

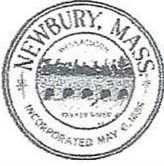
**Town of Newbury  
Building Project Construction Committee Friday June 21, 2019  
7:00A.M., at Town Hall**

Please find the attached pdf of documents to be distributed at Friday's construction committee meeting. The following documents have been attached.

1. Public notice of meeting 6-21-19;
2. Agenda;
3. May 17, 2019 meeting summary draft pending committee review/approval;
4. CTX 5-17-19 meeting notes;
5. CTX invoice dated 6-5-19;
6. Public meeting update regarding local approvals/permitting (Wednesday, June 12<sup>th</sup> joint hearing)
7. CTX Site plan review correspondence, GGD to Joe Serwatka PE, peer review engineer;
8. CTX revised site plan (9 pages);
9. GGD communication regarding conservation commission questions;
10. Project open items 6-21-19 under review;
11. Schedule of probable costs 4-26-19 no update pending DD cost estimate;
12. Project schedule (no change);
13. Communications;

Respectfully submitted,

Bob Connors



**PUBLIC NOTICE POSTING REQUEST  
TO OFFICE OF TOWN CLERK**

Email: [townclerk@townofnewbury.org](mailto:townclerk@townofnewbury.org)

Fax: 978-572-1228

BOARD/COMMITTEE/ORGANIZATION:

**POLICE STATION BUILDING PROJECT**  
**CONSTRUCTION COMMITTEE**

☒ MEETING

☐ PUBLIC HEARING

DAY of WEEK/DATE: **FRIDAY June 21, 2019** TIME (AM/PM): **7:00 A.M.**

ADDRESS: ☒ Newbury Municipal Offices, 12 Kent Way, Byfield, MA 01922

ROOM: ☒ 2<sup>nd</sup> Floor Hearing Room

PURPOSE: GENERAL BUSINESS

SUBMITTED BY: ROBERT CONNORS,  
chairman.

All meeting notices must be filed and time stamped in the Town Clerk's office and posted on the municipal bulletin board 48 hours prior to the meeting in accordance with MGL Ch. 30A, § 18-25.

This may not include Saturdays, Sundays or legal holidays.

Newbury Municipal Offices are open Mon., Wed., Thurs. 8-4 and Tuesday from 8-7, closed Fridays.

Faxed or Emailed postings must reach the Clerk's office during business hours 48 hours prior to the meeting.

MEETING NOTICES WILL ALSO BE POSTED ON THE TOWN WEBSITE ([www.townofnewbury.org](http://www.townofnewbury.org))

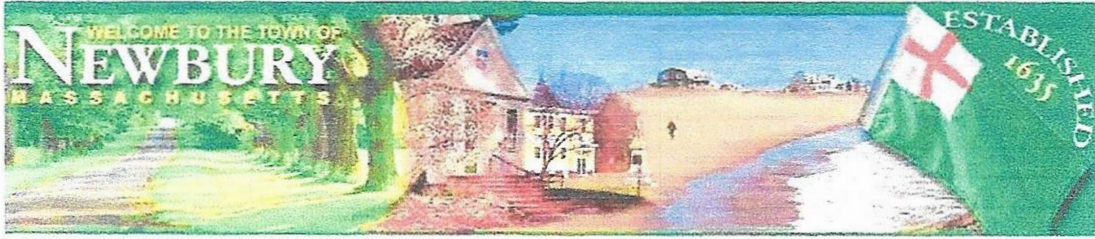
**Agenda:**

Call to order

- 1) Review of May 17<sup>th</sup>, 2019 meeting summary;
- 2) Context Architects (Jeff Shaw) update;
- 3) Update of project schedule, all phases;
- 4) Review estimate of probable costs;
- 5) Update-local permitting-approvals;
- 6) Communications;
- 7) Citizen's concerns;
- 8) Next meeting date;

Adjourn

Note: The matters listed above are those reasonably anticipated by the Chair to be discussed at the meeting. This Agenda may be updated or revised after initial posting. Not all items listed may in fact be discussed, and other items not listed may be brought up for discussion to the extent permitted by law.



**Town of Newbury  
Building Project Construction Committee**

**Friday, June 21, 2019 7:00A.M., at  
Town Hall**

**AGENDA**

- 1) Review of May 17, 2019 meeting summary;
- 2) Context Architects (Jeff Shaw) update;
- 3) Update of project schedule, all phases;
- 4) Review site plan;
- 5) Review estimate of probable costs;
- 6) Update-Seabrook grants, TCS communications;
- 7) Communications
- 8) Citizen's concerns;
- 9) Next meeting date;

Adjourn

**Note: "These listings of matters are those reasonably anticipated by the chair which may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law"**

**Town of Newbury  
Building Project Construction Committee  
Police Station/Town Hall Project**

**MINUTES**

DATE: May 17, 2019

*Approved:* \_\_\_\_\_

**Building Committee Members Present:**

Bob Connors	Chair
Eric Svahn	Vice-Chair

**Building Committee Members Not Present:**

John Kellar	Secretary
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**Others Present:**

Michael Reilly	Police Chief, Town of Newbury
Jeff Shaw	Principal, Context Architecture (CTX)
Zol Tonic	Project Manager, Context Architecture (CTX)
Kevin Heffernan	Owner's Project Manager Vertex (VTX)

**Others Not Present"**

The meeting was opened at 7:00 a.m.

**1. Meeting Minutes from May 17, 2019**

Reviewed items from Context



**NEWBURY POLICE STATION & TOWN HALL PROJECT  
MEETING NOTES – Building Construction Committee – 5.17.2019**

**Building Committee Members Present:**

Bob Connors	Chair
Eric Svahn	Vice Chair
Michael Reilly	Police Chief, Town of Newbury
Kevin Heffernan	Owners Project Manager, Vertex (VTX)
Jeff Shaw	Principal, Context Architecture (CTX)
Zel Tonic	Project Manager, Context Architecture (CTX)

**Building Committee Members Absent:**

John Kellar	Secretary
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Distribution:

All attendees plus:

Craig Johnson

Context Architecture (CTX)

File: 1714.00: 02: 2.2

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Bob reviewed the Building Committee handout documents for this week's meeting.

Meeting minutes and CTX meeting notes were accepted as submitted.

The CTX invoice was voted on and accepted.

Bob reviewed the updated financial statements regarding the project budget.

The Site Review Submission package was formally submitted at the Wed. night Planning Board meeting.

There will be a joint session of the Planning Board and the Conservation Commission on Wed. June 12.

The Conservation Commission filing will need to be made by May 30.

The Design Development drawings package was submitted in digital and hard copy to the Committee.

Jeff outlined the progress of the design work. Most major elements are now in place and structural and MEP systems are finalized. Jeff noted that shortly after the last building committee meeting after discussion with the engineers, the mechanical systems had become a concern as they were taking up too much of the attic space. After some back and forth regarding possibly switching systems, the team is back on track and systems are being re-organized to fit into the perimeter of the attic (eaves and gable ends), leaving as much space open as possible in the core of the space. JS noted that if the Town or Department wanted to add office space to the attic it would not currently have the option for a window. The design team will attempt to organize the mechanicals such that in one or two locations a future dormer could be constructed.

As part of the discussion of the DD submission, Eric noted that a large tree at the West corner of the entry drive might block the view of the building and should be reduced in height. CTX will review with the landscape architect. The plantings continue to be listed as an add alternate to the GC contract and only loam and hydroseeding will be included the base bid.

CTX will forward the project specifications to the Committee when they are completed. The DD submission will now be sent to the cost estimator for the DD Cost Estimate, to be reviewed at the June 7<sup>th</sup> meeting.



68 HARRISON AVENUE BOSTON, MA 02111 TEL 617 423 1400 WEB [CONTEXTARC.COM](http://CONTEXTARC.COM)

The Town has executed the contract documents with TCS to provide the antenna tower design. Kevin to coordinate with TCS and CTX to organize a meeting with TCS communications, Town IT, the Police Department and the design team electrical engineer to review electrical, technology and communications requirements and locations within the next few weeks.

Jeff requested confirmation if the Town has a "front end" (contract documents) they or Town Counsel prefer be used for the project. If not CTX can provide an AIA format contract but this should be resolved soon so the proper review time is available. Bob will reach out to Tracy to confirm.

Bob reviewed the project schedule and noted the addition of the fall Special Town Meeting, following bidding and contract award, in order to approve any additional project funding if it may be needed. The Town must indicate that they have the required construction funding prior to bidding the project; any additional funding needed would be to cover other project related costs. The GC bids are good for 60 days and would extend through Town Meeting. JS noted there is no disadvantage to delaying the notice to proceed into construction because bids being received in early Fall will inevitably require a late Fall/Winter start of construction.

Chief Reilly will send NEMA and FEMA the Design Development drawings for their review and set up a meeting with them to discuss possible funding.

Kevin requested a schedule of all required project inspections & testing (MEP commissioning, materials testing, structural inspections, firestopping inspections, etc.) in order to complete an evaluation of the budgeted costs for the Owner's share of this work. CTX will help put it together.

The proposed alternates previously discussed will remain in place. The benefits and drawbacks of having many small alternates was discussed, but in essence, the positive aspects of having them seem to outweigh the negatives, especially when working to a finite construction budget is concerned.

Some discussion with the public attendees proceeded until the meeting was adjourned.

The next meeting of the committee with CTX will be on Friday June 7, 2019 at 7am.

\*\*\*\*\*

**NEXT MEETING: June 07, 2019, 7:00 AM**

Respectfully submitted,

John W. Kellar, III  
Building Project Construction Committee Secretary/Clerk



## NEWBURY POLICE STATION & TOWN HALL PROJECT MEETING NOTES – Building Construction Committee – 5.17.2019

### Building Committee Members Present:

Bob Connors	Chair
Eric Svahn	Vice Chair
Michael Reilly	Police Chief, Town of Newbury
Kevin Heffernan	Owners Project Manager, Vertex (VTX)
Jeff Shaw	Principal, Context Architecture (CTX)
Zel Tonic	Project Manager, Context Architecture (CTX)

### Building Committee Members Absent:

John Kellar	Secretary
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### Distribution:

All attendees plus:	
Craig Johnson	Context Architecture (CTX)
	File: 1714.00: 02: 2.2

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The next meeting of the committee with CTX will be on Friday June 7, 2019 at 7am.



Town of Newbury  
Tracy Blais  
Town Administrator/Procurement Officer  
12 Kent Way, Suite 200  
Newbury, MA 01922

Invoice number 00013  
Date 06/05/2019

Project 1714.00 NEWBURY POLICE STATION

Professional Services: May 1, 2019 to May 31, 2019

Architectural Services Provided: Continue Design Development.

Description	Fee	Percent Complete	Prior Billed	Earned	Current Billed
Kick off meeting/Goals/Space Needs	15,000.00	100.00	15,000.00	15,000.00	0.00
Site Review/SDesign/Probable Cost & Public Meeting	50,000.00	100.00	50,000.00	50,000.00	0.00
Design Development	96,000.00	90.00	57,600.00	86,400.00	28,800.00
Regulatory Approvals	40,000.00	0.00	0.00	0.00	0.00
Construction Documents	154,000.00	0.00	0.00	0.00	0.00
Bidding	10,000.00	0.00	0.00	0.00	0.00
Construction Administration	186,000.00	0.00	0.00	0.00	0.00
Amendment 1: Fire Station Space Needs Study	18,000.00	100.00	18,000.00	18,000.00	0.00
Amendment 2: Revise Space Needs Prog. & Budget	3,000.00	100.00	3,000.00	3,000.00	0.00
Amendment 2: Concept Design Drawings	5,000.00	100.00	5,000.00	5,000.00	0.00
Amendment 3: Combined Town Hall & Police Facility	5,000.00	100.00	5,000.00	5,000.00	0.00
Amendment 4: Schematic Design 2	38,000.00	100.00	38,000.00	38,000.00	0.00
Total	620,000.00	35.55	191,600.00	220,400.00	28,800.00

Invoice total 28,800.00

cc: [kheffeman@vertexeng.com](mailto:kheffeman@vertexeng.com)





Joseph J. Serwatka, P.E.  
Post Office Box 1016  
North Andover, MA 01845  
978-314-8731

June 3, 2019

Martha Taylor, Planner  
Town of Newbury  
25 High Road  
Newbury, MA 01951

Re: Newbury Police Station  
Peer Review

Dear Ms. Taylor:

I have received the following: Planning Board Submission plan package (18 sheets, dated May 15, 2019), Drainage Analysis dated May 15, 2019, site plan review application form dated May 15, 2019, and site lighting cut sheets, all prepared by Context Architecture and Garcia-Galuska-Desousa, Inc. I have reviewed the submitted material, and offer the following comments:

Existing Conditions Plan

1. Note 10 states that “deeds should be checked for easements. Parking easement found but not definable”. The town may want the engineer or counsel to verify that this has been done.

Sheet C0.1, Site Legend, Notes & Details

1. General note 14 states that whenever utilities or structures are to be installed within city/town public or private layout, “the excavation shall be backfilled with flowable fill”. Flowable has its advantages and disadvantages, and it is more expensive than conventional compacted gravel. It is usually required for backfill within MassDOT layout, but not typically used on municipal roadways. The town may want to opt for the conventional compacted gravel.

Sheet C0.3, Site Details

1. A “wood guide rail-metal posts” detail is provided on the plan. The detail should state whether it is a MassDOT standard spec, or other acceptable design.
2. A typical modular retaining walls section is provided. Given the maximum height, about 8 feet, a structural stamp will be required on the wall design. The town may want the engineer to verify that this will be the contractor’s responsibility.

Sheet C0.4, Site Details

1. The typical trench section for drainage & sewer should provide minimum depths of cover for the respective utilities.

Sheet C0.5, Site Details

1. The outlet control structures have “custom stainless steel” weir plates, each about 4.5’ by 2.5’. The town may want to question whether the engineer could consider a more economical solution, such as a PVC standpipe connected to the outlet pipe, with the required outlet configuration, for example.

#### Sheet C1.1, Site Layout & Materials Plan

1. The 5.5' wide concrete sidewalk should refer back to detail 7 on sheet C0.2.
2. The site sidewalk extends to Morgan Avenue, and abruptly ends at a proposed vertical granite curb, without a ramp or connection to other sidewalks. The town may want to consider whether sidewalk will ever be installed on the north side of Morgan Avenue.
3. The proposed vertical granite curb in Morgan Avenue appears to end abruptly at the fire station side. The town may want the curb to transition to zero reveal at the end, or have the radius extend around to the property line.
4. The easterly end of the proposed vertical granite curb in Morgan Avenue states "align VGC with property line", but does not note a transition to zero reveal. The town may want the curb tipped down at the end to prevent plow damage.
5. The plan notes a "bituminous concrete dumpster area". Typically, dumpster pads are concrete to withstand the weight and legs of the dumpsters. The town may want the specification revised.
6. The snow storage areas depicted at the rear of the site, within the buffer zone to the wetlands, may be too close to the resource area. The town may want snow storage areas depicted further from the resource area.

#### Sheet C2.1, Site Utility Plan

1. The engineer should verify whether the sewer/water crossings depicted comply with general note 13 on sheet C0.1 relative to pipe materials.
2. There appears to be a conflict between the downspout drain and the sewer between DS#8 and DS#9. The engineer should review this.
3. The "EP" symbol from the utility pole to the transformer pad is not shown in the site legend. The engineer should state whether this line is underground or above.
4. Given the existing inverts and length of the existing 12" CMP along the westerly property line, there may be just an inch or two of clearance between it and the proposed 4" sewer services. If the existing drain is not true to line and grade, or has deflected, there could be a direct conflict. It would be wise to conduct an exploratory test pit at the beginning of site work, at the proposed crossing, to verify any conflicts.
5. The town may want the engineer to address whether the roof runoff could be added to subsurface detention bed (SDB) #1, and possibly eliminate the need for SDB #2. This may result in considerable cost savings to the town, and eliminate one of the two pipe outfalls.
6. A Stormceptor water quality structure is included in the runoff treatment train for the pavement runoff. This is a proprietary unit that provides for 75% TSS removal based on the TSS worksheet. The engineer has taken the typical 25% TSS removal credit for the deep sump catchbasins, but has not taken credit for the subsurface detention structures, which may provide 80% TSS removal based on the DEP literature. Taking the allowable credit for the SDBs may allow the engineer to remove the Stormceptor unit, which is a fairly expensive item that requires specialized maintenance/pumping. The engineer may also be able to take credit for the street sweeping outlined in the maintenance schedule. The town may want the engineer to comment on these ideas.
7. It appears that the pipe from proposed CB#3 in Morgan Avenue will conflict with the proposed water services into the site, assuming that the existing 8" watermain is approximately 4 feet deep. The engineer should review this possible conflict.

#### Sheet C3.1, Site Grading Plan

1. The engineer has labeled "erosion control blanket" in the southeast corner of the site, adjacent to Morgan Avenue and the abutter. Proposed contour should be depicted, as is typical, which verify that a maximum 3:1 slope can be created.

2. Pavement runoff from the fire station site flows across the project site in the pre-development condition. The proposed site development redirects this flow to a 20'+/- space between the property line and proposed parking lot. The proposed walkway link and landscaping may interfere with the flow of runoff. A pipe may be required under the walkway to convey runoff. Further, the town may want a defined treatment channel to be provided in the 20' space to maximize TSS removal and treatment.
3. The proposed grading channelizes overland flow between the proposed retaining wall and the easterly property line. This 5' wide area may be susceptible to erosion.
4. Erosion control blankets are depicted on the plan, but an erosion control line and stabilized construction entrance are not depicted. The engineer should address these items.

#### Drainage Analysis

1. The narrative states that the analysis encompasses the site area as well as offsite areas that contribute runoff to the site. It would appear that about half of the area delineated on the fire station site, as well as Morgan Avenue, contribute runoff to existing catchbasin "G", not "to the site". The engineer may want to exclude runoff that is picked up by the catchbasin, and does not contribute runoff to the site.
2. The narrative states, and the provided data would indicate, that the site is comprised mainly of fill to 17' or more. It would appear impractical to remove the fill down to a suitable parent material in order to meet the recharge requirements. The engineer has asked that the recharge requirement be waived.
3. The LID measures section of the checklist notes "grass channel" as an LID measure. The engineer should identify the channel on the plans. As noted previously, the town may also want a drainage channel to be provided to treat pavement runoff from the fire station.

Should you have any questions, please contact me at your convenience.

Respectfully,

Joseph J. Serwatka, P.E.

Joseph J. Serwatka, P.E.  
Post Office Box 1016  
North Andover, MA 01845  
978-314-8731

June 17, 2019

Martha Taylor, Planner  
Town of Newbury  
25 High Road  
Newbury, MA 01951

Re: Newbury Police Station  
Peer Review

Dear Ms. Taylor:

I have received the following: Planning Board Submission plan package (9 sheets, revised to June 12, 2019) and response letter dated June 10, 2019, all prepared by Context Architecture and Garcia-Galuska-Desousa, Inc. I have reviewed the submitted material, and offer the following comments relative to my previous letter dated June 3, 2019. The previous comments are in regular type, with the latest comments in bold type.

Existing Conditions Plan

1. Note 10 states that "deeds should be checked for easements. Parking easement found but not definable". The town may want the engineer or counsel to verify that this has been done.

**The response recommends that the town engage counsel to review the condition and remedy the easement.**

Sheet C0.1, Site Legend, Notes & Details

1. General note 14 states that whenever utilities or structures are to be installed within city/town public or private layout, "the excavation shall be backfilled with flowable fill". Flowable has its advantages and disadvantages, and it is more expensive than conventional compacted gravel. It is usually required for backfill within MassDOT layout, but not typically used on municipal roadways. The town may want to opt for the conventional compacted gravel.

**The response states that General Note #14 can be eliminated and the contractor can follow the typical trench details.**

Sheet C0.3, Site Details

1. A "wood guide rail-metal posts" detail is provided on the plan. The detail should state whether it is a MassDOT standard spec, or other acceptable design.

**The response appears to indicate that the guide rail is not a MassDOT standard, and is intended as a "guide and barrier to prevent parking vehicles from exceeding the paved and curbed surface". The board may want to consider the guide rail suitable for the purpose.**

2. A typical modular retaining walls section is provided. Given the maximum height, about 8 feet, a structural stamp will be required on the wall design. The town may want the engineer to verify that this will be the contractor's responsibility.

**The response appears to agree with the recommendation.**



#### Sheet C0.4, Site Details

1. The typical trench section for drainage & sewer should provide minimum depths of cover for the respective utilities.

**The detail has been revised to show a minimum depth of cover of 2 feet.**

#### Sheet C0.5, Site Details

1. The outlet control structures have "custom stainless steel" weir plates, each about 4.5' by 2.5'. The town may want to question whether the engineer could consider a more economical solution, such as a PVC standpipe connected to the outlet pipe, with the required outlet configuration, for example.

**The engineer appears to have misunderstood the intent of my comment. My intent was to point out that each weir plate could be a multi-thousand dollar item due to the material, size and custom outlets. I believe that the same outlet control can be achieved by using a common PVC or HDPE standpipe.**

#### Sheet C1.1, Site Layout & Materials Plan

1. The 5.5' wide concrete sidewalk should refer back to detail 7 on sheet C0.2.

**The plan has been revised.**

2. The site sidewalk extends to Morgan Avenue, and abruptly ends at a proposed vertical granite curb, without a ramp or connection to other sidewalks. The town may want to consider whether sidewalk will ever be installed on the north side of Morgan Avenue.

**The response states that "the concrete sidewalk to Morgan Avenue will be reviewed with the Architect and Owner".**

3. The proposed vertical granite curb in Morgan Avenue appears to end abruptly at the fire station side. The town may want the curb to transition to zero reveal at the end, or have the radius extend around to the property line.

**The plan has been revised.**

4. The easterly end of the proposed vertical granite curb in Morgan Avenue states "align VGC with property line", but does not note a transition to zero reveal. The town may want the curb tipped down at the end to prevent plow damage.

**The plan has been revised.**

5. The plan notes a "bituminous concrete dumpster area". Typically, dumpster pads are concrete to withstand the weight and legs of the dumpsters. The town may want the specification revised.

**The plan has been revised.**

6. The snow storage areas depicted at the rear of the site, within the buffer zone to the wetlands, may be too close to the resource area. The town may want snow storage areas depicted further from the resource area.

**The response refers to snow not being placed directly in the resource areas, which was not my comment. The intent of my comment was to point out that many conservation commissions prefer to see snow storage as far from the resource area as possible.**

#### Sheet C2.1, Site Utility Plan

1. The engineer should verify whether the sewer/water crossings depicted comply with general note 13 on sheet C0.1 relative to pipe materials.



**The plans have been revised to comply with note 13.**

2. There appears to be a conflict between the downspout drain and the sewer between DS#8 and DS#9. The engineer should review this.

**The plan has been revised.**

3. The "EP" symbol from the utility pole to the transformer pad is not shown in the site legend. The engineer should state whether this line is underground or above.

**This issue has been addressed.**

4. Given the existing inverts and length of the existing 12" CMP along the westerly property line, there may be just an inch or two of clearance between it and the proposed 4" sewer services. If the existing drain is not true to line and grade, or has deflected, there could be a direct conflict. It would be wise to conduct an exploratory test pit at the beginning of site work, at the proposed crossing, to verify any conflicts.

**The plan has been revised to address this issue.**

5. The town may want the engineer to address whether the roof runoff could be added to subsurface detention bed (SDB) #1, and possibly eliminate the need for SDB #2. This may result in considerable cost savings to the town, and eliminate one of the two pipe outfalls.

**The response appears to state that this option was reviewed but ruled out due to site constraints.**

6. A Stormceptor water quality structure is included in the runoff treatment train for the pavement runoff. This is a proprietary unit that provides for 75% TSS removal based on the TSS worksheet. The engineer has taken the typical 25% TSS removal credit for the deep sump catchbasins, but has not taken credit for the subsurface detention structures, which may provide 80% TSS removal based on the DEP literature. Taking the allowable credit for the SDBs may allow the engineer to remove the Stormceptor unit, which is a fairly expensive item that requires specialized maintenance/pumping. The engineer may also be able to take credit for the street sweeping outlined in the maintenance schedule. The town may want the engineer to comment on these ideas.

**The engineer has added the proprietary separator to prevent clogging of the underground system.**

7. It appears that the pipe from proposed CB#3 in Morgan Avenue will conflict with the proposed water services into the site, assuming that the existing 8" watermain is approximately 4 feet deep. The engineer should review this possible conflict.

**The response states that the work will be coordinated to eliminate any conflicts.**

#### Sheet C3.1, Site Grading Plan

1. The engineer has labeled "erosion control blanket" in the southeast corner of the site, adjacent to Morgan Avenue and the abutter. Proposed contour should be depicted, as is typical, which verify that a maximum 3:1 slope can be created.

**Proposed contours have been added.**

2. Pavement runoff from the fire station site flows across the project site in the pre-development condition. The proposed site development redirects this flow to a 20' +/- space between the property line and proposed parking lot. The proposed walkway link and landscaping may interfere with the flow

of runoff. A pipe may be required under the walkway to convey runoff. Further, the town may want a defined treatment channel to be provided in the 20' space to maximize TSS removal and treatment.

**The response appears to indicate that the proposed grade of almost 2 percent will maintain runoff flow. The response also indicates that a defined channel "can be" reviewed/implemented, but the plan does not depict one.**

3. The proposed grading channelizes overland flow between the proposed retaining wall and the easterly property line. This 5' wide area may be susceptible to erosion.

**An erosion control blanket and checkdam have been added to the plan.**

4. Erosion control blankets are depicted on the plan, but an erosion control line and stabilized construction entrance are not depicted. The engineer should address these items.

**This issue appears to be addressed.**

#### Drainage Analysis

1. The narrative states that the analysis encompasses the site area as well as offsite areas that contribute runoff to the site. It would appear that about half of the area delineated on the fire station site, as well as Morgan Avenue, contribute runoff to existing catchbasin "G", not "to the site". The engineer may want to exclude runoff that is picked up by the catchbasin, and does not contribute runoff to the site.

**The response states that catchbasin G was included "due to the fact the 12" discharge from the structure discharges" to the wetlands within the property. This is true, but to include all the areas that contribute to the discharge from the 12" pipe, it appears that catchbasins A-F, at least, would have to be included in the analysis. If you are going to start including off-site catchbasins in the site analysis, it appears you would have to include them all, which would not add any value to the calculations.**

2. The narrative states, and the provided data would indicate, that the site is comprised mainly of fill to 17' or more. It would appear impractical to remove the fill down to a suitable parent material in order to meet the recharge requirements. The engineer has asked that the recharge requirement be waived.

**No response required.**

3. The LID measures section of the checklist notes "grass channel" as an LID measure. The engineer should identify the channel on the plans. As noted previously, the town may also want a drainage channel to be provided to treat pavement runoff from the fire station.

**The response states that the grass channel will be identified on the plans, but it does not appear to be noted on the revised plans.**

Should you have any questions, please contact me at your convenience.

Respectfully,

Joseph J. Serwatka, P.E.



**GARCIA • GALUSKA • DESOUSA**

Consulting Engineers Inc.

370 Faunce Corner Road, Dartmouth, MA 02747-1217

L#67058  
J#640 049 00.00

June 10, 2019

Town of Newbury  
Planning Board  
12 Kent Way  
Byfield, MA 01922

Attn: Ms. Rachel McManus, Chairperson

Re: Site Plan Review  
Newbury Police Station

Dear Ms. McManus,

As you are aware, Mr. Joseph Serwatka, PE has reviewed the Planning Board Submission plan package, Drainage Analysis and the Site Plan Review Application package, all dated May 15, 2019. In response to the review items noted in the June 3, 2019, we provide the following:

**Existing Conditions Plan:**

Item 1: Note 10 states that "deeds should be checked for easements. Parking easement found but not definable". The town may want the engineer or counsel to verify that this has been done.

GGD Response: The deed reference on Page 390 of Book 8138 dated February 24, 1986 from the Essex County Registry of Deeds indicates that The Protection Fire Company No. 2, in a grant to the inhabitants of The Town of Newbury, Essex County, Massachusetts, reserved an easement in perpetuity for the purpose of parking vehicles during social functions and for the grantor to pass and repass from High Road to appurtenant land owned by the grantor. Since this deed was recorded, the grantor, The Protection Fire Company 2, has granted the land containing the easement to The Town of Newbury. It has been recommended that the Town engage counsel to review the condition and remedy the easement.

**Sheet C0.1, Site Legend, Notes & Details:**

Item 2: General note 14 states that whenever utilities or structures are to be installed within city/town public or private layout, "the excavation shall be backfilled with flowable fill". Flowable has its advantages and disadvantages, and it is more expensive than conventional compacted gravel. It is usually required for backfill within MassDOT layout, but not typically used on municipal roadways. The town may want to opt for the conventional compacted gravel.

GGD Response: If acceptable, General Note #14 will be eliminated, and the Contractor will follow the typical trench details as provided within the drawing set.

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**Sheet C0.3, Site Details:**

Item 3: A "wood guide rail-metal posts" detail is provided on the plan. The detail should state whether it is a MassDOT standard spec, or other acceptable design.

GGD Response: *The Guide Rail at the end of the four parking spaces northeast of the proposed building is not designed to fully meet current MassDOT guardrail standards. The posts and rails are meant as a guide and barrier to prevent parking vehicles from exceeding the paved and curbed surface. The 6"x4" metal posts do meet MassDOT standard spec per MassDOT Drawing Number 400.1.4, last updated October 2017 with standard depth, however, the rails, 4"x10" timber, is no longer acceptable by MassDOT for highway projects.*

Item 4: A typical modular retaining walls section is provided. Given the maximum height, about 8 feet, a structural stamp will be required on the wall design. The town may want the engineer to verify that this will be the contractor's responsibility.

GGD Response: *It will be the responsibility of the Contractor to furnish a signed and stamped calculation report completed by a Massachusetts Registered Professional Engineer as part of the shop drawing review process.*

**Sheet C0.4, Site Details:**

Item 5: The typical trench section for drainage & sewer should provide minimum depths of cover for the respective utilities.

GGD Response: *A minimum depth of cover will be added to Detail 2/C0.4. Generally, a minimum of two feet of cover is provided to maintain H-20 load rating of the piping. The Contractor shall follow the inverts and rim elevations provided on Schedule 2/C2.1.*

**Sheet C0.5, Site Details:**

Item 6: The outlet control structures have "custom stainless steel" weir plates, each about 4.5' by 2.5'. The town may want to question whether the engineer could consider a more economical solution, such as a PVC standpipe connected to the outlet pipe, with the required outlet configuration, for example.

GGD Response: *The customized portion of the weir plate is in the size, configuration and elevation of the orifices. They are customized for use on the site to maintain or reduce the peak discharge rate from the site. The weir plate allows the Owner to monitor actual flow conditions through access manhole and allows Owner to modify the outlet in the future if required.*

**Sheet C1.1, Site Layout & Materials Plan:**

Item 7: The 5.5' wide concrete sidewalk should refer back to detail 7 on sheet C0.2.

GGD Response: *Additional notation on the five foot wide concrete sidewalk west of the proposed structure will be identified with tagging to Detail 7/C0.2*



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Item 8: The site sidewalk extends to Morgan Avenue, and abruptly ends at a proposed vertical granite curb, without a ramp or connection to other sidewalks. The town may want to consider whether sidewalk will ever be installed on the north side of Morgan Avenue.

GGD Response: *The concrete sidewalk to Morgan Avenue will be reviewed with the Architect and Owner.*

Item 9: The proposed vertical granite curb in Morgan Avenue appears to end abruptly at the fire station side. The town may want the curb to transition to zero reveal at the end, or have the radius extend around to the property line.

GGD Response: *The drawings have been revised to indicate a radius return towards the Fire Station property line with a transition from full six-inch reveal to flush with parking lot grade transition on the west end of the proposed curbing along Morgan Avenue.*

Item 10: The easterly end of the proposed vertical granite curb in Morgan Avenue states "align VGC with property line" but does not note a transition to zero reveal. The town may want the curb tipped down at the end to prevent plow damage.

GGD Response: *The drawings have been revised to indicate a six-foot transition length from full six-inch reveal to flush with roadway transition on the east end of the proposed curbing along Morgan Avenue.*

Item 11: The plan notes a "bituminous concrete dumpster area". Typically, dumpster pads are concrete to withstand the weight and legs of the dumpsters. The town may want the specification revised.

GGD Response: *Drawings have been revised to include a concrete pad for the dumpster area.*

Item 12: The snow storage areas depicted at the rear of the site, within the buffer zone to the wetlands, may be too close to the resource area. The town may want snow storage areas depicted further from the resource area.

GGD Response: *MassDEP's Snow Disposal Guidance recommends that snow not be placed directly into resource areas. The Town will be responsible for providing snow removal services and will likely store snow in the lawn/swale west of the Police Station parking lot.*

#### **Sheet C2.1, Site Utility Plan:**

Item 13: The engineer should verify whether the sewer/water crossings depicted comply with general note 13 on sheet C0.1 relative to pipe materials.

GGD Response: *The two water and sewer crossings have been reviewed and updated to reflect the sewer being sleeved with mechanical joint piping due to the sewer crossing over the water line.*

Item 14: There appears to be a conflict between the downspout drain and the sewer between DS#8 and DS#9. The engineer should review this.

GGD Response: *The 4" garage waste pipe has been adjusted to provide additional separation between the downspout pipe and the waste pipe.*



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Item 15: The "EP" symbol from the utility pole to the transformer pad is not shown in the site legend. The engineer should state whether this line is underground or above.

GGD Response: The "EP" symbol approximately  $\frac{1}{4}$  of the way down the Site Legend on Sheet C0.1. The Site Legend identifies the "EP" as an underground electrical primary service.

Item 16: Given the existing inverts and length of the existing 12" CMP along the westerly property line, there may be just an inch or two of clearance between it and the proposed 4" sewer services. If the existing drain is not true to line and grade, or has deflected, there could be a direct conflict. It would be wise to conduct an exploratory test pit at the beginning of site work, at the proposed crossing, to verify any conflicts.

GGD Response: Based on our interpolation, it is expected that there should be approximately four to six inches of separation from the top of the sewer pipe to the bottom of the existing drain pipe. A note will be added to the Site Demolition & Preparation Plan calling for the contractor to perform a test pit at the crossing location and report bottom of pipe elevation prior to proceeding with the sewer installation.

Item 17: The town may want the engineer to address whether the roof runoff could be added to subsurface detention bed (SDB) #1, and possibly eliminate the need for SDB #2. This may result in considerable cost savings to the town, and eliminate one of the two pipe outfalls.

GGD Response: The consolidation of Subsurface Detention Beds (SDB) #1 and #2 was reviewed prior to submission. Due to site constraints (drainage structures, water, electrical and sewer services), the footprint of Subsurface Detention Bed #1 cannot be sufficiently expanded to provide the volume of storage that Subsurface Detention Bed #2 can provide.

Item 18: A Stormceptor water quality structure is included in the runoff treatment train for the pavement runoff. This is a proprietary unit that provides for 75% TSS removal based on the TSS worksheet. The engineer has taken the typical 25% TSS removal credit for the deep sump catchbasins, but has not taken credit for the subsurface detention structures, which may provide 80% TSS removal based on the DEP literature. Taking the allowable credit for the SDBs may allow the engineer to remove the Stormceptor unit, which is a fairly expensive item that requires specialized maintenance/pumping. The engineer may also be able to take credit for the street sweeping outlined in the maintenance schedule. The town may want the engineer to comment on these ideas.

GGD Response: Volume 2, Chapter 2: Structural BMP Specifications for the Massachusetts Stormwater Handbook outlines Total Suspended Solids (TSS) removal efficiencies for stormwater structural Best Management Practices (BMPs). The Stormwater Handbook does allow 80% TSS removal for Subsurface Structures that infiltrate, however, the proposed system is for detention purposes due to the high groundwater and site fill materials. We recommend the installation of the hydrodynamic water quality separator unit to prevent fine suspended solids from entering the Subsurface Detention Beds and clogging the voids in the storage volume over time.

Table SS1 in Volume 1, Chapter 1 of the Massachusetts Stormwater Handbook would require that the Town mechanically sweep the parking lot monthly for a 5% TSS removal credit. The Town would be required to mechanically sweep the parking lot weekly for a 10% TSS removal credit.

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Page 5

Item 19: It appears that the pipe from proposed CB#3 in Morgan Avenue will conflict with the proposed water services into the site, assuming that the existing 8" watermain is approximately 4 feet deep. The engineer should review this possible conflict.

GGD Response: *The expected depth of cover over the existing 8" water main in Morgan Avenue is being discussed with the Newburyport Department of Public Services Water Division. The invert of the 12" HDPE drain pipe is proposed at 24.50 in the area of the new building water service lines. Assuming 4 feet of cover over the existing water main results in approximately 6" of separation. The contractor will need to coordinate the location of gate valves and road boxes so as not to conflict with the drain pipe.*

**Sheet C3.1, Site Grading Plan:**

Item 20: The engineer has labeled "erosion control blanket" in the southeast corner of the site, adjacent to Morgan Avenue and the abutter. Proposed contour should be depicted, as is typical, which verify that a maximum 3:1 slope can be created.

GGD Response: *Proposed contours at the southeast corner will be added to demonstrate a 3:1 slope can be created in disturbed areas. The existing grading to remain along the eastern property line does reach 2.25:1 as it crosses onto the abutting property.*

Item 21: Pavement runoff from the fire station site flows across the project site in the pre-development condition. The proposed site development redirects this flow to a 20'+/- space between the property line and proposed parking lot. The proposed walkway link and landscaping may interfere with the flow of runoff. A pipe may be required under the walkway to convey runoff. Further, the town may want a defined treatment channel to be provided in the 20' space to maximize TSS removal and treatment.

GGD Response: *The proposed grade from the south property line to north of the proposed bituminous concrete walkway link between the Fire and Police Station will be 0.018 ft/ft, including across the walkway. We recommend minimizing grade changes in this area due to the presence of the existing fire hydrant, existing sewer ejector pump system and control panel cabinet, bollards as well as the proposed Sewer Manhole (SMH) #1.*

*A defined channel for maximizing Total Suspended Solids removal from the Fire Station property can be reviewed/implemented per the Planning Board and Conservation Commission's request.*

Item 22: The proposed grading channelizes overland flow between the proposed retaining wall and the easterly property line. This 5' wide area may be susceptible to erosion.

GGD Response: *The drawings have been revised to indicate erosion control blanket within the limits of the retaining wall and the eastern limit of work to prevent erosion during the establishment of vegetation. A modified rockfill check dam could be included as well to dissipate runoff energy as it enters the area of confined width.*

Item 23: Erosion control blankets are depicted on the plan, but an erosion control line and stabilized construction entrance are not depicted. The engineer should address these items.

GGD Response: *Drawing C1.0, Site Demolition & Preparation Plan, identifies perimeter erosion controls and the approximate location of the stabilized construction entrance mat. All erosion control measures shall be established prior to disturbance of the site.*

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Page 6

**Drainage Analysis:**

Item 24: The narrative states that the analysis encompasses the site area as well as offsite areas that contribute runoff to the site. It would appear that about half of the area delineated on the fire station site, as well as Morgan Avenue, contribute runoff to existing catchbasin "G", not "to the site". The engineer may want to exclude runoff that is picked up by the catchbasin, and does not contribute runoff to the site.

GGD Response: *The Drainage Analysis includes the areas that contribute to Catch Basin 'G' (also identified at XCB#1 on Drawing C2.1) due to the fact the 12" discharge from the structure discharges to the Bordering Vegetated Wetland within the limits of Police Station property.*

Item 25: The narrative states, and the provided data would indicate, that the site is comprised mainly of fill to 17' or more. It would appear impractical to remove the fill down to a suitable parent material in order to meet the recharge requirements. The engineer has asked that the recharge requirement be waived.

GGD Response: *No response required.*

Item 26: The LID measures section of the checklist notes "grass channel" as an LID measure. The engineer should identify the channel on the plans. As noted previously, the town may also want a drainage channel to be provided to treat pavement runoff from the fire station.

GGD Response: *The grass channel on the east side of the proposed Police Station, which collects runoff from the south side of the building, will be identified on the plans.*

If you should have any comments or questions regarding the above, please contact our office at your earliest convenience.

Very truly yours,

**GARCIA • GALUSKA • DESOUSA**  
Consulting Engineers Inc.



Nathan C. Ketchel, EIT

NCK:jfm

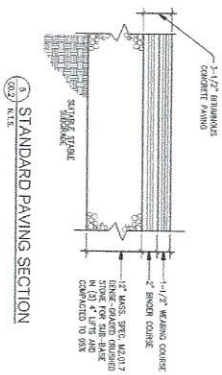
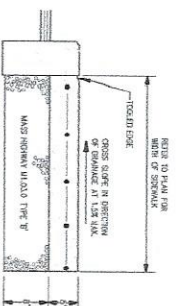
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Cc: Christopher M. Garcia, PE, GGD

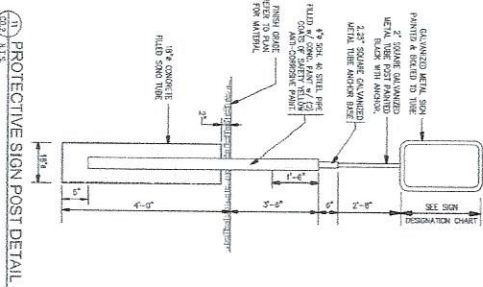
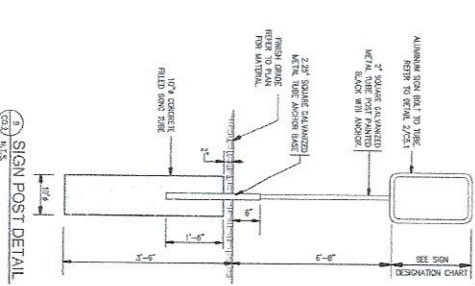
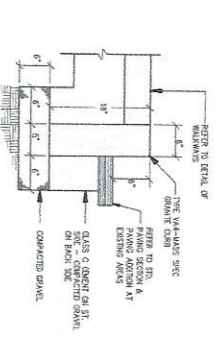
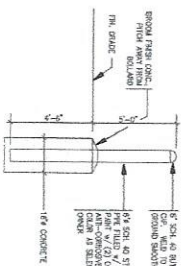




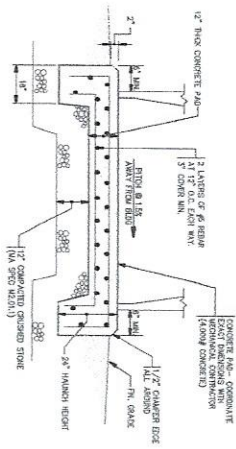




SIGN DESIGNATION CHART			
SIGN DESIGNATION	REGISTRATION	SIZE	SIZE
8h-1 (1199)	20"	20"	
8h-2 (1199) (1199) (1199)	18"	12"	
8h-3 (1199) (1199) (1199)	5"	12"	

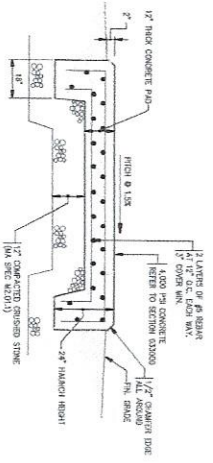






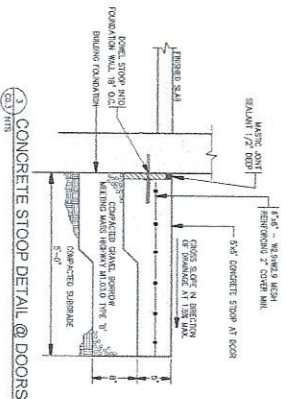
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3. CONSTRUCTION TO PERFORM A RETAIL ALL REQUIRED MATERIALS FOR ONE

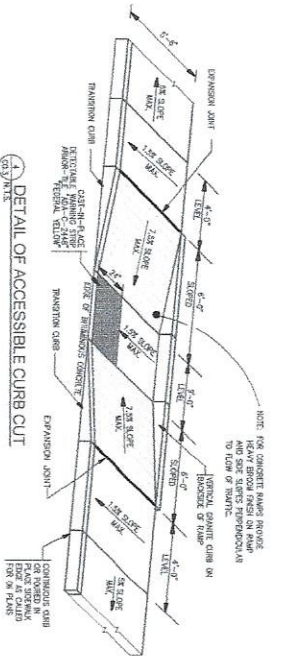


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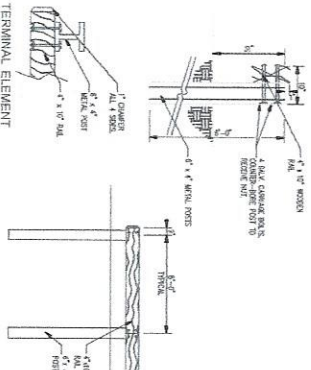
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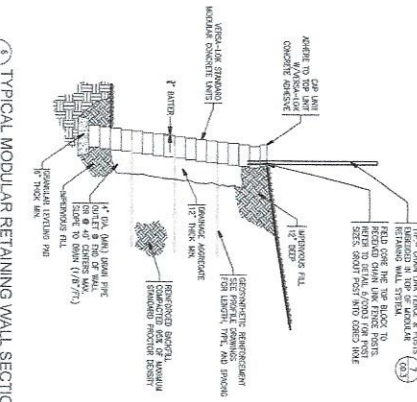
CONCRETE STOOP DETAIL @ DOORS



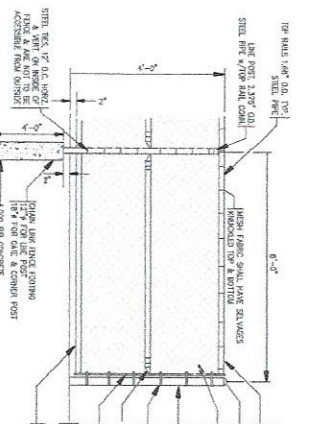
DETAIL OF ACCESSIBLE CURB CUT



WOOD GUIDE RAIL - METAL POSTS

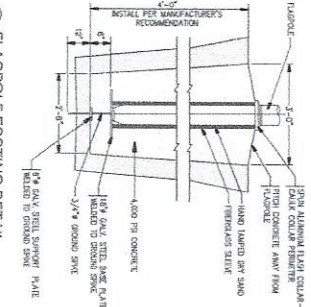


TYPICAL MODULAR RETAINING WALL SECTION

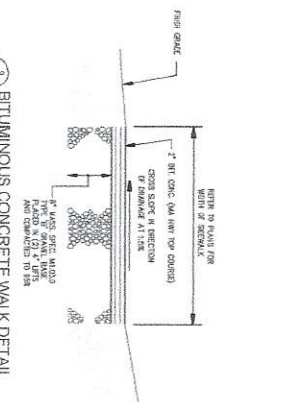


CHAINLINK FENCE DETAIL

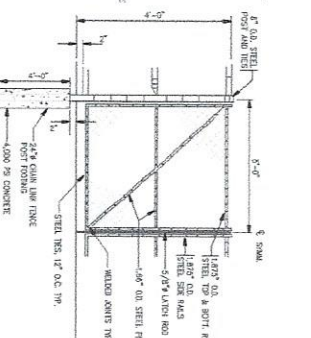
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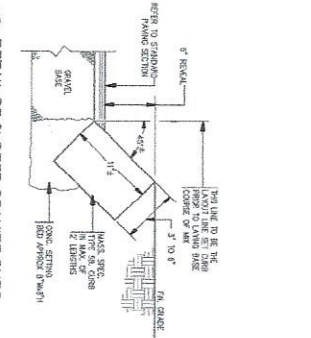


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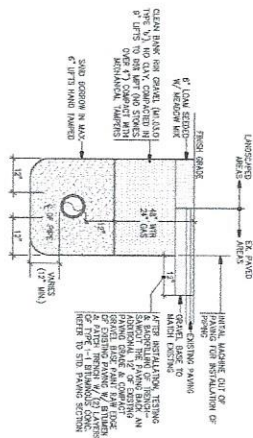


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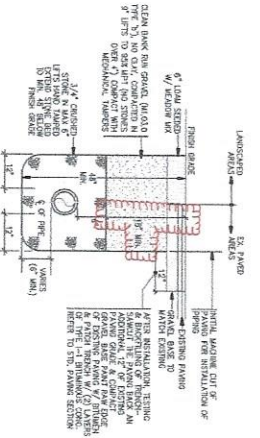
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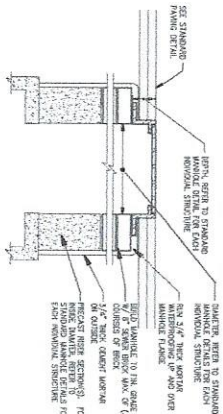
DETAIL OF SLOPED GRANITE CURB



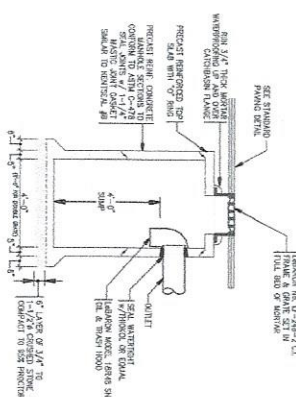
1 TYP. TRENCH SECTION FOR WATER & GAS  
30.4 M.T.S.



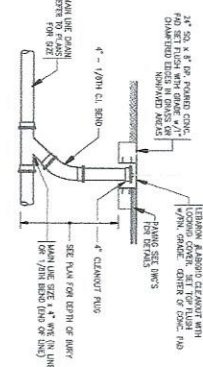
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20.4 N.T.S.



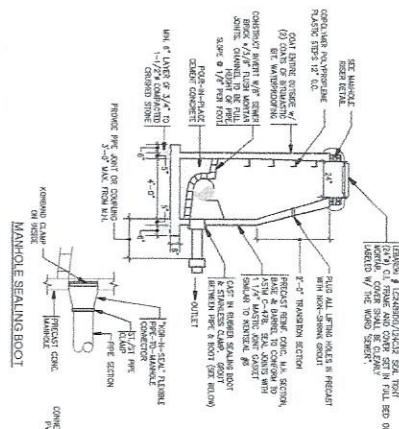
MANHOLE RISER DETAIL



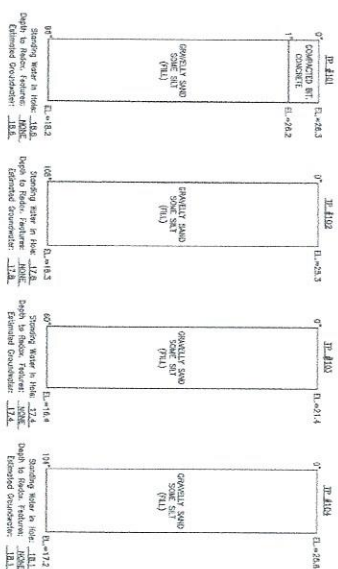
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CO-4 N.T.S.



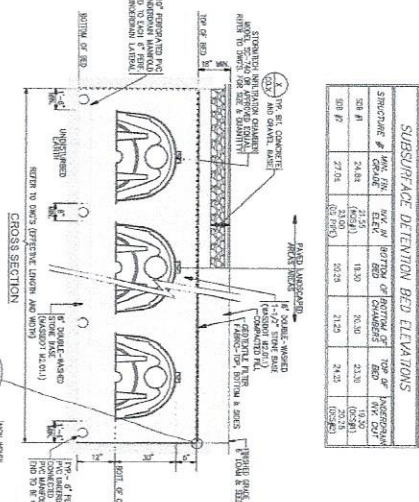
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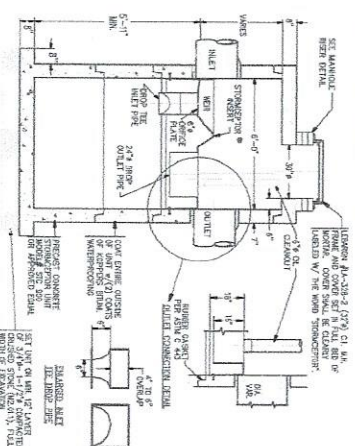
7 STANDARD SEWER MANHOLE DETAIL  
30.4 N.T.S.



9  
10.4  
FOLDS: STORMWATER TEST PIT SOIL LOGS



19  
024 R.T.S. SUBSURFACE DETENTION BED (SIB#1) DETAIL



11 WATER QUALITY INLET DETAIL

SUBSURFACE DETENTION BED ELEVATIONS					
STRUCTURE #	WINDING GRADE	IN V. ELEV.	BOTTOM OF BED	POTENTIAL OF CHAMBERS	TOP OF BED
SEA #	24.88	21.55	18.20	20.10	21.30
SEA #		(052.91)			19.50
SEA #		20.00			20.78
SEA #	27.04		20.28	21.25	24.25
		(052.93)			20.78

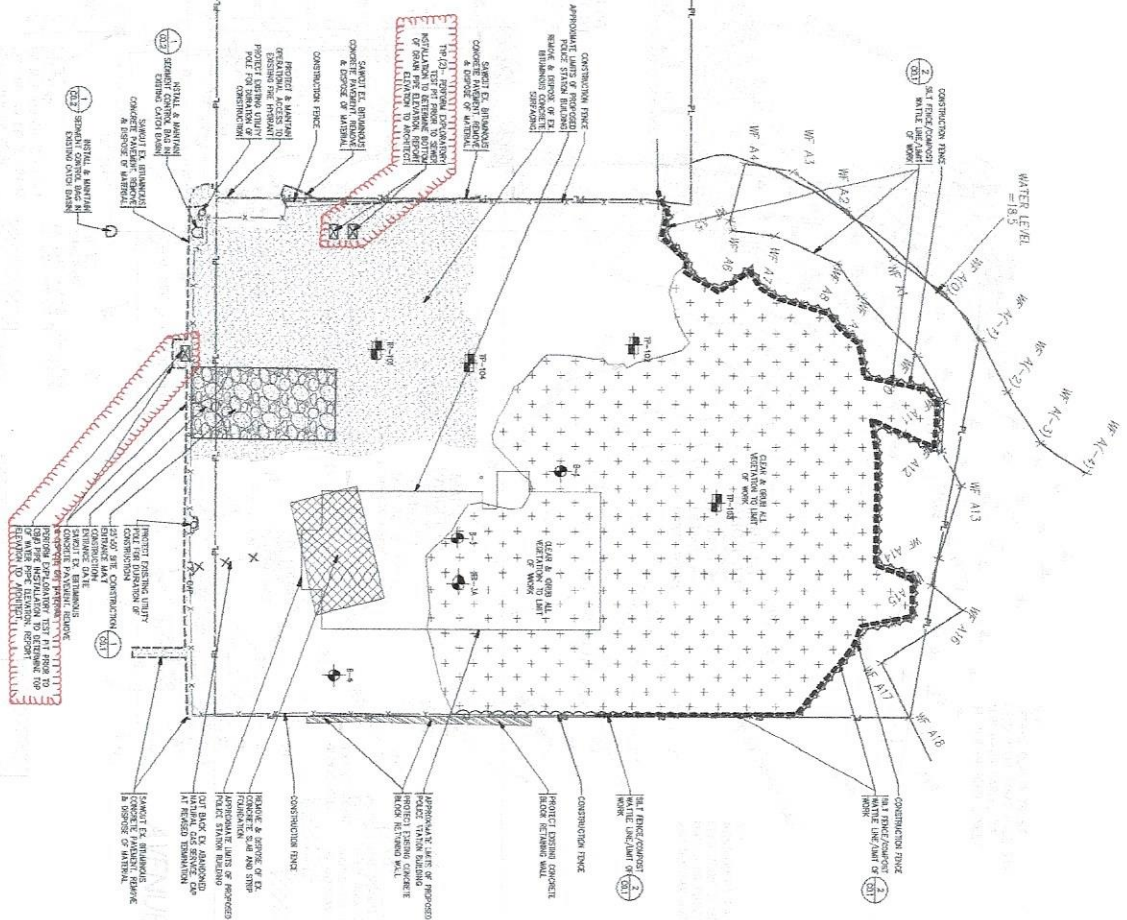


CO.5

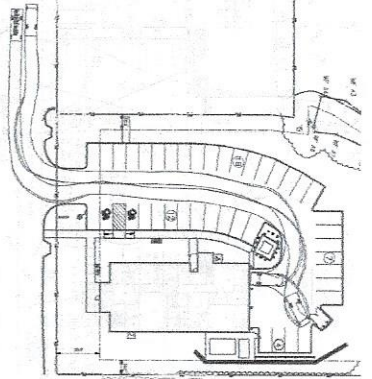
GRAPHIC SCALE

(IN FEET)

1 inch = 20 ft.





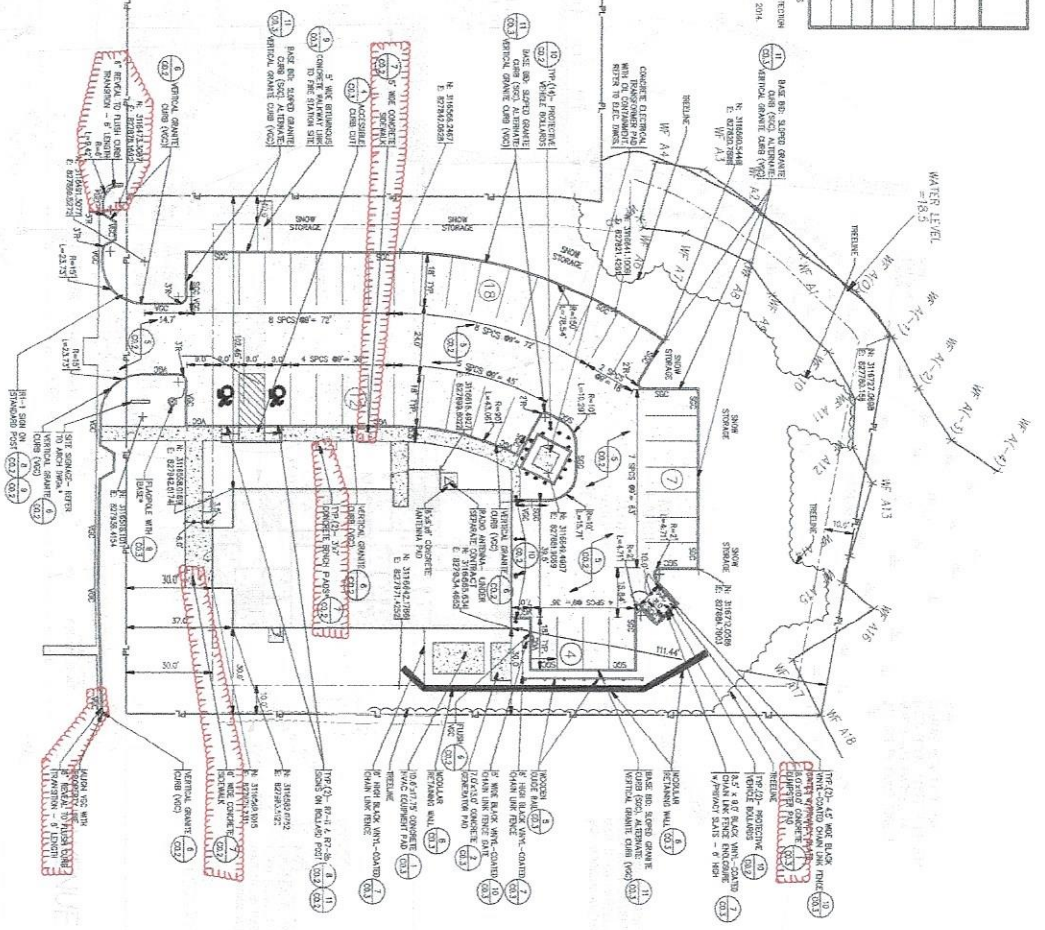


ZONING DIMENSION TABLE - UPPER GREEN BUSINESS ZONING DISTRICT		
USE	MINIMUM	MAXIMUM
(A) MINIMUM LOT SIZE	20,000 SF	40,000 SF
(B) MINIMUM LOT FRONTAGE	100 FT	100 FT
(C) MINIMUM PROPERTY LINE SETBACK	10 FT	30 FT
(D) MINIMUM STREET SETBACK	20 FT	30 FT
(E) MINIMUM FOOTPRINT	N/A	4,750 SF
(F) MINIMUM LOT COVERAGE	20%	100%
(G) MAXIMUM STRUCTURE HEIGHT	35 FT	35 FT

1. MINIMUM SETBACK IS THE MINIMUM SETBACK OF EACH LOT TO COMMON ADJACENT INDIVIDUAL LOTS.  
2. APPROXIMATELY 10% SQUARE FEET OF THE AREA IS PROPOSED.  
3. DISTRICT - NO ALTERATION OF THE AREA IS PROPOSED.  
4. SITE IS LOCATED IN ONE X ACCORDING TO THE 2000 CITY ZONING MAP, EFFECTIVE JAN 16, 2014.

7.1 ZONING DIMENSION TABLE  
SCALE: 1" = 20'

7.2 SITE LAYOUT & MATERIALS PLAN  
SCALE: 1" = 20'



**SITE FURNISHINGS NOTE:**  
FURNISHINGS NOTED WITH AN asterisk (\*) ARE AN ALTERNATE BEARING CONSTRUCTION DISTRICT.



**SITE DRAINAGE & SEWER STRUCTURE NOTES:**  
1. REFER TO THE DRAINAGE & SEWER STRUCTURE ELEVATION SCHEDULE FOR APPROPRIATE ELEVATION TO EACH SEWERING STRUCTURE.

**1 SITE UTILITY PLAN**  
SCALE 1" = 2'



**DOWNSPOLITS**

STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	DOWNSPOUT	REMARKS
DS #1	22.33	23.50	7/00.3	N/A
DS #2	22.33	24.40	7/00.3	N/A
DS #3	22.33	23.33	7/00.3	N/A
DS #4	22.33	23.88	7/00.3	N/A
DS #5	22.33	23.86	7/00.3	N/A
DS #6	22.33	23.50	7/00.3	N/A
DS #7	22.33	24.75	7/00.3	N/A
DS #8	22.33	24.50	7/00.3	N/A
DS #9	22.33	23.80	7/00.3	N/A

**SURFACE DETENTION BED ELEVATIONS**

STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	TYPE OF DETENTION BED	REMARKS
SD #1	21.04	21.50	18.20	18.20
SD #2	21.04	20.25	20.20	20.20
SD #3	21.04	20.25	21.25	21.25
SD #4	21.04	20.25	24.25	24.25

**OUTLET CONTROL STRUCTURES**

STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	TYPE OF OUTLET CONTROL	REMARKS
OS #1	22.33	23.50	18.20	18.20
OS #2	22.33	24.40	20.20	20.20
OS #3	22.33	23.33	21.25	21.25
OS #4	22.33	23.88	24.25	24.25

**WATER QUALITY STRUCTURES**

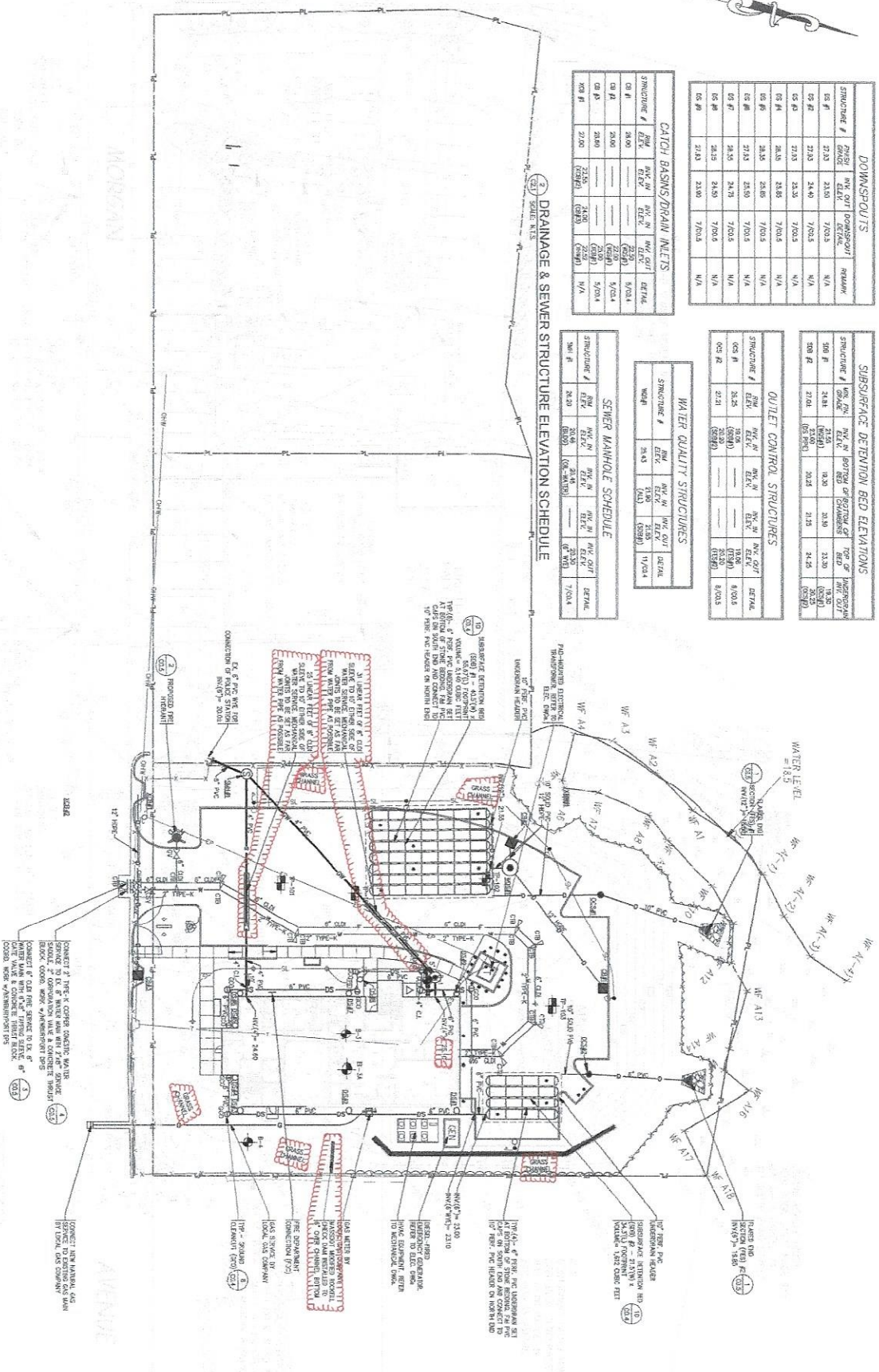
STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	TYPE OF WATER QUALITY STRUCTURE	REMARKS
WQ #1	22.33	23.50	18.20	18.20
WQ #2	22.33	24.40	20.20	20.20
WQ #3	22.33	23.33	21.25	21.25
WQ #4	22.33	23.88	24.25	24.25

**SEWER MANHOLE SCHEDULE**

STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	TYPE OF SEWER MANHOLE	REMARKS
SM #1	22.33	23.50	18.20	18.20
SM #2	22.33	24.40	20.20	20.20
SM #3	22.33	23.33	21.25	21.25
SM #4	22.33	23.88	24.25	24.25

**CATCH BASINS/DRAIN INLETS**

STRUCTURE #	PROPOSED ELEVATION	EXISTING ELEVATION	TYPE OF CATCH BASIN/DRAIN INLET	REMARKS
CB #1	22.33	23.50	18.20	18.20
CB #2	22.33	24.40	20.20	20.20
CB #3	22.33	23.33	21.25	21.25
CB #4	22.33	23.88	24.25	24.25





[illegible]

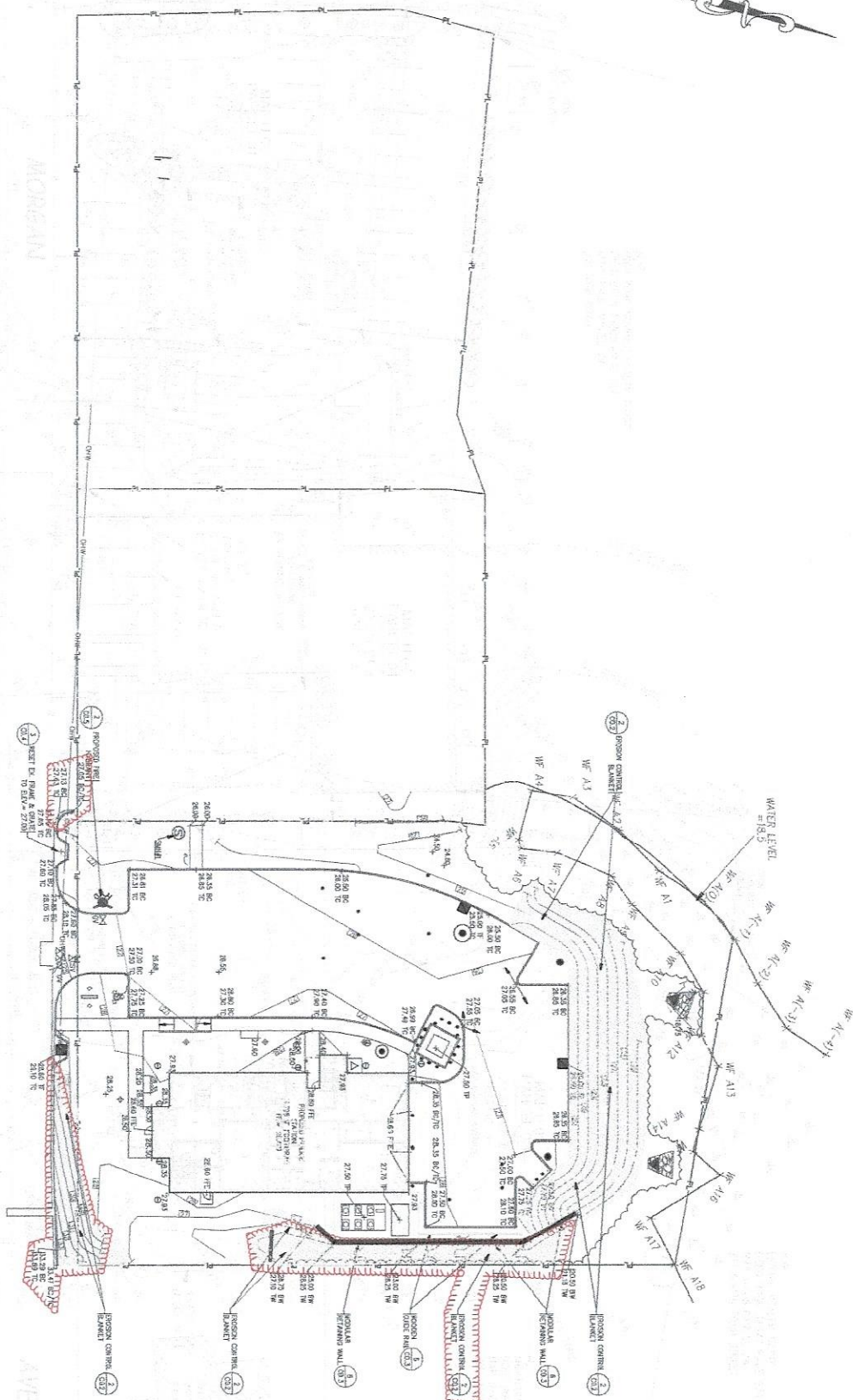
SEC. BOTTOM OF CURB  
 RT. TOP OF CURB  
 RT. TOP OF PAVT. (CATCH BASIN)  
 SEC. BOTTOM OF WALL  
 TYP. TOP OF WALL  
 RT. TOP OF PAD

GRAPHIC SCALE

( IN FEET )

0 10 20 30 40 50 60 70 80

0 1



## Bob Connors

---

**From:** Nathan Ketchel <nathan\_ketchel@g-g-d.com>  
**Sent:** Thursday, June 13, 2019 2:32 PM  
**To:** Bob Connors; jshaw@contextarc.com; ztoncic@contextarc.com  
**Cc:** Chris Garcia  
**Subject:** RE: Newbury Police Station

Good afternoon Bob,  
My comments are below in Doug's email in **green**.

As well, I reviewed the 200 year (11.08 in/24-hrs) and 500 year (14.19 in/24-hrs) storm events. For reference, the 100-year event is 9.19 in/24-hrs. Based on the modeling, the drainage system remains operational through the 200 year event. During the 500 year event, the capacity of the drainage system is exceeded. This means the on-site runoff would accumulate in the parking lot at each of the catch basin grates until the collected runoff reached 6 inches of depth and then overtop the curbing and flow down the slopes to the north. Risk of the building flooding due to on-site runoff is minimal.

Doug was satisfied with the 200 year capacity and felt it struck a good compromise with what the commission member was asking. He said not to worry about further review of additional capacity. I will prepare a letter addressing these comments as well as a brief discussion of the drainage system capacity beyond the 100-year event.

Doug and I also discussed the timing of sending the additional information. He indicated emailing of PDFs on Monday is fine and requested two hardcopies be brought to the hearing for his record.

Please let me know if anyone has any questions.

**Nathan C. Ketchel, EIT**  
**Civil & Environmental Engineer**  
**Garcia.Galuska.DeSousa**  
**Consulting Engineers, Inc.**  
370 Faunce Corner Road  
Dartmouth, MA 02747  
Tel. (508)-998-5700 xt. 66  
Fax. (508)-998-0883  
[nathan\\_ketchel@g-g-d.com](mailto:nathan_ketchel@g-g-d.com)

 Please consider the environment before printing this e-mail.

---

**From:** Bob Connors [<mailto:bobdcon@aol.com>]  
**Sent:** Thursday, June 13, 2019 1:16 PM  
**To:** [jshaw@contextarc.com](mailto:jshaw@contextarc.com); [ztoncic@contextarc.com](mailto:ztoncic@contextarc.com); Nathan Ketchel <[nathan\\_ketchel@g-g-d.com](mailto:nathan_ketchel@g-g-d.com)>  
**Subject:** Fwd: Newbury Police Station

Gents  
A little punch list from cons com  
Comments?

Bob Connors  
R. D. Connors Corp



400 W. Cummings Pk  
Suite 1725  
Woburn MA 01801  
617-593-8945

via iPhone

Begin forwarded message:

**From:** Conservation <[conscom@townofnewbury.org](mailto:conscom@townofnewbury.org)>  
**Date:** June 13, 2019 at 12:25:48 PM EDT  
**To:** Bob Connors <[bobdcon@aol.com](mailto:bobdcon@aol.com)>  
**Cc:** Planning Board <[planningboard@townofnewbury.org](mailto:planningboard@townofnewbury.org)>  
**Subject:** Newbury Police Station

Good Afternoon Bob, After review of the plans for the police station I offer these minor changes.

1. The TSS removal worksheet "Drive & Parking Areas" the WQS should be on the next line down. GGD: I spoke with Doug to get this clarified. My table indicates "STC WQS" (short for Stormceptor Water Quality Structure) unaware that I have a "WQS" acronym for "Water Quality Swale". This will be corrected on our follow-up.
2. The O&M plan, pg. 2, "All paved areas....spring and fall. Within the plan set, sheet C0.1, "Paved Areas" is inconsistent with the O&M. GGD: Plan set accidentally says monthly sweeping. O&M notes twice annually. I think it's best to revise the C0.1 note unless the Town will commit to monthly sweeping.
3. C0.1 "Stormwater System Maintenance Notes", first paragraph, please add the Conservation Commission to the distribution list. GGD: I will update the distribution list to include both the Conservation Commission and Planning Board in addition to those already listed (DPW, BOH, architect & engineer).
4. Plan set, sheet C1.0, one of the lines that depicts straw wattle/limits of work, should not point to the wetland line. GGD: Errant leader will be updated/correct.
5. Plan set, sheet C1.1, Zoning Table, Water Supply Protection District, should be removed. Snow storage labels will likely change. GGD: This is in regards to note #2 under the zoning table. I explained to Doug that the note was just to keep all interested parties aware that 155 square feet of the site does fall within the Water Supply Protection Overlay District, however, no work/disturbance will occur in that corner. He said he was fine with the note remaining.

Seldom do I review a plan and find the issues so minor as those listed above. Thank you for a thorough job, well done. Best, Doug

## 6-21-19 Open items

Team,

Open items carried over from the 5-17-19 meeting;

1. Chief, can you provide an update on MEMA-FEMA-Seabrook grants/draft letter copy on the gen set and com tower; **outstanding**
2. Chief/Kevin, status of TCS drawings/specifications for com tower;
3. Kevin, can you review the current costs for commissioning & testing and provide a revised schedule of costs anticipated; **outstanding**;
4. Kevin, can you prepare 5-17-19 meeting notes by tonight; **outstanding**;
5. Kevin, status of Zel's email request dated of 6-3-19 for a coordination meeting with The Town's Vendor(s) regarding the IT systems and Radio communication systems with regards to system design requirements as well as the Structural Design impacts to our building from the Radio Tower being designed. Our Structural Engineer will need impact loads as well as foundation design requirements soon, in order to incorporate any structural connections and/or details required for the eventual construction of the Antenna Tower by the Town's Vendor. Please notify the vendor(s) and copy us so that we may coordinate with them directly.
6. Kevin, can you confirm town/PD hardware standards;
7. Jeff, can you provide and update on local permitting and approvals with projected filing dates; **complete**;
8. Jeff/Zel, status of updated DD cost estimate;
9. JR-Tracy, can you review/consider waiving all permitting/application costs for this project and provide what the formal approach for these requested waivers; **complete**;
10. John & Eric, can you review, update and prioritize any potential alternate items that can be included without jeopardizing issuance of occupancy permit. **Work in process**;
11. Jeff, status of draft contract with town counsel; **Work in process**;
12. Tracy/Martha, status of parking easement identified on existing plans, can town counsel review/comment on easement impacts and/or abandonment;
13. Eric, conservation commission update/status;
14. RDC, planning board update/status;

## **List of required testing for the project:**

### **SITE Prep WORK:**

1. Observation of Ground Improvement Elements (grouted and un-grouted);
2. Vibration monitoring during installation of ground improvement;
3. Observation of the load testing;
4. Observation of footing bearing surfaces preparation;
5. Observation of slab-on-grade subgrade preparation;
6. Observation of placement of compacted structural fill and in-place density testing.

### **STRUCTURAL**

1. Soils and Foundation testing
2. Cast-in-Place Concrete testing
3. Masonry testing
4. Structural Steel testing
5. Wood Framing

### **PLUMBING:**

1. Pressure test all piping systems (per MA Plum Code).
2. Chlorination of domestic water piping (per MA Plum Code).
3. Start-up report for domestic water heater.

### **FIRE PROTECTION:**

1. Flushing & pressure test all piping (interior & exterior) per NFPA 13

### **MECHANICAL:**

1. Testing & Balancing Report for all Furnace AHU units including supply and return and Exhaust Air systems.
2. Manufacturer's start-up report for all Split System gas fired furnaces and associated air cooled condensing units.
3. Manufacturer's start-up report for ductless cooling unit heat pump AC units.  
(Items above would be responsibility of the HVAC Sub Contractor.
4. *Due to the smaller building size and corresponding HVAC cooling / heating sizes, Independent commissioning service would not be a code requirement (see Attached 2015 IECC code excerpt).*
5. However, for optimum system performance the Owner could opt to hire an independent Commissioning Agent to oversee the project system commissioning.

### **ELECTRICAL:**

1. Required electrical systems to be tested would be the Fire Alarm System which requires an NFPA72 test report that is provided by the installing contractor.
2. And the Emergency Generator which requires an NFPA 101 generator test report also provided by the emergency generator.



**C408.2 Mechanical systems and service water-heating systems commissioning and completion requirements.** Prior to the final mechanical and plumbing inspections, the *registered design professional or approved agency* shall provide evidence of mechanical systems *commissioning* and completion in accordance with the provisions of this section.

*Construction document* notes shall clearly indicate provisions for *commissioning* and completion requirements in accordance with this section and are permitted to refer to specifications for further requirements. Copies of all documentation shall be given to the owner or owner's authorized agent and made available to the *code official* upon request in accordance with Sections C408.2.4 and C408.2.5.

**Exceptions:** The following systems are exempt:

1. Mechanical systems and service water heater systems in buildings where the total mechanical equipment capacity is less than 480,000 Btu/h (140.7 kW) cooling capacity and 600,000 Btu/h (175.8 kW) combined service water-heating and space-heating capacity.
2. Systems included in Section C403.3 that serve individual dwelling units and sleeping units.



## **Hardware standards for Town or the Police Dept.**

- Locksets: \_\_\_\_\_

- Key System: \_\_\_\_\_

- Closers: \_\_\_\_\_

- Panic Hardware: \_\_\_\_\_

Before we produce the final Hardware Spec. we want to be sure we are not specifying anything that doesn't match.

**Newbury Police HQ**  
**cost components 1-7-19 to 4-26-19**

	A	B	C	D	E	F	G	H	I
1	Estimate of Probable costs dated:	4/26/2019	4/16/2019	3/27/2019	2/6/2019	1/7/2019			
2	Construction costs (9,400SF)	\$ 5,170,000	\$5,170,000	\$ 5,170,000	\$ 4,230,000	\$ 4,185,000.00			
3	Communication tower	\$ 100,000	\$100,000	\$ 100,000	\$ 100,000	\$ 100,000.00			
4	Escalation			\$ 171,400	\$ 171,400	\$ 171,400.00			
5	Bid Contingency								
6									
7	<b>SOFT COSTS</b>								
8	Design & Engineering								
9	Architectural and Engineering fees	\$ 620,000	\$620,000	\$ 620,000	\$ 620,000	\$ 551,000.00			
10	Allowance for extra services and Owner changes	\$ -	\$28,000	\$ 28,000	\$ 28,000	\$ 28,000.00			
11	Reimbursable expenses	\$ 7,500	\$7,500	\$ 7,500	\$ 7,500	\$ 7,500.00			
12	Furnishing Design fee	\$ -	\$-	\$ -	\$ -	\$ -			
13	Tel/Data & Security Consultant	\$ 20,000	\$20,000	\$ 20,000	\$ 20,000	\$ 20,000.00			
14	Communications Tower Design	\$ 4,000	\$40,000	\$ 40,000	\$ 40,000	\$ 40,000.00			
15									
16	<b>Professional Services</b>								
17	Owners Project Manager & Clerk of the Works	\$ 233,000	\$233,000	\$ 233,000	\$ 233,000	\$ 173,000.00			
18	Geotechnical Engineering & Borings	\$ -	\$25,000	\$ 25,000	\$ 25,000	\$ 25,000.00			
19	MEP Commissioning	\$ 30,000	\$30,000	\$ 30,000	\$ 30,000	\$ 30,000.00			
20	Construction Testing	\$ 30,000	\$30,000	\$ 30,000	\$ 30,000	\$ 30,000.00			
21									
22	<b>Fixtures, Furnishings &amp; Equipment</b>								
23	Furnishings & Equipment (incl HD storage)	\$ 155,000	\$155,000	\$ 155,000	\$ 155,000	\$ 155,000.00			
24	Allowance for Computer Equip. & Network	\$ 250,000	\$250,000	\$ 250,000	\$ 250,000	\$ 250,000.00			
25	Allowance for Dispatch Equipment	\$ -	\$-	\$ -	\$ -	\$ -			
26	Allowance for Telephone System & Equip.	\$ 50,000	\$50,000	\$ 50,000	\$ 50,000	\$ 50,000.00			
27	Allowance for Security & CCTV System	\$ 144,000	\$144,000	\$ 144,000	\$ 144,000	\$ 144,000.00			
28									
29	<b>Project Related Expenses</b>								
30	Topographic and Utility Survey	\$ -	\$-	\$ -	\$ -	\$ -			
31	Printing bid sets & advertising	\$ 5,000	\$5,000	\$ 5,000	\$ 5,000	\$ 5,000.00			
32	Moving Expenses	\$ 10,000	\$40,000	\$ 40,000	\$ 40,000	\$ 40,000.00			
33	Utility Fees & Backcharges	\$ 35,000	\$100,000	\$ 100,000	\$ 100,000	\$ 100,000.00			
34	Temp Housing, Utilities & Apparatus Garage	\$ -	\$-	\$ -	\$ -	\$ -			
35									
36	Project Contingency (10%)	\$ 517,000	\$517,000	\$ 610,490	\$ 610,490	\$ 610,490.00			
37									
38	<b>PROJECT TOTAL</b>	\$ 7,380,500	\$7,564,500	\$ 7,829,390	\$ 6,889,390	\$ 6,715,390.00	\$ -	\$ -	\$ -

**Newbury Police**  
**Progress SCHEDULE**  
02 May 2019

26 April	<b>BC Meeting:</b> DD Progress Meeting	<b>DD</b>
01 May	<b>Site Plan Review Pre-Application Conference</b>	
15 May	<i>File Site Plan Review Application Submitted</i>	
17 May	<b>BC Meeting:</b> DD Progress Meeting Authorization to begin DD cost estimate and proceed into CD's	
By 06 June	<i>Conservation Commission Application Submitted</i>	
07 June	<b>BC Meeting:</b> DD Cost Estimate - Review DD Cost Estimate	<b>CD</b>
18 June	<b>Conservation Commission Hearing 1 (3<sup>rd</sup> Tuesdays)</b>	
19 June	<b>Site Plan Review Hearing 1 (1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesdays)</b>	
21 June	<b>BC Meeting:</b> Construction Drawings Approval to proceed with CD Cost Estimate	
16 July	<b>Conservation Commission Hearing 2 (if needed)</b>	
17 July	<b>Site Plan Review Hearing 2 (if needed)</b>	
19 July	<b>BC Meeting:</b> Construction Drawings Final Review - Present CD Cost Estimate Approval to proceed with Bidding project	
31 July	Project released for Construction Bids	<b>BID</b>
29 August	Filled Sub Bids Due	
12 September	GC Bids Due, CTX/OPM check bid results	<b>BUILD</b>
23 September	Contract Signed, Notice to Proceed	
22 October	Fall STM	
22 September 2020	Substantial Completion	





**From:** Zeljko Tonicic <[ztoncic@contextarc.com](mailto:ztoncic@contextarc.com)>

**Date:** June 5, 2019 at 10:56:24 AM PDT

**To:** Bob Connors <[bobdcon@aol.com](mailto:bobdcon@aol.com)>

**Cc:** Jeff Shaw <[jshaw@contextarc.com](mailto:jshaw@contextarc.com)>

**Subject:** RE: Police Station

Hi Bob,

Yes, you are correct, with regards to how the poor on-site soil conditions are being handled. In addition I'm sending this response to you and you can decide with whom and when you want to share it.

Regarding the comments from Jim Moran please note the following:

- *"There appears to be a conflict between the Context Drawings provided to the Planning Board and the Context Meeting Notes from the Site Plan Review Pre-Submission Conference dated 5/1/19. The meeting notes say the basic approach for utilization of the site is to remove unsuitable soils and bring in suitable fill."*

Response: My comments regarding the site utilization: "The basic approach for utilization of the site is to remove unsuitable soils (organics and misc. exist. fill) and bring in suitable (including structural) fill to raise the building and parking area elevations, to minimize slopes to 5% or less." were specifically related to the raising of the finished grade and the Finish Floor Elevation of the new building, not to describe the full process of how the sub-surface conditions are to be improved, in order to create acceptable structural bearing conditions for the new structure. So, I would categorize that as an omission (of information) rather than a conflict.

- *"Drawing S0.1 (dated 5/15/19) Foundation notes says Rigid Inclusions or Grouted Concrete Columns under footings and Aggregate Piers under the slabs on grade."*

Response: Our Structural Engineer is proceeding with the recommendations made by our Geo-Technical Engineers in their Foundation Engineering Report dated March 18, 2019, in which they state the following:

"It is recommended that installation of grouted ground improvement elements, such as Rigid Inclusions (RIs) or Grouted Concrete Columns (GCCs), be utilized to "improve" the existing uncontrolled fill and organic soils within the proposed building footprint at footing locations. It is recommended that conventional footing foundations be proportioned utilizing an allowable bearing pressure of two (2) tons per square-foot (tsf) bearing on soils improved by RIs or GCCs."

- *"Can you please clarify which method will be used? Both methods are costly, are there estimates of cost for each?"*

Response: The proposed solution is to utilize both methods, in order to minimize the potential removal of unsuitable material off site as well as the associated work of over excavation, temporary shoring and extensive dewatering. Our Engineers have determined that the proposed combination of ground improvements and suitable fill (to raise grades) will be a significant savings over removal of all unacceptable materials. The magnitude of savings could be in the \$100K range.

- *"Drawing S0.1 goes on to say the design for the columns and piers will be provided by the General Contractor. If this is the method, why isn't a design being provided by the Structural Engineer rather than leaving the design up to the General Contractor? Have any Specification or details been prepared for this work?"*

Response: It is a standard in the construction industry for the Ground Improvement Contractor to provide design, engineering and construction services, based on Structural Design Loads and



soil bearing capacity requirements and parameters set forth in the design documents ( Drawings and Specifications ). In essence their work is a “Design-Build” process. The final Construction Documents issued for bidding will have all required data and/or design requirements for having this portion of the General Contractor’s work scope identified and described.

If you have any questions or need any further explanations please let us know.

Thanks,

Zel

**ZELJKO TONCIC, AIA, LEED AP**  
PROJECT MANAGER

**context** ARCHITECTURE  
68 HARRISON AVENUE BOSTON, MA 02111  
TEL 617 423 1400 X 26 WEB CONTEXTARC.COM  
TWITTER | FACEBOOK



**Town of Newbury  
Building Project Construction Committee**

June 20, 2019

Martha Taylor, Planner  
Town of Newbury, Planning board  
12 Kent Way  
Byfield, MA 01922

RE: construction committee response to Jim Moran communication;

Dear Martha

The committee thoroughly reviewed site placement back at the January 25<sup>th</sup> meeting in which site plan options (perpendicular and parallel) to Morgan Ave were considered. The committee chose the perpendicular option which maximized the number of parking spaces and reduced parking/traffic flow along the residential property line. Both options were presented to the neighbors via Mike Doyle as the neighborhood liaison with our selection of the current building (perpendicular) location. The neighborhood was favorable on the perpendicular site placement with one suggestion; use landscape/trees as a buffer v. fencing.

**No concerns/comments were offered at the meeting on our selection.**

At the April 23<sup>rd</sup> Annual Town meeting, the committee provided and update (seven page handout including proposed site plan) on the proposed building location/orientation, 3 options on exterior finishes and proposed site plan. Town meeting voted on option #1 with an overwhelming 95% favorable vote. Again no comments or concern was raised at town meeting.

I have attached a copy of ATM handout and reference to town meeting approval of the plan set, site plan currently before the planning board and conservation commission. The proposed height complies with zoning and comparative to the Woodbridge school which is within the local neighborhood. Also, the lot is low lying compared to all residential lots.

The community as a whole (town meeting vote on option #1) and the neighborhood have been involved and informed on the current proposal without raising any concern during the process. Too delay the approval process on the basis of last minute email from Jim Moran (Jim has had multiple previous opportunities to express his concerns) only threatens the schedule and exposes the community to added construction costs and delay at a time when the voters of Newbury require action and made their choice clear at the annual town meeting.

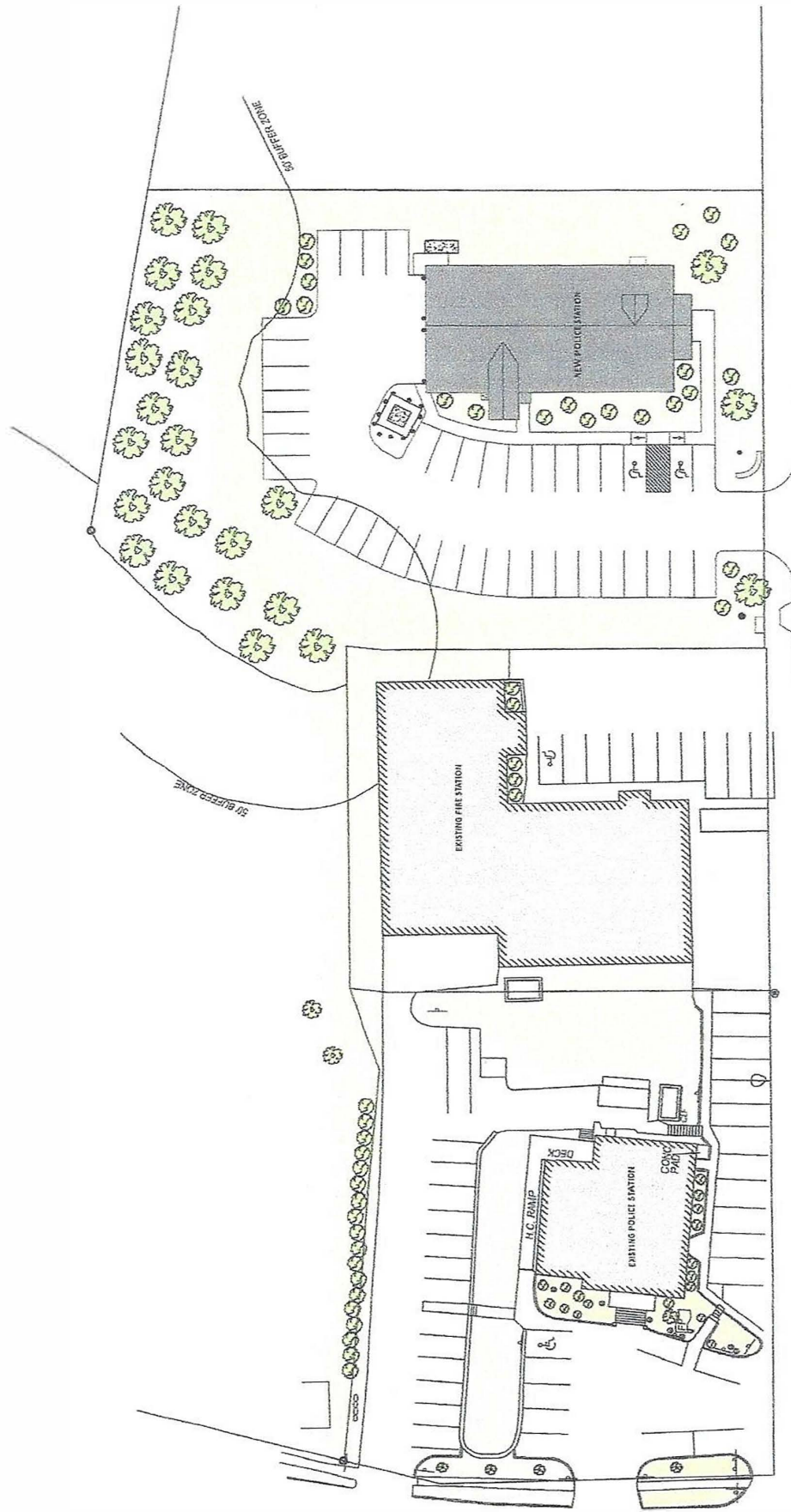
I would suggest that the planning board and conservation commission should address the plan set as submitted and give great weight to the vote/wishes of town meeting.

Respectfully submitted,

Bob Connors,

Chairman, Newbury police building project construction committee





RENDERED SITE PLAN

NEWBURY POLICE STATION  
April 4, 2019

context  
ARCHITECTURE



context  
ARCHITECTURE

NEWBURY POLICE STATION  
April 4, 2019

PERSPECTIVE RENDERING OPTION 1  
Singles on top with flair (light brown)  
Clapboard below  
Stone Base