Listed below are key characters (in bold) for searching within this file.

Hold down the control key and select the "f" key. Enter either a key character from the list below or document name and select enter for a list of documents containing the search word you entered.

APL – all documents behind this target sheet pertain to the original application submitted by the Applicant.

REVIEW – all documents behind this target sheet pertain to those documents submitted to and from staff as part of the project review.

PBM1 – all documents behind this target sheet are any Planning Board memos with attachments that went to the Board.

PBR1 - all documents behind this target sheet are any Planning Board reports with attachments that went to the Board.

CC1 - all documents behind this target sheet are any City Council memos/reports that went to the City Council.

DRC1 - all documents behind this target sheet are those pertaining to the post review of the project by the Development Review Coordinator.

MISC1 - all documents behind this target sheet are those that may not be included in any of the categories above.

REVIEW

GP Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

October 14, 2003

Ms. Kandice Talbot
City of Portland
389 Congress Street
Portland, ME 04101

RE: 300 Allen Avenue, Portland, Maine
Letter of Correspondence #5

Dear Kandi:

Gorrill-Palmer Consulting Engineers, Inc. is pleased to respond to the review comments we received from your letter dated September 23rd and the previous review comments from Jim Seymour of Sebago Technics dated September 5th regarding the above referenced project. For ease of review, each of your comments have been repeated below followed by our response.

Comments by Kandice Talbot/City of Portland Dated 09/23/03

Comment 1 *– Will there be provision for pedestrian traffic from the residential units to Allen Avenue?*

Response – A crosswalk has been depicted from between the handicap parking spaces to the sidewalk adjacent to the residential building to direct pedestrian traffic along the proposed sidewalk to Allen Avenue

Comment 2 *– Will there be any open space provided for the residential units, such as patio area, etc.? The multi-family standards of the site plan ordinance states:*

"Open space on the site for all two-family, special needs independent living unit, bed and breakfast and multiple-family development shall be integrated into the development site. Such open space in a special needs independent living unit or multiple-family development shall be designed to complement and enhance the building form and development proposed on the site. Open space functions may include but are not limited to buffers and screening from streets and neighboring properties, yard space for residents, play areas, and planting strips along the perimeter of proposed buildings."

Response – As requested a 5' x 5' patio has been added to the rear of each of the residential units. These patio areas will be buffered by the existing fence and proposed vegetation within the space between the building and the property line. The center two patios could be constructed as decks, but the outer two would be required to remain as on ground patios, whereas they would be within the required side setbacks.

Comment 3 *– At the meeting it was mentioned that some of the landscaping along the property shall be preserved. A preservation plan shall be submitted. Buffering shall be required between the project and the residential sites.*

Response – The required neighborhood meeting is scheduled on the day of this submission, October 14, 2003. Mr. McKenney, the landscape architect for the project, would like to receive input from the neighbors and intends to submit a revised landscaping plan under separate cover on October 15, 2003.

Comment 4 *– There is a concern about the façade of the office building and the multiple-family building. The multiple-family standards of the site plan ordinance states:*

"The exterior design of the proposed special needs independent living unit, bed and breakfast or multiple-family structures, including architectural style, façade materials, roof pitch, building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and façade variation in projecting or recessed building elements, shall be designed to complement and enhance the nearest residential neighborhood. The design of exterior facades shall provide positive visual interest by incorporating appropriate architectural elements;

The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas and shall also provide sufficient storage areas; and

The scale and surface area of parking, driveways and paved areas are arranged and landscaped to property screen vehicles from adjacent properties and streets."

The site plan standards of the land use code also states:

"For development within the R-P zone, where there is a consistent established architectural style or character to the existing structures in the immediate vicinity in which the development is proposed, that the concurrently visible architectural style or character of the proposed development would not be incongruous to that established style or character".

Response – Revised building elevations were provided to the City on October 1, 2003, which addressed the above requirements.

Comment 5 *– Items that were listed as needing to be resolved prior to Planning Board hearing are listed below:*

a. Pavement quantity
b. Stormwater volume and treatment
c. Development Review Coordinator's memo dated September 5, 2003
d. Landscaping (as mentioned above)

e. Elevations (as mentioned above)
f. Neighborhood meeting
g. Utility capacity letters

Response – a. As mentioned in a previous submission, due to reconfiguration of the site and the use of grass pavers, the overall amount of impervious surface currently proposed compared to previously approved is reduced by 410 s.f. The proposed patios on the units amount to 150 additional square feet, reducing the decrease to 260 s.f. However, the sidewalk at the end of the office parking has been eliminated, removing 230.s.f. of impervious surface. Therefore, the net decrease of impervious surface from the previously approved plan is 490 square feet.

b. A complete Stormwater analysis including water quality treatment is included within this package.
c. The Development Review Coordinators memo is addressed below.
d. Landscaping will be addressed as mentioned above.
e. Building elevations have previously been submitted under separate cover.
f. The neighborhood meeting is scheduled for October 14, 2003.
g. A letter from Portland Water District is included with the package. The City of Portland has been contacted regarding the status of the sewer capacity letter and has not been received as of the time of this submittal, but will be provided upon receipt.

Comments by Jim Seymour/Sebago Technics, Inc. Dated 09/05/03

Comment 1 *– I have read the letter from Alton Palmer, P.E. of Gorrill-Palmer Consulting Engineers, Inc. and agree that the stormwater detention issue for this proposed project will be the same as the previous approved project on the same site. However, I still have concerns about the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue occurs. Looking at the previous calculations and considering that there is more impervious surface, we believe that every effort shall be done to minimize the amount of flow above the allowed peak rate of runoff. We feel that the applicant can further add a design that can limit the peak amount of runoff into the combined system by possibly utilizing either underground storage of using oversized pipes, and using flow controls such as hydro-brakes to allow temporary ponding in proposed catch basins, pipes, and low lying areas. At a minimum, the applicant shall receive a letter from the Public Works Department allowing the designed peak flow into the combined sewer. The applicant also needs to include the actual calculations and summary for the required design storms and its effects on site and downstream.*

Response – The Stormwater analysis included with this package provides calculations in support of the proposed underground detention systems. Construction of the detention system prior to connection into the separated system allows for maintenance of predevelopment peak flows for the 2, 10 and 25-year storms. It is noted that Stormwater Analysis from the previously approved submission was not used in Gorrill-Palmer Consulting Engineers, Inc.'s analysis. Offsite watersheds were redelineated and time of concentration paths were revised.

Comment 2 – *The proposed project is a combination of residential and professional use, which requires up to 23 parking spaces (accumulative in two parking lots), but 29 have been proposed. Since there is no reasonable buffer available on the project site or off site to be used for stormwater treatment, the project shall be required to install a treatment tank system and devise a manner to treat the runoff in an effective manner. Based on previous applications for new developments used by both the City and DEP, the engineer shall be required to show the TSS removal utilizing the MDEP Sliding Scale Method. This is the manner that the City's Ordinance pertaining to Stormwater Management for Runoff Quality has been handled when a development exceeds 25 equivalent car spaces.*

Response – As part of this revised package, a Downstream Defender, water quality unit has been included in the design of the stormwater system. Calculations and details are provided.

Comment 3 – *The current site is a natural low area where ponding routinely occurs due to the "bowl-like" topography. It appears that the land may be wet or saturated frequently. The applicant should verify that these are not wetlands and, if they are, delineate accordingly on the site plans. Any filling of wetlands, as always, shall be coordinated through the local branch of MDEP. This may have been previously permitted and a copy shall be made available to staff indicating transfer of permit.*

Response – Wetlands were delineated onsite by Gove Environmental Services and the limits of the wetland are shown on the plans. A Tier 1 permit from the MDEP is required for the fills on this site. The Tier 1 permit application has been submitted to MDEP. It is noted that the prior City approval of the project in 2002, did not require a wetland delineation prior to approval.

Comment 4 – *If the City allows for the additional stormwater flows to enter their combined sewer system, then the culvert facing Short Street shall be designed with a trash rack to prevent large obstructions form entering the sewer and possibly causing plugging in other downstream structures. An optional design could be a field inlet. It could be used in a manner that a flow control device could regulate flows entering and prevent sewer gases from being possibly exhausted, as the case may be with an open culvert tied to an active sanitary sewer.*

Response – As part of this submission the culvert facing Short Street, is proposed to be removed and replaced with a new culvert. The invert into this culvert has been raised, such that flow from the sewer cannot exit through the culvert. The field inlet is proposed with a trash rack.

Comment 5 – *This project does not indicate a location for a dumpster. Will a dumpster be required? If one is required, it must be screened and placed for easy maintenance.*

Response – The applicant proposes to have the residential buildings use the City's curbside pickup service. A maintenance company will service the office building and that company will remove the waste.

Comment 6 *– General erosion control notes and measures will need to be shown for the proposed project.*

Response – Erosion control measures have been added to the grading plan. Erosion control notes have been included within the detail sheets.

Comment *7 – Tony Lombardo, P.E. had raised some concerns with the previous application regarding the location of the existing sewer easement. You should check with legal counsel to make sure that the easement language is on the new plan and that new easement documents are derived to address any change in the required easement that the City currently has over the property. I would suggest that you obtain a boundary survey for this review along with all deeds associated with the property.*

Response – The applicant will coordinate as necessary with corporate council to ensure easements are provided as necessary. Our office has not received any comments from Public Works to date.

Gorrill-Palmer Consulting Engineers, Inc. appreciates the opportunity to respond to these comments and looks forward to your review of our responses. Should you have any questions or require any additional information, please feel free to contact our office.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Douglas E. Reynolds, P.E.
Project Engineer

AMP/rmg/JN801/TalbotLOC510-14-03

STORMWATER MANAGEMENT REPORT

I. Introduction

Gorrill-Palmer Consulting Engineers, Inc has been retained to prepare plans and permit applications for a proposed development located at 300 Allen Avenue. Figure 1 following this page is an excerpt from the U.S.G.S. Portland West quadrangle map showing the project location. The development will consist of an approximate 2 story 1,550 s.f. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The following narrative contains the stormwater analysis, which is appropriate for the site.

II. Development Description

The site comprises approximately 0.84 acres. Currently, an approximate 1,000 s.f. "Cape" style house occupies the site. The house is located toward the front of the site adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout.

Abutting land uses include:

- North – Residential
- East – Residential
- South – Allen Avenue
- West – Residential

This property was previous permitted by Environmental Engineering & Remediation, Inc. (EER) to include a 1,540 square-foot addition to the existing building and four residential units towards the rear of the property. The approved stormwater report for this project was obtained from EER to be used as a base model for the now proposed development. However, Gorrill-Palmer redelineated the watershed boundaries and field verified certain aspects of the project. The redelineation resulted in an overall decrease in size of the watershed sub-catchment areas.

III. Surface Water and Downstream Waterbodies

There are no lakes located on, adjacent to or downstream of the project site. The site currently drains towards the center of the lot where there is a bowl shaped depression, which has been delineated as a wetland.

IV. General Topography

Topography on the site is relatively flat and drains toward the central portion of the lot. Slopes on-site range from 2% to 4% located in the central portion of the lot. Steeper slopes are present along the perimeter of the exiting house of approximately 20%. Elevations on-site range from 78' at the lowest point of the "bowl" to 83' at the front of the parcel, adjacent to Allen Avenue.

V. Alterations to Land Cover

Changes to land cover within the site involves the removal of grass, brush and wooded areas throughout the site and replacing them with buildings and parking.

VI. Modeling Assumptions

The stormwater management study evaluates the stormwater runoff rates between the pre-development and post-development conditions.

Soil conditions were assumed to be Hydrologic Group D, based on the Cumberland County Medium Intensity Soil Survey.

The SCS TR-20 methodology was employed by Gorrill-Palmer Consulting Engineers, Inc. to analyze the pre-development versus the post-development conditions. A 24-hour, SCS Type III storm distribution for the two, ten, and twenty-five year storm frequencies was used for analysis. The corresponding rainfall amounts for these storms for Southeast Cumberland County are 3.0", 4.7", and 5.5" respectively. The Cumberland County rainfall numbers were utilized based on the approved stormwater report prepared by EER.

Land use was assumed as 0.25 acre residential lots with 38% impervious surface. Additional information used for the stormwater analysis include:

- Portland West 7.5 Minute Quadrangle Map prepared by the U.S.G.S
- On-site topographic survey with 1 foot contour intervals
- Aerial Topography with 2 foot contour intervals, provided by City of Portland GIS Department
- Field Reconnaissance
- Stormwater Report prepared by EER, dated January 21, 2002

VII Water Quantity Control

VII.1 Pre-development Conditions

The study analyzes the watershed in the pre-development condition as depicted on Figure A, Overall Watershed Map, contained in Attachment A.

The predevelopment condition was modeled as two sub-areas with one point of interest, located at the connection point to the combined sewer system. Sub-area 1 contains a majority of the development site as well as several residential dwellings located northwest of the development site and is approximately 1.35 acres in size. Sub-area 2 includes several residential structures located west of the development site that drain into the combined sewer through a field inlet and is approximately 1.38 acres in size. Times of Concentration paths were obtained through field reconnaissance of the area. The table below represents the predevelopment peak flows at the point of interest for the 2, 10, and 25-year storm events.

Table 1 – Pre-development Peak Flows

Drainage Area	Peak Flow (cfs)		
	2 Year	10 Year	25 Year
POI # 1	3.5	6.0	7.5

Copies of the stormwater calculations are included as Attachment B.

VII.2 Post-development Condition

The project was evaluated for the post-development condition, which includes changes to land cover associated with the addition to the existing house, the six residential units, and paved surfaces, as well as

changes to the Time of Concentration within Sub-area 1. The post-development condition was also modeled as two sub-areas with one point of interest. Six of the parking spaces located in the northwest corner of the lot will be constructed of Grass Road Pavers. The grass road pavers consist of a plastic grid in a honeycomb pattern that is backfilled with loam and then seeded. The pavers result in a permeable surface with the grass cover and voids within the honeycomb grid that allow water to permeate through to the underlying soil. For modeling assumptions, these pavers will be considered 50% impervious cover and 50% grass cover.

The following table contains the comparison of peak flows at the point of interest in the pre and post development condition without any on-site detention.

Table 3 – Comparison of Peak flows (cfs)						
Drainage Area	2 Year		10 Year		25 Year	
	Pre	Post	Pre	Post	Pre	Post
POI #1	3.5	3.5	6.0	6.5	7.5	8.0

As can be seen in the above table, an increase in peak flows in the post-development condition occurs; therefore detention of stormwater is necessary to maintain pre-development peak flows.
A sub-surface detention pond is proposed to be located within the drive aisle serving the lot. The detention facility will consist of approximately 150 liner feet of 36-inch diameter storm drain pipe, providing approximately 1,200 cubic feet of storage. Table 4 contains information pertaining to the pond performance.

Table 4 –Pond Performance			
	Storm Event		
	2 Year	10 Year	25 Year
Peak In Flow (cfs)	1.93	3.48	4.20
Peak Outflow (cfs)	1.87	3.11	3.74
Stage (Max. Elevation)	76.54	77.44	78.06
Storage (Max. cf)	352	870	1,171
Depth above Outlet (ft)	0.92	1.82	2.44

Table 5 below presents the comparison of pre and post development peak flows at the Point of Interest, with detention, for the 2, 10 and 25-year storm events:

Table 5 – Comparison of Peak flows (cfs)						
Drainage Area	2 Year		10 Year		25 Year	
	Pre	Post	Pre	Post	Pre	Post
POI #1	3.5	3.5	6.0	6.0	7.5	7.5

As can be seen in the above table, the post development condition peak flows at the point of interest are maintained for the 2, 10 and 25-year storms.

All calculations are contained in Attachment B.

VIII Water Quality

As the development proposes more that 25 parking spaces, the City ordinance requires that a water quality program be implemented to treat stormwater runoff prior to leaving the site. City ordinance

requires that projects meet the MDEP Sliding Scale Standard for TSS removal. This project envisions approximately 0.41 acres of impervious surface within the 0.84-acre site resulting in an impervious surface coverage of approximately 50%, which requires 62% TSS removal based on Sliding Scale.

Water quality treatment will be provided by a 6-foot diameter Downstream Defender that will be installed at the outlet end of the sub-surface detention facility. The 6-foot Downstream Defender, based on MDEP confirmation tests, will attain 80% TSS removal for peak in-flow less than 3.86 cfs for the 1-year rainfall. The computed 1-year rainfall entering the Downstream Defender based on TR-20 methodology is 1.46 cfs, which is below the upper limit for the 6-foot structure. All newly created impervious surface within the site will be treated by the water quality unit, as well as the remaining impervious surfaces within sub-area 1. Based on the computer flow entering the Downstream Defender and the treated area, an 80% TSS removal rating will be attained.

IX Maintenance of Facilities

The applicant, or their assigned heirs will maintain the stormwater facility after construction is completed. The contract documents will require the contractor to designate a person responsible for maintenance of the sedimentation control features during construction. Long-term operation/maintenance planned for the stormwater management facilities is presented below.

The "Parties" may contract with such professionals as may be necessary in order to comply with this provision and may rely on the advice of such professionals in carrying out its duty hereunder, provided, that the following operation and maintenance procedures are hereby established as a minimum for compliance with this section.

1. Remove accumulated sediment from catch basin sumps when sediment as accumulated to within 6 inches of the outlet pipe invert, but not less than annually

2. Maintain subsurface detention facility in accordance with manufacturer's recommendations and specifications.

3. Maintain Downstream Defender in accordance with manufacturer's recommendations and specifications.

X Conclusion

Due to changes in land use and runoff flow-paths, the planned development increases runoff from the site. A subsurface detention facility has been designed to attenuate the increase in peak runoff rates in the post development. The peak runoff for the 2, 10 and 25-year storm events in the post development condition meets the predevelopment peak levels. Water quality standards will be attained with the installation of a 6-foot Downstream Defender at the outlet end of the detention facility.

XI Attachments

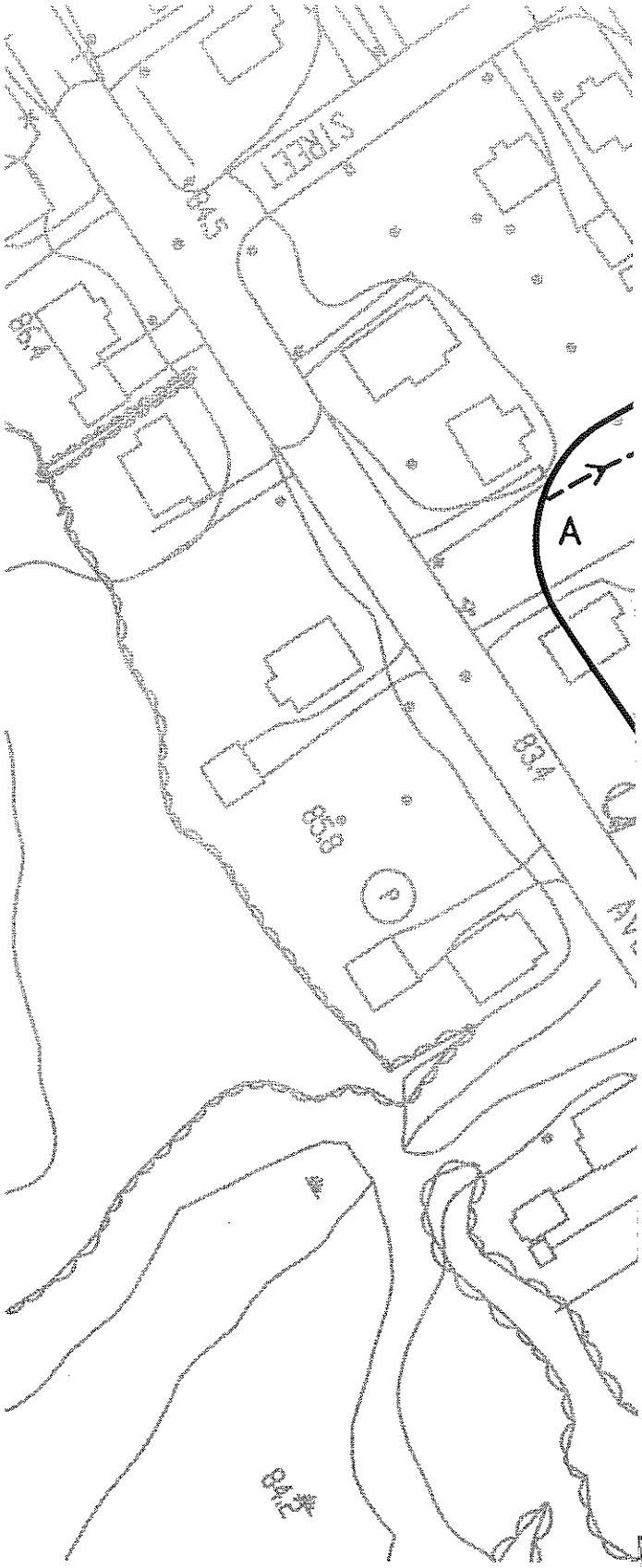
Attached to this section are the following items:

Attachment A – Watershed Maps

Attachment B – TR – 20 Calculations

ATTACHMENT A

WATERSHED MAPS



LEGEND

SUBCATCHMENT AREA

TIME OF CONCENTRATION FLOW PATH

WATERSHED BOUNDARY

SHEET FLOW

SHALLOW CONCENTRATED FLOW

POINT OF INTEREST

0 40 80 160

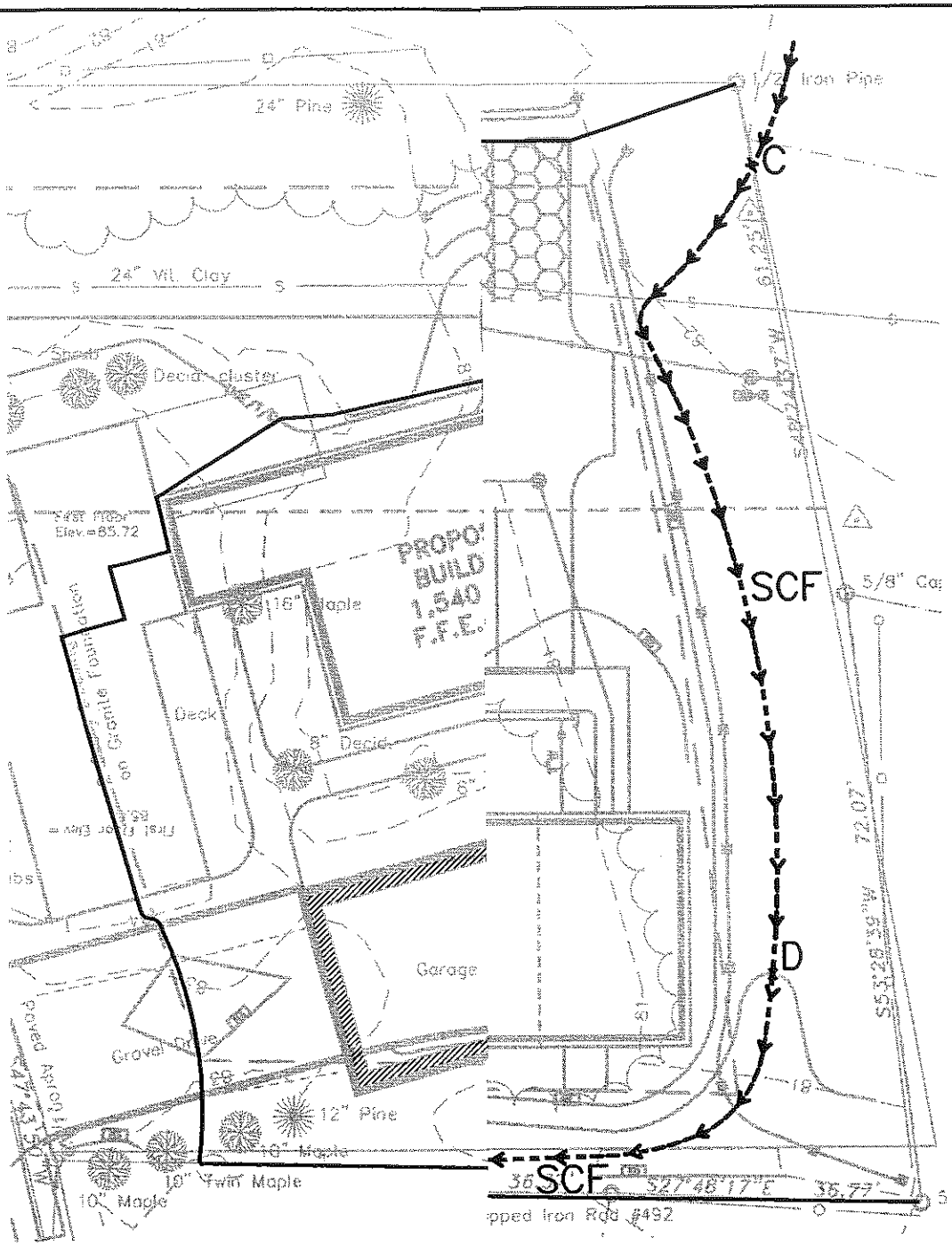
1 inch = 80 ft.

Rev.	Date	Revision
-	-	-

Design: DER	Dc	Watershed Map
Draft: GJL	Jo	
Checked: AMP	Sc	ALLEN ANENUE
File Name: 801-WTI		

Figure No.

A



LEGEND

FOR OVERALL WATERSHED BOUNDARY

(5) SUBCATCHMENT AREA

C TIME OF CONCENTRATION

WATERSHED BOUNDARY

0 40 80 160

1 inch = 80 ft.

Rev.	Date	Revision
-	-	-

Design: DER	D...
Draft: GJL	J...
Checked: AMP	S...
File Name: 801-WT	

...ent Onsite Watershed Map

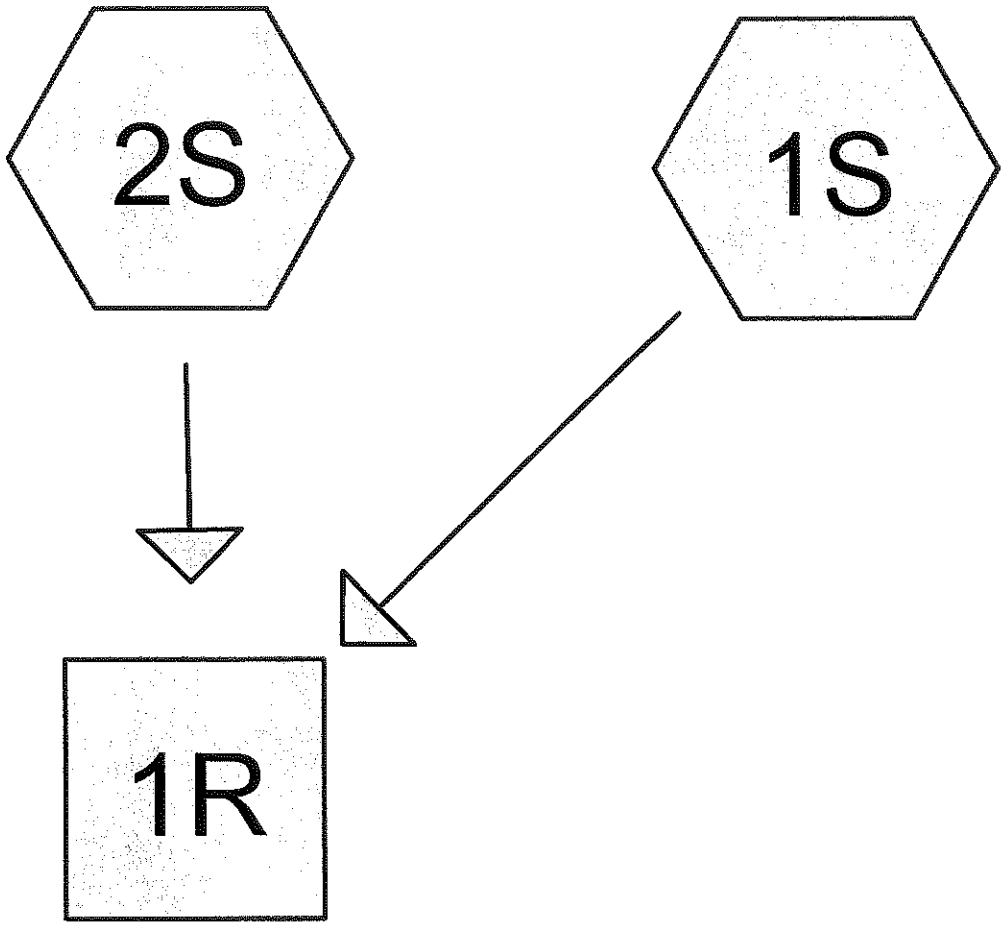
...ALLEN ANENUE

Figure No.

B

ATTACHMENT B

TR-20 CALCULATIONS



Subcat Reach Pond Link

Drainage Diagram for 300 Allen Ave. Predevelopment
Prepared by Gorrill-Palmer Consulting Engineers 10/13/03

Subcatchment 1S: subcatchment 1

Runoff = 1.61 cfs @ 12.39 hrs, Volume= 0.181 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
1.350	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
10.0	300	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
27.9	390	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 1.67 cfs @ 12.37 hrs, Volume= 0.186 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY

Inflow = 3.27 cfs @ 12.38 hrs, Volume= 0.367 af
Outflow = 3.27 cfs @ 12.38 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Subcatchment 1S: subcatchment 1

Runoff = 3.00 cfs @ 12.38 hrs, Volume= 0.346 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
1.350	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
10.0	300	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
27.9	390	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 3.13 cfs @ 12.36 hrs, Volume= 0.354 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY

Inflow = 6.13 cfs @ 12.37 hrs, Volume= 0.699 af
Outflow = 6.13 cfs @ 12.37 hrs, Volume= 0.699 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Subcatchment 1S: subcatchment 1

Runoff = 3.67 cfs @ 12.37 hrs, Volume= 0.426 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
1.350	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
10.0	300	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
27.9	390	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 3.82 cfs @ 12.36 hrs, Volume= 0.436 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

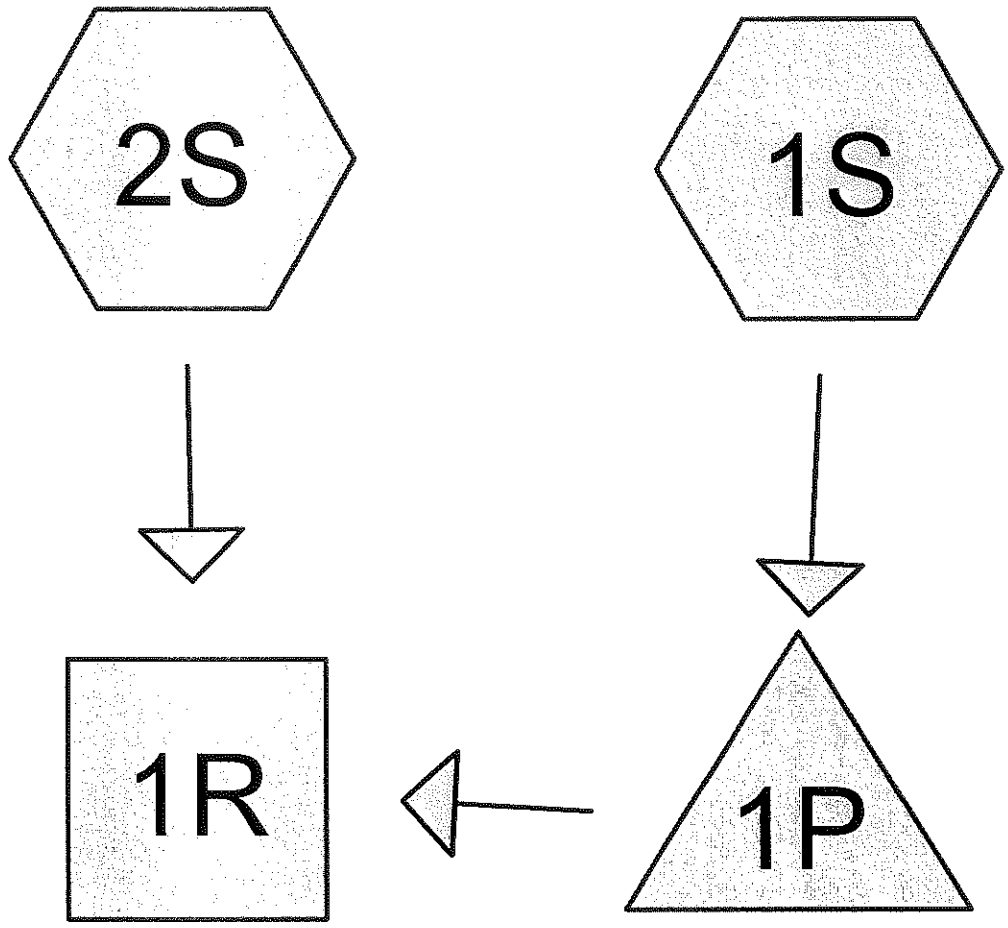
Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY

Inflow = 7.48 cfs @ 12.37 hrs, Volume= 0.862 af
Outflow = 7.48 cfs @ 12.37 hrs, Volume= 0.862 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs



Subcat Reach Pond Link

Drainage Diagram for 300 Allen Ave. Post Development
Prepared by Gorrill-Palmer Consulting Engineers 10/13/03

Subcatchment 1S: subcatchment 1

Runoff = 1.93 cfs @ 12.31 hrs, Volume= 0.199 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.718	87	1/4 acre lots, 38% imp, HSG D
0.382	98	Paved parking & roofs
0.230	80	>75% Grass cover, Good, HSG D
0.020	89	Grass Road Paver
1.350	89	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
2.0	60	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, C-D** Unpaved Kv= 16.1 fps
0.4	55	0.0180	2.2		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
0.0	15	0.2147	28.8	35.37	**Circular Channel (pipe), F-G** Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.011
22.3	420	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 1.67 cfs @ 12.37 hrs, Volume= 0.186 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY SEWER

Inflow	=	3.54 cfs @	12.37 hrs, Volume=	0.384 af
Outflow	=	3.54 cfs @	12.37 hrs, Volume=	0.384 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: PIPE STORAGE

Inflow	=	1.93 cfs @	12.31 hrs, Volume=	0.199 af
Outflow	=	1.87 cfs @	12.36 hrs, Volume=	0.198 af, Atten= 3%, Lag= 3.2 min
Primary	=	1.87 cfs @	12.36 hrs, Volume=	0.198 af

Routing by Stor-Ind method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 76.54' Storage= 352 cf
Plug-Flow detention time= 6.2 min calculated for 0.198 af (99% of inflow)

Elevation (feet)	Cum.Store (cubic-feet)
75.62	0
76.62	381
77.62	975
78.62	1,416
78.76	1,428

Primary OutFlow (Free Discharge)
└1=Orifice/Grate

#	Routing	Invert	Outlet Devices
1	Primary	75.62'	**10.0" Vert. Orifice/Grate** C= 0.600

Subcatchment 1S: subcatchment 1

Runoff = 3.48 cfs @ 12.30 hrs, Volume= 0.368 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.718	87	1/4 acre lots, 38% imp, HSG D
0.382	98	Paved parking & roofs
0.230	80	>75% Grass cover, Good, HSG D
0.020	89	Grass Road Paver
1.350	89	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
2.0	60	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, C-D** Unpaved Kv= 16.1 fps
0.4	55	0.0180	2.2		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
0.0	15	0.2147	28.8	35.37	**Circular Channel (pipe), F-G** Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.011
22.3	420	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 3.13 cfs @ 12.36 hrs, Volume= 0.354 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY SEWER

Inflow	=	6.21 cfs @	12.38 hrs, Volume=	0.721 af
Outflow	=	6.21 cfs @	12.38 hrs, Volume=	0.721 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: PIPE STORAGE

Inflow	=	3.48 cfs @	12.30 hrs, Volume=	0.368 af
Outflow	=	3.11 cfs @	12.41 hrs, Volume=	0.367 af, Atten= 10%, Lag= 6.4 min
Primary	=	3.11 cfs @	12.41 hrs, Volume=	0.367 af

Routing by Stor-Ind method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 77.44' Storage= 870 cf
Plug-Flow detention time= 5.5 min calculated for 0.367 af (100% of inflow)

Elevation (feet)	Cum.Store (cubic-feet)
75.62	0
76.62	381
77.62	975
78.62	1,416
78.76	1,428

Primary OutFlow (Free Discharge)
└─1=Orifice/Grate

#	Routing	Invert	Outlet Devices
1	Primary	75.62'	**10.0" Vert. Orifice/Grate** C= 0.600

Subcatchment 1S: subcatchment 1

Runoff = 4.20 cfs @ 12.30 hrs, Volume= 0.450 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.718	87	1/4 acre lots, 38% imp, HSG D
0.382	98	Paved parking & roofs
0.230	80	>75% Grass cover, Good, HSG D
0.020	89	Grass Road Paver
1.350	89	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.9	90	0.0100	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
2.0	60	0.0100	0.5		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, C-D** Unpaved Kv= 16.1 fps
0.4	55	0.0180	2.2		**Shallow Concentrated Flow, D-E** Unpaved Kv= 16.1 fps
1.0	100	0.0100	1.6		**Shallow Concentrated Flow, E-F** Unpaved Kv= 16.1 fps
0.0	15	0.2147	28.8	35.37	**Circular Channel (pipe), F-G** Diam= 15.0" Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.011
22.3	420	Total			

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 3.82 cfs @ 12.36 hrs, Volume= 0.436 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
1.380	87	1/4 acre lots, 38% imp, HSG D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.2	180	0.0170	0.1		**Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 3.00"
1.6	145	0.0100	1.5		**Shallow Concentrated Flow, B-C** Grassed Waterway Kv= 15.0 fps
26.8	325	Total			

Reach 1R: 24" VIT CLAY SEWER

Inflow = 7.52 cfs @ 12.38 hrs, Volume= 0.885 af
Outflow = 7.52 cfs @ 12.38 hrs, Volume= 0.885 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Pond 1P: PIPE STORAGE

Inflow = 4.20 cfs @ 12.30 hrs, Volume= 0.450 af
Outflow = 3.74 cfs @ 12.41 hrs, Volume= 0.449 af, Atten= 11%, Lag= 6.7 min
Primary = 3.74 cfs @ 12.41 hrs, Volume= 0.449 af

Routing by Stor-Ind method, Time Span= 3.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 78.06' Storage= 1,171 cf
Plug-Flow detention time= 5.4 min calculated for 0.448 af (99% of inflow)

Elevation (feet)	Cum.Store (cubic-feet)
75.62	0
76.62	381
77.62	975
78.62	1,416
78.76	1,428

Primary OutFlow (Free Discharge)
└1=Orifice/Grate

#	Routing	Invert	Outlet Devices
1	Primary	75.62'	**10.0" Vert. Orifice/Grate** C= 0.600

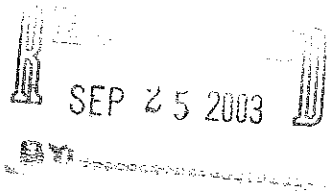
Portland
Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

Customer Service Hotline (207) 761-8310
(207) 774-5961
FAX (207) 879-5837

September 24, 2003

Douglass E. Reynolds, P.E.
Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
Gray, Me. 04039



Re: 300 Allen Ave.- Portland

Doug:

This letter is to confirm there should be an adequate supply of clean and healthful water to serve the needs of the proposed commercial building and 6 unit apartment building at 300 Allen Ave. in Portland. Checking District records, I find there is a 12" cast iron water main on the opposite side of the street in Allen Ave. There is also a possibility to take service off Short St. which has a 2 ¼" water main in it.

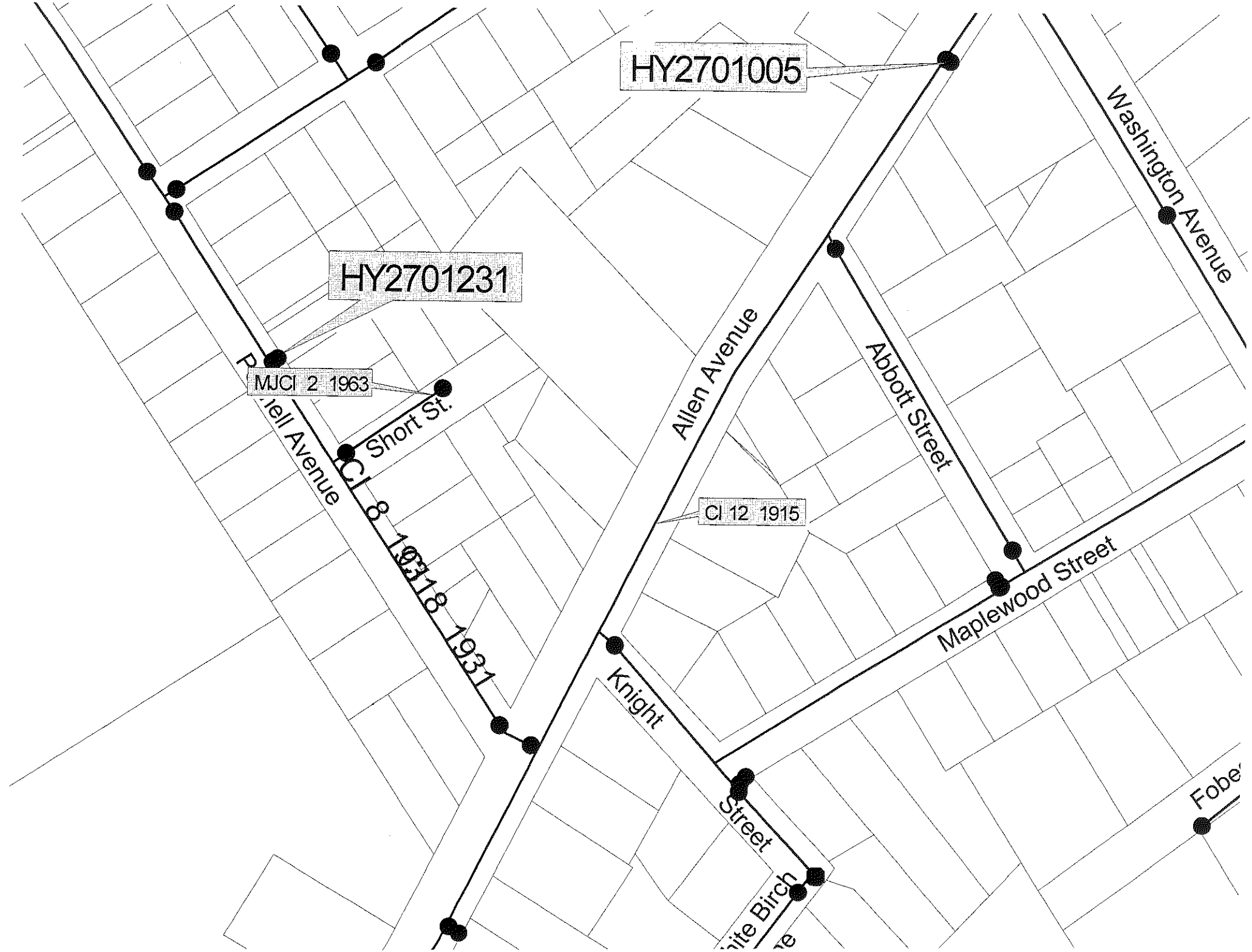
The current data from the nearest hydrant indicates there should be adequate capacity of water to serve the needs of your proposed project.

Hydrant Location: Allen Ave. 50' west of Washington Ave.
Hydrant # 1005
Static pressure = 71 PSI
Flow = 1277 GPM
Last Tested = 7/21/98

If the district can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Jim Pandiscio
Means Coordinator


HY2701005
HY2701231
MJCI 2 1963
Short St.
Cl 8 1918 1931
Cl 12 1915
Allen Avenue
Abbott Street
Washington Avenue
Maplewood Street
Knight
Street

Department of Public Works

Michael J. Bobinsky
Director

CITY OF PORTLAND

22 January 2004

Mr. Douglas E. Reynolds, P.E.,
Gorrill-Palmer Consulting Engineers, Inc.,
P.O. Box 1237,
Gray, Maine 04039

RE: The Capacity to Handle Wastewater Flows, from 300 Allen Avenue, Site of (1) a Proposed Office Building Addition, and (2) a Proposed Apartment Building.

Dear Mr. Reynolds:

This capacity letter supercedes a capacity letter previously issued on January 15, 2002, to another developer, for a similar redevelopment, of this same 300 Allen Avenue property.

The existing twenty-four inch diameter vitrified clay sanitary combined sewer pipe, part of the "August Avenue Outlet," that traverses this site, has **adequate capacity to transport**, while The Portland Water District sewage treatment facilities, located off Marginal Way, have **adequate capacity to treat** the anticipated increased wastewater flows of **1,407 GPD**, from your proposed development.

Anticipated Wastewater Flows from the Proposed Development:	
20 Proposed Office Employees @ 15 GPD/Employee	= 307 GPD
6 Apartments @ 180 GPD/Apartment	= 1,080 GPD
29 Parking Spaces@1 GPD/Parking Space	= 20 GPD
Total Proposed Increase in Wastewater Flows for this Project	**= 1,407 GPD**

The City combined sewer overflow (C.S.O.) abatement consent agreement (with the U.S.E.P.A., and with the Maine D.E.P.) requires C.S.O. abatement, as well as storm water mitigation, in order to offset any increase in sanitary flows, from all projects.

If The City can be of further assistance, please call 874-8832.

Sincerely,
CITY OF PORTLAND

Frank J Brancely, B.A., M.A.
Senior Engineering Technician

FJB

cc: Alexander Q. Jaegerman, Director, Planning Division, Department of Planning, and Urban Development, City of Portland
Kandice Talbot, Planner, Department of Planning, and Urban Development, City of Portland
Eric Labelle, P.E., City Engineer, City of Portland
Bradley A. Roland, P.E., Environmental Projects Engineer, City of Portland
Anthony W. Lombardo, P.E., Project Engineer, City of Portland
Stephen K. Harris, Assistant Engineer, City of Portland
Todd Merkle, Field Inspections Coordinator, City of Portland
Desk file

O:\Engshare\FJB\Capacity Letters\Allen Avenue 300
C:\Frank's\Capacity Letters\Allen Avenue 300

From: Anthony Lombardo
To: Kandi Talbot
Date: Thu, Mar 7, 2002 9:31 AM
Subject: Re: 300 Allen Avenue

Kandi,
I felt that my recent comments on this proposal were quite detailed and comprehensive, however, I can provide more specifics on the topics you reference:

PUBLIC WORKS REVIEW...3/7/02
In reviewing the applicant' most recent plan revisions, I offer the following comments related to site specific stormwater issues:

1. I had a conversation with Steve Bradstreet, of EER, Inc., regarding his firm's attempts, at my previous request, to control/reduce post-development peak runoff rates to a point closer to pre-development levels. In our conversation, on Wednesday, March 6th, I indicated that Public Works would have a more significant comfort level with this project, as it relates to addressing stormwater issues, if the following measures were incorporated into the design proposal:

a. Create more underground stormwater storage in pipes by eliminating the proposed stormwater connection into the combined sewer traversing the site. Instead an new "doghouse"manhole connection should be constructed further downstream, at a point adjacent to the Allen Avenue boundary. It is Public Works' opinion that increasing the size of the proposed pipes would have minimal effect on reducing post-development runoff rates. Instead the necessary depth of ground cover over the top of the pipes, currently at an engineering minimum, would be negatively impacted and reduced.

b. Additionally, it was suggested that the design be revised to expand the surface stormwater storage area, adjacent to the westerly boundary. This storage area would be expanded in a southerly direction towards Allen Avenue and could, quite possibly be increased by 35 - 40%.

c. EER would then revise their stormwater model and report to reflect the design revisions noted in items (a) and (b).

Public Works feels that the combination of the stormwater design measures specified in this memo, as well as the applicant's CSO Sewer Separation contribution (in the form of installing almost 300 linear feet of separated storm sewer main, at our request) make this development proposal an acceptable one.

>>> Kandi Talbot 03/06 1:55 PM >>>
Tony,

Thanks for the February 20th memo regarding your review on this project. I was wondering if I could get another memo just a little bit stronger stating that most recent plans address your concerns which is the stormwater separation within their site as a contribution to the CSO project. At last Wednesday's meeting, you had said that the proposed pipe would provide additional storage on-site. Could you please mention that in your memo also. One question that we have, is if they installed a larger pipe through their site would that provide even more storage?

Because the Board is concerned that this project will not meet the site plan standards, we would request that you attend the Planning Board public hearing scheduled on March 12th at 5:30 p.m. Please let me know if that is an issue. Thanks.

Kandi

CC: Internet:sbradstreet@eerinc.com; Katherine Earley...

From: Anthony Lombardo
To: Kandi Talbot
Date: Wed, Feb 20, 2002 11:43 AM
Subject: 300 Allen Ave. 2/19/02

I have reviewed the February 14th submittal from EER on behalf of OPM, Inc. and offer the following comments:

1. The applicant and their engineer has satisfactorily complied with the requests made in the Public Works e-mail dated 1/31/02 with the one exception. The only area that appears to be deficient is with regard to addressing stormwater.

Stormwater:
As requested, the applicant's engineer has made a sincere attempt at trying to control/reduce post development runoff to a level closer to pre-development runoff rates. Site constraints combined with the density of the proposed development has limited the engineer's ability to reduce post-development runoff by no more than 13%. As I indicated in the 1/31/02 comments, the Allen Ave. combined system is approaching or exceeds capacity during very large rainfall events. However,rather than condemning a project before exploring some design options, Public Works is proposing an alternative that we feel would substantially benefit the interests of the City's infrastructure. That alternative is as follows:

As indicated in our 1/31/02 comments, the City's CSO plan does not include separation of Allen Ave, adjacent to the development site, until 2005 at the earliest. In order for that separation plan to be effective, it will require the separation of Short Street as well as the stormwater runoff from Cypress Street. Obviously, this would require entering this development site and the granted easement to install a separated storm sewer line. Public Works is recommending, in the best interests of the City and the Allen Ave. sewer separation project, that the applicant install a distinct and separated storm sewer line beginning at the Allen Ave. boundary and continuing to the northeast site boundary. This would represent the applicant's contribution to the CSO project and would benefit the City by reducing future construction costs associated with the referenced CSO project.

CC: Internet:sbradstreet@eerinc.com

From: Anthony Lombardo
To: Kandi Talbot
Date: Fri, Feb 1, 2002 8:41 AM
Subject: 300 Allen Ave. 1/31/02

Kandi,
I've reviewed the 1/22/02 submittal and offer the following comments on behalf of Public Works:

- Located just east of the proposed entrance widening is an existing granite monument. This monument needs to be protected during the construction of this site. A note should be added to the plans that clearly specifies protection of this granite monument.
- The applicant proposes the installation of underground cable, in parallel, an offset distance of only two (2) feet from the centerline of the existing 24 inch combined sewer. Public Works feels that a more appropriate separation should be a minimum of five (5) feet to ensure the ease of maintenance of the City sewer.
- The City disagrees with the applicant's engineer and their opinion that televising a sewer, to determine lateral connections, is not necessary. In fact, the applicant's engineer makes an assumption on an existing culvert's connection into this combined sewer, which could only be verified by televising the sewer. Further, the City does not have video record of this combined sewer. As a result, Public Works is still requesting the applicant video this sewer and specify any all connections into this sewer, within the development site. We are also asking for a copy of this video for our archive. This is not an unreasonable request and typically costs in the vicinity of $150 to $300.
- Under "Response #14", in the letter authored by EER, the applicant proposes to grant a 50 foot right of way City for maintenance and repair of the 18" and 24" diameter combined sewer that traverses the site. This should be clearly defined on the plans and a "draft" written description submitted to Public Works.
- The applicant's stormwater report does little to focus on the fact that the sewer crossing the site is in fact a combined sewer. The entire sanitary flows of Pennell Ave., Short Street, Hennessey Drive, Skylark Road and 50% of Cypress Street are carried by these pipes. In addition, the runoff from Cypress Street, 1/3 of Pennell Ave. and all of Short Street is discharged to this combined sewer. As a result, this combined sewer is already burdened with significant peak flows during pre-developed 25 year storm event. Further, the combined 30 inch diameter combined sewer in Allen Ave. already has capacity issues and is identified in the City's CSO master plan for separation. That, however, won't be addressed in the near future due to limited funding. Now the applicant plans to introduce increased sanitary flows and the majority of post-development site runoff directly into this overburdened system with no proposal for detention or flow restriction. **This site, in its current state, acts as a natural detention/retention area. Since the applicant proposes to significantly alter this condition, Public Works feels that it is not unreasonable to request the applicant and their engineer to develop a plan and design to detain or retain post-development runoff to a level closer to pre-development peak rates.**

Planning & Urban Development

Alexander Jaegerman
Planning Director

CITY OF PORTLAND

January 29, 2002

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue
ID #2001-0309, CBL #344-E-006

Dear Mr. Bradstreet:

After review of the plans submitted on January 22, 2002, the following comments have been generated:

1. The multiplex standards states, "the design of the proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas..." The side elevations of the four-unit building should include at the least one (1) additional window on the second floor.

2. It is difficult to determine from the lighting plan if the light levels proposed for the site meet the lighting standards. The light levels must be shown to property lines to be able to determine if there is any spillover onto abutting properties.

3. Please submit a copy of the entire deed referenced in the December 31, 2001 letter from Titcomb Associates.

4. The applicant must provide an adequate easement area for the sewer right-of-way for maintenance of the sewer by the City. In order to determine the location for the easement, the sewer pipe will have to be field located.

5. The trench proposed for the underground electrical and cable must be separated from the existing sewer line by eight (8) feet.

6. The applicant must provide on-site storage to offset the stormwater peaks, which will be directed into the existing sewer. The applicant must also address how the proposed stormwater plan will effect downstream.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

Department of Public Works

William J. Bray
Director

CITY OF PORTLAND

15 January 2002

Mr. Stephen J. Bradstreet, P.E.,
Environmental Engineering & Remediation,
222 St. John Street, Suite 314,
Portland, Maine 04102

RE: The Capacity to handle The Increased Wastewater Flows from A Proposed Addition Plus Four New Residential Units at 300 Allen Avenue.

Dear Mr. Bradstreet:

The existing thirty-six inch diameter vitrified clay sanitary sewer pipe located in Allen Avenue has adequate capacity to transport the anticipated increase in wastewater flows of 45 GPD, from your proposed addition to the existing building. The existing eighteen inch diameter vitrified clay sanitary sewer pipe that traverses your site also has adequate capacity to transport the anticipated wastewater flows of 1,080 GPD, from your proposed four residential units. The Portland Water District sewage treatment facilities located off Marginal Way have adequate capacity to treat the anticipated wastewater flows of 1,125 GPD, from your proposed development.

Anticipated Wastewater Flows from the Proposed Development	
1 Proposed Chiropractor @ 15 GPD/Chiropractor	= 15 GPD
3 Proposed Employees @ 15 GPD/Employee	= 45 GPD
25 Proposed Patients @ 5 GPD/Patient	= 125 GPD
4 Proposed Three Bedroom Units @ 270 GPD/Unit	=1,080 GPD
Less Recent Wastewater flows from 300 Allen Avenue	= (140) GPD
Total Anticipated Increase in Wastewater Flows for this Project	**=1,125 GPD**

The City combined sewer overflow (C.S.O.) abatement consent agreement, with the U.S.E.P.A. and the Maine D.E.P., requires C.S.O. abatement, as well as Stormwater mitigation, from all projects, in order to offset any increase in sanitary flows.

O:\Engshare\CSO\Allen Avenue 300 (EER)

You requested a video of that section of the combined sewer that traverses your client's property. According to Gary Sweeney, the person who videotapes the City's sewer system, that sewer has not been video taped, unfortunately.

This cross-country sewer, the August Avenue Outlet (so called), is recorded on City plan 254/5. "The right to erect and maintain said sewer..." is recorded in Book 1727, pp. 275 ff, at the Cumberland County Registry of Deeds. The City requests Record Drawings, or As Built Drawings, of your proposed realignment on the August Avenue Outlet sewer, for our records. Please send these to the attention of Mr. James Robbins. Archivist, Engineering Section, Department of Public Works, 55 Portland Street, Portland, Maine, 04101-2991.

If I can be of further assistance, please call me at 874-8832.

Sincerely,
CITY OF PORTLAND

Frank J. Brancely, BA, MA
Senior Engineering Technician

FJB

cc: Alexander Q. Jaegerman, Acting Co-Director, Department of Planning, & Urban Development, City of Portland
✓Kandice Talbot, Planner, Dept. of Planning & Urban Development, City of Portland
Eric Labelle, PE, City Engineer, City of Portland
Bradley Roland, PE, Environmental Projects Engineer, City of Portland
Anthony W. Lombardo, PE, Project Engineer, City of Portland
Stephen K. Harris, Assistant Engineer, City of Portland
Todd Merkle, Field Inspections Coordinator, City of Portland
Desk File

From: Jeff Tarling
To: Kandi Talbot
Date: Thu, Jan 10, 2002 3:30 PM
Subject: Allen Ave. Abbott Site

kandi,

I tried to contact Steve Bradstreet concerning the landscape plan...

The plan needs additional shade trees / screening in the rear and sides, we can review when I get back on Tuesday.

Jeff t

Planning & Urban Development

CITY OF PORTLAND

December 14, 2001

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue (ID #2001-0309, CBL #344-E-006)

Dear Mr. Bradstreet:

This letter contains a recap of issues discussed by the Planning Board at the workshop meeting on December 11, 2001.

1. The elevation drawings of the 4-unit residential building will need to be revised. The Planning Board requested that the design of the 4-unit building maintain a similar design as the original cape and the proposed addition. The elevations drawings must show materials proposed and show all of the facades of the building.

2. At the rear of the property there is an existing fence. Your proposal shows relocation of the existing fence, while maintaining the existing natural buffer. You stated at the workshop meeting that there might be some disturbance. This should be noted on the plan and some replacement of the existing buffer should be addressed. Also, there was a suggestion that the area between the office and residential be landscaped, as well as fenced.

3. The Planning Board discussed the possibility of reducing the amount of pavement, such as reducing the width of the proposed driveway and possible shared parking. After discussions with Public Works and the Fire Department, it is possible to reduce the driveway width to 22 ft. Also, the plan should reflect a reduced parking area with a proposal for shared parking, if appropriate.

4. The applicant should look at pedestrian access to the site, such as a sidewalk along the entrance drive.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

Planning & Urban Development

CITY OF PORTLAND

December 12, 2001

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue (ID #2001-0309, CBL #344-E-006)

Dear Mr. Bradstreet:

After review of the sewer right-of-way language (see attached deed), there appears to be a threshold issue with the proposed project located at 300 Allen Avenue. The issue concerns the right, title and interest in the sewer right-of-way. Please submit a boundary survey done by a registered land surveyor of the site along with clear title information to the whole parcel proposed for development.

If you have any questions, please do not hesitate to contact me at 874-8901.

Sincerely,

Kandice Talbot

Kandice Talbot
Planner

CC: Alex Jaegerman, Chief Planner
Sarah Hopkins, Development Review Services Manager
Willy Audet, 400 Allen Avenue, Portland, ME 04103

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

Before me, Nathan W. Thompson, Justice of Peace.

Received October 9, 1943 at 11h 30m A.M. and recorded according to the original.

Portland Home Bldg. Assn. to City of Portland Deed

KNOW ALL MEN BY THESE PRESENTS, That the Portland Home Building Association, a corporation duly organized and existing under the laws of the State of Maine and having a place of business at Portland in the County of Cumberland and State of Maine, in consideration of one dollar ($1.00) and other valuable considerations to it paid by the City of Portland, a municipal corporation in said County and State, the receipt whereof is hereby acknowledged, does hereby give, grant, bargain, sell, convey and confirm unto the said City of Portland, its successors and assigns, the right to erect and maintain in and upon land now or formerly of this grantor, situated in said Portland on the northwesterly side of Allen Avenue, a twenty-four inch sewer for drainage purposes on the following courses and distances, according to a plan therefor made by the Department of Public Works for said City of Portland and duly recorded in the office of said department, viz:

Beginning at a point in the northwesterly side line of Allen Avenue, distant northeasterly along the said northwesterly side line of Allen Avenue 594.05 feet from the second angle in the said northwesterly side line of Allen Avenue southwesterly of Washington Avenue; which said point of beginning is distant easterly at right angles 25.00 feet from the westerly boundary line of land now or formerly of Mary J. Wilson; thence northerly and making an included angle with the northeasterly direction of the said northwesterly side line of Allen Avenue of 72° 03' and parallel with and distant easterly 25.00 feet at right angles from said westerly boundary line of land now or formerly of Mary J. Wilson, a distance of 246.60 feet to an intersection with the center line of August Avenue (so called), produced southerly, said intersection being 85.42 feet northerly from the intersection of the center line of August Avenue (so called) produced southerly, with the center line of Short Street (so called) produced easterly; thence northerly along the center line of August Avenue (so called) produced southerly, and making a deflection angle to the east of 11° 36½' with the last described line, a distance of 48.28 feet, more or less to land now or formerly of this grantor.

Also beginning at the point of intersection of the above first described line extending northerly from Allen Avenue and parallel with and 25.00 feet easterly from the westerly boundary line of land now or formerly of Mary J. Wilson, with the center line of said Short Street (so called) produced easterly; thence westerly along said center line of Short Street (so called) produced easterly, a distance of 27.01 feet, more or less, to an intersection with the said westerly boundary line of land now or formerly of Mary J. Wilson and land now or formerly of this grantor.

As part consideration for said easement of the right to erect and maintain said sewer, said Mary J. Wilson, her heirs and assigns, are to have the right to enter said sewer without cost or expense for the purposes of drainage of said lot

through which said proposed sewer will run, which was the property of said grantor on August 21st, 1922, at any time and at such point or points as she or her heirs and assigns may elect.

And as a further part of said consideration for said easement of the right to erect and maintain said sewer, said grantee, its successors and assigns, shall erect and maintain, at its own cost and expense, inlets in said proposed sewer of sufficient capacity to provide for the discharge of surface water into said sewer which may collect upon the low levels of said lot by reason of said sewer construction or by its obstruction of natural water courses, and to hold and save harmless said grantor, from loss, cost or damage which may arise from the accumulation of surface water upon adjacent premises by reason of said sewer construction or its interruption of natural water courses.

And also a right of way in August Avenue, extending from Cypress Street southeasterly to land now or formerly of Mary J. Wilson, for the purpose of maintaining, repairing or rebuilding the sewer in said August Avenue, built by the Portland Home Building Association in 1922.

Said right of way to be 50.00 feet in width and to lie within the side lines of said August Avenue as shown on plan of The Holmsteads, Portland, Maine, and recorded in Cumberland County Registry of Deeds, in Plan Book 14, page 70.

And also a right of way in Short Street, extending from Pennell Avenue northeasterly to land now or formerly of Mary J. Wilson, for the purpose of maintaining, repairing or rebuilding the sewer in said Short Street, built by the Portland Home Building Association in 1922.

Said right of way to be 50.00 feet in width and to lie within the side lines of said Short Street as shown on plan of The Holmsteads, Portland, Maine, and recorded in Cumberland County Registry of Deeds in Plan Book 14, page 70.

Consideration for this deed is less than one hundred ($100.00) dollars.

This deed is given for the purpose of correcting an error in a previous deed of the same property given by the said Portland Home Building Association to the City of Portland and dated August 21st, 1943.

TO HAVE AND TO HOLD all and singular the before described property with all the privileges and appurtenances thereto belonging, to the said City of Portland, its successors and assigns, to their own use and behoof forever.

And the said grantor corporation hereby covenants with the said grantee, its successors and assigns, that it is the lawful owner of the above described property and has good right to sell and dispose of the same as aforesaid; that the same is free from all encumbrances, and that it will warrant and defend the same against the lawful claims and demands of all persons.

IN WITNESS WHEREOF said Portland Home Building Association has caused its corporate name and its corporate seal to be affixed by William M. Pennell, its Treasurer, thereunto duly authorized, this eighth day of October in the year of our Lord one thousand nine hundred and forty-three.

Signed
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Signed, Sealed and Delivered
in presence of
Roscoe Phillips

CORPORATE
PORTLAND HOME BUILDING ASSOCIATION SEAL
by William M. Pennell, Treasurer

STATE OF MAINE

Cumberland, ss. October 8th, 1943

Personally appeared the above named William M. Pennell, Treasurer of the Portland Home Building Association, and acknowledged the above instrument to be his free act and deed, in his said capacity, and the free act and deed of said corporation.

Before me, Roscoe Phillips, Justice of the Peace.

Received October 11, 1943 at 9h -m A.M. and recorded according to the original.

Portland Home Bldg Assn. to City of Portland Deed.

KNOW ALL MEN BY THESE PRESENTS, That the Portland Home Building Association a corporation duly organized and existing under the laws of the State of Maine and having a place of business at Portland in the County of Cumberland and State of Maine, in consideration of the sum of one dollar ($1.00) to it paid by the City of Portland, a body politic and corporate, duly organized and existing according to law and located in said County and State, the receipt whereof is hereby acknowledged, does hereby give, grant, bargain, sell, transfer and deliver unto the said City of Portland, the following described sewers in Pennell Avenue, Cypress Street, August Avenue and Short Street, in said City of Portland, to wit:

Beginning at a point in the center of Pennell Avenue, said point being distant 385.00 feet northwesterly along the center line of Pennell Avenue from its intersection with the center line of Short Street produced westerly, at elevation of invert 79.465 feet; thence southeasterly through the center of Pennell Avenue, and on a descending grade of 0.300 feet per 100 feet, a distance of 35.00 feet to a manhold, elevation of invert 79.360.

Again beginning at the last described manhole, at elevation of invert 79.193 feet; thence southeasterly through the center of Pennell Avenue and on the same descending grade of 0.300 feet per 100 feet, a distance of 350.00 feet to a manhole and a connection with the Short Street sewer built in 1922, elevation of invert 78.143.

Again beginning at a point in the center line of Pennell Avenue, said point being distant 135.00 feet southeasterly along the center line of Pennell Avenue from its intersection with the center line of Short Street produced westerly, at elevation of invert 78.985 feet; thence northwesterly through the center of Pennell Avenue and on a descending grade of 0.500 feet per 100 feet, a distance of 135.00 feet to a manhole and a connection with Short Street sewer built in 1922, elevation of invert 78.310 feet.

Total length 520.00 feet 1 Manhole

Sewer is built of 8-inch vitrified pipe laid 5.1 feet deep at the point of beginning, said point of beginning being 385.00 feet northwesterly from the

AUGUST AVENUE OUTLET SEWER
AUGUST AVENUE SEWER
SHORT STREET SEWER

RIGHT OF WAY

Registry of Deeds, Book 1727, Page 275 (Deed) October 8, 1943
Portland Home Building Association to City of Portland.

Beginning at a point in the northwesterly side line of Allen Avenue, distant northeasterly along the said northwesterly side line of Allen Avenue 594.05 feet from the second angle in the said northwesterly side line of Allen Avenue southwesterly of Washington Avenue; which said point of beginning is distant easterly at right angles 25.00 feet from the westerly boundary line of land now or formerly of Mary J. Wilson; thence northerly and making an include angle with the northeasterly direction of the said northwesterly side line of Allen Avenue of 72° 03' and parallel with and distant easterly 25.00 feet at right angles from said westerly boundary line of land now or formerly of Mary J. Wilson, a distance of 246.60 feet to an intersection with the center line of August Avenue (so-called), produced southerly, said intersection being 85.42 feet northerly from the intersection of the center line of August Avenue (So-called) produced southerly, with the center line of Short Street (so-called) produced easterly; thence northerly along the center line of August Avenue (so-called) produced southerly, and making a deflection angle to the east of 11° 36½' with the last described line, a distance of 48.28 feet, more or less, to land now or formerly of this Grantor.

Also beginning at the point of intersection of the above first described line extending northerly from Allen Avenue and parallel with and 25.00 feet easterly from the westerly boundary line of land now or formerly of Mary J. Wilson, with the center line of said Short Street (so-called) produced easterly; thence westerly along said center line of Short Street (so-called) produced easterly, a distance of 27.01 feet, more or less, to an intersection with the said westerly boundary line of land now or formerly of Mary J. Wilson and land now or formerly of this Grantor.

And also a right of way in August Avenue, extending from Cypress Street southeasterly to land now or formerly of Mary J. Wilson, for the purpose of maintaining, repairing or rebuilding the sewer in said August Avenue, built by the Portland Home Building Association in 1922.

Said right of way to be 50.00 feet in width and to lie within the side lines of said August Avenue as shown on plan of The Holmsteads, Portland, Maine and recorded in Cumberland County Registry of Deeds in Plan Book 14, Page 70.

And also a right of way in Short Street, extending from Pennell Avenue northeasterly to land now or formerly of Mary J. Wilson, for the purpose of maintaining, repairing or rebuilding the sewer in said Short Street, built by the Portland Home Building Association in 1922.

Said right of way to be 50.00 feet in width and to lie within the side lines of said Short Street as shown on plan of The Holmsteads, Portland,Maine and recorded in Cumberland County Registry of Deeds in Plan Book 14, Page 70.

Sebago Technics

Engineering & Planning for the Future

01P309

TO: Kandice Talbot - Planner

FROM: Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.

RE: Cyrus B. Abbott/OPM Inc. Professional/Residential Development - 300 Allen Avenue

DATE: December 7, 2001

I have reviewed the Site Plan for Cyrus B. Abbott/OPM Inc. Professional/Residential Development - 300 Allen Avenue and have the following comments:

1. I have read the letter from Stephen Bradstreet, P.E. of Environmental Engineering & Remediation Inc. and agree that stormwater detention is available for this proposed project. However, I have concerns about the quantity of stormwater that could be introduced into the combined sewer system. Looking at the calculations for the 10-year storm, the proposed changes by the project could introduce as much as 9.25 cfs into the existing system. That is approximately half of the pipe's capacity for just this project alone. A 25-year storm would utilize even more. Considering that this system also primarily carries sewage, this may not be a good decision to enter this much runoff. I feel that the applicant can further add a design that can limit the peak amount of runoff into the combined system by possibly utilizing either underground storage using oversized pipes, or using flow controls such as hydrobrakes to allow temporary ponding in proposed catch basins, pipes, and low lying areas. At a minimum, the applicant shall receive a letter from the Public Works Dept. allowing the designed peak flow into the combined sewer. The applicant also needs to include the actual calculations and summary for the 25-year storm and its effects on site and downstream.

2. I have a couple of questions regarding the stormwater report:

   a. The calculations don't show a real increase in the impact that the lot experiences due to development. The CN value only changes by one number in the proposed development, Watershed #1.

b. The engineer shall also include a drainage plan to be used in conjunction with the stormwater model. It is difficult to follow the model without a matching plan.

c. Results of the 25-year storm need to be submitted.

3. The proposed project is a combination of residential and professional use which requires up to 22 parking spaces (accumulative in two parking lots). I strongly believe that, since there is no reasonable buffer available on the project site or off site to be used for stormwater treatment, the project shall be required to install a treatment tank system. Based on previous applications for new residential developments used by both the City and DEP, the engineer shall be required to show 40% TSS removal.

4. The current site is a natural low area where ponding routinely occurs due to the "bowl-like" topography. It appears that the land may be wet or saturated frequently. The applicant should verify that these are not wetlands and, if they are, delineate accordingly on the site plans. Any filling of wetlands, as always, shall be coordinated through the local branch of the MDEP.

5. If the City allows for the additional stormwater flows to enter their combined sewer system, then the culvert facing Short Street shall be designed with a trash rack to prevent large obstructions from entering the sewer and possibly causing plugging in other downstream structures. An optional design could be a field inlet. It could be used in a manner that a flow control device could regulate flows entering and prevent sewer gases from being possibly exhausted, as the case may be with an open culvert tied to an active sanitary sewer.

6. The plans indicate that a stone-lined island is to be constructed between the two proposed parking lots. If stone is the landscaping medium used, a detail of the size and type of stone shall be provided. Also, because runoff/snowmelt will penetrate into the parking lot base, an underdrain pipe should be installed to remove runoff seepage such that it does not interfere with the structural integrity of the parking lots.

7. The access entrance into the site has short radius curves. It is evident that the entrance is very tight between the existing building and property line. Please have Larry Ash review the traffic turning design and entrance onto Allen Avenue.

8. This project does not indicate a location for a dumpster. Will a dumpster be required? If one is required, it must be screened and placed for easy maintenance.

9. Due to the buildings being constructed with zero tolerance with the setback lines, the applicant shall have the foundation location certified by a licensed State of Maine land surveyor. The surveyor shall submit a drawing and statement that the building meets the required zoning setbacks.

10. A general construction schedule or timeframe shall be included and added to the Erosion Control Notes on Sheet 7 of 7.

11. Tony Lombardo, P.E. has raised some concerns regarding the location of the existing sewer easement. You should check with legal counsel to make sure that the easement language is on the plan and that new documents are derived to address any change in the required easement that the City currently has over the property. I would suggest that you obtain a boundary survey for this review along with all deeds associated with the property.

Please feel free to contact me if you or the design engineer have any questions with my comments or concerns. I will be available through Tuesday to assist you and the applicant if warranted to address as many of my comments as possible.

JRS:jrs/jc

Planning & Urban Development

CITY OF PORTLAND

December 6, 2001

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue (ID #2001-0309, CBL #344-E-006)

Dear Mr. Bradstreet:

After review of the plans submitted on November 26, 2001, regarding the proposed office building addition and 4-unit residential building located at 300 Allen Avenue, the following information is requested for review.

1. Elevation drawings of the proposed 4-unit residential building must be submitted. The elevation drawings must show material to be used and show all of the facades of the building. You also must meet the multiplex standards, which are included for your review.
2. It does not appear that a dumpster is proposed for the site. The applicant must address how they will handle waste and provide a contract for handling waste.
3. The applicant must submit utility capacity letters from the Portland Water District and the Portland Sewer Division.
4. The plans should specify that any existing granite removed within the City right of way, in order to create the proposed entrance widening, must remain City property and delivered to a designated City stockyard.
5. Any new manholes installed along the main line of the existing City 18" diameter vitrified clay sanitary sewer need to specified as "doghouse" style manholes. Public Works feels this will minimize the disturbance, during construction, to the City system. The existing clay sewer is also cradled in concrete. Further, the existing pipe can be utilized as the manhole structure channel.
6. The plans should clearly specify the respective size (diameter) of each proposed sanitary manhole. Specifically, the proposed sanitary sewer manhole that receives 2 – 15" dia. inverts, 2 – 24" inverts. This manhole will need to be larger than a typical 4' dia. structure.

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7. The applicant should be made aware of the fact that City records don't reveal all of the potential connections that may exist in the existing sanitary sewer main. Therefore, the applicant should request to review Public Works videos of this sewer. If video records don't exist then Public Works will require that the applicant contract with an appropriate plumbing contractor to obtain this information and provide Public Works with a copy. This is essential in the area proposed to be relocated and replaced.

8. Contact should be made with Carol Merritt at Public Works to verify the appropriate fees associate with connecting into City sewer as well as working within the City right of way.

9. The application and plans need to clearly specify the "sewer right of way" that exists and which contains the 18" sanitary sewer flowing southeasterly, known as the Short Street sewer and the "sewer right of way" that contains the 18" and 24" sanitary sewer flowing southwesterly, known as the August Ave. sewer. These right of ways are 50' wide and are recorded in the Cumberland County Registry of Deeds under Book 1727, Page 275 on 10/8/43. The proposed structure additions and proposed structures are encroaching on this sewer right of way. Further, the relocation and replacement of a section of this existing sewer main will require a revision to the existing right of way.

10. The Traffic Engineer is requesting that the applicant provide 20 ft. radii at the driveway entrance.

11. The City Arborist is currently reviewing the landscape plan and comments will be forwarded as soon as I receive them. We understand that you are proposing the stockade fence to buffer the residential use from the business use, however, instead of the crushed stone within this island, we would like to see substantial landscaping along the fence, on both sides.

12. It is not clear from your submittal which light fixtures are proposed. It also appears by from the lighting plan that there is spillover in the rear of the site, on both sides of the property. This must be addressed.

13. Applicant must show a fire hydrant within 500 ft. of the project on the plan.

14. A written statement must be submitted which includes description of proposed uses, quantity and type of residential, general summary of existing and proposed easements, method of handling solid waste disposal, estimate of time period required to complete project, and a list of all state and federal regulatory approvals which may be required.

15. A letter of financial capability from a financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved should be submitted.

16. The Development Review Coordinator is currently reviewing the drainage plans and I will forward comments when I receive them. There has been some discussion surrounding stormwater quality, because the drainage is tying directly into the sewer. Stormwater treatment could become a requirement.

17. As you are aware, a neighborhood meeting is required after the workshop, but at least 7 days prior to the scheduled public hearing. The applicant is responsible for noticing the neighbors, however we will provide labels. The labels must be requested at least two days in advance and there is a charge of $1 a sheet for labels.

Any further comments will be forwarded to you as soon as I receive it. If you have any questions, please do not hesitate to contact me at 874-8901.

Sincerely,

Kandice Talbot

Kandice Talbot
Planner

CC: Alex Jaegerman, Chief Planner
Sarah Hopkins, Development Review Services Manager

Planning & Urban Development

Alexander Jaegerman
Planning Director

CITY OF PORTLAND

January 29, 2002

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue
ID #2001-0309, CBL #344-E-006

Dear Mr. Bradstreet:

After review of the plans submitted on January 22, 2002, the following comments have been generated:

1. The multiplex standards states, "the design of the proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas..." The side elevations of the four-unit building should include at the least one (1) additional window on the second floor.

2. It is difficult to determine from the lighting plan if the light levels proposed for the site meet the lighting standards. The light levels must be shown to property lines to be able to determine if there is any spillover onto abutting properties.

3. Please submit a copy of the entire deed referenced in the December 31, 2001 letter from Titcomb Associates.

4. The applicant must provide an adequate easement area for the sewer right-of-way for maintenance of the sewer by the City. In order to determine the location for the easement, the sewer pipe will have to be field located.

5. The trench proposed for the underground electrical and cable must be separated from the existing sewer line by eight (8) feet.

6. The applicant must provide on-site storage to offset the stormwater peaks, which will be directed into the existing sewer. The applicant must also address how the proposed stormwater plan will effect downstream.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

7. Attached is Tony Lombardo's memo regarding his review of the most recently submitted plans. Please address these comments accordingly.

If you have any questions, please do not hesitate to contact me at 874-8901.

Sincerely,

Kandice Talbot

Kandice Talbot
Planner

CC: Sarah Hopkins, Development Review Services Manager
Willy Audet, 400 Allen Avenue, Portland, ME 04103

Planning & Urban Development

Alexander Jaegerman
Planning Director

CITY OF PORTLAND

January 16, 2002

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue
ID #2001-0309, CBL #344-E-006

Dear Mr. Bradstreet:

The City Arborist has recently reviewed the landscaping plan and is recommending the following changes to the plan:

1. Along the easterly property line, in the area of the existing garage, the City Arborist is recommending three (3) Spruce or Pine trees, 5 – 6 ft. in height.

2. As mentioned previously, we understand that you are proposing the stockade fence to buffer the residential use from the business use, however, instead of the crushed stone within this island, we would like to see landscaping along the fence, on both sides. Staff is recommending that five to six (5-6) shade trees should be installed within this area, half on each side of the fence and the trees should be staggered. The specie of the shade trees should be either Ornamental Pear, European Hornbeam or 'Armstrong' Maple and should be 2.5" or greater caliper.

3. Along the westerly edge of the property, near the turnaround for the office parking, it is recommended that two (2) Summit Ash trees, 2.5" caliper be placed on either side of the turnaround.

4. Two (2) Spruce or Pine trees, 5 – 6 ft. in height, should be placed on the westerly edge of the property near the side of the residential building and five (5) Spruce or Pine trees, 5 – 6 ft. in height, should be placed on the northerly edge of the property, near the rear of the residential building.

5. A Red Maple tree, 2.5" caliper shall be placed within the grassed area near the northeasterly corner of the parking area for the residential building.

6. The Planting Schedule shall be revised to replace Crimson King with Red Maple and the size of the Emerald Green shall be 5' – 6' ht.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

If you have any questions, please do not hesitate to contact me at 874-8901.

Sincerely,

Kandice Talbot

Kandice Talbot
Planner

CC: Sarah Hopkins, Development Review Services Manager
Willy Audet, 400 Allen Avenue, Portland, ME 04103

From: Anthony Lombardo
To: Sarah Hopkins
Date: Thu, Nov 29, 2001 11:19 AM
Subject: 300 Allen Ave.

I have reviewed the application submitted by EER, on behalf OPM, INC. and offer the following comments:

1.The plans should specify that any existing granite removed within the City right of way, in order to create the proposed entrance widening, must remain City property and delivered the a designated City stockyard.
2. Any new manholes installed along the main line of the existing City 18" diameter vitrified clay sanitary sewer need to specified as "doghouse" style manholes. Public Works feels this will minimize the disturbance, during construction, to the City system. The existing clay sewer is also cradled in concrete. Further, the existing pipe can be utilized as the manhole structure channel.
3. The plans should clearly specify the respective size (diameter) of each proposed sanitary manhole. Specifically, the proposed sanitary sewer manhole that receives 2 - 15" dia. inverts, 2 - 24" inverts. This manhole will need to be larger than a typical 4' dia. structure.
4. The applicant should be made aware of the fact that City records don't reveal all of the potential connections that may exist in the existing sanitary sewer main. Therefore, the applicant should request to review Public Works videos of this sewer. If video records don't exist then Public Works will require that the applicant contract with an appropriate plumbing contractor to obtain this information and provide the Public Works with a copy. This is essential in the area proposed to be relocated and replaced.
5. The applicant should contact Carol Merritt at Public Works to verify the appropriate fees associate with connecting into City sewer as well as working within the City right of way.
6. The application and plans need to clearly specify the "sewer right of way" that exists and which contains the 18" sanitary sewer flowing southeasterly, known as the Short Street sewer and the "sewer right of way" that contains the 18" and 24" sanitary sewer flowing southwesterly, known as the August Ave. Sewer. These right of ways are 50' wide and are recorded in the Cumberland County Registry of Deeds under Book 1727, Page 275 on 10/8/43. The proposed structure additions and proposed structures are encroaching on this sewer right of way. Further, the relocation and replacement of a section of this existing sewer main will require a revision to the existing right of way.

City of Portland Site Plan Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 300 Allen Avenue		
Total Square Footage of Proposed Structure 3000SF Addition + 4 Unit Building	Square Footage of Lot 36,000 SF	
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# Map 344 E #6	Property owner, mailing address: OPM, Inc. 400 Allen Avenue, Portland, ME 04103	Telephone: 797-7777
Consultant/Agent, mailing address, phone & contact person EER, Inc./Steve Bradstreet 222 St. John Street, Ste.314 828-1272/774-6907 FAX	Applicant name, mailing address & telephone: Arthur Dyer same as above	**Project name:** Cyrus B. Abbott Professional Bldg.

Proposed Development (check all that applies) X New Building X Building Addition X Change of Use
X Residential X Office ___Retail ___Manufacturing ___Warehouse/Distribution ___Parking lot
___Subdivision, amount of lots_____
___Other:_____

Major Development X $500.00 **Minor Development**_____ $400.00

Who billing will be sent to:	Arthur Dyer		
Mailing address:	same as above		
State and Zip:		Contact person:	Phone:
		Arthur Dyer	797-7777

Nine (9) separate packets must include the following:

a. copy of application
b. cover letter stating the nature of the project
c. site plan containing the information found in the attached sample plans check list

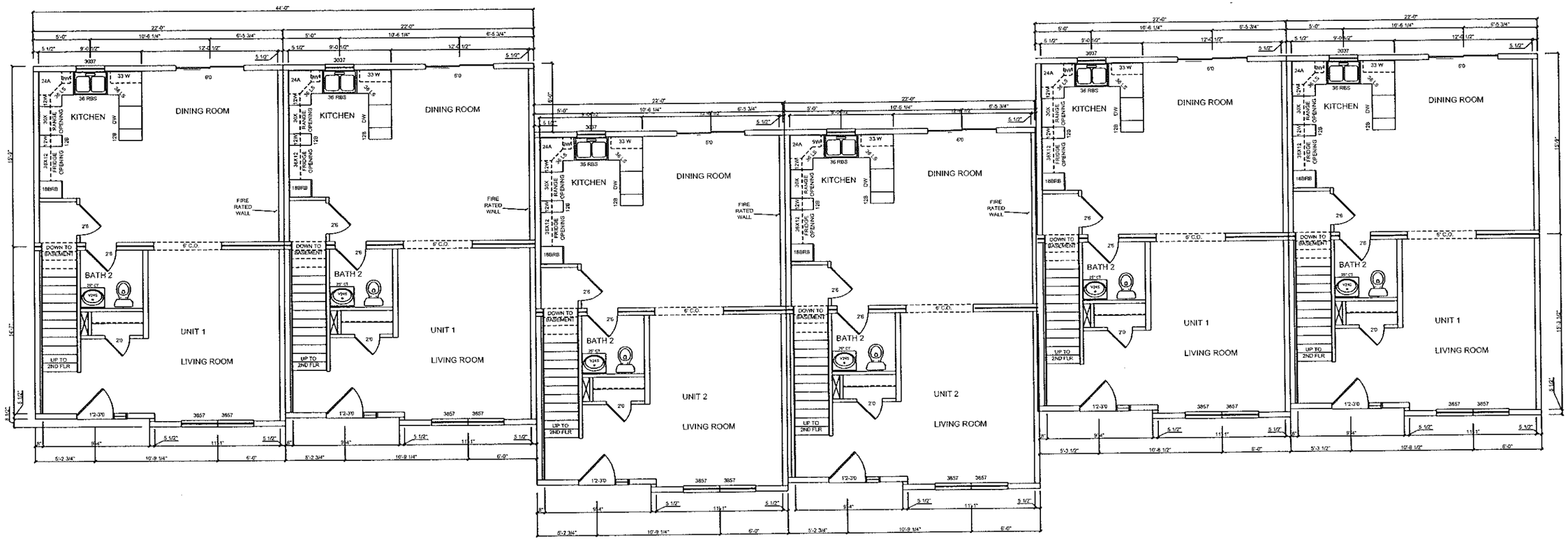
All plans must be folded neatly and in packet form

Section 14-522 of the Zoning Ordinance outlines the process, copies are available at the counter at .25 per page, you may also visit the web site: ci.portland.me.us chapter 14

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: Arthur Dyer	Date: 11/21/01

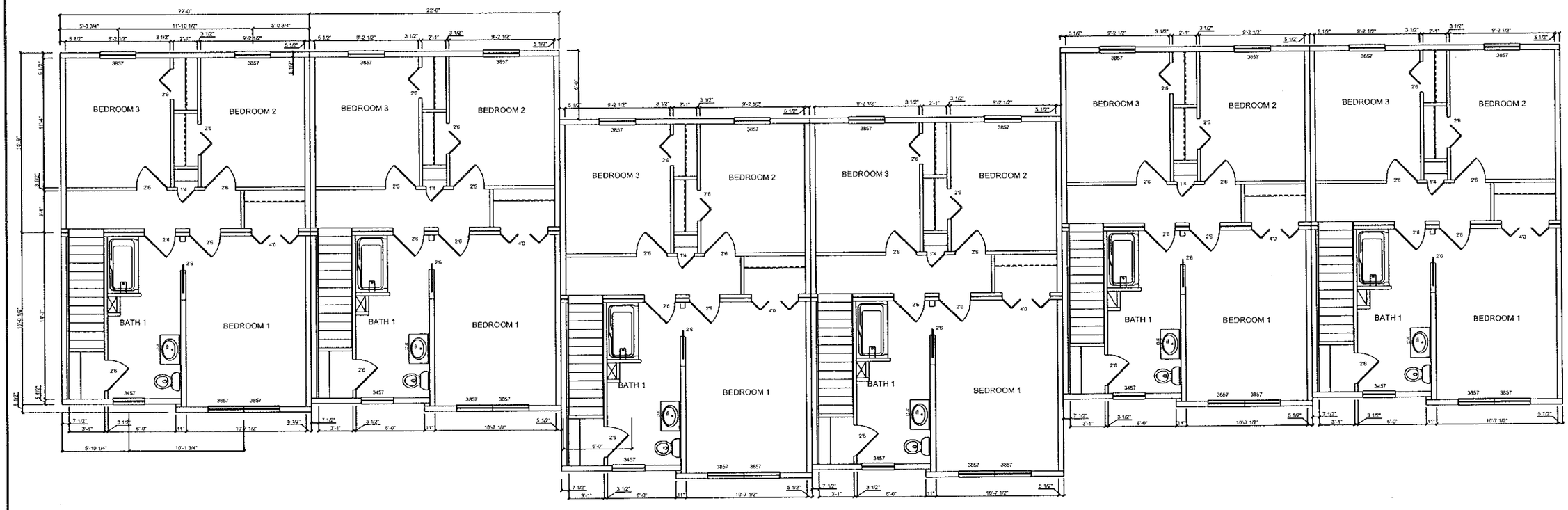
This application is for site review ONLY, a building Permit application and associated fees will be required prior to construct



1ST FLOOR PLAN

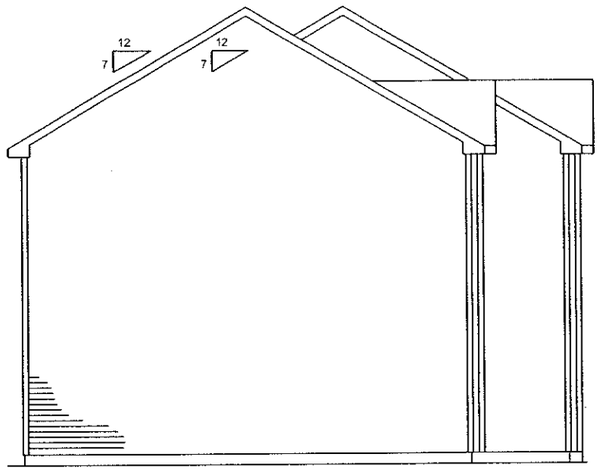
JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223

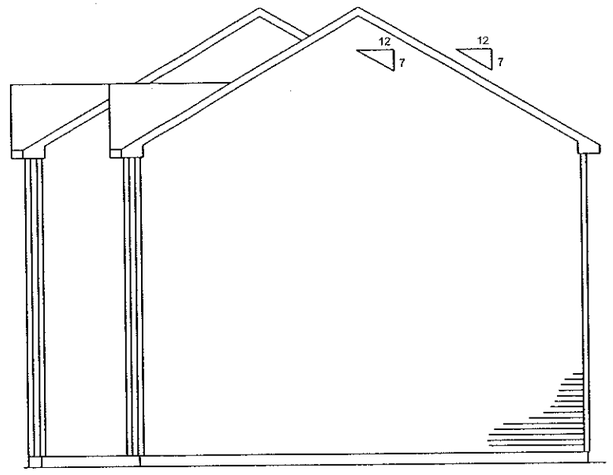


JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	2ND FLOOR PLAN SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

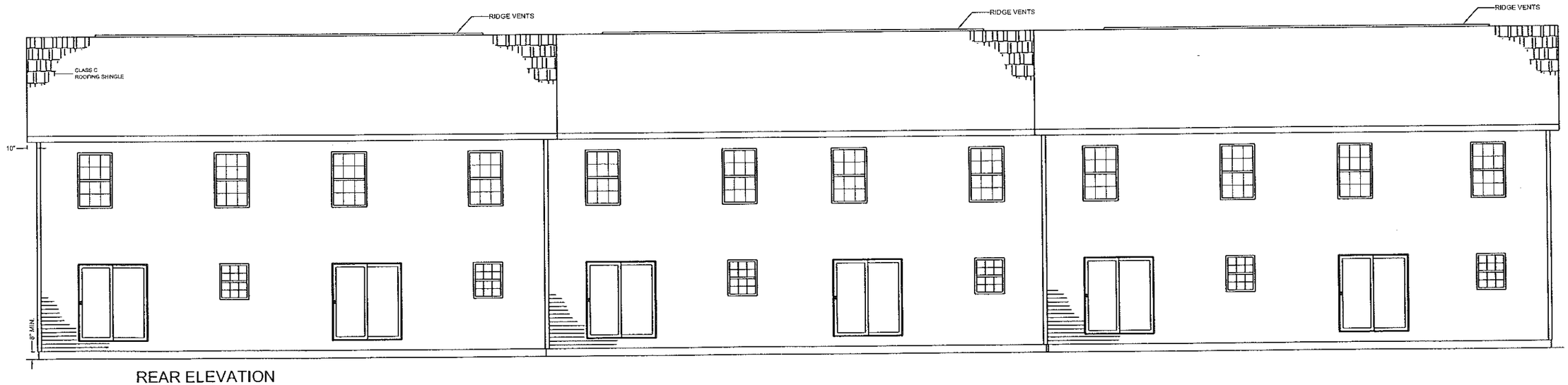
KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223



RIGHT ELEVATION



LEFT ELEVATION



REAR ELEVATION

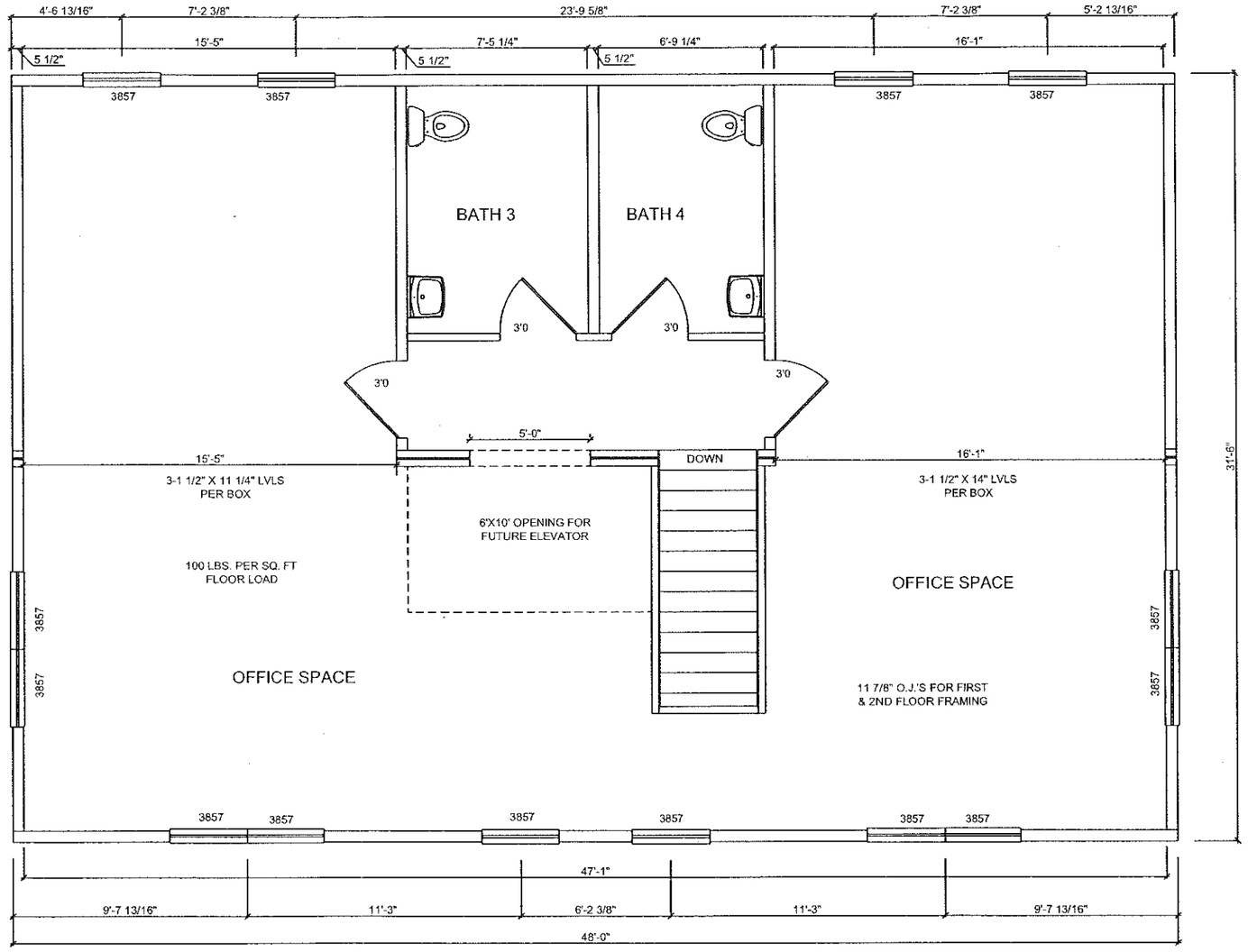
JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	ELEVATIONS ALL SHEET # 5a DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223

FRONT ELEVATION

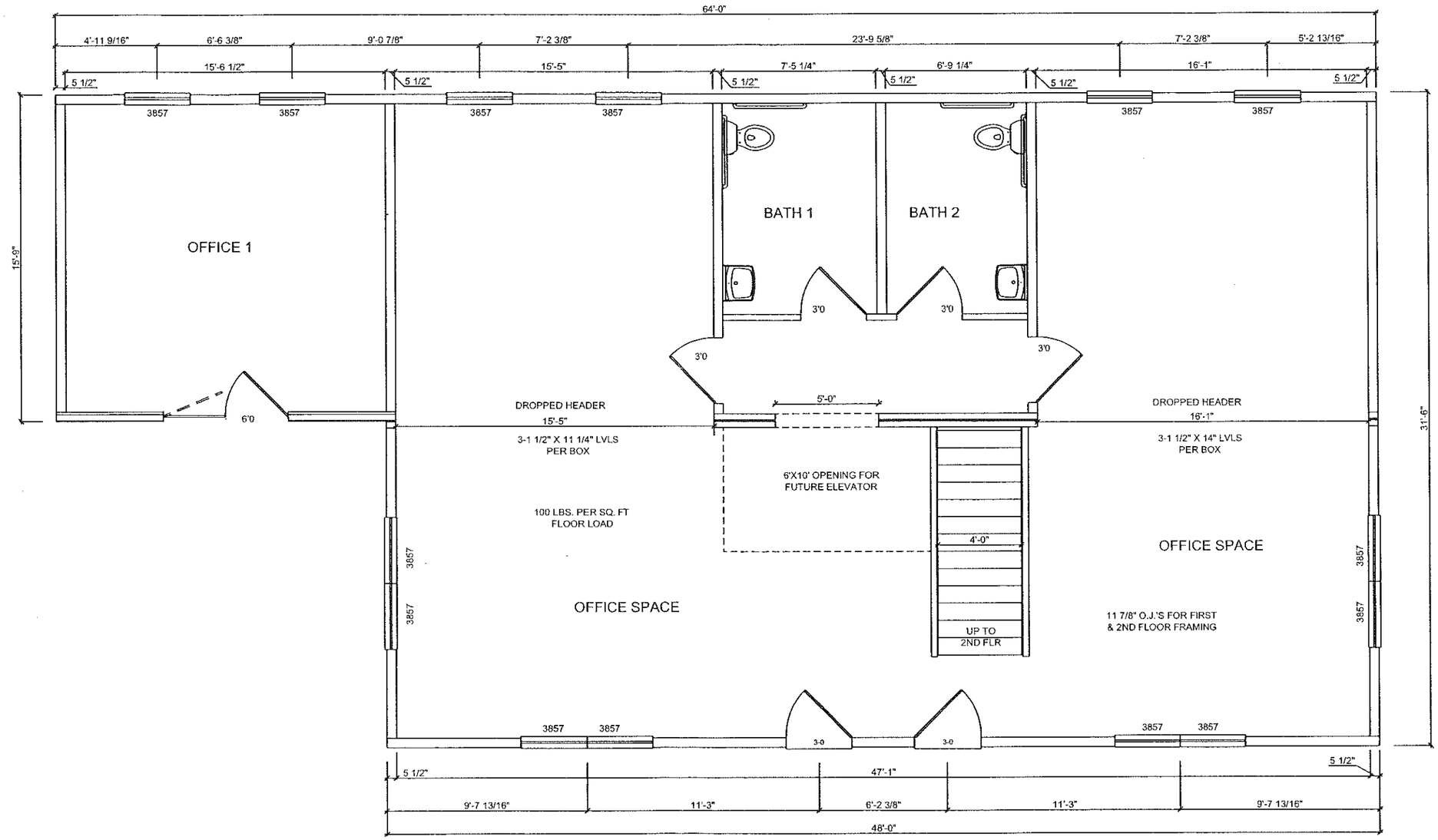
JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS	REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223



2ND FLOOR PLAN

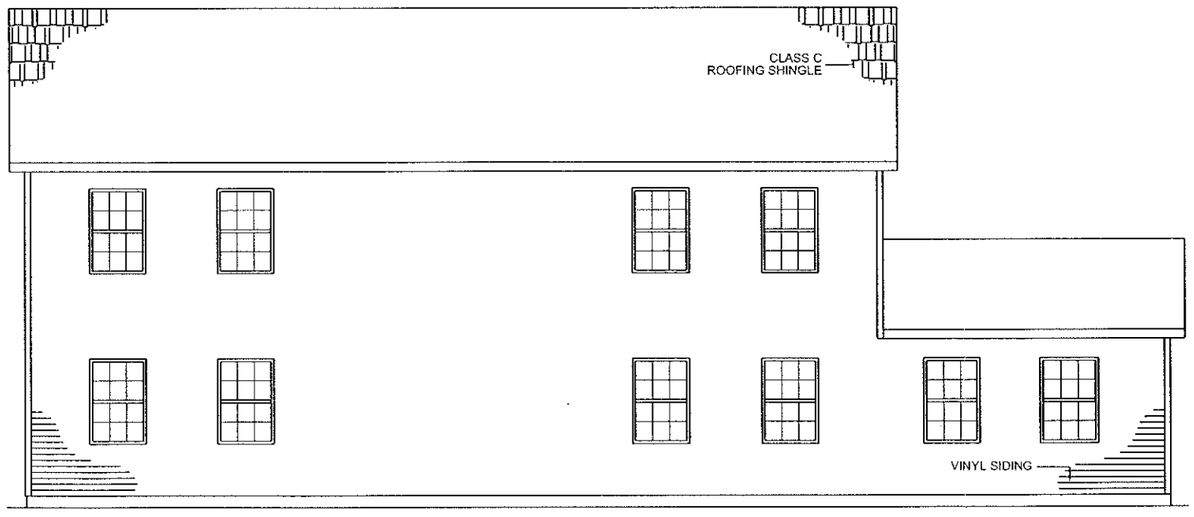
JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3A DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS	REV # REV # REV # REV #	KBS BUILDING SYSTEMS	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223



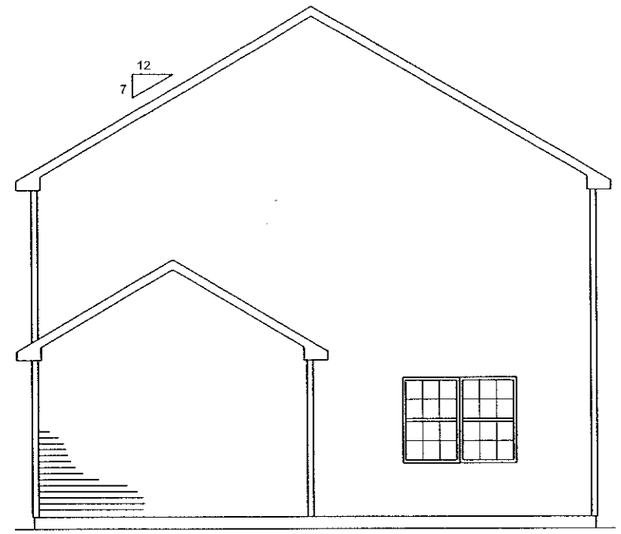
1ST FLOOR PLAN (9FT. CEILING)

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

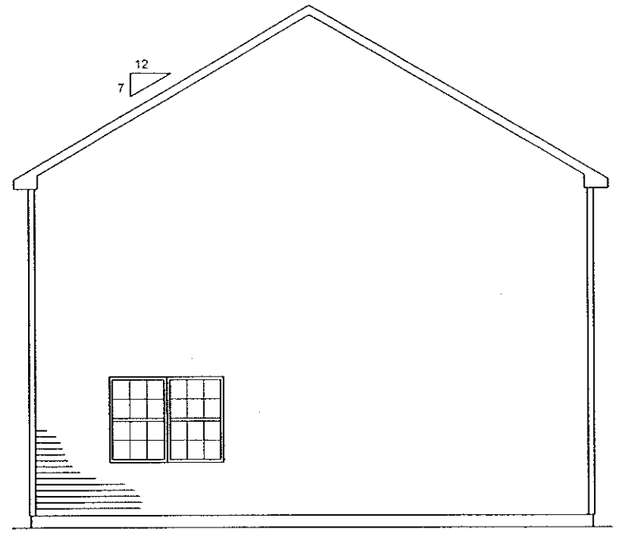
KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223



REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION

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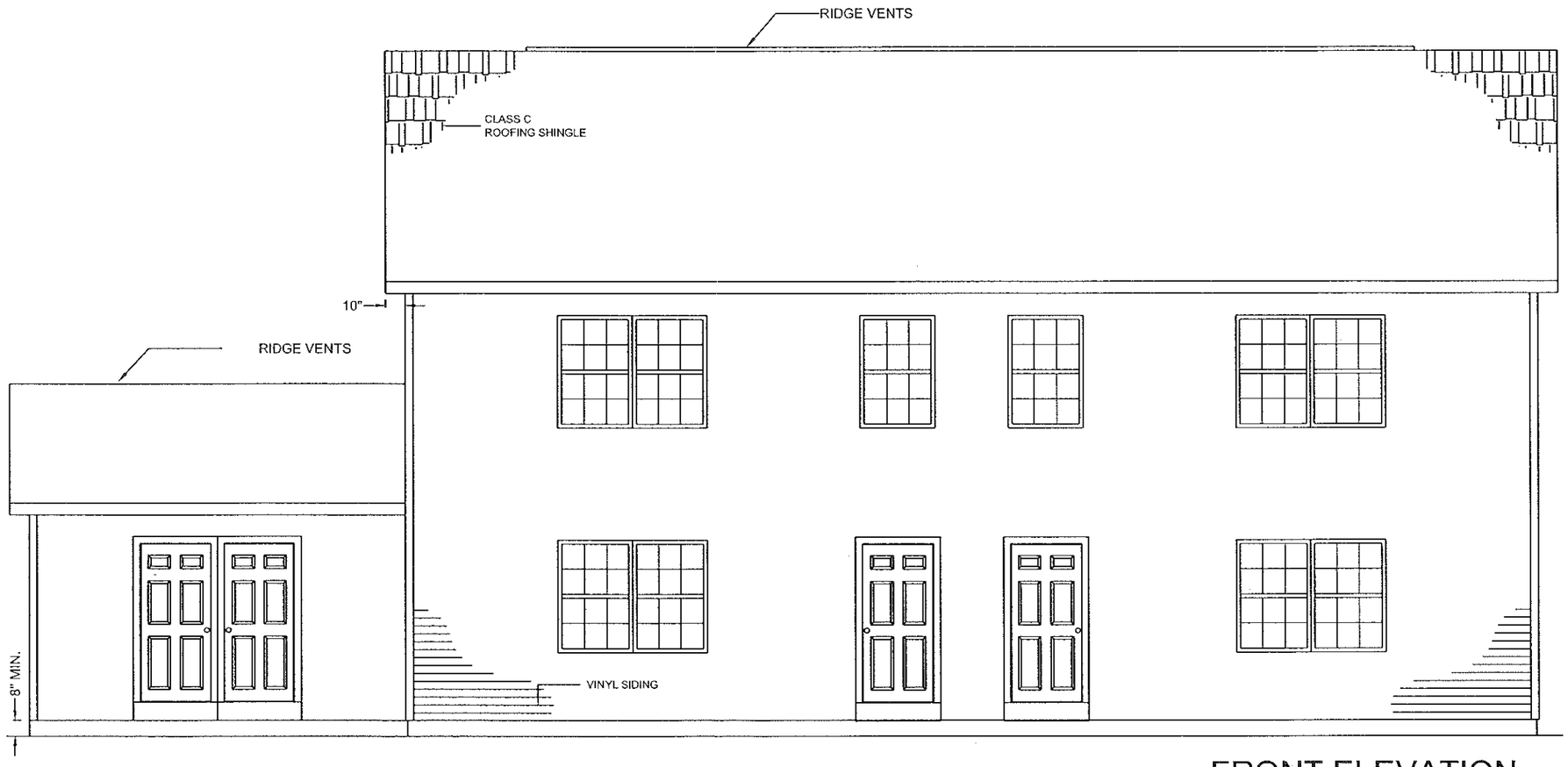
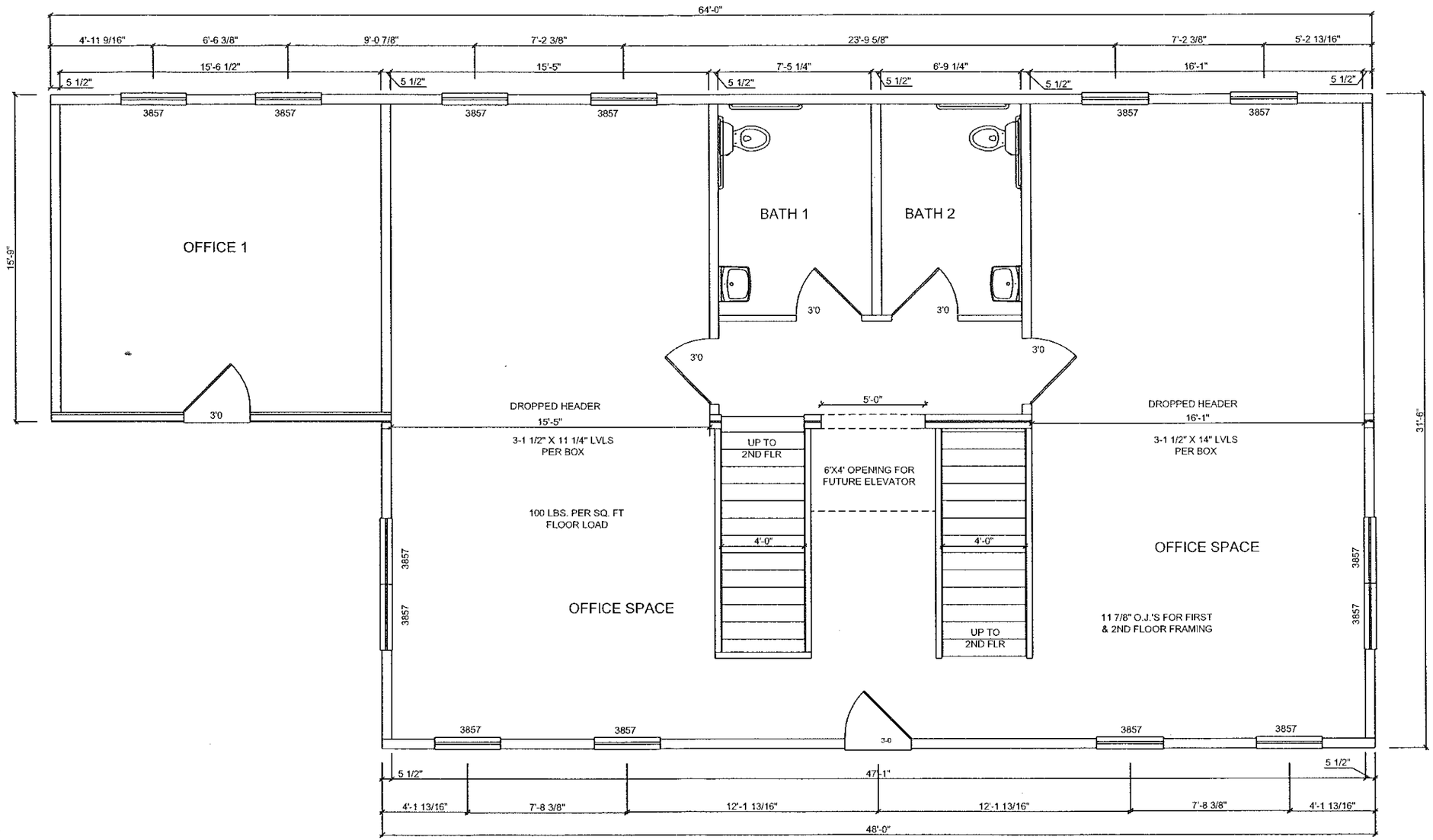
KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223



FRONT ELEVATION

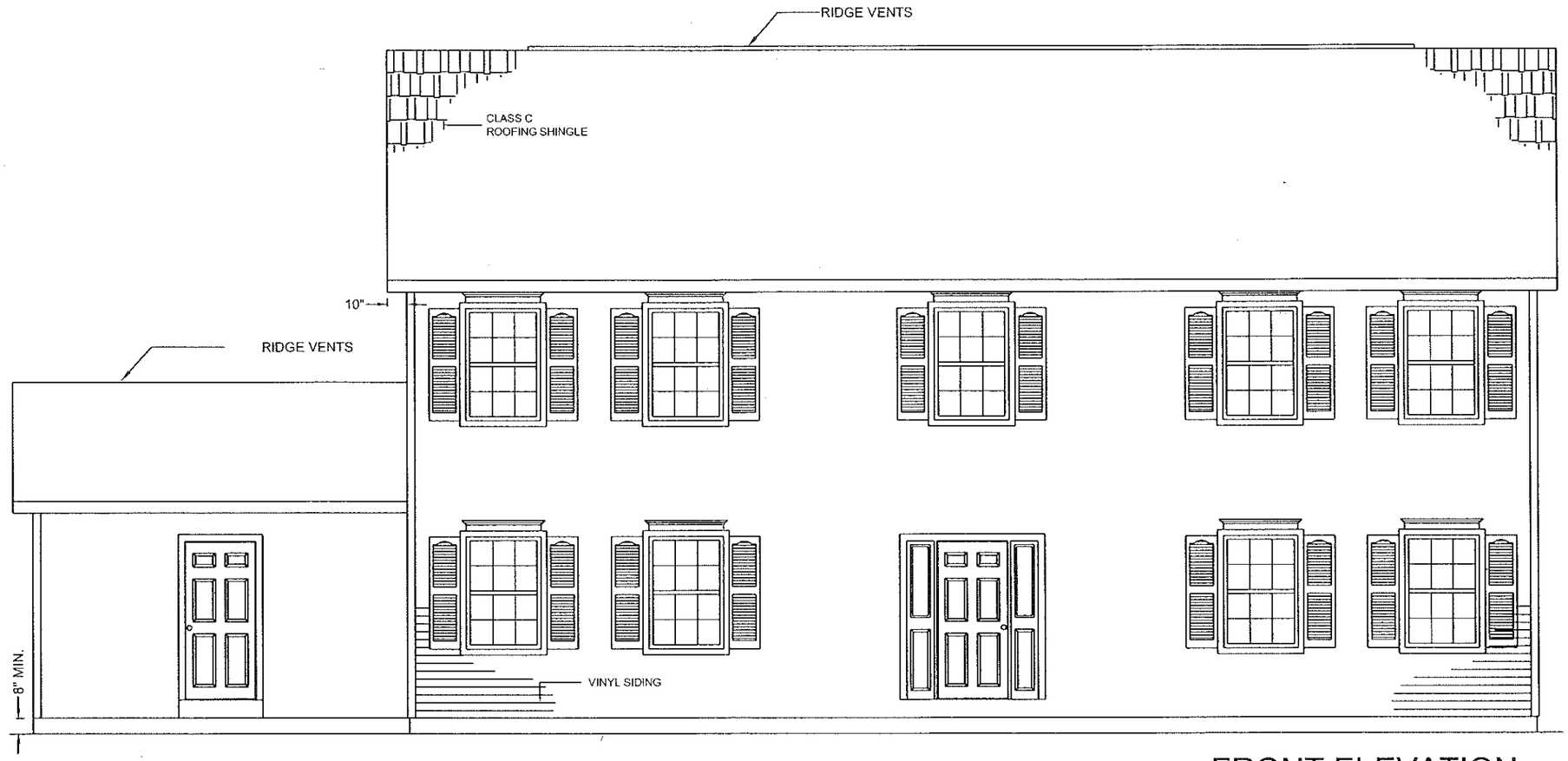
FRONT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 5 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223



1ST FLOOR PLAN (9FT. CEILING)

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV #1 9/17 BY:JC REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223



FRONT ELEVATION

FRONT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 5 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV #1 9/17 BY:JC REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

PBM1

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Chair Caron and Members of the Portland Planning Board

FROM: Kandice Talbot, Planner

DATE: December 11, 2001

SUBJECT: Cyrus B. Abbott Site Development, OPM, Inc., Applicant
Vicinity of 300 Allen Avenue

Introduction

OPM, Inc. is proposing a 1, 540 sq. ft., 2-story addition to the existing building located at 300 Allen Avenue. The building will be used for professional offices. Currently, the existing building is residential. The applicant is also proposing a 4-unit residential building in the rear of the property. This building will total 2,420 sq. ft. A vicinity map is included as Attachment 1. The site is 35,779 sq. ft. The zoning for the site is R-P and R-5, which was recently approved by the City Council. The development will be subject to site plan and subdivision review.

Zoning

As the Board may recall, the applicant requested a zone change for the property located at 300 Allen Avenue, from R-5 to B-2. After discussion, the Planning Board recommended that the front portion of the property located at 300 Allen Avenue be rezoned from R-5 to R-P, because there was a concern of the impact on the residential neighborhood north of the property. The Planning Board also recommended that the two-family home, located at 308 Allen Avenue, be rezoned to R-P and a portion of the Burger King site, located at 318 Allen Avenue be rezoned B-2.

The City Council held a public hearing and approved the rezoning of the front portion of the property at 300 Allen Avenue to R-P, and the portion of the Burger King site to B-2. The City Council left the property at 308 Allen Avenue in the R-5 zone.

As shown on the plan, the office addition and most of the parking is within the R-P zone. The residential units and all of the associated parking are located within the R-5 zone. At a meeting with the Zoning Administrator and the applicant the following items were discussed based on zoning: 1) The number of allowable units can be based on the total lot area and not on the area specifically within the R-5 zone, 2) The office use may extend 35 ft. beyond the R-P/R-5 zone line, thereby allowing office parking in the R-5 zone, and 3) residential access through the R-P zone is allowed. The Zoning Administrator's memo is included as Attachment 4.

Development

1. Utilities

Sanitary sewer service will be connected to the existing sanitary sewer main crossing the site. The applicant is proposing to relocate the sewer line to accommodate four residential units on the site. A 2" water service will be connected to the existing water line within Allen Avenue. Electrical and telephone services will be extended underground from the existing overhead lines. The applicant will need to submit utility capacity letters from the Portland Water District and the Portland Sewer Division.

Public Works has reviewed the plans and is requesting that the applicant revise the plans to clearly specify the size of each proposed sanitary manhole and that any new manholes installed along the main line of the existing City sanitary sewer need to specified as "doghouse" style manholes. Also, if information is not available at Public Works, the applicant may need to contract a plumbing contractor to obtain all possible connections that may exist within the existing sanitary sewer main and provide Public Works with a copy. This is essential in the area of the sewer main where it is proposed to be relocated and replaced.

Public Works is also requesting that the application and plans clearly specify the "sewer right of way" that exists and which contains the 18" sanitary sewer flowing southeasterly, known as the Short Street sewer and the "sewer right of way" that contains the 18" and 24" sanitary sewer flowing southwesterly, known as the August Avenue sewer. These rights of ways are 50' wide and recorded in the Cumberland County Registry of Deeds. The proposed structures are encroaching on this sewer right of way, which could be a potential issue. Corporation Counsel is currently reviewing this concern. Also, the relocation and replacement of a section of this existing sewer main will require a revision to the existing right of way.

Public Works' memo is included as Attachment 5.

2. Soil Erosion

The applicant has submitted an erosion and sedimentation control plan. The Development Review Coordinator is currently reviewing the plans.

3. Traffic

Access is from Allen Avenue through one driveway. The existing garage will be removed to allow the construction of the driveway to the rear of the site. The Traffic Engineer is requesting that the applicant provide 20 ft. radii at the entrance of the driveway. The driveway entrance will be constructed with granite curb. Sidewalk and granite curb exist along Allen Avenue.

The applicant is proposing two separate parking areas for the separate uses. The office parking lot will consist of twelve (12) parking spaces. The residential parking area will consist of nine (9) parking spaces.

4. Sanitary/Stormwater

The existing site currently consists of a residential home and a backyard, which is an overgrown field with a perimeter of shrubs and trees. The site is bowl shaped as a result of abutting development over the years. The site will be graded to collect and direct on and off-site runoff into the existing 24" vitrified clay storm drainage pipe that runs through the site. A stormdrain system will collect runoff within the site and a swale system will direct runoff coming from off-site to a field inlet that will be located on the west side of the site. A stormdrain manhole will be installed so that if the combined sewer is ever separated, there is a convenient location for separation. Casco traps are proposed in the structures to prevent passing floatables.

Staff is determining whether treatment of the stormwater will be required. The Development Review Coordinator is currently reviewing the plans.

5. Financial Capability

The applicant has not submitted proof of financial capability at this time. A letter of financial capability will be required prior to a public hearing being scheduled.

6. Landscaping/Existing Vegetation

The applicant has submitted a landscape plan. Proposed for landscaping are several landscape beds around the proposed office building and in the front of the proposed residential building. The landscape areas will consist of two (2) Crimson King trees, and a variety of shrubs, such as Hummingbird Summersweet, Blue Sargent, Rhododendron, Azalea, and Emerald Green. To separate the office use from the residential use, the applicant is proposing an island, which will consist of crushed stone and a 6' high stockade fence.

The City Arborist is currently reviewing the landscape plan. Ordinance requires that two (2) trees be installed for each residential unit. The applicant will be required to plant eight (8) trees around the site. A portion of these trees will be required along Allen Avenue. The applicant should also look at landscaping along the separation fence instead of the proposed crushed stone.

7. Exterior Lighting

The applicant is proposing nine (9) light poles around the site. The poles will be 14 ft. high and the fixtures will be 175-watt lights. Catalogue cuts of the lighting and a photometric plan have been submitted and are included as Attachments 7 and 10c. Staff has a concern with light spillover on the easterly and westerly property lines near the proposed residential building. The applicant will need to address this concern.

8. Dwelling Unit Type

OPM, Inc. is proposing a 1, 540 sq. ft., 2-story addition to the existing building located at 300 Allen Avenue. The building will be used for professional offices. Currently, the existing building is residential. The building façade will consist of wood clapboards and MDO plywood. The applicant is proposing a cupola on the top of the addition, which will be visible from Allen Avenue. Elevations of the addition are included as Attachment 11.

The applicant is also proposing a 4-unit residential building in the rear of the property. This building will total 2,420 sq. ft. Patios are proposed on the rear of the units. Staff has requested elevations from the applicant.

9. Fire

The Fire Department is requesting that the applicant show a fire hydrant within 500 ft. of the proposed site.

10. Solid Waste Disposal

A dumpster is not proposed on the site. The applicant must address how they will handle waste and provide a contract for handling waste.

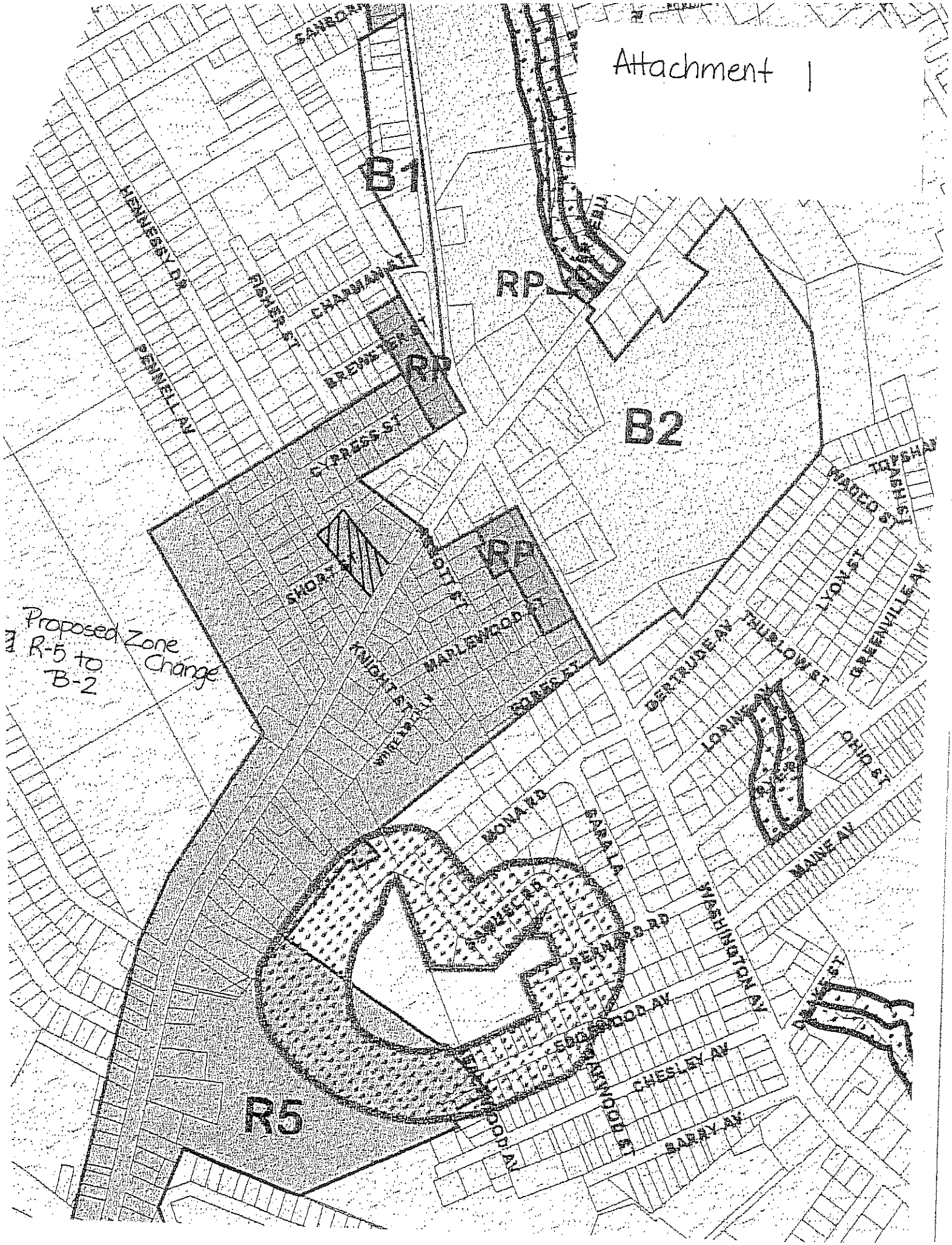
Issues To Be Resolved Prior to Public Hearing

Following is a list of items that will need to be resolved prior to scheduling of a public hearing:

- Utility capacity letters
- Public Works' comments
- Sanitary sewer right of way easement
- Radius of driveway
- Stormwater treatment
- Financial Capability
- Landscaping
- Lighting spillover
- Residential Elevations
- Fire hydrant
- Solid waste disposal
- Neighborhood Meeting

Attachments

1. Vicinity Map
2. Applicant's Letter
3. Deed
4. Zoning Administrator's Memo dated December 7, 2001
5. Public Works' Memo dated November 29, 2001
6. Stormwater Report Narrative
7. Lighting Catalogue Cuts
8. Staff Letter to Applicant dated December 6, 2001
9. Pictures of Existing Building
10. Plans
11. Addition Elevations


Attachment 1
B-1
RP
B2
R5
Proposed Zone Change
R-5 to B-2
HENNESSY DR
FISHER ST
CHANNING WAY
BREWSTER ST
CYPRESS ST
SKINNELL AV
SHORT ST
KNIGHT ST
WHITE WAY
MAPLEWOOD ST
ROSSA AV
BERTRUDE AV
THELMA ST
LYON ST
GREENVILLE AV
LORNE AV
OHIO ST
MAINE AV
WASHINGTON AV
CHESLEY AV
SARAY AV
WOODLAND AV
ALAMEDA
SEAN RD
MANZANITA
MONA RD
HAROLD ST
TOWNSHIP

Att. 2

EER Environmental Engineering & Remediation, Inc.

222 St. John Street, Suite 314 , Portland, Maine 04102
Tel 207/828-1272 Fax 207/774-6907
WWW.EERINC.COM

November 20, 2001

Ms. Kandi Talbot, Planner
City of Portland
City Hall
389 Congress Street
Portland, ME 04101

Subject: **Major Site Plan Review Submittal**
300 Allen Avenue

Dear Kandi:

Enclosed is the OPM, Inc. submittal for the subject project. The submittal includes the application and fee; seven sets of site plans; three copies of the stormwater management report; seven sets of building elevations; lighting cuts; financial capacity and photographs of the existing building.

I trust this meets the submission requirements. If there is any additional information you need, please feel free to give me a call. Thank you again for getting this project on the December 11 workshop agenda.

Very truly,

Environmental Engineering
& Remediation, Inc.

Stephen J. Bradstreet, P.E.

Cc: Willie Audet

P:\691\talbot11-21-01.doc

AH. 3

WARRANTY DEED
(Maine Statutory Short Form)

KNOW ALL BY THESE PRESENTS, that I, HERMAN G. COWAN of Westbrook, County of Cumberland, and State of Maine, for consideration paid, GRANT to OPM, INC., a corporation organized and existing under the laws of the State of Maine, the mailing address of which is 52 Bangs Shore Road, Orrs Island, ME 04066, with WARRANTY COVENANTS, certain real estate located in Portland, County of Cumberland and State of Maine, which is more particularly described as follows:

A certain lot or parcel of land, with the buildings thereon, located in that part of Portland, formerly Deering, situated on the northwesterly side of the road leading from Allen's Corner to Morrill's Corner, now called Allen Avenue, and bounded and described as follows:

Commencing on the northwesterly side of said Allen Avenue at the corner of land now or formerly of one Lovejoy, but earlier of Hart & Company at the southerly corner of said lot at a stone post set in the ground; thence running northwesterly by said Lovejoy land sixteen (16) rods to a pipe set in the ground near the former location of a hackmatack tree; thence northeasterly eight (8) rods by said Lovejoy land to a pipe set in the ground near the former location of a Balm of Gilead tree to land formerly of G. L. Marston, later of one Cobb; thence southeasterly by said Cobb land and land formerly of Amasa Fobes sixteen (16) rods to said Avenue to a stone set in the ground; thence southwesterly by said Avenue eight (8) rods to the point of beginning.

Containing one hundred twenty-eight (128) square rods of land.

Said premises are subject to an easement for a sewer given by Mary J. Wilson to the Portland Home Building Association by deed recorded in the Cumberland County Registry of Deeds in Book 1111, Page 300.

Being the same premises conveyed to the grantor herein by deed of Herman G. Cowan, Personal Representative of the Estate of Sara Johonnett Cowan by deed of even date herewith, to be recorded in said Registry of Deeds.

AH. 3a

WITNESS my hand and seal this 13th day of February, 2001.

SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF:

Witness

Herman G. Cowan

STATE OF MAINE
County of Cumberland, SS. February 13, 2001

Then personally appeared the above-named Herman G. Cowan and acknowledged the foregoing instrument to be his free act and deed.

Before me,

Notary Public

Printed Name:

ELIZABETH F. POND
Notary Public, Maine
My Commission Expires October 10, 2005

A11.4

From: Marge Schmuckal
To: Kandi Talbot
Date: Fri, Dec 7, 2001 12:57 PM
Subject: Cyrus B. Abbot Professional Bldg & Residential Units

300 Allen Avenue:

This lot is divided by a zone line midway thru the lot, with R-P adjacent to Allen Avenue and the R-5 zone abutting in the rear. I have not been given any scaled paperwork to determine if the placement of this new zone line has been place in the correct location.

The setbacks for both zones and uses have been met. However, it will be emphasized that the patios shown on the rear of the 4 apartment units shall be just that. They may not be constructed decks. Such a structure would illegally extend into the required rear setback.

The heights of both structures are compliant with their respective zones.

Lot area requirements for the dwelling units are being met. The multiplex requires 6,000 sq. ft. of land area per unit. 35,779 sq. ft. is shown.

Lot coverage and inpervious surface requirements are being met.

The Floor Area Ratio (F.A.R.) is being met.

Parking for the professional building is 11 spaces and 11 spaces are shown. Parking for the residential units is 8 and 9 spaces are shown. The plans show that there are professional parking spaces within the adjacent R-5 zone. This will require the Planning Board to allow an exception under 14-333. I am also not seeing complete fencing and buffering requirements as required under 14-339. However, I am sure that the applicant could easily meet these requirements.

This project would also be considered a subdivision by ordinance and State Law and would need to be approved as such.

Marge Schmuckal,
Zoning Administrator

CC: Sarah Hopkins

AH. 5

From: Anthony Lombardo
To: Sarah Hopkins
Date: Thu, Nov 29, 2001 11:19 AM
Subject: 300 Allen Ave.

I have reviewed the application submitted by EER, on behalf OPM, INC. and offer the following comments:

1.The plans should specify that any existing granite removed within the City right of way, in order to create the proposed entrance widening, must remain City property and delivered the a designated City stockyard.
2. Any new manholes installed along the main line of the existing City 18" diameter vitrified clay sanitary sewer need to specified as "doghouse" style manholes. Public Works feels this will minimize the disturbance, during construction, to the City system. The existing clay sewer is also cradled in concrete. Further, the existing pipe can be utilized as the manhole structure channel.
3. The plans should clearly specify the respective size (diameter) of each proposed sanitary manhole. Specifically, the proposed sanitary sewer manhole that receives 2 - 15" dia. inverts, 2 - 24" inverts. This manhole will need to be larger than a typical 4' dia. structure.
4. The applicant should be made aware of the fact that City records don't reveal all of the potential connections that may exist in the existing sanitary sewer main. Therefore, the applicant should request to review Public Works videos of this sewer. If video records don't exist then Public Works will require that the applicant contract with an appropriate plumbing contractor to obtain this information and provide the Public Works with a copy. This is essential in the area proposed to be relocated and replaced.
5. The applicant should contact Carol Merritt at Public Works to verify the appropriate fees associate with connecting into City sewer as well as working within the City right of way.
6. The application and plans need to clearly specify the "sewer right of way" that exists and which contains the 18" sanitary sewer flowing southeasterly, known as the Short Street sewer and the "sewer right of way" that contains the 18" and 24" sanitary sewer flowing southwesterly, known as the August Ave. Sewer. These right of ways are 50' wide and are recorded in the Cumberland County Registry of Deeds under Book 1727, Page 275 on 10/8/43. The proposed structure additions and proposed structures are encroaching on this sewer right of way. Further, the relocation and replacement of a section of this existing sewer main will require a revision to the existing right of way.

Att. 6

STORMWATER MANAGEMENT REPORT

FOR

300 ALLEN AVENUE
PORTLAND, MAINE

Prepared for:
OPM, Inc.
52 Bang's Shore Road
Orrs Island, ME 04066

Submitted by:

Environmental Engineering & Remediation, Inc.
222 St. John Street
Suite 314
Portland, Maine 04102

November 20, 2001

6a

Stormwater Management Report
for
300 Allen Avenue
Portland, Maine

PROJECT'S HYDROLOGICAL LOCATION

The Allen Avenue site development is located on the northwest side of Allen Avenue just west of Washington Street and east of Pennell Street. Figure 1 presents the approximate location of the property. The site is bowl shaped as a result of abutting development over the years. Allen Avenue has a combined sewer system which is part of the City's Fall Brook watershed area. Pennell Street was recently separated north of Short Street. This system is part of the City's Presumpscot River watershed area.

PRE-DEVELOPMENT CONDITIONS

The existing site is currently a residential home on .83 acres of land. The backyard of the home is an overgrown field with a perimeter of shrubs, shade trees and fruit trees. The lot slopes to a low point on the northeast property line where it percolates into the soil. Runoff from an abutter's property on the south side of Short Street flows into a culvert that is believed to be tied into the 24" vitrified clay combined sewer that traverses the site out to Allen Avenue. Additional stormwater flow enter the site from the direction of Cypress Street. Once the runoff enters the site, it has nowhere to go but to percolate into the soil. The site has very little impervious area, with only the house, garage and driveway.

POST-DEVELOPMENT CONDITIONS

The site will be redeveloped with a residential/professional business located in the existing structure. A 1,540 square foot structure will be added for additional floor space. Four residential units will be constructed at the rear of the site in the R5 zone. Twelve parking spaces will be provided in the RP zone and an additional nine spaces in the R5 zone, along with an entrance drive.

The site will be graded to collect and direct on-site and off-site runoff into the 24" vitrified clay storm drainage that traverses the site. A stormdrain system will collect runoff within the site while a swale system will direct flow coming from off-site, to a field inlet that is located on the west side of the site.

Within the new stormdrain system, a stormdrain manhole will be installed so that if the combined sewer is ever separated, there is a convenient location for separation. Casco traps are also being installed in the structures to prevent passing floatables.

STORMWATER RUNOFF CALCULATIONS

Stormwater runoff calculations for this project were made using the Hydro CAD computer program, which is based on the Soil Conservation Service's TR-20 methodology. Runoff hydrographs are generated based on a standard type III storm. Three storm frequencies were modeled; the two-year storm (3.0 inches in 24 hours); the ten-year storm (4.7 inches in 24 hours); and the 25-year storm (5.5 inches in 24 hours).

Recognizing that the site consists of Belgrade, Buxton and Scantic soils (silty loam) and that the site has been the recipient of off-site runoff, the soils have been modeled as a hydrologic soil group D. Areas other than the gravel and grass (paved or buildings) have an assigned curve number that is independent of the hydrologic soil group.

Runoff Curve numbers were determined based on land coverage and soil type. Soil type obtained from the *Soil Survey of Cumberland County, Maine*, issued August 1974 by the United States Department of Agriculture's Soil Conservation Service. Times of concentration were developed based on runoff flow paths for each watershed. Drainage areas were based on visually delineation during site reconnaissance. Actual areas based on survey may change the results.

Based on the calculations presented in Appendix A, the stormwater results are tabulated below.

Drainage Area	Post-Development (CFS)		Post-Development (CFS)	
	2 Year	10 Year	2 Year	10 Year
1	3.31	6.18	3.77	6.92
2	1.36	2.55	1.34	2.50

The increase is fairly minimal for the new development. However, watershed #1 now contributes all of its flow to the 24" combined sewer as indicated below.

Reach	Post-Development (CFS)		Post-Development (CFS)	
	2 Year	10 Year	2 Year	10 Year
24" Vit. Clay	1.34	2.51	5.01	9.25

CoC

MAINTENANCE OF STORMWATER COLLECTION FACILITIES

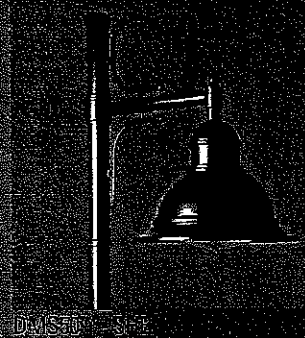
The Owner shall maintain the facilities in a clean, operating condition by removing debris and sediment from ditches, catch basins, and storm drain piping as necessary to maintain flow and water quality.

SUMMARY AND CONCLUSIONS

The construction of the stormdrain and swale system will collect stormwater runoff and direct it to the combined sewer system that traverses the site. Provisions have been made within the design to allow for ease of separation in the future.

Domus Series DMS50/60

Church Street, Burlington, Vermont, DMS50™ - SG - LD

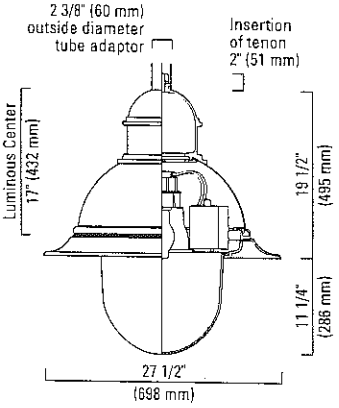


LUMEC

DMS50/60

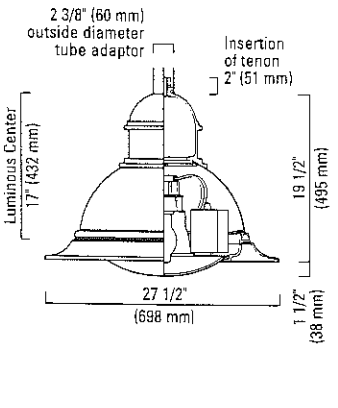
DMS50 Luminaire

The **DMS50** luminaire consists of a sealed optical chamber made of a hydroformed reflector permanently sealed on an injected refractor, with internal prisms only (SHA/SSA optics). SCB/SHB optics use a tempered-glass lens.
A toolfree lamp access shutter and sleeve, with self-adjusting injection-molded silicone gasket, keep the optical chamber hermetically sealed.
The optical system is placed in a cast-aluminum technical ring, which is assembled in a spun and cast-aluminum housing suspended under a cast-aluminum fitter.
A large, bell-shaped spun-aluminum skirt is mechanically assembled to the technical ring.
*The **DMS50** luminaire is UL and CSA approved.*



EPA: 1.35 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SHA/SSA



EPA: 1.00 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SHB/SCB

Lamp Guide

Wattage	DMS50/60 SHA/SSA	SCB	SHB
70 MH, medium	—	—	—
100 MH, medium	—	—	—
175 MH, mogul	—	—	—
250 MH, mogul	—[1]	—	—
400 MH, mogul	**N/A**	●[2]	●[2]
70 HPS, mogul	—	—	—
100 HPS, mogul	—	—	—
150 HPS, mogul	—	—	—
250 HPS, mogul	—[1]	—	**N/A**
400 HPS, mogul	**N/A**	●	**N/A**

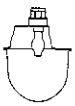
● *Remote ballast in mounting or pole base*
[1] *Requires a polycarbonate refractor.*
[2] *Requires a reduced jacket lamp.*

DMS50™ and **DMS60™** Domus Series luminaires accommodate H.I.D. or incandescent lamps as shown in the above table.

HPS ballasts feature a -40F° (-40C°) lamp starting capacity with a high power factor of 90% and operate within ANSI trapezoidal limits. MH ballasts feature a -20F° (-30C°) lamp starting capacity with a high power factor of 90%. All ballasts are UL recognized and CSA certified.

The ballast is integrated in the hood of the luminaire while the unitized ballast tray slides into a ballast box that is mechanically assembled onto the optical support plate.

Optical Systems



SHA & SSA optics

Sealed optical chamber consisting of a reflector permanently assembled on top of a prismatic refractor.

SHA3M:	Asymmetrical hyperextensive (III)
SHA4L:	Asymmetrical hyperextensive (IV)
SSA3M:	Asymmetrical semi cut-off (III)

In the above optics, the sleeve and shutter permit exact positioning of the lamp.
SHA & SSA refractors available in:

ACDR:	Acrylic (175 W max.)
PC:	Polycarbonate

Add suffix to optical system code.

SCB & SHB optics

Sealed optical chamber consisting of a reflector permanently assembled on top of a tempered-glass sag lens.

SCB3M:	Asymmetrical cut-off (III)
SHB3M:	Asymmetrical hyperextensive (III) (not available with 250W HPS)

In the above optics, the sleeve and shutter permit exact positioning of the lamp.

(Lamps not included)

For further information, refer to the Outdoor Lighting Application Guide.

Mountings (DMS50)

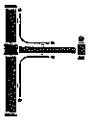
IF

A 180° bent section of extruded aluminum 2 3/8" (60 mm) O.D., mechanically assembled to the side of a pole.

LM

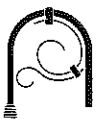
A 180° bent section of extruded aluminum 2 3/8" (60 mm) O.D., welded to a cast-aluminum pole adaptor and a flat rolled aluminum spiral.

MM



A 2 3/8" (60 mm) round aluminum arm welded to a 4 1/2" (114 mm) O.D. pole adaptor. The mounting is complete with two bent decorative rods, spheres and a cast-aluminum luminaire adaptor.

NM

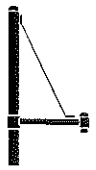


A 180° bent section of extruded aluminum 2 3/8" (60 mm) O.D., with cast-aluminum decorative spirals, and a pole adaptor. The mounting slip fits into a 4" (102 mm) pole.

OM

Two straight 1 5/8" (41 mm) O.D. aluminum side arms welded to a 4" (102 mm) round aluminum pole adaptor and to a cast-aluminum luminaire adaptor.

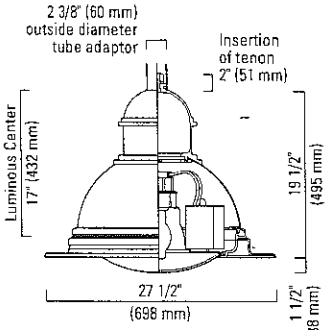
RM



A 2 3/8" (60 mm) O.D. aluminum arm welded to a 4" (102 mm) round pole adaptor and a cast-aluminum luminaire adaptor, with decorative half-sphere. A structural 1/2" (13 mm) rod is welded to the arm and pole adaptor.

Ordering Sample

Lamp	Luminaire	Optical System	Voltage	Mounting & Configuration	Pole	Finish	Options
100 HPS	DMS50	SHA3L - ACDR	120	IF-1A	R80-15	GNTX	FS-LR



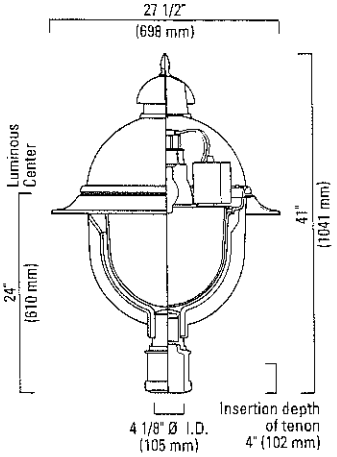
EPA: 1.00 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SCB/SHB - FB

DMS50 with SHA/SSA optics
and a flat base spinning (FB)

DMS60 Luminaire

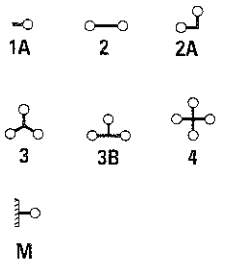
The **DMS60** luminaire consists of a sealed optical chamber made of a hydro-formed reflector permanently sealed on an injected refractor, with internal prisms only (SHA/SSA optics). SCB/SHB optics use a tempered-glass lens.
A toolfree lamp access shutter and sleeve, with self-adjusting injection-molded silicone gasket, keep the optical chamber hermetically sealed.
The optical system is surrounded by a one-piece, two-arm, cast-aluminum cradle welded to the bottom piece of a cast-aluminum technical ring.
A large aluminum hood and a deflector are mechanically assembled on the top part of the technical ring.
A large, bell-shaped spun-aluminum skirt is mechanically assembled to the bottom section of the technical ring.
*The **DMS60** luminaire is UL and CSA approved.*



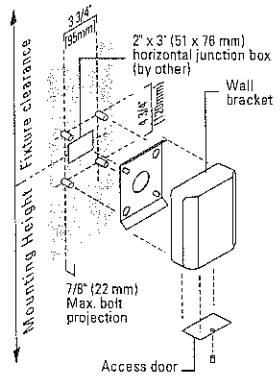
EPA: 1.82 sq.ft.
Weight: 40 lbs (18.1 kg)

DMS60 - SHA

Configurations

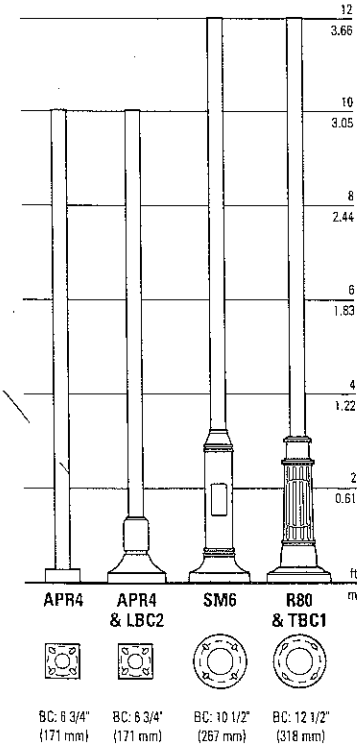


Typical wall mounting detail
for Domus luminaire mountings



Consult the Pole Guide for details and the complete line of mountings.

Poles



Consult the Pole Guide for details and the complete line of poles.

Finishes

16 Standard Colors Available

The specially-formulated textured (TX) Lumital powder coat is available in a range of 16 standard colors. This unique coating of thermosetting polyester resins provides a highly-durable UV-resistant exterior finish as per ASTM G7.

Lumital coatings are specially formulated for outstanding salt-spray resistance according to ASTM B117 standards.

All surfaces are chemically treated using a four-step (aluminum) or six-step (steel) process prior to painting. Consult Lumec for complete specifications.

SC Special Color
Provide a 4" (102 mm) square color chip.

It is possible to order smaller minimal quantities of powder paint at a premium. Your representative will be able to tell you if a powder coating can be developed for your project.

Lumiseal, a biofriendly reactive organic conversion coating, is applied on all aluminum parts that are subject to salt-spray corrosion. Consult Lumec for complete specifications.

Please note that where quantities do not warrant it, Lumec reserves the right to use an oven-cured liquid polyurethane finish.

Luminaire Options

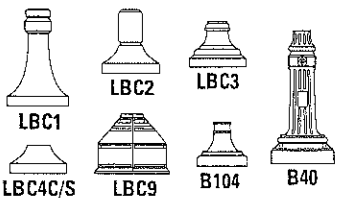
FS	Fusing (consult Lumec)
HS	House shield
FB	Flat base spinning

Pole Options

HB	Hinged base (APR4 & APS4 poles only)
DR*	Duplex receptacle (120 volts only)
GFI*	Duplex receptacle with ground fault interrupter (120 volts only)
PH	Photoelectric cell
LS*	Provision for loudspeaker outlet
BA*	Banner arm
IP	Interior paint (pole only, consult factory for applicable poles)
LBC	Optional base cover

* *Consult factory for feasibility with cast-aluminum shafts.*

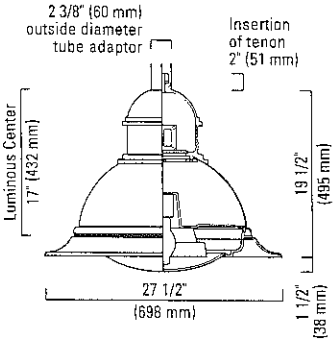
Base cover for APR4 & SPR4 poles only (replace standard base cover).



DMS50/60

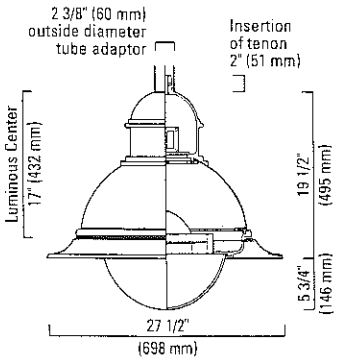
DMS50 Luminaire with Segmented Cut-off Optics

The **DMS50** luminaire can accomodate **SG** and **SE** segmented optical systems. Toolfree access to the interior of the luminaire permits easy access to the lamp.
The optical system is placed in a cast-aluminum technical ring, which is assembled in housing housing.
A **SLG** sag lens or **DL** drop lens is required with SE optical systems.



EPA: 1.00 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SE - SLG
DMS50 with SE optics and a sag lens (SGL)



EPA: 1.20 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SG - DL
DMS50 with SG optics and a drop lens (DL)

Lamp Guide

Wattage	DMS50/60 SG	SE
70 MH, medium	—	—
100 MH, medium	—	—
175 MH, mogul	—	—
250 MH, mogul	—	—
400 MH, mogul	●[1]	●[1]
70 HPS, mogul	—	—
100 HPS, mogul	—	—
150 HPS, mogul	—	—
250 HPS, mogul	—	N/A
400 HPS, mogul	●	N/A

● *Remote ballast in mounting or pole base*
[1] *Requires a reduced jacket lamp.*

DMS50™ and **DMS60™** Domus Series luminaires accommodate H.I.D. or incandescent lamps as shown in the above table.

HPS ballasts feature a -40F° (-40C°) lamp starting capacity with a high power factor of 90% and operate within ANSI trapezoidal limits. MH ballasts feature a -20F° (-30C°) lamp starting capacity with a high power factor of 90%. All ballasts are UL recognized and CSA certified.

The ballast is integrated in the hood of the luminaire.

Optical Systems

SG optics
Segmented cut-off reflector system set in faceted arc-image duplicating patterns

SG1:	Asymmetrical (I)
SG2:	Asymmetrical (II)
SG3:	Asymmetrical (III)
SGQ:	Symmetrical (V)
SGFM:	Forward-throw Not available in 200, 250 and 400W.

SE optics
Small hydroformed cut-off reflector system set in faceted arc-image duplicating patterns.

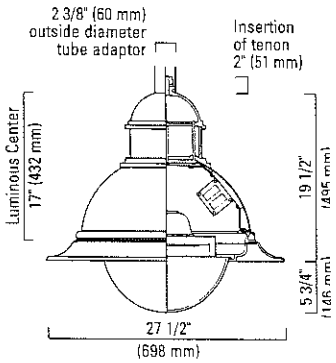
SE3:	Asymmetrical (I) Not available in 200, 250 and 400W.
SE5:	Symmetrical (V)

Please consult factory for details.
(Clear lamps not included)
For further information, refer to the Outdoor Lighting Application Guide.

Luminaire Options

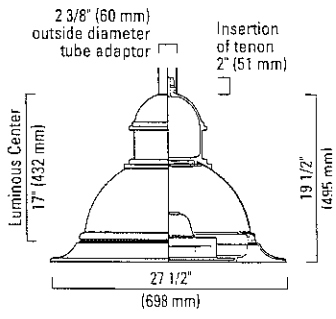
FS	Fusing (consult Lumec)
HS	House shield (SG optics only)
DL	Polycarbonate drop lens (SG or SE optics only, 250W max.) (250W remote ballast)
SLG	Tempered glass sag lens (SG or SE optics only) (Standard when used with SE optics)
LD	Luminous dome (available with SG optics only) (Maximum 250W - remote ballast)
LR	Luminous ring (available with SG optics only) (Maximum 250W - remote ballast)
FB	Flat base spinning

DMS50 Luminaire with luminous options



EPA: 1.20 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SG - LR - DL
DMS50 with SG optics, a luminous ring (LR) and a drop lens (DL)



EPA: 1.20 sq.ft.
Weight: 42 lbs (19.1 kg)

DMS50 - SG - LD
DMS50 with SG optics, and a luminous dome (LD)

AH.8

Planning & Urban Development

CITY OF PORTLAND

December 6, 2001

Stephen J. Bradstreet, P.E.
222 St. John Street, Suite 314
Portland, ME 04102

RE: 300 Allen Avenue (ID #2001-0309, CBL #344-E-006)

Dear Mr. Bradstreet:

After review of the plans submitted on November 26, 2001, regarding the proposed office building addition and 4-unit residential building located at 300 Allen Avenue, the following information is requested for review.

1. Elevation drawings of the proposed 4-unit residential building must be submitted. The elevation drawings must show material to be used and show all of the facades of the building. You also must meet the multiplex standards, which are included for your review.
2. It does not appear that a dumpster is proposed for the site. The applicant must address how they will handle waste and provide a contract for handling waste.
3. The applicant must submit utility capacity letters from the Portland Water District and the Portland Sewer Division.
4. The plans should specify that any existing granite removed within the City right of way, in order to create the proposed entrance widening, must remain City property and delivered to a designated City stockyard.
5. Any new manholes installed along the main line of the existing City 18" diameter vitrified clay sanitary sewer need to specified as "doghouse" style manholes. Public Works feels this will minimize the disturbance, during construction, to the City system. The existing clay sewer is also cradled in concrete. Further, the existing pipe can be utilized as the manhole structure channel.
6. The plans should clearly specify the respective size (diameter) of each proposed sanitary manhole. Specifically, the proposed sanitary sewer manhole that receives 2 – 15" dia. inverts, 2 – 24" inverts. This manhole will need to be larger than a typical 4' dia. structure.

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7. The applicant should be made aware of the fact that City records don't reveal all of the potential connections that may exist in the existing sanitary sewer main. Therefore, the applicant should request to review Public Works videos of this sewer. If video records don't exist then Public Works will require that the applicant contract with an appropriate plumbing contractor to obtain this information and provide Public Works with a copy. This is essential in the area proposed to be relocated and replaced.

8. Contact should be made with Carol Merritt at Public Works to verify the appropriate fees associate with connecting into City sewer as well as working within the City right of way.

9. The application and plans need to clearly specify the "sewer right of way" that exists and which contains the 18" sanitary sewer flowing southeasterly, known as the Short Street sewer and the "sewer right of way" that contains the 18" and 24" sanitary sewer flowing southwesterly, known as the August Ave. sewer. These right of ways are 50' wide and are recorded in the Cumberland County Registry of Deeds under Book 1727, Page 275 on 10/8/43. The proposed structure additions and proposed structures are encroaching on this sewer right of way. Further, the relocation and replacement of a section of this existing sewer main will require a revision to the existing right of way.

10. The Traffic Engineer is requesting that the applicant provide 20 ft. radii at the driveway entrance.

11. The City Arborist is currently reviewing the landscape plan and comments will be forwarded as soon as I receive them. We understand that you are proposing the stockade fence to buffer the residential use from the business use, however, instead of the crushed stone within this island, we would like to see substantial landscaping along the fence, on both sides.

12. It is not clear from your submittal which light fixtures are proposed. It also appears by from the lighting plan that there is spillover in the rear of the site, on both sides of the property. This must be addressed.

13. Applicant must show a fire hydrant within 500 ft. of the project on the plan.

14. A written statement must be submitted which includes description of proposed uses, quantity and type of residential, general summary of existing and proposed easements, method of handling solid waste disposal, estimate of time period required to complete project, and a list of all state and federal regulatory approvals which may be required.

15. A letter of financial capability from a financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved should be submitted.

16. The Development Review Coordinator is currently reviewing the drainage plans and I will forward comments when I receive them. There has been some discussion surrounding stormwater quality, because the drainage is tying directly into the sewer. Stormwater treatment could become a requirement.

17. As you are aware, a neighborhood meeting is required after the workshop, but at least 7 days prior to the scheduled public hearing. The applicant is responsible for noticing the neighbors, however we will provide labels. The labels must be requested at least two days in advance and there is a charge of $1 a sheet for labels.

8B

Any further comments will be forwarded to you as soon as I receive it. If you have any questions, please do not hesitate to contact me at 874-8901.

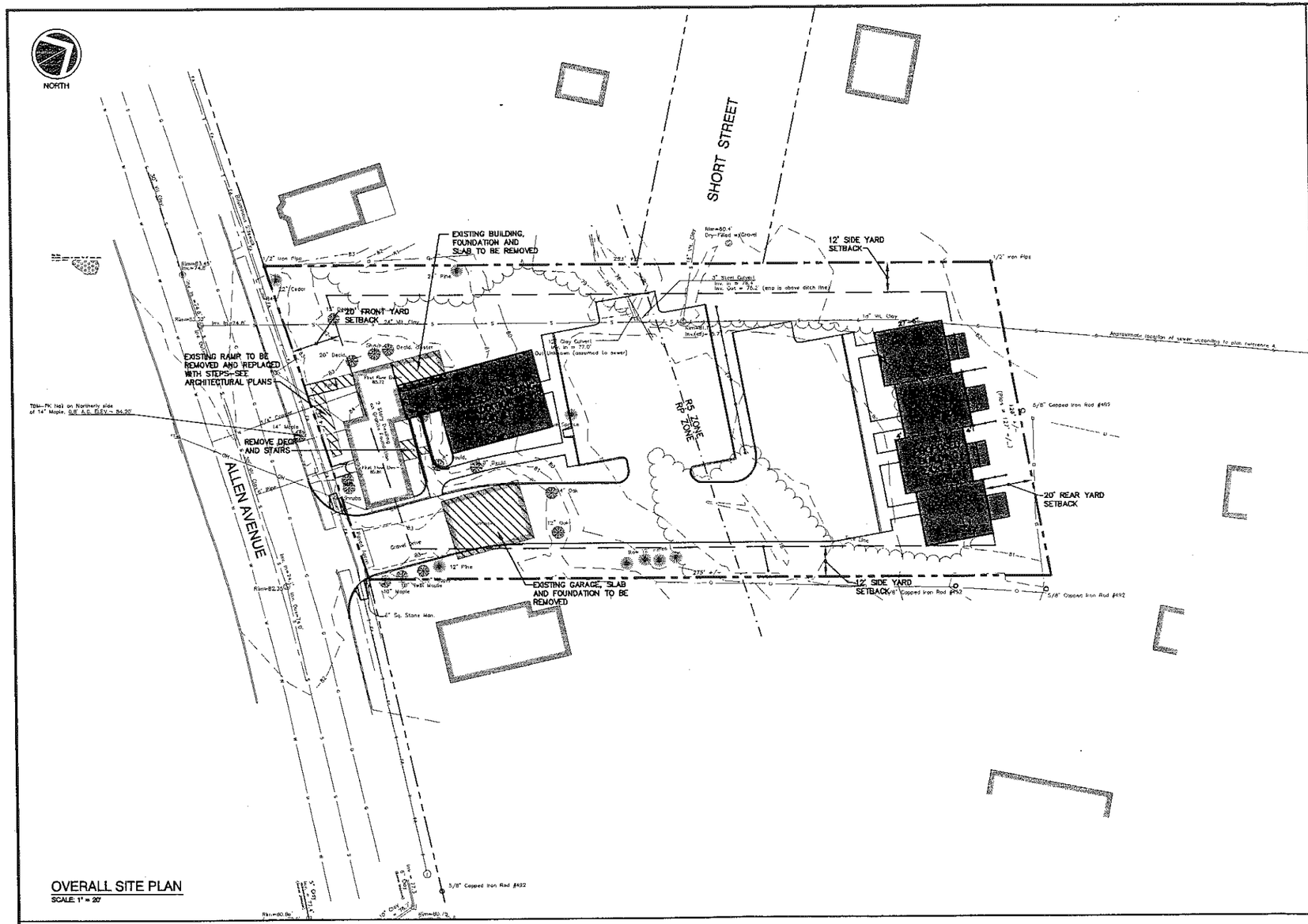
Sincerely,

Kandice Talbot

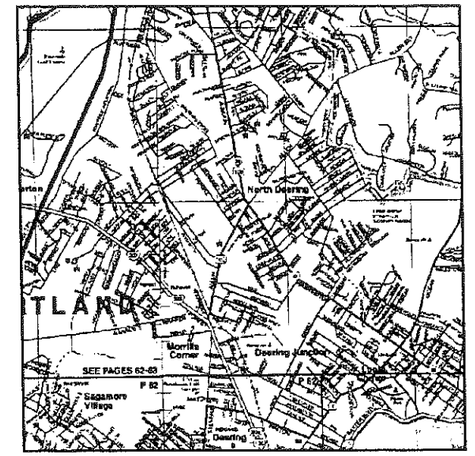
Kandice Talbot
Planner

CC: Alex Jaegerman, Chief Planner
Sarah Hopkins, Development Review Services Manager

Att. 10



OVERALL SITE PLAN
SCALE: 1" = 20'



LOCUST PLAN

PROJECT INFORMATION

RECORD OWNER/
DEVELOPER:
OPM, INC.
52 BANG'S SHORE ROAD
ORRS ISLAND, ME 04066

ENGINEER:
ENVIRONMENTAL ENGINEERING & REMEDIATION, INC.
222 ST. JOHN STRET SUITE 314
PORTLAND, MAINE 04102
MR. STEPHEN J. BRADSTREET, P.E.

SURVEYOR:
TITCOMB ASSOCIATES
133 GRAY ROAD
FALMOUTH, MAINE 04105
MR. DAVID E. TITCOMB

SCALE
SCALE: HOR 1" = 20'

20 0 10 20

ZONING STANDARDS

RP ZONE

MINIMUM LOT SIZE:	6,000 S.F.
MINIMUM STREET FRONTAGE:	60'
MINIMUM YARD DIMENSIONS:	
FRONT YARD SETBACK:	20'
REAR YARD SETBACK:	20'
SIDE YARD SETBACK:	10' (ONE STORY) 12' (TWO STORIES) 14' (THREE OR MORE STORIES)
MINIMUM LOT WIDTH:	60'
MAXIMUM STRUCTURE HEIGHT:	45'
MAXIMUM IMPERIOUS SURFACE:	60%

R5 ZONE

MINIMUM LOT AREA/DWELLING AREA:	6,000 S.F.
MINIMUM STREET FRONTAGE:	50'
MINIMUM YARD DIMENSIONS:	
FRONT YARD SETBACK:	20'
REAR YARD SETBACK:	20'
SIDE YARD SETBACK:	8' (ONE STORY) 8' (ONE AND ONE HALF STORIES) 12' (TWO STORIES) 14' (TWO AND ONE HALF STORIES)
MINIMUM LOT WIDTH:	50'
MAXIMUM STRUCTURE HEIGHT:	35'
MAXIMUM LOT COVERAGE:	40%

IMPERVIOUS SURFACE RATIO

EXISTING LOT AREA:	35,779 S.F.
IMPERVIOUS SURFACE AREA:	18,355 S.F.
IMPERVIOUS SURFACE RATIO:	51.3%

REV.	BY	DATE	STATUS	CAD NO.
A	SJB	11/20/01	ISSUED FOR: PLANNING BOARD REVIEW	691_a_c100

STATE OF MAINE
STEPHEN J. BRADSTREET #5740
REGISTERED PROFESSIONAL ENGINEER

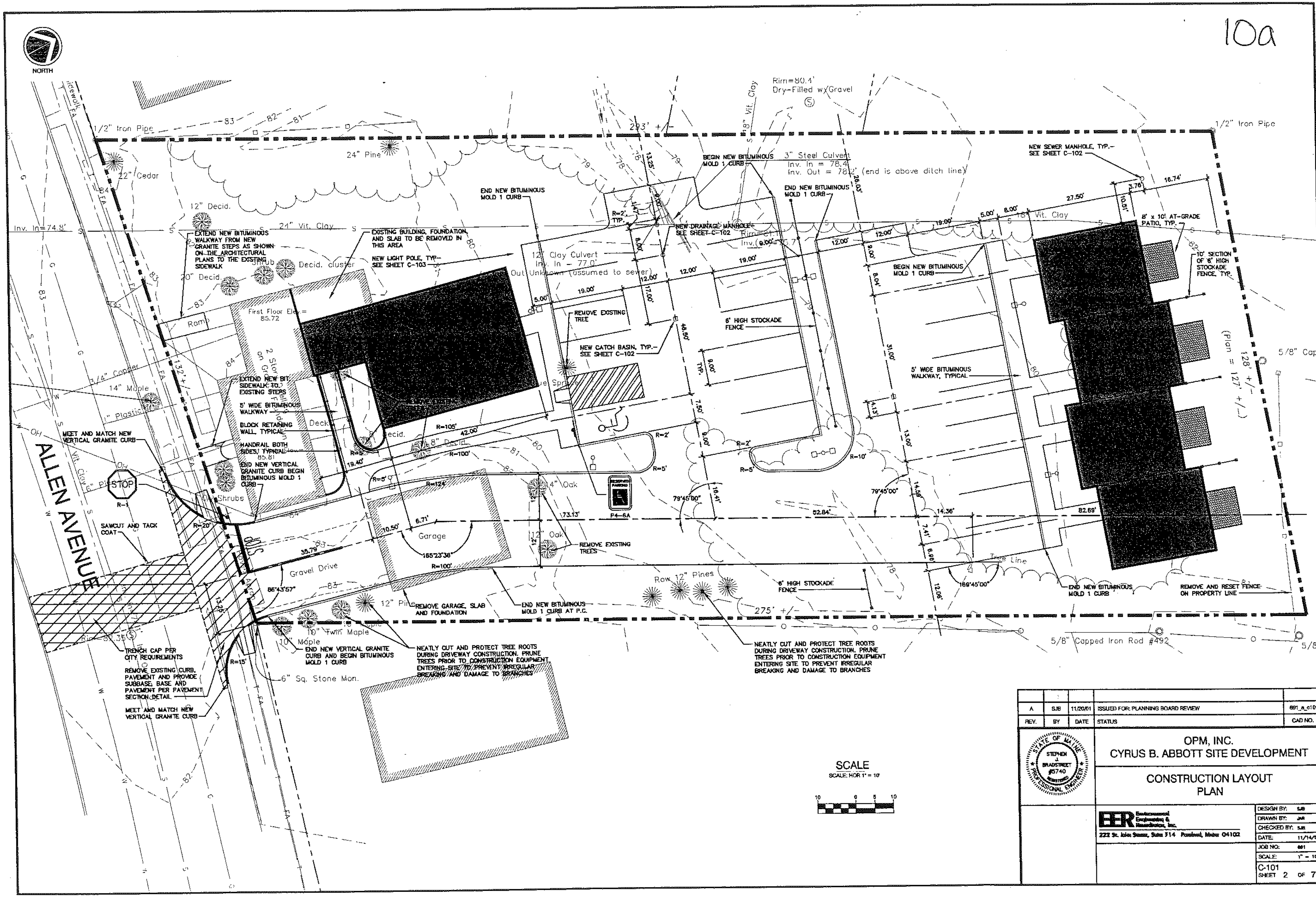
OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

OVERALL
SITE PLAN

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
DRAWN BY:	JAR
CHECKED BY:	SJB
DATE:	11/14/01
JOB NO:	691
SCALE:	1" = 20'
C-100 SHEET	1 OF 7

10a



NORTH
ALLEN AVENUE
1/2" Iron Pipe
24" Pine
22" Cedar
12" Decid.
21" Vit. Clay
Inv. In=74.8'
EXTEND NEW BITUMINOUS WALKWAY FROM NEW GRANITE STEPS AS SHOWN ON THE ARCHITECTURAL PLANS TO THE EXISTING SIDEWALK
EXISTING BUILDING, FOUNDATION, AND SLAB TO BE REMOVED IN THIS AREA
NEW LIGHT POLE, TYP.— SEE SHEET C-103
Decid. cluster
20" Decid.
First Floor Elev.= 85.72
END NEW BITUMINOUS MOLD 1 CURB
12" Clay Culvert
Inv. In = 77.0'
Out Unknown (assumed to sewer)
BEGIN NEW BITUMINOUS MOLD 1 CURB
3" Steel Culvert
Inv. In = 78.4'
Inv. Out = 78.2' (end is above ditch line)
Rim=80.4'
Dry-Filled w/Gravel
NEW DRAINAGE MANHOLE— SEE SHEET C-102
NEW SEWER MANHOLE, TYP.— SEE SHEET C-102
8' x 10' AT-GRADE PATIO, TYP.
10' SECTION OF 6' HIGH STOCKADE FENCE, TYP.
REMOVE EXISTING TREE
NEW CATCH BASIN, TYP.— SEE SHEET C-102
6' HIGH STOCKADE FENCE
5' WIDE BITUMINOUS WALKWAY, TYPICAL
(Plan = 127' +/-)
128' +/-
5/8" Cap
EXTEND NEW BIT. SIDEWALK TO EXISTING STEPS
5' WIDE BITUMINOUS WALKWAY
BLOCK RETAINING WALL, TYPICAL
HANDRAIL BOTH SIDES, TYPICAL
END NEW VERTICAL GRANITE CURB BEGIN BITUMINOUS MOLD 1 CURB
MEET AND MATCH NEW VERTICAL GRANITE CURB
14" Maple
STOP
R-1
SAWCUT AND TACK COAT
Garage
Gravel Drive
4" Oak
12" Oak
REMOVE EXISTING TREES
P4-6A
Row 12" Pines
6' HIGH STOCKADE FENCE
275' +/-
293' +/-
Tree Line
END NEW BITUMINOUS MOLD 1 CURB
REMOVE AND RESET FENCE ON PROPERTY LINE
5/8" Capped Iron Rod #492
12" Pine
REMOVE GARAGE, SLAB AND FOUNDATION
END NEW BITUMINOUS MOLD 1 CURB AT P.C.
10" Twin Maple
10" Maple
END NEW VERTICAL GRANITE CURB AND BEGIN BITUMINOUS MOLD 1 CURB
NEATLY CUT AND PROTECT TREE ROOTS DURING DRIVEWAY CONSTRUCTION. PRUNE TREES PRIOR TO CONSTRUCTION EQUIPMENT ENTERING SITE TO PREVENT IRREGULAR BREAKING AND DAMAGE TO BRANCHES
6" Sq. Stone Mon.
TRENCH CAP PER CITY REQUIREMENTS
REMOVE EXISTING CURB, PAVEMENT AND PROVIDE SUBBASE, BASE AND PAVEMENT PER PAVEMENT SECTION DETAIL
MEET AND MATCH NEW VERTICAL GRANITE CURB
SCALE
SCALE: HOR 1" = 10'

REV.	BY	DATE	STATUS	CAD NO.
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STATE OF MAINE — STEPHEN J. BRADSTREET #5740 — REGISTERED PROFESSIONAL ENGINEER

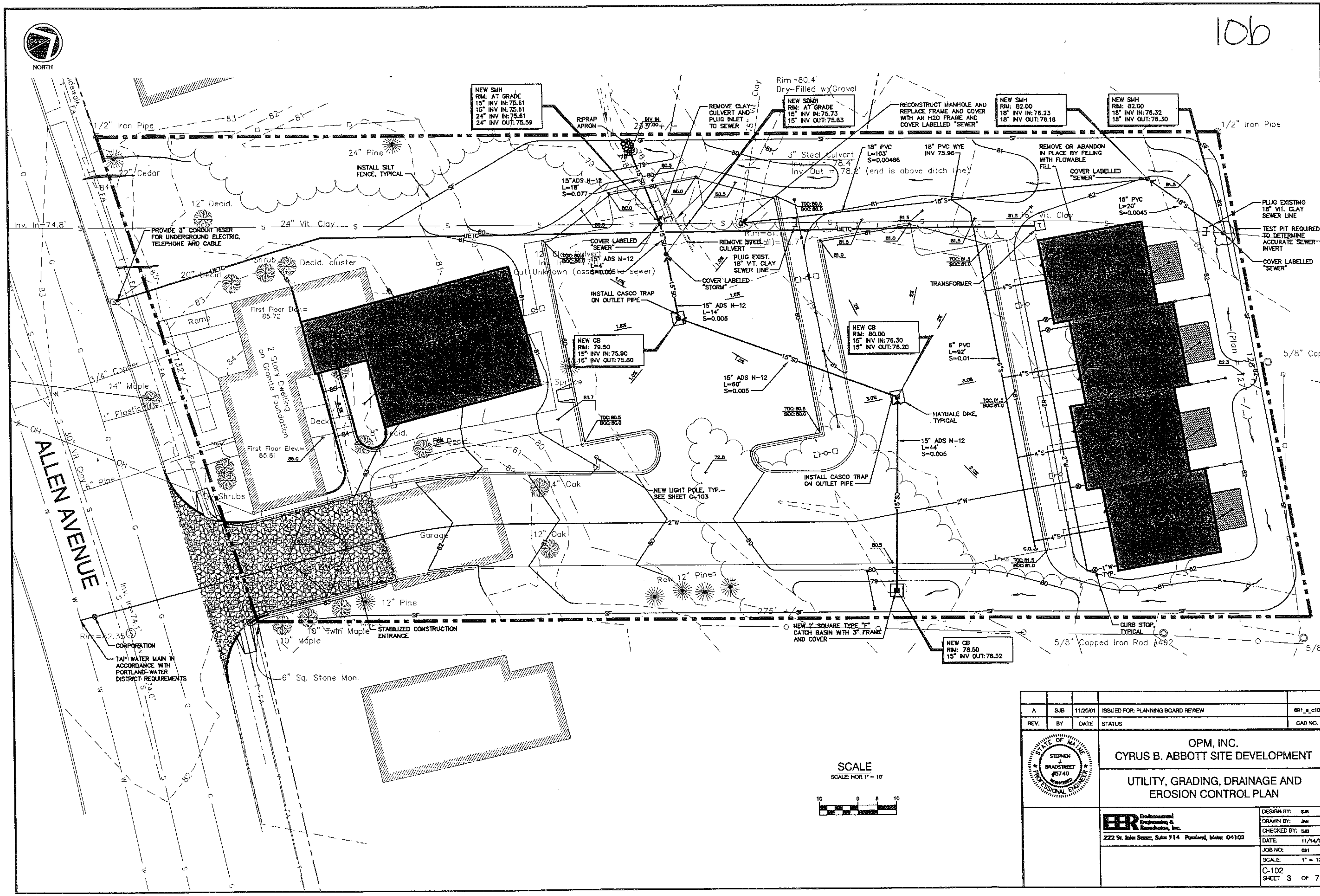
OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

CONSTRUCTION LAYOUT PLAN

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
DRAWN BY:	JAR
CHECKED BY:	SJB
DATE:	11/14/01
JOB NO:	691
SCALE:	1" = 10'
C-101	SHEET 2 OF 7

10b



NORTH
ALLEN AVENUE
NEW SMH
RIM: AT GRADE
15" INV IN: 75.61
15" INV IN: 75.61
24" INV IN: 75.61
24" INV OUT: 75.59
NEW SDMH
RIM: AT GRADE
15" INV IN: 75.73
15" INV OUT: 75.63
RECONSTRUCT MANHOLE AND REPLACE FRAME AND COVER WITH AN H20 FRAME AND COVER LABELLED "SEWER"
NEW SMH
RIM: 82.00
18" INV IN: 76.23
18" INV OUT: 76.18
NEW SMH
RIM: 82.00
18" INV IN: 76.32
18" INV OUT: 76.30
REMOVE OR ABANDON IN PLACE BY FILLING WITH FLOWABLE FILL
PLUG EXISTING 18" VIT. CLAY SEWER LINE
TEST PIT REQUIRED TO DETERMINE ACCURATE SEWER INVERT
COVER LABELLED "SEWER"
INSTALL SILT FENCE, TYPICAL
PROVIDE 3" CONDUIT RISER FOR UNDERGROUND ELECTRIC, TELEPHONE AND CABLE
2 Story Dwelling on Granite Foundation
First Floor Elev.= 85.72
First Floor Elev.= 85.81
INSTALL CASCO TRAP ON OUTLET PIPE
NEW CB
RIM: 79.50
15" INV IN: 75.90
15" INV OUT: 75.80
NEW CB
RIM: 80.00
15" INV IN: 76.30
15" INV OUT: 76.20
HAYBALE DIKE, TYPICAL
NEW LIGHT POLE, TYP.- SEE SHEET C-103
NEW CB
RIM: 78.50
15" INV OUT: 76.52
NEW 2' SQUARE TYPE "F" CATCH BASIN WITH 3" FRAME AND COVER
STABILIZED CONSTRUCTION ENTRANCE
CORPORATION
TAP WATER MAIN IN ACCORDANCE WITH PORTLAND WATER DISTRICT REQUIREMENTS
CURB STOP, TYPICAL
5/8" Capped Iron Rod #492
1/2" Iron Pipe
6" Sq. Stone Mon.
TRANSFORMER
SCALE
SCALE: HOR 1" = 10'

REV.	BY	DATE	STATUS	CAD NO.
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STATE OF MAINE — STEPHEN J. BRADSTREET #5740 — REGISTERED PROFESSIONAL ENGINEER

OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

UTILITY, GRADING, DRAINAGE AND EROSION CONTROL PLAN

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
DRAWN BY:	JAR
CHECKED BY:	SJB
DATE:	11/14/01
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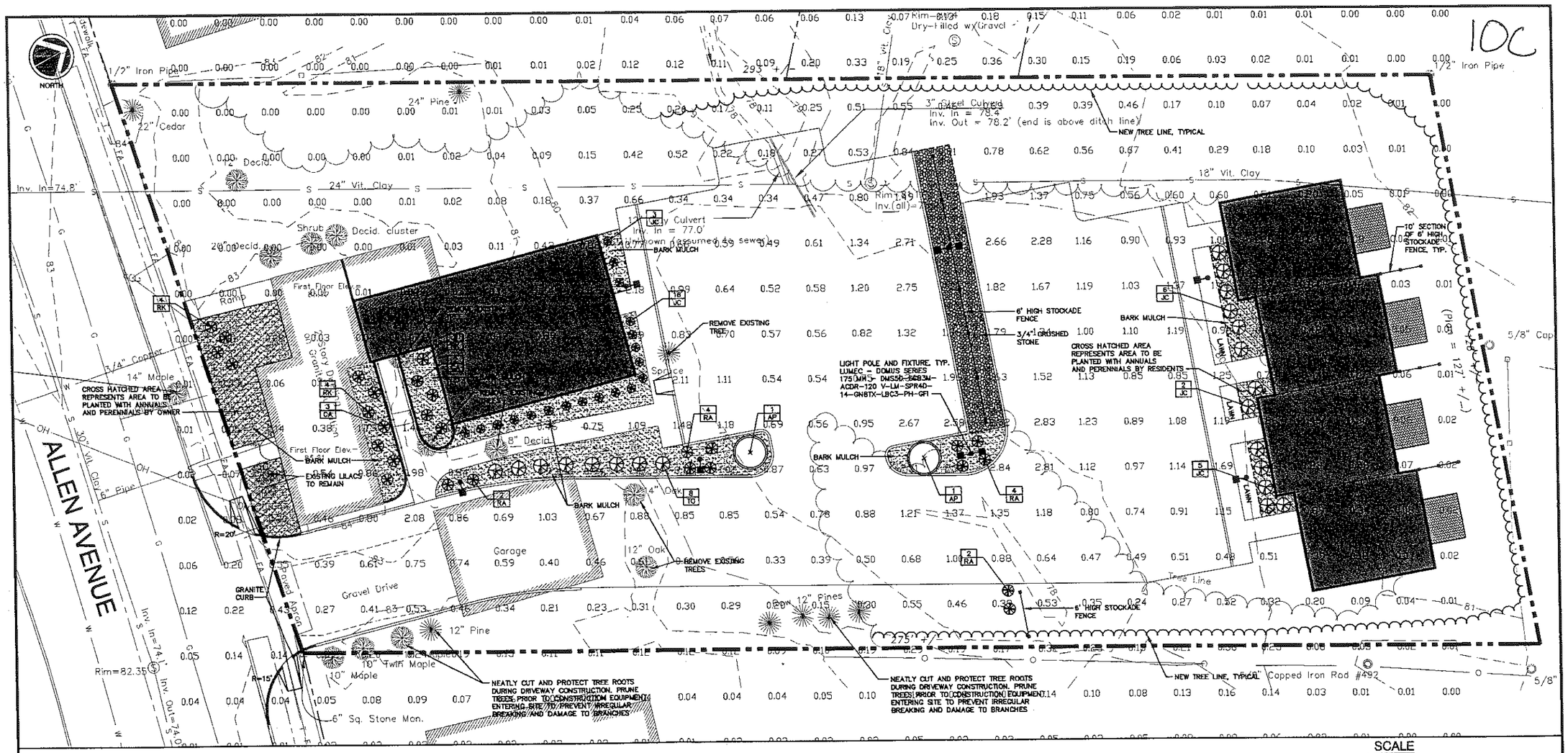
SCALE:	1" = 10'
C-102	SHEET 3 OF 7

10C



PLANTING NOTES

1. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE POSSIBILITY OF UNDERGROUND UTILITIES. THE LANDSCAPE CONTRACTOR SHALL VERIFY UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY UTILITIES, WALKS, PAVING, CURBING, ETC., DAMAGED IN THE PERFORMANCE OF THIS JOB AT NO COST TO THE OWNER.
3. PLANTING OF TREES AND SHRUBS SHALL NOT OCCUR UNTIL ALL GRADING AND PAVING IS COMPLETED.
4. ALL PLANTS SHALL HAVE A NORMAL HABIT OF GROWTH FOR THE SPECIES AND SHALL BE SOUND, HEALTHY AND FREE OF DISEASE AND INSECTS. THEY SHALL CONFORM TO THE MEASUREMENTS ON THE PLANT LIST AND SHALL CONFORM TO ANSI Z60.1 – NURSERY STOCK, LATEST REVISION.
5. ALL PLANTS SHALL HAVE ALL NONBIODEGRADABLE MATERIALS (STRING, WIRE, POTS, ETC.) REMOVED AT THE TIME OF PLANTING. CIRCLING ROOTS OR ROOTS THAT WOULD LATER GIRDLE THE PLANT SHALL BE STRAIGHTENED, CUT OR THE ROOT BALL SHALL BE CUT UTILIZING THE "BUTTERFLY METHOD." TOP 1/3 OF WIRE BASKETS AND BURLAP ON TREES SHALL BE CUT AND REMOVED.
6. BACKFILL MIX SHALL BE COMPOSED OF A 80/20, LOAM/PEAT MOSS MIX. PLANTING PITS SHALL BE EXCAVATED TO THREE TIMES THE DIAMETER AND TO THE SAME DEPTH OF THE PLANT ROOT BALL. BACKFILL 1/2 OF THE PIT AT A TIME AND COMPACT. SEE NOTE 7 AND INSTALL SLOW RELEASE FERTILIZER AFTER FIRST BACKFILL LIFT. SETTING THE TREE/SHRUB: EACH TREE/SHRUB SHALL BE PLANTED SUCH THAT THE TRUNK FLARE JUNCTION IS LEVEL WITH OR 1-2" ABOVE EXISTING GRADE. TREES/SHRUBS WHERE THE PLANTING DEPTH IS INCORRECT SHALL BE REJECTED. ALL PLANTING ISLANDS SHALL HAVE 18" OF TOPSOIL INSTALLED, WITH A FINISHED GRADE AT THE TOP OF CURB, PRIOR TO THE INSTALLATION OF PLANT MATERIAL.
7. ALL PLANTINGS SHALL HAVE SLOW RELEASE FERTILIZER TABLETS INSTALLED. TABLETS SHALL BE AGRIFORM 21 GRAM 20-10-5 PLANTING TABLETS OR AN APPROVED EQUAL. APPLICATION RATE: PERENNIALS-1 TABLET/PLANT, WOODY SHRUBS TO 3'-0"-2 TABLETS/PLANT, SHRUBS AND TREES 3'-0" TO 6'-0"-3 TABLETS/PLANT AND TREES 6'-0" AND ABOVE-4 TABLETS/PLANT. AFTER PLANTS ARE INSTALLED, LIQUID FEED ALL PLANTS WITH ROOTS OR AN APPROVED EQUAL. MIX MIX ACCORDING TO MANUFACTURER'S INSTRUCTIONS. APPLICATION RATE: PERENNIALS-2 QT'S/PLANT, WOODY SHRUBS TO 4'0"-1.5 GAL./PLANT, TREES AND SHRUBS 4'-0" TO 10'-0"-3.0 GAL/PLANT AND TREES 10' AND ABOVE-4.0 GAL/PLANT.
8. TREES WILL NOT BE STAKED UNLESS IN THE OPINION OF THE LANDSCAPE CONTRACTOR THAT IT IS REQUIRED. IN THOSE CASES THE PARTICULAR TREES SHOULD BE REPORTED TO THE OWNER FOR THEIR APPROVAL. IN NO CASES SHALL A TREE BE STAKED BECAUSE THE ROOT BALL CRUMPLED. IN THOSE CASES THE TREE SHALL BE REMOVED AND REPLACED WITH A TREE OF THE SAME SPECIES AND SIZE WITH A SOUD AND INTACT ROOT BALL. IF STAKES ARE USED, THEY SHALL BE REMOVED BY THE CONTRACTOR AFTER ONE YEAR.
9. MULCH TO BE INSTALLED TO A DEPTH OF 3" AFTER NORMAL SETTLING. MULCH SHALL BE MEDIUM SHREDDED HEMLOCK BARK. DO NOT PLACE MULCH IN CONTACT WITH THE TREE OR SHRUB TRUNK. ALL SHRUB BEDS AND ISLANDS SHALL BE MULCHED. IN SHRUB BEDS THE EXTENT OF MULCH WILL BE 3' FROM THE CENTER OF THE PLANT TO THE EDGE OF THE BED.
10. ALL PLANTS SHALL BE ORIENTED FOR BEST APPEARANCE. PLANT SPECIES SUBSTITUTIONS WILL NOT BE ALLOWED UNLESS APPROVED BY THE OWNER.
11. ALL PLANTS SHALL BE GUARANTEED FOR ONE GROWING SEASON (ONE YEAR FROM DATE OF ACCEPTANCE). ANY PLANTS THAT DIE DURING THE GUARANTEE, SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO COST TO THE OWNER.
12. ALL AREAS NOT IDENTIFIED WITH OTHER SURFACE TREATMENTS SHALL BE LAWN. THE LAWN ARE SHALL BE SEEDED WITH (LOFTS TRI-PLEX GENERAL OR APPROVED EQUAL) AND STRAW MULCHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAWN MAINTENANCE. MAINTENANCE SHALL COMMENCE AT THE TIME OF PLANTING AND LAST UNTIL A GOOD FULL CATCH OR GRASS IS ESTABLISHED.
13. IF QUANTITIES OF PLANTS LISTED IN THE PLANT SPECIES LIST DO NOT CORRELATE WITH THE PLANTINGS INDICATED ON THE PLAN, THE QUANTITIES ON THE PLAN SHALL GOVERN.

PLANTING SCHEDULE

SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
AP	2	A. PLATANOIDES "CRIMSON KING"	CRIMSON KING	2.5"-3" CAL.	B&B
CA	5	CLETHRA ALNIFOLIA "HUMMINGBIRD SUMMERSWEET"	HUMMINGBIRD SUMMERSWEET	18"-24"	4' O.C.
JC	32	J. CHIN. VAR. SARGENTI GLAUCA	BLUE SARGENT	2'-2.5' HT.	B&B, 4' O.C.
RA	12	R. "AGLO"	AGLO RHODODENDRON	18"-18" HT.	4' O.C.
RK	11	R. KURUME HYBRID "HERSEY'S RED"	HERSEY'S RED AZALEA	15"-18" HT.	4' O.C.
TO	8	T. OCC. "SMARGARD"	EMERALD GREEN	3'-4' HT.	B&B, 4' O.C.

SCALE

SCALE: HOR 1" = 10'

10 0 5 10

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STATE OF MAINE STEPHEN J. BRADSTREET #5740 REGISTERED PROFESSIONAL ENGINEER

OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

SITE LANDSCAPING AND LIGHTING PLAN

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
DRAWN BY:	JAR
CHECKED BY:	SJB
DATE:	11/14/01
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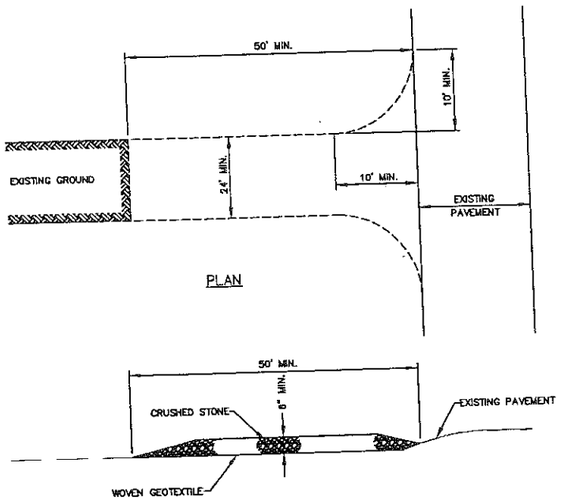
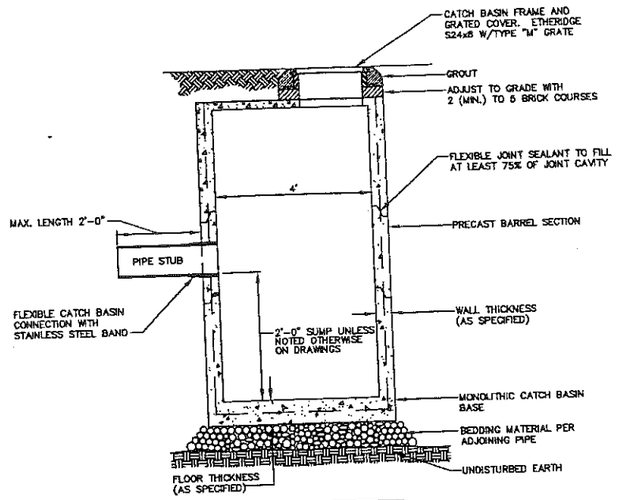
C-103
SHEET 4 OF 7

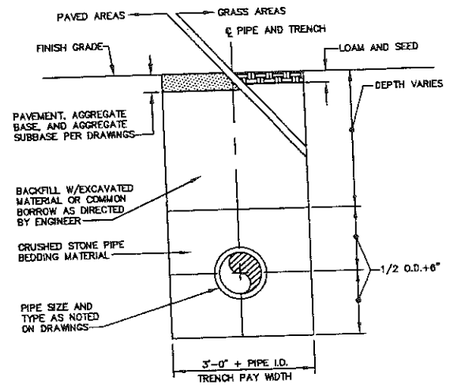


STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



I.D.	WALL WIDTH	FLOOR THICKNESS
4'-0"	5"	6"
5'-0"	6"	6"
6'-0"	7"	6"
8'-0"	8"	8"
10'-0"	10"	9"

PRECAST CONCRETE CATCH BASIN/MANHOLE
NOT TO SCALE



TYPICAL TRENCH DETAIL
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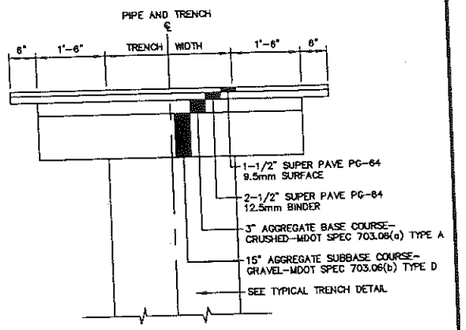
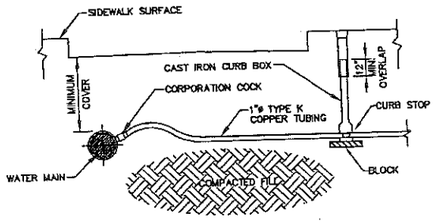
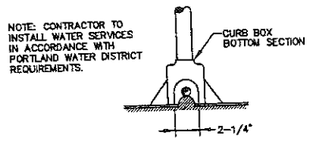


TYPICAL TRENCH PAVING DETAIL
NOT TO SCALE





TYPICAL COPPER HOUSE SERVICE DETAIL
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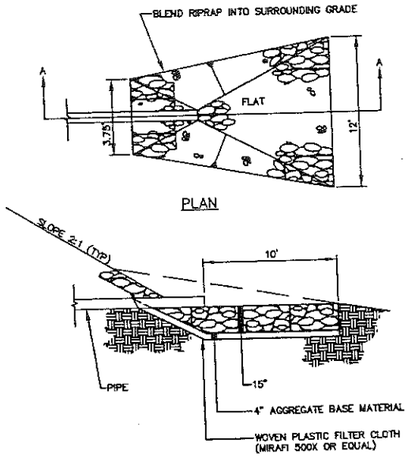
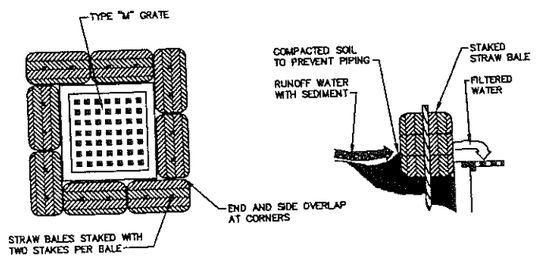


RIPRAP APRON DETAIL
NOT TO SCALE

EROSION CONTROL FENCE DETAIL
NOT TO SCALE



HAYBALE DIKE DETAIL
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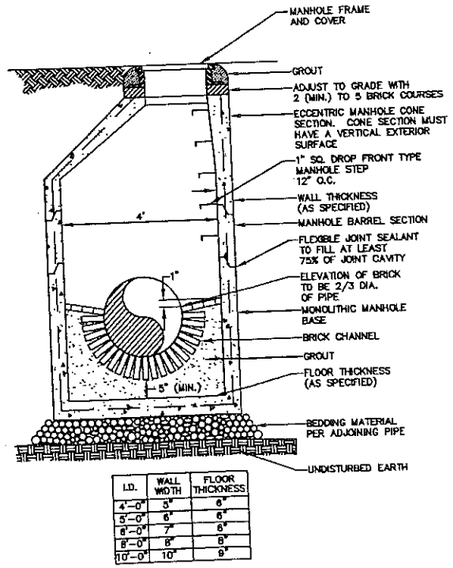
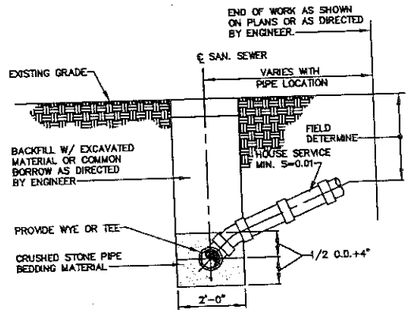


I.D.	WALL WIDTH	FLOOR THICKNESS
4'-0"	5"	6"
5'-0"	6"	6"
6'-0"	7"	6"
8'-0"	8"	8"
10'-0"	10"	9"

PRECAST CONCRETE MANHOLE
NOT TO SCALE



NOTE:
WHERE TRENCHES FOR HOUSE CONNECTIONS EXTEND INTO STREET, SEE TYPICAL TRENCH DETAIL FOR DETAILS.

TYPICAL TRENCH SECTION BUILDING CONSTRUCTION
NOT TO SCALE

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STATE OF MAINE
STEPHEN J. BRADSTREET #5740 REGISTERED PROFESSIONAL ENGINEER

OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

CONSTRUCTION DETAILS

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
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SCALE:	AS NOTED
C-104 SHEET	5 OF 7

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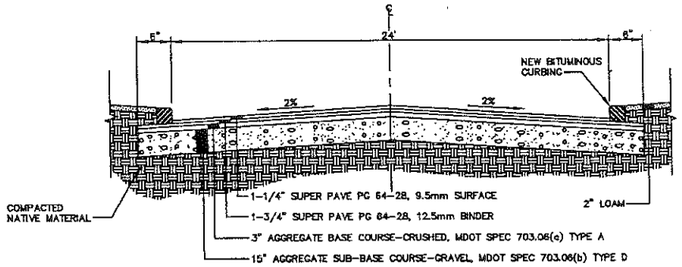

TYPICAL ROADWAY SECTION
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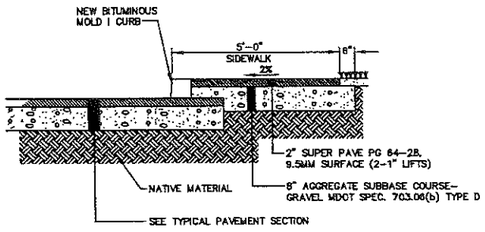
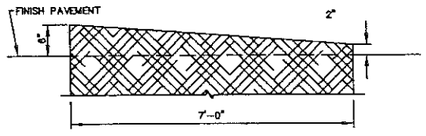


TYPICAL SIDEWALK SECTION
NOT TO SCALE

BITUMINOUS CURB-MOLD 1
NOT TO SCALE



TYPICAL TIPDOWN CURB INSTALLATION
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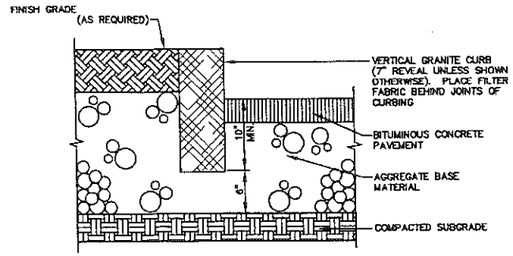

VERTICAL GRANITE CURBING
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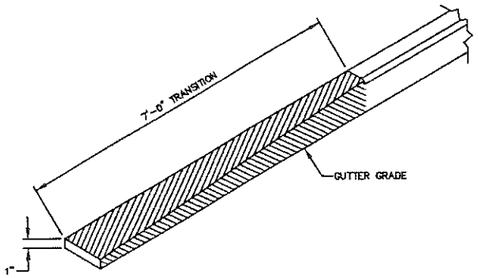
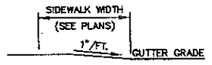
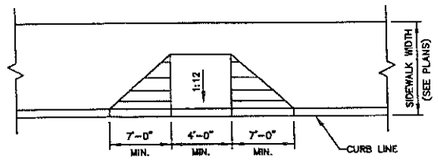


BITUMINOUS TRANSITION CURB
NOT TO SCALE

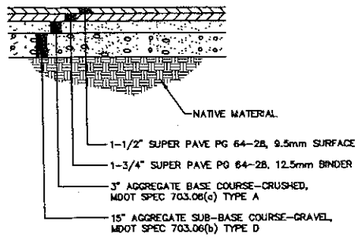


SECTION



PLAN

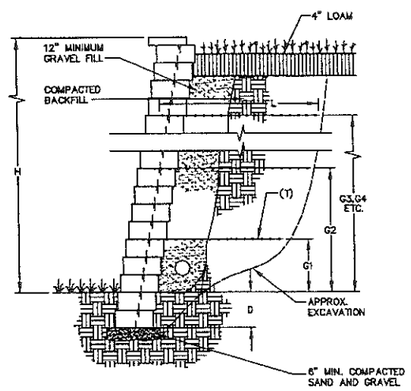
SIDEWALK RAMP
NOT TO SCALE



TYPICAL PAVEMENT SECTION
NOT TO SCALE

VARIABLES:
H – WALL HEIGHT ABOVE GRADE
D – DEPTH BASE UNIT BELOW GRADE
G# – DISTANCE OF GRID LAYER# ABOVE GRADE
L – GRID LENGTH

GENERAL NOTES:
1. FACTOR OF SAFETY FOR SLIDING: 1.5
2. FACTOR OF SAFETY FOR OVERTURNING: 2.0
3. UNIT WEIGHT SOIL: 125 PCF
4. GEOGRID DESIGN BASED ON TENSAR SYSTEM.
5. GLOBAL STABILITY HAS NOT BEEN CHECKED.
6. ALLOWABLE BEARING PRESSURE: 3,000 PSF
7. DIMENSIONS SHOWN IN CHART ARE IN FEET.
8. DESIGN OF WALL SHALL BE PROVIDED BY THE MANUFACTURER.



DESIGN CHART

SLOPING FILL 2.5H : 1V — SANDS/GRAVEL ϕ = 34°

H	D	GRID TYPE	GRID LENGTH	GRID LOCATION G1	G2	G3	G4	G5
2	.5							
3	.5	SS2	2.6	1.5				
4	.5	SS2	3.5	1.0	2.5			
5	1.0	SR1	4.1	1.0	3.0			
6	1.0	SR1	5.1	1.0	2.5	4.5		
7	1.0	SR1	6.0	1.0	3.0	5.0		
8	1.0	SR1	6.5	1.0	3.0	5.0	7.0	

CONCRETE BLOCK RETAINING WALL
NOT TO SCALE

REV.	BY	DATE	STATUS	CAD NO.
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STATE OF MAINE — STEPHEN J. BRADSTREET #5740 REGISTERED PROFESSIONAL ENGINEER

OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

CONSTRUCTION DETAILS

EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

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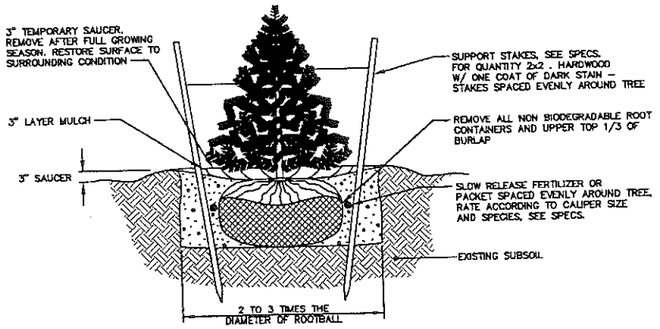
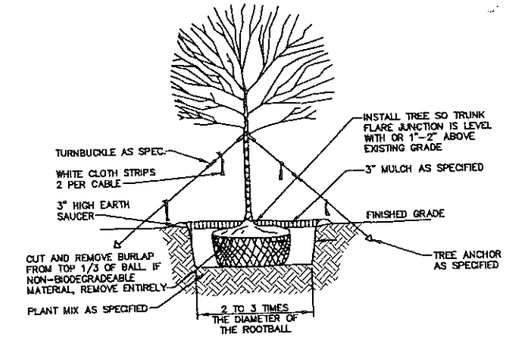
SCALE:	AS NOTED

C-105
SHEET 6 OF 7



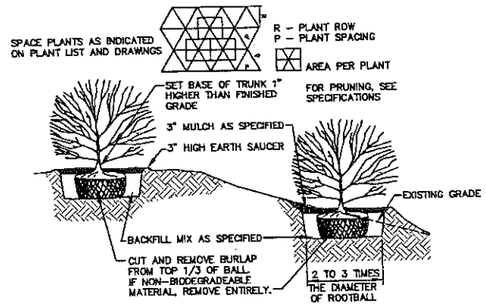
NOTES:
1. NEVER CUT OUT CENTRAL LEADER, PRUNE OUT BROKEN, DEAD, OR CONFLICTING BRANCHES
2. SEE SPECS. FOR ADDITIONAL REQUIREMENTS
3. TREE GUYS SHALL BE GUYING CHAIN OR WEB STRAPPING.
4. INSTALL TREE SO TRUNK FLARE JUNCTION IS LEVEL WITH OR 1"-2" ABOVE EXISTING GRADE.
5. WATER AT TIME OF PLANTING-SEE NOTES AND SPECS.

EVERGREEN TREE PLANTING & STAKING DETAIL
NOT TO SCALE



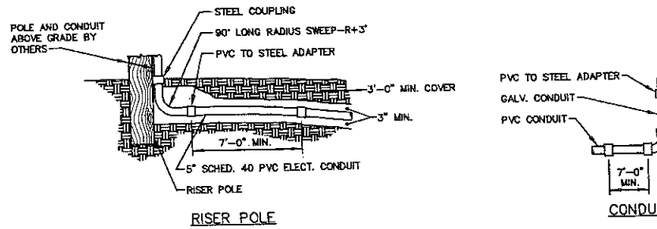
NOTES:
1. ON TREES LESS THAN 4" CA. USE WOOD STAKES.
2. ON TREES 3" CA. OR GREATER USE GUYING CABLES (3) EVENLY SPACED.
3. FOR PRUNING, SEE SPECIFICATIONS.
4. NEVER CUT OUT CENTRAL LEADER, PRUNE OUT BROKEN, DEAD, OR CONFLICTING BRANCHES
5. SEE SPECS. FOR ADDITIONAL REQUIREMENTS
6. WATER AT TIME OF PLANTING-SEE NOTES AND SPECS.

TYPICAL TREE PLANTING DETAIL
NOT TO SCALE — 4" CALIPER AND GREATER

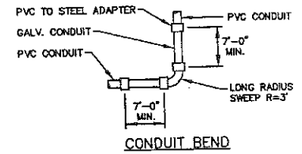


NOTES:
1. SEE SPECS. FOR ADDITIONAL REQUIREMENTS
2. INSTALL SHRUB SO TRUNK ROOT JUNCTION IS LEVEL WITH OR 1"-2" ABOVE EXISTING GRADE.

TYPICAL SHRUB PLANTING DETAIL
NOT TO SCALE

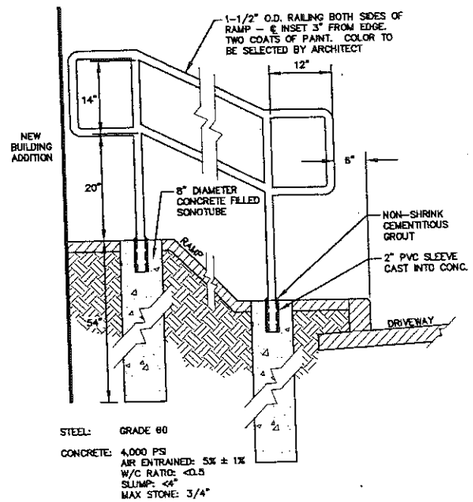


RISER POLE



CONDUIT BEND

CONDUIT BEND AND RISER POLE DETAIL
NOT TO SCALE



STOCKADE FENCE DETAIL
NOT TO SCALE

RAILING DETAIL
SCALE: 1" = 1'-0"

EROSION CONTROL NOTES

1. APPLICATION OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES FOR THE PROJECT SHALL BE IN ACCORDANCE WITH PROCEDURES AND SPECIFICATIONS OF THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES," MARCH 1991 (BMP HANDBOOK).
2. SILTATION FENCE SHALL BE INSTALLED BEFORE GRUBBING OR EARTH MOVING OPERATIONS.
3. PERMANENT SEEDING SHALL BE APPLIED WITHIN 15 DAYS OF FINAL GRADING FROM APRIL 15 TO SEPTEMBER 1.
4. PERMANENT SEEDING SHALL BE:

	LBS/1,000 S.F.
BIRDSFOOT TREFOIL	.18
CROWNVETCH	.34
CREEPING RED FESCUE OR TALL FESCUE	.46

5. TEMPORARY SEEDING SHALL BE APPLIED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL IF PERMANENT SEEDING IS NOT APPLIED. TEMPORARY SEEDING SHALL BE:

SEED	LB/1,000 SQ. FT.	SEEDING DEPTH	RECOMMENDED SEEDING DATES
WINTER RYE	2.6	1-1.5"	8/15-10/1
OATS	1.8	1-1.5"	4/1-7/1, 8/15-9/15
ANNUAL RYEGRASS	0.9	.25"	4/1-7/1
SUDANGRASS	0.9	.5-1"	5/15-8/15
PERENNIAL	0.9	.25"	8/15-9/15

6. FERTILIZER SHALL BE 10-20-20 GRANULAR CAREN FERTILIZER AND APPLIED AT 18.4 LBS/1,000 S.F.
7. LIMESTONE SHALL BE GROUND WITH 50% CALCIUM PLUS MAGNESIUM OXIDE AND APPLIED AT 138 LBS/1,000 S.F.
8. MULCH SHALL BE HAY OR STRAW APPLIED AT 70-90 LBS/1,000 S.F.
9. WINTER MULCH SHALL BE APPLIED BETWEEN OCTOBER 1 AND APRIL 1 AND SHALL BE HAY OR STRAW APPLIED AT 300 LBS/1,000 S.F.
10. ALL EROSION CONTROL MEASURES, SEEDING AND MULCHING SHALL BE INSPECTED WEEKLY, AFTER RAINSTORMS AND DURING RUNOFF EVENTS. ALL MEASURES SHALL BE REPAIRED OR REPLACED WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DAMAGE.
11. SEEDED AND MULCHED AREAS SHALL BE MAINTAINED UNTIL FINAL ACCEPTANCE OF THE WORK. SEED CATCH SHALL BE ACCEPTABLE WHEN 75 PERCENT CATCH IS ESTABLISHED. MAINTENANCE SHALL CONSIST OF PROVIDING PROTECTION AGAINST TRAFFIC AND REPAIRING ANY AREAS TO RE-ESTABLISHED THE CONDITION AND GRADE OF THE SOIL PRIOR TO SEEDING AND SHALL THEN BE REFERTILIZED, RESEEDED AND REMULCHED.
12. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON COMPLETION OF GRADING OPERATIONS AND ESTABLISHMENT OF A 75 PERCENT CATCH OF GRASS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES DURING CONSTRUCTION.
14. EROSION CONTROL INSPECTION SHALL BE PERFORMED BY:
    ENVIRONMENTAL ENGINEERING AND REMEDIATION, INC.
    STEPHEN J. BRADSTREET, P.E.
    222 ST. JOHN STREET SUITE 314
    (207) 828-1272
15. EROSION CONTROL AND CONSTRUCTION SEQUENCE:
    a) INSTALL ALL TEMPORARY EROSION CONTROL AS SHOWN ON THE PLAN SHEET IN ACCORDANCE WITH THE DETAILS AND BMP'S.
    b) CONSTRUCT THE DRIVE AND PARKING LOTS. IMMEDIATELY UPON INSTALLATION OF STORMDRAINS CONSTRUCT RIPRAP INLET PROTECTION.
    c) REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE IMPROVEMENTS ARE COMPLETE AND THERE IS 75 PERCENT CATCH OF GRASS.
    d) INSTALL PERMANENT EROSION CONTROL MEASURES.

REV.	BY	DATE	STATUS	CAD NO.
A	SJB	11/20/01	ISSUED FOR: PLANNING BOARD REVIEW	691_A_C106

STATE OF MAINE — STEPHEN J. BRADSTREET #5740 REGISTERED — PROFESSIONAL ENGINEER

OPM, INC.
CYRUS B. ABBOTT SITE DEVELOPMENT

CONSTRUCTION DETAILS

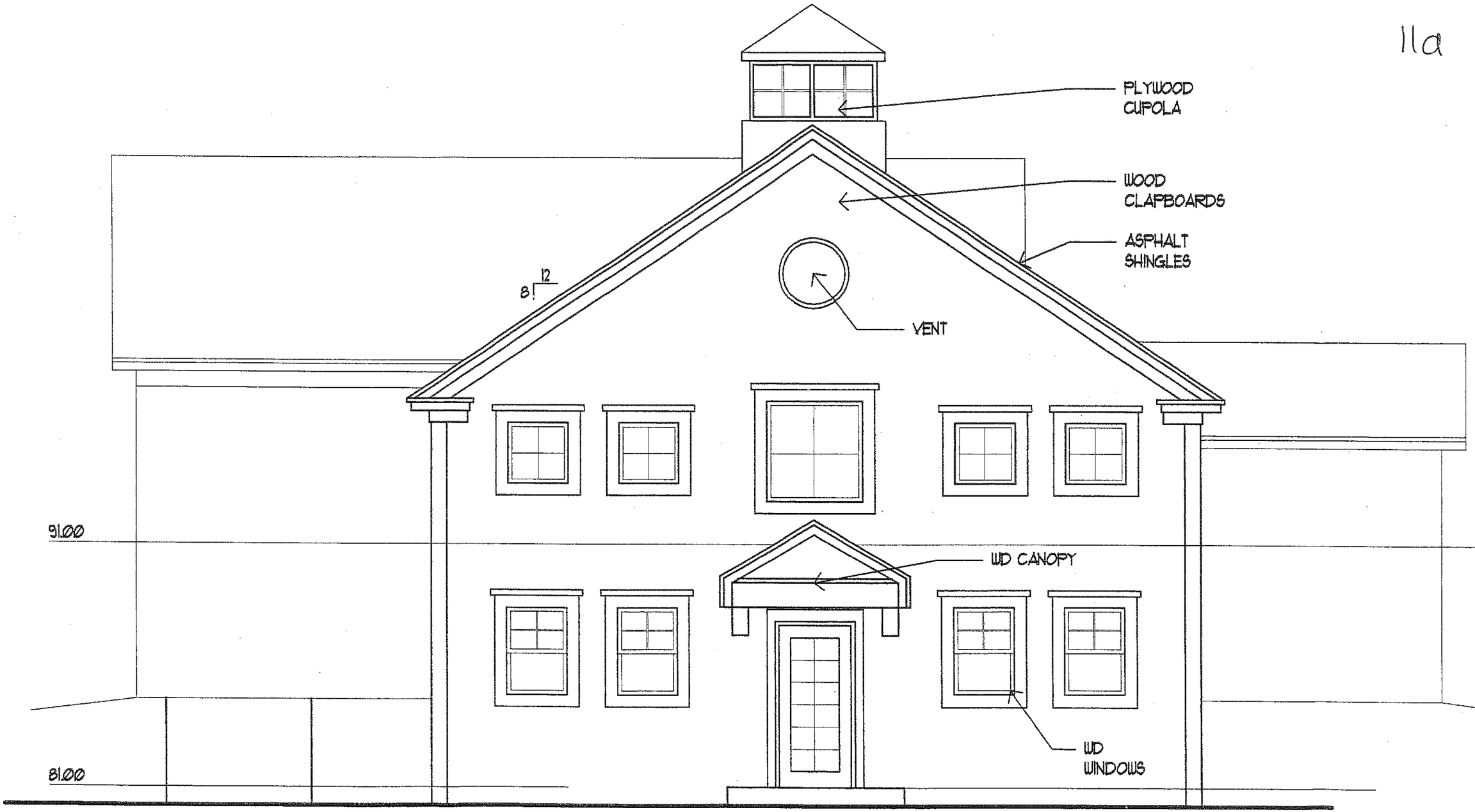
EER Environmental Engineering & Remediation, Inc.
222 St. John Street, Suite 314 Portland, Maine 04102

DESIGN BY:	SJB
DRAWN BY:	JAR
CHECKED BY:	SJB
DATE:	11/14/01
JOB NO:	691
SCALE:	AS NOTED
C-106 SHEET	7 OF 7

FRONTELEVATION

SCALE: 1/4" = 1'-0"

0 4'



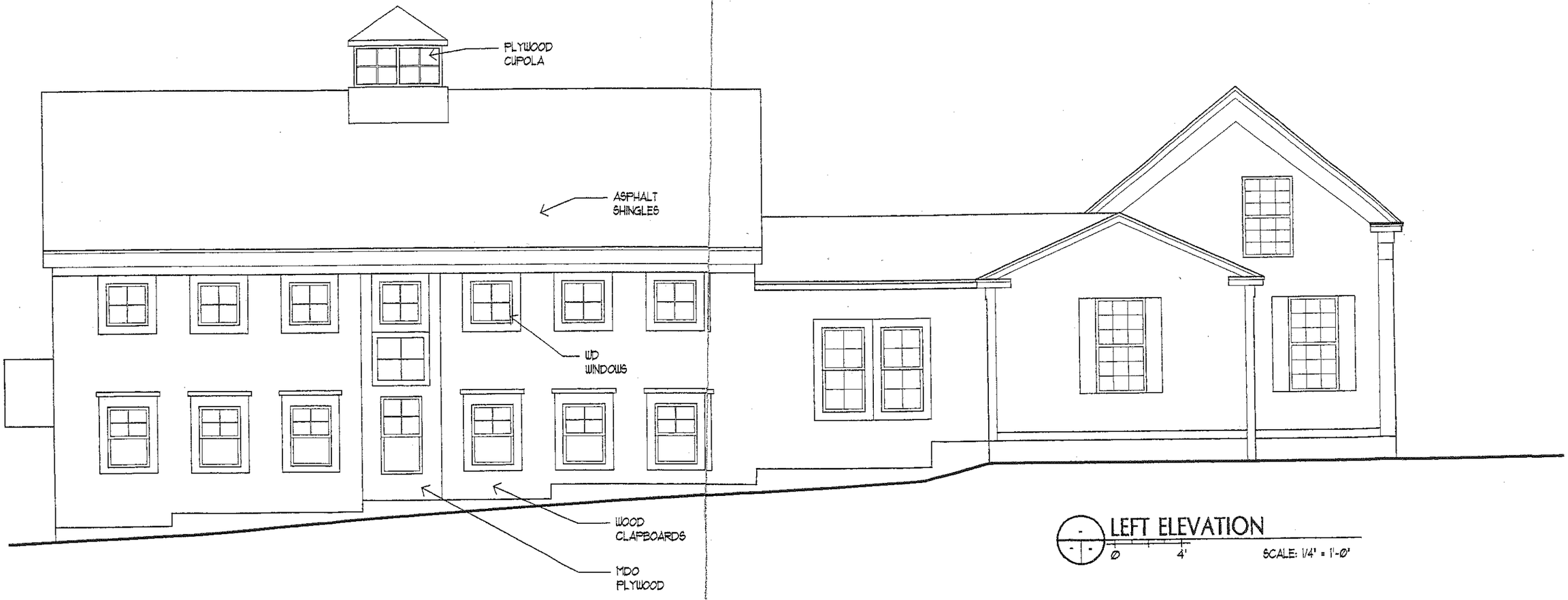
REAR ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

11C



LEFT ELEVATION

SCALE: 1/4" = 1'-0"

Memorandum
Department of Planning and Development
Planning Division

To: Chair Caron and Members of the Portland Planning Board

From: Kandice Talbot, Planner

Date: September 9, 2003

Re: 300 Allen Avenue, Office/Residential Use

Mr. Bob Adam is proposing redevelopment of the parcel located at 300 Allen Avenue. The proposed development will include an approximate 2-story 1,550 sq. ft. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The 6-unit multiplex structure is proposed along the northeasterly property line, with the front of the units being approximately parallel to the property line. The site is 36,443 sq. ft. and zoned R-P and R-5.

An existing 1,000 sq. ft. "Cape" style house currently occupies the site. The existing building is located adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout. Topography on the site is relatively flat and drains toward the central portion of the lot.

This site was previously approved with an addition to the cape style house and a ~~five~~ four-unit multiplex.

Access

Access to the site will be from Allen Avenue via a 20 ft. wide driveway, which will open up into a 29-space parking lot. Use of the parking lot will be by both the office building and the residential building.

During the previous review process, the Planning Board was concerned with the amount of pavement on site and suggested that the applicant reduce the amount of pavement. The previous approval had proposed twenty (20) parking spaces. This site proposed nine (9) additional parking spaces.

Utilities

The applicant is proposing to connect the sanitary sewer service to an existing sanitary sewer main crossing the site. A 4" water service will be connected to the existing water line within Allen Avenue. Electrical and telephone services will be extended underground from the existing overhead lines. Utility capacity letters need to be submitted.

Stormwater

The existing site currently consists of a residential home and a backyard, which is an overgrown field with a perimeter of shrubs and trees. The site is bowl shaped as a result of abutting development over the years.

The applicant is proposing that the site would be graded to collect and direct on and off-site runoff into the existing 24" vitrified clay storm drainage pipe that runs through the site. This pipe is a combined sewer. The entire sanitary flows of Pennell Avenue, Short Street, Hennessey Drive, Skylark Road and half of Cypress Street is carried by these pipes. In addition, the runoff from Cypress Street, 1/3 of Pennell Avenue and all of Short Street are discharged to this combined sewer. As a result, this combined sewer is already burdened with significant peak flows during pre-developed 25-year storm events. Further, the combined 30-inch diameter in Allen Avenue and already has capacity issues.

To address the concerns with the combined sewer within the site and in Allen Avenue, the applicant's engineer is proposing to detain flows to the extent possible from both watershed areas, thereby reducing the rate of flow into the combined sewer system. This is accomplished by the combination of a swale with outlet control and providing outlet control on the stormdrain lines. The applicant is proposing that the reduction in the runoff rate that contributes flow to the 24" vitrified clay sewer has been reduced by 10 to 13% by restricting flow in the stormdrain pipes by the use of orifices. Swales have been created to pond as much water as possible without encroaching onto abutting property. The limiting factor is the shallow sanitary sewer depth and existing grades at the property line.

The City's CSO plan does not include separation of Allen Ave, adjacent to the development site, until 2005 at the earliest. In order for that separation plan to be effective, it will require the separation of Short Street as well as the stormwater runoff from Cypress Street. This would require entering this development site and the granted easement to install a separated storm sewer line. Public Works is recommending, in the best interests of the City and the Allen Ave. sewer separation project, that the applicant install a distinct and separated storm sewer line beginning at the Allen Ave. boundary and continuing to the northeast site boundary. This would represent the applicant's contribution to the CSO project and would benefit the City by reducing future construction costs associated with the referenced CSO project. The applicant has agreed to install a stormdrain system through the property that will allow future separation upstream to be connected to the Allen Avenue system.

Public Works is also requesting that the applicant create more underground stormwater storage in pipes by eliminating the proposed stormwater connection into the combined sewer traversing the site. Instead a new "doghouse" manhole connection should be constructed further downstream, at a point adjacent to the Allen Avenue boundary. Additionally, it is recommended that the design be revised to expand the surface stormwater storage area, adjacent to the westerly boundary. This storage area would be expanded in a southerly direction towards Allen Avenue, thereby increasing storage by approximately 35 – 40%.

The applicant is proposing to meet this request. The installation of the separated storm drain system is proposed as part of this project. The applicant is also proposing to convey an easement for the existing sanitary sewer main traversing the site, as requested by Public Works. The applicant is also proposing an expanded ponding area toward Allen Avenue to increase storage volume.

Based on the proposed number of parking spaces, staff is recommending that the applicant install a stormwater treatment unit. The proposed project is a combination of residential and professional use with 29 parking spaces proposed. Since there is no reasonable buffer available on the project site or off site to be used for stormwater treatment, the project shall be required to install a treatment tank system and devise a manner to treat the runoff in an effective manner. Based on previous applications for new developments used by both the City and DEP, the engineer shall be required to show the TSS removal utilizing the MDEP Sliding Scale Method. This is the manner that the City's Ordinance pertaining to Stormwater Management for Runoff Quality has been handled when a development exceeds 25 equivalent car spaces.

Public Works has reviewed the plans and does not have any issues with the plans as proposed. Public Works memo is included as Attachment 6.

The Development Review Coordinator has reviewed the plans and has concerns regarding the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue. A stormwater management plan must also be submitted. It also appears that some of the land may be wet or saturated frequently. The applicant should verify that these are not wetlands, and if they are, delineate accordingly on the site plans. The DRC's memo is included as Attachment 7.

Landscaping

The applicant has submitted a landscaping plan, which is included as Attachment 10. It does not appear that the applicant is proposing any buffer between the westerly edge of the parking lot and the residential neighborhood. The applicant shall address this concern. The City Arborist is currently reviewing the plan.

Lighting

The applicant shall provide staff with lighting catalogue cuts and a lighting photometric plan.

Elevations

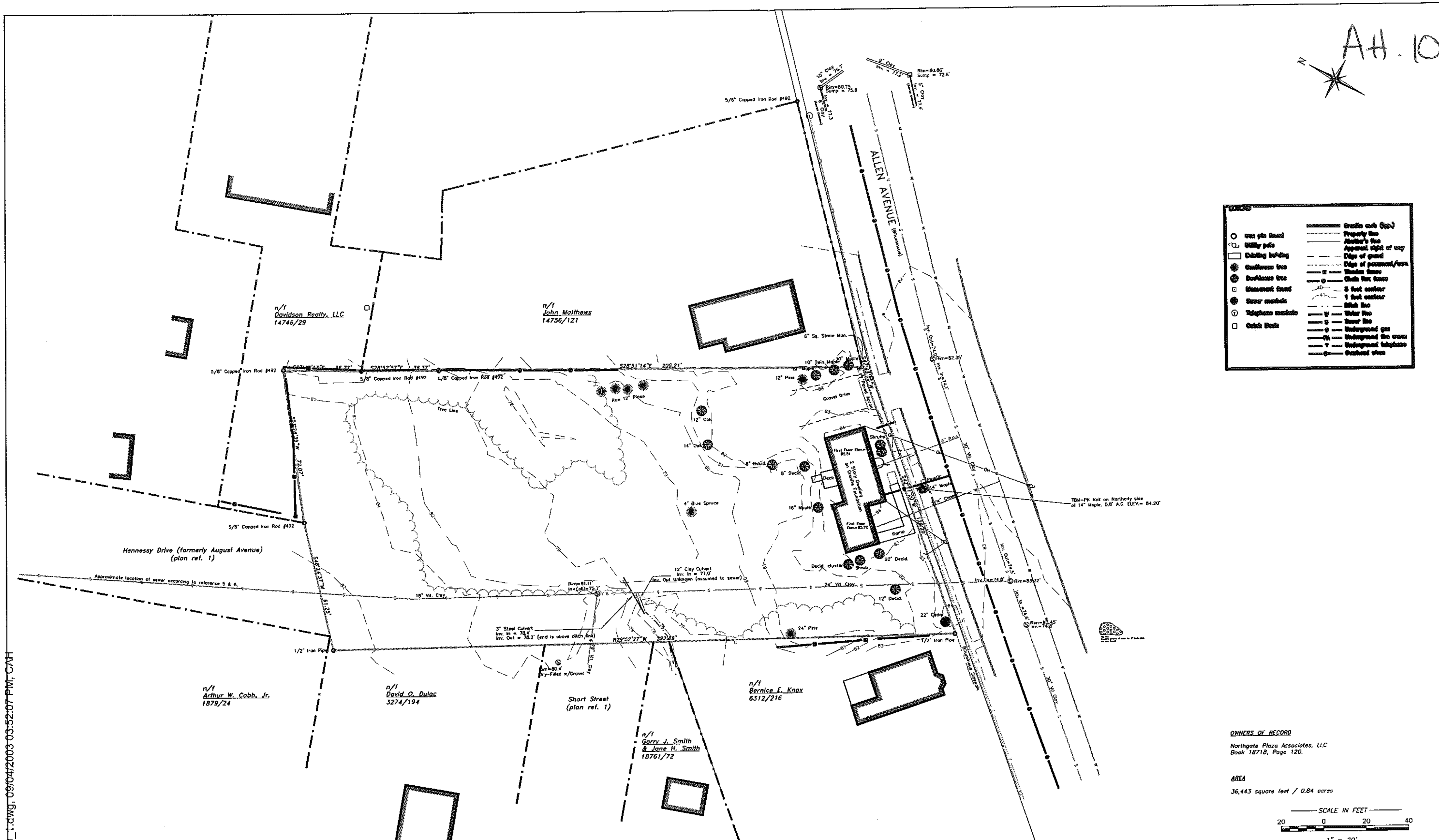
Elevations have been included as Attachment 11. However, because they were submitted earlier of this day, staff has not reviewed the building elevations.

Items to be Addressed Prior to Public Hearing

- Pavement quantity
- Stormwater Volume and Treatment
- Development Review Coordinator's Memo
- Landscaping
- Elevations review
- Neighborhood Meeting
- Capacity Letters

Attachments:

1. Applicant's Letter dated June 24, 2003
2. Vicinity Map
3. Applicant's Letter dated August 26, 2003
4. Financial Capacity Letter
5. Deed
6. Public Works' Memo dated July 18, 2003 and September 5, 2003
7. DRC's Memo dated September 5, 2003
8. Applicant's Letter dated September 5, 2003
9. Previously Approved Plan by Planning Board
10. Proposed Plans
11. Elevations



OWNERS OF RECORD

Northgate Plaza Associates, LLC
Book 18718, Page 120.

AREA

36,443 square feet / 0.84 acres

NOTES

(1) Book and Page references are to the Cumberland County Registry of Deeds unless otherwise specified.

(2) Bearings are referenced to magnetic north.

(3) Elevations are referenced to NAVD 88 based on Maine Department of Transportation Bench Mark 159, top of bolt in sign base near the northwest intersection of Allen Avenue and Washington Avenue. Elevation = 82.27' (25.075m).

(4) The ancient deeds for this parcel call for monumentation which was not recovered, is missing or destroyed. The boundaries delineated hereon are based on abutting surveys and the lines of possession, acquiesced to by the abutters. In order to fully establish the boundaries as delineated hereon it is recommended that deeds be exchanged with the abutters, based on this survey.

REFERENCES

(1) Plan of The Holmsteads dated September 1921 and recorded in Plan Book 14 page 70.

(2) Plan of Sarah J. Cowen Lot by Albert W. Hume dated October 12, 1978.

(3) Property Plan for James Davison by A.R.C.C. dated April 8, 1999.

(4) Standard Boundary Survey for John Matthews by A.R.C.C. dated September 5, 2001.

(5) Partial copy of Portland Sewer System Infiltration–Inflow Analysis for the Portland Water District dated 1988.

(6) Deed of Mary J. Wilson to Portland Home Building Association for a 24 inch sewer line, dated August 21, 1922 and recorded in Book 1111, Page 300.

State of Maine, Cumberland ss
Registry of Deeds
Received ______________ 20____
at___h___m___M and recorded in
Plan Book ________ Page _____
Attest:________________
Register

CERTIFICATION

This survey substantially conforms to the current standards of practice set forth by the Maine State Board of Licensure for Land Surveyors.

Paul H. Bobbidge, P.L.S. #1237

PLAN OF
EXISTING CONDITIONS & BOUNDARY SURVEY
300 Allen Avenue — Portland, Maine

MADE FOR

GORRILL–PALMER CONSULTING ENGINEERS
P.O. Box 1237 — Gray, Maine

JOB# 201079.1	DATE: 06/16/03	SCALE: 1"=20'
BOOK# 711	Titcomb Associates 133 Gray Road Falmouth, Maine 04105	
LP\201079_1.DWG		
FILE# 8305		

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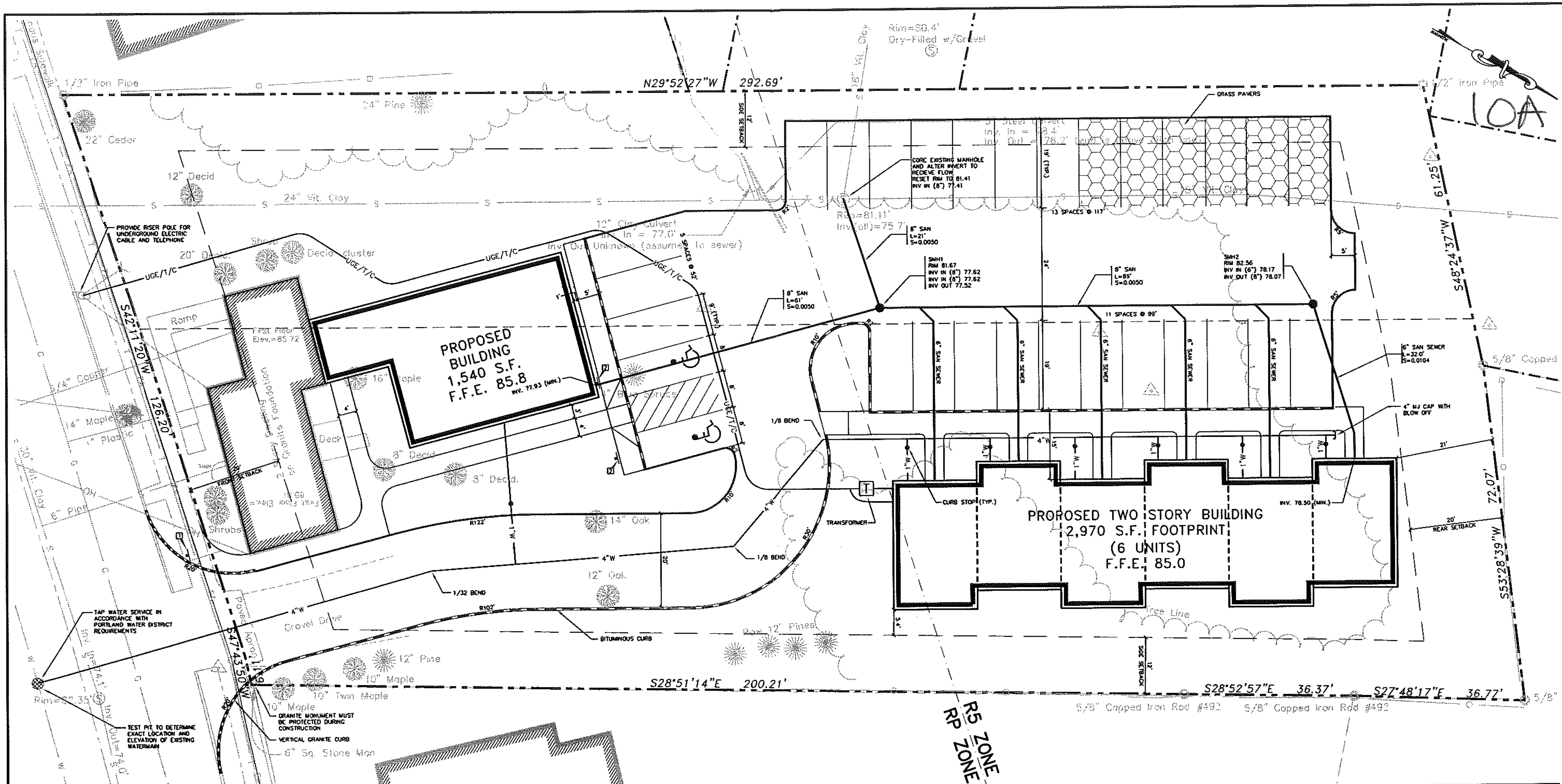

CURBING LEGEND	
	VERTICAL GRANITE CURB
	BITUMINOUS CURB

SIGN LEGEND	
R1-1 30"x 30" [1]	R7-8 12"x 18" [2]

SPACE AND BULK STANDARDS

	RP ZONE		R5 ZONE	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
MIN. LOT AREA/DWELLING AREA	6,000 S.F.	19,087 S.F.	6,000 S.F.	17,356 S.F.
MIN. STREET FRONTAGE	60'	>60'	50'	N/A
MIN. YARD DIMENSIONS FRONT REAR *SIDE	 20' 20' 10' - 1 STORY 12' - 2 STORY 14' - 3 OR MORE STORIES	 >20' >20' >12'	 20' 20' 8' - 1 STORY 8' - 1 1/2 STORY 12' - 2 STORY 14' - 2 1/2 STORY	 >20' >20' >12'
MINIMUM LOT WIDTH	60'	>60'	60'	>60'
MAX. STRUCTURE HEIGHT	45'	<45'	35'	<35'
MAX. LOT COVERAGE (BUILDING FOOTPRINT)	–	–	40%	16.6%
MAX. IMPERVIOUS SURFACE	80%	45.2%	–	–

*THE WIDTH OF ONE (1) SIDE YARD MAY BE REDUCED ONE (1) FOOT FOR EVERY FOOT THAT THE OTHER SIDE YARD IS CORRESPONDINGLY INCREASED, BUT NO LESS THAN EIGHT (8) FEET.

SITE DATA

ZONE: R-5: RESIDENTIAL 5
RP: RESIDENTIAL PROFESSIONAL

SITE AREA 36,443 S.F. = 0.84 ACRES

BUILDING AREA

EXISTING OFFICE (1 STORY)	1,013 S.F.
PROPOSED OFFICE (2 STORIES)	1,540 S.F. x 2
TOTAL FLOOR AREA	4,093 S.F.

PARKING	REQUIRED	PROVIDED
NEW STRUCTURE		
OFFICE (1 SP/400 SF FLOOR AREA) x 4,093 SF	11	17
RESIDENTIAL (2 SP/UNIT) x 6 UNITS	12	12
TOTAL	23	29
HANDICAP SPACES	2	2

1 inch = 10 ft.

Rev.	Date	Revision
–	–	–

Issued For	Date	By
CITY STAFF REVIEW	8/26/03	AMP
SKETCH PLAN REVIEW	6/20/03	AMP

Design: PDO	Draft: DB	Date: JUN 2003
Checked: AMP	Scale: 1"=10'	Job No.: 801
File Name: 801-SP.DWG		

This plan shall not be modified without written permission from Gorrill-Palmer Consulting Engineers, Inc.(GPCEI). Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to GPCEI.

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Drawing Name: Site Layout & Utility Plan
Project: 300 ALLEN AVE.
Client: Bob Adam
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 1

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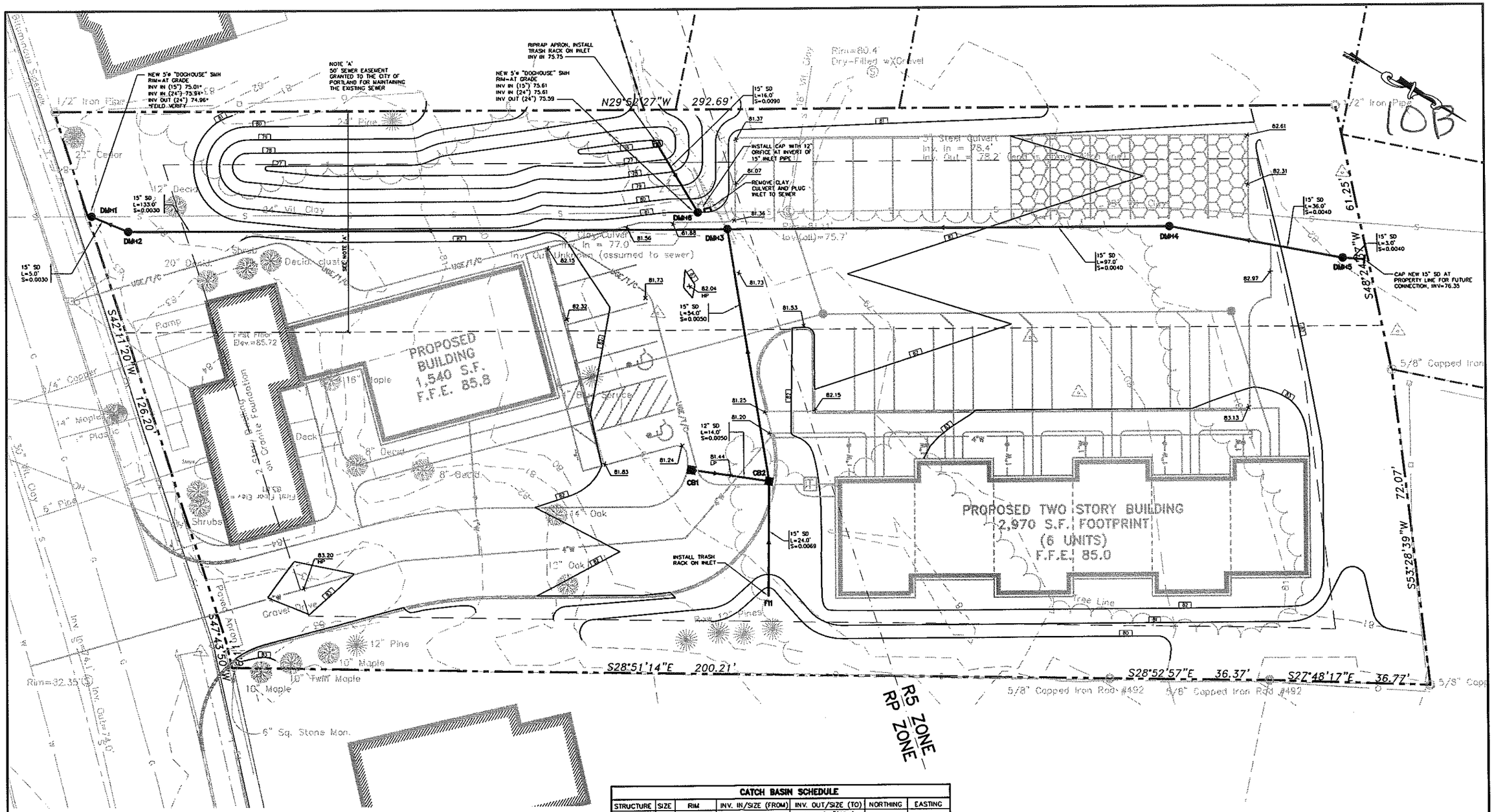


CATCH BASIN SCHEDULE

STRUCTURE	SIZE	RIM	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)	NORTHING	EASTING
CB1	4'ø	81.03	–	77.41/12"(CB2)	–	–
CB2	4'ø	81.03	77.34/12"(CB1) 77.34/15"(INLET)	77.24/15"(DMH3)	–	–
DMH1	5'ø	AT GRADE	75.01/15"(DMH2) 75.94/24"(DMH6)	74.96/24" (EXIST SAN MH)	–	–
DMH2	4'ø	82.50	75.12/15"(DMH3)	75.02/15"(DMH1)	–	–
DMH3	4'ø	81.43	76.97/15"(CB2) 75.62/15"(DMH4)	75.52/15"(DMH2)	–	–
DMH4	4'ø	82.41	76.10/15"(DMH5)	76.00/15"(DMH3)	–	–
DMH5	4'ø	82.10	76.34/15"(STUB)	76.24/15"(DMH4)	–	–
DMH6	5'ø	81.00	75.61/15"(INLET) 75.61/24"(SAN)	75.59/24"(DMH1)	–	–
F11	–	–	–	79.00/15"(CB2)	–	–

Rev.	Date	Revision
–	–	–

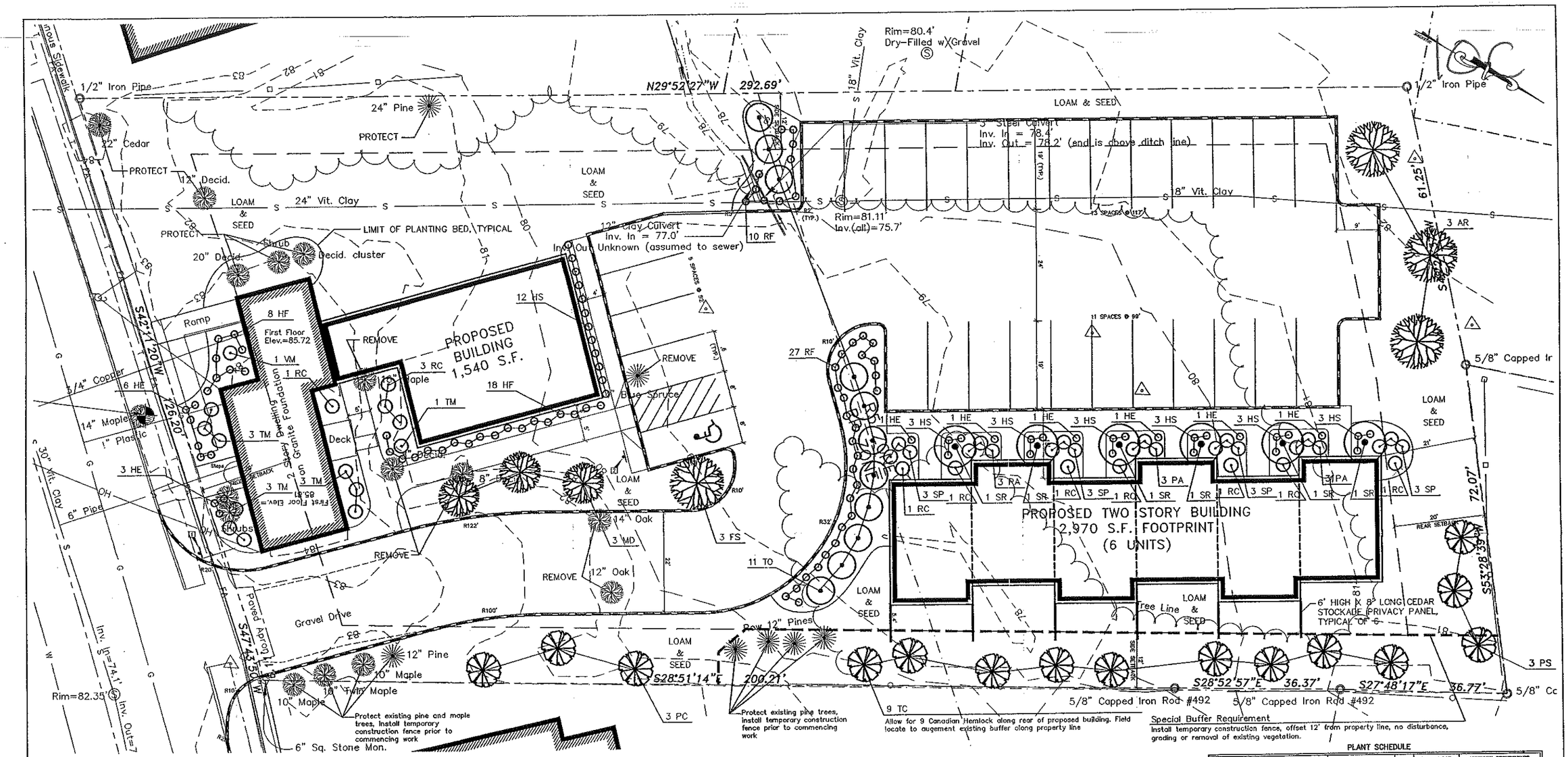
Issued For	Date	By
CITY STAFF REVIEW	8/26/03	AMP

Design: DER | Drafl: LAN/DB | Date: JUN 2003
Checked: AMP | Scale: 1"=10' | Job No.: 801
File Name: 801-GRADING.DWG

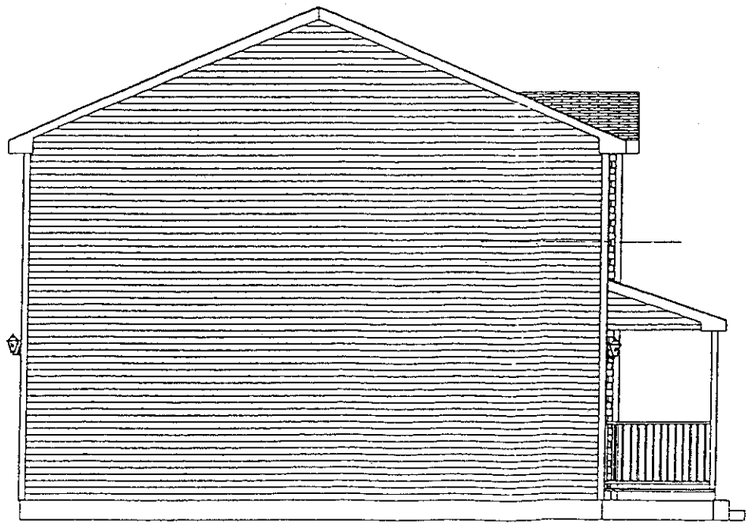
GP Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237 15 Shaker Road Gray, ME 04039
Traffic and Civil Engineering Services
207-657-6910 FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Drawing Name: **Grading, Drainage & Erosion Control Plan**
Project: **300 ALLEN AVE.**
Client: **Bob Adam**
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 2

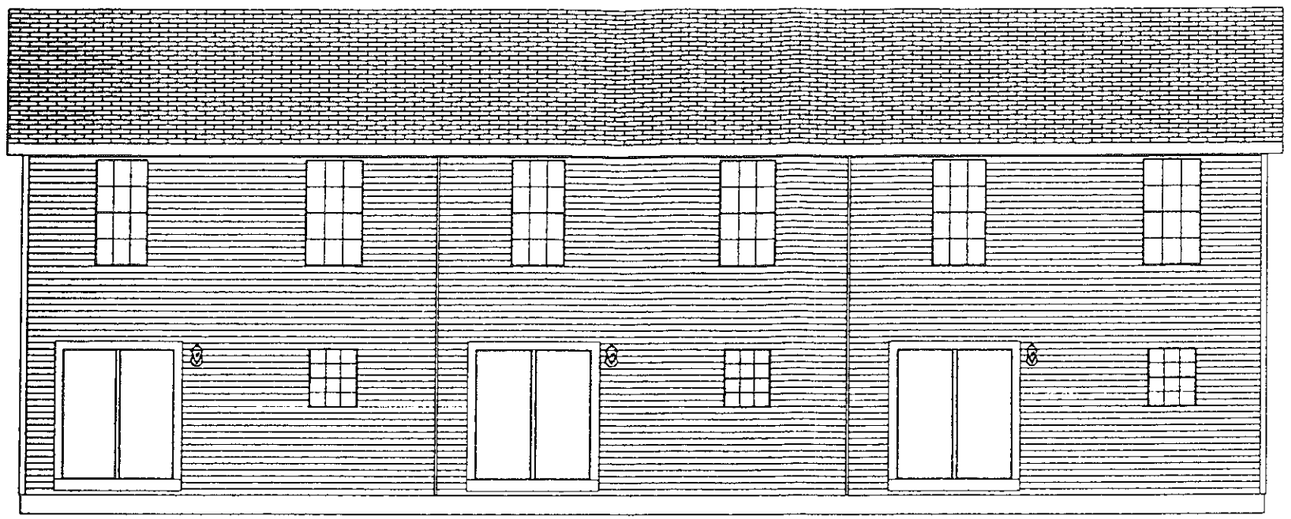

1/2" Iron Pipe
N29°52'27"W 292.69'
1/2" Iron Pipe
24" Pine
PROTECT
22" Cedar
PROTECT
12" Decid.
20" Decid.
Shrub
Decid. cluster
LOAM & SEED
24" Vit. Clay
LIMIT OF PLANTING BED, TYPICAL
12" Clay Culvert
Inv. In = 77.0'
Unknown (assumed to sewer)
In Out
Rim=80.4'
Dry-Filled w/Gravel
18" Vit. Clay
3 Steel Culvert
Inv. In = 78.4'
Inv. Out = 78.2' (end is above ditch line)
8" Vit. Clay
Rim=81.11'
Inv.(alt)=75.7'
10 RF
27 RF
PROPOSED BUILDING 1,540 S.F.
First Floor Elev.=85.72
8 HF
1 VM
1 RC
3 TM
Existing Dwelling Foundation to be Removed
First Floor Elev.= 85.81
Ramp
Steps
SETBACK
Deck
12 HS
18 HF
1 TM
3 RC
15" Maple
REMOVE
Blue Spruce
3 FS
11 TO
3 MD
14" Oak
12" Oak
3 HE
6 HE
5/4" Copper
14" Maple
1" Plastic
6" Pipe
Shrubs
OH
S42°11'20"W 126.20'
Inv. Out=74.1'
Inv. In=74.4'
Rim=82.35
30" Vit. Clay
Paved Apron
Gravel Drive
S47°43'50"W
12" Pine
10" Maple
18" Twin Maple
10" Maple
Protect existing pine and maple trees, install temporary construction fence prior to commencing work
6" Sq. Stone Mon.
Row 12" Pines
Protect existing pine trees, install temporary construction fence prior to commencing work
S28°51'14"E 200.21'
3 PC
9 TC
Allow for 9 Canadian Hemlock along rear of proposed building. Field locate to augement existing buffer along property line
LOAM & SEED
Tree Line
PROPOSED TWO STORY BUILDING
2,970 S.F. FOOTPRINT
(6 UNITS)
6' HIGH X 8' LONG CEDAR STOCKADE PRIVACY PANEL, TYPICAL OF 6
3 PS
S28°52'57"E 36.37'
S27°48'17"E 36.77'
5/8" Capped Iron Rod #492
5/8" Capped Iron Rod #492
5/8" Capped Ir
5/8" Cc
Special Buffer Requirement
Install temporary construction fence, offset 12' from property line, no disturbance, grading or removal of existing vegetation.
61.25'
72.07'
S55°28'39"E
3 AR
11 SPACES @ 99'
5 SPACES @ 55'
13 SPACES @ 117'
1 HE 3 HS
3 RA
3 PA
3 SP 1 RC 1 SR
20' REAR SETBACK
Existing Gravel Drive
Existing Paved Apron
Existing Shed
Existing Garage
Existing Dwelling
Existing Shed
Existing Garage
Existing Dwelling
Existing Shed
Existing Garage
Existing Dwelling

FRONT ELEVATION

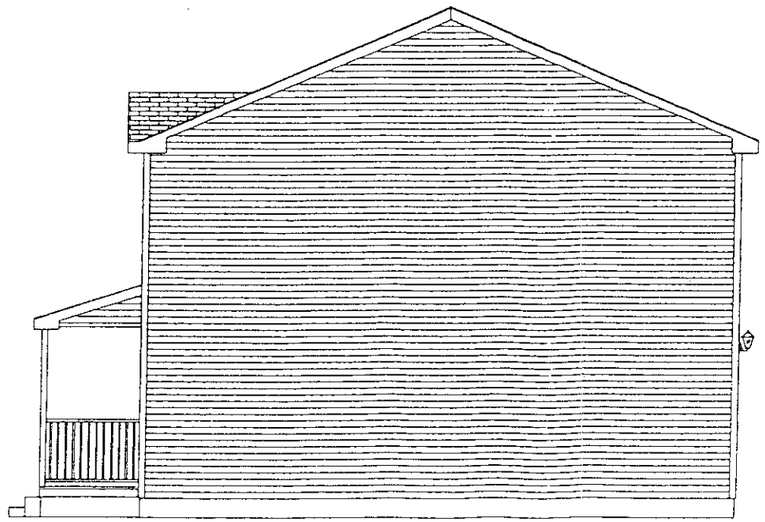


LEFT END ELEVATION

11A



REAR ELEVATION



RIGHT END ELEVATION

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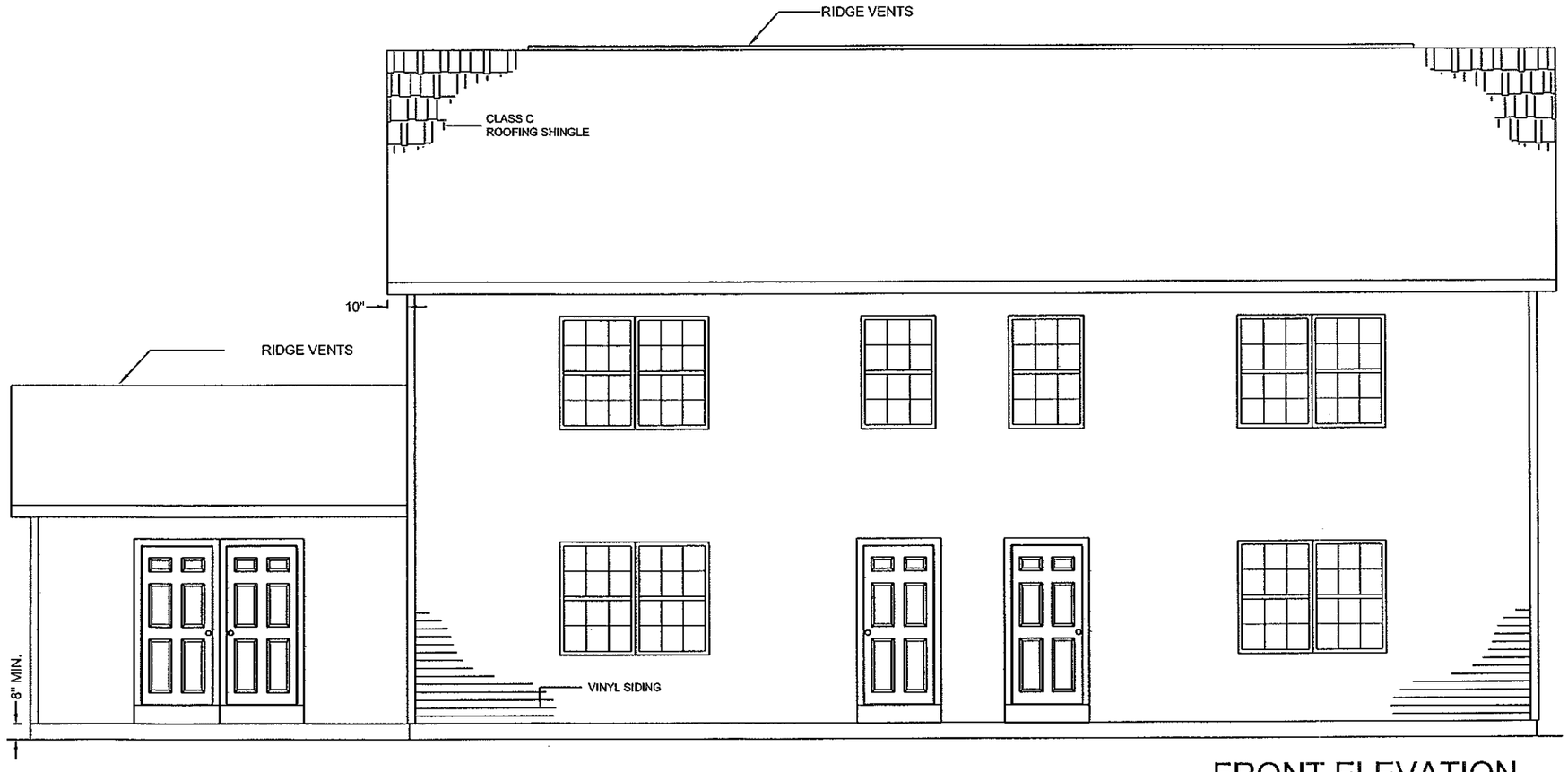
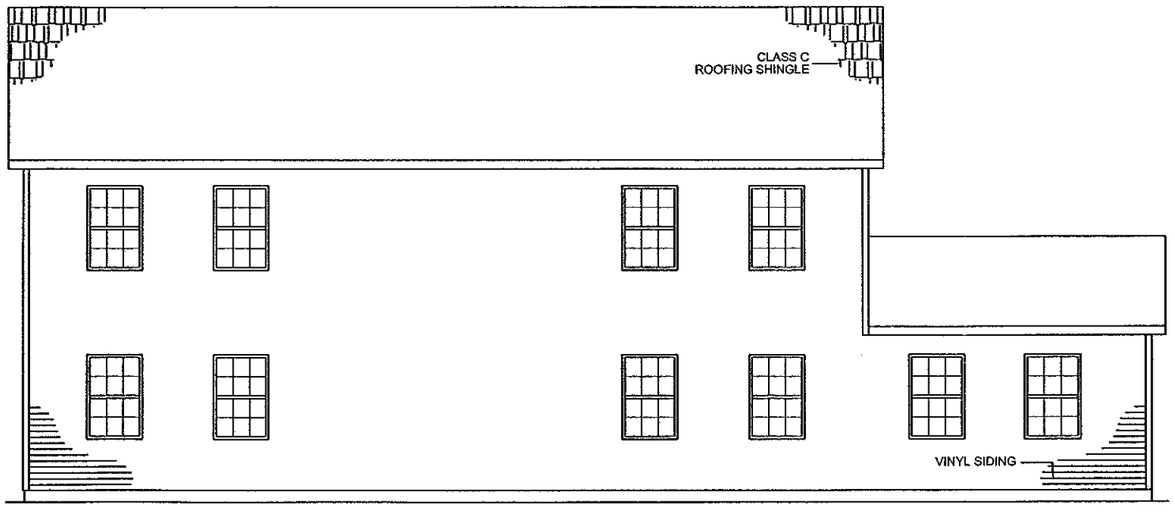


FRONT ELEVATION

FRONT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: ME ---	BUILDER: ADAMS ADDRESS: --- ---	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ---	SHEET NAME SHEET # 5 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

11D



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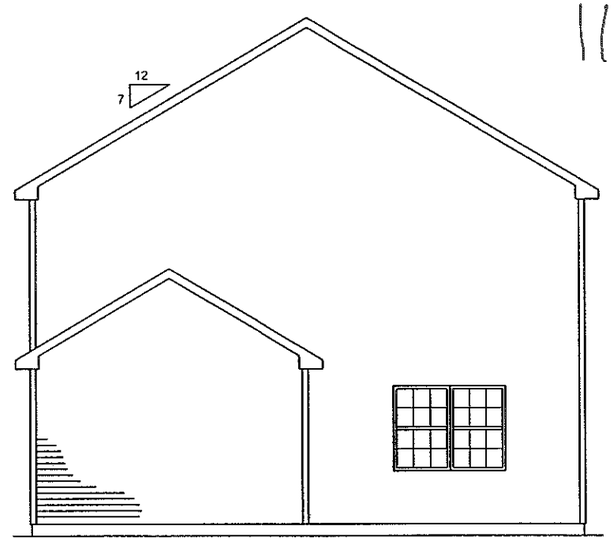
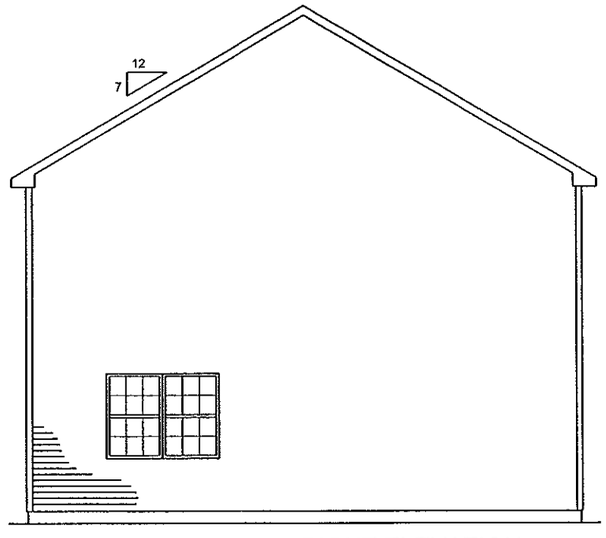


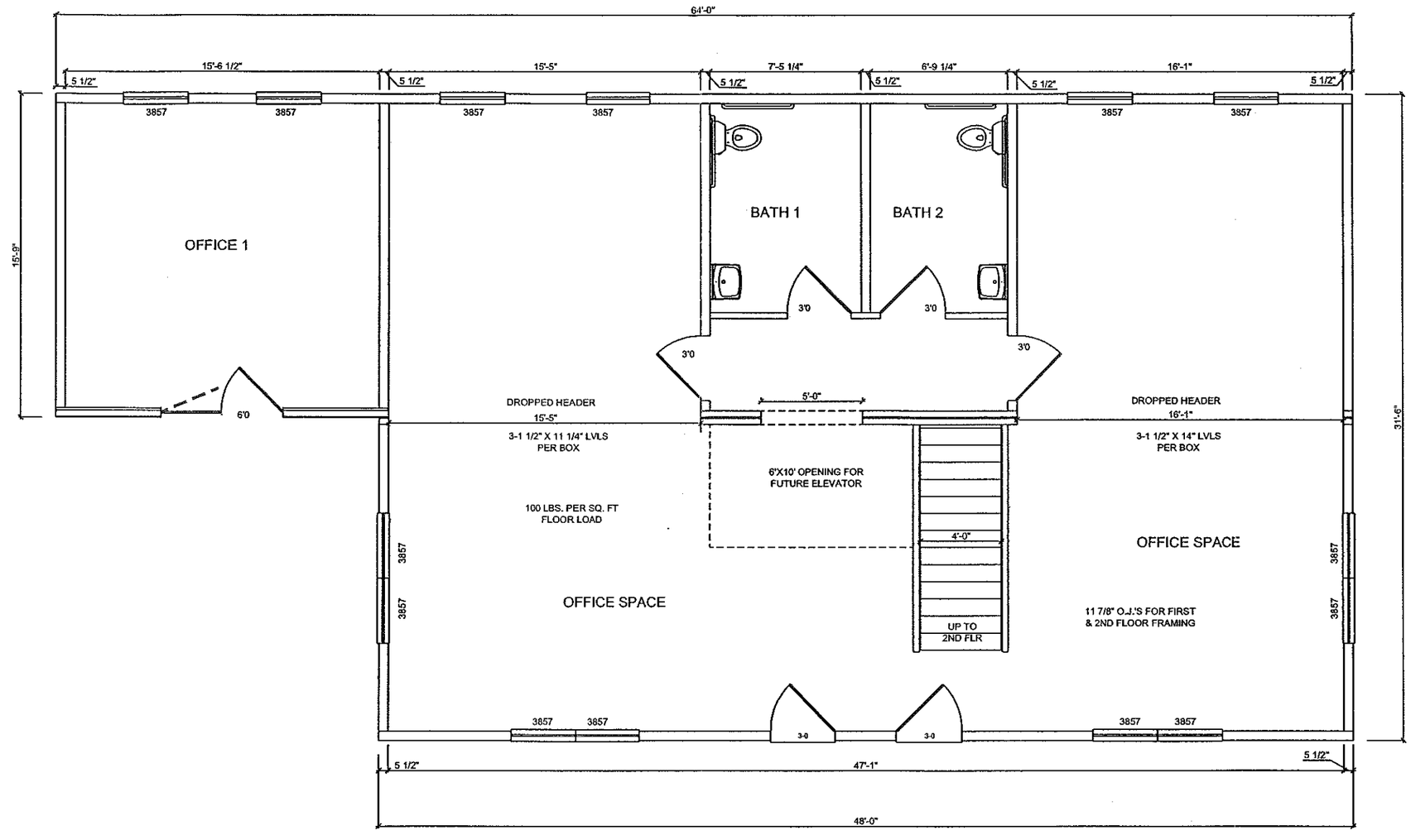
LEFT ELEVATION



RIGHT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: --- ---	BUILDER: ADAMS-2 ADDRESS: --- ---	HOUSE TYPE FILE NAME: ADAMS2 SERIAL #: ----	ELEVATIONS ALL SHEET # 5a DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: -----	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

11E



1ST FLOOR PLAN (9FT. CEILING)

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: --- ---	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

PBR1

REVISED MOTIONS FOR THE BOARD TO CONSIDER – 300 Allen Avenue
10/28/2003

On the basis of plans and material submitted by the applicant and on the basis of information contained in Planning Report #51-03 pertaining to the standards of Site Plan and Subdivision Review, the Planning Board finds:

6-1 Caron opposed

i. That the standards contained in the City of Portland Technical Standards and Design Guidelines, Lighting Section regarding cut-off fixtures are [waived/not waived] as the Board [finds/does not find] that this site requires specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context providing that photometrics fall within IESNA guidelines.

ii. That the proposed development [is/is not] in conformance with the Subdivision Ordinance of the Land Use Code

7-0

Potential Conditions of Approval:

1. that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

2. that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

3. that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

iii. That the proposed development [is/is not] in conformance with the Site Plan Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the City Arborist review and approved as it relating to after utility line in place/ the water line

7-1

2. that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

3. Stockade fence detail materials Style for review and approval

From: Jeff Tarling
To: Kandi Talbot
Date: Tue, Oct 28, 2003 3:57 PM
Subject: 300 Allen Avenue

Kandi,

I have reviewed the revised plans for 300 Allen Avenue. The landscape plan addresses buffering, shade and ornamental trees and foundation plantings.

Jeff Tarling

CC: Sarah Hopkins

PLANNING REPORT #51-03

OFFICE/RESIDENTIAL USE
VICINITY OF 300 ALLEN AVENUE
SUBDIVISION AND SITE PLAN REVIEW
BOB ADAM, APPLICANT

Submitted to:
Portland Planning Board
Portland, Maine
October 28, 2003

Submitted by:
Kandice Talbot, Planner

I. INTRODUCTION

Mr. Bob Adam is proposing redevelopment of the parcel located at 300 Allen Avenue. The proposed development will include an approximate 2-story 1,550 sq. ft. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The 6-unit multiplex structure is proposed along the northeasterly property line, with the front of the units being approximately parallel to the property line. The site is 36,443 sq. ft. and zoned R-P and R-5.

An existing 1,000 sq. ft. "Cape" style house currently occupies the site. The existing building is located adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout. Topography on the site is relatively flat and drains toward the central portion of the lot.

This site was previously approved with an addition to the cape style house and a four-unit multiplex.

201 notices were sent to area residents. A notice also appeared in the October 20th and October 21st editions of the *Portland Press Herald.* A neighborhood meeting was held on October 14, 2003. The neighborhood minutes are included as Attachment 11.

II. SUMMARY OF FINDINGS

Zoning:	R-P and R-5
Parcel Size:	36,443 sq. ft.
Parking Spaces:	29 parking spaces

III. STAFF REVIEW

The proposal has been reviewed for compliance with the Subdivision and Site Plan Ordinance of the Land Use Code. Planning, Building Inspections, Public Works, Parks and Recreation and Fire Prevention staff have completed review of the proposal.

IV. SUBDIVISION REVIEW

1. Water and Air Pollution

   The development will not result in undue water or air pollution.

2/3. Utilities

   The applicant is proposing to connect the sanitary sewer service to an existing sanitary sewer main crossing the site. A 4" water service will be connected to the existing water line within Allen Avenue. Electrical and telephone services will be extended underground from the existing overhead lines. A water capacity letter is included as Attachment 9. A sewer capacity letter has been requested from the Portland Sewer Division but has not been received at this time. A potential condition of approval is:

   - that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

The applicant would need to grant a 50-foot sewer easement to the City for the existing sewer line that goes through the site and grant access to the easement through the proposed driveway and parking area. A potential condition of approval is:

- that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

4. Soil Erosion

The applicant has submitted an erosion and sedimentation control plan. The Development Review Coordinator has reviewed and approved the erosion control plans.

5. Traffic

Access to the site will be from Allen Avenue via a 20 ft. wide driveway, which will open up into a 29-space parking lot. Use of the parking lot will be by both the office building and the residential building.

During the previous review process, the Planning Board was concerned with the amount of pavement on site and suggested that the applicant reduce the amount of pavement. The previous approval had proposed twenty (20) parking spaces. This site proposal includes nine (9) additional parking spaces. However, six (6) of those spaces will be constructed of grass pavers to eliminate the amount of pavement.

6. Stormwater

The existing site currently consists of a residential home and a backyard, which is an overgrown field with a perimeter of shrubs and trees. The site is bowl shaped as a result of abutting development over the years.

The applicant is proposing that the site would be graded to collect and direct on and off-site runoff into the existing 24" vitrified clay storm drainage pipe that runs through the site. This pipe is a combined sewer. The entire sanitary flows of Pennell Avenue, Short Street, Hennessey Drive, Skylark Road and half of Cypress Street is carried by these pipes. In addition, the runoff from Cypress Street, 1/3 of Pennell Avenue and all of Short Street are discharged to this combined sewer. As a result, this combined sewer is already burdened with significant peak flows during pre-developed 25-year storm events. Further, the combined 30-inch diameter in Allen Avenue and already has capacity issues.

To address the concerns with the combined sewer within the site and in Allen Avenue, the applicant's engineer is proposing to detain flows to the extent possible from both watershed areas, thereby reducing the rate of flow into the combined sewer system. This is accomplished by the combination of a swale with outlet control and providing outlet control on the stormdrain lines. The applicant is proposing that the reduction in the runoff rate that contributes flow to the 24" vitrified clay sewer has been reduced by 10 to 13% by restricting flow in the stormdrain pipes by the use of orifices. Swales have been created to pond as much water as possible without encroaching onto abutting property. The limiting factor is the shallow sanitary sewer depth and existing grades at the

property line.

The City's CSO plan does not include separation of Allen Ave, adjacent to the development site, until 2005 at the earliest. In order for that separation plan to be effective, it will require the separation of Short Street as well as the stormwater runoff from Cypress Street. This would require entering this development site and the granted easement to install a separated storm sewer line. Public Works is recommending, in the best interests of the City and the Allen Ave. sewer separation project, that the applicant install a distinct and separated storm sewer line beginning at the Allen Ave. boundary and continuing to the northeast site boundary. This would represent the applicant's contribution to the CSO project and would benefit the City by reducing future construction costs associated with the referenced CSO project. The applicant has agreed to install a stormdrain system through the property that will allow future separation upstream to be connected to the Allen Avenue system.

Public Works is also requesting that the applicant create more underground stormwater storage in pipes by eliminating the proposed stormwater connection into the combined sewer traversing the site. Instead, a new "doghouse" manhole connection should be constructed further downstream, at a point adjacent to the Allen Avenue boundary. Additionally, it is recommended that the design be revised to expand the surface stormwater storage area, adjacent to the westerly boundary. This storage area would be expanded in a southerly direction towards Allen Avenue, thereby increasing storage by approximately 35 – 40%.

The applicant is proposing to meet this request. The installation of the separated storm drain system is proposed as part of this project. The applicant is also proposing to convey an easement for the existing sanitary sewer main traversing the site, as requested by Public Works. The applicant is also proposing an expanded ponding area toward Allen Avenue to increase storage volume.

Based on the proposed number of parking spaces, staff is recommending that the applicant install a stormwater treatment unit. The proposed project is a combination of residential and professional use with 29 parking spaces proposed. The applicant is proposing to install a Downstream Defender as part of this project.

Public Works has reviewed the plans and does not have any issues with the plans as proposed. Public Works memo is included as Attachment 6.

The Development Review Coordinator has reviewed the plans and has concerns regarding the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue. It also appears that some of the land may be wet or saturated frequently. The applicant should verify that these are not wetlands, and if they are, delineate accordingly on the site plans. The applicant has addressed most of these concerns; however, the Development Review Coordinator is recommending that the separation of storm drainage should include collecting the offsite runoff in the new storm drain manhole #3, instead of sanitary manhole. The Development Review Coordinator's Memos are included as Attachment 7 and 15. A potential condition of approval is:

- that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

7. Solid Waste Disposal

A dumpster is not proposed on the site. The applicant proposes to have the residential building use the City's curbside pickup service. A maintenance company will service the office building and the company will remove waste.

8. Scenic Beauty

This development will not cause an undue adverse effect on the scenic or natural beauty of the area aesthetics, historic sites, significant wildlife habitat or rare and irreplaceable natural area.

9. Comprehensive Plan

This development is consistent with the City of Portland Comprehensive Plan.

10. Financial Capability

A letter of financial capability is included as Attachment 4.

11. Groundwater

The development as proposed will not adversely affect the quality or quantity of groundwater.

12. Flood Hazard/Shoreline

The site is not located in the flood hazard or shoreland zones.

VI. SITE PLAN REVIEW

1/2. Traffic

The traffic comments have been consolidated in the subdivision review section.

3. Proposed Buildings

The applicant is proposing a 1,550 sq. ft. 2-story addition to the existing building located at 300 Allen Avenue. The building will be used for professional offices. Currently, the existing building is residential. The building façade will consist of vinyl siding. Elevations of the addition are included as Attachment 18.

The applicant is also proposing a 6-unit residential building in the rear of the property. Patios are proposed on the rear of the units. The building façade will consist of vinyl clapboard. The multifamily elevations are included as Attachment 18.

4. Sewer, Storm Drain and Water

The sewer, storm drain and water comments have been consolidated in the subdivision review section.

5. Landscaping/Existing Vegetation

The applicant has submitted a landscaping plan, which is included as Attachment 20G.

The applicant is proposing thirty-one (31) trees around the site. The subdivision ordinance requires two trees per unit, which has been met. The applicant is also proposing shrubs and plantings around the buildings. There was a concern that there was no buffering on the westerly edge of the property, between the proposed parking lot and the residential neighborhood. The applicant is proposing a 6 ft. wooden stockade fence along the property line to buffer the parking area from the residential neighbors. The City Arborist is currently reviewing the most recent landscaping plan. A potential condition of approval is:

- that the City Arborist review and approve the landscaping plan.

6. Soils and Drainage

Soils and drainage have been consolidated in the subdivision review section.

7. Exterior Lighting

The applicant is proposing five (5) light poles around the site. The poles will be 18 ft. high and the fixtures will be 250-watt lights. The applicant is also proposing six (6) ornamental residential poles in front of the residential units. These lights will be 6 –8 ft. high on a cedar pole and the fixtures will be 100-watt lights. The applicant is also proposing two building mounted lights on the office building, which will be 100-watt lights with a mounting height of 10 – 12 ft. Catalogue cuts of the lighting and a photometric plan have been submitted and are included as Attachments 16 and 17.

Because the five light poles are located mostly within the residential area, staff is recommending that the applicant reduce the pole heights to 14- 16 ft. high. The photometric plan will also need to be revised to show the entire site to determine that there is no spillover onto abutting properties. A potential condition of approval is:

- that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

The ornamental residential poles are not cut-off. The Lighting standards states that "Sites which are part of an historic district or require specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context may propose non-cutoff fixtures providing that photometrics fall within IESNA guidelines." The Board would have to waive the lighting standards that all fixtures shall be a "cut-off" type.

8. Fire

The Fire Department has reviewed and approved the plans.

9. City Infrastructure

The proposed development will not place any strain on the City infrastructure as previously discussed in the traffic and stormwater section.

VII. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of plans and material submitted by the applicant and on the basis of information contained in Planning Report #51-03 pertaining to the standards of Site Plan and Subdivision Review, the Planning Board finds:

i. That the standards contained in the City of Portland Technical Standards and Design Guidelines, Lighting Section regarding cut-off fixtures are [waived/not waived] as the Board [finds/does not find] that this site requires specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context providing that photometrics fall within IESNA guidelines.

ii. That the proposed development [is/is not] in conformance with the Subdivision Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

2. that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

3. that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

iii. That the proposed development [is/is not] in conformance with the Site Plan Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the City Arborist review and approve the landscaping plan.

2. that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

Attachments:

1. Applicant's Letter dated June 24, 2003
2. Vicinity Map
3. Applicant's Letter dated August 26, 2003
4. Financial Capacity Letter
5. Deed
6. Public Works' Memo dated July 18, 2003 and September 5, 2003
7. DRC's Memo dated September 5, 2003
8. Applicant's Letter dated September 5, 2003
9. Water Capacity Letter
10. Neighbor Letter
11. Neighborhood Meeting Minutes
12. Applicant's Letter dated October 1, 2003
13. Applicant's Letter dated October 14, 2003
14. Stormwater Report
15. DRC's Memo dated October 17, 2003
16. Lighting Catalogue Cuts
17. Photometric Plan
18. Elevations
19. Previously Approved Plan by Planning Board
20. Plans

A-H . 1

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

June 24, 2003

Ms. Kandice Talbot, Planner
City of Portland
389 Congress Street
Portland, ME 04101-3503

Subject: 300 Allen Avenue
Portland, Maine
Sketch Plan Submittal

Dear Kandi:

Gorrill-Palmer Consulting Engineers, Inc. has been retained by Mr. Bob Adam to provide a sketch plan submittal for the development of 300 Allen Avenue. As you know, redevelopment of this parcel has been submitted for Planning Staff and Planning Board review previously, by a different development team. The previous proposal included expansion of the front office building, as well as development of five attached residential units toward the rear of the site. The proposal before the City, at this time, includes the same expansion of the office building, but includes an additional sixth residential unit toward the rear of the site. A copy of the prior plan for this site is also enclosed.

In accordance with Section14-495, (a)(2) of the Land Use Ordinance for the City of Portland, this letter and accompanying plans are intended to satisfy the Sketch Plan submittal to allow commencement of the review of the Project. Bob Adam and Gorrill-Palmer Consulting Engineers, Inc., look forward to the Planning Staff and Board's review.

Site Description

The project site is located on the north side of Allen Avenue and comprises of approximately 0.84 – acres. The prior application to the City did not include a boundary survey and assumed a parcel size of 35,779 s.f. Titcomb Associates was retained by Mr. Adam to complete a boundary survey and determined that the parcel includes 36,443 s.f. or an increase of 664 s.f. This allows the addition of the sixth residential unit based on 6,000 s.f. per unit. An existing 1,000 square foot "Cape" style house currently occupies the site. The existing building is located adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout. Topography on the site is relatively flat and drains toward the central portion of the lot.

Zoning

The site is located within the R-P (Residential-Professional) and R-5 (Residential) zones. The zone line is set back 150 feet from Allen Avenue and is shown on the site plan. Permitted uses within the R-P zone include; residential use, professional offices, and business services; as defined within Section 14-47 of the City Land Use Ordinance. Multi-unit residential use is permitted within the R-5 zone.

Proposed Use

The proposed development of the site will include an approximate 2 story 1,550 s.f. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The proposed addition to the existing house will be situated at the rear of the building. It is anticipated that the existing house and addition will be utilized as a professional office or business service, as permitted within the R-P Zone and defined within the Land Use Ordinance. The 6-unit multiplex structure is proposed along the northeasterly property line, with the front of the units being approximately parallel to the property line.

The total amount of proposed office space is approximately 4,100 s.f. Per Division 20 of the Ordinance office space requires 1 space per 400 square feet of office space. Based upon this requirement, the office space requires 11 spaces (4,100 s.f. x 1 space/ 400 s.f. = 11 spaces). Also per Division 20 of the Ordinance, residential units require 2 parking spaces per unit. Therefore, the site requires 12 spaces for 6 residential units. The propose site consists of 29 parking spaces, 12 designated for the multiplex unit and 17 remaining for the office at the front of the lot. The six additional spaces have been provided based upon the opinion of the applicant that the office space will require more spaces than the Ordinance requires.

Utilities

The previous applicant was required to provide a means of separating the combined sewer/storm drainage line that runs through the site. The separation was a condition of the approval, because the post-development peak flows from the site exceeded the predevelopment peak flows. As a stormwater analysis has not been completed for the revised layout, it is anticipated that similar conditions may apply to the revised proposal.

It is also noted that on the previous plan, a portion of the existing sewer main within the site was relocated due to the location of the proposed residential units. As can be seen on the attached plan, due to the new location of the residential units, relocation of the sewer main will not be necessary.

Ability to serve letters from the applicable utility companies will be obtained as the project moves forward in the planning process. Sanitary sewer, water, natural gas and power are all located on Allen Avenue, therefore it is anticipated that these services will be available to the project.

Access

The modified site plan maintains the access point from the prior approval and only adds one additional residential unit.

Conclusion

As proposed, the development of this project will provide additional residential and office opportunities within the City. Please contact this office as we await a response as to the schedule for review of this matter at a workshop meeting with the Board, presumably on July 9th.

Sincerely,

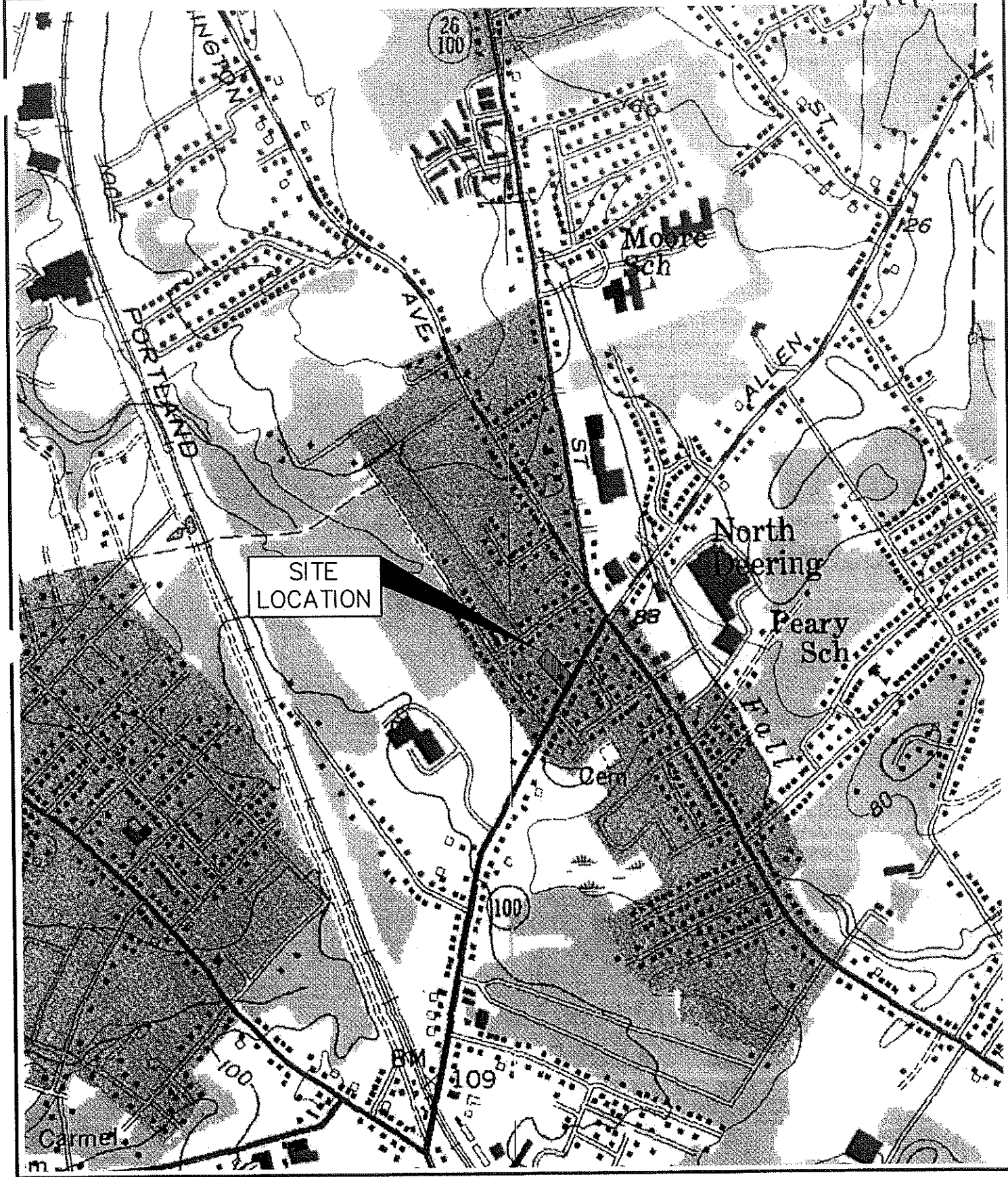
Gorrill-Palmer Consulting Engineers, Inc.

Alton M. Palmer, P.E.
Senior Vice President

cc: Bob Adam
Bill McKenney

AMP/pdo/JN801/Talbot6-23-03

AH. 2



U.S.G.S. Location Map

300 Allen Avenue - Portland, Maine

U.S.G.S. Portland West, Maine -7.5 Minute Series (Topographic)

Design: DER	Date: JUNE 2003
Draft: CAH	Job No.: 801
Checked: AMP	Scale: 1"=1,000'±
File Name: 801-LOCATION.DWG	

Gorrill-Palmer Consulting Engineers, Inc.

Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Road
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Figure 1

A1.3

GP Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

August 26, 2003

Ms. Kandice Talbot, Planner
City of Portland
389 Congress Street
Portland, ME 04101

RE: 300 Allen Avenue, Office/Residential Use
Letter of Correspondence #1

Dear Kandi:

Gorrill-Palmer Consulting Engineers, Inc. is pleased to respond to the review comments we received from you in a letter dated August 13, 2003 regarding the above referenced project. It is noted that this submission package is not intended to be the full Site Plan Application, it is intended to respond to the review comments and provide the City Staff with additional information. A Site Layout & Utility Plan and a Grading & Drainage Plan have been included within this package. Additional support information and details will be provided in a subsequent submission. For ease of review, each of your comments is repeated below followed by our response.

Comment 1 – *A Survey, stamped by a registered land surveyor, shall be submitted.*

Response – A stamped signed survey is included within this package as Attachment A.

Comment 2 – *Elevations of the buildings must be submitted, which show materials that are proposed for the facades of the buildings.*

Response – Elevations will be provided within the subsequent submittal package.

Comment 3 – *There is not a dumpster shown on the site. How is the applicant proposing to remove waste from the site?*

Response – The applicant proposes to have the residential buildings use the City's curbside pickup service. A maintenance company will service the office building and the company will remove the waste.

Comment 4 – *Sewer and water capacity letters shall be submitted.*

Response – Request for Ability to Serve letters, which have been sent from our office to the respective utilities are provided within Attachment B.

Comment 5 *– Public Works will ask for the same "condition of approval" as requested in the previous application for this site development. We will be seeking the installation of a separated storm drain system. The applicant's engineer is advised to obtain a copy of the previous design for reference. Further, if a recorded easement does not exist for the existing sanitary sewer main traversing the site, the City will be requesting the conveyance of such an easement.*

Response – The applicant is proposing to meet the condition of approval as requested. The installation of the separated storm drain system is proposed as part of this project. The conveyance of an easement is acceptable to the applicant. It is noted that the ponding area adjacent to the western property line has been expanded toward Allen Avenue to increase storage volume. The applicant is willing to coordinate with public works prior to the final submission to ensure the acceptable conditions will be met.

Comment 6 *– The granite monument specified on the southeasterly property corner, adjacent to Allen Avenue, must be protected during construction. This is an Allen Avenue street line control point. The plans should specify its protection.*

Response – A note specifically protecting the granite monument has been added to the plan as requested.

Comment 7 *– A landscaping plan shall be submitted, to be reviewed and approved by the City Arborist.*

Response – A landscaping plan has been included within this package as Attachment C.

Comment 8 *– Will there by any new lighting proposed for the site? If so, lighting catalogue cuts and a lighting photometric plan shall be submitted for review by staff.*

Response – A lighting plan for the proposed layout will be provided within the subsequent submittal package.

Comment 9 *– The applicant shall submit evidence of financial capability from a responsible financial institution, stating that it was reviewed the planned development and they would seriously consider financing the project when approved.*

Response – A financial capacity letter from the People's Heritage Bank is included in Attachment D.

Comment 10 *– Right, title and interest to the property must be submitted.*

Response – A deed, which indicates Mr. Adam's ownership of the property is included within Attachment D.

Comment 11 *– A stormwater management plan shall be submitted for the Development Review Coordinator to review. Also, because the plan is now proposing twenty-nine (29)-parking spaces, the City will require that stormwater treatment be provided.*

Response - At this time the applicant is proposing to use reinforced grass pavers in place of pavement for six parking spaces within the development. The reconfiguration of other aspects of the site layout creates a proposed project, which has 410 s.f. less impervious surface than the previously approved plan. Therefore it is the applicant's opinion that whereas less impervious surface is proposed for the current project and water quality was not required for the previous project, water quality should not be required for this project. A revised Stormwater Analysis will be provided within the subsequent submission.

Comment 12 *– This office/residential project was previously approved by the Planning Board. This proposal includes an additional two (2) units to the rear building and includes and additional nine(9) parking spaces. With the approved plan, the Planning Board had a concern with the amount of paved area on site. Staff will raise this concern to the Planning Board at the workshop meeting.*

Response – As mentioned above, the proposed project has 410 s.f. less impervious surface than the previously approved plan. Therefore, it is the applicant's opinion that the amount of impervious surface should not be an issue.

Gorrill-Palmer Consulting Engineers, Inc. appreciates the opportunity to respond to these comments and looks forward to your review. Should you have any questions or require any additional information please contact the office.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Douglas E. Reynolds
Project Engineer

Enclosure

Copy:
Mr. Bob Adam
Mr. Bill McKenney

AMP/hh/JN801/Talbotresponse8/18/03

AH. 4

People's
A Division of Banknorth N.A.

One Portland Square
P.O. Box 9540
Portland, ME 04112-9540

tel. 800-462-3666
207-761-8500

August 25, 2003

Mr. Lee D. Urban, Director
City of Portland
Department of Planning & Development
389 Congress Street, Room 205
Portland, Maine 04101

RE: Robert Adams – 300 Allen Avenue, Office / Residential Use

Dear Mr. Urban,

Robert Adams has been a customer of the Bank for several years. All accounts have been handled in a professional and satisfactory manner.

In our opinion, Robert Adams has the financial capability to complete the $1,000,000 project located at 300 Allen Avenue.

If you have any questions, I can be reached at 761-8625.

Sincerely,

Daniel P. Thornton
Senior Vice President

AH. 5

WARRANTY DEED
Corporate Grantor

KNOW ALL MEN BY THESE PRESENTS, that **Northgate Plaza Associates, LLC**, a Maine Limited Liability Company of Portland, in the County of Cumberland, and State of Maine, whose mailing address is: 400 Allen Avenue, Portland, Maine, for consideration paid, grant to:

Robert L. Adam of Westbrook, Maine, whose mailing address is: 662 East Bridge Street, Westbrook, Maine, with warranty covenants, the land in Portland, County of Cumberland, and State of Maine, described as follows:

> A certain lot or parcel of land, together with any buildings and improvements thereon, situated in the City of Portland, County of Cumberland, and State of Maine as set forth in Exhibit A attached hereto and made a part hereof.

IN WITNESS WHEREOF, the said Northgate Plaza Associates, LLC, has caused this instrument to be executed by Wilfred J. Audet, Jr. its Member, thereunto duly authorized this 22nd day of the month of August, 2003.

SIGNED, SEALED and DELIVERED in presence of

Witness

Wilfred J. Audet, Jr. - Member
Northgate Plaza Associates, LLC

STATE OF MAINE, COUNTY OF CUMBERLAND August 22, 2003

Then personally appeared the above named Wilfred J. Audet, Jr., Member of Northgate Plaza Associates, LLC, and acknowledging the foregoing instrument to be his free act and deed in his capacity, and the free act and deed of said Northgate Plaza Associates, LLC.

~~Notary Public~~/Attorney at Law
Alan E. Wolf

5A

EXHIBIT A

Deed Description
300 Allen Avenue, Portland, Maine

A certain lot or parcel of land located at 300 Allen Avenue, in the City of Portland, County of Cumberland, State of Maine, being the lot of land delineated on the plan of Existing Conditions and Boundary Survey made for Gorrill-Palmer Consulting Engineers dated June 06, 2003 and recorded in the Cumberland County Registry of Deeds in Book 203, Page 461 and more particularly described as follows:

Beginning at a ½" iron pipe found driven into the earth on the northwesterly sideline of Allen Avenue at the easterly corner of land now or formerly of Bernice E. Knox as described in a deed recorded in Book 6312, Page 216. Thence:

1) N 29° 52' 27" W a distance of Two Hundred Ninety-Two and 69/100 (292.69) feet by said Knox and land now or formerly Garry J. Smith and Jane H. Smith as described in a deed recorded in Book 18761, Page 72, by Short Street as delineated on a certain plan of The Holmsteads dated September 1921 and recorded in Plan Book 14, Page 70, and by land now or formerly David O. Dulac as described in Book 3274, Page 194 to a ½" iron pipe found driven into the earth.

2) N 48° 24' 37" E a distance of Sixty-One and 25/100 (61.25) feet by said Dulac and Hennessy Drive as delineated on the aforesaid plan of The Holmsteads to a capped 5/8" rebar, P.L.S. #492 and land now or formerly Davidson Realty, LLC as described in Book 14746, Page 29 .

3) N 53° 28' 39" E a distance of Seventy-Two and 07/100 (72.07) feet by said Davidson Realty, LLC to a capped 5/8" rebar, P.L.S. #492.

4) S 27° 48' 17" E a distance of Thirty-Six and 77/100 (36.77) feet by said Davidson Realty, LLC to a capped 5/8" rebar, P.L.S. #492 and land now or formerly John Matthews as described in Book 14756, Page 121.

5) S 28° 52' 57" E a distance of Thirty-Six and 37/100 (36.37) feet by said John Matthews to a capped 5/8" rebar, P.L.S. #492.

6) S 28° 51' 14" E a distance of Two Hundred and 21/100 (200.21) feet by said John Matthews to a 6" square monument on the northwesterly line of Allen Avenue.

7) S 47° 43' 50" W a distance of Six and 11/100 (6.11) feet by said Allen Avenue to an angle point on the northwesterly line of Allen Avenue.

8) S 42° 11' 20" W a distance of One Hundred Twenty-Six and 20/100 (126.20) feet by

5B

said Allen Avenue to the point of beginning.

Said premises are SUBJECT TO an easement of sewer given by Mary J. Wilson to the Portland Home Building Association by deed recorded in the Cumberland County Registry of Deeds in Book 1111, Page 300.

The use and enjoyment of said premises are SUBJECT TO a restrictive covenant which shall remain in effect for a period of ninety-nine (99 years) and shall commence on August 22, 2003 and shall terminate on August 22, 2102. Said restrictive covenant shall prevent the operation of a real estate brokerage practice from being conducted on the premises.

Said parcel contains 36,443 square feet and is the same parcel conveyed to Northgate Plaza Associates, LLC by warranty deed from OPM, Inc., recorded in the Cumberland County Registry of Deeds in Book 18718, Page 120. Bearings are referenced to Magnetic North.

Being the same premises as shown on a land survey recorded in the Cumberland County Registry of Deeds in Book 203, Page 461.

AH · 6

CITY OF PORTLAND, MAINE
DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM
Engineering Copy

2003-0124
Application I. D. Number

06/24/2003
Application Date

Northgate Plaza Associates Llc
Applicant

400 Allen Ave , Portland , ME 04103
Applicant's Mailing Address

Building Addition
Project Name/Description

Consultant/Agent

300 - 300 Allen Ave, Portland, Maine
Address of Proposed Site

Agent Ph: **Agent Fax:**
Applicant or Agent Daytime Telephone, Fax

344 E006001
Assessor's Reference: Chart-Block-Lot

Proposed Development (check all that apply): ☑ New Building ☑ Building Addition ☐ Change Of Use ☐ Residential ☑ Office ☐ Retail ☐ Manufacturing ☐ Warehouse/Distribution ☑ Parking Lot ☐ Other (specify)

4,510 s.f.
Proposed Building square Feet or # of Units

Acreage of Site

R-P/R-5
Zoning

Check Review Required:

☑ Site Plan (major/minor)
☐ Subdivision # of lots
☐ PAD Review
☐ 14-403 Streets Review
☐ Flood Hazard
☐ Shoreland
☐ HistoricPreservation
☐ DEP Local Certification
☐ Zoning Conditional Use (ZBA/PB)
☐ Zoning Variance
☐ Other

Fees Paid: Site Plan **$500.00** Subdivision Engineer Review Date **06/25/2003**

Engineering Comments

PUBLIC WORKS ENGINEERING REVIEW...7/18/03

I have reviewed the "conceptual" submittal dated 6/24/03 and offer the following comments:

1. Public Works will ask for the same "condition of approval" as requested in the previous application for this site developement. We will be seeking the installation of a separated storm drain system. The applicant's engineer is advised to obtain a copy of the the previous design for reference. Further, if a recorded easement does not exist for the existing sanitary sewer main, traversing the site, the City will be requesting the conveyance of such an easement.
2. The granite monument specified on the southeasterly property corner, adjacent to Allen Avenue, must be protected during construction. This is an Allen Avenue street line control point. The plans should specify it's protection.

REVIEW.....9/5/03

I have reviewed the plans dated August 26th and find that all of my previous comments have been addressed. The official sign off, however, must come from the City Engineer, Eric Labelle.

Performance Guarantee ☐ **Required*** ☐ **Not Required**

* No building permit may be issued until a performance guarantee has been submitted as indicated below

☐ Performance Guarantee Accepted	date	amount	expiration date
☐ Inspection Fee Paid	date	amount	
☐ Building Permit Issue	date		
☐ Performance Guarantee Reduced	date	remaining balance	signature

A-H. 7

Sebago Technics
Engineering Expertise You Can Build On

03P124

TO: **Kandice Talbot - Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **300 Allen Avenue – Building Addition, Northgate Plaza Associates LLC**

DATE: **September 5, 2003**

I have reviewed the Site/ Sketch Plan Application for the Professional/Residential Development at 300 Allen Avenue for Northgate Plaza LLC and have the following comments:

1. I have read the letter from Alton Palmer, P.E. of Gorrill & Palmer Consulting Engineers Inc. and agree that the stormwater detention issue for this proposed project will be the same as the previous approved project on the same site. However, I still have concerns about the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue occurs. Looking at the previous calculations and considering that there is more impervious surface, we believe that every effort shall be done to minimize the amount of flow above the allowed peak rate of runoff. We feel that the applicant can further add a design that can limit the peak amount of runoff into the combined system by possibly utilizing either underground storage or using oversized pipes, and using flow controls such as hydro-brakes to allow temporary ponding in proposed catch basins, pipes, and low lying areas. At a minimum, the applicant shall receive a letter from the Public Works Department allowing the designed peak flow into the combined sewer. The applicant also needs to include the actual calculations and summary for the required design storms and its effects on site and downstream.

2. The proposed project is a combination of residential and professional use which requires up to 23 parking spaces (accumulative in two parking lots), but 29 have been proposed. Since there is no reasonable buffer available on the project site or off site to be used for stormwater treatment, the project shall be required to install a treatment tank system and devise a manner to treat the runoff in an effective manner. Based on previous applications for new developments used by both the City and DEP, the engineer shall be required to show the TSS removal utilizing the MDEP Sliding Scale Method. This is the manner that the City's Ordinance pertaining to Stormwater Management for Runoff Quality has been handled when a development exceeds 25 equivalent car spaces.

3. The current site is a natural low area where ponding routinely occurs due to the "bowl-like" topography. It appears that the land may be wet or saturated frequently. The

7A

applicant should verify that these are not wetlands and, if they are, delineate accordingly on the site plans. Any filling of wetlands, as always, shall be coordinated through the local branch of the MDEP. This may have been previously permitted and a copy shall be made available to staff indicating transfer of permit.

4. If the City allows for the additional stormwater flows to enter their combined sewer system, then the culvert facing Short Street shall be designed with a trash rack to prevent large obstructions from entering the sewer and possibly causing plugging in other downstream structures. An optional design could be a field inlet. It could be used in a manner that a flow control device could regulate flows entering and prevent sewer gases from being possibly exhausted, as the case may be with an open culvert tied to an active sanitary sewer.

5. This project does not indicate a location for a dumpster. Will a dumpster be required? If one is required, it must be screened and placed for easy maintenance.

6. General erosion control notes and measures will need to shown for the proposed project.

7. Tony Lombardo, P.E. had raised some concerns with the previous application regarding the location of the existing sewer easement. You should check with legal counsel to make sure that the easement language is on the new plan and that new easement documents are derived to address any change in the required easement that the City currently has over the property. I would suggest that you obtain a boundary survey for this review along with all deeds associated with the property.

Please feel free to contact me if you or the design engineer, have any questions with my comments or concerns.

JRS:jrs/jc

A4.8

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

September 5, 2003

Ms. Kandice Talbot, Planner
City of Portland
389 Congress Street
Portland, ME 04101

RE: 300 Allen Avenue, Office/Residential Use
Letter of Correspondence #2

Dear Kandi:

Attached to this letter are copies of the proposed elevations for the 6 residential units. It is noted that the enclosed elevations only includes three units. It is intended that the other three units will have the identical treatments as shown. The proposed color of the units will be light green.

Also attached are the elevations and floor plans for the proposed office space within the expansion of the existing building. The vinyl siding is intended to be white.

Please contact this office if you require additional information regarding the elevations and floor plan.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Douglas E. Reynolds
Project Engineer

Enclosure

Copy:
Mr. Bob Adam
Mr. Bill McKenney

AMP/hh/JN801/Talbot LOC2 9-5-03

Att. 9

Portland Water District

225 Douglass St. • P.O. Box 3553 • Portland, ME 04104-3553

Customer Service Hotline (207) 761-831C
(207) 774-596
FAX (207) 879-583

September 24, 2003

Douglass E. Reynolds, P.E.
Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
Gray, Me. 04039

Re: 300 Allen Ave.- Portland

Doug:

This letter is to confirm there should be an adequate supply of clean and healthful water to serve the needs of the proposed commercial building and 6 unit apartment building at 300 Allen Ave. in Portland. Checking District records, I find there is a 12" cast iron water main on the opposite side of the street in Allen Ave. There is also a possibility to take service off Short St. which has a 2 ¼" water main in it.

The current data from the nearest hydrant indicates there should be adequate capacity of water to serve the needs of your proposed project.

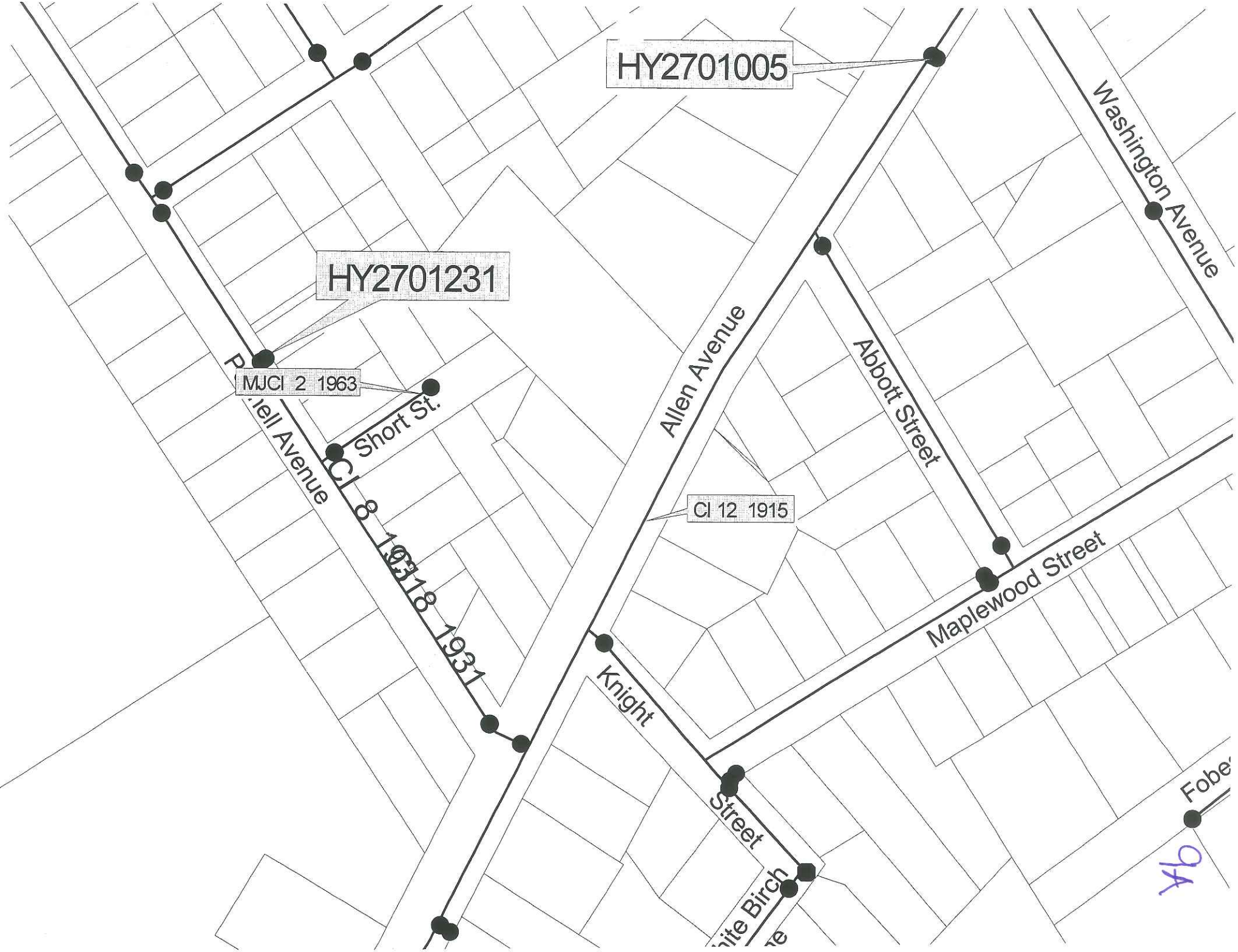
Hydrant Location: Allen Ave. 50' west of Washington Ave.
Hydrant # 1005
Static pressure = 71 PSI
Flow = 1277 GPM
Last Tested = 7/21/98

If the district can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

Jim Pandiscio

Jim Pandiscio
Means Coordinator


HY2701005
Washington Avenue
HY2701231
MJCI 2 1963
Short St.
Allen Avenue
Abbott Street
Cl 8 1918 1931
Cl 12 1915
Maplewood Street
Knight
Street
Fobe
94

Att. 10

Public Comment : 300 Allen Avenue Workshop
for Bob Adam

Submitted by David Kingsley of Northgate Plaza Associates
400 Allen Avenue, Portland, ME

I was prepared to comment in person at the 3:30 pm workshop, but, I'm unable to attend the 4:45 pm time as rescheduled.

I am one of the former owners of 300 Allen Avenue and obtained the original approvals for the combined office and residential mixed-use. One of the principal reasons why my partner and I sold the property to Mr Adam is because we lost our professional tenant and did not want to develop the property on speculation. The reason why the tenant left is because we had inadequate parking. In sum, I feel that the amount of parking at 300 Allen Avenue needs to be increased in order to attract a first-class professional tenant. If the zoning allows the Board to increase the parking, I hope that the Board supports Mr Adam's efforts.

I also own a property at 400 Allen Avenue which similarly abutts a residential neighborhood and is an office in an R-P zone. We have enjoyed excellent relations with our residential neighbors because it is the use and overall appearance of the property which affects residential owners/tenants not the number of cars in the parking lot – in particular since most business parking is vacant after hours and on the weekends.

Sincerely, Dominic

Att. 11

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

Meeting Notes

Subject:	Neighborhood Meeting – 300 Allen Avenue
Attendees:	Doug Reynolds, Gorrill-Palmer Consulting Engineers, Inc. Bill McKenney, Wm. E. McKenney, ASLA See attached sign-up list
Date:	October 14, 2003, 6:00 PM
Job #:	801
Distribution:	Kandi Talbot, Bill McKenney, Bob Adam, File

On Tuesday October 14, 2003, a neighborhood meeting was held for the 300 Allen Avenue redevelopment project. All abutters within 500 feet of the proposed project were notified via mailed letters, which were sent out on October 6, 2003. Notifications were sent out based upon a list provided by the City of Portland Planning Department. This meeting was held to meet the requirements of the City of Portland Planning Department.

Mr. Reynolds started the meeting with a brief introduction of the project. Mr. McKenney provided a brief description of the landscaping proposed for the project and then opened the floor to questions. Listed below is a brief summary of the questions from the abutters and the responses provided.

Ms. McKenna asked if any construction would be taking place within Short Street associated with the connection to the water main. Mr. Reynolds indicated that there would be construction to connect to the water main, and should be of short duration.

Mr. McKenna asked additional landscaping would be provided along the western property line. Mr. McKenney indicated that no new vegetation has been proposed along the west property line, and he would be evaluating the need for additional vegetation when completing the landscaping plan.

Mr. McKenna asked what would be used for lighting of the parking area. Mr. McKenney indicated that we would be proposing to use ornamental post lighting adjacent to the front of the residential units and that shoe-box style parking lot lights with house-side shields would be used to light the parking area. The house-side shields would reduce any spillover light towards the west property line.

Ms. Orbeton asked when construction is intended to take place. Mr. Reynolds indicated that upon receipt of Planning Board approval, the project could be started and would take place over the winter.

Ms. McKenna asked is this project would affect the drainage within her property. Mr. Reynolds indicated that a Stormwater Analysis has been completed for the project, and flow would be directed to the proposed storm drain line crossing the site. He also indicated that the existing field inlet on the west side of the site would be replaced and therefore cleaned-out, which would reduce any ponding adjacent to her land.

Gorrill-Palmer Consulting Engineers, Inc. closed the meeting by indicating to the attendees that there would be a public hearing with the Planning Board on October 28, 2003.

Prepared by: Doug Reynolds

DER/der/JN801/neighmeeting notes 10-14-03

11A

300 ALLEN AVENUE 10/14/03
NEIGHBORHOOD MEETING-
SIGN IN SHEET

	NAME	ADDRESS	TEL #
1	Margie White	59 Cypress St.	797-8065
2	Susan McKenna	7 Short St.	797-3231
3	↖ resident ↗		
4	Jane Orbeton James McKenna	⇒ Parents and co-owners of 7 Short St.	

Att. 12

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

October 1, 2003

Ms. Kandice Talbot, Planner
City of Portland
389 Congress Street
Portland, ME 04101

RE: 300 Allen Avenue, Office/Residential Use
Letter of Correspondence #4

Dear Kandi:

As mentioned in our September 26, 2003 letter, the residential building elevations were being revised to include windows on the end units. Included with this letter are the revised elevations for the residential unit with the windows. Revised elevations and floor plans for the office building are also included with this letter. The attached elevations and building plans supercede the previous submissions.

It was mentioned in the previous letter that the color of the units would be light green. The color of the siding will actually be tan. Color samples are available from our office if requested and can be provided to the Planning Board at the next meeting

Please contact this office if you require any additional information regarding the revised elevations.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Douglas E. Reynolds, P.E.
Project Engineer

Enclosure

Copy:
Mr. Bob Adam
Mr. Bill McKenney

AMP/pdo/JN801/Talbot LOC4_ 10-1-03.doc

AH. 13

Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services

PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail:mailbox@gorrillpalmer.com

October 14, 2003

Ms. Kandice Talbot
City of Portland
389 Congress Street
Portland, ME 04101

RE: 300 Allen Avenue, Portland, Maine
Letter of Correspondence #5

Dear Kandi:

Gorrill-Palmer Consulting Engineers, Inc. is pleased to respond to the review comments we received from your letter dated September 23rd and the previous review comments from Jim Seymour of Sebago Technics dated September 5th regarding the above referenced project. For ease of review, each of your comments have been repeated below followed by our response.

Comments by Kandice Talbot/City of Portland Dated 09/23/03

Comment 1 *– Will there be provision for pedestrian traffic from the residential units to Allen Avenue?*

Response – A crosswalk has been depicted from between the handicap parking spaces to the sidewalk adjacent to the residential building to direct pedestrian traffic along the proposed sidewalk to Allen Avenue

Comment 2 *– Will there be any open space provided for the residential units, such as patio area, etc.? The multi-family standards of the site plan ordinance states:*

"Open space on the site for all two-family, special needs independent living unit, bed and breakfast and multiple-family development shall be integrated into the development site. Such open space in a special needs independent living unit or multiple-family development shall be designed to complement and enhance the building form and development proposed on the site. Open space functions may include but are not limited to buffers and screening from streets and neighboring properties, yard space for residents, play areas, and planting strips along the perimeter of proposed buildings."

Response – As requested a 5' x 5' patio has been added to the rear of each of the residential units. These patio areas will be buffered by the existing fence and proposed vegetation within the space between the building and the property line. The center two patios could be constructed as decks, but the outer two would be required to remain as on ground patios, whereas they would be within the required side setbacks.

Comment 3 *– At the meeting it was mentioned that some of the landscaping along the property shall be preserved. A preservation plan shall be submitted. Buffering shall be required between the project and the residential sites.*

Response – The required neighborhood meeting is scheduled on the day of this submission, October 14, 2003. Mr. McKenney, the landscape architect for the project, would like to receive input from the neighbors and intends to submit a revised landscaping plan under separate cover on October 15, 2003.

Comment 4 *– There is a concern about the façade of the office building and the multiple-family building. The multiple-family standards of the site plan ordinance states:*

"The exterior design of the proposed special needs independent living unit, bed and breakfast or multiple-family structures, including architectural style, façade materials, roof pitch, building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and façade variation in projecting or recessed building elements, shall be designed to complement and enhance the nearest residential neighborhood. The design of exterior facades shall provide positive visual interest by incorporating appropriate architectural elements;

The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas and shall also provide sufficient storage areas; and

The scale and surface area of parking, driveways and paved areas are arranged and landscaped to property screen vehicles from adjacent properties and streets."

The site plan standards of the land use code also states:

"For development within the R-P zone, where there is a consistent established architectural style or character to the existing structures in the immediate vicinity in which the development is proposed, that the concurrently visible architectural style or character of the proposed development would not be incongruous to that established style or character".

Response – Revised building elevations were provided to the City on October 1, 2003, which addressed the above requirements.

Comment 5 *– Items that were listed as needing to be resolved prior to Planning Board hearing are listed below:*

a. Pavement quantity
b. Stormwater volume and treatment
c. Development Review Coordinator's memo dated September 5, 2003
d. Landscaping (as mentioned above)

e. Elevations (as mentioned above)
f. Neighborhood meeting
g. Utility capacity letters

Response – a. As mentioned in a previous submission, due to reconfiguration of the site and the use of grass pavers, the overall amount of impervious surface currently proposed compared to previously approved is reduced by 410 s.f. The proposed patios on the units amount to 150 additional square feet, reducing the decrease to 260 s.f. However, the sidewalk at the end of the office parking has been eliminated, removing 230.s.f. of impervious surface. Therefore, the net decrease of impervious surface from the previously approved plan is 490 square feet.

b. A complete Stormwater analysis including water quality treatment is included within this package.
c. The Development Review Coordinators memo is addressed below.
d. Landscaping will be addressed as mentioned above.
e. Building elevations have previously been submitted under separate cover.
f. The neighborhood meeting is scheduled for October 14, 2003.
g. A letter from Portland Water District is included with the package. The City of Portland has been contacted regarding the status of the sewer capacity letter and has not been received as of the time of this submittal, but will be provided upon receipt.

Comments by Jim Seymour/Sebago Technics, Inc. Dated 09/05/03

Comment 1 *– I have read the letter from Alton Palmer, P.E. of Gorrill-Palmer Consulting Engineers, Inc. and agree that the stormwater detention issue for this proposed project will be the same as the previous approved project on the same site. However, I still have concerns about the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue occurs. Looking at the previous calculations and considering that there is more impervious surface, we believe that every effort shall be done to minimize the amount of flow above the allowed peak rate of runoff. We feel that the applicant can further add a design that can limit the peak amount of runoff into the combined system by possibly utilizing either underground storage of using oversized pipes, and using flow controls such as hydro-brakes to allow temporary ponding in proposed catch basins, pipes, and low lying areas. At a minimum, the applicant shall receive a letter from the Public Works Department allowing the designed peak flow into the combined sewer. The applicant also needs to include the actual calculations and summary for the required design storms and its effects on site and downstream.*

Response – The Stormwater analysis included with this package provides calculations in support of the proposed underground detention systems. Construction of the detention system prior to connection into the separated system allows for maintenance of predevelopment peak flows for the 2, 10 and 25-year storms. It is noted that Stormwater Analysis from the previously approved submission was not used in Gorrill-Palmer Consulting Engineers, Inc.'s analysis. Offsite watersheds were redelineated and time of concentration paths were revised.

Comment 2 *– The proposed project is a combination of residential and professional use, which requires up to 23 parking spaces (accumulative in two parking lots), but 29 have been proposed. Since there is no reasonable buffer available on the project site or off site to be used for stormwater treatment, the project shall be required to install a treatment tank system and devise a manner to treat the runoff in an effective manner. Based on previous applications for new developments used by both the City and DEP, the engineer shall be required to show the TSS removal utilizing the MDEP Sliding Scale Method. This is the manner that the City's Ordinance pertaining to Stormwater Management for Runoff Quality has been handled when a development exceeds 25 equivalent car spaces.*

Response – As part of this revised package, a Downstream Defender, water quality unit has been included in the design of the stormwater system. Calculations and details are provided.

Comment 3 – *The current site is a natural low area where ponding routinely occurs due to the "bowl-like" topography. It appears that the land may be wet or saturated frequently. The applicant should verify that these are not wetlands and, if they are, delineate accordingly on the site plans. Any filling of wetlands, as always, shall be coordinated through the local branch of MDEP. This may have been previously permitted and a copy shall be made available to staff indicating transfer of permit.*

Response – Wetlands were delineated onsite by Gove Environmental Services and the limits of the wetland are shown on the plans. A Tier 1 permit from the MDEP is required for the fills on this site. The Tier 1 permit application has been submitted to MDEP. It is noted that the prior City approval of the project in 2002, did not require a wetland delineation prior to approval.

Comment 4 *– If the City allows for the additional stormwater flows to enter their combined sewer system, then the culvert facing Short Street shall be designed with a trash rack to prevent large obstructions form entering the sewer and possibly causing plugging in other downstream structures. An optional design could be a field inlet. It could be used in a manner that a flow control device could regulate flows entering and prevent sewer gases from being possibly exhausted, as the case may be with an open culvert tied to an active sanitary sewer.*

Response – As part of this submission the culvert facing Short Street, is proposed to be removed and replaced with a new culvert. The invert into this culvert has been raised, such that flow from the sewer cannot exit through the culvert. The field inlet is proposed with a trash rack.

Comment 5 *– This project does not indicate a location for a dumpster. Will a dumpster be required? If one is required, it must be screened and placed for easy maintenance.*

Response – The applicant proposes to have the residential buildings use the City's curbside pickup service. A maintenance company will service the office building and that company will remove the waste.

Comment 6 – *General erosion control notes and measures will need to be shown for the proposed project.*

Response – Erosion control measures have been added to the grading plan. Erosion control notes have been included within the detail sheets.

Comment *7 – Tony Lombardo, P.E. had raised some concerns with the previous application regarding the location of the existing sewer easement. You should check with legal counsel to make sure that the easement language is on the new plan and that new easement documents are derived to address any change in the required easement that the City currently has over the property. I would suggest that you obtain a boundary survey for this review along with all deeds associated with the property.*

Response – The applicant will coordinate as necessary with corporate council to ensure easements are provided as necessary. Our office has not received any comments from Public Works to date.

Gorrill-Palmer Consulting Engineers, Inc. appreciates the opportunity to respond to these comments and looks forward to your review of our responses. Should you have any questions or require any additional information, please feel free to contact our office.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

Douglas E. Reynolds, P.E.
Project Engineer

AMP/rmg/JN801/TalbotLOC510-14-03

Att. 14

STORMWATER MANAGEMENT REPORT

I. Introduction

Gorrill-Palmer Consulting Engineers, Inc has been retained to prepare plans and permit applications for a proposed development located at 300 Allen Avenue. Figure 1 following this page is an excerpt from the U.S.G.S. Portland West quadrangle map showing the project location. The development will consist of an approximate 2 story 1,550 s.f. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The following narrative contains the stormwater analysis, which is appropriate for the site.

II. Development Description

The site comprises approximately 0.84 acres. Currently, an approximate 1,000 s.f. "Cape" style house occupies the site. The house is located toward the front of the site adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout.

Abutting land uses include:

- North – Residential
- East – Residential
- South – Allen Avenue
- West – Residential

This property was previous permitted by Environmental Engineering & Remediation, Inc. (EER) to include a 1,540 square-foot addition to the existing building and four residential units towards the rear of the property. The approved stormwater report for this project was obtained from EER to be used as a base model for the now proposed development. However, Gorrill-Palmer redelineated the watershed boundaries and field verified certain aspects of the project. The redelineation resulted in an overall decrease in size of the watershed sub-catchment areas.

III. Surface Water and Downstream Waterbodies

There are no lakes located on, adjacent to or downstream of the project site. The site currently drains towards the center of the lot where there is a bowl shaped depression, which has been delineated as a wetland.

IV. General Topography

Topography on the site is relatively flat and drains toward the central portion of the lot. Slopes on-site range from 2% to 4% located in the central portion of the lot. Steeper slopes are present along the perimeter of the exiting house of approximately 20%. Elevations on-site range from 78' at the lowest point of the "bowl" to 83' at the front of the parcel, adjacent to Allen Avenue.

V. Alterations to Land Cover

Changes to land cover within the site involves the removal of grass, brush and wooded areas throughout the site and replacing them with buildings and parking.

VI. Modeling Assumptions

The stormwater management study evaluates the stormwater runoff rates between the pre-development and post-development conditions.

Soil conditions were assumed to be Hydrologic Group D, based on the Cumberland County Medium Intensity Soil Survey.

The SCS TR-20 methodology was employed by Gorrill-Palmer Consulting Engineers, Inc. to analyze the pre-development versus the post-development conditions. A 24-hour, SCS Type III storm distribution for the two, ten, and twenty-five year storm frequencies was used for analysis. The corresponding rainfall amounts for these storms for Southeast Cumberland County are 3.0", 4.7", and 5.5" respectively. The Cumberland County rainfall numbers were utilized based on the approved stormwater report prepared by EER.

Land use was assumed as 0.25 acre residential lots with 38% impervious surface. Additional information used for the stormwater analysis include:

- Portland West 7.5 Minute Quadrangle Map prepared by the U.S.G.S
- On-site topographic survey with 1 foot contour intervals
- Aerial Topography with 2 foot contour intervals, provided by City of Portland GIS Department
- Field Reconnaissance
- Stormwater Report prepared by EER, dated January 21, 2002

VII Water Quantity Control

VII.1 Pre-development Conditions

The study analyzes the watershed in the pre-development condition as depicted on Figure A, Overall Watershed Map, contained in Attachment A.

The predevelopment condition was modeled as two sub-areas with one point of interest, located at the connection point to the combined sewer system. Sub-area 1 contains a majority of the development site as well as several residential dwellings located northwest of the development site and is approximately 1.35 acres in size. Sub-area 2 includes several residential structures located west of the development site that drain into the combined sewer through a field inlet and is approximately 1.38 acres in size. Times of Concentration paths were obtained through field reconnaissance of the area. The table below represents the predevelopment peak flows at the point of interest for the 2, 10, and 25-year storm events.

Table 1 – Pre-development Peak Flows

Drainage Area	Peak Flow (cfs)		
	2 Year	10 Year	25 Year
POI # 1	3.5	6.0	7.5

Copies of the stormwater calculations are included as Attachment B.

VII.2 Post-development Condition

The project was evaluated for the post-development condition, which includes changes to land cover associated with the addition to the existing house, the six residential units, and paved surfaces, as well as

changes to the Time of Concentration within Sub-area 1. The post-development condition was also modeled as two sub-areas with one point of interest. Six of the parking spaces located in the northwest corner of the lot will be constructed of Grass Road Pavers. The grass road pavers consist of a plastic grid in a honeycomb pattern that is backfilled with loam and then seeded. The pavers result in a permeable surface with the grass cover and voids within the honeycomb grid that allow water to permeate through to the underlying soil. For modeling assumptions, these pavers will be considered 50% impervious cover and 50% grass cover.

The following table contains the comparison of peak flows at the point of interest in the pre and post development condition without any on-site detention.

Table 3 – Comparison of Peak flows (cfs)						
Drainage Area	2 Year		10 Year		25 Year	
	Pre	Post	Pre	Post	Pre	Post
POI #1	3.5	3.5	6.0	6.5	7.5	8.0

As can be seen in the above table, an increase in peak flows in the post-development condition occurs; therefore detention of stormwater is necessary to maintain pre-development peak flows.
A sub-surface detention pond is proposed to be located within the drive aisle serving the lot. The detention facility will consist of approximately 150 liner feet of 36-inch diameter storm drain pipe, providing approximately 1,200 cubic feet of storage. Table 4 contains information pertaining to the pond performance.

Table 4 –Pond Performance			
	Storm Event		
	2 Year	10 Year	25 Year
Peak In Flow (cfs)	1.93	3.48	4.20
Peak Outflow (cfs)	1.87	3.11	3.74
Stage (Max. Elevation)	76.54	77.44	78.06
Storage (Max. cf)	352	870	1,171
Depth above Outlet (ft)	0.92	1.82	2.44

Table 5 below presents the comparison of pre and post development peak flows at the Point of Interest, with detention, for the 2, 10 and 25-year storm events:

Table 5 – Comparison of Peak flows (cfs)						
Drainage Area	2 Year		10 Year		25 Year	
	Pre	Post	Pre	Post	Pre	Post
POI #1	3.5	3.5	6.0	6.0	7.5	7.5

As can be seen in the above table, the post development condition peak flows at the point of interest are maintained for the 2, 10 and 25-year storms.

All calculations are contained in Attachment B.

VIII Water Quality

As the development proposes more that 25 parking spaces, the City ordinance requires that a water quality program be implemented to treat stormwater runoff prior to leaving the site. City ordinance

14C

requires that projects meet the MDEP Sliding Scale Standard for TSS removal. This project envisions approximately 0.41 acres of impervious surface within the 0.84-acre site resulting in an impervious surface coverage of approximately 50%, which requires 62% TSS removal based on Sliding Scale.

Water quality treatment will be provided by a 6-foot diameter Downstream Defender that will be installed at the outlet end of the sub-surface detention facility. The 6-foot Downstream Defender, based on MDEP confirmation tests, will attain 80% TSS removal for peak in-flow less than 3.86 cfs for the 1-year rainfall. The computed 1-year rainfall entering the Downstream Defender based on TR-20 methodology is 1.46 cfs, which is below the upper limit for the 6-foot structure. All newly created impervious surface within the site will be treated by the water quality unit, as well as the remaining impervious surfaces within sub-area 1. Based on the computer flow entering the Downstream Defender and the treated area, an 80% TSS removal rating will be attained.

IX Maintenance of Facilities

The applicant, or their assigned heirs will maintain the stormwater facility after construction is completed. The contract documents will require the contractor to designate a person responsible for maintenance of the sedimentation control features during construction. Long-term operation/maintenance planned for the stormwater management facilities is presented below.

The "Parties" may contract with such professionals as may be necessary in order to comply with this provision and may rely on the advice of such professionals in carrying out its duty hereunder, provided, that the following operation and maintenance procedures are hereby established as a minimum for compliance with this section.

1. Remove accumulated sediment from catch basin sumps when sediment as accumulated to within 6 inches of the outlet pipe invert, but not less than annually

2. Maintain subsurface detention facility in accordance with manufacturer's recommendations and specifications.

3. Maintain Downstream Defender in accordance with manufacturer's recommendations and specifications.

X Conclusion

Due to changes in land use and runoff flow-paths, the planned development increases runoff from the site. A subsurface detention facility has been designed to attenuate the increase in peak runoff rates in the post development. The peak runoff for the 2, 10 and 25-year storm events in the post development condition meets the predevelopment peak levels. Water quality standards will be attained with the installation of a 6-foot Downstream Defender at the outlet end of the detention facility.

XI Attachments

Attached to this section are the following items:

Attachment A – Watershed Maps

Attachment B – TR – 20 Calculations

AH. 15

Sebago Technics
Engineering Expertise You Can Build On

03P124

TO: **Kandice Talbot - Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **300 Allen Avenue – Building Addition, Northgate Plaza Associates LLC**

DATE: **October 17, 2003**

I have reviewed the revised Site/ Sketch Plan Application for the Professional/Residential Development at 300 Allen Avenue for Northgate Plaza LLC and have the following new comments in italics:

1. I have read the letter from Alton Palmer, P.E. of Gorrill & Palmer Consulting Engineers Inc. and agree that the stormwater detention issue for this proposed project will be the same as the previous approved project on the same site. However, I still have concerns about the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue occurs. Looking at the previous calculations and considering that there is more impervious surface, we believe that every effort shall be done to minimize the amount of flow above the allowed peak rate of runoff. We feel that the applicant can further add a design that can limit the peak amount of runoff into the combined system by possibly utilizing either underground storage or using oversized pipes, and using flow controls such as hydro-brakes to allow temporary ponding in proposed catch basins, pipes, and low lying areas. At a minimum, the applicant shall receive a letter from the Public Works Department allowing the designed peak flow into the combined sewer. The applicant also needs to include the actual calculations and summary for the required design storms and its effects on site and downstream.
   The applicant has submitted calculations and designed an underground system for detention along with a treatment system. My only comments are that the separation of storm drainage should include the offsite runoff to be piped into the new storm drain manhole #3 instead of sanitary manhole. This may require the storm drain to be upgraded in size. Also given the very shallow pipe slope this may be another reason to upgrade the pipe size. Lastly, I am not aware of MEDEP granting 80% removal to any device for treatment. I believe the maximum they allow is 60% when sized appropriately. Given the site the selected system will be adequate.

2. The proposed project is a combination of residential and professional use which requires up to 23 parking spaces (accumulative in two parking lots), but 29 have been proposed. Since there is no reasonable buffer available on the project site or off site to be used for

stormwater treatment, the project shall be required to install a treatment tank system and devise a manner to treat the runoff in an effective manner. Based on previous applications for new developments used by both the City and DEP, the engineer shall be required to show the TSS removal utilizing the MDEP Sliding Scale Method. This is the manner that the City's Ordinance pertaining to Stormwater Management for Runoff Quality has been handled when a development exceeds 25 equivalent car spaces.
A Downstream Defender has been selected for treatment.

3. The current site is a natural low area where ponding routinely occurs due to the "bowl-like" topography. It appears that the land may be wet or saturated frequently. The applicant should verify that these are not wetlands and, if they are, delineate accordingly on the site plans. Any filling of wetlands, as always, shall be coordinated through the local branch of the MDEP. This may have been previously permitted and a copy shall be made available to staff indicating transfer of permit.
Permits have been filed and copies will be supplied upon approval

4. If the City allows for the additional stormwater flows to enter their combined sewer system, then the culvert facing Short Street shall be designed with a trash rack to prevent large obstructions from entering the sewer and possibly causing plugging in other downstream structures. An optional design could be a field inlet. It could be used in a manner that a flow control device could regulate flows entering and prevent sewer gases from being possibly exhausted, as the case may be with an open culvert tied to an active sanitary sewer.
A hooded device has been shown to eliminate gases, and trash rack will be installed.

5. This project does not indicate a location for a dumpster. Will a dumpster be required? If one is required, it must be screened and placed for easy maintenance.
Trash pickup will be by curbside and private arrangements

6. General erosion control notes and measures will need to shown for the proposed project.
They are added

7. Tony Lombardo, P.E. had raised some concerns with the previous application regarding the location of the existing sewer easement. You should check with legal counsel to make sure that the easement language is on the new plan and that new easement documents are derived to address any change in the required easement that the City currently has over the property. I would suggest that you obtain a boundary survey for this review along with all deeds associated with the property.
They have agreed to work with staff where needed.

8. ***The first handicap stall looks like it would be difficult to access given the tight radius. Will this space fit or work for a turning van.***

Please feel free to contact me if you or the design engineer, have any questions with my comments or concerns.

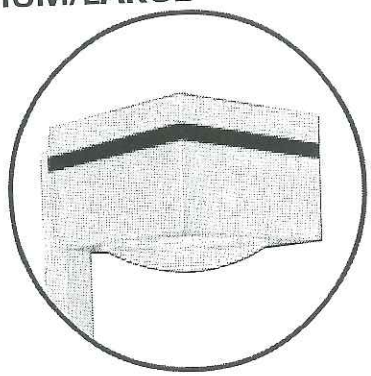
JRS:jrs/jc

300 ALLEN AVE POLE MOUNTED LIGHT FIXTURE

PROFORMER-XL

Catalog Number | Type Att. 16

MEDIUM/LARGE



Vertical lamp luminaire for maximum pole spacing with uniform lighting in parking lots, shopping centers, auto dealerships, parks, and recreational areas.

IESNA FULL CUTOFF AVAILABLE WITH FLAT LENS

Features

- Square, formed aluminum housing with embossed decorative band. Optional color vinyl trim stripe available.
- Formed aluminum door with round, clear, convex tempered glass lens, fully gasketed to housing, secured with hinge and two captive screws. Optional flat glass lens requires reduced-envelope lamp.
- Specular, anodized aluminum, **segmented** reflectors for vertical lamp, provide Type III, IV, V square, or V rectangular light patterns. IESNA Full Cutoff lighting classification achieved with flat lens. Tool-less fasteners allow easy access to ballast.
- Extruded aluminum arm provided for pole mount. Spider mount has four twin-tube arms attaching housing to pole top fitter. Yoke mount has two square arms securing housing to pole top fitter.
- Mogul porcelain socket, pulse rated, with spring loaded, nickel plated center contact and reinforced lamp grip screw shell.
- CWA type ballast, HPF, starting rated at -20°F (-40°F for HPS).
- TGIC thermoset polyester powder paint finish with choice of six standard, and four premium standard colors.
- UL and CSA listed for wet locations.

Ordering Information

Order No. Example: ❶ PFI-XL – ❷ PM – ❸ M400PS – ❹ VS – ❺ 480 – ❻ FS – ❼ BGE – ❽ BCS

❶ Model
- PFI-XL - 250w-400w
- PFII-XL - 450w-1000w

❷ Mounting Mode
- PM - arm mount
  - std - 6" arm for PFI-XL
  - std - 10" arm for PFII-XL, required for PFI-XL at 90°
  - spl - 12.5" arm required for PFII-XL at 90°
- SM-PAD - spider mount for SQSP or SQAP 5" or 6" pole
- SM-SF - spider mount with slipfitter for 2⅜" OD tenon
- YM-PAD - yoke mount for SQSP or SQAP 5" or 6" pole
- YM-SF - yoke mount with slipfitter for 2⅜" OD tenon

❸ Lamp Types/Watts

PFI-XL
METAL HALIDE
- M250 (ED-28)
- M400 (ED-37)[1]

PULSE START METAL HALIDE
- M250PS (ED-28)
- M320PS (ED-37)[1]
- M350PS (ED-37)[1]
- M400PS (ED-37)[1]

HIGH PRESSURE SODIUM
- S250 (ED-18)
- S400 (ED-18)

PFII-XL
METAL HALIDE
- M1000 (BT-56)[1]

PULSE START METAL HALIDE
- M450PS (ED-37)
- M750PS (BT-37)
- M1000PS (BT-37)

HIGH PRESSURE SODIUM
- S1000 (E-25)[1]

❹ Reflector
- III - asymmetric
- IV - forward throw
- VS - symmetric square[2]
- VRT - symmetric rectangular[3]

❺ Voltage
- MT - multi-tap[4] (120/208/240/277v)
- 347
- 480

❻ Options
- PR - photo receptacle (less cell)
- PRC - photo receptacle with cell
- FS - fusing (specify voltage)
- QZ - quartz standby time delay (D.C. bayonet base lamp included)
- FG - flat glass lens (requires reduced-envelope lamp)
- CS - internal house-side cutoff shield (flat lens only)

❼ Color

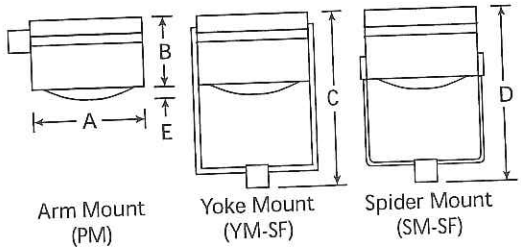
STANDARD
- DBZ - dark bronze
- SGB - black
- SWT - white
- PRG - gray
- PLS - platinum silver
- FGP - forest green

PREMIUM STANDARD
- MBZ - medium bronze
- BGE - beige
- LIV - light ivory
- CMB - burgundy

❽ Stripe Color
- WCS - white
- BCS - black
- OCS - other (consult factory)
- NCS - none

[1]Reduced-envelope lamp required with flat lens.
[2]ED-37 lamp required with 1000w HPS.
[3]PFII-XL only.
[4]Factory wired for 277 volt unless specified.

Dimensions



Arm Mount (PM) | Yoke Mount (YM-SF) | Spider Mount (SM-SF)

	A	B	C	D	E	EPA (PM)	Wt./Lbs. (PM)
PFI-XL	21.12"	12"	37.25"	39.5"	2.87"	2.7	50
PFII-XL	25"	16"	45.5"	46"	4"	4.0	84

300 ALLEN AVE LIGHT POLE

SQUARE STRAIGHT STEEL POLES

16A

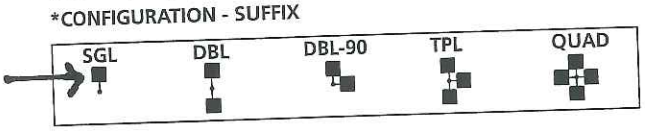
Catalog Number	Type

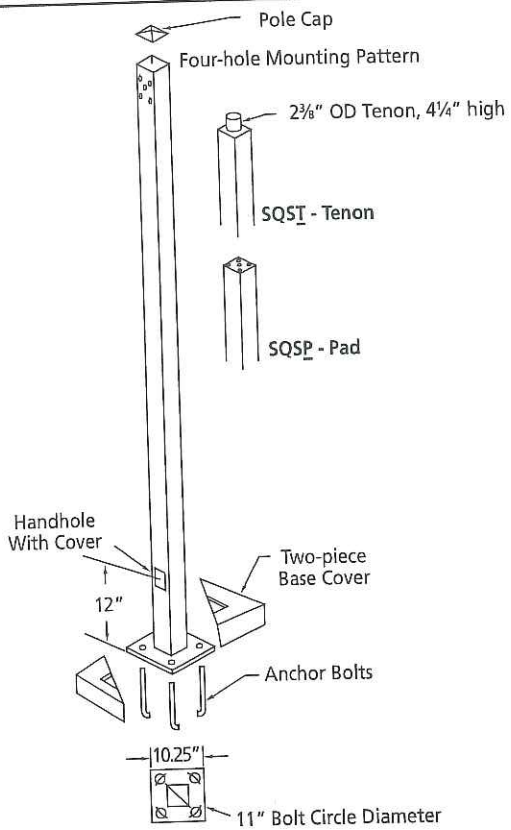
SQUARE STRAIGHT STEEL - DIRECT SIDE MOUNT

Nom. Height	Order Number	Allowable EPA Wind Velocity w/1.3 gust 70	80	90	100	Shaft Size Sq.in.	Ga.	Anchor Bolt Size	Wt./ Lbs.
10'	10-SQS-411-*	38	28.5	22	17	4	11	¾ x15	91
10'	10-SQS-511-*	60	46	36	28	5	11	¾ x15	106
12'	12-SQS-411-*	28	21	15	12	4	11	¾ x15	104
12'	12-SQS-511-*	45	33	25	20	5	11	¾ x15	122
14'	14-SQS-411-*	23	17	12.5	9.5	4	11	¾ x15	116
14'	14-SQS-407-*	34.5	25.5	20	15	4	7	¾ x15	158
14'	14-SQS-511-*	38	28.5	21.5	16.5	5	11	¾ x15	138
16'	16-SQS-411-*	19.5	14	10.5	7.5	4	11	¾ x15	128
16'	16-SQS-407-*	29.5	21.5	16	12	4	7	¾ x15	176
16'	16-SQS-511-*	32	23.5	17.5	13.5	5	11	¾ x15	153
16'	16-SQS-507-*	47.5	35.5	27	21.5	5	7	¾ x15	214
18'	18-SQS-411-*	16.5	11.5	8.5	6	4	11	¾ x30	147
18'	18-SQS-407-*	25.5	18	13.5	10.5	4	7	¾ x30	201
18'	18-SQS-511-*	27.5	20	14	11	5	11	¾ x30	175
18'	18-SQS-507-*	42	31	23.5	18	5	7	¾ x30	243
20'	20-SQS-411-*	13.5	9.5	6.5	4.5	4	11	¾ x30	173
20'	20-SQS-407-*	22	16	11.5	8.5	4	7	¾ x30	160
20'	20-SQS-511-*	23.5	17	12	9	5	11	¾ x30	191
20'	20-SQS-507-*	36.5	27	20	15.5	5	7	¾ x30	266
20'	20-SQS-607-*	51	38	28.5	22	6	7	¾ x30	312
25'	25-SQS-411-*	8.5	5	3	1.5	4	11	1x36	238
25'	25-SQS-407-*	14.5	10	6.5	4.5	4	7	1x36	266
25'	25-SQS-511-*	15	10.5	6.5	4	5	11	1x36	231
25'	25-SQS-507-*	25	18	12.5	8.5	5	7	1x36	324
25'	25-SQS-525-*	36.5	26	19	14	5	.25	1x36	437
25'	25-SQS-607-*	38.5	28	20.5	15	6	7	1x36	404
30'	30-SQS-407-*	6.5	4.5	2.5	1.5	4	7	1x36	313
30'	30-SQS-511-*	7.5	5.5	2.5	NR	5	11	1x36	274
30'	30-SQS-507-*	18	12	8	4.5	5	7	1x36	398
30'	30-SQS-525-*	22	16	13	8	5	.25	1x36	537
30'	30-SQS-607-*	30	20	14	9	6	7	1x36	467
30'	30-SQS-625-*	42	30	22	16	6	.25	1¼ x48	630
35'	35-SQS-607-*	20.5	13	8	4.5	6	7	1x36	538
35'	35-SQS-625-*	26	18	12	7.5	6	.25	1¼ x48	726
40'	40-SQS-607-*	11	8	3.5	NR	6	7	1x36	614
40'	40-SQS-625-*	14	10.5	5.5	2.5	6	.25	1¼ x48	802

NOTE: Specify ***Configuration*** and ***Color***.

*CONFIGURATION - SUFFIX





SQUARE STRAIGHT STEEL - PAD MOUNT

Nom. Height	Order Number	Allowable EPA Wind Velocity w/1.3 gust 70	80	90	100	Shaft Size Sq.in.	Ga.	Anchor Bolt Size	Wt./ Lbs.
20'	20-SQSP-511	20.5	14.5	10.5	7.5	5	11	¾ x30	191
20'	20-SQSP-507	32	23	17.5	13	5	7	¾ x30	266
20'	20-SQSP-607	48	35	27	20.5	6	7	¾ x30	312
25'	25-SQSP-511	13.5	9	5.5	3.3	5	11	1x36	231
25'	25-SQSP-507	22.5	15.5	10.5	7.5	5	7	1x36	324
25'	25-SQSP-525	32	23	16.5	12.5	5	.25	1x36	437
25'	25-SQSP-607	34.5	25	18	13.5	6	7	1x36	404
30'	30-SQSP-511	6.5	4.5	1.9	NR	5	11	1x36	274
30'	30-SQSP-507	16	11	7	3.5	5	7	1x36	398
30'	30-SQSP-525	19	14.5	11.5	7	5	.25	1x36	537
30'	30-SQSP-607	26	18	12.5	8	6	7	1x36	467
30'	30-SQSP-625	38.5	27	19.5	14.5	6	.25	1¼ x48	630
35'	35-SQSP-607	18.5	11.5	7	3.5	6	7	1x36	538
35'	35-SQSP-625	23	16	10.5	6.5	6	.25	1¼ x48	726
40'	40-SQSP-607	9.5	7	3	NR	6	7	1x36	614
40'	40-SQSP-625	12.5	9	4.8	1.9	6	.25	1¼ x48	802

NOTE: Specify ***Color***.

All poles provided with TGIC thermoset polyester powder paint finish.
All poles furnished with anchor bolts, double nuts, and base cover.
Luminaire EPA computed at 2' above top of pole, pad mount at 3' above top of pole. For luminaires above 2', consult factory.

SQUARE STRAIGHT STEEL - TENON MOUNT

Nom. Height	Order Number	Allowable EPA Wind Velocity w/1.3 gust 70	80	90	100	Shaft Size Sq. in	Ga.	Anchor Bolt Size	Wt./ Lbs.
10'	10-SQST-411	32	24	18.5	14.5	4	11	¾ x15	91
10'	10-SQST-511	50	39	30	24	5	11	¾ x15	106
12'	12-SQST-411	24	18	13.5	10.5	4	11	¾ x15	104
12'	12-SQST-511	39.5	29.5	22.5	18	5	11	¾ x15	122
14'	14-SQST-411	20.5	15	11	8.5	4	11	¾ x15	116
14'	14-SQST-407	30.5	22.5	17.5	13.5	4	7	¾ x15	158
14'	14-SQST-511	33.5	25	19	14.5	5	11	¾ x15	138
16'	16-SQST-411	17.5	12.5	9	7	4	11	¾ x15	128
16'	16-SQST-407	26.5	19	14	11	4	7	¾ x15	176
16'	16-SQST-511	29	21	16	12	5	11	¾ x15	153
16'	16-SQST-507	43	32	24.5	19.5	5	7	¾ x15	214
18'	18-SQST-411	15	10.5	7.5	5.5	4	11	¾ x30	147
18'	18-SQST-407	23	16.5	12.5	9.5	4	7	¾ x30	201
18'	18-SQST-511	25	18	13	10	5	11	¾ x30	175
18'	18-SQST-507	38	28	21.5	16.5	5	7	¾ x30	243
20'	20-SQST-411	12.5	8.5	6	4	4	11	¾ x30	173
20'	20-SQST-407	20	14.5	10.5	7.5	4	7	¾ x30	160
20'	20-SQST-511	21.5	15.5	11	8	5	11	¾ x30	191
20'	20-SQST-507	33.5	24.5	18.5	14	5	7	¾ x30	266
20'	20-SQST-607	51	37	28.5	21.5	6	7	¾ x30	312
25'	25-SQST-411	8	4.5	2.5	1.3	4	11	1x36	238
25'	25-SQST-407	13.5	9	6	4	4	7	1x36	266
25'	25-SQST-511	14	9.5	6	3.5	5	11	1x36	231
25'	25-SQST-507	23.5	16.5	11	8	5	7	1x36	324
25'	25-SQST-525	33.5	24	17.5	13	5	.25	1x36	437
25'	25-SQST-607	36	26	19	14	6	7	1x36	404
30'	30-SQST-407	6	4	2	1.2	4	7	1x36	313
30'	30-SQST-511	7	5	2	NR	5	11	1x36	274
30'	30-SQST-507	17	11.5	7.5	4	5	7	1x36	398
30'	30-SQST-525	20	15	12	7.5	5	.25	1x36	537
30'	30-SQST-607	27	19	13	8.5	6	7	1x36	467
30'	30-SQST-625	40	28	20.5	15	6	.25	1¼ x48	630
35'	35-SQST-607	19.5	12	7.5	4	6	7	1x36	538
35'	35-SQST-625	24	16.5	11	7	6	.25	1¼ x48	726
40'	40-SQST-607	11	8	3.5	NR	6	7	1x36	614
40'	40-SQST-625	13	9.5	5	2	6	.25	1¼ x48	802

NOTE: Specify ***Color***.

SPAULDING

300 ALLEN AVE BUILDING LIGHT FIXTURE

16B

WD14

14" Wall Director®

revision 4/1/02 • wd14.pdf

KIM LIGHTING

Type:
Job:
Catalog number:

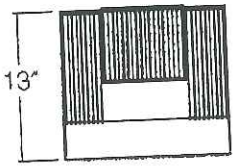
/ / /
Fixture | Electrical Module | Finish | Options
See page 2 — See pages 3-4

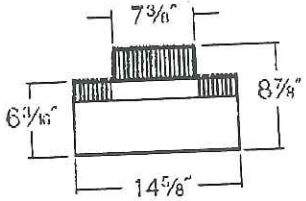
Approvals:

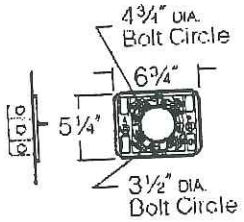
Date:
Page: 1 of 4

Specifications

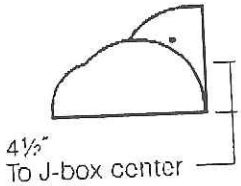
Maximum Fixture Weight (150HPS) = 26 lb







Mounting Plate
Attaches directly to any standard 4" J-box (by others)



Reflector Housing: One piece die-cast aluminum with integral cooling fins. Rotates against ballast housing to provide 10° of adjustment with degree markers cast into housing. At 0° adjustment, lens is totally concealed from view above horizontal with fixture aimed downward.

Ballast Housing: One piece die-cast aluminum with integral cooling fins. Fastens to mounting plate with keyhole slots freeing both hands for securing and wiring. One stainless steel socket-head screw on each side of housing frees the reflector housing to rotate for aiming. Tightening the screws locks the two housings together with sealing provided by a silicone gasket. For visual aiming, adjustment may be accomplished with the fixture on.

Lens Frame: One piece die-cast aluminum with integral hinges and stainless steel pins. Two stainless steel quarter-turn fasteners secure lens frame to reflector housing with sealing provided by a one piece extruded and vulcanized silicone gasket. Lens is clear flat ⅛" thick tempered glass sealed to lens frame with a silicone gasket and retainer clips. For UP models, lens is mounted flush with frame for water run-off, and is silicone sealed.

Type II, III, and IV Reflector Module: Specular Alzak® optical segments are rigidly mounted to an aluminum module which attaches to the housing by a no-tool quick-disconnecting hinge and fastener. All sockets are porcelain medium base rated 4KV. All modules are factory prewired with a quick-disconnect plug for mating to the ballast. Available in three light distributions, all interchangeable within the same housing.

Wall Grazer Reflector Module: Specular Alzak® optical segment is rigidly formed into a self-contained module which attaches to the housing by a no-tool quick-disconnecting hinge and fastener. Black louver vanes run parallel to the lamp arc for controlling the hot spot directly behind the fixture, and spill light into the atmosphere. All sockets are porcelain medium base rated 4KV. All modules are factory prewired with a quick-disconnect plug for mating to the ballast.

Spot Reflector Module: Specular Alzak® optical spun parabola is rigidly mounted to a self-contained module which attaches to the housing by a no-tool quick-disconnecting hinge and fastener. Black internal louvers are provided to control the beam and prevent hot spots directly behind the fixture and spill light into the atmosphere. All sockets are porcelain medium base rated 4KV. All modules are factory prewired with a quick-disconnect plug for mating to the ballast.

Electrical Components: High power factor ballasts are rigidly mounted inside the housing and are factory prewired with a quick-disconnect plug for mating to the socket. Starting temperatures are –40°F for HPS lamp modes and –20°F for MH lamp modes.

Mounting Plate: Mounting plate attaches directly to any standard 4" Junction Box. All mounting plates are die-cast aluminum with reinforced ribs. Two studs are provided in each plate with flange nuts to allow fixture mounting by keyhole slots. Sealant must be applied (by others) between mounting plate and mounting surface to insure a dry Junction Box.

Finish: Super TGIC thermoset polyester powder coat paint, 2.5 mil nominal thickness applied over a chromate conversion coating; 2500 hour salt spray test endurance rating. Standard colors are Black, Dark Bronze, Light Gray, Platinum Silver, or White. Custom colors are available and subject to additional charges, minimum quantities and longer lead times. Consult representative.

Certification: UL Listed to U.S. and Canadian safety standards for wet locations. Fixture manufacturer shall employ a quality program that is certified to meet the ISO 9001 standard.

CAUTION: Fixtures must be grounded in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.

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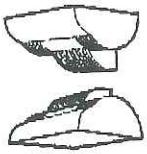
16C

KIM LIGHTING

WD14
14" Wall Director®
revision 4/1/02 • wd14.pdf

Type:
Job:



Standard Features

Fixture
Cat. No. designates **WD14** fixture, Up (U) or Down (D) configuration, and light distribution (2, 3, 4, G or S).

WD Fixture Light Distribution: Type II | Type III | Type IV | Wall Grazer | Spot

Cat. No.: (Up 14") ☐ WD14U2 ☐ WD14U3 ☐ WD14U4 ☐ WD14UG ☐ WD14US
Cat. No.: (Down 14") ☐ WD14D2 ☐ WD14D3 ☐ WD14D4 ☐ WD14DG ☐ WD14DS

Electrical Module
HPS = High Pressure Sodium
MH = Metal Halide

Lamp Watts | Lamp Type | Line Volts
150 | HPS | 120

Cat. Nos. for Electrical Modules available:

	☐ 70HPS120 ☐ 70HPS208 ☐ 70HPS240 ☐ 70HPS277 ☐ 70HPS347	☐ 100HPS120 ☐ 100HPS208 ☐ 100HPS240 ☐ 100HPS277 ☐ 100HPS347	☐ 150HPS120 ☐ 150HPS208 ☐ 150HPS240 ☐ 150HPS277 ☐ 150HPS347
Lamp	ED-17, Clear	ED-17, Clear	ED-17, Clear
Socket	Medium Base	Medium Base	Medium Base
ANSI Ballast Type	S-62	S-54	S-55

	☐ 70MH120 ☐ 70MH208 ☐ 70MH240 ☐ 70MH277 ☐ 70MH347	☐ 100MH120 ☐ 100MH208 ☐ 100MH240 ☐ 100MH277 ☐ 100MH347	☐ 150MH120 ☐ 150MH208 ☐ 150MH240 ☐ 150MH277 ☐ 150MH347	☐ 175MH120 ☐ 175MH208 ☐ 175MH240 ☐ 175MH277 ☐ 175MH347
Lamp	ED-17, Clear	ED-17, Clear	ED-17, Clear	ED-17, Clear
Socket	Medium Base	Medium Base	Medium Base	Medium Base
ANSI Ballast Type	M-98	M-90	M-102	M-57

Finish
Super TGIC powder coat paint over a chromate conversion coating.

Color: Black | Dark Bronze | Light Gray | Platinum Silver | White | [1]Custom Colors
Cat. No.: ☐ BL-P | ☐ DB-P | ☐ LG-P | ☐ PS-P | ☐ WH-P | ☐ CC-P

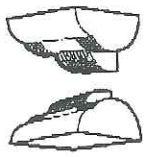
[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

16D

KIM LIGHTING

WD14
14" Wall Director®
revision 4/1/02 • wd14.pdf

Type:
Job:

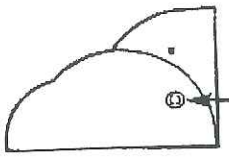


Optional Features

Photocell Control
Cat. No. **(see right)**
☐ **No Option**

Factory installed inside housing with fully gasketed sensor on side wall.

Cat. No.	Line Volts:	Cat. No.	Line Volts:
☐ **A-30**	120V	☐ **A-33**	277V
☐ **A-31**	208V	☐ **A-35**	347V
☐ **A-32**	240V		



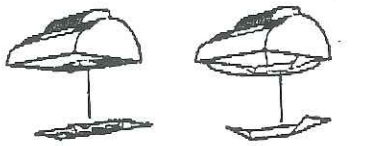
Houseside Shield
Cat. No. **(see right)**
☒ **No Option**

Combination louver shield and black end-panel for reflector. Factory installed to reflector module. Reduces light toward wall by the amounts shown.

CAUTION: Do not use the Houseside Shield option with the Wall Grazer as it will interfere with the light distribution.

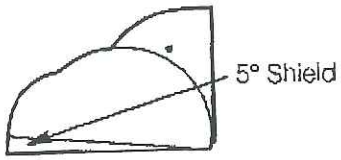
Approximate Light Reduction Toward Wall	Type II	Type III	Type IV
	-43%	-74%	-77%

Cat. No.
☐ **HS** for flat lens
☐ **HSC** for fixtures with optional convex glass lens.



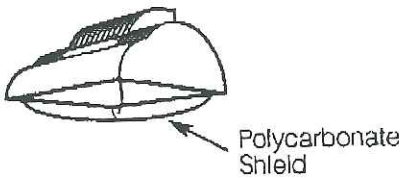
5° Shield
Cat. No. ☐ **5DS14**
☒ **No Option**

Aluminum shield field-attached to lens frame. Maintains a horizontal cutoff fixture edge when the luminaire is tilted 5°. Finished to match the fixture.



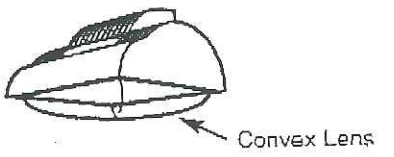
Polycarbonate Shield
Cat. No. ☐ **LS**
☒ **No Option**

For DOWN fixture models only. Fully gasketed one piece vacuum formed clear UV stabilized polycarbonate shield replaces standard tempered glass lens.



Convex Glass Lens
Cat. No. ☐ **CGL**
☒ **No Option**

Tempered convex glass lens replaces standard flat lens.

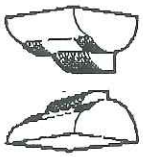


16E

KIM LIGHTING

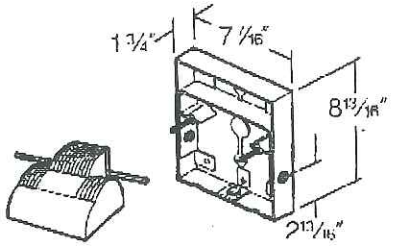
WD14
14" Wall Director®
revision 4/1/02 • wd14.pdf

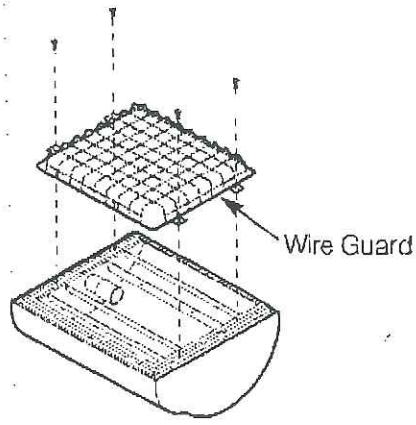
Type:
Job:



Optional Features

Fusing Cat. No. **(see right)** ☒ **No Option**	Line Volts: 120V ☐ **SF** · 208V ☐ **DF** · 240V ☐ **DF** · 277V ☐ **SF** · 347V ☐ **SF** Cat. No.:
Quartz Standby Cat. No. ☐ **QS** ☒ **No Option**	Integral electronic device energizes a T-4 mini-can socket during initial lamp start-up or after a power interruption. De-energizes prior to H.I.D. lamp reaching full brightness. T-4 halogen lamp by others; 100 watt maximum.
Surface Conduit Mount Cat. No. ☐ **SCM14U** ☐ **SCM14D** ☒ **No Option**	Cast aluminum Junction Box and fixture mount for attachment (by others) to existing walls, beams or columns. SCM14 has one ¾" conduit tap in each side and bottom only. Must be securely mounted to wall surface. Finished to match the fixture. **SCM14U** for UP fixtures only. **SCM14D** for DOWN fixtures only.
Wire Guard Cat. No. ☐ **WG** ☒ **No Option**	11 ga. (.12" dia.) BB Wire, 12⅜" x 10¼" x 1½" deep. Finish is super TGIC thermoset polyester powder coat paint, over zinc plated wireform. **NOTE:** Only available with flat lens applications.





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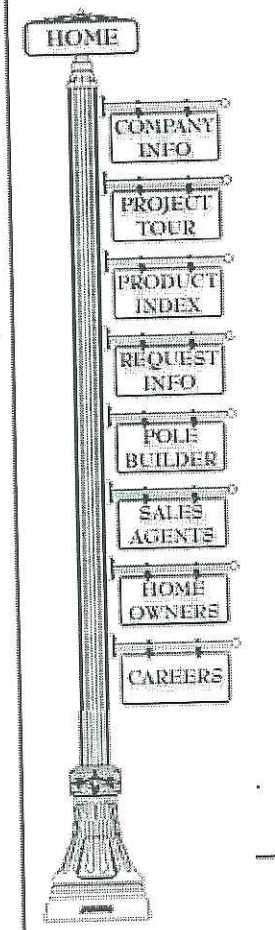
STERNBERG VINTAGE LIGHTING



NANTUCKET - 7543

SEE A PROJECT PHOTO | RETURN TO FIXTURE INDEX | PRODUCT SPECIFICATIONS

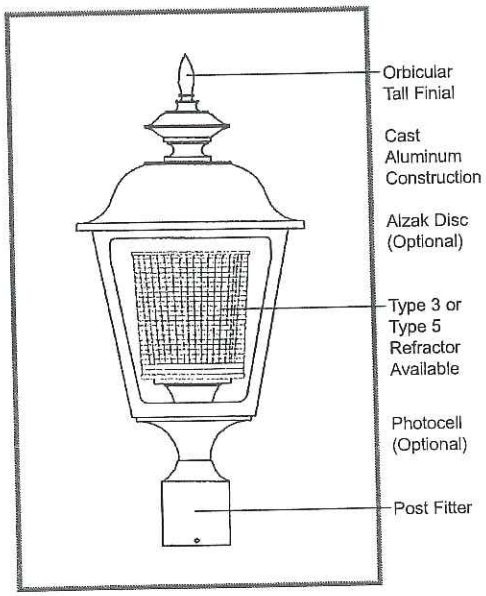
7543, Medium size, authentic Nantucket style coach light features optional beveled glass, frosted glass chimney and scales 12"x26" plus 17" on the diagonal. Often supplied with our glass refractor for higher wattage H.I.D. Over 21 models in three sizes are available. Consult factory.

Click Here For Residential Scale Fixtures

300 ALLEN AVE RESIDENTIAL/ORNAMENTAL FIXTURE

10/23/03

7543TF NANTUCKET SERIES SPECIFICATIONS



GENERAL

The 7543TF Nantucket series is an impressive traditional four-sided fixture. It features consist of a decorative cast four-sided curved roof with a unique one-piece cast cage with acrylic lens. The roof shall be appointed with a decorative cast 4" diameter orbicular tall finial.

POST FITTER

The fitter or base shall be heavy wall cast aluminum, 319 alloy for high tensile strength. It shall have an inside diameter opening to fit a 3" diameter pole or tenon. When ordered with a Sternberg aluminum pole, the fitter shall be set screwed to the pole top or tenon.

BALLAST

The ballast shall be remote mounted in the base of the pole, pole shaft, arm or ballast box.

ELECTRICAL

Fixture shall be U.L. listed. H.I.D. ballasts shall be high power factor with lamp starting down to -30 degree F. Medium base and mogul base porcelain sockets are 4KV rated. All compact fluorescent (PL) ballasts shall be instant start electronic with a starting temperature of down to 0 degrees F. They shall have a 4-pin socket to accept quad or triple tube lamps.

FIXTURE HOUSING

The 7543TF fixture shall be 12" wide and the overall height shall be 25 5/8". It shall be made of heavy wall cast aluminum, 319 alloy and lenses shall be made of vandal resistant acrylic, available in clear (CA), clear seeded (CSA), clear textured (CTA), prismatic (PA), and white (WA) acrylic. The fixture cage shall cast in one piece. The Model 7543TF shall have a four-sided roof, cage and bottom plate with four large lenses.

OPTICAL OPTIONS

Refractors shall be 6" diameter borosilicate glass with an I.E.S. Type 3 (RE3G) or Type 5 (RE5G) distribution. It shall be secured to the socket stem with 3/8" steel anodized threaded pipe nipple and rest on a cast aluminum holder with anti-shock gasket. The refractor will be secured to cast holder with a quarter-turn internal aluminum twist ring for ease of maintenance. The optional Alzak Disc is an optical shield to help direct light downward. It shall be 7" diameter and made of specular reflective aluminum and mounted directly above lamp.

Frosted Glass Hurricane Chimney (FHC) is an optic option which adds an authentic touch.

House Side Shield (HSS) is an option which will block up to 120° of light in any one direction.

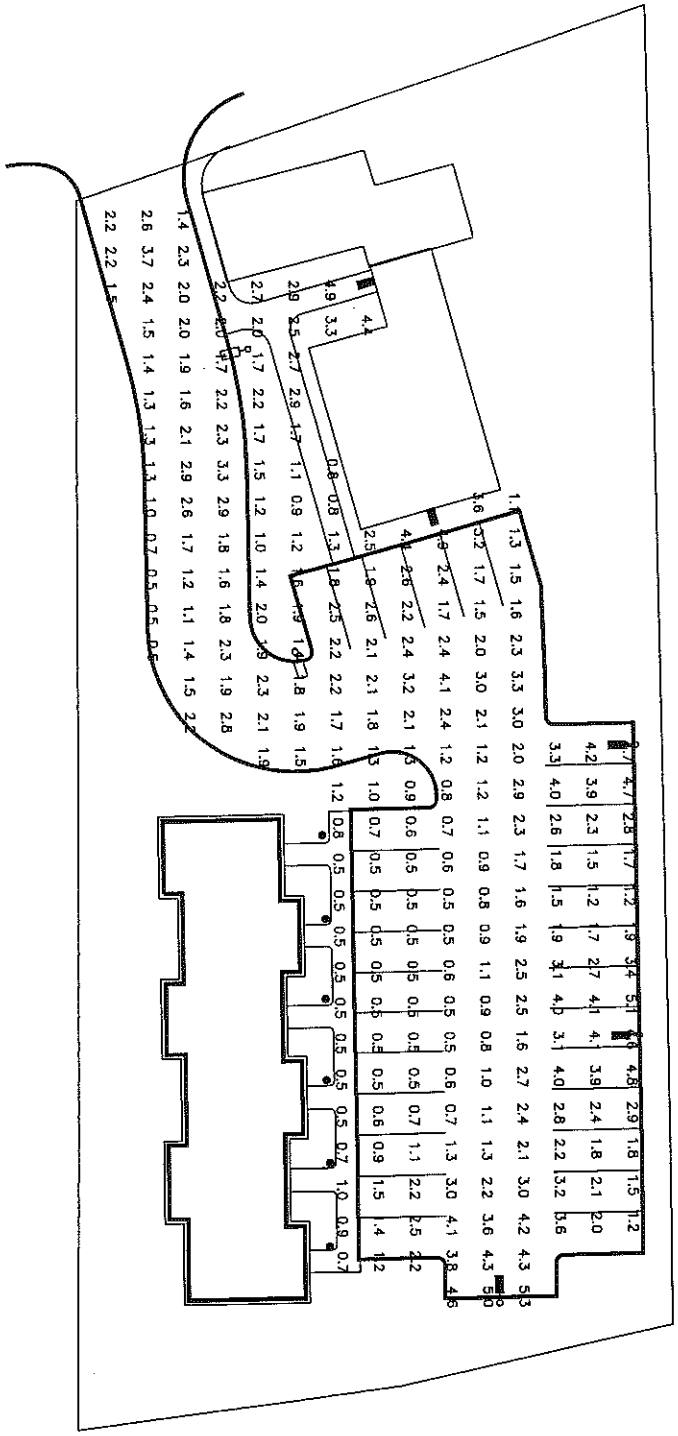
3-Light (3L) candelabra set is an option for incandescent application.

LIST NO. 7543TF NANTUCKET SERIES

PHOTOCELLS

Photocells shall be either the thermo bi-metal button type or the electronic button type. On single post top and multiple head fixture assemblies, photocells shall be mounted in the pole shaft. The

(Continued on back page)



▪ WD14x4/100MHxxx/xx
100W MH
candela file 'WD4-100M.IES'
1 lamp(s) per luminaire, 7020 initial lumens per lamp
Light Loss Factor = 0.720, watts per luminaire = 100
number locations= 2, number luminaires= 2
kw all locations= 0.2
Occurrences: 2 at mounting height 10 ft

▪ PFI-XL-M250-IV-FG-CS
250W MH
candela file 'I9276.ies'
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Light Loss Factor = 0.720, watts per luminaire = 285
Outreach (from mounting axis to photometric center)= 24 in
mounting height= 18 ft
number locations= 3, number luminaires= 3
kw all locations= 0.9

▪ PFI-XL-M250-III-FG
250W MH
candela file 'L4703PFX.ies'
1 lamp(s) per luminaire, 20000 initial lumens per lamp
Light Loss Factor = 0.720, watts per luminaire = 458
Outreach (from mounting axis to photometric center)= 24 in
mounting height= 18 ft
number locations= 2, number luminaires= 2
kw all locations= 0.9

• NRG-6x1-CL1
100W
candela file 'HP06072.IES'
1 lamp(s) per luminaire, 1465 initial lumens per lamp
Light Loss Factor = 1.000, watts per luminaire = 60
mounting height= 8 ft
number locations= 6, number luminaires= 6
kw all locations= 0.4

GRID1
250 points at z=0, spacing 8ft by 8ft
HORIZONTAL FOOTCANDLES

Average	2.0
Maximum	5.3
Minimum	0.5

PROPERTY LINE GRID
103 points
HORIZONTAL FOOTCANDLES

Average	0.3
Maximum	1.5
Minimum	0.0

SPAULDING LIGHTING
1736 DREMAN AVENUE CINCINNATI, OHIO 45223

APPLICATIONS DEPARTMENT
CALCULATIONS BY: Kenn Grant
VOICE: 513-541-3486 x224
FACSIMILE: 513-541-5813
EMAIL : kgrant@spauldinglighting.com

SPAULDING LIGHTING SALES AGENCY:
Swaney Lighting Associates
Bev White

0 10 20 40
1 IN. = 20 FT.

PROJECT NAME:
300 ALLEN AVENUE

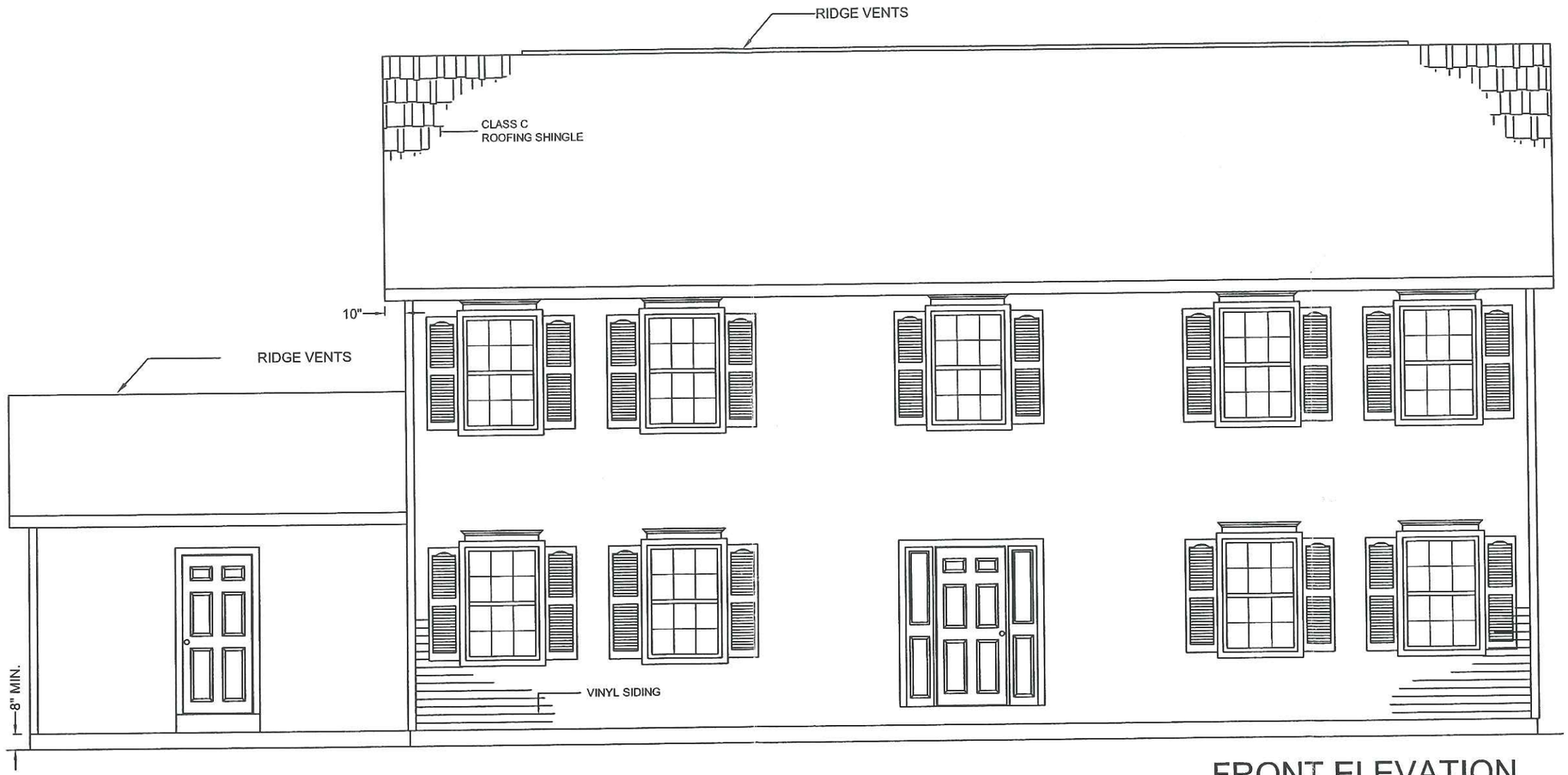
FILE: SP-613
DATE: 10-22-03

Illuminance levels shown are calculated from the luminaire laboratory test data listed. Laboratory tests are made under optimum conditions, with lamp output at rated value, and in accordance with Illuminating Engineering Society approved methods.

Actual illuminance levels may differ due to variance in lamp lumen output, lamp tilt factor, ballast voltage output, line voltage at ballast, reflector specularity, lamp lumen depreciation and luminaire dirt depreciation. Light Loss Factor (L.L.F.). If less than 1.00, indicates the anticipated effect of factors other than variable field conditions.

A11-17

Att. 18

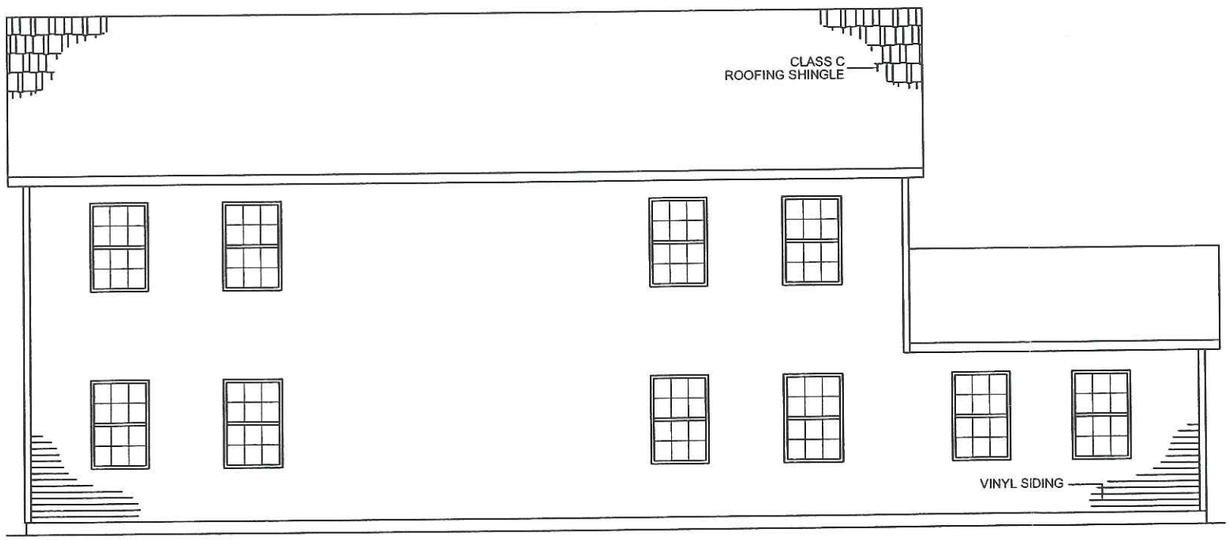


FRONT ELEVATION

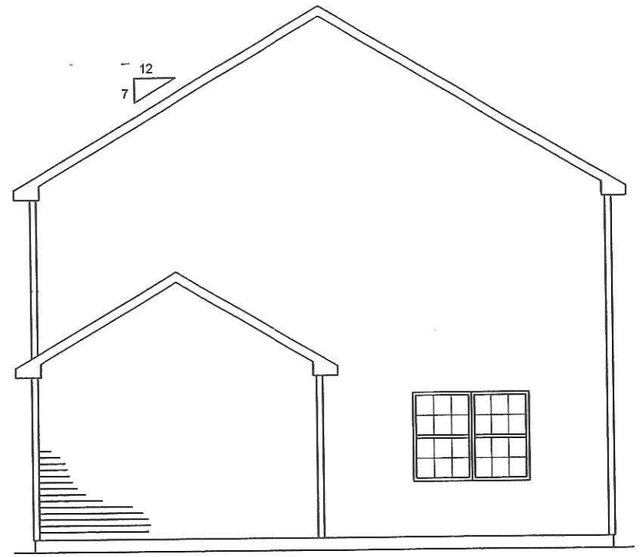
FRONT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 5 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV #1 9/17 BY:JC REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

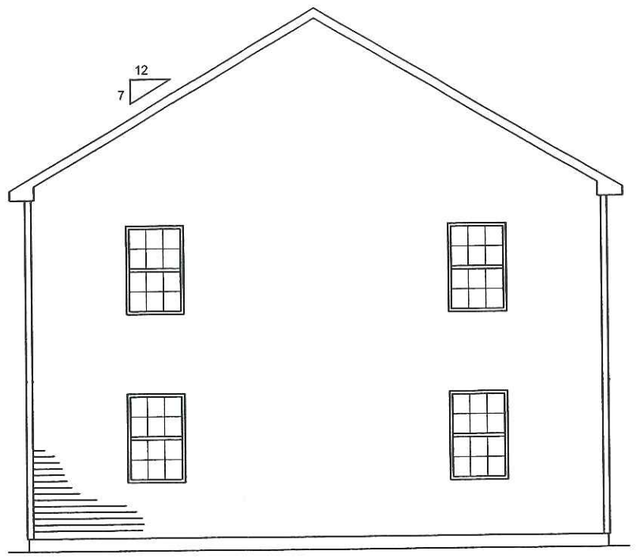
18A



REAR ELEVATION



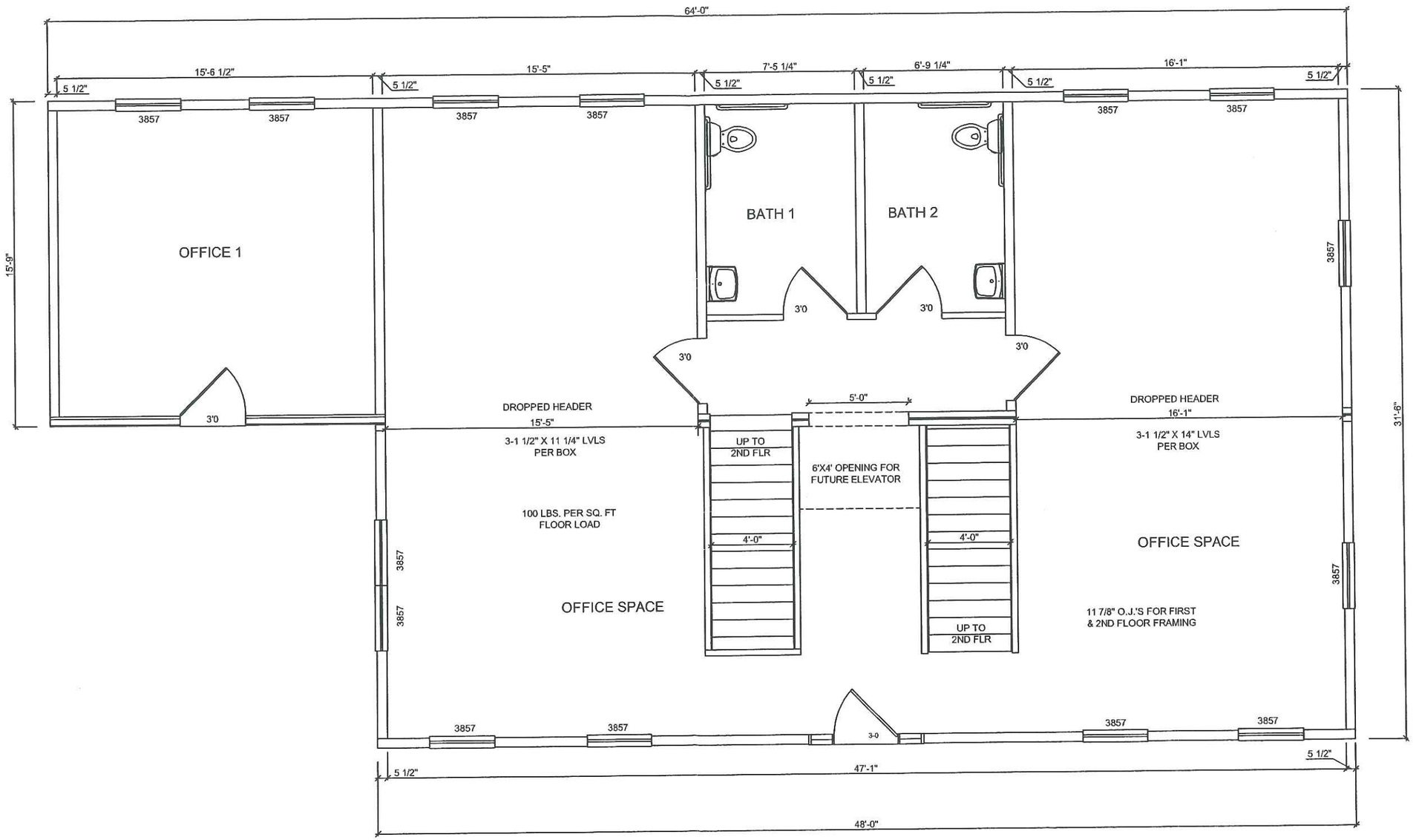
LEFT ELEVATION



RIGHT ELEVATION

JOB NAME: COMM. BLDNG JOB SITE: ---- ----	BUILDER: ADAMS-2 ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS2 SERIAL #: ----	ELEVATIONS ALL SHEET # 5a DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: -----	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

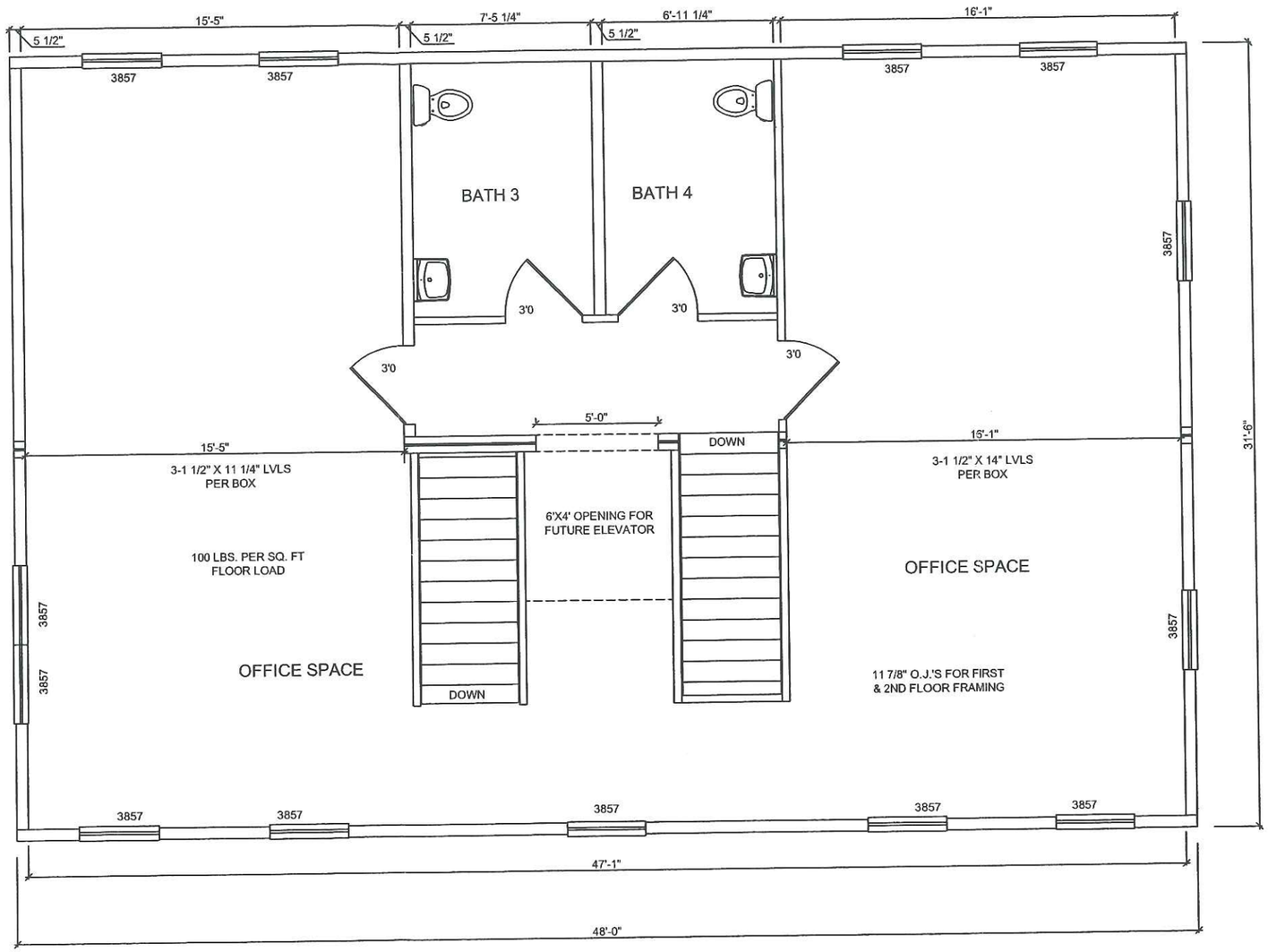
18B



1ST FLOOR PLAN (9FT. CEILING)

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3 DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV #1 9/17 BY:JC REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

18C



2ND FLOOR PLAN

JOB NAME: COMM. BLDNG JOB SITE: ME ----	BUILDER: ADAMS ADDRESS: ---- ----	HOUSE TYPE FILE NAME: ADAMS 2 SERIAL #: ----	SHEET NAME SHEET # 3A DWN. BY: JWC SCALE = 3/16"=1'-0" DATE: 8/29/03	REVISIONS REV #1 9/17 BY:JC REV # REV # REV #	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

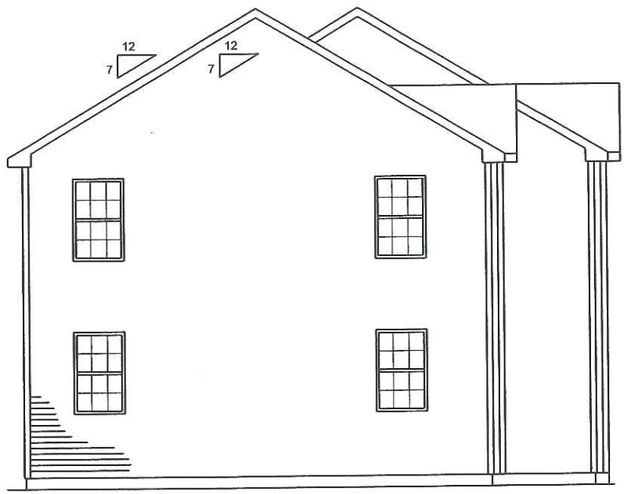
18D

FRONT ELEVATION

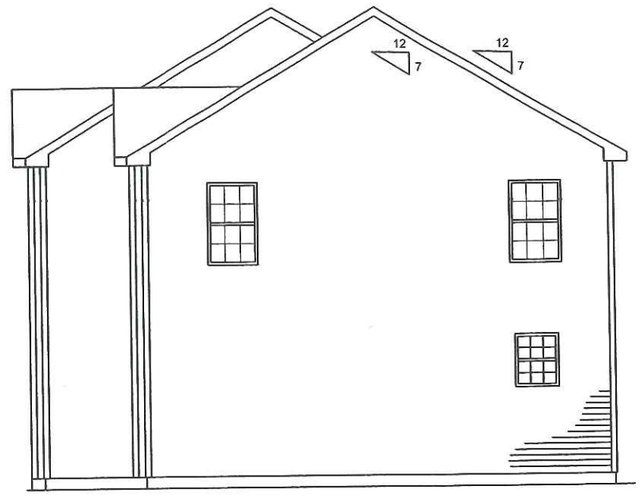
JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	FRONT ELEVATION	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223

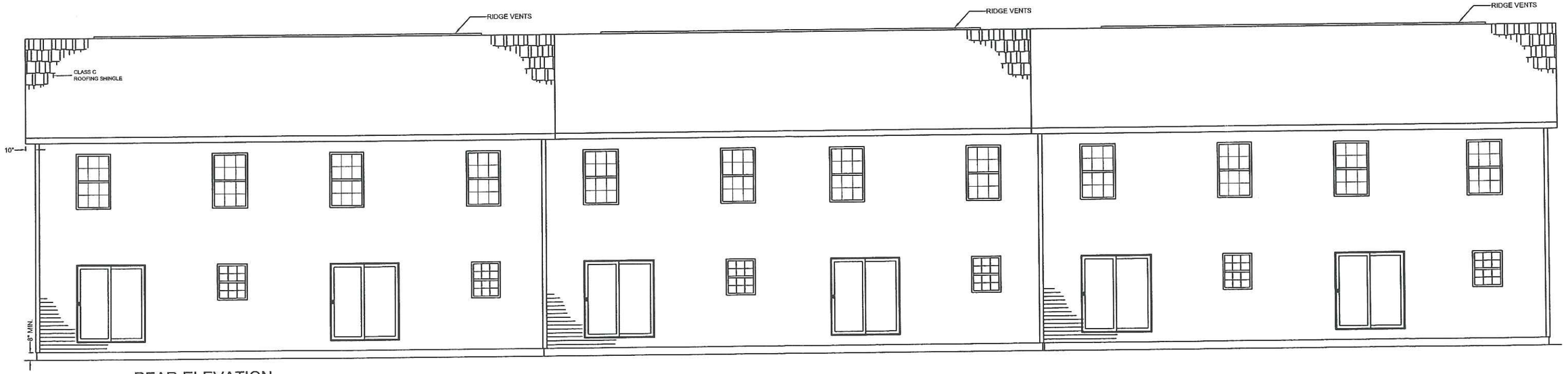
18E



RIGHT ELEVATION



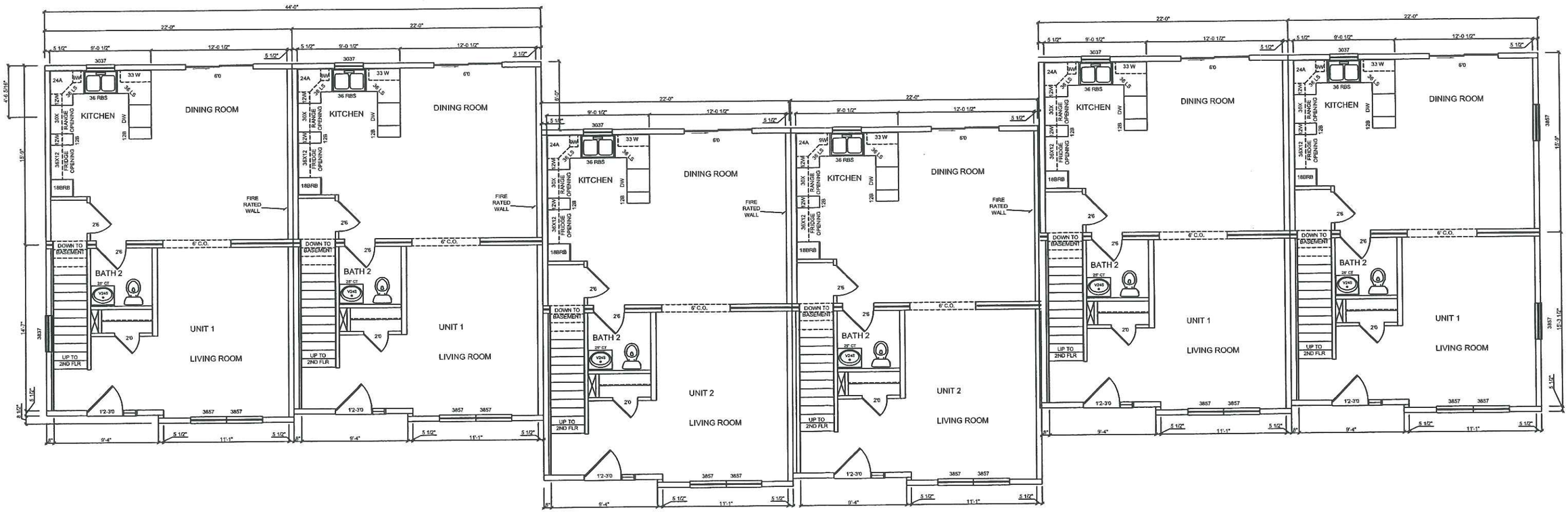
LEFT ELEVATION



REAR ELEVATION

JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	ELEVATIONS ALL SHEET # 5a DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS	KBS BUILDING SYSTEMS, INC. 300 PARK STREET, SOUTH PARIS, ME 04281 PHONE: 207-739-2400 FAX: 207-739-2223

18F

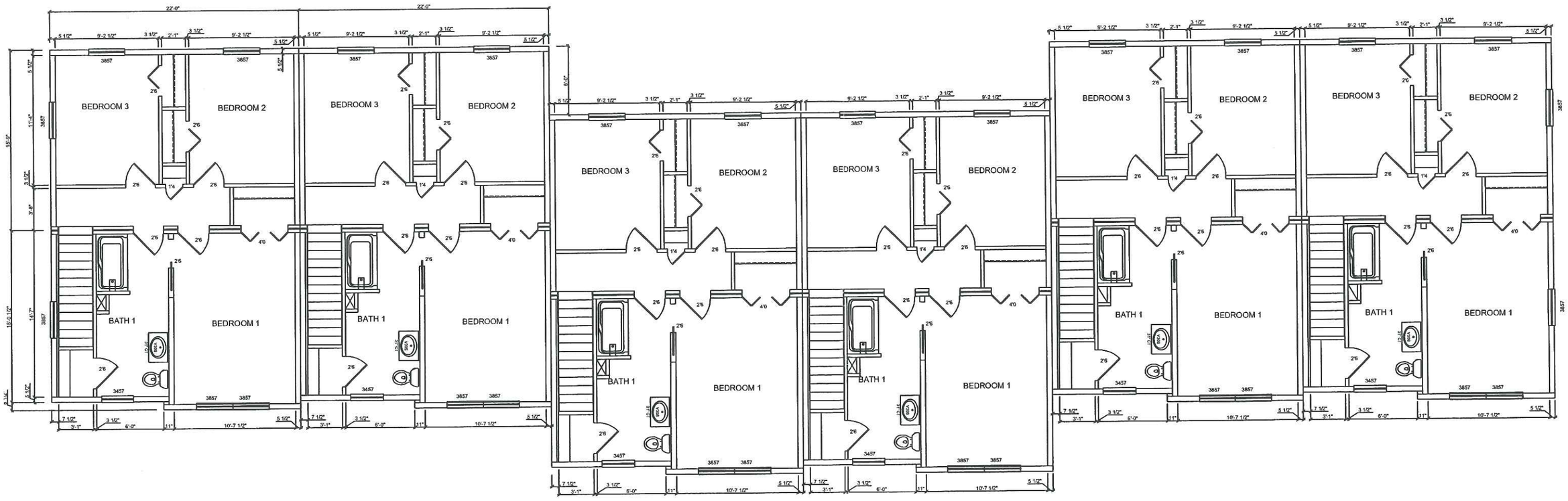


1ST FLOOR PLAN

JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223

186



JOB NAME: ADAMS JOB SITE: ---- ----	BUILDER: TOWN HOUSE ADDRESS: ME ----	HOUSE TYPE FILE NAME: ADAMS SERIAL #: ----	2ND FLOOR PLAN SHEET # DWN. BY: JWC SCALE= 1/8"=1'-0" DATE: 8/29/03	REVISIONS REV # REV # REV # REV #	KBS BUILDING SYSTEMS

KBS BUILDING SYSTEMS, INC.
300 PARK STREET, SOUTH PARIS, ME 04281
PHONE: 207-739-2400 FAX: 207-739-2223

A# 19

NORTH

ALLEN AVENUE

1/2" Iron Pipe

1/2" Iron Pipe

5/8" Capped Iron Rod #492

5/8" Cap

293' +/-

(Plan = 127' +/-)

128' +/-

275' +/-

Rim=80.4'
Dry-Filled w/Gravel

Inv. In 74.8'

Inv. In = 78.4'
Inv. Out = 78.2' (end is above ditch line)

Inv. In = 77.0'
Out Unknown (assumed to sewer)

Rim=81.1'
Inv.(9.00')=75.7

First Floor Elev.= 85.72

2 Story on Crawl Space

Ramp

Garage

Gravel

Shrubs

Deck

Tree Line

Row 12" Pines

Inv. Out 61.35

Bit.

Conc.

Vit. Clay

Plastic

Copper

Maple

Oak

Pine

Cedar

Twin Maple

Sq. Stone Mon.

Decid. cluster

Evergreen

Deciduous

Overhead Wires

Edge of Pavement

Sidewalk

Utility Pole

Guy Wire

Catch Basin

Drain Manhole

Sewer Manhole

Water Gate

Water Shut Off

Fire Hydrant

Gas Gate

Gas Shut Off

Electric Manhole

Electric Pedestal

Electric Transformer

Telephone Manhole

Telephone Pedestal

Light Pole

Signal Pole

Signal Box

Traffic Control Box

Mail Box

Sign

Bollard

Flood Light

Monitoring Well

Test Pit

Boring

Survey Control Point

Iron Pipe

Iron Rod

Drill Hole

Concrete Bound

Granite Bound

Stone Bound

Property Line

Abutting Property Line

Right of Way Line

Easement Line

Building Setback Line

Existing Building

Existing Contour

Existing Spot Grade

Proposed Contour

Proposed Spot Grade

Proposed Swale

Proposed Ridge

Proposed Building

Proposed Retaining Wall

Proposed Guard Rail

Proposed Fence

Proposed Stockade Fence

Proposed Stone Wall

Proposed Erosion Control Barrier

Proposed Silt Fence

Proposed Hay Bale Barrier

Proposed Drainage Line

Proposed Culvert

Proposed Underdrain

Proposed Gas Line

Proposed Water Line

Proposed Overhead Wires

Proposed Underground Electric

Proposed Underground Telephone

Proposed Light Pole

Proposed Sign

Proposed Silt Sack

Proposed Rip Rap

Proposed Mulch Pad

Proposed Vegetative Filter Strip

Proposed Deciduous Tree

Proposed Evergreen Tree

Proposed Shrub

Limit of Work

Limit of Disturbed Area

Limit of Wetland Disturbance

Wetland Flag

Wetland Boundary

Stream

Vernal Pool

Vernal Pool Envelope

Deer Wintering Area

Deer Travel Corridor

Deer Feeding Area

Fawning Area

Significant Wildlife Habitat

Open Space

Conservation Easement

Proposed Open Space

Proposed Conservation Easement

Proposed Lot Number

Proposed Lot Line

Proposed Street Line

Proposed Monument

Proposed Granite Bound

Proposed Iron Pipe

Proposed Iron Rod

Proposed Drill Hole

Proposed Concrete Bound

Proposed Stone Bound

Proposed Street Name

Proposed Right of Way Width

Proposed Easement Width

Proposed Setback

Proposed Parking Space

Proposed Number of Parking Spaces

Proposed Use

Proposed Building Addition

Proposed Building Height

Proposed Building Area

Proposed Number of Stories

Proposed Number of Units

Proposed Finished Floor Elevation

Proposed Basement Floor Elevation

Proposed Footing Drain

Proposed Cleanout

Proposed Trench Drain

Proposed Area Drain

Proposed Roof Drain

Proposed Subdrain

Proposed Hydrant

Proposed Water Service

Proposed Water Gate

Proposed Water Shut Off

Proposed Gas Service

Proposed Gas Gate

Proposed Gas Shut Off

Proposed Electric Service

Proposed Electric Manhole

Proposed Electric Pedestal

Proposed Electric Transformer

Proposed Telephone Service

Proposed Telephone Manhole

Proposed Telephone Pedestal

Proposed Light Pole

Proposed Signal Pole

Proposed Signal Box

Proposed Traffic Control Box

Proposed Mail Box

Proposed Sign

Proposed Bollard

Proposed Flood Light

Proposed Monitoring Well

Proposed Test Pit

Proposed Boring

Proposed Survey Control Point

Proposed Iron Pipe

Proposed Iron Rod

Proposed Drill Hole

Proposed Concrete Bound

Proposed Granite Bound

Proposed Stone Bound

Proposed Property Line

Proposed Abutting Property Line

Proposed Right of Way Line

Proposed Easement Line

Proposed Building Setback Line

Proposed Existing Building

Proposed Existing Contour

Proposed Existing Spot Grade

Proposed Proposed Contour

Proposed Proposed Spot Grade

Proposed Proposed Swale

Proposed Proposed Ridge

Proposed Proposed Building

Proposed Proposed Retaining Wall

Proposed Proposed Guard Rail

Proposed Proposed Fence

Proposed Proposed Stockade Fence

Proposed Proposed Stone Wall

Proposed Proposed Erosion Control Barrier

Proposed Proposed Silt Fence

Proposed Proposed Hay Bale Barrier

Proposed Proposed Drainage Line

Proposed Proposed Culvert

Proposed Proposed Underdrain

Proposed Proposed Gas Line

Proposed Proposed Water Line

Proposed Proposed Overhead Wires

Proposed Proposed Underground Electric

Proposed Proposed Underground Telephone

Proposed Proposed Light Pole

Proposed Proposed Sign

Proposed Proposed Silt Sack

Proposed Proposed Rip Rap

Proposed Proposed Mulch Pad

Proposed Proposed Vegetative Filter Strip

Proposed Proposed Deciduous Tree

Proposed Proposed Evergreen Tree

Proposed Proposed Shrub

Proposed Limit of Work

Proposed Limit of Disturbed Area

Proposed Limit of Wetland Disturbance

Proposed Wetland Flag

Proposed Wetland Boundary

Proposed Stream

Proposed Vernal Pool

Proposed Vernal Pool Envelope

Proposed Deer Wintering Area

Proposed Deer Travel Corridor

Proposed Deer Feeding Area

Proposed Fawning Area

Proposed Significant Wildlife Habitat

Proposed Open Space

Proposed Conservation Easement

Proposed Proposed Open Space

Proposed Proposed Conservation Easement

Proposed Proposed Lot Number

Proposed Proposed Lot Line

Proposed Proposed Street Line

Proposed Proposed Monument

Proposed Proposed Granite Bound

Proposed Proposed Iron Pipe

Proposed Proposed Iron Rod

Proposed Proposed Drill Hole

Proposed Proposed Concrete Bound

Proposed Proposed Stone Bound

Proposed Proposed Street Name

Proposed Proposed Right of Way Width

Proposed Proposed Easement Width

Proposed Proposed Setback

Proposed Proposed Parking Space

Proposed Proposed Number of Parking Spaces

Proposed Proposed Use

Proposed Proposed Building Addition

Proposed Proposed Building Height

Proposed Proposed Building Area

Proposed Proposed Number of Stories

Proposed Proposed Number of Units

Proposed Proposed Finished Floor Elevation

Proposed Proposed Basement Floor Elevation

Proposed Proposed Footing Drain

Proposed Proposed Cleanout

Proposed Proposed Trench Drain

Proposed Proposed Area Drain

Proposed Proposed Roof Drain

Proposed Proposed Subdrain

Proposed Proposed Hydrant

Proposed Proposed Water Service

Proposed Proposed Water Gate

Proposed Proposed Water Shut Off

Proposed Proposed Gas Service

Proposed Proposed Gas Gate

Proposed Proposed Gas Shut Off

Proposed Proposed Electric Service

Proposed Proposed Electric Manhole

Proposed Proposed Electric Pedestal

Proposed Proposed Electric Transformer

Proposed Proposed Telephone Service

Proposed Proposed Telephone Manhole

Proposed Proposed Telephone Pedestal

Proposed Proposed Light Pole

Proposed Proposed Signal Pole

Proposed Proposed Signal Box

Proposed Proposed Traffic Control Box

Proposed Proposed Mail Box

Proposed Proposed Sign

Proposed Proposed Bollard

Proposed Proposed Flood Light

Proposed Proposed Monitoring Well

Proposed Proposed Test Pit

Proposed Proposed Boring

Proposed Proposed Survey Control Point

Proposed Proposed Iron Pipe

Proposed Proposed Iron Rod

Proposed Proposed Drill Hole

Proposed Proposed Concrete Bound

Proposed Proposed Granite Bound

Proposed Proposed Stone Bound

Proposed Proposed Property Line

Proposed Proposed Abutting Property Line

Proposed Proposed Right of Way Line

Proposed Proposed Easement Line

Proposed Proposed Building Setback Line

Proposed Proposed Existing Building

Proposed Proposed Existing Contour

Proposed Proposed Existing Spot Grade

Proposed Proposed Proposed Contour

Proposed Proposed Proposed Spot Grade

Proposed Proposed Proposed Swale

Proposed Proposed Proposed Ridge

Proposed Proposed Proposed Building

Proposed Proposed Proposed Retaining Wall

Proposed Proposed Proposed Guard Rail

Proposed Proposed Proposed Fence

Proposed Proposed Proposed Stockade Fence

Proposed Proposed Proposed Stone Wall

Proposed Proposed Proposed Erosion Control Barrier

Proposed Proposed Proposed Silt Fence

Proposed Proposed Proposed Hay Bale Barrier

Proposed Proposed Proposed Drainage Line

Proposed Proposed Proposed Culvert

Proposed Proposed Proposed Underdrain

Proposed Proposed Proposed Gas Line

Proposed Proposed Proposed Water Line

Proposed Proposed Proposed Overhead Wires

Proposed Proposed Proposed Underground Electric

Proposed Proposed Proposed Underground Telephone

Proposed Proposed Proposed Light Pole

Proposed Proposed Proposed Sign

Proposed Proposed Proposed Silt Sack

Proposed Proposed Proposed Rip Rap

Proposed Proposed Proposed Mulch Pad

Proposed Proposed Proposed Vegetative Filter Strip

Proposed Proposed Proposed Deciduous Tree

Proposed Proposed Proposed Evergreen Tree

Proposed Proposed Proposed Shrub

Proposed Proposed Limit of Work

Proposed Proposed Limit of Disturbed Area

Proposed Proposed Limit of Wetland Disturbance

Proposed Proposed Wetland Flag

Proposed Proposed Wetland Boundary

Proposed Proposed Stream

Proposed Proposed Vernal Pool

Proposed Proposed Vernal Pool Envelope

Proposed Proposed Deer Wintering Area

Proposed Proposed Deer Travel Corridor

Proposed Proposed Deer Feeding Area

Proposed Proposed Fawning Area

Proposed Proposed Significant Wildlife Habitat

Proposed Proposed Open Space

Proposed Proposed Conservation Easement

Proposed Proposed Proposed Open Space

Proposed Proposed Proposed Conservation Easement

Proposed Proposed Proposed Lot Number

Proposed Proposed Proposed Lot Line

Proposed Proposed Proposed Street Line

Proposed Proposed Proposed Monument

Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Iron Pipe

Proposed Proposed Proposed Iron Rod

Proposed Proposed Proposed Drill Hole

Proposed Proposed Proposed Concrete Bound

Proposed Proposed Proposed Stone Bound

Proposed Proposed Proposed Street Name

Proposed Proposed Proposed Right of Way Width

Proposed Proposed Proposed Easement Width

Proposed Proposed Proposed Setback

Proposed Proposed Proposed Parking Space

Proposed Proposed Proposed Number of Parking Spaces

Proposed Proposed Proposed Use

Proposed Proposed Proposed Building Addition

Proposed Proposed Proposed Building Height

Proposed Proposed Proposed Building Area

Proposed Proposed Proposed Number of Stories

Proposed Proposed Proposed Number of Units

Proposed Proposed Proposed Finished Floor Elevation

Proposed Proposed Proposed Basement Floor Elevation

Proposed Proposed Proposed Footing Drain

Proposed Proposed Proposed Cleanout

Proposed Proposed Proposed Trench Drain

Proposed Proposed Proposed Area Drain

Proposed Proposed Proposed Roof Drain

Proposed Proposed Proposed Subdrain

Proposed Proposed Proposed Hydrant

Proposed Proposed Proposed Water Service

Proposed Proposed Proposed Water Gate

Proposed Proposed Proposed Water Shut Off

Proposed Proposed Proposed Gas Service

Proposed Proposed Proposed Gas Gate

Proposed Proposed Proposed Gas Shut Off

Proposed Proposed Proposed Electric Service

Proposed Proposed Proposed Electric Manhole

Proposed Proposed Proposed Electric Pedestal

Proposed Proposed Proposed Electric Transformer

Proposed Proposed Proposed Telephone Service

Proposed Proposed Proposed Telephone Manhole

Proposed Proposed Proposed Telephone Pedestal

Proposed Proposed Proposed Light Pole

Proposed Proposed Proposed Signal Pole

Proposed Proposed Proposed Signal Box

Proposed Proposed Proposed Traffic Control Box

Proposed Proposed Proposed Mail Box

Proposed Proposed Proposed Sign

Proposed Proposed Proposed Bollard

Proposed Proposed Proposed Flood Light

Proposed Proposed Proposed Monitoring Well

Proposed Proposed Proposed Test Pit

Proposed Proposed Proposed Boring

Proposed Proposed Proposed Survey Control Point

Proposed Proposed Proposed Iron Pipe

Proposed Proposed Proposed Iron Rod

Proposed Proposed Proposed Drill Hole

Proposed Proposed Proposed Concrete Bound

Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Stone Bound

Proposed Proposed Proposed Property Line

Proposed Proposed Proposed Abutting Property Line

Proposed Proposed Proposed Right of Way Line

Proposed Proposed Proposed Easement Line

Proposed Proposed Proposed Building Setback Line

Proposed Proposed Proposed Existing Building

Proposed Proposed Proposed Existing Contour

Proposed Proposed Proposed Existing Spot Grade

Proposed Proposed Proposed Proposed Contour

Proposed Proposed Proposed Proposed Spot Grade

Proposed Proposed Proposed Proposed Swale

Proposed Proposed Proposed Proposed Ridge

Proposed Proposed Proposed Proposed Building

Proposed Proposed Proposed Proposed Retaining Wall

Proposed Proposed Proposed Proposed Guard Rail

Proposed Proposed Proposed Proposed Fence

Proposed Proposed Proposed Proposed Stockade Fence

Proposed Proposed Proposed Proposed Stone Wall

Proposed Proposed Proposed Proposed Erosion Control Barrier

Proposed Proposed Proposed Proposed Silt Fence

Proposed Proposed Proposed Proposed Hay Bale Barrier

Proposed Proposed Proposed Proposed Drainage Line

Proposed Proposed Proposed Proposed Culvert

Proposed Proposed Proposed Proposed Underdrain

Proposed Proposed Proposed Proposed Gas Line

Proposed Proposed Proposed Proposed Water Line

Proposed Proposed Proposed Proposed Overhead Wires

Proposed Proposed Proposed Proposed Underground Electric

Proposed Proposed Proposed Proposed Underground Telephone

Proposed Proposed Proposed Proposed Light Pole

Proposed Proposed Proposed Proposed Sign

Proposed Proposed Proposed Proposed Silt Sack

Proposed Proposed Proposed Proposed Rip Rap

Proposed Proposed Proposed Proposed Mulch Pad

Proposed Proposed Proposed Proposed Vegetative Filter Strip

Proposed Proposed Proposed Proposed Deciduous Tree

Proposed Proposed Proposed Proposed Evergreen Tree

Proposed Proposed Proposed Proposed Shrub

Proposed Proposed Proposed Limit of Work

Proposed Proposed Proposed Limit of Disturbed Area

Proposed Proposed Proposed Limit of Wetland Disturbance

Proposed Proposed Proposed Wetland Flag

Proposed Proposed Proposed Wetland Boundary

Proposed Proposed Proposed Stream

Proposed Proposed Proposed Vernal Pool

Proposed Proposed Proposed Vernal Pool Envelope

Proposed Proposed Proposed Deer Wintering Area

Proposed Proposed Proposed Deer Travel Corridor

Proposed Proposed Proposed Deer Feeding Area

Proposed Proposed Proposed Fawning Area

Proposed Proposed Proposed Significant Wildlife Habitat

Proposed Proposed Proposed Open Space

Proposed Proposed Proposed Conservation Easement

Proposed Proposed Proposed Proposed Open Space

Proposed Proposed Proposed Proposed Conservation Easement

Proposed Proposed Proposed Proposed Lot Number

Proposed Proposed Proposed Proposed Lot Line

Proposed Proposed Proposed Proposed Street Line

Proposed Proposed Proposed Proposed Monument

Proposed Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Proposed Iron Pipe

Proposed Proposed Proposed Proposed Iron Rod

Proposed Proposed Proposed Proposed Drill Hole

Proposed Proposed Proposed Proposed Concrete Bound

Proposed Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Proposed Stone Bound

Proposed Proposed Proposed Proposed Property Line

Proposed Proposed Proposed Proposed Abutting Property Line

Proposed Proposed Proposed Proposed Right of Way Line

Proposed Proposed Proposed Proposed Easement Line

Proposed Proposed Proposed Proposed Building Setback Line

Proposed Proposed Proposed Proposed Existing Building

Proposed Proposed Proposed Proposed Existing Contour

Proposed Proposed Proposed Proposed Existing Spot Grade

Proposed Proposed Proposed Proposed Proposed Contour

Proposed Proposed Proposed Proposed Proposed Spot Grade

Proposed Proposed Proposed Proposed Proposed Swale

Proposed Proposed Proposed Proposed Proposed Ridge

Proposed Proposed Proposed Proposed Proposed Building

Proposed Proposed Proposed Proposed Proposed Retaining Wall

Proposed Proposed Proposed Proposed Proposed Guard Rail

Proposed Proposed Proposed Proposed Proposed Fence

Proposed Proposed Proposed Proposed Proposed Stockade Fence

Proposed Proposed Proposed Proposed Proposed Stone Wall

Proposed Proposed Proposed Proposed Proposed Erosion Control Barrier

Proposed Proposed Proposed Proposed Proposed Silt Fence

Proposed Proposed Proposed Proposed Proposed Hay Bale Barrier

Proposed Proposed Proposed Proposed Proposed Drainage Line

Proposed Proposed Proposed Proposed Proposed Culvert

Proposed Proposed Proposed Proposed Proposed Underdrain

Proposed Proposed Proposed Proposed Proposed Gas Line

Proposed Proposed Proposed Proposed Proposed Water Line

Proposed Proposed Proposed Proposed Proposed Overhead Wires

Proposed Proposed Proposed Proposed Proposed Underground Electric

Proposed Proposed Proposed Proposed Proposed Underground Telephone

Proposed Proposed Proposed Proposed Proposed Light Pole

Proposed Proposed Proposed Proposed Proposed Sign

Proposed Proposed Proposed Proposed Proposed Silt Sack

Proposed Proposed Proposed Proposed Proposed Rip Rap

Proposed Proposed Proposed Proposed Proposed Mulch Pad

Proposed Proposed Proposed Proposed Proposed Vegetative Filter Strip

Proposed Proposed Proposed Proposed Proposed Deciduous Tree

Proposed Proposed Proposed Proposed Proposed Evergreen Tree

Proposed Proposed Proposed Proposed Proposed Shrub

Proposed Proposed Proposed Proposed Limit of Work

Proposed Proposed Proposed Proposed Limit of Disturbed Area

Proposed Proposed Proposed Proposed Limit of Wetland Disturbance

Proposed Proposed Proposed Proposed Wetland Flag

Proposed Proposed Proposed Proposed Wetland Boundary

Proposed Proposed Proposed Proposed Stream

Proposed Proposed Proposed Proposed Vernal Pool

Proposed Proposed Proposed Proposed Vernal Pool Envelope

Proposed Proposed Proposed Proposed Deer Wintering Area

Proposed Proposed Proposed Proposed Deer Travel Corridor

Proposed Proposed Proposed Proposed Deer Feeding Area

Proposed Proposed Proposed Proposed Fawning Area

Proposed Proposed Proposed Proposed Significant Wildlife Habitat

Proposed Proposed Proposed Proposed Open Space

Proposed Proposed Proposed Proposed Conservation Easement

Proposed Proposed Proposed Proposed Proposed Open Space

Proposed Proposed Proposed Proposed Proposed Conservation Easement

Proposed Proposed Proposed Proposed Proposed Lot Number

Proposed Proposed Proposed Proposed Proposed Lot Line

Proposed Proposed Proposed Proposed Proposed Street Line

Proposed Proposed Proposed Proposed Proposed Monument

Proposed Proposed Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Proposed Proposed Iron Pipe

Proposed Proposed Proposed Proposed Proposed Iron Rod

Proposed Proposed Proposed Proposed Proposed Drill Hole

Proposed Proposed Proposed Proposed Proposed Concrete Bound

Proposed Proposed Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Proposed Proposed Stone Bound

Proposed Proposed Proposed Proposed Proposed Property Line

Proposed Proposed Proposed Proposed Proposed Abutting Property Line

Proposed Proposed Proposed Proposed Proposed Right of Way Line

Proposed Proposed Proposed Proposed Proposed Easement Line

Proposed Proposed Proposed Proposed Proposed Building Setback Line

Proposed Proposed Proposed Proposed Proposed Existing Building

Proposed Proposed Proposed Proposed Proposed Existing Contour

Proposed Proposed Proposed Proposed Proposed Existing Spot Grade

Proposed Proposed Proposed Proposed Proposed Proposed Contour

Proposed Proposed Proposed Proposed Proposed Proposed Spot Grade

Proposed Proposed Proposed Proposed Proposed Proposed Swale

Proposed Proposed Proposed Proposed Proposed Proposed Ridge

Proposed Proposed Proposed Proposed Proposed Proposed Building

Proposed Proposed Proposed Proposed Proposed Proposed Retaining Wall

Proposed Proposed Proposed Proposed Proposed Proposed Guard Rail

Proposed Proposed Proposed Proposed Proposed Proposed Fence

Proposed Proposed Proposed Proposed Proposed Proposed Stockade Fence

Proposed Proposed Proposed Proposed Proposed Proposed Stone Wall

Proposed Proposed Proposed Proposed Proposed Proposed Erosion Control Barrier

Proposed Proposed Proposed Proposed Proposed Proposed Silt Fence

Proposed Proposed Proposed Proposed Proposed Proposed Hay Bale Barrier

Proposed Proposed Proposed Proposed Proposed Proposed Drainage Line

Proposed Proposed Proposed Proposed Proposed Proposed Culvert

Proposed Proposed Proposed Proposed Proposed Proposed Underdrain

Proposed Proposed Proposed Proposed Proposed Proposed Gas Line

Proposed Proposed Proposed Proposed Proposed Proposed Water Line

Proposed Proposed Proposed Proposed Proposed Proposed Overhead Wires

Proposed Proposed Proposed Proposed Proposed Proposed Underground Electric

Proposed Proposed Proposed Proposed Proposed Proposed Underground Telephone

Proposed Proposed Proposed Proposed Proposed Proposed Light Pole

Proposed Proposed Proposed Proposed Proposed Proposed Sign

Proposed Proposed Proposed Proposed Proposed Proposed Silt Sack

Proposed Proposed Proposed Proposed Proposed Proposed Rip Rap

Proposed Proposed Proposed Proposed Proposed Proposed Mulch Pad

Proposed Proposed Proposed Proposed Proposed Proposed Vegetative Filter Strip

Proposed Proposed Proposed Proposed Proposed Proposed Deciduous Tree

Proposed Proposed Proposed Proposed Proposed Proposed Evergreen Tree

Proposed Proposed Proposed Proposed Proposed Proposed Shrub

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Proposed Proposed Proposed Proposed Proposed Wetland Flag

Proposed Proposed Proposed Proposed Proposed Wetland Boundary

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Proposed Proposed Proposed Proposed Proposed Vernal Pool

Proposed Proposed Proposed Proposed Proposed Vernal Pool Envelope

Proposed Proposed Proposed Proposed Proposed Deer Wintering Area

Proposed Proposed Proposed Proposed Proposed Deer Travel Corridor

Proposed Proposed Proposed Proposed Proposed Deer Feeding Area

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Proposed Proposed Proposed Proposed Proposed Proposed Conservation Easement

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Proposed Proposed Proposed Proposed Proposed Proposed Monument

Proposed Proposed Proposed Proposed Proposed Proposed Granite Bound

Proposed Proposed Proposed Proposed Proposed Proposed Iron Pipe

Proposed Proposed Proposed Proposed Proposed Proposed Iron Rod

Proposed Proposed Proposed Proposed Proposed Proposed Drill Hole

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Proposed Proposed Proposed Proposed Proposed Proposed Proposed Guard Rail

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Proposed Proposed Proposed Proposed Proposed Proposed Proposed Underground Telephone

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Proposed Proposed Proposed Proposed Proposed Proposed Proposed Gas Line

Proposed Proposed Proposed Proposed Proposed Proposed Proposed Water Line

Proposed Proposed Proposed Proposed Proposed Proposed Proposed Overhead Wires

Proposed

AH-20

300 ALLEN AVENUE

PORTLAND, MAINE

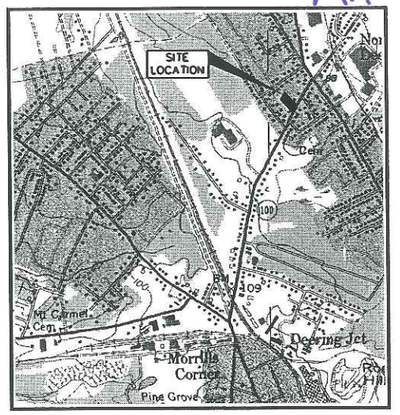
PREPARED BY:

GP Gorrill-Palmer Consulting Engineers, Inc.

PO Box 1237
15 Shaker Road
Gray, ME 04039

Traffic and Civil Engineering Services

207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com



LOCATION MAP
N.T.S.

LEGEND

EXISTING:	DESCRIPTION:	PROPOSED:
○	IRON PIPE	
□	MONUMENT	■
---100---	TITCOMB ASSOCIATES, GROUND SURVEY CONTOUR	
	PROPOSED CONTOUR	——100——
▪ ▪▪▪▪▪▪▪▪ ▪	WETLAND LIMIT	
	EDGE OF PAVEMENT	
	CULVERT	
	BUILDINGS	
	RIPRAP	
	UTILITY POLE	
	RIGHT OF WAY	
	SILT FENCE	
	CENTER LINE	
x 226.4	SPOT GRADE	100.31
	PROPERTY LINE	
	TREELINE	
N/F	NOW OR FORMERLY	
	CATCH BASIN	
	SEWER MANHOLE	
	DRAIN MANHOLE	
	WATER VALVE	
	CAPPED IRON ROD SET PLS #1273	

GENERAL NOTES

GENERAL NOTES

1. TOPOGRAPHIC DATA BOUNDARY SURVEY AND EXISTING CONDITIONS WERE PREPARED BY TITCOMB ASSOCIATES OF FALMOUTH, MAINE IN JUNE OF 2003.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE OWNER AND THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE OWNER, THE CITY OF PORTLAND OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.

4. ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.

5. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

6. WETLANDS ON THIS PLAN WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC.

7. WETLANDS ON THIS PLAN WERE SURVEY LOCATED BY TITCOMB ASSOCIATES OF FALMOUTH, MAINE.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN APPROVAL FROM THE CITY OF PORTLAND WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS. THE CONSTRUCTION WILL BE GOVERNED BY THE CITY OF PORTLAND ZONING AND SUBDIVISION ORDINANCES WHICH ARE AVAILABLE FOR VIEWING AT THE OFFICE OF THE ENGINEER OR THE MUNICIPAL OFFICE.

2. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

LAYOUT NOTES

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB.

2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.

3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE-HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.

4. PROPERTY LINE AND R.O.W. MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE, BY A MAINE REGISTERED LAND SURVEYOR.

5. PROPOSED RIGHT OF WAY MONUMENTS AND PROPERTY LINE PINS SHALL BE INSTALLED UNDER THE DIRECTION OF A MAINE REGISTERED LAND SURVEYOR.

UTILITY NOTES

1. ALL WATER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO PORTLAND WATER DISTRICT STANDARDS. ALL WATER DISTRIBUTION PIPING SHALL BE CLASS 52 DUCTILE IRON PIPE, DOUBLE CEMENT LINED AND BITUMINOUS COATED CONFORMING TO AWWA/ANSI C104/A21.4. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C651, LATEST REVISION.

2. THE LOCATION OF THE PROPOSED UNDERGROUND ELECTRICAL SERVICE IS APPROXIMATE AND THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION WITH CENTRAL MAINE POWER COMPANY.

3. THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL BE PLACED ON THE WATER DISTRIBUTION LINES AT ALL BENDS, TEES, FIRE HYDRANTS, VALVES, CHANGES IN DIRECTION, ETC. THE THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL MEET THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT STANDARDS.

4. TEST PITS AT ALL UTILITY CROSSINGS SHALL BE COMPLETED TWO WEEKS IN ADVANCE OF THE START OF CONSTRUCTION OR ORDERING OF MATERIALS. TEST PIT INFORMATION SHALL BE PROMPTLY PROVIDED TO ENGINEER FOR REVIEW.

GRADING AND DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603— PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

   REINFORCED CONCRETE PIPE, CLASS III
   POLYVINYL-CHLORIDE (PVC) PIPE
   SMOOTH BORE POLYETHYLENE — ADS OR HANCOR

2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY THE OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION OFF SITE.

3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.

EROSION CONTROL NOTES

1. LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.

2. PRIOR TO BEGINNING ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL THE PERIMETER SILT FENCES AND THE CONSTRUCTION ENTRANCE.

3. ALL GROUND AREAS DISTURBED FOR CONSTRUCTION WILL BE GRADED, LOAMED AND SEEDED AS SOON AS POSSIBLE. PERMANENT SEED MIXTURE SHALL CONFORM TO THE SEEDING PLAN CONTAINED IN THE EROSION CONTROL REPORT PREPARED FOR THIS PROJECT.

4. PRIOR TO PAVING, THE CONTRACTOR SHALL FLUSH SILT FROM ALL STORM DRAIN LINES.

5. ALL STORM DRAIN INLETS & OUTLETS ARE TO RECEIVE RIPRAP PROTECTION APRONS DURING CONSTRUCTION.

6. ALL CATCH BASINS WITH OUTLET PIPES 15" DIAMETER OR LESS SHALL BE PROVIDED WITH CASCO TRAPS PER DETAIL.

7. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL REPORT.

8. THE CONTRACTOR SHALL REPAIR AND ADD STONE TO THE CONSTRUCTION ENTRANCE AS IT BECOMES SATURATED WITH MUD TO ENSURE THAT IT WORKS AS PLANNED DURING CONSTRUCTION.

9. SILT REMOVED FROM AROUND INLETS AND BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.

10. A FULL EROSION CONTROL REPORT ACCOMPANIES THIS PLAN SET AND IS CONTAINED ON THE DRAWINGS OF THIS PLAN SET.

11. THE MAINTENANCE SCHEDULE FOR THE CATCH BASIN SEDIMENT SUMPS IS AS FOLLOWS:
THESE DEVICES SHALL BE INSPECTED IN APRIL AND OCTOBER OF EACH YEAR. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE CATCH BASIN WHEN THE DEPTH OF THE SEDIMENT IS GREATER THAN ONE FOOT. THE SEDIMENT WILL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

12. THE CONTRACTOR IS CAUTIONED THAT FAILURE TO COMPLY WITH THE SEQUENCE OF CONSTRUCTION, EROSION/SEDIMENT CONTROL PLAN, AND OTHER PERMIT REQUIREMENTS BASED UPON ANY THIRD PARTY REVIEW (ie MDEP) MAY RESULT IN MONETARY PENALTIES. THE CONTRACTOR SHALL BE ASSESSED ALL SUCH PENALTIES AT NO COST TO THE OWNER OR PERMITTEE.

13. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE DIRECTED BY THE OWNER.

14. ALL DISTURBED AREAS ARE TO RECEIVE A MINIMUM OF 4" OF TOPSOIL PRIOR TO PERMANENT SEEDING.

UTILITIES

WATER:
PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PORTLAND, MAINE 04102
(207) 761-8300

SEWER:
PORTLAND PUBLIC WORKS DEPT.
55 PORTLAND STREET
PORTLAND, MAINE 04101
(207) 874-8871

ELECTRIC:
CENTRAL MAINE POWER
162 CANCO ROAD
PORTLAND, MAINE 04103
(207) 826-2869

TELEPHONE:
VERIZON
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
(207) 797-1842

CABLE:
TIME WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
(207) 775-3431

CALL BEFORE YOU DIG 1-800-344-7233

INDEX

PROFESSIONAL ENGINEER'S STAMP APPLIES TO EACH PLAN PREPARED BY GORRILL-PALMER CONSULTING ENGINEERS, INC. INCLUDED WITHIN ATTACHED SET.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

Rev.	Date	Revision

CITY STAFF REVIEW	10/14/03	AMP
Issued For	Date	By

Design: DER | Draft: GJL | Date: NOV 02
Checked: AMP | Scale: NTS | Job No.: 801
File Name: 801-COV.dwg

GP Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237 15 Shaker Road Gray, ME 04039
Traffic and Civil Engineering Services
207-657-6910 FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Drawing Name: **Cover Sheet, General Notes & Legend**
Project: **300 ALLEN AVE.**
Client: **Bob Adam**
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 1

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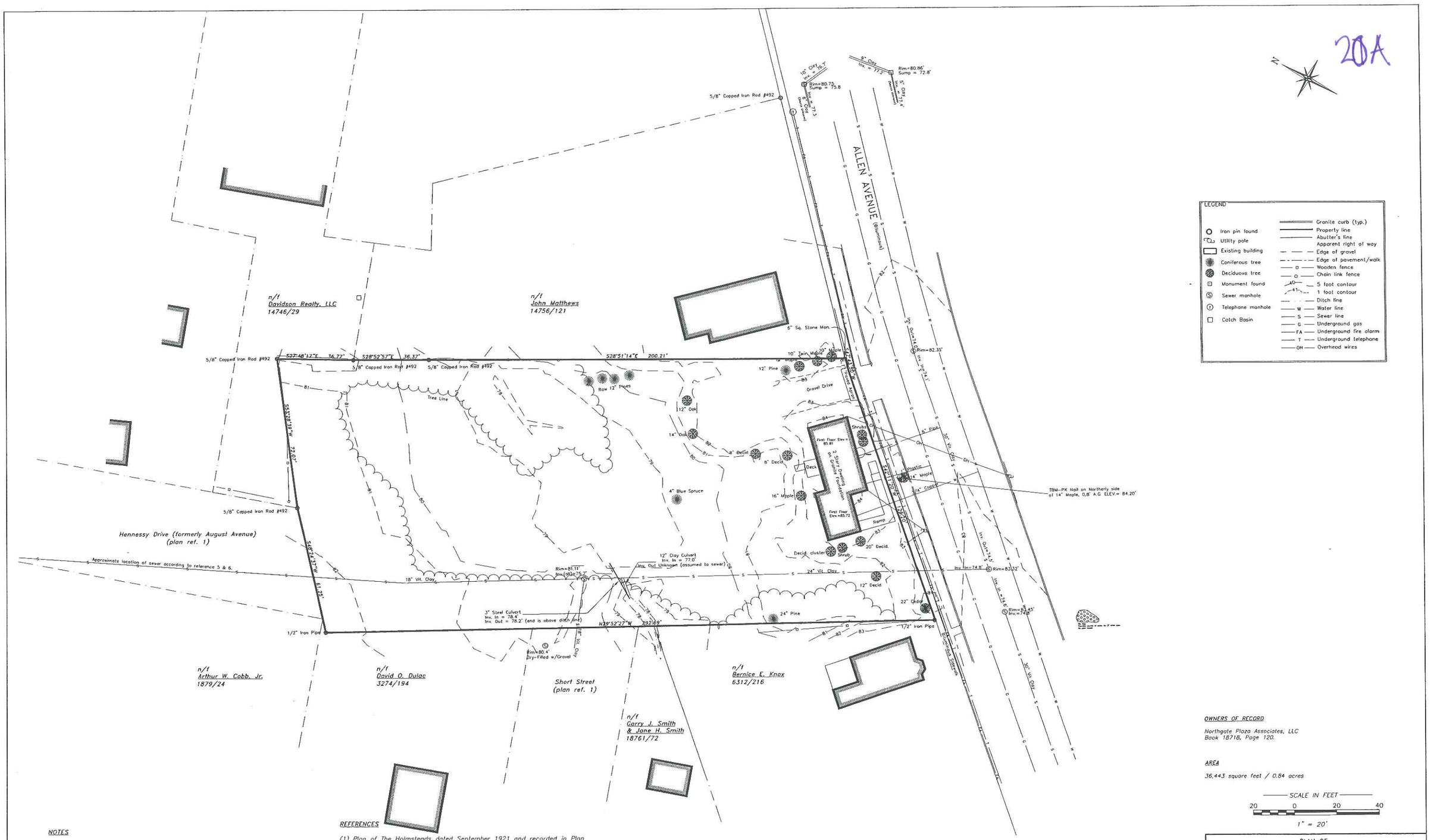
20A



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OWNERS OF RECORD

Northgate Plaza Associates, LLC
Book 18718, Page 120.

AREA

36,443 square feet / 0.84 acres

SCALE IN FEET
20 0 20 40
1" = 20'

NOTES

(1) Book and Page references are to the Cumberland County Registry of Deeds unless otherwise specified.

(2) Bearings are referenced to magnetic north.

(3) Elevations are referenced to NAVD 88 based on Maine Department of Transportation Bench Mark 159, top of bolt in sign base near the northwest intersection of Allen Avenue and Washington Avenue. Elevation = 82.27' (25.075m).

(4) The ancient deeds for this parcel call for monumentation which was not recovered, is missing or destroyed. The boundaries delineated hereon are based on abutting surveys and the lines of possession, acquiesced to by the abutters. In order to fully establish the boundaries as delineated hereon it is recommended that deeds be exchanged with the abutters, based on this survey.

REFERENCES

(1) Plan of The Holmsteads dated September 1921 and recorded in Plan Book 14 page 70.

(2) Plan of Sarah J. Cowen Lot by Albert W. Hume dated October 12, 1978.

(3) Property Plan for James Davison by A.R.C.C. dated April 8, 1999.

(4) Standard Boundary Survey for John Matthews by A.R.C.C. dated September 5, 2001.

(5) Partial copy of Portland Sewer System Infiltration–Inflow Analysis for the Portland Water District dated 1988.

(6) Deed of Mary J. Wilson to Portland Home Building Association for a 24 inch sewer line, dated August 21, 1922 and recorded in Book 1111, Page 300.

State of Maine, Cumberland ss
Registry of Deeds
Received _____ 20___
at __h__m__M and recorded in Plan Book _____ Page ____
Attest:_____
Register

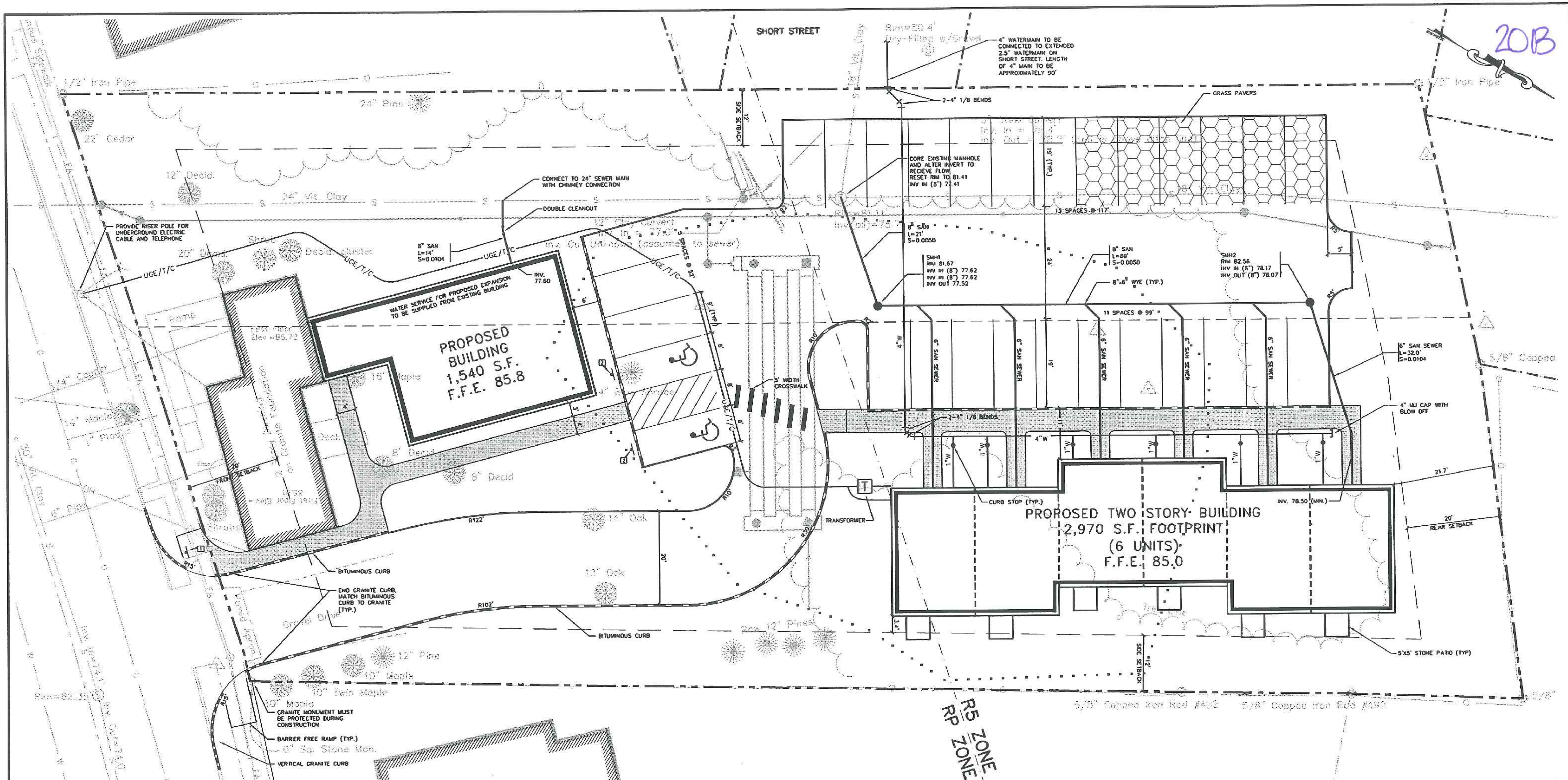
CERTIFICATION

This survey substantially conforms to the current standards of practice set forth by the Maine State Board of Licensure for Land Surveyors.

Paul H. Babbidge, P.L.S. #1237

PLAN OF
EXISTING CONDITIONS & BOUNDARY SURVEY
300 Allen Avenue — Portland, Maine
MADE FOR
GORRILL–PALMER CONSULTING ENGINEERS
P.O. Box 1237 — Gray, Maine

JOB# 201079.1	DATE: 06/16/03	SCALE: 1"=20'
BOOK# 711		
LP\201079_1.DWG	Titcomb Associates	
FILE# 8305	133 Gray Road, Falmouth, Maine 04105	



CURBING LEGEND

- VERTICAL GRANITE CURB
- BITUMINOUS CURB

SIGN LEGEND

- STOP — R1-1 30"x 30" [1]
- RESERVED PARKING (VAN ACCESSIBLE) — R7-8 12"x 18" [2]

SPACE AND BULK STANDARDS

	RP ZONE REQUIRED	RP ZONE PROVIDED	R5 ZONE REQUIRED	R5 ZONE PROVIDED
MIN. LOT AREA/DWELLING AREA	6,000 S.F.	19,087 S.F.	6,000 S.F.	17,356 S.F.
MIN. STREET FRONTAGE	60'	>60'	50'	N/A
MIN. YARD DIMENSIONS FRONT	20'	>20'	20'	>20'
REAR	20'	>20'	20'	>20'
*SIDE	10' - 1 STORY 12' - 2 STORY 14' - 3 OR MORE STORIES	>12'	8' - 1 STORY 8' - 1 1/2 STORY 12' - 2 STORY 14' - 2 1/2 STORY	>12'
MINIMUM LOT WIDTH	60'	>60'	60'	>60'
MAX. STRUCTURE HEIGHT	45'	<45'	35'	<35'
MAX. LOT COVERAGE (BUILDING FOOTPRINT)	-	-	40%	16.6%
MAX. IMPERVOUS SURFACE	80%	45.2%	-	-

*THE WIDTH OF ONE (1) SIDE YARD MAY BE REDUCED ONE (1) FOOT FOR EVERY FOOT THAT THE OTHER SIDE YARD IS CORRESPONDINGLY INCREASED, BUT NO LESS THAN EIGHT (8) FEET.

SITE DATA

ZONE: R-5: RESIDENTIAL 5
RP: RESIDENTIAL PROFESSIONAL

SITE AREA 36,443 S.F. = 0.84 ACRES

BUILDING AREA

EXISTING OFFICE (1 STORY)	1,013 S.F.
PROPOSED OFFICE (2 STORIES)	1,540 S.F. x 2
TOTAL FLOOR AREA	4,093 S.F.

PARKING	REQUIRED	PROVIDED
NEW STRUCTURE		
OFFICE (1 SP/400 SF FLOOR AREA) x 4,093 SF	11	17
RESIDENTIAL (2 SP/UNIT) x 6 UNITS	12	12
TOTAL	23	29
HANDICAP SPACES	2	2

10 0 5 10 20
1 inch = 10 ft.

Rev.	Date	Revision
-	-	-

Issued For	Date	By
SKETCH PLAN REVIEW	6/20/03	AMP
CITY STAFF REVIEW	8/26/03	AMP
CITY STAFF REVIEW	10/14/03	AMP

Design: PDO | Draft: DB | Date: JUN 2003
Checked: AMP | Scale: 1"=10' | Job No.: 801
File Name: 801-SP.DWG

Gorrill-Palmer Consulting Engineers, Inc.
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15 Shaker Road
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207-657-6910
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E-Mail: mailbox@gorrillpalmer.com

Drawing Name: Site Layout & Utility Plan

Project: 300 ALLEN AVE.

Client: Bob Adam
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 3

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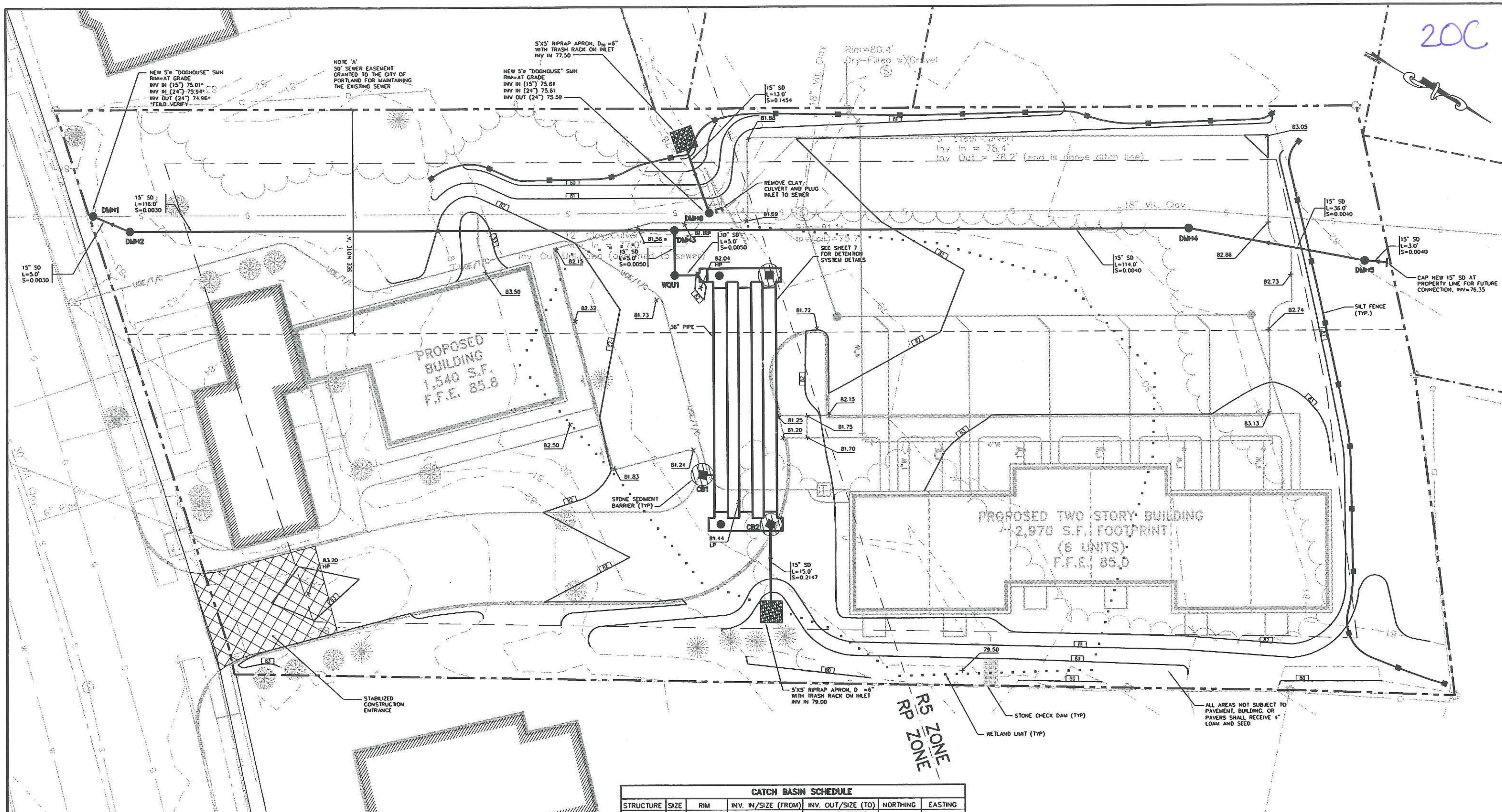
20C



PROPOSED BUILDING 1,540 S.F. F.F.E. 85.8
PROPOSED TWO STORY BUILDING 2,970 S.F. FOOTPRINT (6 UNITS) F.F.E. 85.0
NOTE 'A' 50' SEWER EASEMENT GRANTED TO THE CITY OF PORTLAND FOR MAINTAINING THE EXISTING SEWER
NEW 5'ø "DOGHOUSE" SMH RIM=AT GRADE INV IN (15") 75.01* INV IN (24") 75.94* INV OUT (24") 74.96* *FIELD VERIFY
NEW 5'ø "DOGHOUSE" SMH RIM=AT GRADE INV IN (15") 75.61 INV IN (24") 75.61 INV OUT (24") 75.59
REMOVE CLAY CULVERT AND PLUG INLET TO SEWER
SEE SHEET 7 FOR DETENTION SYSTEM DETAILS
STONE SEDIMENT BARRIER (TYP)
STABILIZED CONSTRUCTION ENTRANCE
STONE CHECK DAM (TYP)
WETLAND LIMIT (TYP)
ALL AREAS NOT SUBJECT TO PAVEMENT, BUILDING, OR PAVERS SHALL RECEIVE 4" LOAM AND SEED
CAP NEW 15" SD AT PROPERTY LINE FOR FUTURE CONNECTION, INV=76.35
SILT FENCE (TYP.)
R5 ZONE
RP ZONE
1 inch = 10 ft.

CATCH BASIN SCHEDULE						
STRUCTURE	SIZE	RIM	INV. IN/SIZE (FROM)	INV. OUT/SIZE (TO)	NORTHING	EASTING
CB1	4'ø	81.03	–	76.21/12"(CB2)	–	–
CB2	4'ø	81.03	76.14/12"(CB1) 75.99/15"(INLET)	75.89/15"(DMH3)	–	–
DMH1	5'ø	AT GRADE	75.01/15"(DMH2) 75.94/24"(DMH6)	74.96/24" (EXIST SAN MH)	–	–
DMH2	4'ø	82.50	75.12/15"(DMH3)	75.02/15"(DMH1)	–	–
DMH3	4'ø	81.43	75.54/15"(WQU1) 75.54/15"(DMH4)	75.44/15"(DMH2)	–	–
DMH4	4'ø	82.41	76.10/15"(DMH5)	76.00/15"(DMH3)	–	–
DMH5	4'ø	82.10	76.34/15"(STUB)	76.24/15"(DMH4)	–	–
DMH6	5'ø	81.00	75.61/15"(INLET) 75.61/24"(SAN)	75.59/24"(DMH1)	–	–
WQU1	6'ø	–	75.57/10"(DET)	75.57/15"(DMH3)	–	–

Rev.	Date	Revision
–	–	–

Issued For	Date	By
CITY STAFF REVIEW	10/14/03	AMP
CITY STAFF REVIEW	8/26/03	AMP

Design: DER | Draft: LAN/DB | Date: JUN 2003
Checked: AMP | Scale: 1"=10' | Job No.: 801
File Name: 801-GRADING.DWG

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Drawing Name: **Grading, Drainage & Erosion Control Plan**

Project: **300 ALLEN AVE.**

Client: **Bob Adam**
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 4

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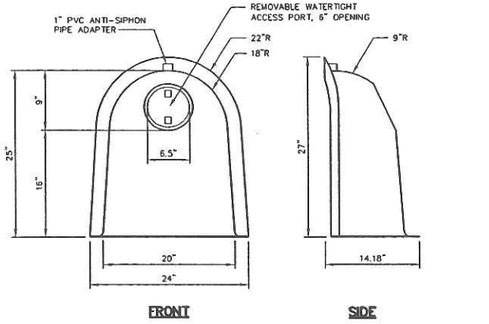
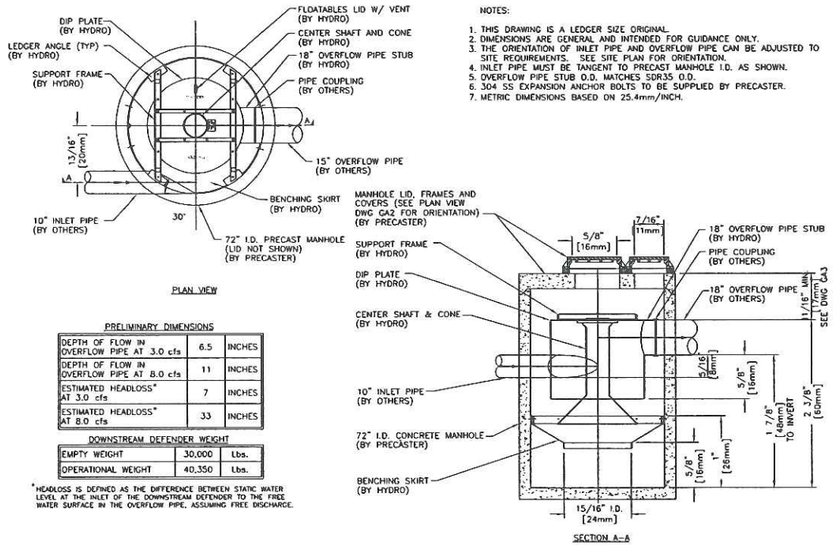


NOTE:
1. SIZE 18R REQUIRED FOR 12" PIPE

"THE SNOUT"
N.T.S.

NOTE:
SIDEWALK SECTION TO BE REPLACED WITH LOAM AND SEED WHERE APPLICABLE

BITUMINOUS CURB AT SIDEWALK
N.T.S.



NOTES:
1. THIS DRAWING IS A LEDGER SIZE ORIGINAL.
2. DIMENSIONS ARE GENERAL AND INTENDED FOR GUIDANCE ONLY.
3. THE ORIENTATION OF INLET PIPE AND OVERFLOW PIPE CAN BE ADJUSTED TO SITE REQUIREMENTS. SEE SITE PLAN FOR ORIENTATION.
4. INLET PIPE MUST BE TANGENT TO PRECAST MANHOLE I.D. AS SHOWN.
5. OVERFLOW PIPE STUB O.D. MATCHES SDR35 O.D.
6. 304 SS EXPANSION ANCHOR BOLTS TO BE SUPPLIED BY PRECASTER.
7. METRIC DIMENSIONS BASED ON 25.4mm/INCH.

PRELIMINARY DIMENSIONS

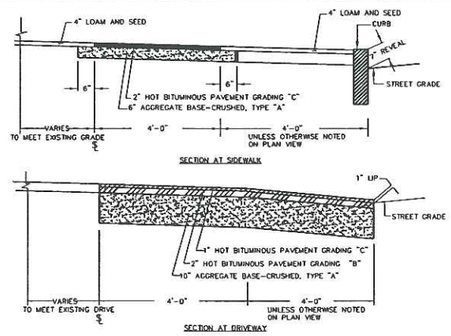
DEPTH OF FLOW IN OVERFLOW PIPE AT 3.0 cfs	6.5	INCHES
DEPTH OF FLOW IN OVERFLOW PIPE AT 8.0 cfs	11	INCHES
ESTIMATED HEADLOSS* AT 3.0 cfs	7	INCHES
ESTIMATED HEADLOSS* AT 8.0 cfs	33	INCHES

DOWNSTREAM DEFENDER WEIGHT

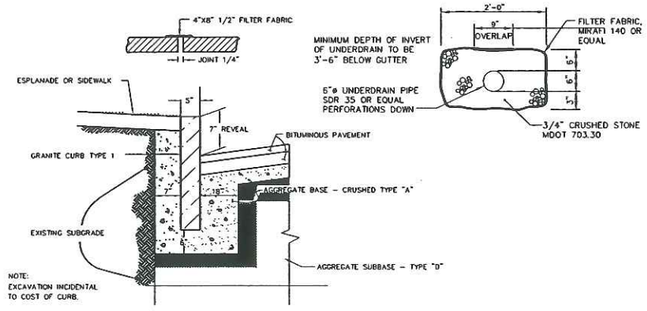
EMPTY WEIGHT	30,000	Lbs.
OPERATIONAL WEIGHT	40,350	Lbs.

*HEADLOSS IS DEFINED AS THE DIFFERENCE BETWEEN STATIC WATER LEVEL AT THE INLET OF THE DOWNSTREAM DEFENDER TO THE FREE WATER SURFACE IN THE OVERFLOW PIPE, ASSUMING FREE DISCHARGE.

6' DIA. DOWNSTREAM DEFENDER *
N.T.S.
* OR ANY EQUIVALENT STRUCTURE CAPABLE OF TREATING 1.35 ACRES AT AN 80% TSS REMOVAL RATING

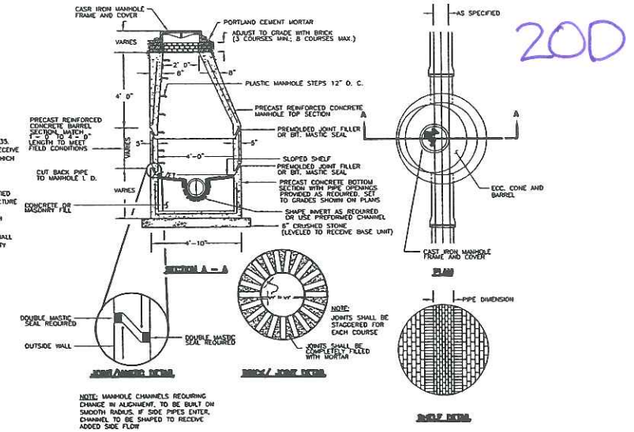


BITUMINOUS SIDEWALK AND DRIVEWAY CONSTRUCTION
N.T.S.



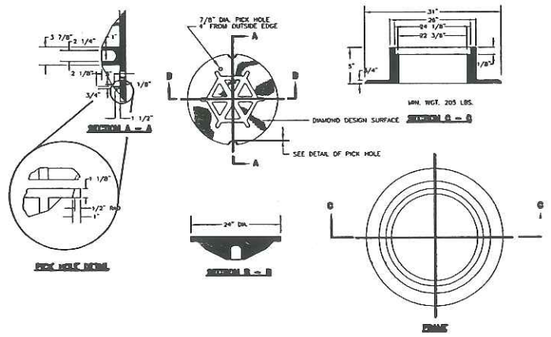
CURB PLACEMENT
N.T.S.

GENERAL NOTES
1. ULTIMATE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. ASTM SPEC. C-478-67
3. C-32-63, GRADE MA AND SA.
4. APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTION OF BRICK MASONRY, THE SMOOTH MORTAR SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" THICK. AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
5. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
6. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
7. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
8. STORM AND SEWER MANHOLES SHALL HAVE SOLID COVERS WITH ONE DRILLED HOLE.
9. EXISTING MANHOLE AND CATCH BASIN FRAMES AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

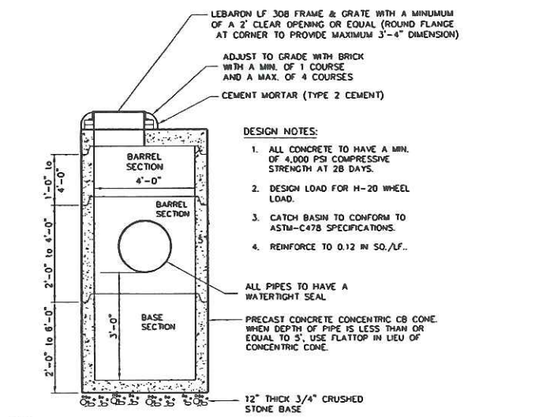


NOTE: MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS. IF SIDE PIPES ENTER, CHANNEL TO BE SHAPED TO RECEIVE ADDED SIDE FLOW

PRECAST CONCRETE MANHOLE TYPE "A"
N.T.S.



TYPE "A" MANHOLE COVER AND FRAME
N.T.S.



DESIGN NOTES:
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF..

NOTE:
1. "THE SNOUT" OR APPROVED EQUIVALENT SHALL BE PROVIDED ON CATCH BASIN PIPES 12" OR LESS

4'-0" PRECAST CATCH BASIN
N.T.S.

Rev.	Date	Revision
-	-	-

CITY STAFF REVIEW	10/14/03	AMP
Issued For	Date	By

Design: DER | Draft: GJL | Date: OCT 03
Checked: AMP | Scale: N.T.S. | Job No.: 801
File Name: 801-DET.dwg

Gorrill-Palmer Consulting Engineers, Inc.
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Drawing Name: Site, Stormdrain & Misc. Details
Project: 300 ALLEN AVE.
Client: Bob Adam
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 5

NOTES:

Erosion Control Measures and Site Stabilization

The primary emphasis of the erosion/sedimentation control plan to be implemented for the infrastructure construction is as follows:

Development of a careful construction sequence.
Rapid revegetation of denuded areas to minimize the period of soil exposure.
Rapid stabilization of drainage paths to avoid rill and gully erosion.
The use of on-site measures to capture sediment (hay bales/silt fence, etc.)

The following temporary and permanent erosion and sediment control devices will be implemented as part of the site development. These devices shall be installed as indicated on the plans or as described within this report. For further reference, see the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices.

A. Temporary Erosion Control Measures

The following measures are planned as temporary erosion/sedimentation control measures during construction:

1. A crushed stone-stabilized construction entrance shall be placed at the site entrance at Allen Avenue.

2. Siltation fence shall be installed downstream of any disturbed areas to trap runoff borne sediments until the slopes are revegetated. The silt shall be installed per the details provided in this package and inspected immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind fence or berm, the barrier shall be replaced with a stone check dam.

3. Straw or hay mulch including hydroseeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15th and October 1st on slopes of less than 15 percent shall be anchored by applying water; mulch placed on slopes of equal to or steeper than 15 percent shall be covered by a fabric netting and anchored with staples in accordance with manufacturer's recommendation. Mulch placed between October 1st and April 15th on slopes equal to or steeper than 8 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturer's recommendations. Slopes steeper than 3:1, which are to be revegetated, shall receive curlex blankets by American Excelsior or equal. Mulch application rates are provided within this plan set. Mulch shall not be placed over snow.

4. Temporary stockpiles of stumps, grubbings, or common excavation will be protected as follows:

a) Temporary stockpiles shall not be located within 50 feet of any wetlands, which will not be disturbed and any slopes which exceed 15%

b) Stockpiles shall be stabilized within 7 days by either temporarily seeding the stockpile by a hydroseed method containing an emulsified mulch tackifier or by covering the stockpile with mulch.

c) Stockpiles shall be surrounded by silt fence at the time of formation.

5. All denuded areas that are within 50 feet of an undisturbed wetland, which have been rough graded, and are not located within a roadway subbase area, shall receive mulch or erosion control mesh fabric within 7 days of initial disturbance of soil. All areas within 50' feet of an undisturbed wetland shall be mulched prior to any predicted rain event regardless of the 7-day window. In other areas, the time period may be extended to 14 days.

6. For work, which is conducted between October 15 and April 15 of any calendar year, all denuded areas will be covered with hay mulch, applied at twice the normal application rate and anchored with fabric netting. The time period for applying mulch as noted in Paragraph 3 above, shall be limited to 7 days for all areas.

7. Allen Avenue shall be swept to control mud and dust as necessary.

8. During grubbing operations stone check dams will be installed at any evident concentrated flow discharge points.

9. Silt fencing with a minimum stake spacing of 6 feet should be used, unless the fence is supported by wire fence reinforcement of minimum 14 gauge and with a maximum mesh spacing of 6 inches, in which case stakes may be spaced a maximum of 10 feet apart. The bottom of the fence should be anchored.

10. Storm drain catch basin inlet protection shall be provided through the use of stone sediment barriers. Installation details are included within the plan set. The barriers shall be inspected after each rainfall and repairs made as necessary. Sediment shall be removed and the barrier restored to its original dimensions when the sediment has accumulated to ½ the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.

11. Water and/or calcium chloride shall be furnished and applied in accordance with MDOT specifications – Section 637 – Dust Control.

12. Loam and seed is intended to serve, as the primary permanent revegetative measure for all denuded areas not provided with other erosion control measures, such as riprap. Application rates are provided within this plan set. Seeding shall not occur over snow.

B. Permanent Erosion Control Measures

1. All areas disturbed during construction, but not subject to other restoration (paving, riprap, etc.) will be loamed, limed, fertilized, mulched, and seeded. Fabric netting, anchored with staples, shall be placed over the mulch in areas as noted in paragraph 3 of Temporary Erosion Control Measures. All areas within 50' of an undisturbed wetland shall be mulched prior to any predicted rain event regardless of the 7-day window. Native topsoil shall be stockpiled and reused for final restoration when it is of sufficient quality.

2. Catch basins will be provided with sediment sumps and inlet hoods for all outlet pipes that are 12" in diameter and smaller.

Implementation Schedule

The following construction sequence shall be implemented to insure the effectiveness of the erosion and sedimentation control measures are optimized:

Note: For all grading activities, the contractor shall exercise extreme caution not to overexpose the site by limiting the disturbed area.

1. Install crushed stone-stabilized construction entrance with barrier free ramps and sidewalk at the intersection of the site driveway with Allen Avenue.

2. Clear area as necessary for building and parking lot.

3. Install perimeter silt fence as required.

4. Grub work area for building and parking lot.

5. Install stone check dams at any evident concentrated flow discharge points during grubbing operations.

6. Commence earthwork operations.

7. Excavate for installation of subsurface detention facility.

8. Commence installation of catch basins and storm drain piping.

9. Foundation preparation area shall be excavated for the installation of building footings.

10. Commence installation of underground utilities.

11. Install riprap aprons.

12. Continue earthwork and grading to subgrade as necessary for construction.

13. Complete installation of underground utilities to within 5' of building.

14. Complete remaining earthwork operations.

15. Install subbase and base gravel within parking fields and driveway.

16. Install gravel for sidewalks.

17. Complete installation of storm drainage structures and utility appurtenances.

18. Install base course paving for access drive and parking area.

19. Install curbing as shown on site layout plan.

20. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.

21. Install surface course paving for access drive and parking area. Stripe pavement as indicated on layout plan.

22. Once the site is stabilized and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.

23. Touch up loam and seed.

Note: All denuded areas not subject to final paving, riprap or gravel shall be revegetated.

Prior to construction of the project, the contractor shall submit to the owner a schedule for the completion of the work, which will satisfy the following criteria:

1. The above construction sequence should generally be completed in the specified order; however, several separate items may be constructed simultaneously. Work must also be scheduled or phased to prevent the extent of the exposed areas as specified below. The intent of this sequence is to provide for erosion control and to have structural measures such as silt fence and construction entrances in place before large areas of land are denuded.

2. The work shall be conducted in sections which will:

a) Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 30 days.

b) Revegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event; or temporarily stabilized within 7 days of initial disturbance of soil for areas within 50 feet of an undisturbed and 14 days for all other areas. Areas within 50 feet of an undisturbed wetland shall be mulched prior to any predicted rain event regardless of the 7-day window.

c) Incorporate planned inlets and drainage system as early as possible into the construction phase. The ditches shall be immediately lined or revegetated as soon as their installation is complete.

Winter Stabilization Plan

If a summer/fall construction schedule is not possible and construction is necessary between October 15 and April 15 of any calendar year, the contractor shall submit a schedule, which will satisfy the following criteria:

1. Limit the amount of exposed area to those areas in which work is expected to be undertaken during the proceeding 15 days and that which can be mulched in the event of a predicted snow event.

2. During the construction process, all disturbed areas shall be covered with mulch within 7 days of final grading. Mulch shall not be placed over snow.

3. Once final grade has been established, the contractor may choose to dormant seed the disturbed areas prior to placement of mulch and placement of fabric netting anchored with staples.

a. If dormant seeding is used for the site, all disturbed areas shall receive 6" of loam and seed at an application rate of 5#/1000 s.f. Seeding shall not occur over snow.
All areas seeded during the winter months will be inspected in the spring for adequate catch. All areas sufficiently vegetated (less than 75 percent catch) shall be revegetated by replacing loam, seed and mulch.

b. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

4. The area of denuded non-stabilized construction shall be limited to the minimum area practicable. An area shall be considered to be denuded until the subbase gravel is installed or the areas of future loam and seed have been loamed, seeded, and mulched. The mulch rate shall be twice the rate specified in the seeding plan (for example, 115#/1,000 s.f. x 2 = 230#/s.f.).

5. The schedule shall be subject to the approval of the Owner.

The Contractor must install any added measures, which may be necessary to control erosion/sedimentation from the site dependent upon the actual site and weather conditions.

The Contractor shall note that no areas within 100 feet of an undisturbed wetland shall remain denuded for a period of over 7 days before it is temporarily stabilized. All other areas shall be stabilized within 14 days. For construction between October 15 and April 15 of any calendar year, all areas shall be temporarily stabilized with 7 days.

Project: 300 ALLEN AVENUE

Site Location: Portland, Maine

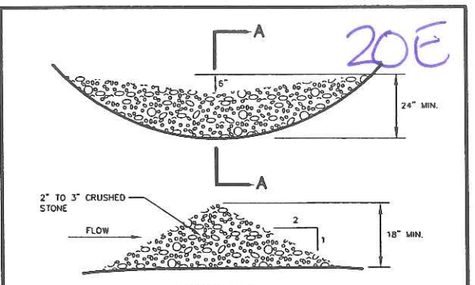
A. Permanent Seeding

1. Instruction on preparation of soil: Prepare a good seed bed for planting method used. (6" topsoil min.)
2. Apply lime as follows: # / acres, OR 138 # /M Sq. Ft.
3. Fertilize with pounds of N-P-K/ac. OR 18.4 pounds of 10-20-20 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:
45% Kentucky Bluegrass
45% Creeping Red Fescue
10% Perennial Ryegrass
6. Mulching instructions: Apply at the rate of per acre, OR 115 pounds per M. Sq. Ft.
7. TOTAL LIME 138 # PER 1000 sq. ft.
8. TOTAL FERTILIZER 18.4 # PER 1000 sq. ft.
9. TOTAL SEED 1.03 # PER 1000 sq. ft.
10. TOTAL MULCH 115 # PER 1000 sq. ft.
11. TOTAL other materials, seeds, etc.
12. REMARKS

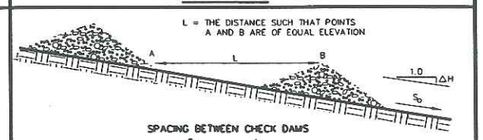
Spring seeding is recommended, however, late summer (prior to September 1) seeding can be made. Permanent seeding should be made prior to August 5 or as a dormant seeding after the first killing frost and before the first snowfall. If seeding cannot be done within these seeding dates, temporary seeding and mulching shall be used to protect the site. Permanent seeding shall be delayed until the next recommended seeding period.

B. Temporary Seeding

1. Instruction on preparation of soil: Prepare a good seed bed for planting method used. (6" topsoil min.)
2. Apply lime as follows: # / acres, OR 138 # /M Sq. Ft.
3. Fertilize with pounds of N-P-K/ac. OR 13.8 pounds of 10-10-10 N-P-K/M Sq. Ft.
4. Method of applying lime and fertilizer: Spread and work into the soil before seeding.
5. Seed with the following mixture:
100% Annual Ryegrass
6. Mulching instructions: Apply at the rate of per acre, OR 115 pounds per M. Sq. Ft.
7. TOTAL LIME 138 # PER 1000 sq. ft.
8. TOTAL FERTILIZER 13.8 # PER 1000 sq. ft.
9. TOTAL SEED 0.9 # PER 1000 sq. ft.
10. TOTAL MULCH 115 # PER 1000 sq. ft.
11. TOTAL other materials, seeds, etc.
12. REMARKS



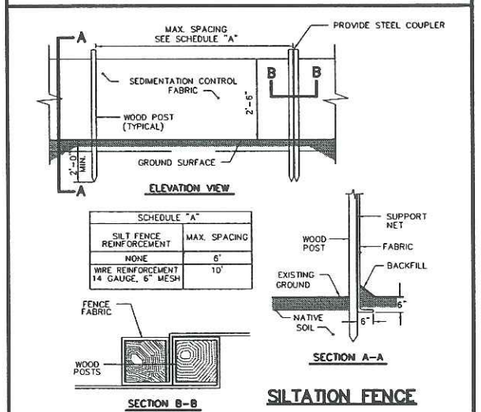
SECTION A-A



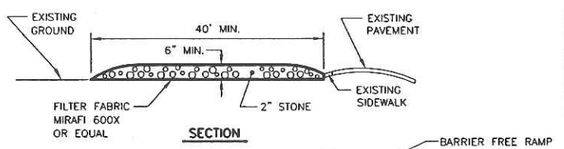
SPACING BETWEEN CHECK DAMS

S_o (FT./FT.)	L (FT.)
0.020	75
0.030	50
0.040	40
0.050	30
0.080	20
0.100	15

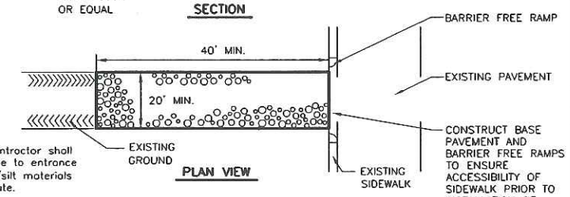
STONE CHECK DAM
N.T.S.



SILTATION FENCE



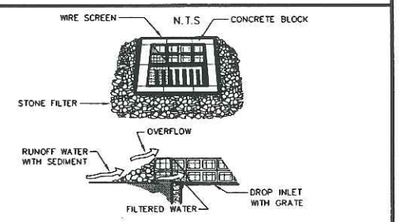
SECTION



Note: Contractor shall add stone to entrance as mud/silt materials accumulate.

PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:

PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8" AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12 INCHES HIGH, AND NO GREATER THAN 24" HIGH.

WIRE MESH SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS SHALL BE USED.

STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN IN DETAIL. THE STONE FILTER SHALL BE 3/4" CRUSHED STONE.

IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT, SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND REPLACED.

STONE SEDIMENT BARRIER
N.T.S.

Rev.	Date	Revision
-	-	-

Issued For	Date	By
CITY STAFF REVIEW	10/14/03	AMP

Design: DER	Draft: GJL	Date: OCT 03
Checked: AMP	Scale: N.T.S.	Job No.: 801
File Name: 801-DET.dwg		

This plan shall not be modified without written permission from Gorrill-Palmer Consulting Engineers, Inc.(GPCEI). Any alterations, authorized or otherwise, shall be at the user's sole risk and without liability to GPCEI.

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Traffic and Civil Engineering Services
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Drawing Name: Erosion & Sedimentation Control Details & Notes
Project: 300 ALLEN AVE.
Client: Bob Adam
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 6

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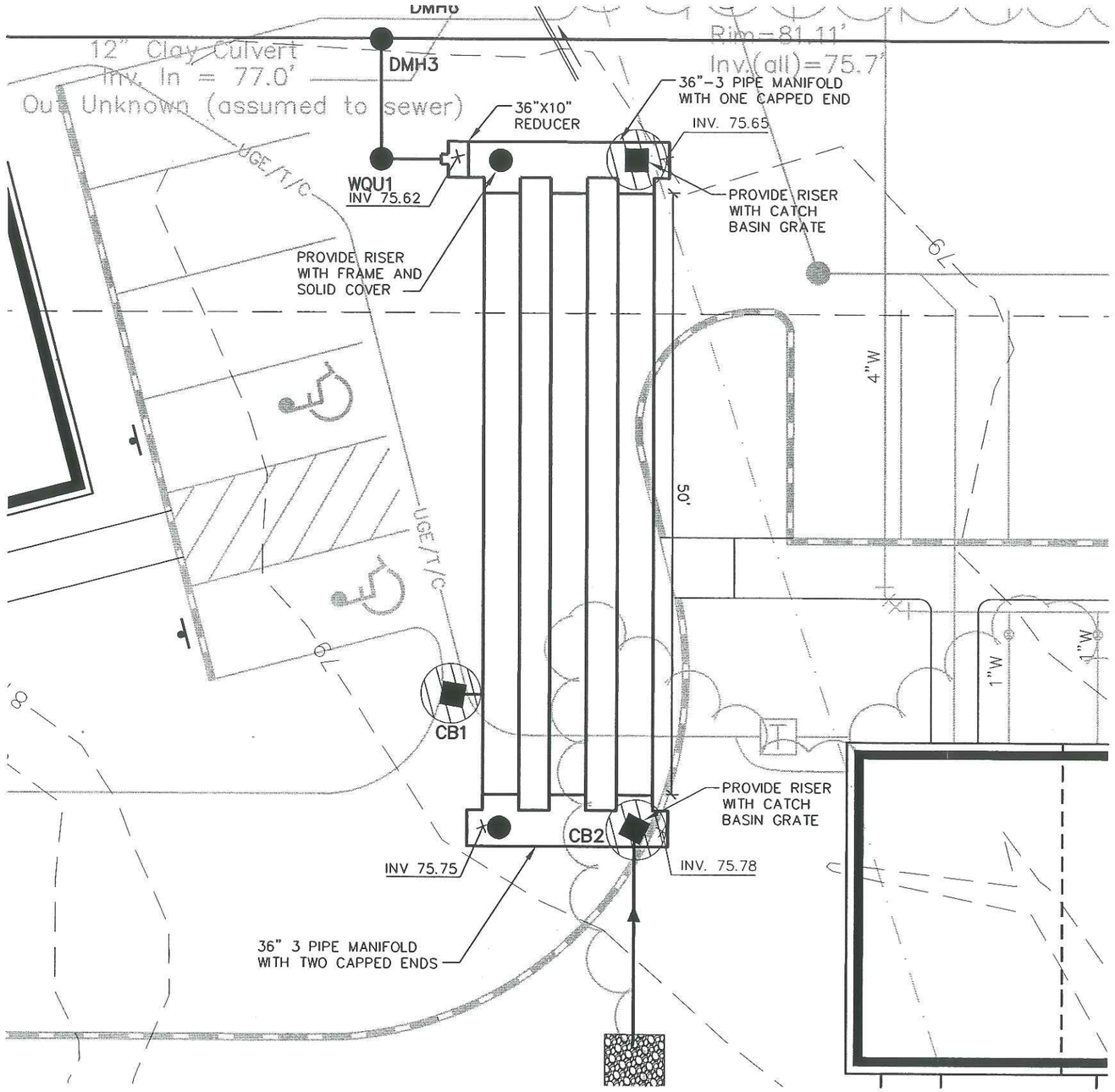
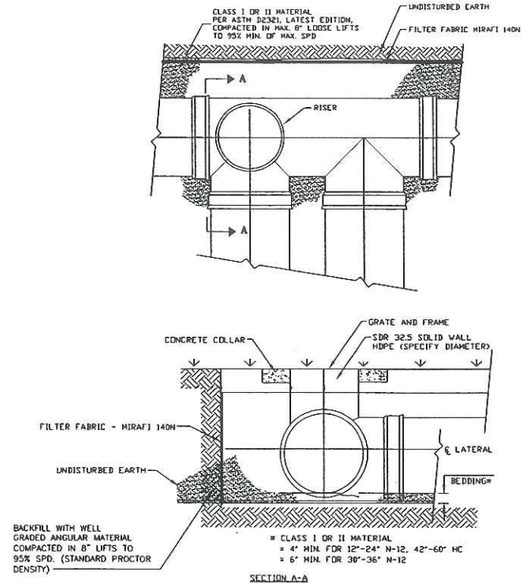
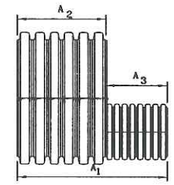


DETENTION POND PLAN
1"=5'

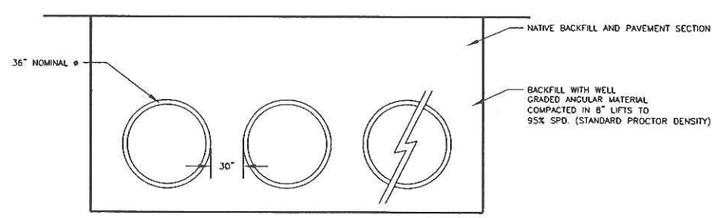


TYPICAL RISER
N.T.S.



PART Nº	PIPE SIZE	A_1	A_2	A_3
3673-AN	36" x 10" 900 mm x250 mm	28.12" 714 mm	20.56" 522 mm	7.56" 192 mm

TYPICAL FABRICATED REDUCER DETAILS
N.T.S.



1. PROVIDE A MINIMUM OF 6" LOOSE GRAVEL BASE.
2. 36-INCH PIPE SPACING TO BE 2.5 FEET.
3. PROVIDE ADEQUATE POSITIVE DRAINAGE FROM THE EXCAVATION.

TYPICAL SUBSURFACE DETENTION CROSS SECTION
N.T.S.

Rev.	Date	Revision
-	-	-

CITY STAFF REVIEW	10/14/03	AMP
Issued For	Date	By

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Gorrill-Palmer Consulting Engineers, Inc.
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15 Shaker Road
Gray, ME 04039
Traffic and Civil Engineering Services
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FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Drawing Name: **Detention System Details**
Project: **300 ALLEN AVE.**
Client: **Bob Adam**
662 East Bridge Street, Westbrook, ME 04092

Drawing No. 7

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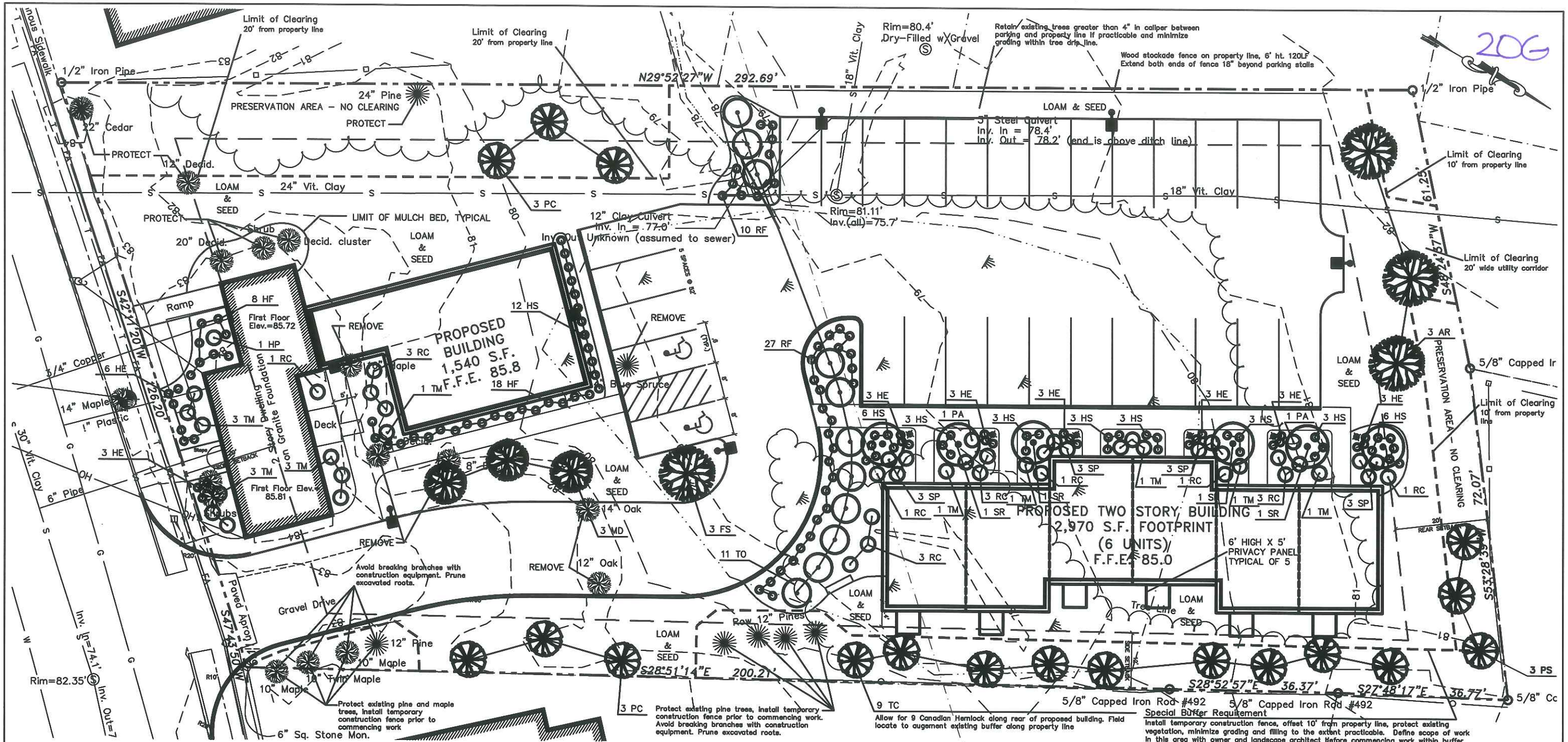
206


Limit of Clearing 20' from property line
1/2" Iron Pipe
N29°52'27"W 292.69'
Rim=80.4' Dry-Filled w/Gravel
Retain existing trees greater than 4" in caliper between parking and property line if practicable and minimize grading within tree drip line.
Wood stockade fence on property line, 6' ht. 120LF Extend both ends of fence 18" beyond parking stalls
24" Pine
PRESERVATION AREA - NO CLEARING
PROTECT
22" Cedar
12" Decid.
LOAM & SEED
24" Vit. Clay
3 PC
LIMIT OF MULCH BED, TYPICAL
Shrub
20" Decid.
Decid. cluster
12" Clay Culvert Inv. In = 77.6' Inv. Out = Unknown (assumed to sewer)
10 RF
18" Vit. Clay
3" Steel Culvert Inv. In = 78.4' Inv. Out = 78.2' (end is above ditch line)
Rim=81.11' Inv.(all)=75.7'
Limit of Clearing 10' from property line
Limit of Clearing 20' wide utility corridor
S48°47'47"W 61.25'
S42°27'20"W 226.20'
Ramp
8 HF
First Floor Elev.=85.72
1 HP
1 RC
PROPOSED BUILDING 1,540 S.F. F.F.E. 85.8
12 HS
18 HF
1 TM
REMOVE
3 RC
Maple
Blue Spruce
Deck
Existing Dwelling Granite Foundation
3 TM
First Floor Elev. 85.81
Shrubs
5/4" Copper
14" Maple
1" Plastic
30" Vit. Clay
6" Pipe
3 HE
6 HE
27 RF
3 HE
6 HS
3 HS
1 PA
3 HS
3 HS
3 HS
3 HS
3 HE
3 HE
3 HE

PLANNING REPORT #51-03

OFFICE/RESIDENTIAL USE
VICINITY OF 300 ALLEN AVENUE
SUBDIVISION AND SITE PLAN REVIEW
BOB ADAM, APPLICANT

Submitted to:
Portland Planning Board
Portland, Maine
October 28, 2003

Submitted by:
Kandice Talbot, Planner

I. INTRODUCTION

Mr. Bob Adam is proposing redevelopment of the parcel located at 300 Allen Avenue. The proposed development will include an approximate 2-story 1,550 sq. ft. addition to the existing "Cape" style house, as well as, a six-unit residential multiplex structure. The 6-unit multiplex structure is proposed along the northeasterly property line, with the front of the units being approximately parallel to the property line. The site is 36,443 sq. ft. and zoned R-P and R-5.

An existing 1,000 sq. ft. "Cape" style house currently occupies the site. The existing building is located adjacent to Allen Avenue. The rear portion of the site is undeveloped with trees and low brush located throughout. Topography on the site is relatively flat and drains toward the central portion of the lot.

This site was previously approved with an addition to the cape style house and a four-unit multiplex.

201 notices were sent to area residents. A notice also appeared in the October 20th and October 21st editions of the *Portland Press Herald.* A neighborhood meeting was held on October 14, 2003. The neighborhood minutes are included as Attachment 11.

II. SUMMARY OF FINDINGS

Zoning:	R-P and R-5
Parcel Size:	36,443 sq. ft.
Parking Spaces:	29 parking spaces

III. STAFF REVIEW

The proposal has been reviewed for compliance with the Subdivision and Site Plan Ordinance of the Land Use Code. Planning, Building Inspections, Public Works, Parks and Recreation and Fire Prevention staff have completed review of the proposal.

IV. SUBDIVISION REVIEW

1. Water and Air Pollution

   The development will not result in undue water or air pollution.

2/3. Utilities

   The applicant is proposing to connect the sanitary sewer service to an existing sanitary sewer main crossing the site. A 4" water service will be connected to the existing water line within Allen Avenue. Electrical and telephone services will be extended underground from the existing overhead lines. A water capacity letter is included as Attachment 9. A sewer capacity letter has been requested from the Portland Sewer Division but has not been received at this time. A potential condition of approval is:

   - that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

The applicant would need to grant a 50-foot sewer easement to the City for the existing sewer line that goes through the site and grant access to the easement through the proposed driveway and parking area. A potential condition of approval is:

- that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

4. Soil Erosion

The applicant has submitted an erosion and sedimentation control plan. The Development Review Coordinator has reviewed and approved the erosion control plans.

5. Traffic

Access to the site will be from Allen Avenue via a 20 ft. wide driveway, which will open up into a 29-space parking lot. Use of the parking lot will be by both the office building and the residential building.

During the previous review process, the Planning Board was concerned with the amount of pavement on site and suggested that the applicant reduce the amount of pavement. The previous approval had proposed twenty (20) parking spaces. This site proposal includes nine (9) additional parking spaces. However, six (6) of those spaces will be constructed of grass pavers to eliminate the amount of pavement.

6. Stormwater

The existing site currently consists of a residential home and a backyard, which is an overgrown field with a perimeter of shrubs and trees. The site is bowl shaped as a result of abutting development over the years.

The applicant is proposing that the site would be graded to collect and direct on and off-site runoff into the existing 24" vitrified clay storm drainage pipe that runs through the site. This pipe is a combined sewer. The entire sanitary flows of Pennell Avenue, Short Street, Hennessey Drive, Skylark Road and half of Cypress Street is carried by these pipes. In addition, the runoff from Cypress Street, 1/3 of Pennell Avenue and all of Short Street are discharged to this combined sewer. As a result, this combined sewer is already burdened with significant peak flows during pre-developed 25-year storm events. Further, the combined 30-inch diameter in Allen Avenue and already has capacity issues.

To address the concerns with the combined sewer within the site and in Allen Avenue, the applicant's engineer is proposing to detain flows to the extent possible from both watershed areas, thereby reducing the rate of flow into the combined sewer system. This is accomplished by the combination of a swale with outlet control and providing outlet control on the stormdrain lines. The applicant is proposing that the reduction in the runoff rate that contributes flow to the 24" vitrified clay sewer has been reduced by 10 to 13% by restricting flow in the stormdrain pipes by the use of orifices. Swales have been created to pond as much water as possible without encroaching onto abutting property. The limiting factor is the shallow sanitary sewer depth and existing grades at the

property line.

The City's CSO plan does not include separation of Allen Ave, adjacent to the development site, until 2005 at the earliest. In order for that separation plan to be effective, it will require the separation of Short Street as well as the stormwater runoff from Cypress Street. This would require entering this development site and the granted easement to install a separated storm sewer line. Public Works is recommending, in the best interests of the City and the Allen Ave. sewer separation project, that the applicant install a distinct and separated storm sewer line beginning at the Allen Ave. boundary and continuing to the northeast site boundary. This would represent the applicant's contribution to the CSO project and would benefit the City by reducing future construction costs associated with the referenced CSO project. The applicant has agreed to install a stormdrain system through the property that will allow future separation upstream to be connected to the Allen Avenue system.

Public Works is also requesting that the applicant create more underground stormwater storage in pipes by eliminating the proposed stormwater connection into the combined sewer traversing the site. Instead, a new "doghouse" manhole connection should be constructed further downstream, at a point adjacent to the Allen Avenue boundary. Additionally, it is recommended that the design be revised to expand the surface stormwater storage area, adjacent to the westerly boundary. This storage area would be expanded in a southerly direction towards Allen Avenue, thereby increasing storage by approximately 35 – 40%.

The applicant is proposing to meet this request. The installation of the separated storm drain system is proposed as part of this project. The applicant is also proposing to convey an easement for the existing sanitary sewer main traversing the site, as requested by Public Works. The applicant is also proposing an expanded ponding area toward Allen Avenue to increase storage volume.

Based on the proposed number of parking spaces, staff is recommending that the applicant install a stormwater treatment unit. The proposed project is a combination of residential and professional use with 29 parking spaces proposed. The applicant is proposing to install a Downstream Defender as part of this project.

Public Works has reviewed the plans and does not have any issues with the plans as proposed. Public Works memo is included as Attachment 6.

The Development Review Coordinator has reviewed the plans and has concerns regarding the quantity of stormwater that could be introduced into the combined sewer system until the drainage separation project in Allen Avenue. It also appears that some of the land may be wet or saturated frequently. The applicant should verify that these are not wetlands, and if they are, delineate accordingly on the site plans. The applicant has addressed most of these concerns; however, the Development Review Coordinator is recommending that the separation of storm drainage should include collecting the offsite runoff in the new storm drain manhole #3, instead of sanitary manhole. The Development Review Coordinator's Memos are included as Attachment 7 and 15. A potential condition of approval is:

- that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

7. Solid Waste Disposal

A dumpster is not proposed on the site. The applicant proposes to have the residential building use the City's curbside pickup service. A maintenance company will service the office building and the company will remove waste.

8. Scenic Beauty

This development will not cause an undue adverse effect on the scenic or natural beauty of the area aesthetics, historic sites, significant wildlife habitat or rare and irreplaceable natural area.

9. Comprehensive Plan

This development is consistent with the City of Portland Comprehensive Plan.

10. Financial Capability

A letter of financial capability is included as Attachment 4.

11. Groundwater

The development as proposed will not adversely affect the quality or quantity of groundwater.

12. Flood Hazard/Shoreline

The site is not located in the flood hazard or shoreland zones.

VI. SITE PLAN REVIEW

1/2. Traffic

The traffic comments have been consolidated in the subdivision review section.

3. Proposed Buildings

The applicant is proposing a 1,550 sq. ft. 2-story addition to the existing building located at 300 Allen Avenue. The building will be used for professional offices. Currently, the existing building is residential. The building façade will consist of vinyl siding. Elevations of the addition are included as Attachment 18.

The applicant is also proposing a 6-unit residential building in the rear of the property. Patios are proposed on the rear of the units. The building façade will consist of vinyl clapboard. The multifamily elevations are included as Attachment 18.

4. Sewer, Storm Drain and Water

The sewer, storm drain and water comments have been consolidated in the subdivision review section.

5. Landscaping/Existing Vegetation

The applicant has submitted a landscaping plan, which is included as Attachment 20G.

The applicant is proposing thirty-one (31) trees around the site. The subdivision ordinance requires two trees per unit, which has been met. The applicant is also proposing shrubs and plantings around the buildings. There was a concern that there was no buffering on the westerly edge of the property, between the proposed parking lot and the residential neighborhood. The applicant is proposing a 6 ft. wooden stockade fence along the property line to buffer the parking area from the residential neighbors. The City Arborist is currently reviewing the most recent landscaping plan. A potential condition of approval is:

- that the City Arborist review and approve the landscaping plan.

6. Soils and Drainage

Soils and drainage have been consolidated in the subdivision review section.

7. Exterior Lighting

The applicant is proposing five (5) light poles around the site. The poles will be 18 ft. high and the fixtures will be 250-watt lights. The applicant is also proposing six (6) ornamental residential poles in front of the residential units. These lights will be 6 –8 ft. high on a cedar pole and the fixtures will be 100-watt lights. The applicant is also proposing two building mounted lights on the office building, which will be 100-watt lights with a mounting height of 10 – 12 ft. Catalogue cuts of the lighting and a photometric plan have been submitted and are included as Attachments 16 and 17.

Because the five light poles are located mostly within the residential area, staff is recommending that the applicant reduce the pole heights to 14- 16 ft. high. The photometric plan will also need to be revised to show the entire site to determine that there is no spillover onto abutting properties. A potential condition of approval is:

- that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

The ornamental residential poles are not cut-off. The Lighting standards states that "Sites which are part of an historic district or require specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context may propose non-cutoff fixtures providing that photometrics fall within IESNA guidelines." The Board would have to waive the lighting standards that all fixtures shall be a "cut-off" type.

8. Fire

The Fire Department has reviewed and approved the plans.

9. City Infrastructure

The proposed development will not place any strain on the City infrastructure as previously discussed in the traffic and stormwater section.

VII. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of plans and material submitted by the applicant and on the basis of information contained in Planning Report #51-03 pertaining to the standards of Site Plan and Subdivision Review, the Planning Board finds:

i. That the standards contained in the City of Portland Technical Standards and Design Guidelines, Lighting Section regarding cut-off fixtures are [waived/not waived] as the Board [finds/does not find] that this site requires specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context providing that photometrics fall within IESNA guidelines.

ii. That the proposed development [is/is not] in conformance with the Subdivision Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

2. that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

3. that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

iii. That the proposed development [is/is not] in conformance with the Site Plan Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the City Arborist review and approve the landscaping plan.

2. that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

Attachments:

1. Applicant's Letter dated June 24, 2003
2. Vicinity Map
3. Applicant's Letter dated August 26, 2003
4. Financial Capacity Letter
5. Deed
6. Public Works' Memo dated July 18, 2003 and September 5, 2003
7. DRC's Memo dated September 5, 2003
8. Applicant's Letter dated September 5, 2003
9. Water Capacity Letter
10. Neighbor Letter
11. Neighborhood Meeting Minutes
12. Applicant's Letter dated October 1, 2003
13. Applicant's Letter dated October 14, 2003
14. Stormwater Report
15. DRC's Memo dated October 17, 2003
16. Lighting Catalogue Cuts
17. Photometric Plan
18. Elevations
19. Previously Approved Plan by Planning Board
20. Plans

REVISED MOTIONS FOR THE BOARD TO CONSIDER – 300 Allen Avenue
10/28/2003

On the basis of plans and material submitted by the applicant and on the basis of information contained in Planning Report #51-03 pertaining to the standards of Site Plan and Subdivision Review, the Planning Board finds:

i. That the standards contained in the City of Portland Technical Standards and Design Guidelines, Lighting Section regarding cut-off fixtures are [waived/not waived] as the Board [finds/does not find] that this site requires specific decorative lighting fixtures as means to achieve compatibility within an existing architectural context providing that photometrics fall within IESNA guidelines.

ii. That the proposed development [is/is not] in conformance with the Subdivision Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the applicant submit a sewer capacity letter from the Portland Sewer Division prior to issuance of a building permit.

2. that the applicant submit sewer easement language to staff to be reviewed and approved by Corporation Counsel.

3. that the applicant revise the plans to address the Development Review Coordinator's comments dated October 17, 2003.

iii. That the proposed development [is/is not] in conformance with the Site Plan Ordinance of the Land Use Code

Potential Conditions of Approval:

1. that the applicant reduce the pole heights of the parking lot poles to 14 – 16 ft. high and submit a photometric plan that shows the foot candles to the property line to determine that there is no spillover onto abutting properties.

Jane Oberton - Short Street
couple of additional completions -
curb on parking area - do sit drain on
Short Street

From: Jeff Tarling
To: Kandi Talbot
Date: Tue, Oct 28, 2003 3:57 PM
Subject: 300 Allen Avenue

Kandi,

I have reviewed the revised plans for 300 Allen Avenue. The landscape plan addresses buffering, shade and ornamental trees and foundation plantings.

Jeff Tarling

CC: Sarah Hopkins