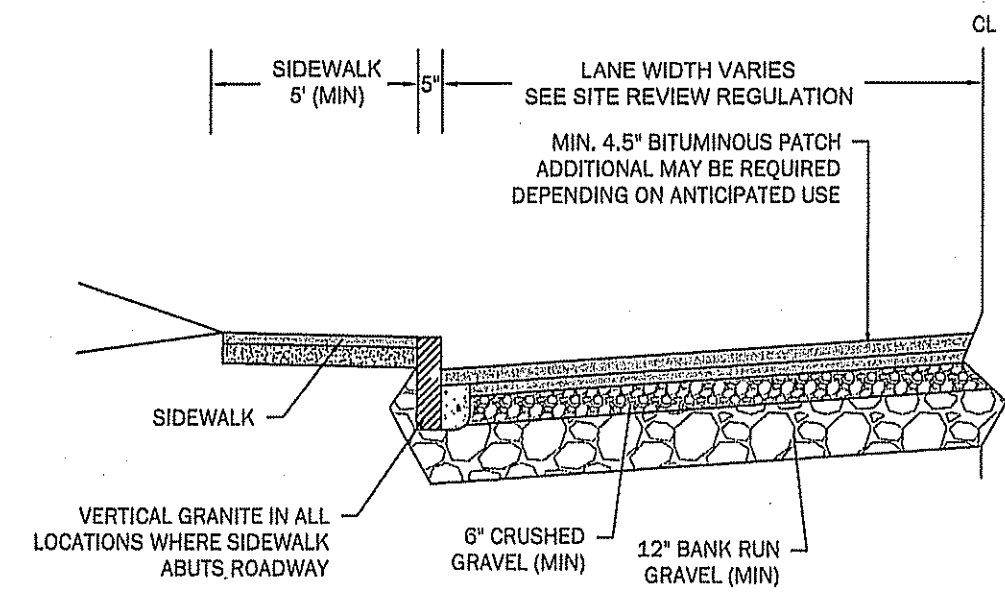
PROFILES
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

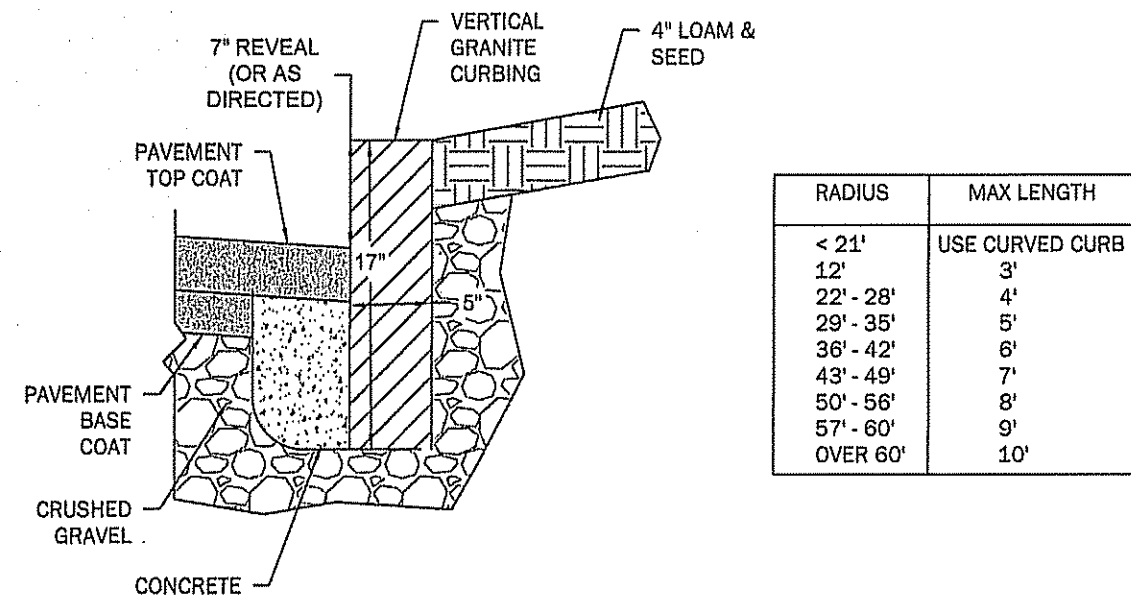


REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC
DATE: JANUARY 22, 2019			SCALE: 1" = 20'
PROJECT NO: 17-1219-1			SHEET 10 OF 15



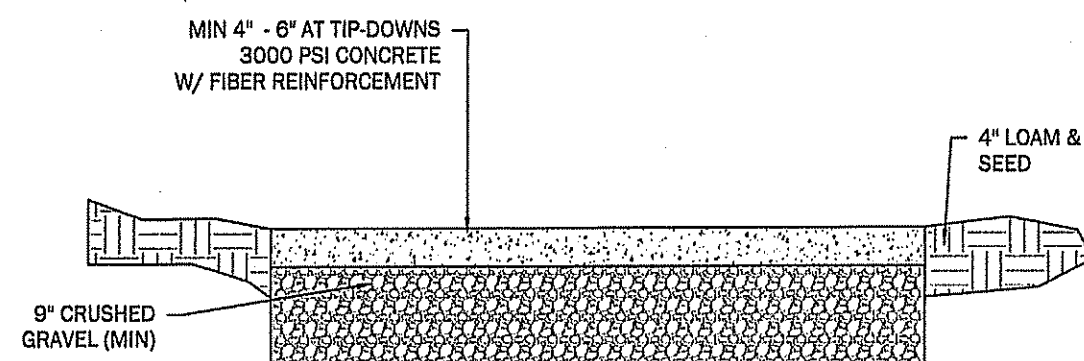
PUBLIC ROADWAY CROSS SECTION

CITY OF DOVER
NOT TO SCALE



VERTICAL GRANITE CURB

CITY OF DOVER
NOT TO SCALE



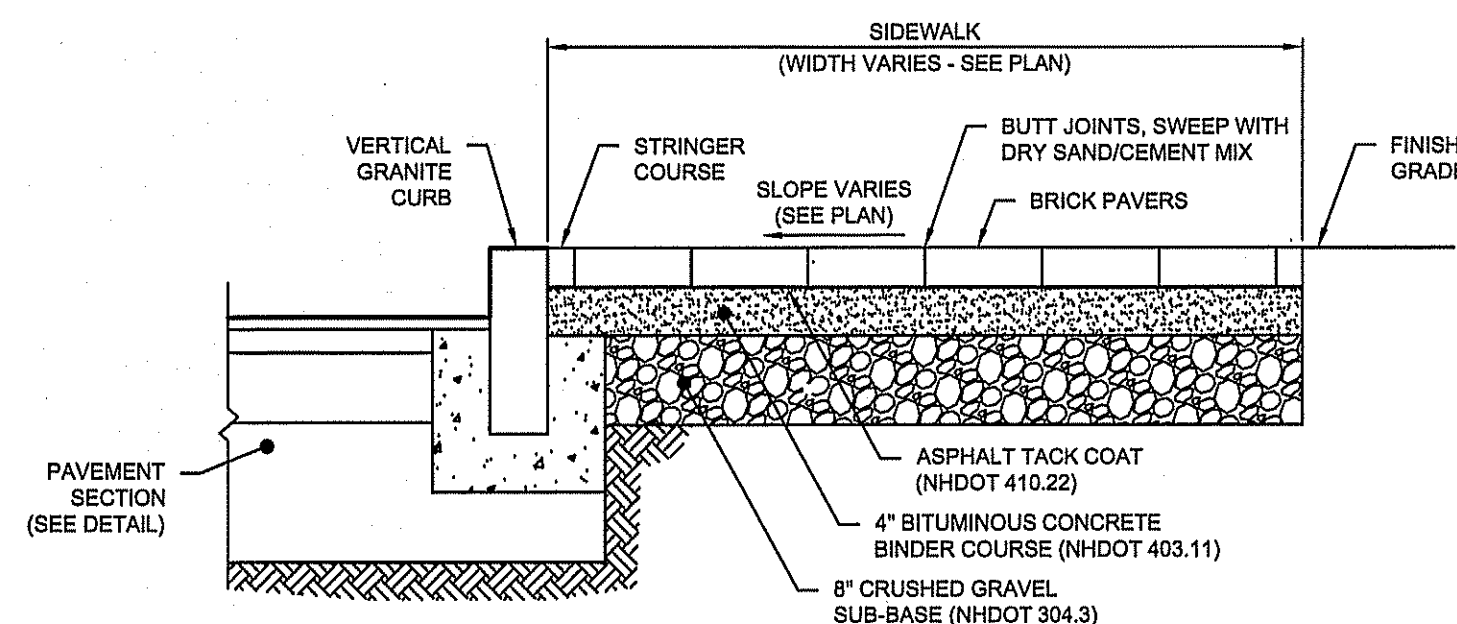
CONCRETE SIDEWALK

NOTES:

1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.
2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.
3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.
4. DETECTABLE WARNING STRIPS SHALL BE CAST IRON.

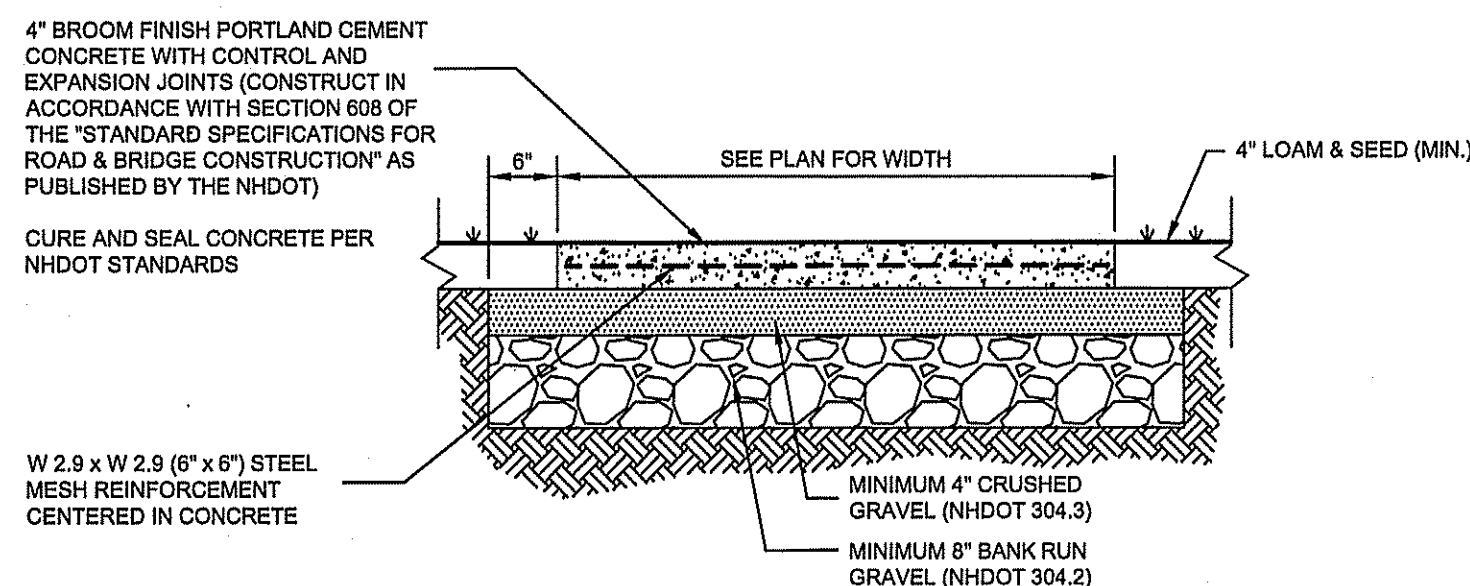
STANDARD CONCRETE SIDEWALK

CITY OF DOVER
NOT TO SCALE



BRICK SIDEWALK

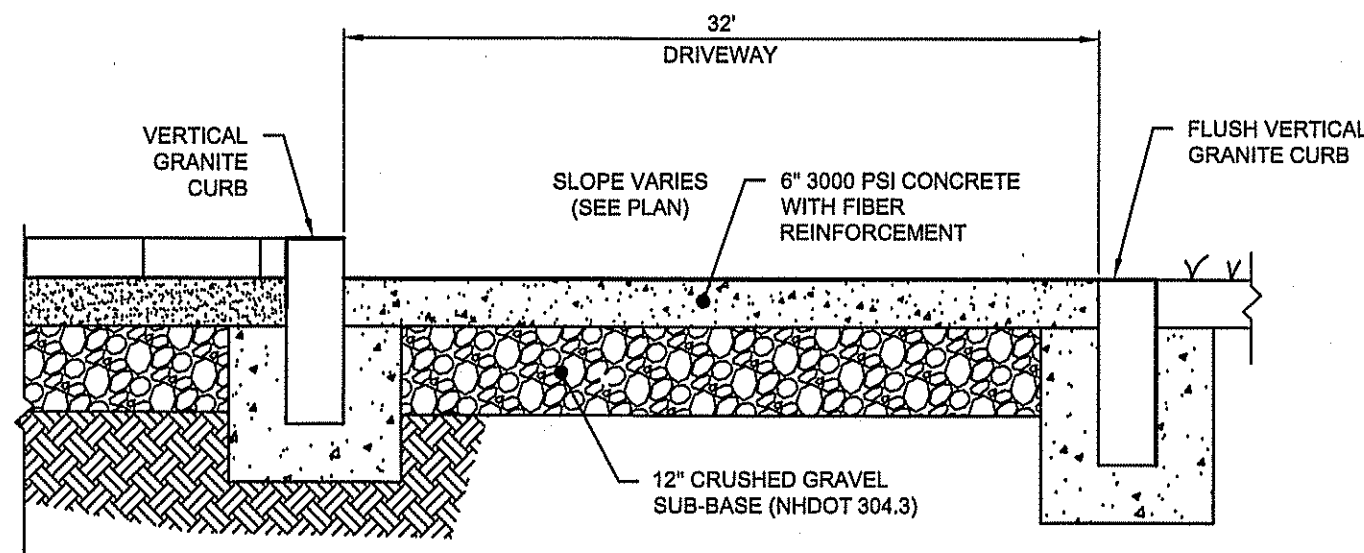
NOT TO SCALE



CONCRETE PAD DETAIL

NOT TO SCALE

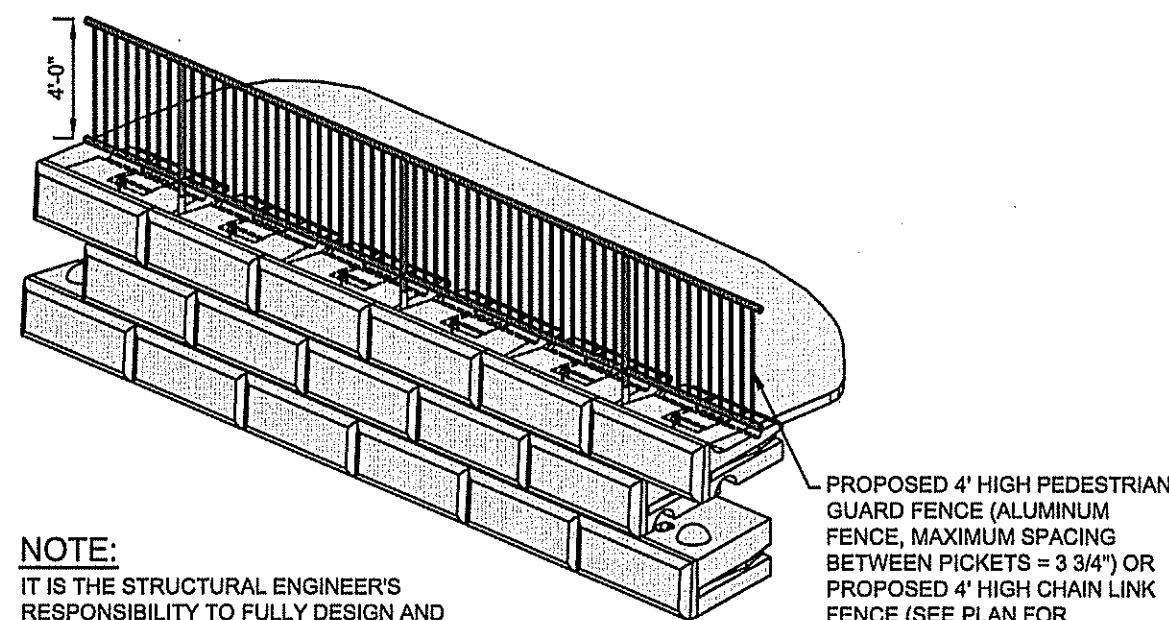
(MARCH 2008)



CONCRETE DRIVEWAY

NOT TO SCALE

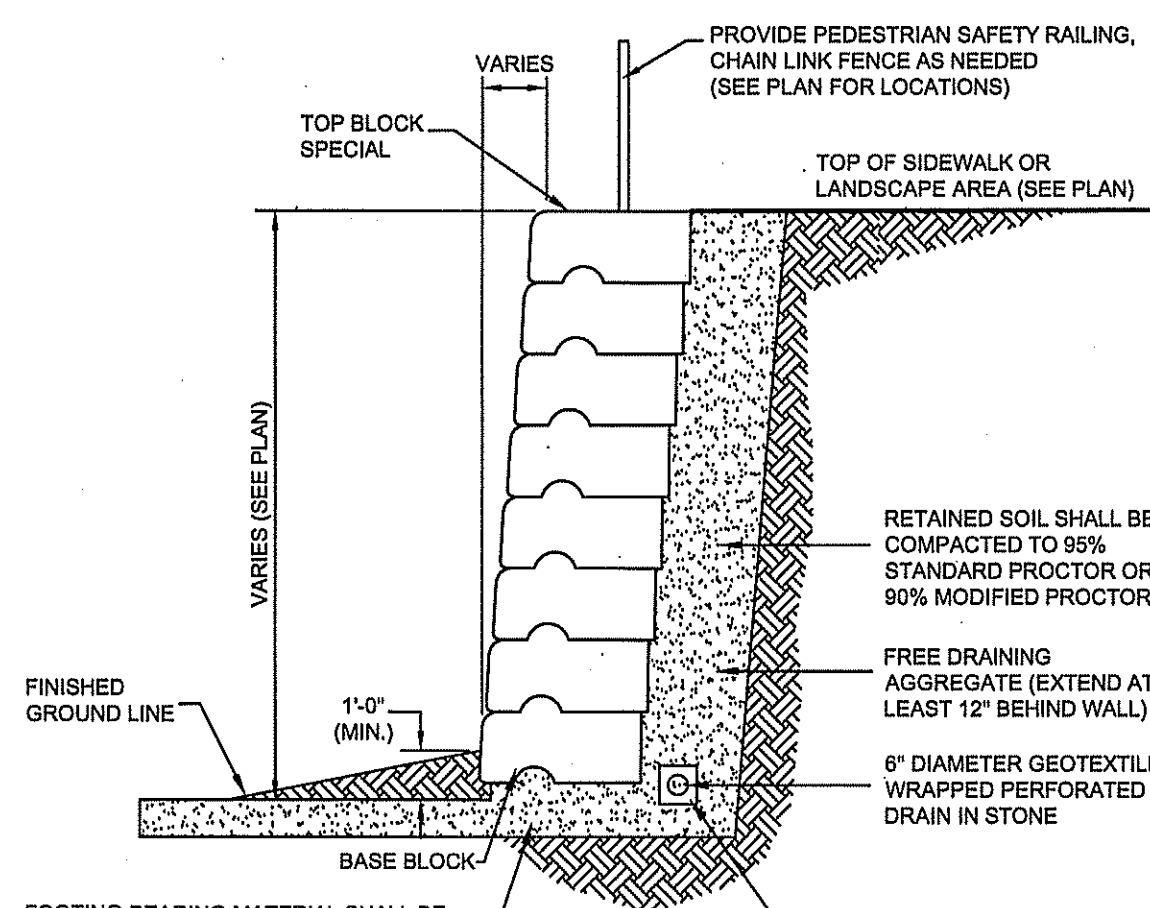
NOTES:
DRIVEWAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 92 OF THE CITY OF DOVER, NH ORDINANCES. DRIVEWAY SHALL MEET THE DRIVEWAY REQUIREMENTS OUTLINED IN CHAPTERS 149 AND 155 OF THE CITY OF DOVER, NH ORDINANCES.



FENCE OR PEDESTRIAN RAILING

NOT TO SCALE

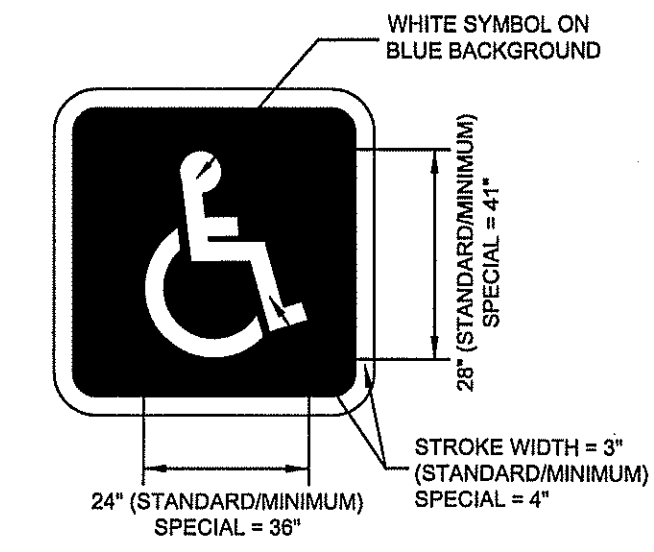
NOTE:
IT IS THE STRUCTURAL ENGINEER'S RESPONSIBILITY TO FULLY DESIGN AND DETAIL THE CONNECTION OF THE GUARD POSTS TO THE RETAINING WALL BLOCKS AND ASSURE ACCEPTABLE RESISTANCE TO THE APPLIED FORCES.



REDI-ROCK RETAINING WALL

(TO BE DESIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN NEW HAMPSHIRE)

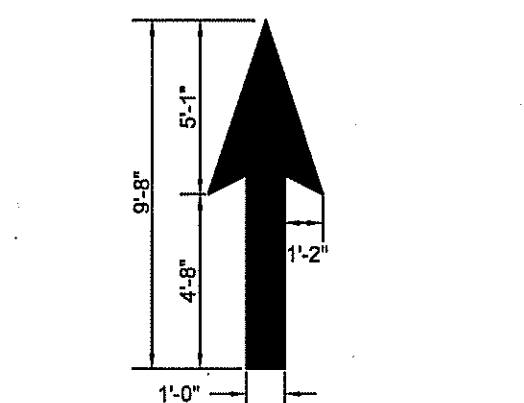
NOT TO SCALE



HANDICAP STRIPING DETAIL

NOT TO SCALE

(MARCH 2012)



THROUGH (STRAIGHT) ARROW

VARIES

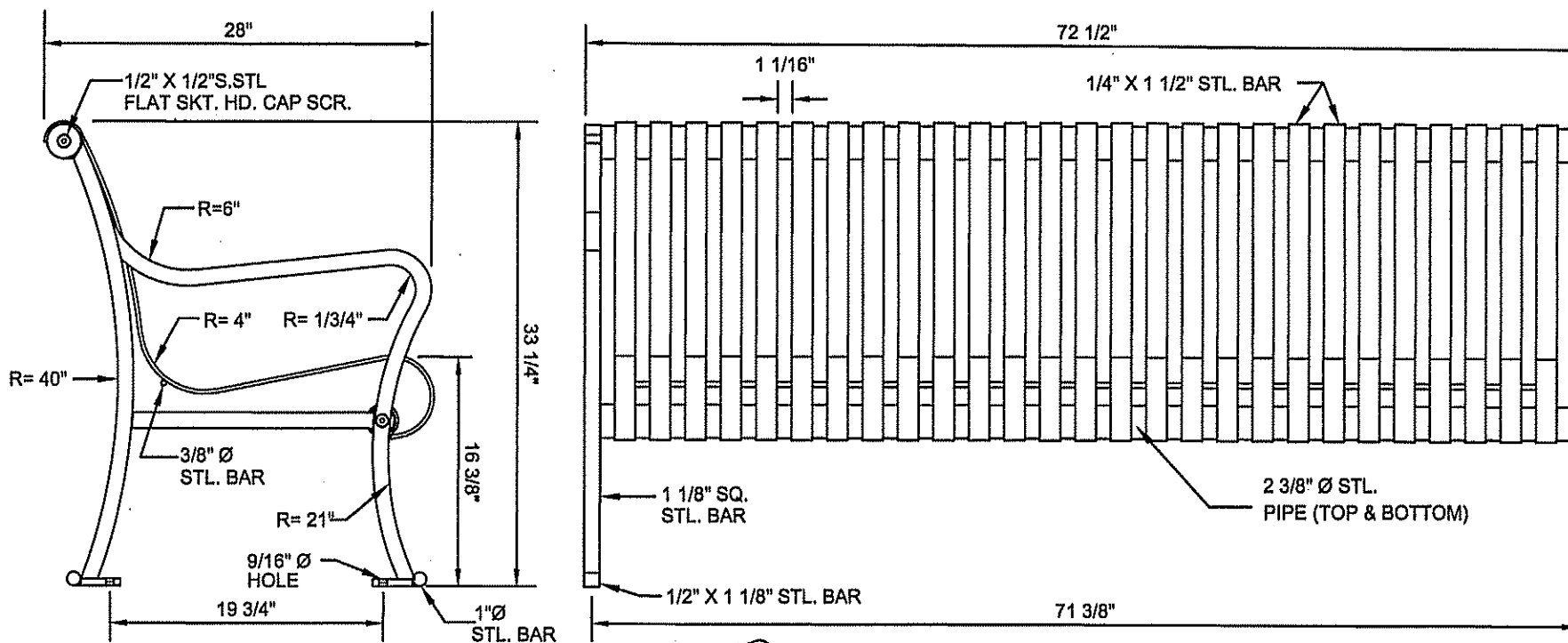
STOP BAR

STRIPING NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
2. WIDTH OF LINES SHALL VARY NO MORE THAN 1/4 INCH FROM THAT SPECIFIED.
3. THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
4. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

PAVEMENT MARKINGS

NOT TO SCALE



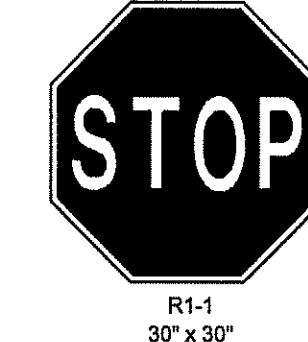
BENCH ALTERNATE

NOT TO SCALE



RESIDENTIAL LOADING AREA SIGN

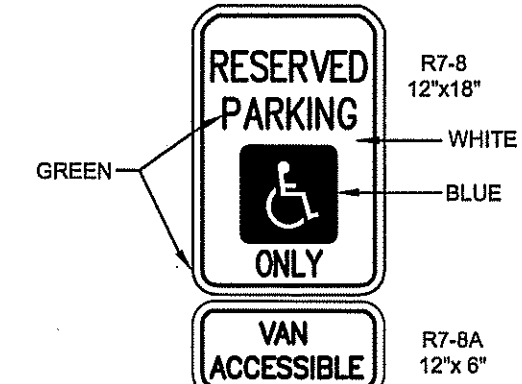
NOT TO SCALE



STOP SIGN DETAIL

NOT TO SCALE

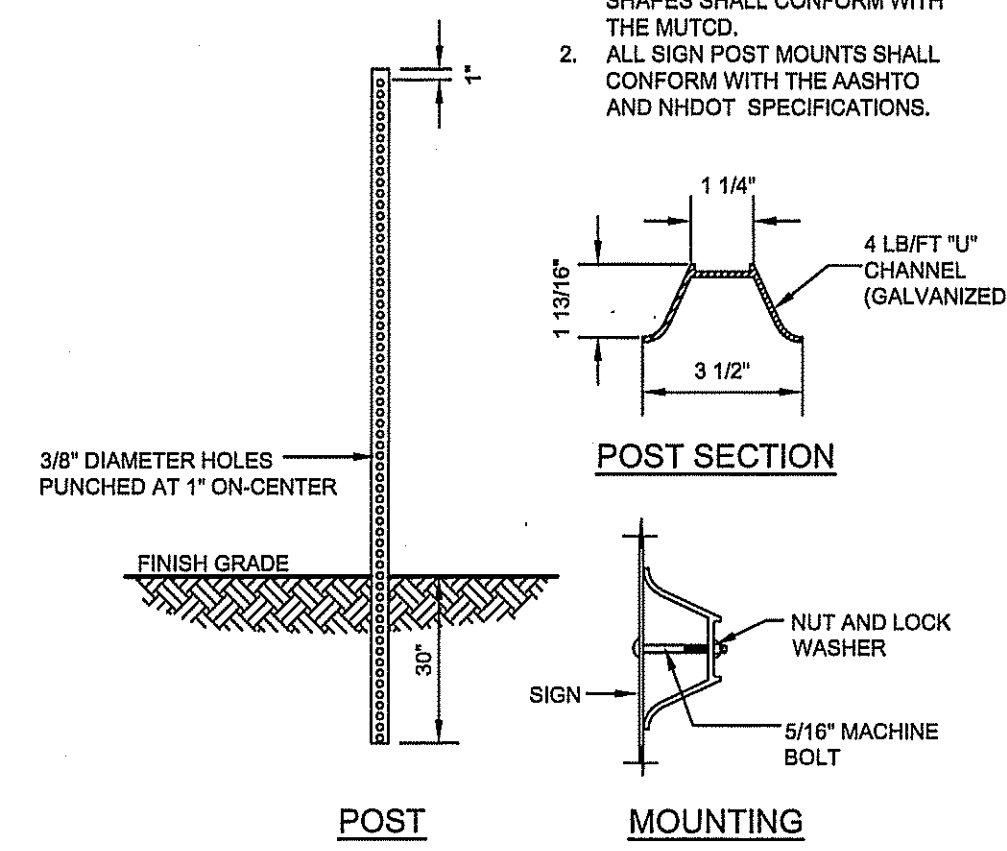
(MARCH 2008)



VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL

NOT TO SCALE

(MARCH 2008)

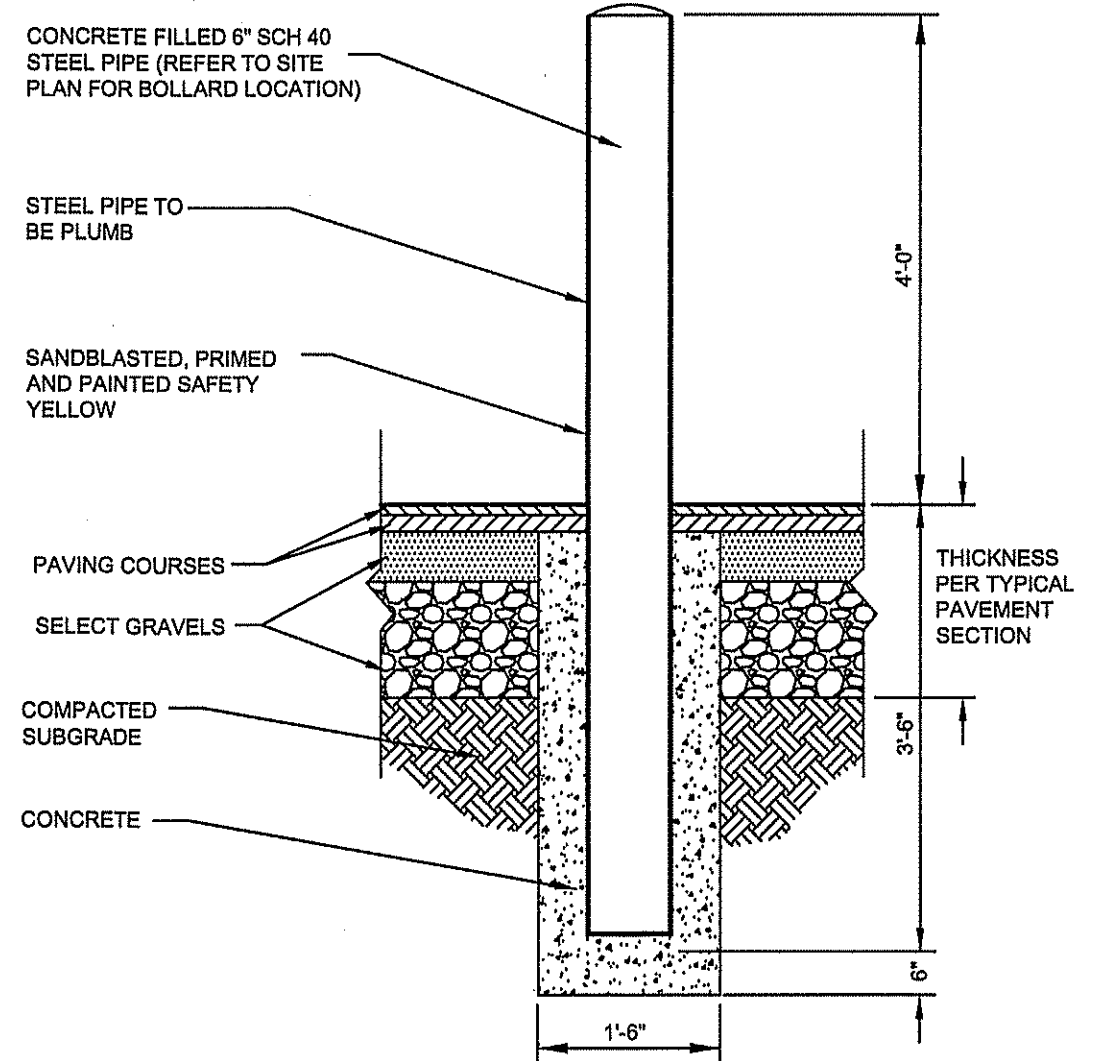


STEEL SIGN POST DETAIL

NOT TO SCALE

(MARCH 2008)

NOTE:
POST SHALL CONFORM TO NHDOT 615.2.5.3



BOLLARD DETAIL

NOT TO SCALE

(MARCH 2008)

CONSTRUCTION DETAILS

DOVER HEIGHTS

MAP 6 LOT 20

1 FIRST STREET

DOVER, NEW HAMPSHIRE

STRAFFORD COUNTY

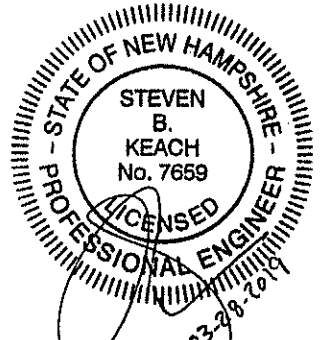
PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



REVISIONS

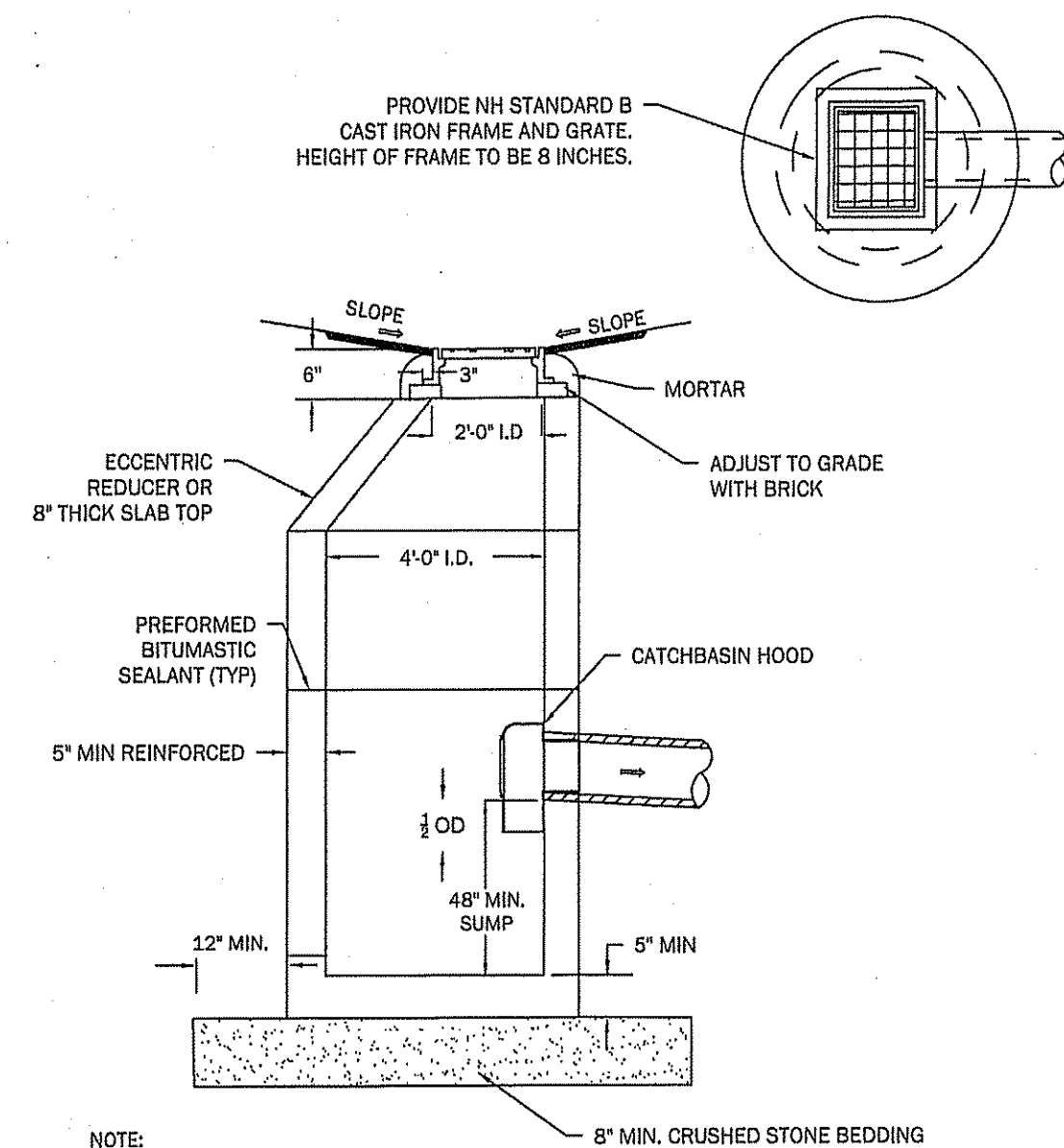
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC

DATE: JANUARY 22, 2019

SCALE: AS SHOWN

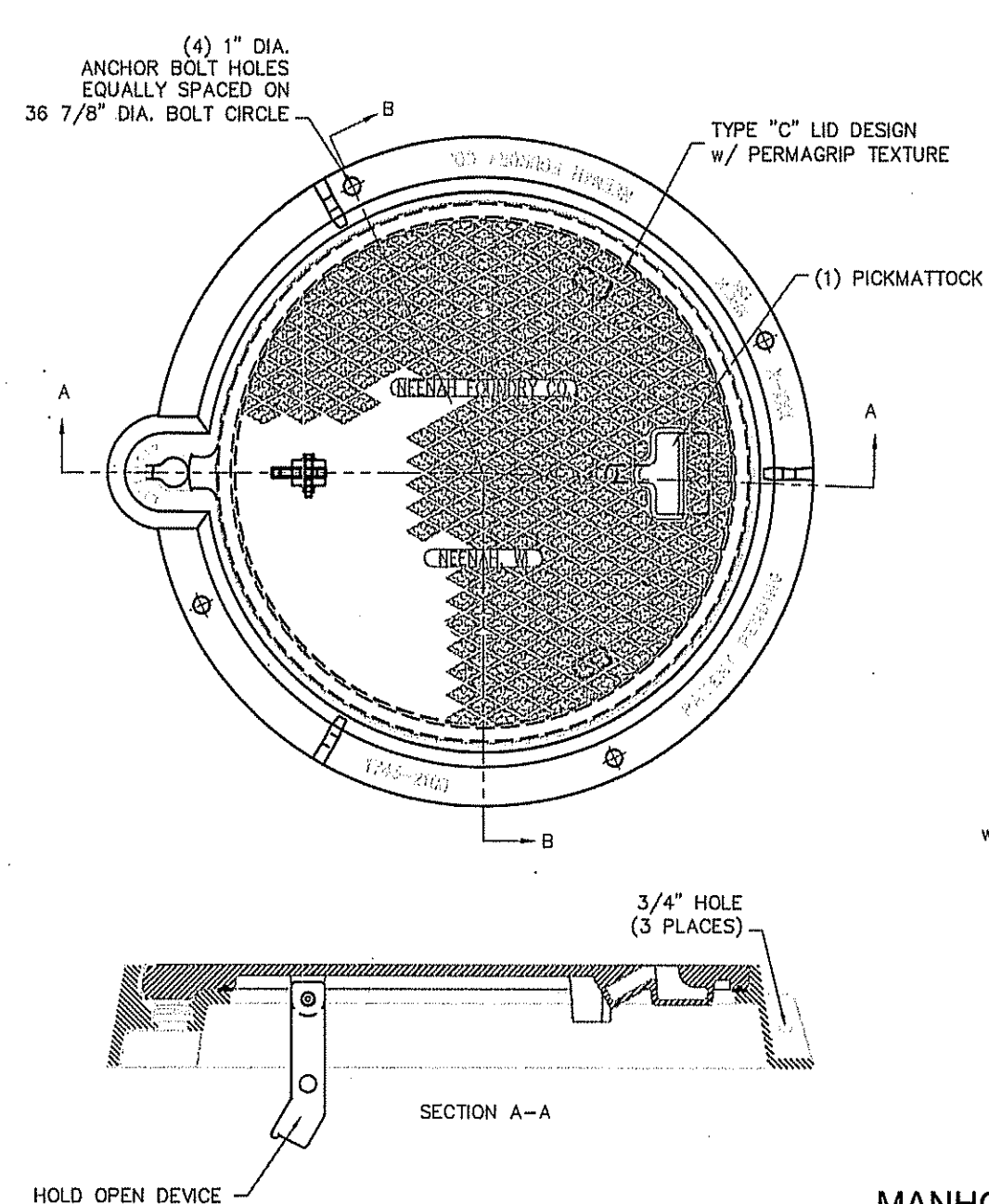
PROJECT NO: 17-1219-1

SHEET 11 OF 15

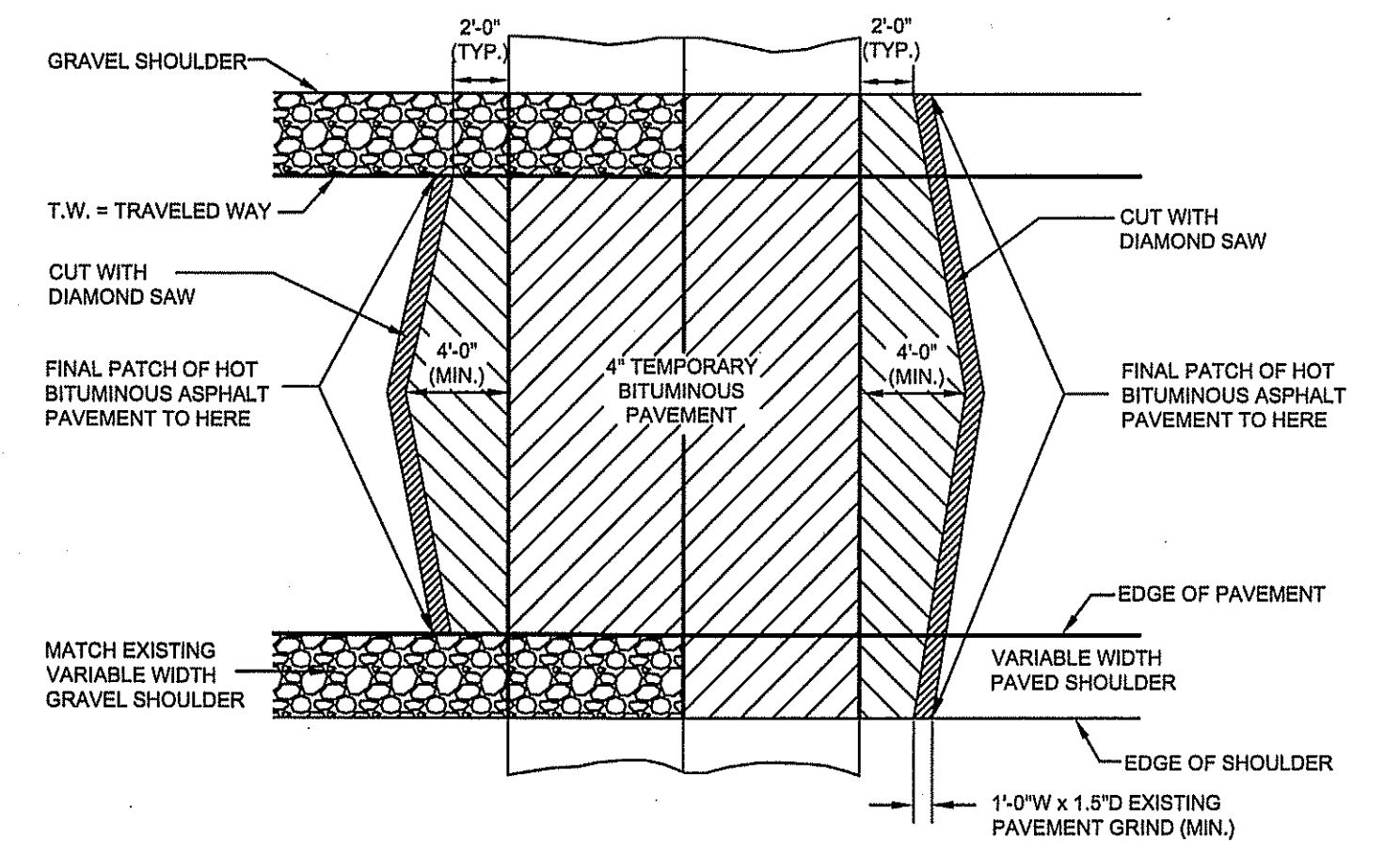
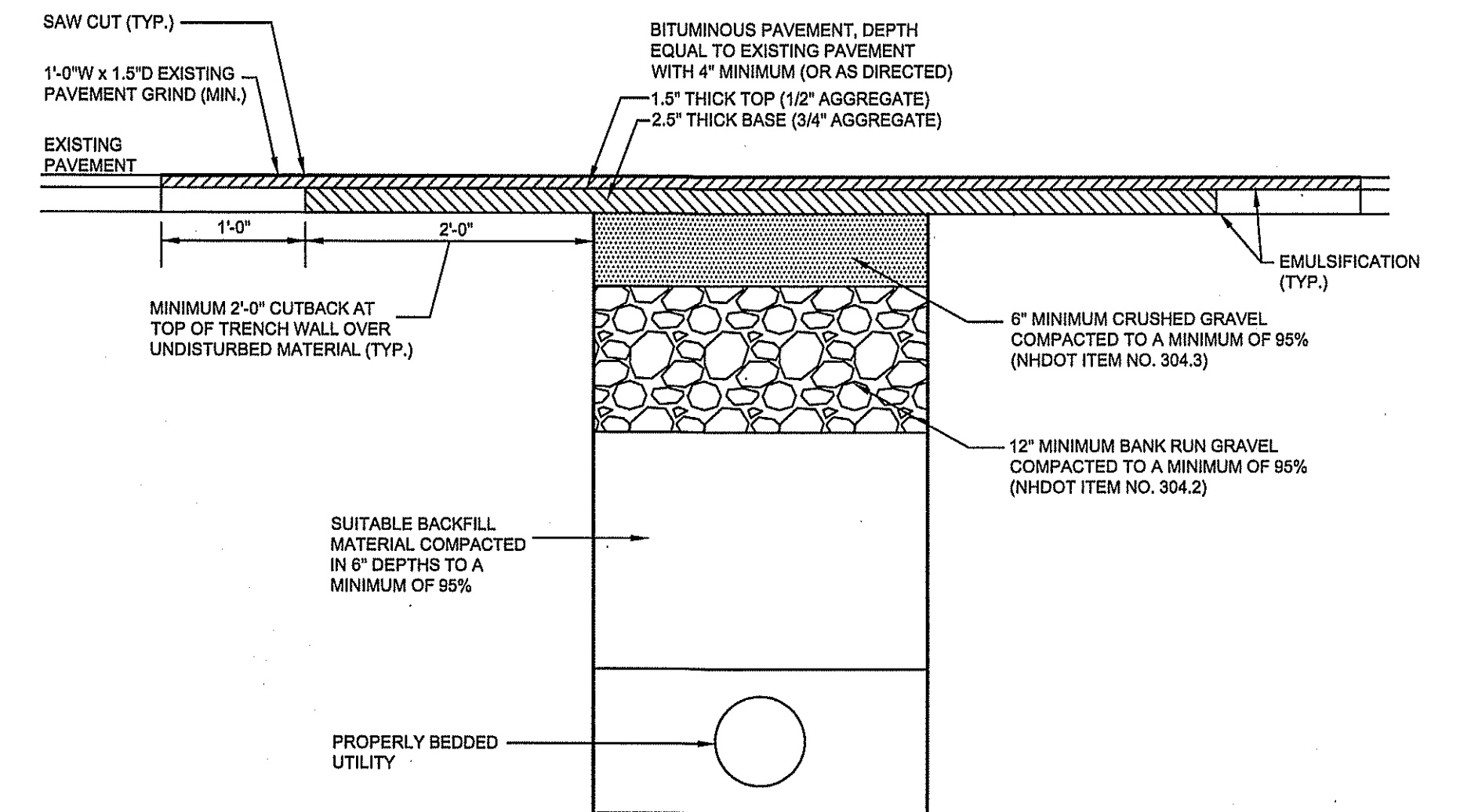
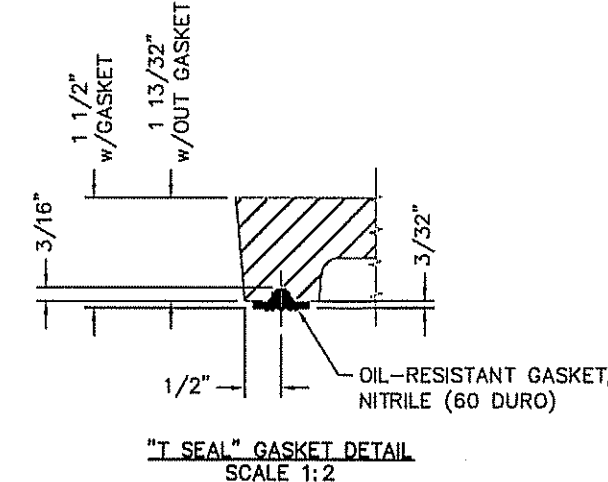
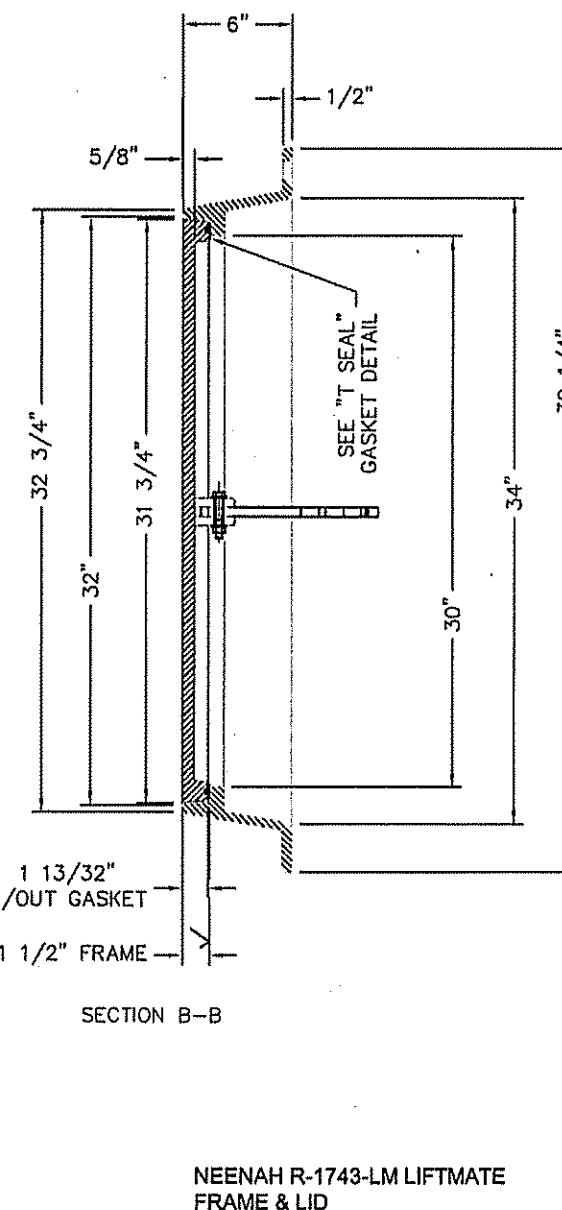


NOTE:
ENTIRE STRUCTURE SHALL BE CAPABLE OF WITHSTANDING AN H - 20 LOAD. DETAILS OF REINFORCEMENT TO BE FURNISHED BY MANUFACTURER.

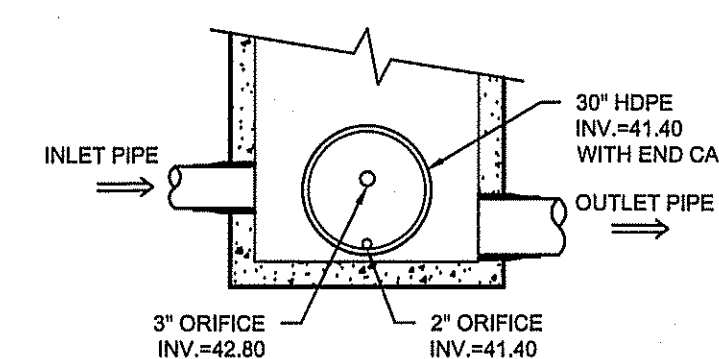
TYPICAL CATCH BASIN
CITY OF DOVER
NOT TO SCALE



MANHOLE FRAME & COVER
CITY OF DOVER
NOT TO SCALE

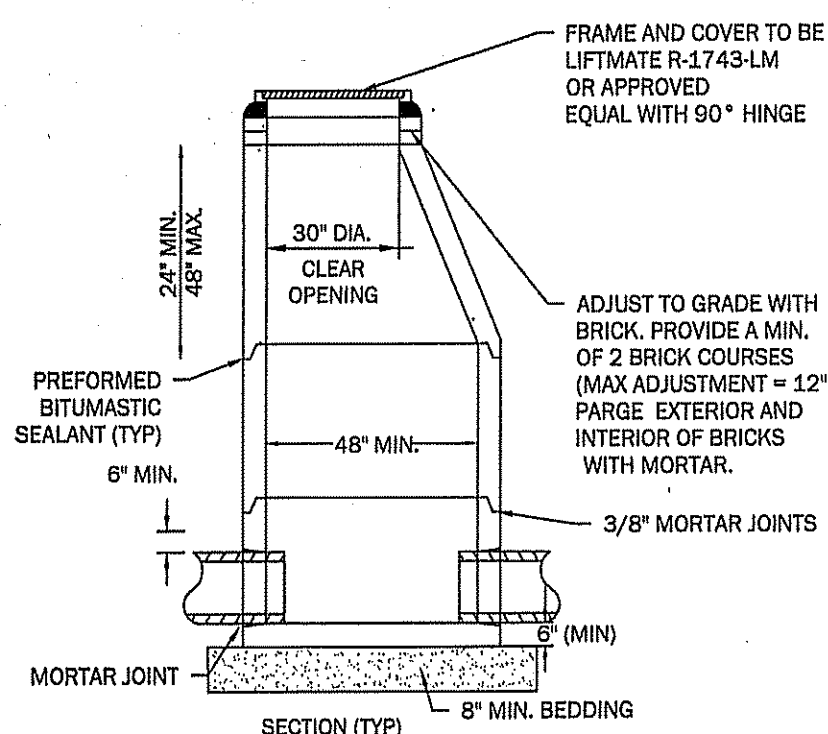


PERMANENT PAVEMENT REPAIR
NOT TO SCALE
(MARCH 2008)

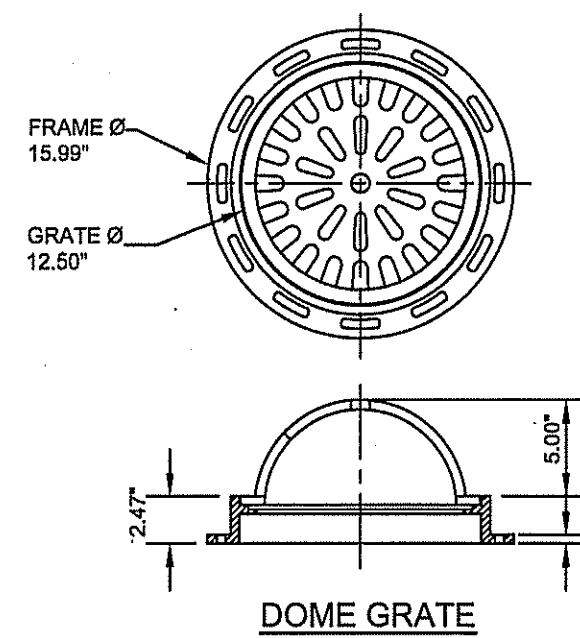


NOTES:
1. ORIFICES TO BE CORED INTO END CAP.
2. END CAP TO BE SECURED TO PIPE.

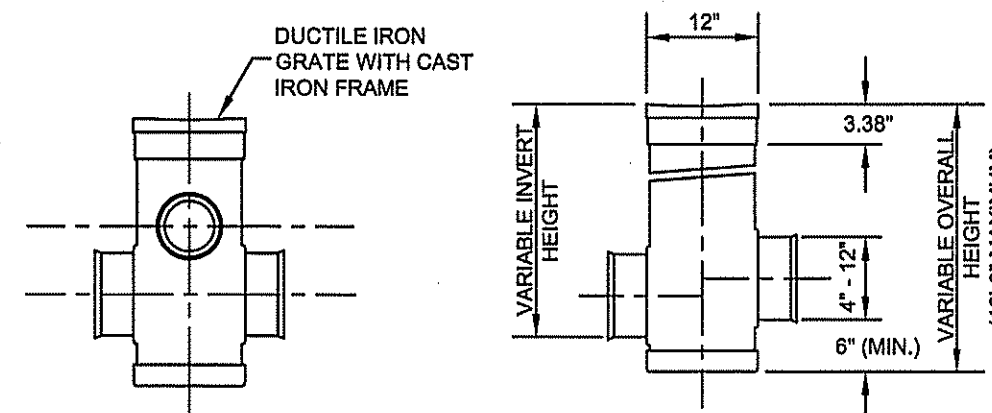
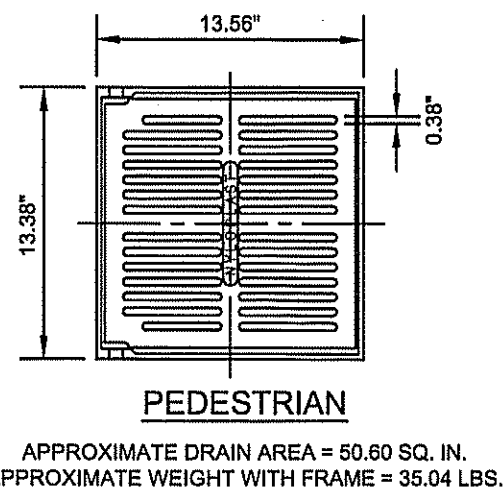
DMH #1 STORAGE DETAIL
NOT TO SCALE



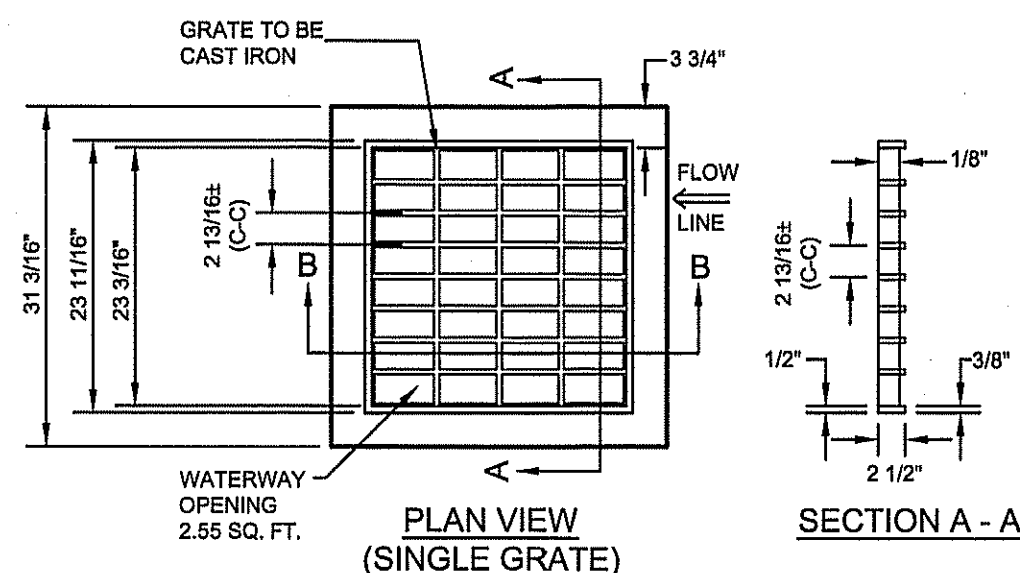
TYPICAL DRAIN MANHOLE
CITY OF DOVER
NOT TO SCALE



NYLOPLAST 12\"/>

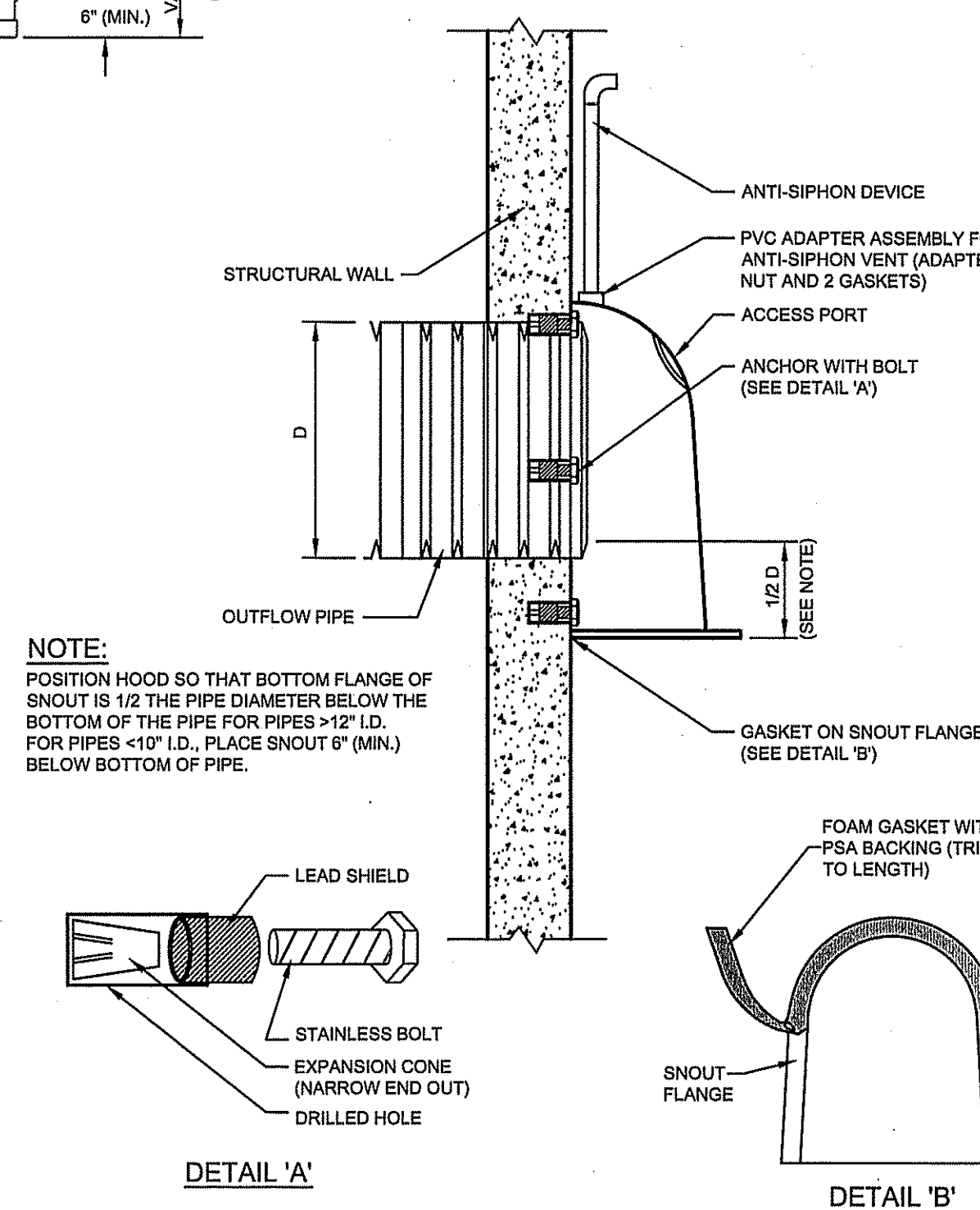


12\"/>

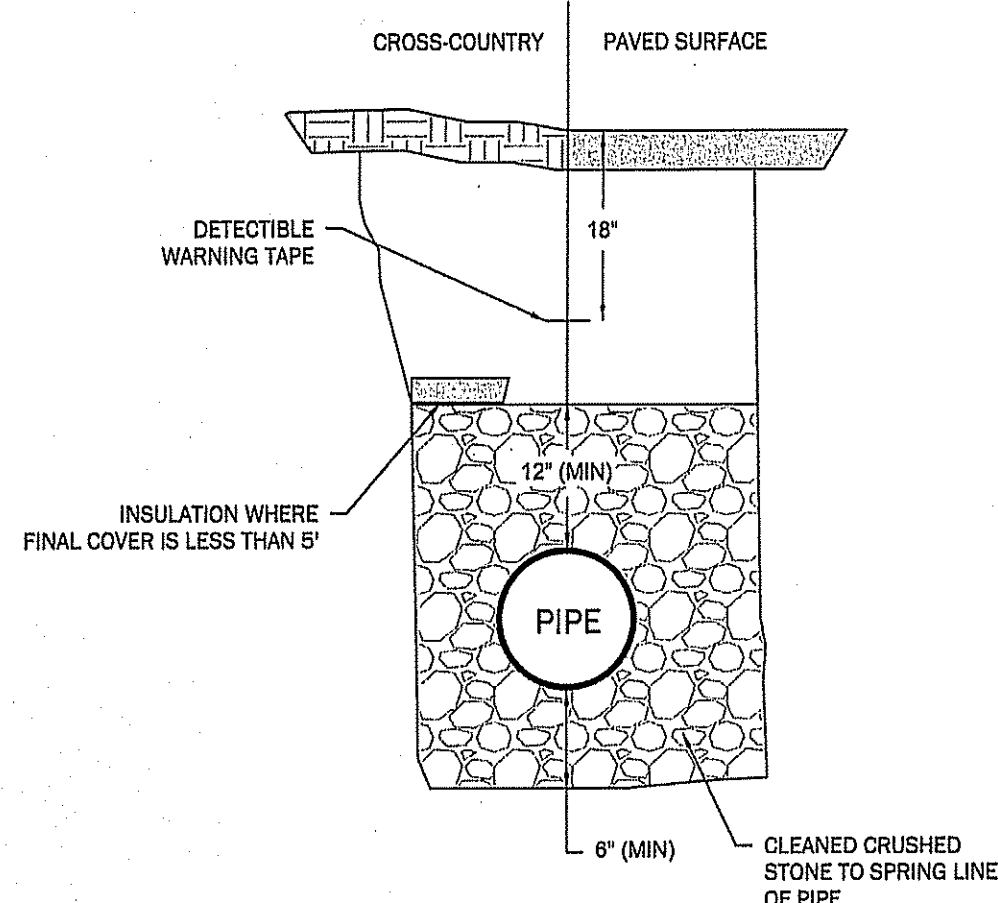


SECTION B - B

TYPE B FRAME & GRATE DETAIL
NOT TO SCALE
(MARCH 2008)



SNOUT OIL AND DEBRIS STOP DETAIL (OR EQUAL)
NOT TO SCALE
(MARCH 2008)

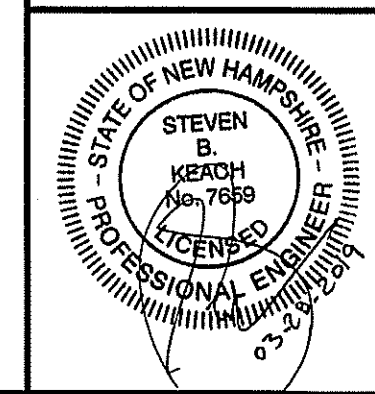


TYPICAL SEWER/DRAINLINE TRENCH
CITY OF DOVER
NOT TO SCALE

CONSTRUCTION DETAILS
DOVER HEIGHTS
MAP 6 LOT 20
1 FIRST STREET
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
PLANNING FILE # P19-16

OWNER OF RECORD & APPLICANT:
ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



REVISIONS			
No.	DATE	DESCRIPTION	BY
1	03/22/19	REV. PER CITY TRC COMMENTS	MC
DATE: JANUARY 22, 2019		SCALE: AS SHOWN	
PROJECT NO: 17-1219-1		SHEET 12 OF 15	

1. ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
2. MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 20 YEARS.
3. MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND 1+20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
4. BARRELS, CONCRETE GRADE RINGS AND CROWN SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE AND SHALL CONFORM TO ASTM C478.
5. BEDDING: CRUSHED STONE OR SAND, CLEAN, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33
 - 100% PASSING 1/4 INCH SCREEN
 - 90% PASSING 3/4 INCH SCREEN
 - 20-55% PASSING 3/8 INCH SCREEN
 - 0-10% PASSING #4 SIEVE
 - 0-10% PASSING #10 SIEVE

6. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
7. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
8. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:

- A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
- B. CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
- C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
- D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.

9. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
10. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
11. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.

12. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.

13. MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS.

A. CONCRETE FOR PRECAST BASES OR GRADE RINGS SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

B. REINFORCING FOR PRECAST CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".

C. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURE(S) AS CONFORM TO ASTM C478:

D. THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING;
E. THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE;
F. THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS, BLISTERS, SAND, LUGS AND DEFECTS;

G. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;

H. CASTINGS SHALL BE EQUAL TO CLASS 30, BE CERTIFIED BY THEIR MANUFACTURE(S) AS CONFORMING TO

ASTM A48/48M;

I. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL BE CERTIFIED BY THEIR MANUFACTURE(S) AS CONFORMING TO ASTM C32, CLAY OR SHALE, FOR GRADE SS HARD BRICK;

J. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME

K. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
1. 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR

2. 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
L. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150/C150M;
M. HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES".

N. SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";

O. CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE REQUIREMENTS FOR CONCRETE AND MORTAR SPECIFICATIONS FOR CONCRETE, M.S.

P. SUBJECT TO (Q) BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION:

Q. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR D.I. PIPE OR FOR PVC PIPE UP THROUGH 15-INCH DIAMETER;
AND

R. WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING H-20 LOADS.

14. MANHOLE STEPS SHALL:

- A. BE PERMITTED ONLY AT THE REQUEST OF THE SYSTEM OWNER;
- B. BE MANUFACTURED OF STAINLESS, PLASTIC-COVERED STEEL OR PLASTIC;
- C. BE SHAPED SO THAT THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL INTO WHICH THEY ARE

D. BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO ASTM C478 FOR LOAD CARRYING CAPACITY AND PULL-OUT RESISTANCE;

E. NOT BE SECURED WITH MORTAR;
F. BE APPROXIMATELY 14-INCHES BY 10-INCHES IN DIMENSION;
G. HAVE A DROP SECTION OR RAISED ABUTMENTS TO PREVENT SIDEWAYS SLIPPAGE OFF THE STEP; AND
H. HAVE NON-SKID SAFETY SERRATIONS ON THE FOOT CONTACT SURFACES.

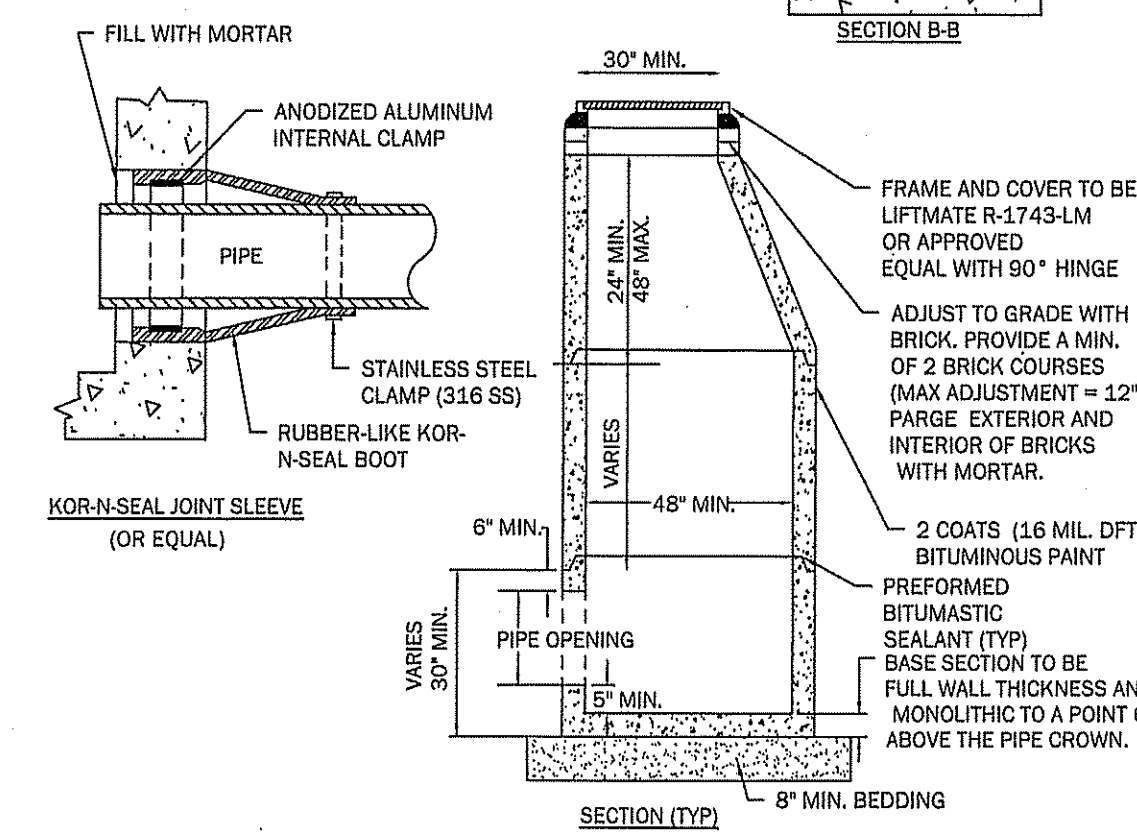
15. MANHOLE TESTING:

- A. MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.
- B. THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
 - 1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg AND

1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg; AND
2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCH Hg SHALL BE:
 - a. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;
 - b. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND

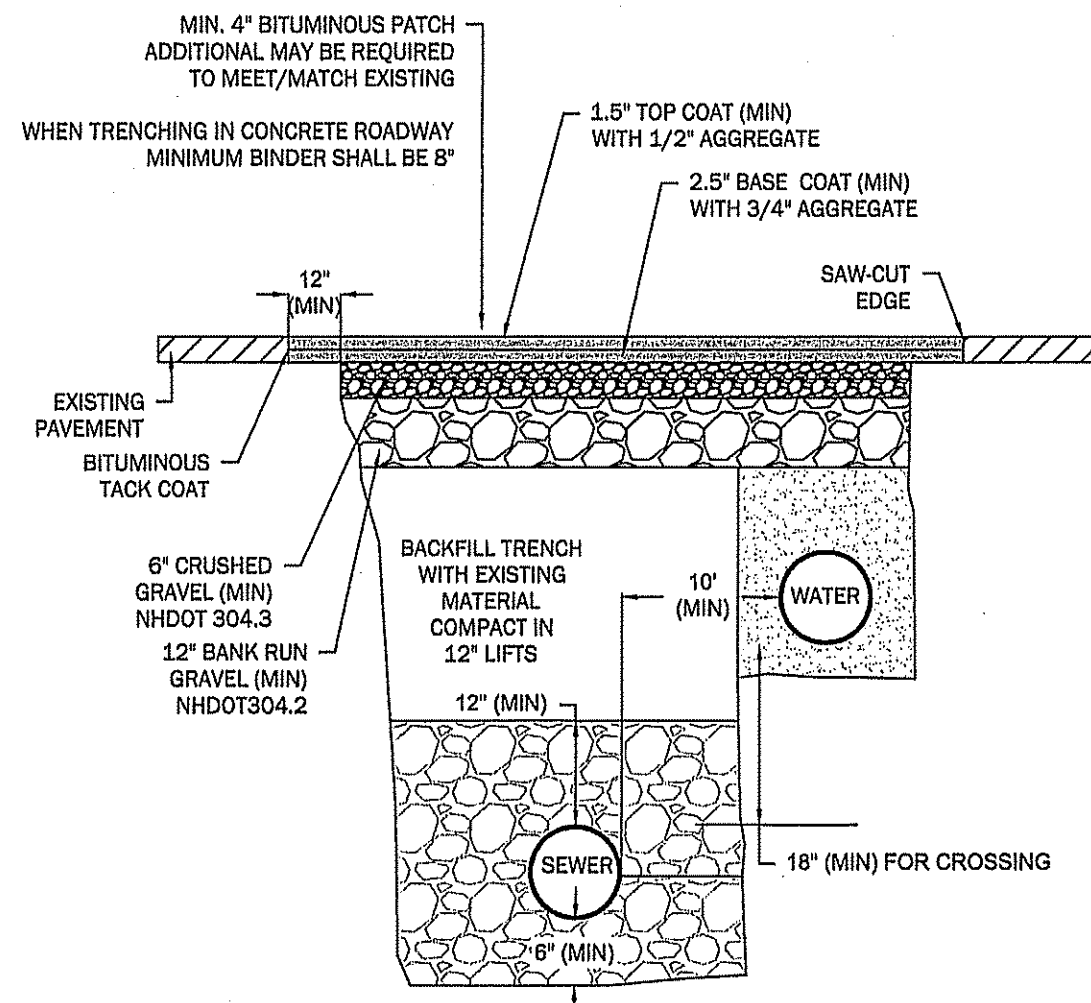
C. THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.

D. FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENTS TO GRADE.



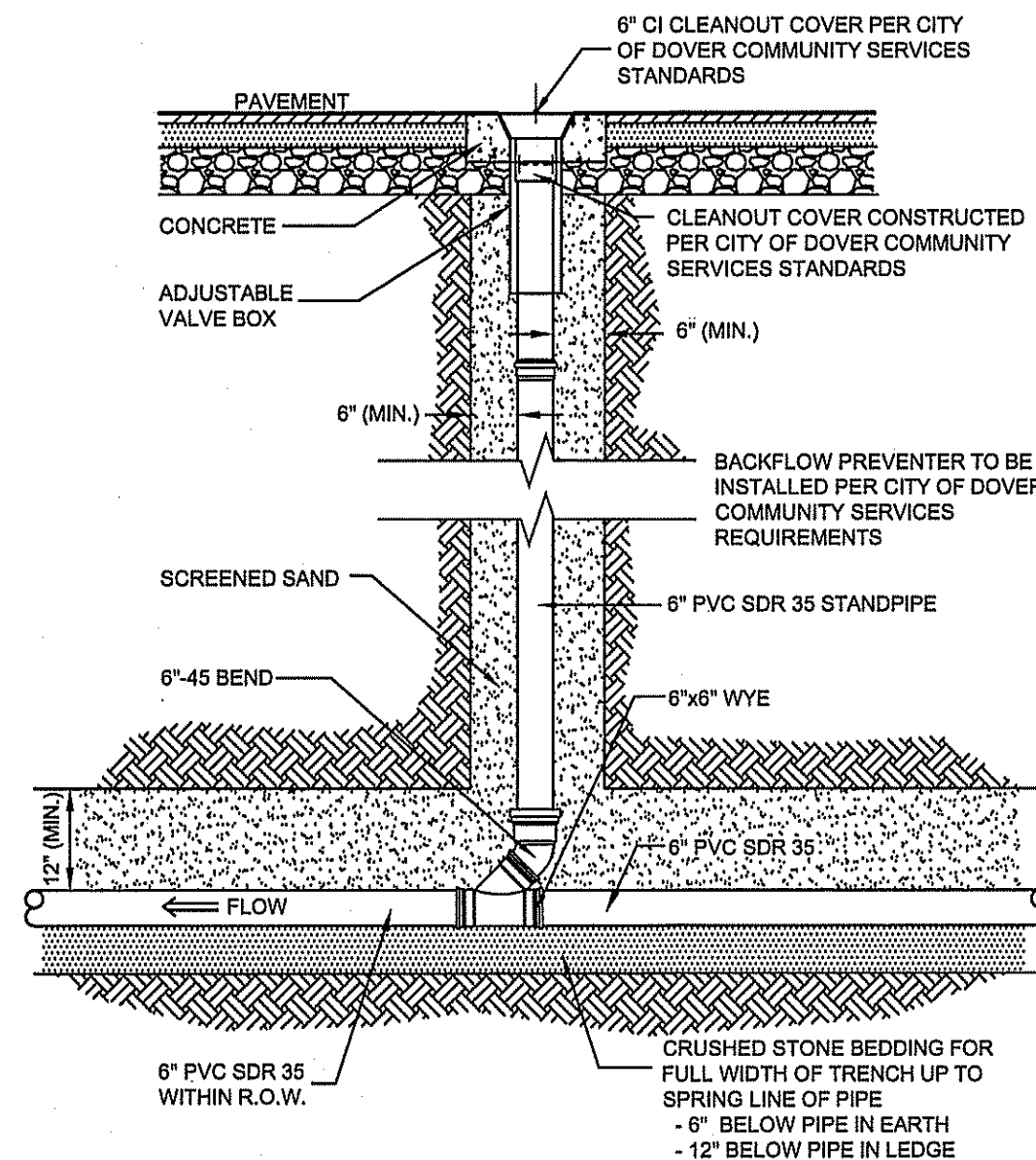
TYPICAL SEWER MANHOLE
CITY OF DOVER
NOT TO SCALE

SEE SHEET 11 FOR MANHOLE
FRAME & COVER DETAIL

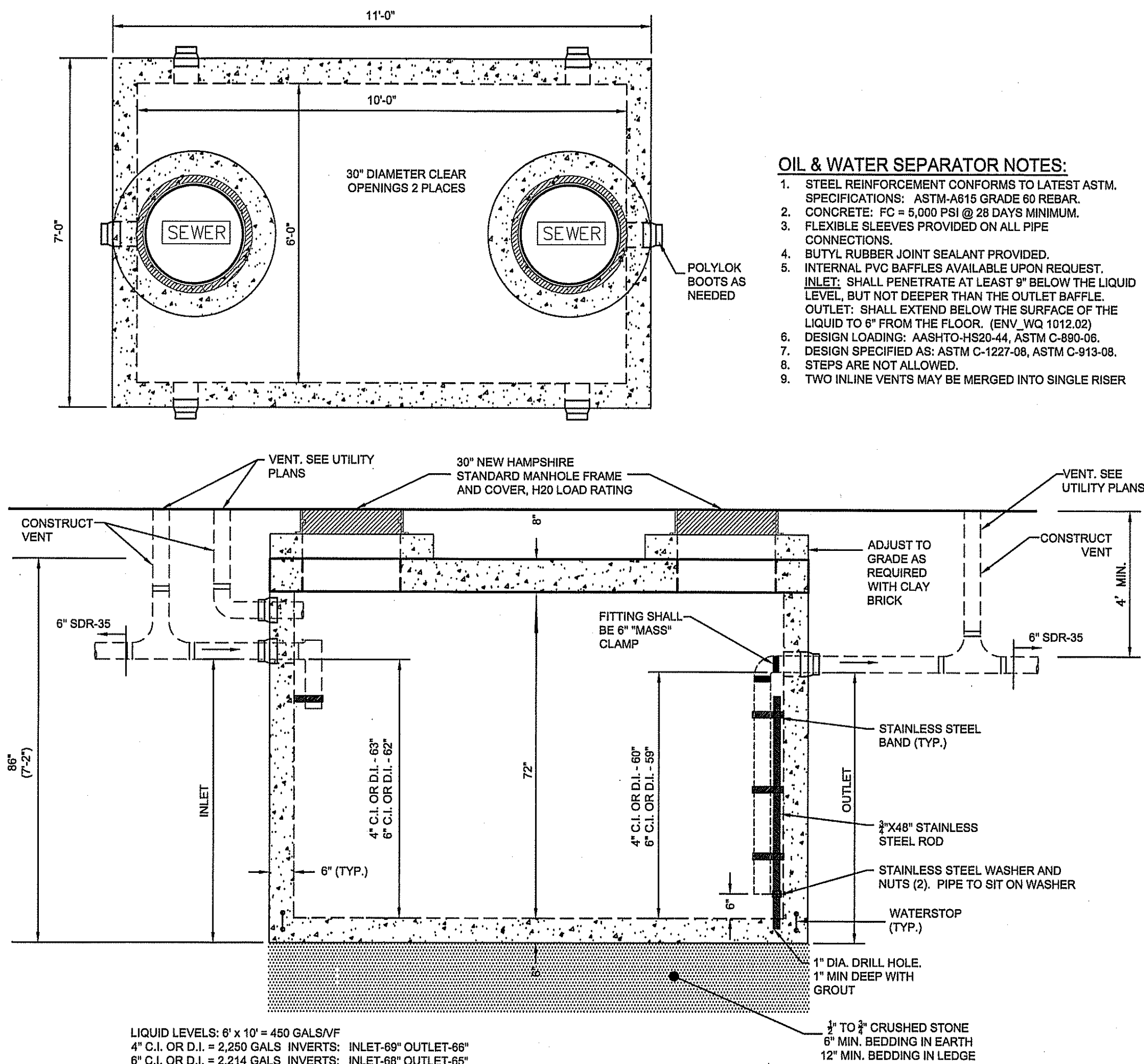


TYPICAL TRENCH DETAIL
CITY OF DOVER
NOT TO SCALE

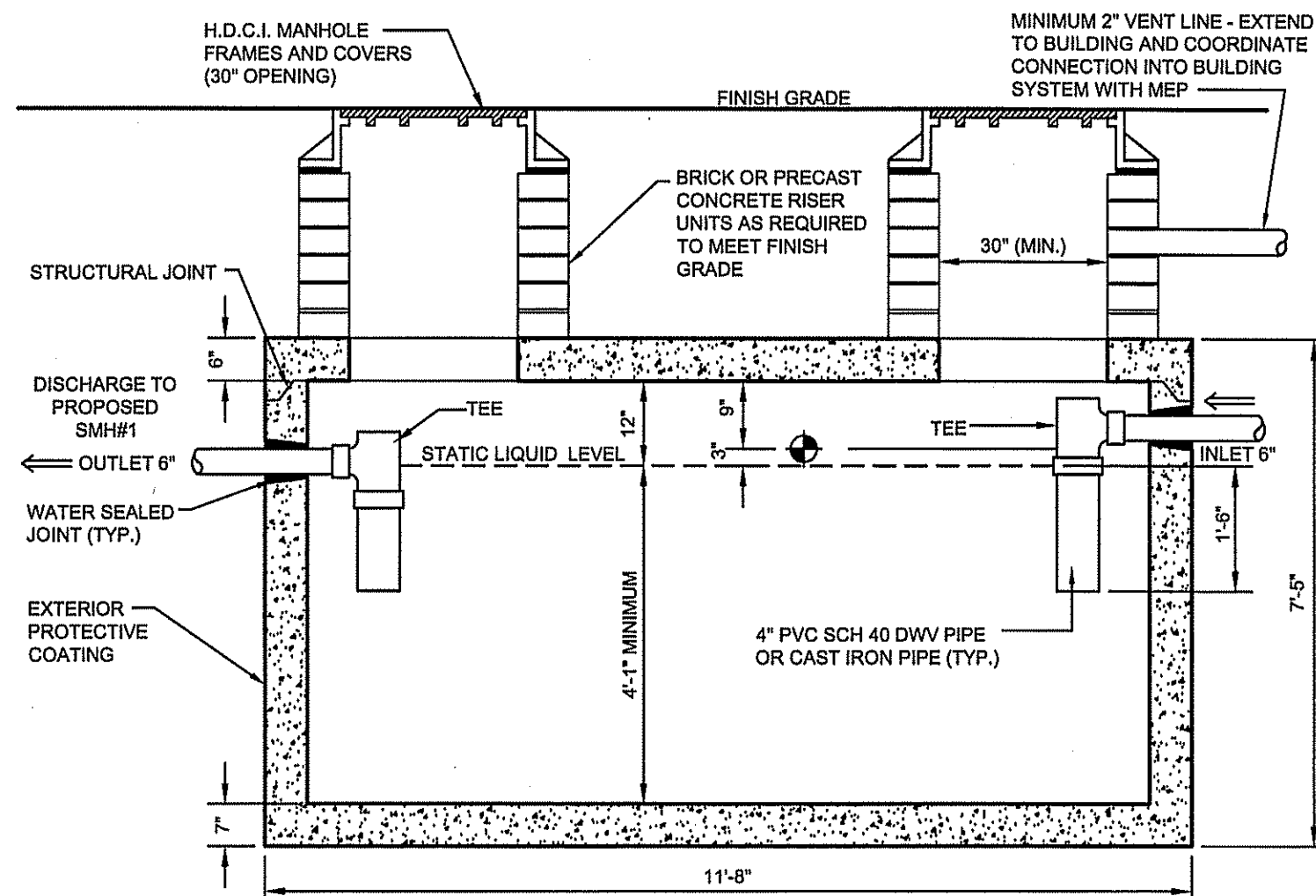
1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES



SEWER SERVICE CLEANOUT
NOT TO SCALE



2,000 GALLON OIL & WATER SEPARATOR
NOT TO SCALE



3,000 GALLON GREASE TRAP (H-20)
NOT TO SCALE

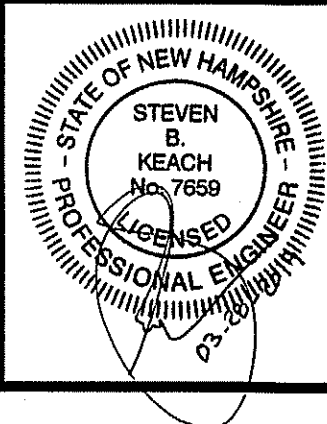
1. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES. MINIMUM SIZE FOR STREET SEWER LINES SHALL BE 8 INCHES.

- PIPE AND JOINT INSTALLATION:**
- STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA):
- A. AWWA C151/A21.51-02 - FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
 - A. AWWA C150/A21.50-02 - FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND CAST IRON CASTINGS;
 - B. JOINTS SHALL BE MECHANICAL, PUSH-ON OR BALL-AND-SOCKET TYPE.
 - B. PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL COMPLY WITH THE FOLLOWING STANDARDS:
 - 1. ASTM D3034-04A - PVC, SOLID WALL;
 - 2. AT LEAST 48 PSI AT 5% PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2414-02 DURING MANUFACTURING; AND
 - 3. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RING OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-96/2003(E1) AND SHALL BE INSTALLED VERTICALLY.
 - 3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
 - 4. JOINTS SHALL BE DEPENDENT UPON PROPER MATERIALS (SEE NOTE #2) FOR WATER TIGHTNESS, AND ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED, WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE SEWER SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
 - 5. SERVICE CONNECTIONS SHALL USE SANITARY TEE OR WYE FITTINGS FOR ALL NEW CONSTRUCTION. THE CENTERLINE OF ALL BUILDING CONNECTIONS SHALL ENTER THE TEE OR HALF OF THE SEWER. ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 4 FEET MUST BE MADE VERTICALLY. ANY SERVICE CONNECTION WITH A VERTICAL RISE UP TO 12 FEET SHALL EMPLOY NON-ENCASED RISERS THAT PROTECT AGAINST PIPE PENETRATION OR FAILURE AT THE FITTING BY THE USE OF BELL-ON-BELL CONNECTIONS. FOR EXISTING SEWER WHERE FITTINGS CANNOT BE INSTALLED VERTICALLY, THE SERVICE CONNECTION PRESSURE RATED SEWERAGE SHALL HAVE AN ISOLATION VALVE OR CURB STOP VALVE INSTALLED AT THE PROPERTY LINE. IF A CHECK VALVE IS USED AT THE PROPERTY LINE, THE VALVE SHALL BE INSTALLED WITHIN A VAULT TO FACILITATE MAINTENANCE. ROOF DRAINAGE, EXTERIOR OR INTERIOR FOUNDATION DRAINS, SUMP PUMPS OR OTHER SOURCE OF WATER PENETRATION OR GROUND WATER SHALL NOT BE DIRECTLY OR INDIRECTLY CONNECTED TO A PUBLIC SEWER.
- PIPE INSTALLATION:**
- A. THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER.
 - B. PIPES SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL.
 - C. BEDDING AND RE-FILL, FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE, SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH AN APPROPRIATE MECHANICAL TAMP.
 - D. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/8 INCH PER FOOT.
 - E. JOINTS MUST BE KEPT DRY AND DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
- TESTING:** THE COMPLETED HOUSE SEWER SHALL BE SUBJECT TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANSIONS: (PRIOR TO BACKFILLING)
- A. OBSERVATION TEST SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE PLUGGER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
 - B. THE PIPE SHALL BE FULLY COVERED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH A CLEAN OUT WITH A LIGHT.
 - C. DYE FLUORESCENCE WYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSIDE MANHOLE.
 - D. LEAKAGE OBSERVED IN ANY OF THE ABOVE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP, IF NECESSARY, AND RE-LAID SO AS TO ASSURE WATER-TIGHTNESS.
- ILLEGAL CONNECTIONS:** NOTHING SHALL START OR WASTE FLOW FROM TOILETS, SINKS, LAUNDRY OR OTHER PERMITTED ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER, SHALL NOT BE PERMITTED.
- WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE. UNLESS ACCESSIBLE AND NECESSARY, THE WATER SERVICE SHALL BE PLACED ABOVE AND TO ONE SIDE OF THE SEWER SERVICE, AS SHOWN.
- LOCATION:** THE LOCATION OF THE WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS MATERIAL, ROD OR PIPE SHALL BE PLACED AFTER THE WYE TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPE FINDER.
- 11. CHIMNEY CONNECTIONS ARE ONLY PERMITTED IF ALLOWED BY THE A.H.J. ANY VERTICAL RISE GREATER THAN 4 FEET SHALL BE PROVIDED WITH ADDED SUPPORT BY EMBEDDING THIS CONNECTION INTO THE FOUNDATION. ANY RISE UP TO 12 FEET OF VERTICAL RISE CAN ALSO BE SECURED BY PROPER MEANS AS LONG AS IT CONSISTS OF A BELL-ON-BELL CONNECTION PROPERLY PROTECTED AGAINST PIPE PENETRATION AND IF IT IS ALLOWED BY THE A.H.J.
 - 12. UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" MAXIMUM LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST DENSITY.

ONE FIRST DOVER, LLC
157 MAIN DUNSTABLE RD, SUITE 102
NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

A KEACH-NORDSTROM ASSOCIATES, INC.

Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881



REVISIONS				
No.	DATE	DESCRIPTION		
1	03/22/19	REV. PER	CITY TRC	COMMENTS
DATE: JANUARY 22, 2019			SCALE: AS SHOWN	
PROJECT NO: 17-1219-1			SHEET 13 OF 15	

REVISIONS					
No.	DATE	DESCRIPTION			BY
1	03/22/19	REV. PER	CITY TRC	COMMENTS	MC
DATE: JANUARY 22, 2019		SCALE: AS SHOWN			
PROJECT NO: 17-1219-1		SHEET 14 OF 15			

- NOT TO SCALE



1. ALL MATERIAL TO MEET FILTREX® SPECIFICATIONS.
2. SILTOSOXX® COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. SILTOSOXX® DEPICTED IS FOR MINIMUM SLOPES. GREAT SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

NOT TO SCALE



MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

1. STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH SHALL APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ON PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.



100

NOT TO SCALE



NOT TO SCALE

1. FIRST CUT AND CLEAR TREES AND BRUSH ONLY WITHIN DESIGNATED LIMITS OF CLEARING AS NECESSARY TO FACILITATE PROPOSED CONSTRUCTION. ALL TREES, BRANCHES AND OTHER VEGETATIVE MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REQUIREMENTS OF THE STATE OF TEXAS, DEPARTMENT OF TRANSPORTATION, TEXAS HIGHWAY DEPARTMENT.
2. PRIOR TO COMMENCEMENT OF ANY EARTHMOVING OPERATIONS, ALL CALCULABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILTATION FENCING AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
3. COMPLETE GRADING AND STABILIZATION OF STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED BY THE CONTRACTOR. NATIVE ORGANIC SOIL MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTION ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION BARRIERS TO PREVENT EROSION AND SOIL LOSS DUE TO EROSION.
4. BEGIN EARTHMOVING OPERATIONS TO COMPLETION OF ALL WORK NEEDED TO BALANCE SITE AND FACILITATE BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
5. ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
6. INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME STABLE BY VEGETATION.
7. PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS.
8. COMPLETE EXCAVATIONS/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRIABLE LOAM.
9. FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER TOPSOILING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
10. INSTALL THE BINDER AND FILLER COURSE OVER ALL TURF AREAS OVER THE ENTIRE PROJECT AREA.
11. CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN PERMANENT SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
12. INSTALL THE SPECIAL WEARING COURSE OF PAVEMENT OVER THE ENTIRE PAVED COURSE.
13. COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.

1. EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF MORE THAN ONE (1) MONTH.
2. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATIONAL MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
3. ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
4. ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
5. IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
6. AN EROSION CONTROL MEASURE SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING OCCURS:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
7. DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENVA-1100.
8. IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
9. AREAS HAVING FINISH GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION."
10. AT THE COMPLETION OF POND AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.
11. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOME ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
4. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

PLANNING FILE # P19-16

NASHUA, NH 03060
S.C.R.D. BK. 4510 PG. 565

Civil Engineering Land Surveying Landscape Architecture

mercer Park North, Suite 3B, Bedford, NH 03110 Phone (603)

REVISIONS				
No.	DATE	DESCRIPTION		
1	03/22/19	REV. PER	CITY TRC	COMMENTS
DATE: JANUARY 22, 2019			SCALE: AS SHOWN	
PROJECT NO: 17-1219-1			SHEET 15 OF 15	



FIRST STREET ELEVATION
1/8" = 1'-0"



SECOND STREET ELEVATION
1/8" = 1'-0"

DOVER HEIGHTS
ONE FIRST STREET, DOVER, NH

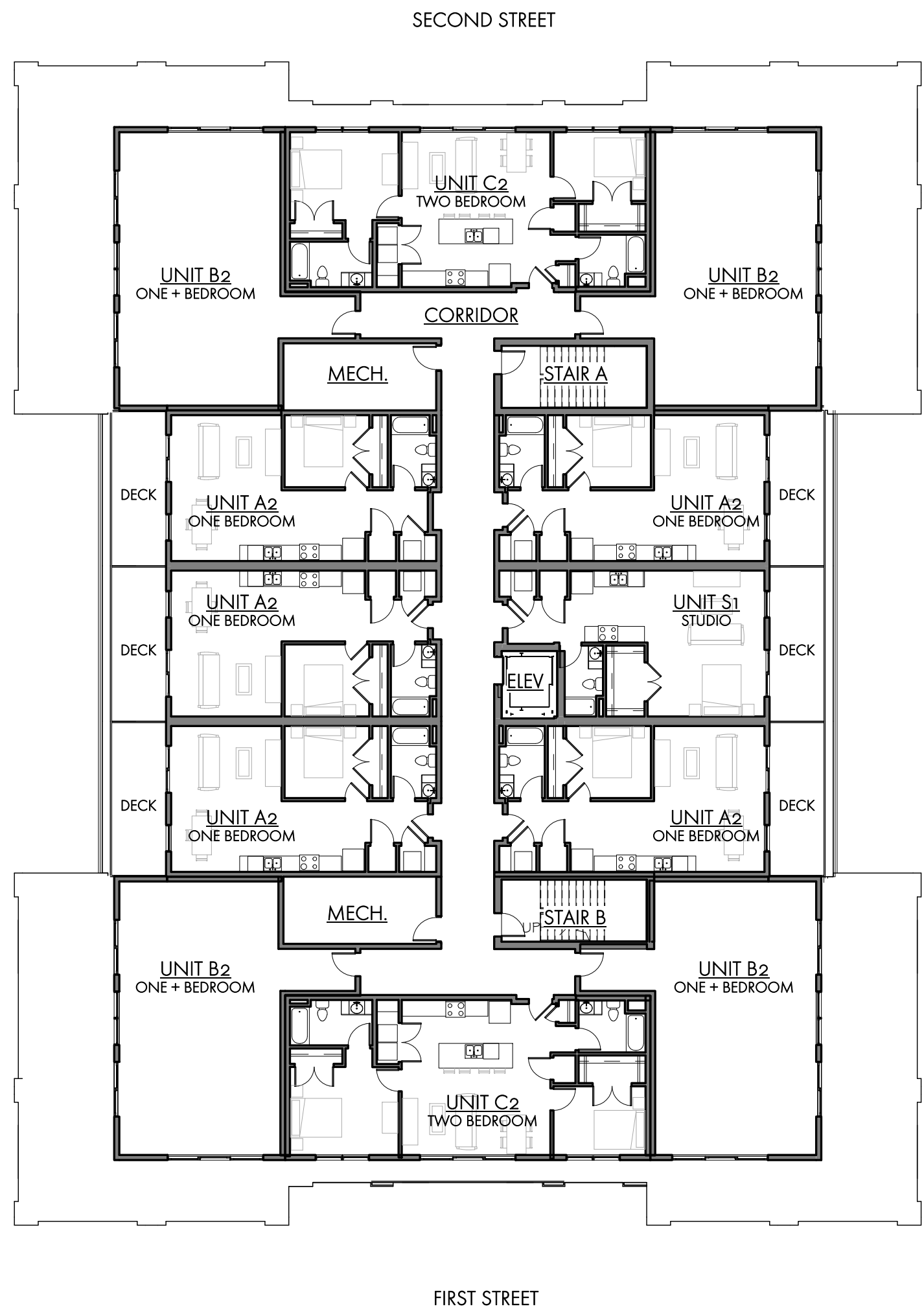
BUILDING ELEVATION
1/8" = 1'-0"

MARCH 28, 2019

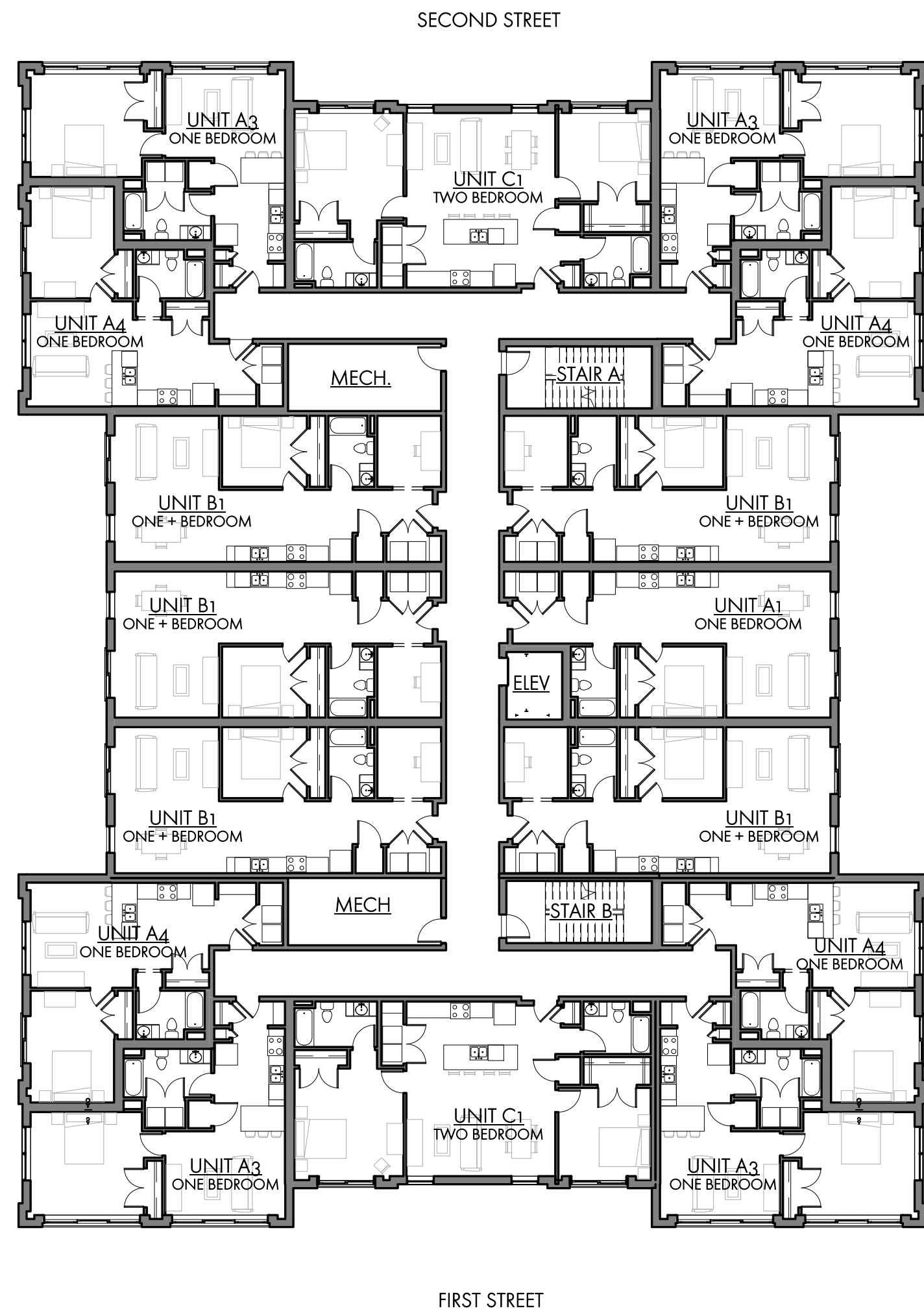




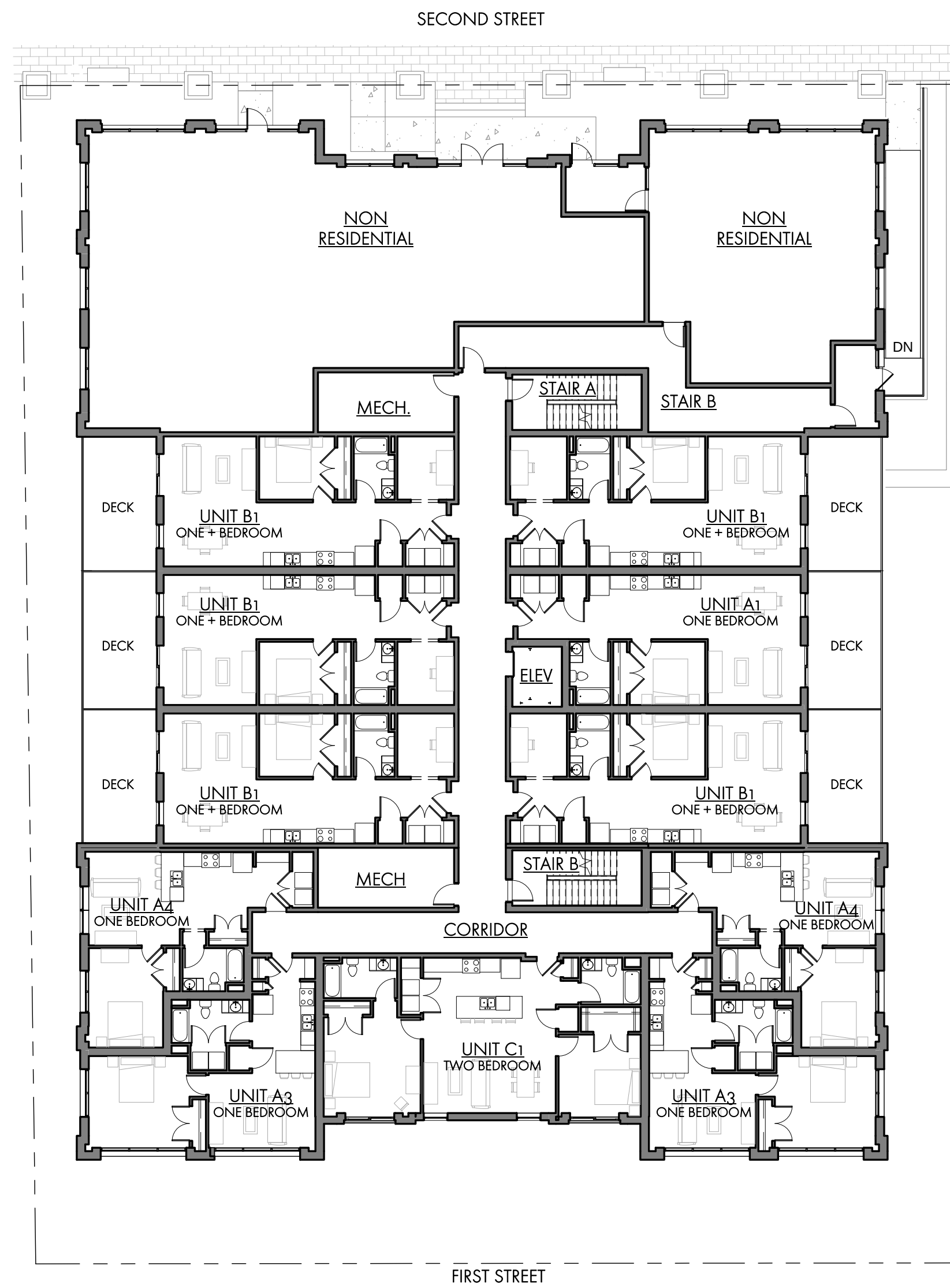
EAST ELEVATION
1/8" = 1'-0"



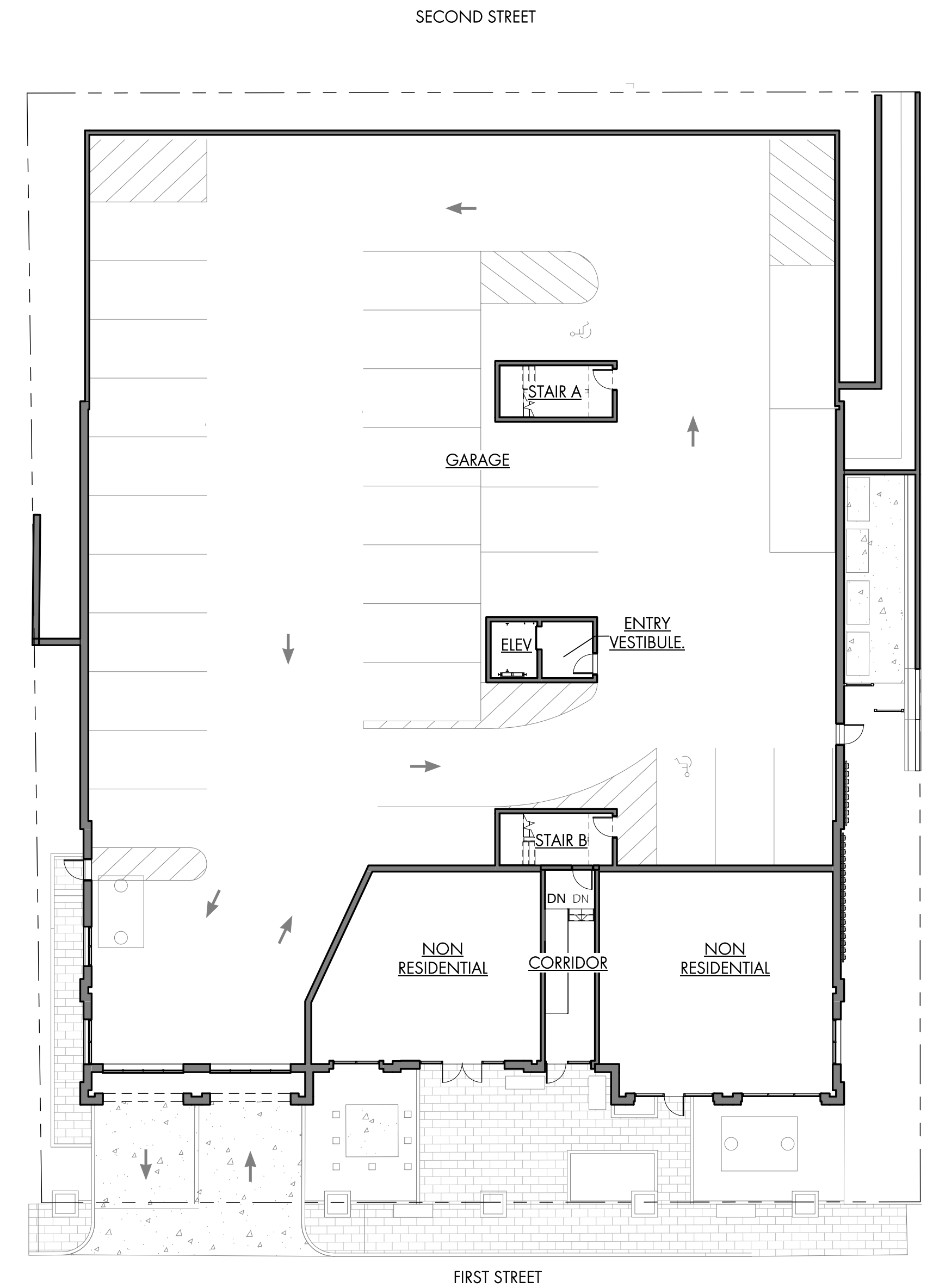
FIFTH FLOOR PLAN
1/16" = 1'-0"



TYPICAL FLOOR PLAN (2-4)
1/16" = 1'-0"



FIRST FLOOR
1/16" = 1'-0"
(GRADE LEVEL ON SECOND STREET)



PARKING FLOOR (P1)
1/16" = 1'-0"
(GRADE LEVEL ON FIRST STREET)

