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Sent Via Email

February 16, 2021

Jenny Raitt, Director
Department of Planning and Community Development
Town of Arlington
50 Pleasant Street
Arlington, Massachusetts 02476

RE: Response 2 to Peer Review Comments – Site Plan Review
Thorndike Place Comprehensive Permit Application

Dear Ms. Raitt:

On behalf of the Applicant, Arlington Land Realty LLC, BSC Group, Inc. (BSC) is pleased to provide the following responses to peer review for the Thorndike Place residential project on Dorothy Road in Arlington, Massachusetts. This letter responds to comments provided by BETA Group, Inc. (BETA) in a letter to you dated November 20, 2020 as well as comments provided by Mr. Wayne Chouinard, Town Engineer, in a memorandum to you dated December 4, 2020. Please note that this letter is responding to comments from both parties regarding site plan review. Responses to both BETA's and the Town Engineer's comments relating to stormwater management for the project were provided in a separate letter dated January 22, 2021.

Subsequent to the dates of the BETA letter and Town Engineer memorandum, the ZBA held a public hearing on architecture and urban design on January 26 and a working session on February 4. In response to comments received at those meetings, the Applicant is proposing building, parking and site plan modifications shown on the attached site plan sketch prepared by Oaktree entitled Proposed Site Plan Modifications Sketch, dated February 16,20921, and as listed below:

- Reduction in building height along Dorothy Road
- Reduction to 172 units[1]
- Reduction in parking to a ratio of 1.12 spaces per unit or 193 spaces
  - Parking for four (4) vehicles and one accessible van in the front courtyard
  - 10 parking spaces in the western surface lot
  - The balance of the parking, approximately 178 spaces, would be in the garage
- Relocation of the Children's Play Area to the west side of the building
- Inclusion of an accessible pedestrian connection from the southwest courtyard to the relocated Children's Play Area and surface parking
- Inclusion of a potential Bluebikes station adjacent to the surface parking area

The section headings and comment numbers below correspond to the original November 20, 2020 comments from BETA followed by the December 4, 2020 memorandum from Mr.

[1] Should the Applicant be required to file an appeal to the Housing Appeals Committee as a result of the Board's decision on the application, the Applicant reserves the right to advance the 176-unit project as presented to the Board.

Chouinard, Town Engineer. For clarity, we have repeated original comments in standard text and then provided a summary of our response in italics and the modifications identified above are included in our responses.

Many of the comments included below include final design elements that will be incorporated into the final site plans submitted for review for consistency with the Board's decision or will be coordinated with the appropriate Town Department prior to submission for building permit.

Responses to BETA Peer Review – Civil Design Issues

Site Plans

2. A 15-ft wide pervious paver emergency access drive is shown looping around the rear of the main site building.

   Recommendation: The Applicant should confirm that the access drive can accommodate an emergency vehicle (fire truck) turning around the southeast corner of the site building.

   Response: A truck turning exhibit has been prepared showing the emergency vehicle route, a copy of which is enclosed herein. The turning radius specifications were provided by the Arlington Fire Department.

3. Existing Conditions Plan - The applicant should add a professional surveyor's stamp.

   Response: The Existing Conditions Plan will be stamped by a professional land surveyor and will be included in the final site plans submitted for review for consistency with the Board's decision.

7. Grading and Drainage Plan – The applicant proposes an entrance door to the garage level on the east side of the building, the proposed finished grade elevation is 2.83. The seasonal high groundwater elevation of the site development area is presumed to be around elev. 3.0 based on past soil borings.

   Recommendation: The applicant should confirm the seasonal high groundwater elevation in this area and provide appropriate mitigative measures if necessary, to prevent surface water from entering the garage through the doorway.

   Response: The project architect is reviewing options to raise the elevation of the garage entrance door on the east side of the building above the seasonal high groundwater elevation. The change in elevation will be accomplished with an internal ramp. Additionally, test pits conducted on the site demonstrate groundwater to be at El.=3.0. The applicant has proposed as a condition of the Comprehensive Permit to perform confirmatory on-site testing for groundwater levels during March and/or April 2021 during the expected seasonal high groundwater period.

8. Areas for trash collection and snow storage are not identified on the site plan.

   Recommendation: The Applicant should identify potential areas for trash collection and snow storage on the site plan to confirm that these will not conflict with other site elements.

   Response: The proposed location of the trash room in the basement level is shown on Sheet C-104 of the site plans and the Garage Plan in the architectural drawings. All trash and recycling facilities are located on the garage level. Building management staff will

wheel out trash and recycling on trash/recycling days to a location on the south side of the garage vehicular ramp where it will be removed by waste haulers.

Snow storage for the surface parking lot and primary access drive will be provided off the pavement on the west side of the parking lot. Snow storage for the courtyard entrance will be provided off pavement within landscape areas and to the east and west of the courtyard between the building and back of sidewalk. Any excess snow will be removed and properly disposed of offsite.

The trash/recycling collection areas and designated snow storage areas will be depicted in the final site plans submitted for review for consistency with the Board's decision.

11. Recommend the applicant adjust the location of the proposed pedestrian ramp on the west side of the site building so that it is located within the proposed crosswalk crossing the site access drive.

Response: BSC concurs with this recommendation. The location of the proposed pedestrian ramp on the west side of the building will be relocated to align with the proposed crosswalk crossing the site access drive and will be depicted in the final site plans submitted for review for consistency with the Board's decision.

Flood Plain

13. A portion of the proposed project design requires filling within the 100-year flood plain. Compensatory storage is required on a 1:1 (per foot) basis by the Mass Wetlands Protection Act (310 CMR 10.57) and on a 2:1 basis by the Arlington Wetlands Bylaw.

The applicant has provided compensatory flood plain storage calculations in the stormwater report (Sec. 2.12) and has designated an upland area on the site plan southeast of the proposed building for compensatory storage. In addition, the southeast courtyard area is labeled "Open Space / Flood Storage".

Recommendation: The Applicant should provide a plan graphic showing the existing flood plain area being altered by the proposed building / site development, currently the building hatch is obscuring the flood plain limits. The proposed compensatory flood storage volume calculations and designated flood storage volume area appear consistent.

Response: A floodplain impacts and compensatory storage exhibit was previously submitted. A revised floodplain impacts and compensatory storage exhibit considering the Isolated Vegetated Wetlands (IVW) and AURA is attached. The proposed compensatory storage areas located within the AURA to BVW or IVW have been located, where possible, within the outer 50 feet of the AURA. This work is also considered a temporary disturbance area and once the compensatory storage work is complete, it will return to its natural function as AURA and Land Subject to Flooding.

Utilities

21. The applicant proposes some drain manholes (DMH-2, 3) requiring shallow installations. For these applications the applicant should confirm the frame/cover height (standard 8-in, shallow 4-in) and that adequate cover exists over the inlet/outlet pipes for constructability.

Response: DMH-2 and 3 have been eliminated in the revised stormwater management system design as submitted to the Board and The BETA Group on January 25, 2021.

22. The Utility Plans show the proposed utility services from the project site to the existing municipal/gas/electric utilities in Dorothy Road.

    Recommendation: We recommend the Applicant coordinate with the Arlington Public Works Department and local utility companies regarding all proposed site utility connections to the public utilities in Dorothy Road to confirm compliance with applicable construction standards.

    Response: A detailed plan review and comments was provided by the Town Engineer. Responses to those comments are provided below.

23. The existing survey shows an existing drain line in Dorothy Road that runs in front of the project site. The Utility Plan shows three proposed sewer service lines from the building to the existing municipal sewer in Dorothy Road that cross the drain line.

    Recommendation: The Applicant should confirm the proposed sewer services as shown do not conflict with the existing drain line.

    Response: The existing sewer line that runs within the easement across the property frontage on Dorothy Road has an invert of approximately elevation = 1.7 to 1.2. The proposed building sewer laterals have invert elevations = 5.22 to 4.33; providing a minimum of 1 foot separation where crossing the existing sewer.

Responses to Wayne Chouinard, Town Engineer Memorandum

Utilities: Water

- Calculations should be provided to ensure the distribution system for the area has the capacity for increased demand for fire flow and domestic water supply without impacting the existing system or abutter's water volume and pressure.

  Response: The proposed 172 units include a total of 263 bedrooms resulting in an estimated residential water usage of 31,823 gallons per day. This is based on 110% of the Title V design flows of 110 gallons per day per bedroom. Hydraulic calculations for fire flow will be completed as the building design progresses to building permit.

- Utility Plans indicate connection to the existing water main located in Dorothy Road. The existing water mains were installed in 1931, 1946 and 1948 and are beyond the recommended service life. Any connection to the Town System should replace the water main, hydrants and gate valves as indicated on the Water System Schematic Sketch – Dorothy Road (attached)

  Response: As indicated, the existing water mains located in Littlejohn Street and Dorothy Road were installed in 1931, 1946 and 1948 and are beyond their recommended service life. Under Chapter 40B, a developer should not be responsible for existing inadequacies for which a municipality is required to address. Given the Town's requirements for connections to the Town water main be triple gated tee connections, the applicant agrees to replace the 8-inch water main in Dorothy Road in the area (approximately one pipe

length in both directions) of the three proposed connections. This will be depicted in the final site plans submitted for review for consistency with the Board's decision.

- Connections to the Town water main require a triple gated connection to provide maximum shut-off and distribution control.

  Response: Connections to the Town water main will utilize a triple gated connection. This will be depicted in the final site plans submitted for review for consistency with the Board's decision.

- Connections to the Town water main require a tee connection.

  Response: Water connections will utilize a tee connection. This will be depicted in the final site plans submitted for review for consistency with the Board's decision.

- Consideration should be given for the proposed water line connecting to the fire hydrant located in the southwest corner to be extended from the Littlejohn water main to provide the opportunity for the main connection from the building to be located outside of Dorothy Road and reduce bends and fittings to the hydrant.

  Response: An extension of the Littlejohn water main would be ideal. However, an existing sewer manhole at the intersection of Littlejohn and Dorothy creates a conflict for this logical extension. Also, an extension from Littlejohn would conflict with the existing drainage pipe and easement on-site. The applicant in willing to work with Engineering to identify an alternate option to reduce bends and fittings to the hydrant.

Utilities: Sewer

- Up-gradient sewer flow, with peaking factor shall be determined and provided to document suitable capacity for proposed additional flow into the sewer system. Evaluation shall include the downstream sewer main to determine whether it will provide sufficient capacity for the intended increase in flow and address any I/I potential.

  Response: Does the Town have a Sewer Master Plan identifying the tributary area for East Arlington, A map of the sewer system with pipe sizes, any documented flow data and any documented system deficiencies downstream from the proposed development? Also, does

the Town's Sewer Rehabilitation Project include the Dorothy Road Area? Have any I/I issues been identified and have any rehabilitation projects been completed?

- It is recommended that an Infiltration/Inflow (I/I) mitigation fee be assessed to be used to reduce I/I of the Town sewer system in the amount equal to four (4) times the design flow of the project.

  Response: Can the Engineering Division provide a copy of the Town's Infiltration/Inflow (I/I) mitigation fee policy with the cost per gallon of I/I removal? A search on the Town's website did not reveal an I/I mitigation fee policy or ordinance.

- Due to the anticipated flow leaving the proposed building, sewer services should utilize 8" service lines and are required to discharge into a sewer manhole when entering the Town sewer collection system. (see attached Sewer System Schematic – Dorothy Road)

  Response: The Sewer laterals will be revised from 6" to 8" and will be shown on the final site plans submitted for review for consistency with the Board's decision.

- Details of the oil/gas separators and proposed pump system should be provided.

  Response: Proposed oil/gas separators and proposed pump system will be provided by the building plumbing engineer as part of the building permit plans.

- The underground infiltration system proposed in the parking lot located at the western edge of the project is not recommended in the vicinity of the existing sewer line/easement without requiring an upgrade or renewal of the existing sewer main.

  Response: The underground infiltration system in the parking lot has been relocated south of the existing sewer line/easement to avoid impact.

- Prior to construction a pipe line evaluation shall be performed along the 14/18' sewer main. Upon completion of construction, a post-construction evaluation of the sewer main shall be performed. Any damaged and/or disturbed pipe shall be repaired/replaced.

- *Response: Prior to construction a CCTV sewer pipe inspection will be performed along the 14/18' sewer main (from the existing manhole located to the West of the proposed surface parking lot to the manhole located adjacent to the southwest lot corner of 56 Dorothy Road) Any existing deficiencies identified as part of the pre-construction inspection will be the responsibility of the Town. Upon completion of construction, a post-construction CCTV sewer pipe inspection will be performed. Based on the outcome of the post-construction inspection, should construction result in damage and/or disturbance to pipe, the same shall be repaired/replaced at the expense of the site contractor.*

Stormwater/Resource Areas:

Responses provided in:

Response 1 to Peer Review Comments – Stormwater Management

Thorndike Place Comprehensive Permit Application

Dated January 22, 2021

Utilities: Other

- What are the off-site upgrade requirements necessary for the CATV requirements for the proposed development? Will current utility pole and cable configurations accommodate the

required cable, electric and telephone wires without the need for additional utility poles or improvements outside of the project locus? Any installation of new utility poles or underground conduit in the public right of way will require a Grant of Location from the Board of Selectmen. This information should be provided as part of the application process to evaluate the entirety of impacts and effects.

Response: Off-site CATV upgrades, if necessary, have not been identified. As the building design progresses towards building permit, the applicant will submit applications for service to the private utility companies. At that time, the private utility companies will identify any infrastructure upgrades needed to service the proposed development including any new utility poles or underground conduit within the public right-of-way.

Pavement, parking and sidewalks:

- Please clarify the access/egress and parking configuration proposed at the front drop off/pick up entrance of the building including dimensions and turning radius. The parking space orientation does not conform to the expected traffic flow direction.

  Response: The proposed courtyard circulation will be reversed to provide counter clockwise circulation. Dimensions and traffic flow directions will be shown on the final site plans submitted for review for consistency with the Board's decision.

- Sidewalk widths proposed within the public right of way should be 5 feet in width.

  Response: The sidewalks were proposed at 4 feet in width to be consistent with the existing sidewalks on Dorothy Road in the vicinity of the project. Sidewalks 5 feet in width will be provided and will be depicted on the final plans.

- The proposed fire lane located at the rear of the building is very close to the building. It is recommended the fire lane provide a suitable buffer distance from the building to protect fire personnel and apparatus in the event of a building/wall collapse.

  Response: The location of the emergency access will be coordinated with the Arlington Fire Department.

- Concrete sidewalks and driveway aprons should be installed along the frontage of the property.

  Response: Concrete sidewalks and driveway aprons will be installed along the property frontage on Dorothy Road; the final plans to be submitted for review for consistency with the decision will clarify the same.

- Current curb stones along the project frontage consists of small length cobbles. During the installation of new granite curbing, these small cobbles shall be removed and stacked and/or delivered to the DPW Yard.

  Response: The Applicant agrees to a condition of the decision to provide that the existing small cobble curb stones on Dorothy Road which are removed as part of construction will be stacked or delivered to the DPW Yard.

- The main access driveway into the property appears to be an extension of Littlejohn Street. This may result in unintended entry into the property by the travelling public.

  Response: The main site drive alignment was designed to intentionally not be an extension of Littlejohn Street to avoid confusion and to limit unintended entry by the public. The

installation of concrete sidewalk and driveway apron as well as signage and/ or gate posts at the main site drive will help to define it as a private driveway and minimize unintended entry.

- Due to the location and alignment of the main driveway, egress of vehicles from the project site during darkness will result in repetitive light intrusion on #24 Littlejohn Street from the headlights. Consider and alternative access location or prevention method for the abutter.

  Response: As stated in the response to the comment above, the main site drive alignment was designed to intentionally not be an extension of Littlejohn Street to avoid confusion and to limit unintended entry by the public. It is possible to revise the alignment of the driveway for exiting vehicles to be aligned with the northbound travel lane of Littlejohn Street to mitigate light intrusion on #24 Littlejohn, if such an alignment is preferential to the Town.

- Was consideration given to providing pedestrian access through the property to the pedestrian bridge located over Rte. 2 or to Margaret Street at the entrance to Thorndike Field?

  Response: No pedestrian access is currently proposed to the existing pedestrian bridge over Route 2. Additionally, the TAC stated that use of the pedestrian bridge was not recommended and, therefore, a pedestrian connection is not proposed.

  Pedestrian access to Margaret Street was included in the original Comprehensive Permit application but has been eliminated due to wetland resource area impacts and concerns raised by the Conservation Commission. The applicant supports the idea of a pedestrian connection to Margaret Street, and intends to participate in the planning of any pedestrian paths through the proposed Conservation Parcel, subject to reasonable restrictions on the proximity of trails to the proposed project, to ensure privacy of the residents.

Landscaping:

- Project should provide screening of parking areas and buildings from the immediate abutters. Large, mixed evergreens should be provided suitable to grow into a visual screen for the 2-3-4 story building. Parking areas should be shielded from abutters with suitably selected mixed Evergreen species.

  *Response: A Planting Plan (L-100) is included in the plan set. Evergreens are proposed to provide screening of the surface parking lot from the immediate abutters. The proposed white pines are proposed to be 8 – 10 feet tall at the time of planting and are expected to grow 2 -3 feet per year. Street trees are proposed at approximately 35 – 50 feet on-center continuing the street tree aesthetic that exists on Dorothy Road and Littlejohn Street. The proposed street trees and evergreens will grow into a visual screen for the building and parking lot. Based on the site plan modifications described above, (*reduction in parking to a ratio of 1.12 spaces per unit and 10 parking spaces in the western surface lot) *, the westerly surface lot will be reduced in size allowing for a greater vegetative buffer to the abutting property.*

- It is unclear if there are any existing public shade trees along the frontage of the proposed project. A public shade tree under MGL Chapter 87 is defined as "any tree 1-inch and larger dbh growing within the public right of way. Removal of public shade trees is not allowed without a Tree Hearing arranged and coordinated by the Arlington Tree Warden.

Response: The applicant recommends a site visit with the Tree Warden to identify any existing public shade trees as identified under MGL Chapter 87 but requests as part of the comprehensive permit, that any requirement for a hearing be waived and any required approval be incorporated into the Comprehensive Permit granted by the Zoning Board of Appeals. Additionally, and as stated above, street trees are proposed at approximately 35 – 50 feet on-center continuing the street tree aesthetic that exists on Dorothy Road and Littlejohn Street.

- Limits of disturbance, tree clearing and excavation for the project should be indicated on the plan.

  Response: The proposed limits of disturbance, tree clearing and excavation are indicated by the perimeter sediment control shown on the Site Preparation Plan, Sheet C-101.

Lighting:

- A photometric plan should be provided to evaluate site lighting and light spillage at property lines. Night sky reduction, light pollution, cut off fixtures and glare should be addressed and carefully evaluated and documented.

  Response: Site lighting will be designed with shielding, lenses, or cutoff devices to eliminate light trespass onto any street or abutting lot or parcel and to eliminate glare perceptible to persons on any street or abutting lot or parcel. A preliminary site lighting and photometrics plan will be included in the final site plans submitted for review for consistency with the Board's decision.

Traffic:

- Comments pertaining to the Traffic Report is deferred to the Transportation Advisory Committee.

  Response: Response to Traffic Advisory Committee and BETA traffic peer review comments have been provided by Vanasse & Associates under separate cover.

Administrative:

- Consideration should be given to designing and providing a wider sewer easement beyond 10Ft. These easement width were typical in past generations of design but are found as the utilities are aging do not provide suitable room to perform all necessary work within the easement.

  Response: The applicant is open to considering the possibility of providing a wider sewer easement where it crosses the property with the exception of where the easement abuts the Dorothy Road right-of-way. The applicant will further assess whether any increase in the width would otherwise be inconsistent with project construction, operation and maintenance. As the existing easement abuts the right-of-way, suitable room should be available to perform all necessary work.

- Site plan should identify areas where delivery, drop off and other larger vehicles may require suitable turning radius requirements.

  Response: Smaller delivery vehicles will be permitted to use the front courtyard parking area for the drop-off of packages. Larger delivery vehicles will temporarily park along the

project frontage on Dorothy Road. Tenant move-in/move-out activities will be coordinated by property management with access to the parking garage via the main site driveway.

- Time of use restrictions for deliveries, trash pickup etc. to reduce impacts on adjacent neighborhood should be included.

  Response: Trash and recycling will not be placed out for pick up before 6:00AM on the day of pick up and will be managed on site by private subcontractors.

- Signage – none included.

  Response: The project signage will include a flush mounted, silhouette/'halo' wall sign attached to the building entrance facing Dorothy Road, a monument sign at the courtyard visitor entry and a brick post "Resident and Visitor" sign at the site driveway near the corner of Little John and Dorothy Road . During construction, a construction sign will be on site indicating the engineer, architect, contractor or other firms associated with the project to be limited to no more than 32 square feet in area. Internally, one or more directional signs for the safety and direction of residents may be proposed in the vicinity of the surface parking area, the children's play area and/or at internal crosswalks. Such signage shall be depicted on the final plans to be reviewed for consistency with the decision.

We look forward to discussing these revisions with you at the next public hearing on the project. Should you have any questions on this information, please do not hesitate to reach out to me at (617) 896-4321 or jhession@bscgrop.com.

Sincerely,
BSC Group, Inc.

John Hession, P.E.
Vice President

cc: zba@town.arlington.ma.us
Marta Nover and Todd Undzis, BETA
Paul Haverty, Blatman, Bobrowski & Haverty, LLC
Stephanie Kiefer, Smolak & Vaughan
Gwen Noyes and Arthur Klipfel, Arlington Land Realty

Attachments: Proposed Site Plan Modifications Sketch
Truck Turning Exhibit
Floodplain Impacts and Compensatory Storage Exhibit

bluebikes

playground

HC

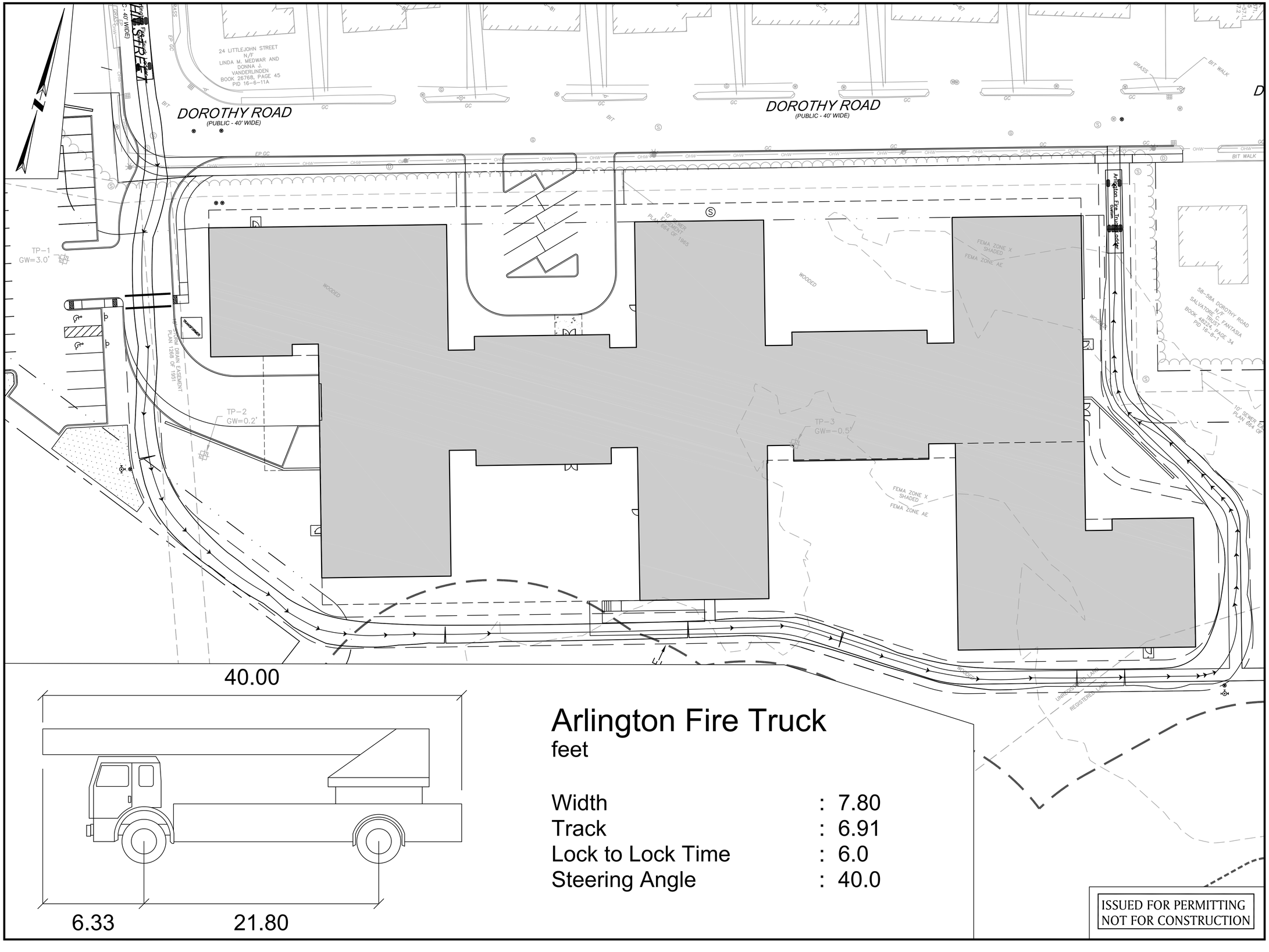
EL.10'

EL.12.5'

south courtyard

N

THORNDIKE PLACE
PROPOSED SITE PLAN MODIFICATIONS SKETCH
FEBRUARY 16, 2021



Arlington Fire Truck
feet

Width	:	7.80
Track	:	6.91
Lock to Lock Time	:	6.0
Steering Angle	:	40.0

ISSUED FOR PERMITTING
NOT FOR CONSTRUCTION

DATE

PROFESSIONAL ENGINEER

THORNDIKE PLACE

DOROTHY ROAD

IN

ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

TRUCK TURNING
FIRE TRUCK ACCESS

JANUARY 12, 2021

REVISIONS:

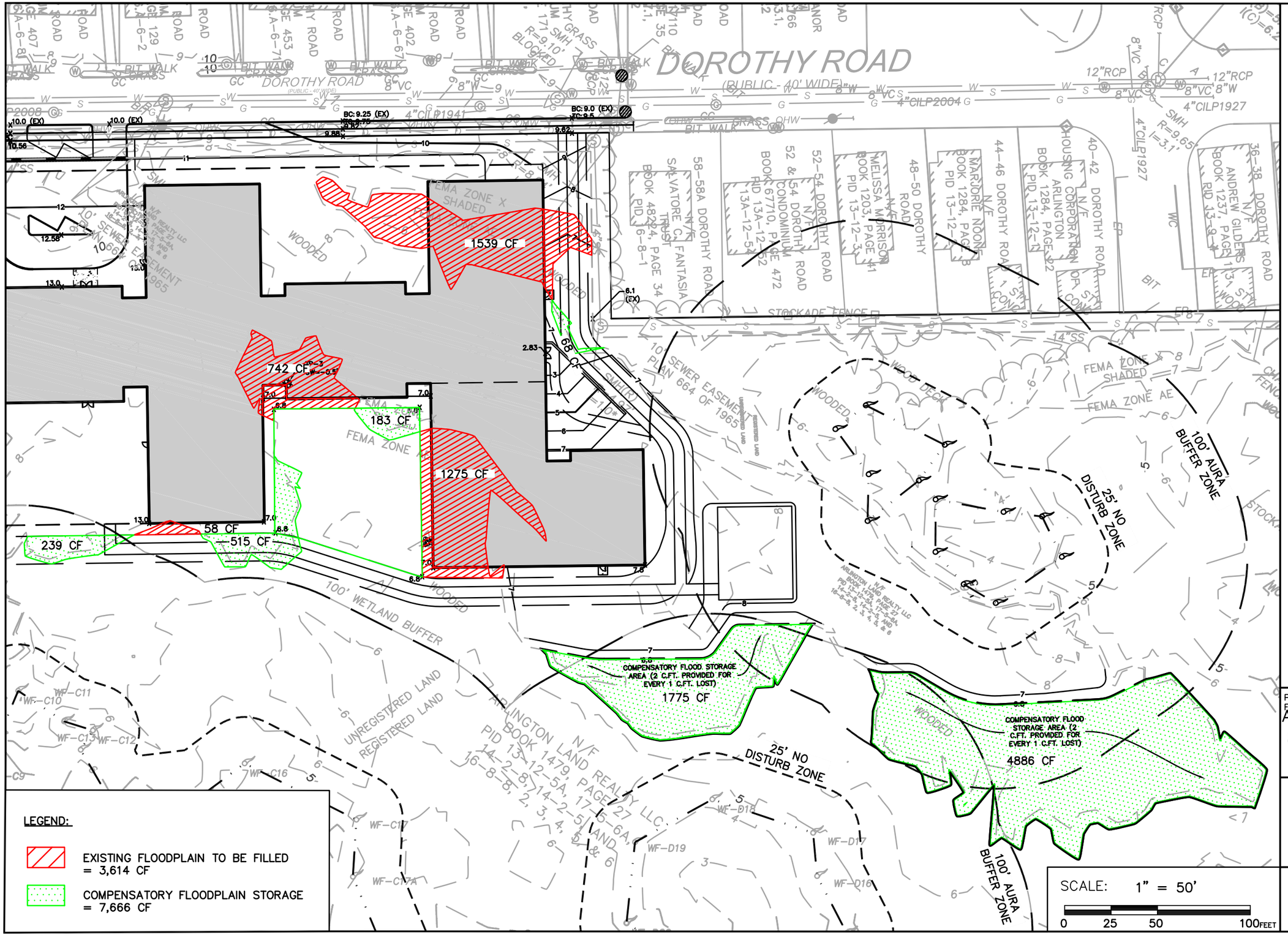
NO.	DATE	DESC.
1	9/18/20	NEW BUILDING FOOTPRINT
2	10/22/20	WETLAND DELINEATION
3	11/03/20	REVISED BUILDING

PREPARED FOR:
ARLINGTON LAND REALTY, LLC
84 SHERMAN STREET, 2ND FLOOR
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

SCALE: 1" = 20'
0 10 20 40 FEET

FILE: \Civil_Drawings\2340700-LM
DWG.:
JOB. NO: 23407.00
SHEET SK-01



THORNDIKE PLACE

DOROTHY ROAD

ARLINGTON
MASSACHUSETTS
(MIDDLESEX COUNTY)

COMPENSATORY
FLOOD STORAGE

REVISED FEBRUARY 11, 2021

PREPARED FOR:
ARLINGTON LAND REALTY
84 SHERMAN ST, FLR 2
CAMBRIDGE, MA 02140

BSC GROUP
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

Job No.: 23407.00 Date: 2/4/2021
Scale: 1" = 50' Revised:
Dwg No:
File: 2340700\C\D\Graphics\2340700-Flood