

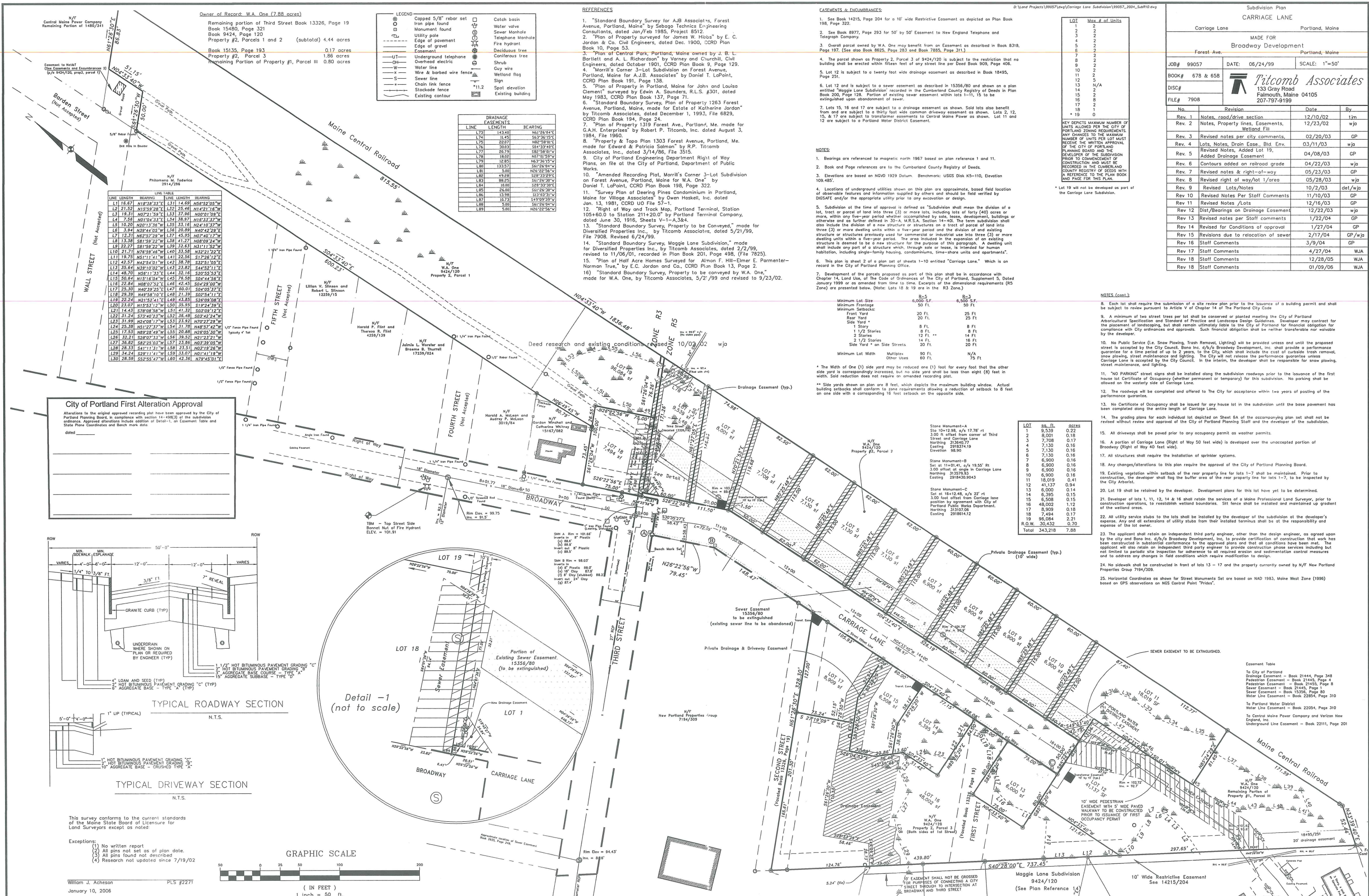
341 6006001

Third St, Portland, Maine

Carriage Lane

Broadway Development

2003-2004



Subdivision Plan	
CARRIAGE LANE	
Carriage Lane	
Portland, Maine	
MADE FOR	
Broadway Development	
Portland, Maine	
JOB# 99057	DATE: 06/24/99
BOOK# 678 & 658	SCALE: 1"=50'
DISC#	
FILE# 7908	

No.	Revision	Date	By
Rev 1	Notes, cond/drive section	12/10/02	tm
Rev 2	Notes, Property lines, Easements, Wetland Fill	12/23/02	wja
Rev 3	Revised notes per city comments	02/20/03	GP
Rev 4	Notes, Notes, Drain Easement, Added Drainage Easement	03/11/03	wja
Rev 5	Revised Notes, Added Lot 19, Added Drainage Easement	04/08/03	GP
Rev 6	Contours added on railroad grade	04/22/03	wja
Rev 7	Revised notes & right-of-way	05/23/03	GP
Rev 8	Revised right of way/lot 1/area	05/28/03	wja
Rev 9	Revised Lots/Notes	10/20/03	del/wja
Rev 10	Revised Notes Per Staff Comments	11/10/03	GP
Rev 11	Revised Notes /Lots	12/16/03	GP
Rev 12	Dist/Bearings on Drainage Easement	12/22/03	wja
Rev 13	Revised notes per staff comments	1/22/04	GP
Rev 14	Revised for Conditions of approval	1/27/04	GP
Rev 15	Revisions due to relocation of sewer	2/17/04	GP/wja
Rev 16	Staff Comments	3/9/04	GP
Rev 17	Staff Comments	4/27/04	WJA
Rev 18	Staff Comments	12/28/05	WJA
Rev 18	Staff Comments	01/09/06	WJA

KEY DEPICTS MAXIMUM NUMBER OF UNITS ALLOWED PER CITY OF PORTLAND ZONING REQUIREMENTS. ANY CHANGES TO THE MAXIMUM NUMBER OF UNITS PER LOT MUST RECEIVE THE WRITTEN APPROVAL OF THE CITY OF PORTLAND PLANNING BOARD AND THE DEVELOPER OF THE SUBDIVISION PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MUST BE RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS WITH A REFERENCE TO THE PLAN BOOK AND PAGE FOR THIS PLAN.

* Lot 19 will not be developed as part of the Carriage Lane Subdivision.

LOT	Sq. Ft.	Acres
1	9,539	0.22
2	8,001	0.18
3	7,708	0.17
4	7,130	0.16
5	7,130	0.16
6	7,130	0.16
7	6,900	0.16
8	6,900	0.16
9	6,900	0.16
10	6,900	0.16
11	18,019	0.41
12	41,137	0.94
13	5,000	0.14
14	6,355	0.15
15	6,508	0.15
16	48,002	1.10
17	8,909	0.18
18	7,494	0.17
19	98,084	2.21
R.O.W.	30,432	0.70
Total	343,218	7.88

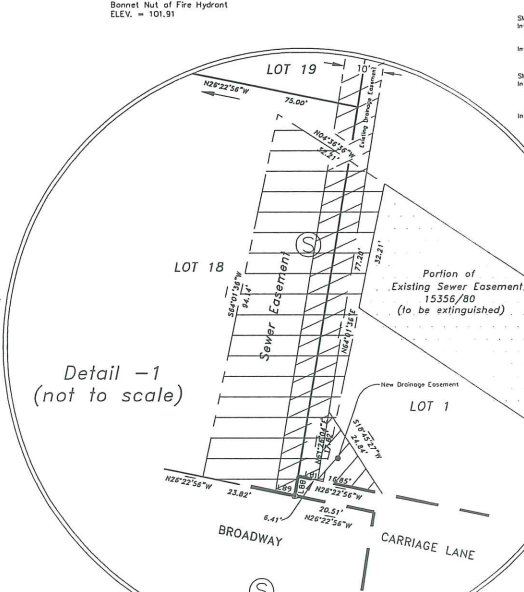
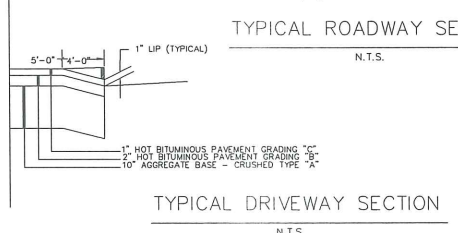
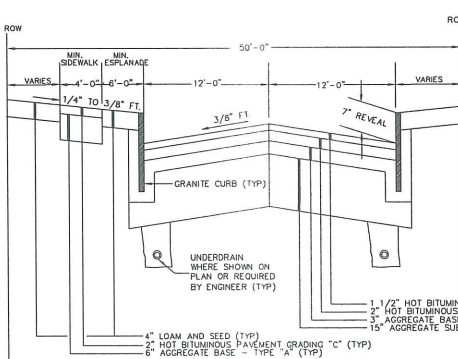
NOTES (Cont.)

- Each lot shall require the submission of a site review plan prior to the issuance of a building permit and shall be subject to review pursuant to Article V of Chapter 14 of the Portland City Code.
- A minimum of two street trees per lot shall be conserved or planted meeting the City of Portland Agricultural Specification and Standards of Practice and Landscape Design Guidelines. Developer may contract for the placement of trees to the City of Portland for financial obligation for compliance with City ordinances and approvals. Such financial obligation shall be neither transferable nor voidable by the developer.
- No Public Service (i.e. Snow Plowing, Fire Removal, Lighting) will be provided unless and until the proposed street is accepted by the City Council. Bona Inc. d/b/a Broadway Development, Inc. shall provide a performance guarantee for a time period of up to 2 years, to the City, which shall include the cost of outside storm removal, snow plowing, street maintenance and lighting. The City will not release the performance guarantee unless Carriage Lane is accepted by the City Council. In the interim, the developer shall be responsible for snow plowing, street maintenance, and lighting.
- "NO PARKING" street signs shall be installed along the subdivision roadways prior to the issuance of the first house lot Certificate of Occupancy (whether permanent or temporary) for this subdivision. No parking shall be allowed on the westerly side of Carriage Lane.
- The roadways will be completed and offered to the City for acceptance within two years of posting of the performance guarantee.
- No Certificate of Occupancy shall be issued for any house lot in the subdivision until the base pavement has been completed along the entire length of Carriage Lane.
- The grading plans for each individual lot depicted on Sheet 6A of the accompanying plan set shall not be revised without review and approval of the City of Portland Planning Staff and the developer of the subdivision.
- All driveways shall be paved prior to any occupancy permit or weather permits.
- A portion of Carriage Lane (Right of Way 50 feet wide) is developed over the unaccepted portion of Broadway (Right of Way 40 feet wide).
- All structures shall require the installation of sprinkler systems.
- Any changes/alterations to this plan require the approval of the City of Portland Planning Board.
- Existing vegetation within setback of the rear property line for lots 1-7 shall be maintained. Prior to construction, the developer shall flag the buffer area of the rear property line for lots 1-7, to be inspected by the City Arborist.
- Lot 19 shall be retained by the developer. Development plans for this lot have yet to be determined.
- Developer of lots 1, 11, 12, 14 & 16 shall retain the services of a Maine Professional Land Surveyor, prior to construction operations, to reestablish wetland boundaries. Site fence shall be installed and maintained up gradient of the wetland area.
- All utility service stubs to the lots shall be installed by the developer of the subdivision at the developer's expense. Any and all extensions of utility stubs from their installed terminus shall be at the responsibility and expense of the lot owner.
- The applicant shall retain an independent third party engineer, other than the design engineer, as agreed upon by the city and Bona Inc. d/b/a Broadway Development, Inc. to provide certification of construction that work has been constructed in substantial conformance to the approved plans and that all conditions have been met. The applicant will also retain an independent third party engineer to provide construction phase services including but not limited to periodic site inspection for adherence to all required erosion and sedimentation control measures and to address any changes in field conditions which require modification to design.
- No sidewalk shall be constructed in front of lots 13 - 17 and the property currently owned by N/F New Portland Properties Group 7194/309.
- Horizontal Coordinates as shown for Street Monuments Set are based on NAD 1983, Maine West Zone (1996) based on GPS observations on NGS Control Point "Prides".

City of Portland First Alteration Approval

Alterations to the original approved recording plan have been approved by the City of Portland Planning Board, in compliance with section 14-438(3) of the subdivision ordinance. Approved alterations include addition of Detail-1, an Easement Table and State Plane Coordinates and Bench marks.

dated _____

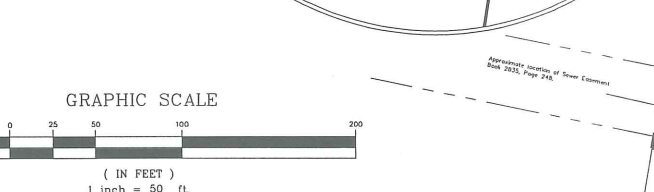


This survey conforms to the current standards of the Maine State Board of Licensure for Land Surveyors except as noted.

Exceptions:

- No written report.
- All pins not set as of plan date.
- All pins found not described.
- Research not updated since 7/19/02.

William J. Acheson PLS #2271
January 10, 2006



LEGEND

- Capped 5/8" rebar set
- Iron pipe found
- Monument found
- Utility pole
- Edge of pavement
- Edge of gravel
- Easement
- Underground telephone
- Overhead electric
- Water line
- Wire & barbed wire fence
- Sewer line
- Chain link fence
- Stockade fence
- Existing contour
- Catch basin
- Water valve
- Sewer Manhole
- Telephone Manhole
- Fire hydrant
- Deciduous tree
- Coniferous tree
- Shrub
- Guy wire
- Wetland flag
- Sign
- Spot elevation
- Existing building

DRAINAGE EASEMENTS

LINE	LENGTH	BEARING
L73	14.48	N47°59'41"W
L74	11.45	S63°36'15"E
L75	22.07	N88°58'00"E
L76	20.03	S84°33'45"E
L77	20.79	S82°58'01"W
L78	18.82	N37°10'59"E
L79	12.85	N63°36'15"W
L80	123.57	N82°26'04"W
L81	5.00	N82°26'04"W
L82	4.98	S28°33'22"E
L83	88.25	S41°26'30"W
L84	10.80	S28°33'22"E
L85	26.00	S41°26'30"W
L86	13.88	S13°37'12"E
L87	10.73	S49°03'33"W
L88	3.00	S41°26'04"W
L89	5.00	N26°22'56"W

- REFERENCES**
- "Standard Boundary Survey for AJB Associates, Forest Avenue, Portland, Maine," by Sebago Technical Engineering Consultants, dated Jan/Feb 1985, Project 8512.
 - "Plan of Property surveyed for James W. Hibbs" by E. C. Jordan & Co. Civil Engineers, dated Dec. 1900, CCRD Plan Book 10, Page 53.
 - "Plan of Central Park, Portland, Maine owned by J. B. L. Bartlett and A. L. Richardson" by Verney and Churchill, Civil Engineers, dated October 1901, CCRD Plan Book 9, Page 129.
 - "Morrill's Corner 3-Lot Subdivision on Forest Avenue, Portland, Maine for A.J.B. Associates" by Daniel T. LaPoint, CCRD Plan Book 191, Page 138.
 - "Plan of Property in Portland, Maine for John and Louisa Ciemi" surveyed by Edwin A. Saunders, R.L.S. #301, dated May 1983, CCRD Plan Book 137, Page 71.
 - "Standard Boundary Survey, Plan of Property 1263 Forest Avenue, Portland, Maine, made for Estate of Katherine Jordan" by Titcomb Associates, dated December 1, 1993, File 6829, CCRD Plan Book 194, Page 24.
 - "Plan of Property 1319 Forest Ave., Portland, Me. made for G.A.H. Enterprises" by Robert P. Titcomb, Inc. dated August 3, 1984, File 1960.
 - "Property & Tops Plan 1303 Forest Avenue, Portland, Me. made for Edward & Patricia Salmon" by R.P. Titcomb Associates, Inc., dated 3/14/86, File 3515.
 - City of Portland Engineering Department Right of Way Plans, on file at the City of Portland, Department of Public Works.
 - "Amended Recording Plat, Morrill's Corner 3-Lot Subdivision on Forest Avenue, Portland, Maine for W.A. One" by Daniel T. LaPoint, CCRD Plan Book 198, Page 322.
 - "Survey Plan of Deering Pines Condominium in Portland, Maine for Village Associates" by Owen Haskell, Inc. dated Jan. 13, 1981, CCRD UO File 57-1.
 - "Right of Way and Track Map, Portland Terminal, Station 105+60.0 to Station 211+20.0" by Portland Terminal Company, dated June 30, 1916, Sheets V-1-A,3&4.
 - "Standard Boundary Survey, Property to be conveyed" made for Diversified Properties Inc., by Titcomb Associates, dated 5/21/99, File 7908, Revised 6/24/99.
 - Standard Boundary Survey, Maggie Lane Subdivision" made for Diversified Properties Inc., by Titcomb Associates, dated 5/22/99, revised to 11/06/01, recorded in Plan Book 201, Page 498, (File 7825).
 - "Plan of Half Acre Homes Surveyed for Almon F. Hill-Elmer E. Parmenter-Norman Trust," by E.C. Jordan and Co., CCRD Plan Book 13, Page 2.
 - "Standard Boundary Survey, Property to be conveyed by W.A. One" made for W.A. One, by Titcomb Associates, 5/27/99 and revised to 9/23/02.

EASEMENTS & ENCUMBRANCES

- See Book 14215, Page 204 for a 10' wide Restrictive Easement as depicted on Plan Book 198, Page 322.
- See Book 6877, Page 293 for 50' by 50' Easement to New England Telephone and Telegraph Company.
- Overall parcel owned by W.A. One may benefit from an Easement as described in Book 8318, Page 197. (See also Book 8625, Page 283 and Book 7885, Page 311.)
- The parcel shown as Property 2, Parcel 3 of 9424/120 is subject to the restriction that no building shall be erected within fifteen feet of any street line per Deed Book 908, Page 408.
- Lot 12 is subject to a twenty foot wide drainage easement as described in Book 18495, Page 251.
- Lot 12 and is subject to a sewer easement as described in 15356/80 and shown on a plan entitled "Maggie Lane Subdivision" recorded in the Cumberland County Registry of Deeds in Plan Book 200, Page 128. Portion of existing sewer easement within lots 1-11, 15 to be extinguished upon abandonment of sewer.
- Lots 16 and 17 are subject to a drainage easement as shown. Said lots also benefit from and are subject to a thirty foot wide common driveway easement as shown. Lots 2, 12, 15, & 17 are subject to transformer easements to Central Maine Power as shown. Lot 11 and 12 are subject to a Portland Water District Easement.

NOTES

- Bearings are referenced to magnetic north 1967 based on plan reference 1 and 11.
- Book and Page references are to the Cumberland County Registry of Deeds.
- Elevations are based on NGVD 1929 Datum. Benchmarks: USGS Disk K5-110, Elevation 109.485'.
- Locations of underground utilities shown on this plan are approximate, based field location of observable features and information supplied by others and should be field verified by DIGSAFE and/or the appropriate utility prior to any excavation or design.
- Subdivision of the time of approval is defined as "Subdivision shall mean the division of a lot, tract or parcel of land into three (3) or more lots, including lots of forty (40) acres or more, within any five-year period whether accomplished by sale, lease, development, buildings or otherwise and as further defined in 30-A M.R.S.A. Section 14-40. The term subdivision shall also include the division of a new structure or structures on a tract of land into three (3) or more dwelling units within a five-year period and the division of an existing structure or structures previously used for commercial or industrial use into three (3) or more dwelling units within a five-year period. The area included in the expansion of an existing structure is deemed to be a new structure for the purpose of this paragraph. A dwelling unit shall include any part of a structure which, through sale or lease, is intended for human habitation, including single-family housing, condominiums, time-share units and apartments."
- This plan is sheet 2 of a plan set of sheets 1-10, entitled "Carriage Lane," which is on record in the City of Portland Planning Office.
- Development of the parcels proposed as part of this plan shall be in accordance with Chapter 14, Land Use, of the Code of Ordinances of the City of Portland, Supplement 5, Dated January 1999 or as amended from time to time. Excerpts of the dimensional requirements (R5 Zone) are presented below. (Note: Lots 18 & 19 are in the R3 Zone.)

Minimum Lot Size	R-5	R-3
Minimum Frontage	6,000 S.F.	6,000 S.F.
Minimum Setback	50 Ft.	50 Ft.
Front Yard	20 Ft.	25 Ft.
Rear Yard	20 Ft.	25 Ft.
Side Yard *	8 Ft.	8 Ft.
1 1/2 Stories	8 Ft.	8 Ft.
2 Stories	12 Ft. **	14 Ft.
1 1/2 Stories	14 Ft.	16 Ft.
Side Yard on Side Streets	20 Ft.	N/A
Minimum Lot Width	Multiple	90 Ft.
Other Uses	60 Ft.	N/A

* 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 side yard shall be less than eight (8) feet in width. Said reduction does not require an amended recording plat.

** Side yards shown on plan are 8 feet, which depicts the maximum building width. Actual building setbacks shall conform to zone requirements allowing a reduction of setback to 8 feet on one side with a corresponding 16 foot setback on the opposite side.

Stone Monument-A
Sta 10+12.98, o/s 17.78' r/l
3.00' ft offset from corner of Third Street and Carriage Lane
Bearing: 318.6477
Easting: 2918374.19
Elevation: 98.90

Stone Monument-B
Sta 61+18+12.48, o/s 12.55' r/l
3.00' foot offset from Carriage Lane
Bearing: 318.6477
Easting: 2918374.19
Elevation: 98.90

Stone Monument-C
Sta 61+18+12.48, o/s 22' r/l
3.00' foot offset from Carriage Lane
Bearing: 318.6477
Easting: 2918374.19
Elevation: 98.90

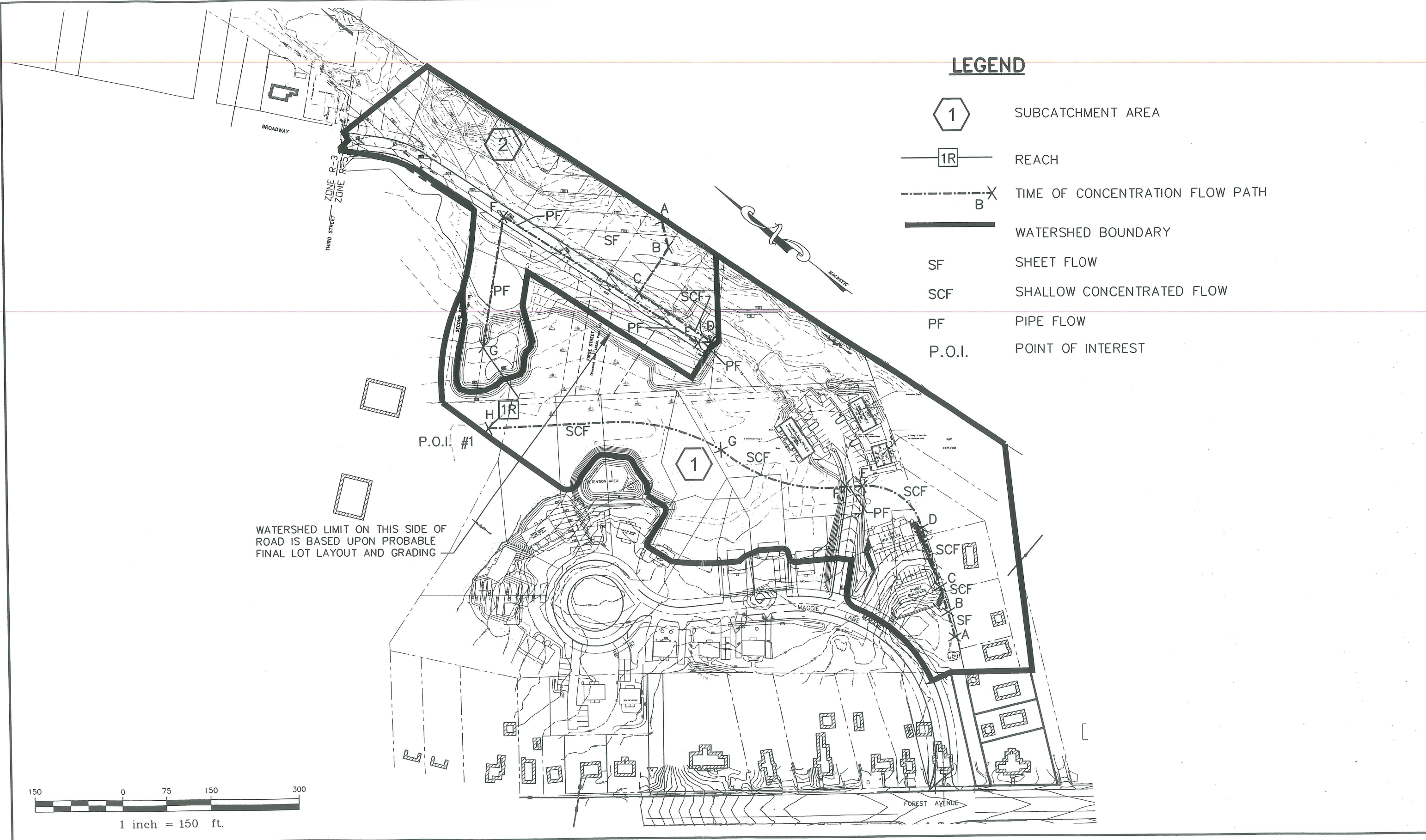
LOT	Sq. Ft.	Acres
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6	7,130	0.16
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9	6,900	0.16
10	6,900	0.16
11	18,019	0.41
12	41,137	0.94
13	5,000	0.14
14	6,355	0.15
15	6,508	0.15
16	48,002	1.10
17	8,909	0.18
18	7,494	0.17
19	98,084	2.21
R.O.W.	30,432	0.70
Total	343,218	7.88

ESSEMENT TABLE


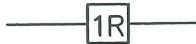


To City of Portland
Drainage Easement - Book 21444, Page 348
Pedestrian Easement - Book 21445, Page 4
Pedestrian Easement - Book 21455, Page 8
Sewer Easement - Book 21456, Page 8
Water Line Easement - Book 22854, Page 310

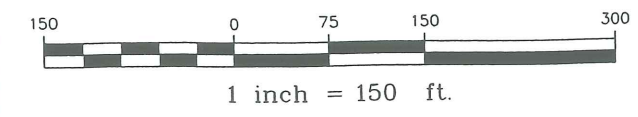
To Portland Water District
Water Line Easement - Book 22054, Page 310

To Central Maine Power Company and Verizon New England, Inc.
Underground Line Easement - Book 22111, Page 201



LEGEND

-  SUBCATCHMENT AREA
-  REACH
-  TIME OF CONCENTRATION FLOW PATH
-  WATERSHED BOUNDARY
- SF SHEET FLOW
- SCF SHALLOW CONCENTRATED FLOW
- PF PIPE FLOW
- P.O.I. POINT OF INTEREST



Rev.	Date	Revision
-	-	-

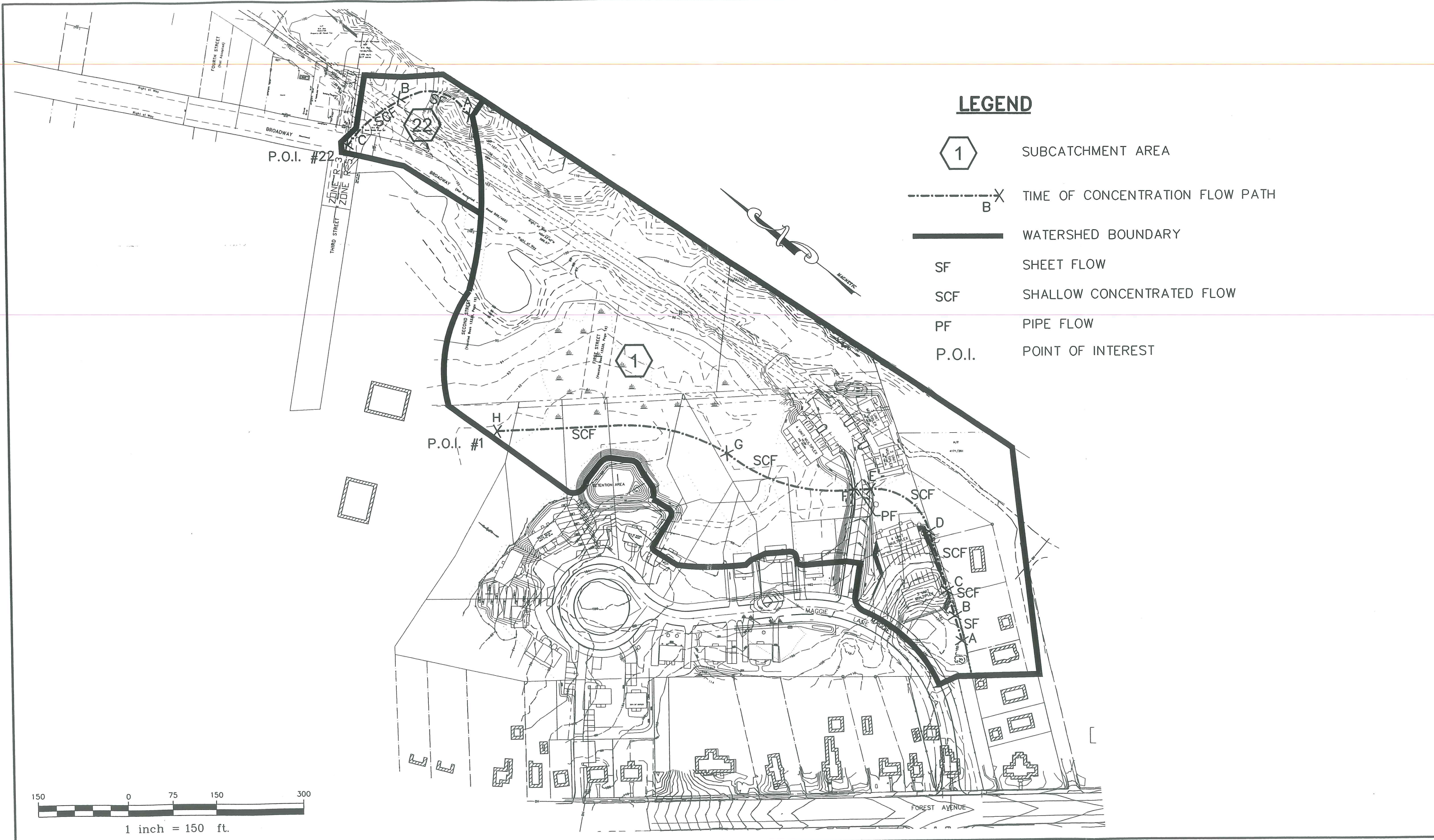
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Draft: SGB	Job No.: 632
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File Name: 632-WTRSHED	

GP 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

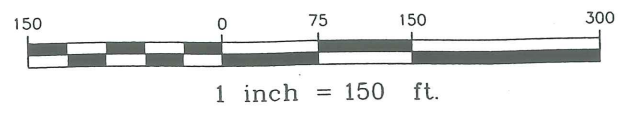
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Project:	CARRIAGE LANE, PORTLAND, ME

Figure No.
2



LEGEND

-  SUBCATCHMENT AREA
-  TIME OF CONCENTRATION FLOW PATH
-  WATERSHED BOUNDARY
- SF SHEET FLOW
- SCF SHALLOW CONCENTRATED FLOW
- PF PIPE FLOW
- P.O.I. POINT OF INTEREST



Rev.	Date	Revision
-	-	-

Design: PDO	Date: DEC 2002
Draft: SGB	Job No.: 632
Checked: AMP	Scale: 1"=150'
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 Gray, ME 04039

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

Drawing Name:	Pre Development Watershed Plan
Project:	CARRIAGE LANE, PORTLAND, ME

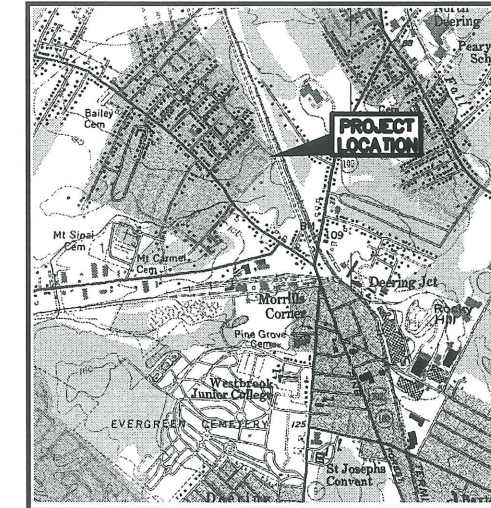
Figure No.
1

CARRIAGE LANE

PORTLAND, MAINE

PREPARED BY:

GP 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: mail@gorrillpalmer.com



LOCATION MAP
N.T.S.

Att. 17

LEGEND

EXISTING:	DESCRIPTION:	PROPOSED:
○	IRON PIPE	□
□	MONUMENT	□
---	TITCOMB ASSOCIATES, GROUND SURVEY CONTOUR	---
---	PROPOSED CONTOUR	---
	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	
Lot #	SUBDIVISION LOT NUMBER	
---	DRAINAGE EASEMENT	---

GENERAL NOTES

- GENERAL NOTES**
1. TOPOGRAPHIC DATA AND EXISTING CONDITIONS WAS PREPARED BY TITCOMB ASSOCIATES OF FALMOUTH, MAINE IN SEPTEMBER OF 2002.
 2. BOUNDARY SURVEY WAS PREPARED BY TITCOMB ASSOCIATES FOR THE DEVELOPERS IN 2002.
 3. 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.
 4. 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 OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE OWNER.
 5. 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.
 6. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
 7. WETLANDS ON THIS PLAN WERE DELINEATED BY MARK HAMPTON OF MARK HAMPTON ASSOCIATES.
 8. 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 SUBDIVISION 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

- 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.
 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

- 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/AWS C104/A21.4. DISINFECTION OF WATER LINES SHALL CONFORM TO AWWA STANDARD C851, 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 CONDUCTED 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

- GRADING AND DRAINAGE NOTES**
1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 602-- 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

- 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 SNAIPS 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 (IF ANY) 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

- 1 - COVER SHEET, GENERAL NOTES, & LEGEND
- 2 - SUBDIVISION PLAN BY TITCOMB ASSOCIATES
- 3 - EXISTING CONDITIONS PLAN
- 4 - LAYOUT PLAN & PROFILE
- 5 - UTILITY PLAN & PROFILE
- 5A - EXISTING SEWER PLAN & PROFILE
- 6 - GRADING, DRAINAGE & EROSION CONTROL PLAN & PROFILE
- 7 - UTILITY DETAILS
- 8 - ROADWAY, STORM DRAIN & MISCELLANEOUS DETAILS
- 9 - EROSION & SEDIMENTATION CONTROL DETAILS & NOTES
- 10 - POND DETAILS

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
-	-	-

Issued For	Date	By
SKETCH PLAN SUBMISSION	1/13/03	AMP

Design:	Draft:	Date:
DER	GUL	NOV 02
Checked: AMP	Scale: NTS	Job No.: 632
File Name: 632-COV.dwg		

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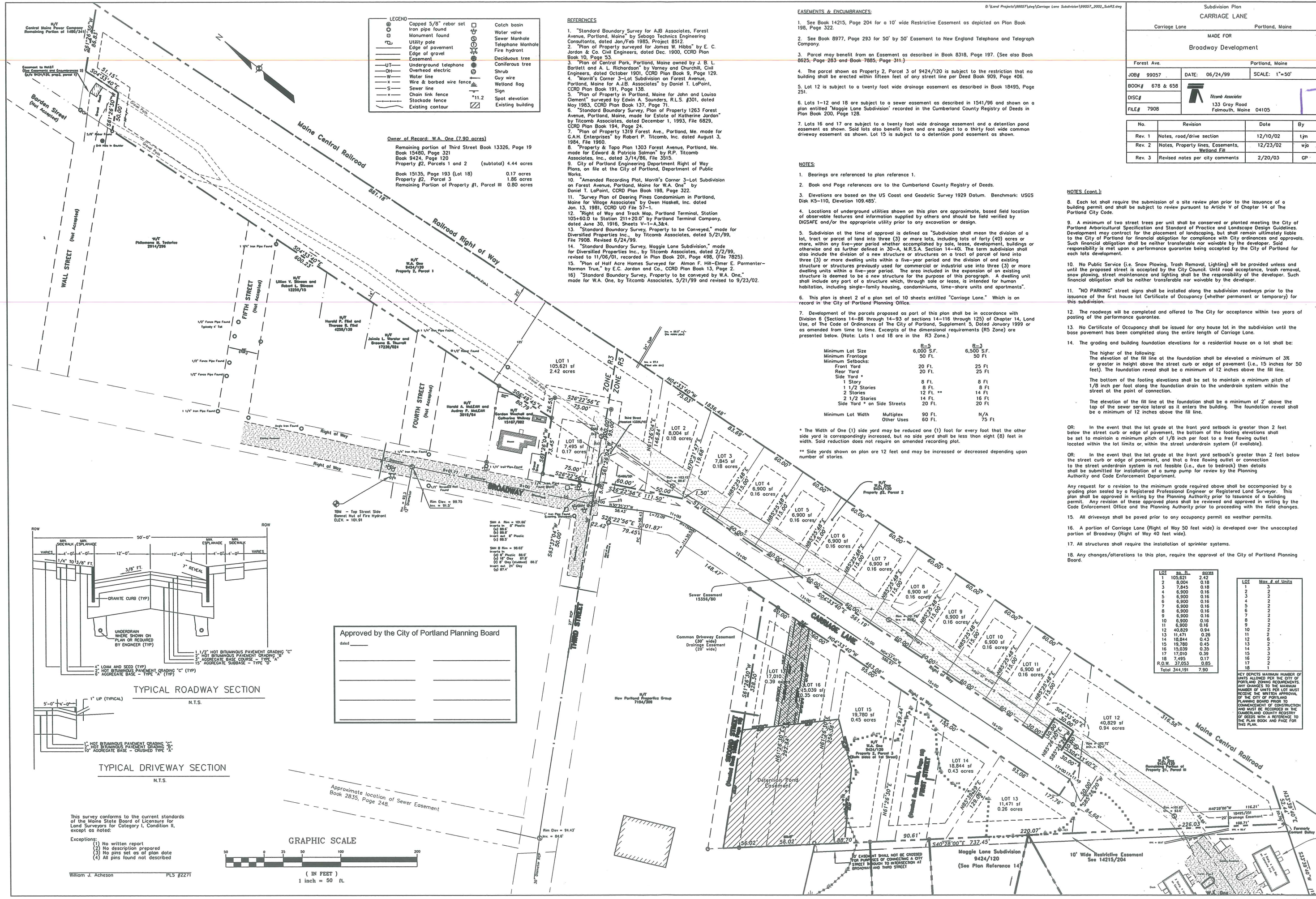
GP Gorrill-Palmer Consulting Engineers, Inc.
 Traffic and Civil Engineering Services
 PO Box 1237 15 Shaker Road Gray, ME 04039 207-657-6910
 FAX: 207-657-6912 E-Mail: mail@gorrillpalmer.com

Drawing Name:	Cover Sheet, General Notes & Legend
Project:	CARRIAGE LANE
Client:	Broadway Development PO Box 10127, Portland, Maine 04104

Drawing No.	1
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Subdivision Plan			
CARRIAGE LANE			
Carriage Lane	Portland, Maine		
MADE FOR			
Broadway Development			
Forest Ave. Portland, Maine			
JOB# 99057	DATE: 06/24/99	SCALE: 1"=50'	
BOOK# 678 & 658	Titcomb Associates 133 Gray Road Falmouth, Maine 04105		
DISC#			
FILE# 7908			
No.	Revision	Date	By
Rev. 1	Notes, road/drive section	12/10/02	ljm
Rev. 2	Notes, Property lines, Easements, Wetland Fill	12/23/02	wjw
Rev. 3	Revised notes per city comments	2/20/03	GP

17A



LEGEND

6"Ø	Capped 5/8" rebar set	□	Catch basin
—	Monument found	○	Water valve
—	Utility pole	○	Sewer Manhole
—	Edge of pavement	○	Telephone Manhole
—	Edge of gravel	○	Fire hydrant
—	Easement	○	Deciduous tree
—	Underground telephone	○	Coniferous tree
—	Overhead electric	○	Shrub
—	Water line	○	Guy wire
—	Wire & barbed wire fence	○	Wellhead flag
—	Sewer line	○	Sign
—	Chain link fence	○	Spot elevation
—	Stockade fence	○	Existing building
—	Existing contour	○	

- REFERENCES**
- "Standard Boundary Survey for A.B. Associates, Forest Avenue, Portland, Maine" by Sebago Technics Engineering Consultants, dated Jan/Feb 1985, Project 8512
 - "Plan of Property surveyed for James W. Hibbs" by E. C. Jordan & Co. Civil Engineers, dated Dec. 1900, CCRD Plan Book 10, Page 53.
 - "Plan of Central Park, Portland, Maine owned by J. B. L. Bartlett and A. L. Richardson" by Varney and Churchill, Civil Engineers, dated October 1901, CCRD Plan Book 9, Page 129.
 - "Morrill's Corner 3-Lot Subdivision on Forest Avenue, Portland, Maine for A.B. Associates" by Daniel T. LaPoint, CCRD Plan Book 191, Page 138.
 - "Plan of Property in Portland, Maine for John and Louisa Clement" surveyed by Edwin A. Saunders, R.L.S. #301, dated May 1983, CCRD Plan Book 137, Page 71.
 - "Standard Boundary Survey, Plan of Property 1263 Forest Avenue, Portland, Maine, made for Estate of Katherine Jordan by Titcomb Associates, dated December 1, 1993, File 6829, CCRD Plan Book 194, Page 24.
 - "Plan of Property 1319 Forest Ave., Portland, Me. made for G.A.H. Enterprises" by Robert P. Titcomb, Inc. dated August 3, 1984, File 1960.
 - "Property & Topo Plan 1303 Forest Avenue, Portland, Me. made for Edward & Patricia Salmon" by R.P. Titcomb Associates, Inc. dated 3/14/86, File 3515.
 - City of Portland Engineering Department Right of Way Plans, on file at the City of Portland, Department of Public Works.
 - "Amended Recording Plat, Morrill's Corner 3-Lot Subdivision on Forest Avenue, Portland, Maine for W.A. One" by Daniel T. LaPoint, CCRD Plan Book 188, Page 322.
 - "Survey Plan of Deering Pines Condominium in Portland, Maine for Village Associates" by Owen Hoskell, Inc. dated Jan. 15, 1981, CCRD UD File 57-1.
 - "Right of Way and Track Map, Portland Terminal, Station 105+60.0 to Station 211+20.0" by Portland Terminal Company, dated June 30, 1916, Sheets V-1-A, 3&4.
 - "Standard Boundary Survey, Property to be Conveyed," made for Diversified Properties Inc. by Titcomb Associates, dated 5/21/99, File 7908. Revised 6/24/99.
 - "Standard Boundary Survey, Maggie Lane Subdivision," made for Diversified Properties Inc. by Titcomb Associates, dated 2/21/99, revised to 11/06/01, recorded in Plan Book 201, Page 498, (File 7825).
 - "Plan of Half Acre Homes Surveyed for Almon F. Hill-Elmer E. Pormenter-Norman True," by E.C. Jordan and Co., CCRD Plan Book 13, Page 2.
 - Standard Boundary Survey, Property to be conveyed by W.A. One, made for W.A. One, by Titcomb Associates, 5/21/99 and revised to 9/23/02.

- EASEMENTS & ENCUMBRANCES:**
- See Book 14215, Page 204 for a 10' wide Restrictive Easement as depicted on Plan Book 196, Page 322.
 - See Book 8977, Page 293 for 50' by 50' Easement to New England Telephone and Telegraph Company.
 - Parcel may benefit from an Easement as described in Book 8318, Page 197. (See also Book 8625, Page 263 and Book 7885, Page 311.)
 - The parcel shown as Property 2, Parcel 3 of 9424/120 is subject to the restriction that no building shall be erected within fifteen feet of any street line per Deed Book 909, Page 406.
 - Lot 12 is subject to a twenty foot wide drainage easement as described in Book 18495, Page 251.
 - Lots 1-12 and 18 are subject to a sewer easement as described in 1541/96 and shown on a plan entitled "Maggie Lane Subdivision" recorded in the Cumberland County Registry of Deeds in Plan Book 200, Page 128.
 - Lots 16 and 17 are subject to a twenty foot wide drainage easement and a detention pond easement as shown. Said lots also benefit from and are subject to a thirty foot wide common driveway easement as shown. Lot 15 is subject to a detention pond easement as shown.

- NOTES:**
- Bearings are referenced to plan reference 1.
 - Book and Page references are to the Cumberland County Registry of Deeds.
 - Elevations are based on the US Coast and Geodetic Survey 1929 Datum. Benchmark: USGS Disk K5-110, Elevation 109.485'.
 - Locations of underground utilities shown on this plan are approximate, based field location of observable features and information supplied by others and should be field verified by DIGSAFE and/or the appropriate utility prior to any excavation or design.
 - Subdivision at the time of approval is defined as "Subdivision shall mean the division of a lot, tract or parcel of land into three (3) or more lots, including lots of forty (40) acres or more, within any five-year period whether accomplished by sale, lease, development, buildings or otherwise and as further defined in 30-A, M.R.S.A. Section 14-40. The term subdivision also include the division of a new structure or structures on a tract of parcel of land into three (3) or more dwelling units within a five-year period and the division of an existing structure or structures previously used for commercial or industrial use into three (3) or more dwelling units within a five-year period. The area included in the expansion of an existing structure is deemed to be a new structure for the purpose of this paragraph. A dwelling unit shall include any part of a structure which, through sale or lease, is intended for human habitation, including single-family housing, condominiums, time-share units and apartments".
 - This plan is sheet 2 of a plan set of 10 sheets entitled "Carriage Lane." Which is on record in the City of Portland Planning Office.
 - Development of the parcels proposed as part of this plan shall be in accordance with Division 5 (Sections 14-85 through 14-93 of sections 14-116 through 123) of Chapter 14, Land Use, of the Code of Ordinances of the City of Portland, Supplement 5, Dated January 1999 or as amended from time to time. Excerpts of the dimensional requirements (R3 Zone) are presented below. (Note: Lots 1 and 18 are in the R3 Zone.)

- NOTES (cont.):**
- Each lot shall require the submission of a site review plan prior to the issuance of a building permit and shall be subject to review pursuant to Article V of Chapter 14 of The Portland City Code.
 - A minimum of two street trees per unit shall be conserved or planted meeting the City of Portland Arboricultural Specification and Standard of Practice and Landscape Design Guidelines. Development may contract for the placement of landscaping, but shall remain ultimately liable to the City of Portland for financial obligation for compliance with City ordinances and approvals. Such financial obligation shall be neither transferable nor notifiable by the developer. Said responsibility is met upon a performance guarantee being accepted by the City of Portland for each lots development.
 - No Public Service (i.e. Snow Plowing, Trash Removal, Lighting) will be provided unless and until the proposed street is accepted by the City Council. Until road acceptance, trash removal, snow plowing, street maintenance and lighting shall be the responsibility of the developer. Such financial obligation shall be neither transferable nor notifiable by the developer.
 - "NO PARKING" street signs shall be installed along the subdivision roadways prior to the issuance of the first house lot Certificate of Occupancy (whether permanent or temporary) for this subdivision.
 - The roadways will be completed and offered to The City for acceptance within two years of posting of the performance guarantee.
 - No Certificate of Occupancy shall be issued for any house lot in the subdivision until the base pavement has been completed along the entire length of Carriage Lane.
 - The grading and building foundation elevations for a residential house on a lot shall be:
 - The higher of the following:
 - The elevation of the fill line at the foundation shall be elevated a minimum of 3% or greater in height above the street curb or edge of pavement (i.e., 15 inches for 50 feet). The foundation reveal shall be a minimum of 12 inches above the fill line.
 - The bottom of the footing elevations shall be set to maintain a minimum pitch of 1/8 inch per foot along the foundation drain to the underdrain system within the street at the point of connection.
 - The elevation of the fill line at the foundation shall be a minimum of 2' above the top of the sewer service lateral as it enters the building. The foundation reveal shall be a minimum of 12 inches above the fill line.

Minimum Lot Size	R-5 6,000 S.F.	R-3 6,500 S.F.
Minimum Frontage	50 Ft.	50 Ft.
Minimum Setbacks:		
Front Yard	20 Ft.	25 Ft.
Rear Yard	20 Ft.	25 Ft.
Side Yard *		
1 Story	8 Ft.	8 Ft.
1 1/2 Stories	8 Ft.	8 Ft.
2 Stories	12 Ft. **	14 Ft.
2 1/2 Stories	14 Ft.	16 Ft.
Side Yard * on Side Streets	20 Ft.	20 Ft.
Minimum Lot Width	90 Ft.	N/A
Other Uses	60 Ft.	75 Ft.

* 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 side yard shall be less than eight (8) feet in width. Said reduction does not require an amended recording plat.

** Side yards shown on plan are 12 feet and may be increased or decreased depending upon number of stories.

OR: In the event that the lot grade at the front yard setback is greater than 2 feet below the street curb or edge of pavement, the bottom of the footing elevations shall be set to maintain a minimum pitch of 1/8 inch per foot to a free flowing outlet located within the lot limits or within the street underdrain system (if available).

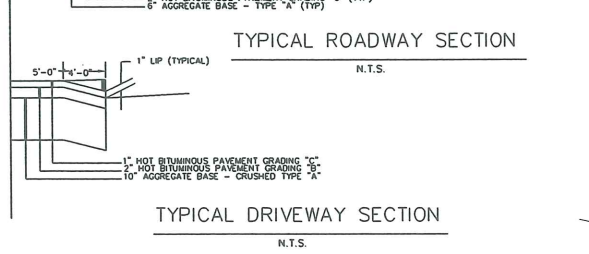
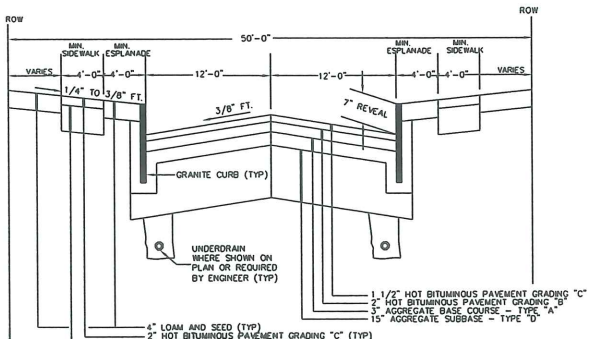
OR: In the event that the lot grade at the front yard setback's greater than 2 feet below the street curb or edge of pavement, and that a free flowing outlet or connection to the street underdrain system is not feasible (i.e., due to bedrock) then details shall be submitted for installation of a sump pump for review by the Planning Authority and Code Enforcement Department.

- Any request for a revision to the minimum grade required above shall be accompanied by a grading plan sealed by a Registered Professional Engineer or Registered Land Surveyor. This plan shall be approved in writing by the Planning Authority prior to issuance of a building permit. Any revision of these approved plans shall be reviewed and approved in writing by the Code Enforcement Office and the Planning Authority prior to proceeding with the final changes.
- All driveways shall be paved prior to any occupancy permit as weather permits.
 - A portion of Carriage Lane (Right of Way 50 feet wide) is developed over the unaccepted portion of Broadway (Right of Way 40 feet wide).
 - All structures shall require the installation of sprinkler systems.
 - Any changes/alterations to this plan, require the approval of the City of Portland Planning Board.

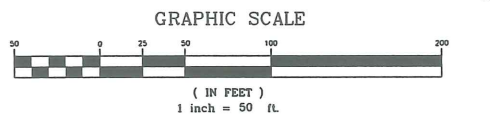
LOT	sq. ft.	acres
1	105,621	2.42
2	9,004	0.18
3	7,845	0.18
4	6,900	0.16
5	6,900	0.16
6	6,900	0.16
7	6,900	0.16
8	6,900	0.16
9	6,900	0.16
10	6,900	0.16
11	6,900	0.16
12	40,829	0.94
13	11,471	0.26
14	18,844	0.43
15	19,780	0.45
16	15,039	0.35
17	17,010	0.39
18	7,495	0.17
R.O.W.	37,053	0.85
Total	344,191	7.90

LOT	Max # of Units
1	3
2	2
3	2
4	2
5	2
6	2
7	2
8	2
9	2
10	2
11	2
12	6
13	2
14	3
15	3
16	2
17	2
18	1

KEY DEPICTS MAXIMUM NUMBER OF UNITS ALLOWED FOR THE CITY OF PORTLAND ZONING REQUIREMENTS. ANY CHANGES TO THE MAXIMUM NUMBER OF UNITS FOR LOT MUST RECEIVE THE WRITTEN APPROVAL OF THE CITY OF PORTLAND PLANNING BOARD PRIOR TO COMMENCEMENT OF CONSTRUCTION AND MUST BE RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS WITH A REFERENCE TO THE PLAN BOOK AND PAGE FOR THIS PLAN.



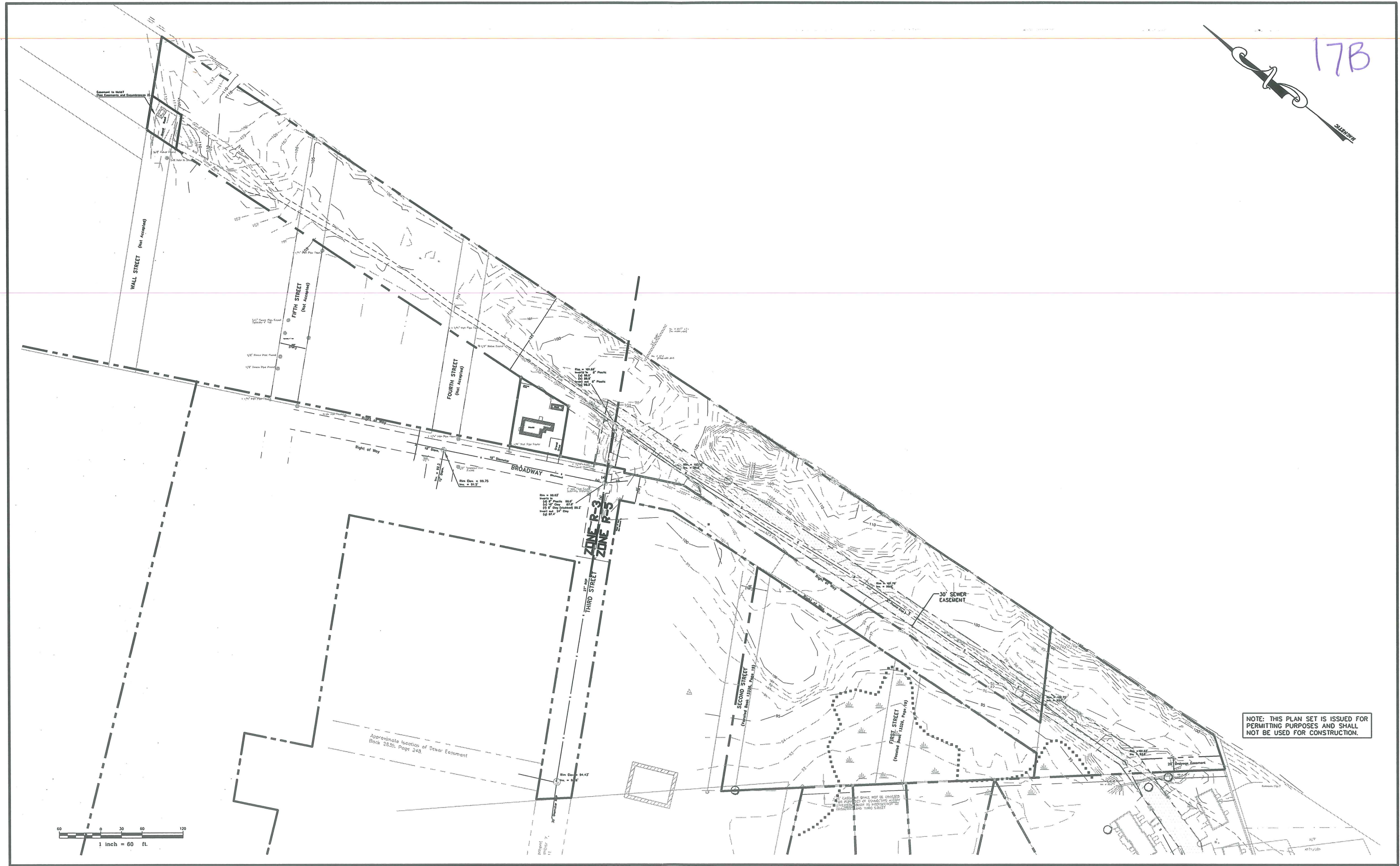
Approved by the City of Portland Planning Board
dated _____



This survey conforms to the current standards of the Maine State Board of Licensure for Land Surveyors for Category I, Condition II, except as noted:
Exception:
1) No written report
2) No description prepared
3) No pins set as of plan date
4) All pins found not described

William J. Acheson PLS #2271

17B



Rev.	Date	Revision
-	-	-

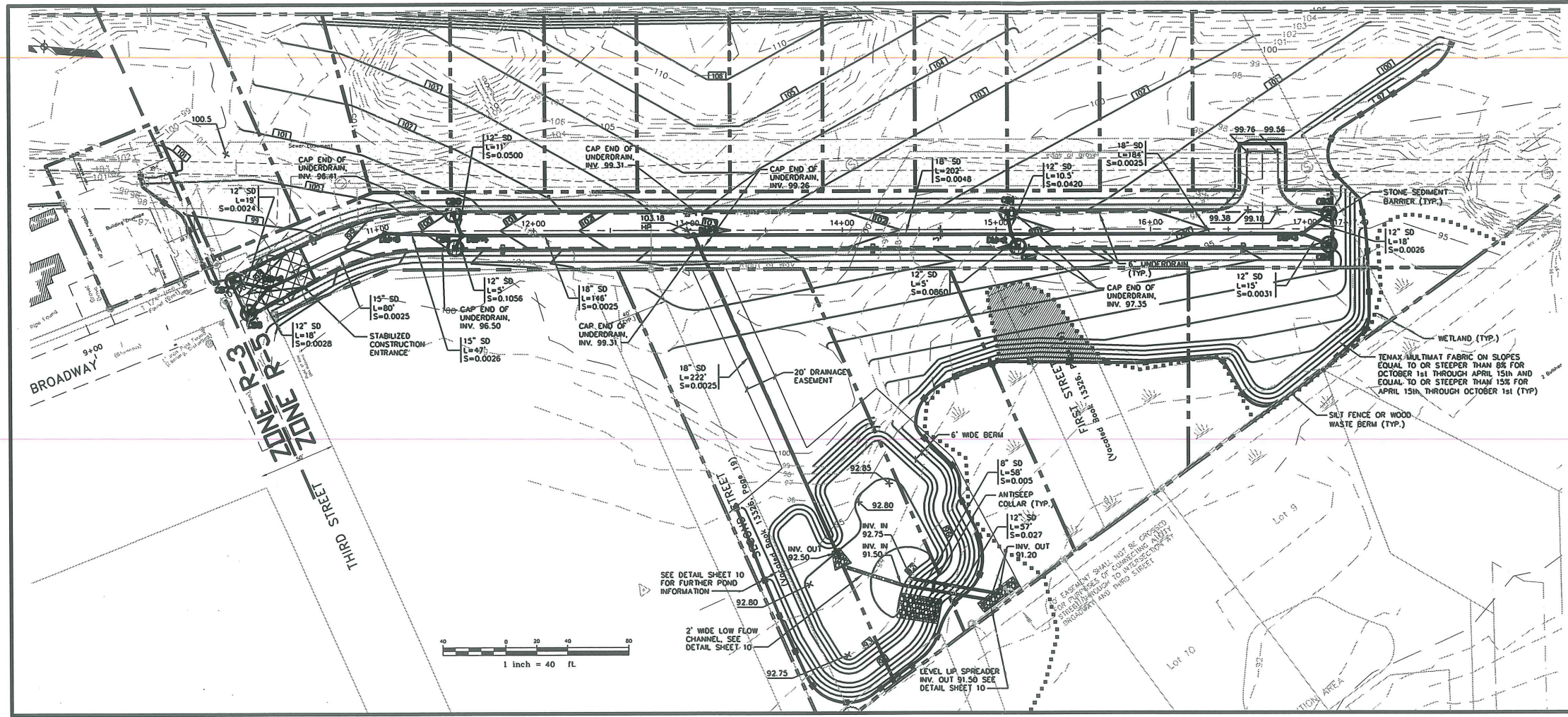
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Issued For	Date	By

Design: PDO Draft: SGB/CAH Date: OCT 2002
 Checked: AMP Scale: 1"=60' Job No.: 632
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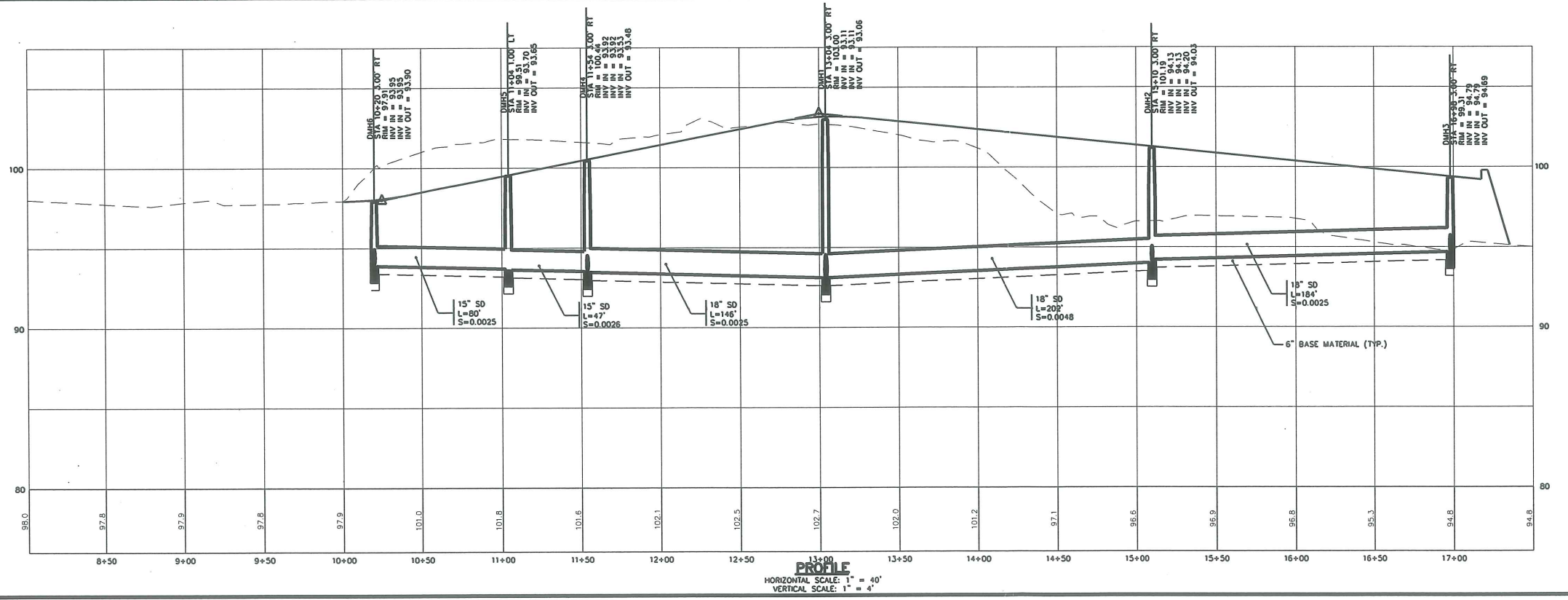
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 15 Shaker Road FAX: 207-657-6912
 Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

Drawing Name:	Existing Conditions Plan
Project:	CARRIAGE LANE
Client:	BROADWAY DEVELOPMENT PO Box 10127, Portland, Maine 04104

Drawing No.
3



STORM DRAIN SCHEDULE						
STRUCTURE	SIZE	RIM	INV. IN/DESC.(FROM)	INV. OUT/DESC.(TO)	NORTHING	EASTING
CB1	4"	100.96	97.46/6'(UD)	94.57/12'(DMH2)		
CB2	4"	100.90	97.40/6'(UD)	94.57/12'(DMH2)		
CB3	4"	98.84	95.34/6'(UD)	94.84/12'(DMH3)		
CB4	4"	98.84	95.36/6'(UD)	94.84/12'(DMH3)		
CB5	4"	100.07	96.57/6'(UD)	94.47/12'(DMH4)		
CB6	4"	100.10	96.60/6'(UD)	94.45/12'(DMH4)		
CB7	4"	97.42	94.05/6'(UD)	94.00/12'(DMH6)		
CB8	4"	97.42	94.05/6'(UD)	94.00/12'(DMH6)		
DMH1	4"	103.00	93.11/18'(DMH2)	93.06/18'(OUTLET)		
DMH2	4"	101.19	94.13/12'(CB1)	94.03/18'(DMH1)		
DMH3	4"	99.31	94.79/12'(CB3)	94.69/18'(DMH2)		
DMH4	4"	100.44	93.53/18'(DMH5)	93.48/18'(DMH1)		
DMH5	4"	99.51	93.70/15'(DMH6)	93.65/18'(DMH4)		
DMH6	4"	98.09	93.95/12'(CB7)	93.90/15'(DMH5)		



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Rev.	Date	Revision

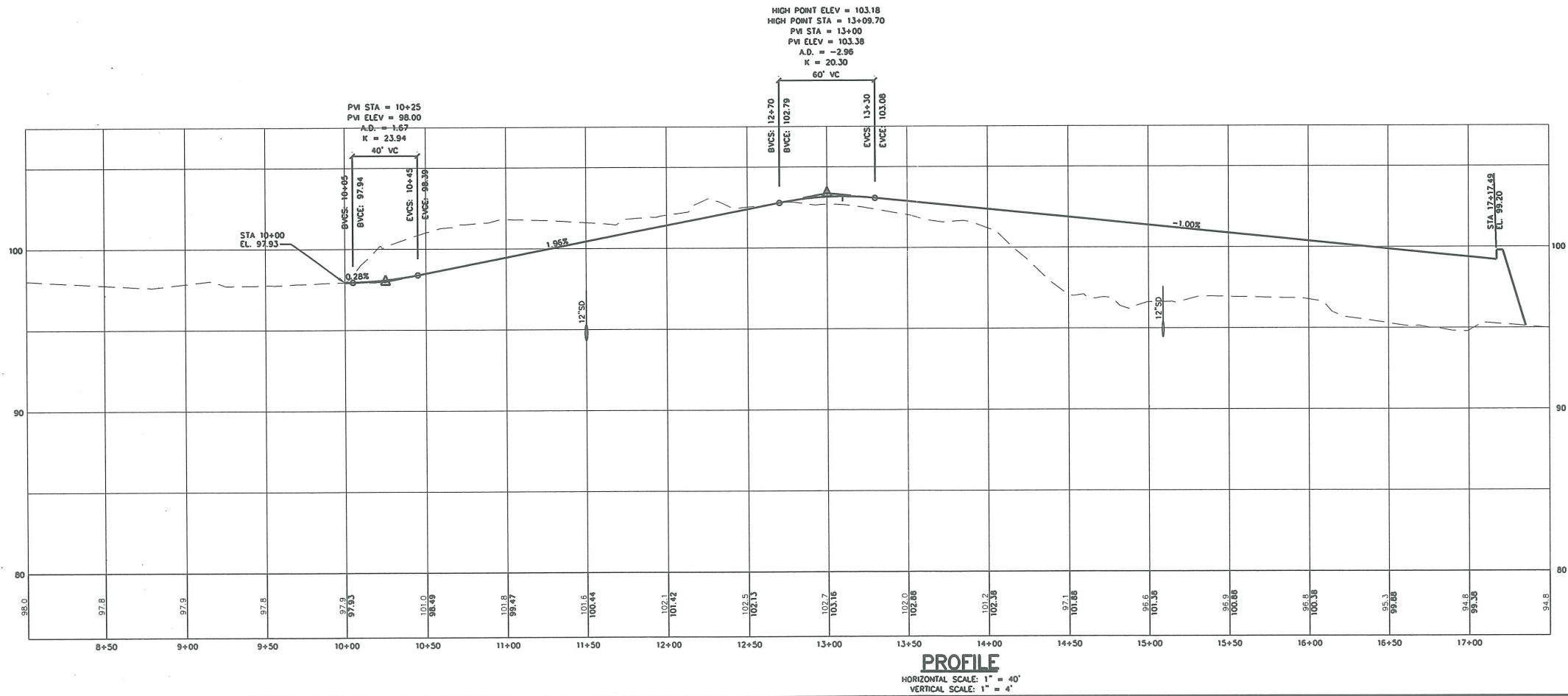
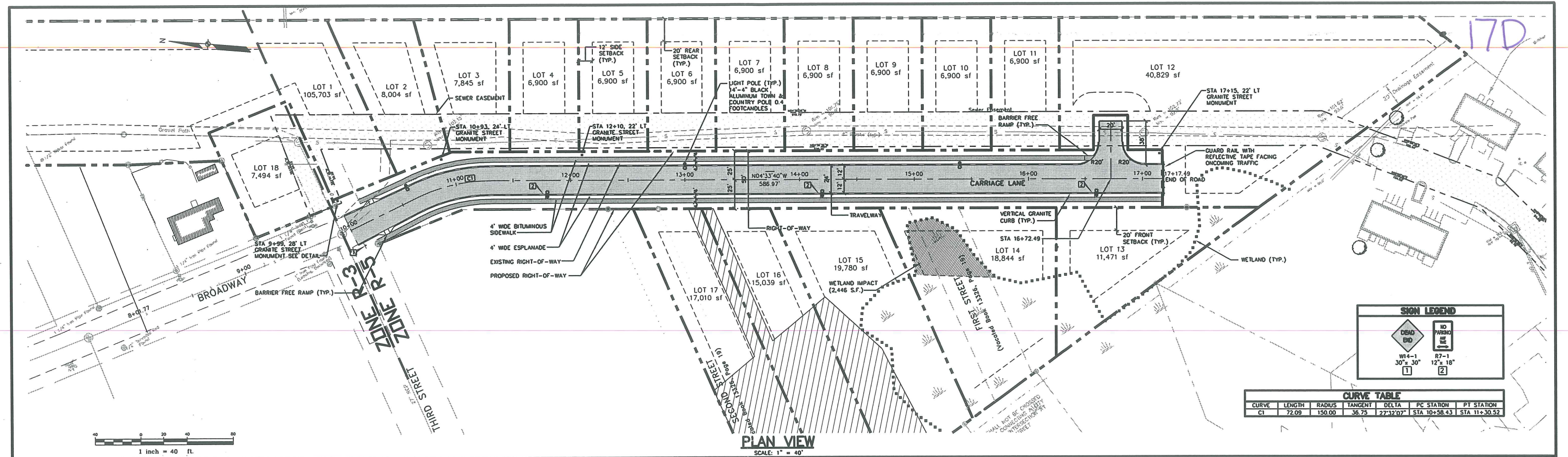
SKETCH PLAN SUBMISSION	Date	By
	1/6/03	AMP

Design: PDO Draft: SGB/CAH OCT 2002
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 15 Shaker Road FAX: 207-657-6912
 Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

Drawing Name:	Drainage Plan & Profile
Project:	CARRIAGE LANE
Client:	BROADWAY DEVELOPMENT PO Box 10127, Portland, Maine 04104

Drawing No.
6



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Rev.	Date	Revision

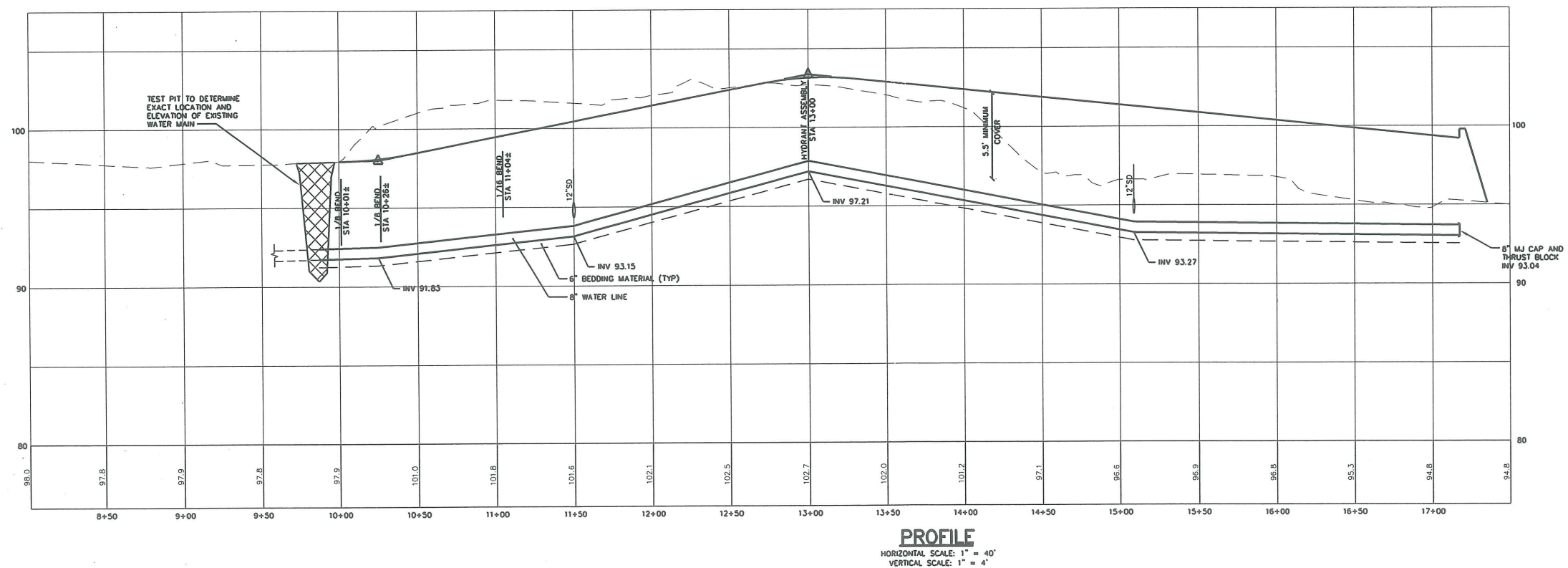
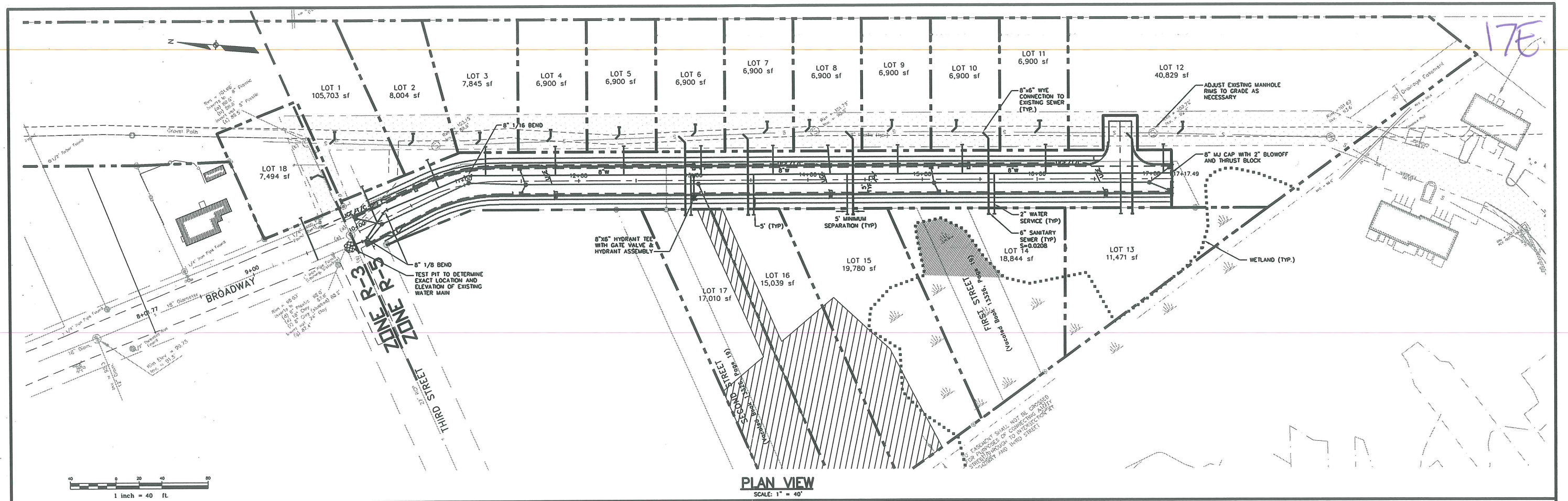
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 Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

Drawing Name:	Layout Plan & Profile
Project:	CARRIAGE LANE
Client:	BROADWAY DEVELOPMENT PO Box 10127, Portland, Maine 04104

Drawing No.
4



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Rev.	Date	Revision
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SKETCH PLAN SUBMISSION	1/6/03	AMP
Issued For	Date	By

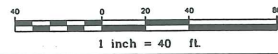
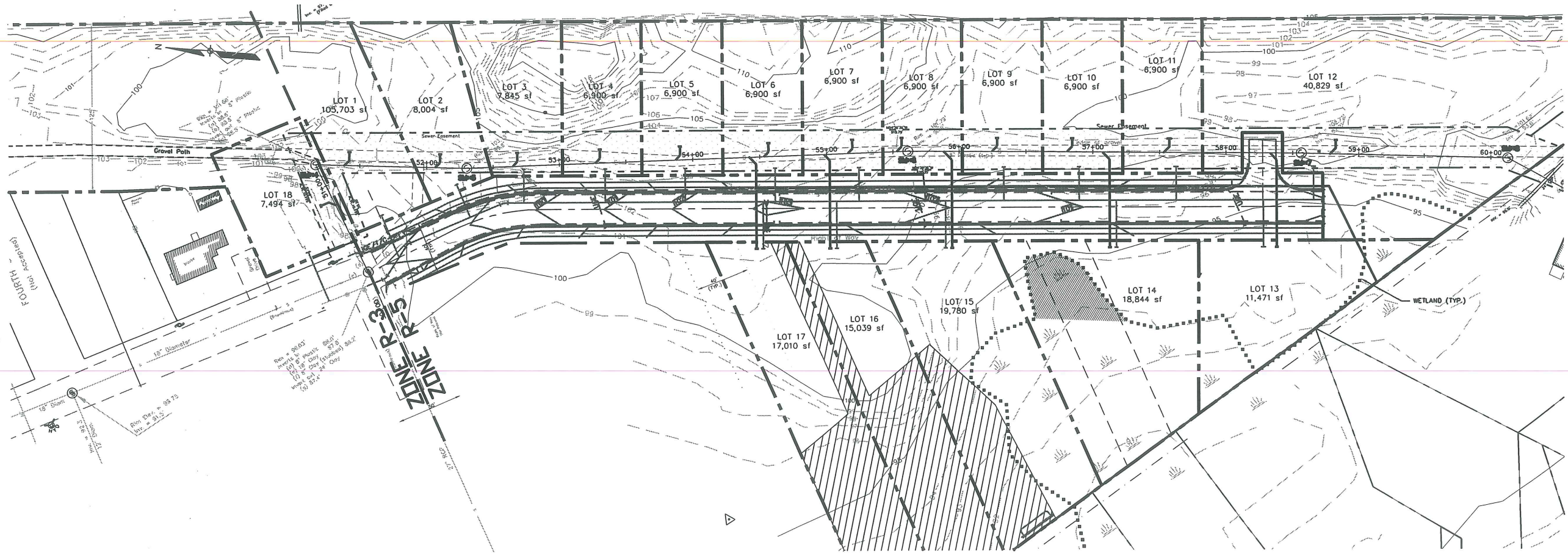
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Checked: AMP
File Name: 632-PP-UTIL
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207-657-6912
E-Mail: mailbox@gorrillpalmer.com

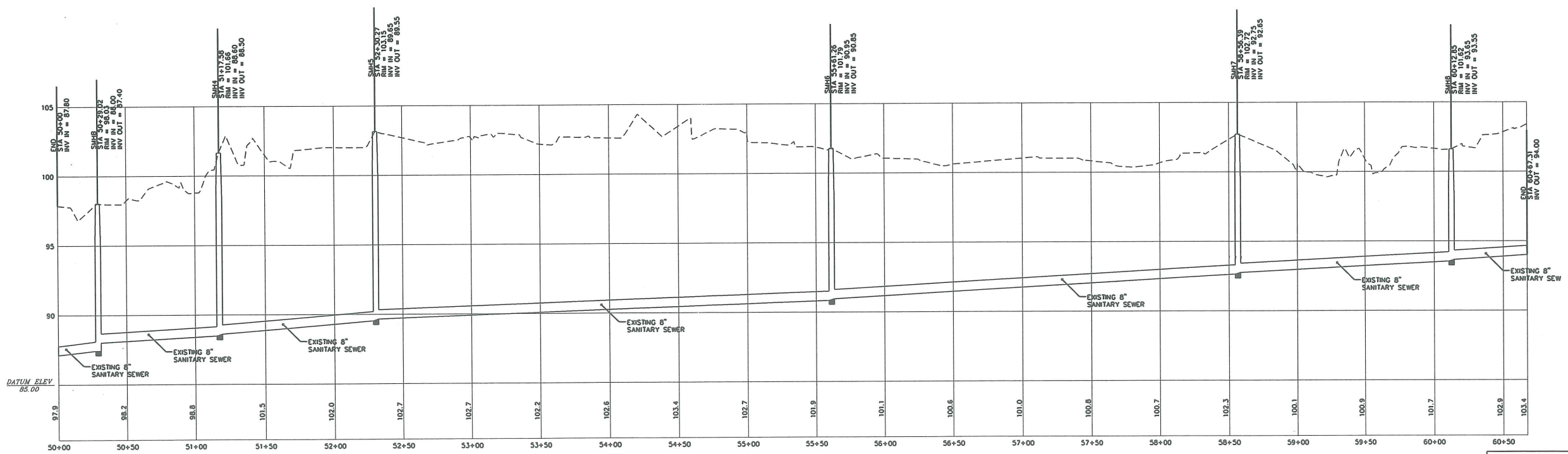
Drawing Name:	Utility Plan & Profile
Project:	CARRIAGE LANE
Client:	BROADWAY DEVELOPMENT PO Box 10127, Portland, Maine 04104

Drawing No.
5

17F



PLAN VIEW
SCALE: 1" = 40'



PROFILE
HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

Rev.	Date	Revision

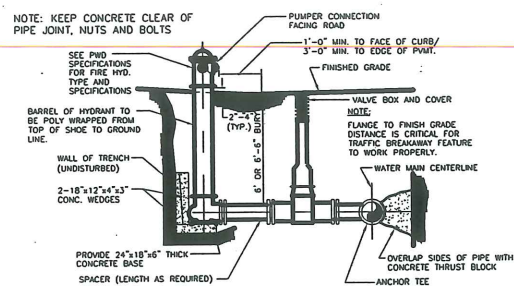
SKETCH PLAN SUBMISSION	1/6/03	AMP
Issued For	Date	By

Design: PDO DB NOV 2002
Checked: AMP Scale: AS SHOWN Job No.: 632
File Name: 632-PP-SEWER
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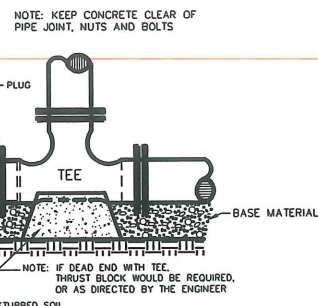
GP Gorrill-Palmer Consulting Engineers, Inc.
Traffic and Civil Engineering Services
PO Box 1237 207-657-6910
15 Shaker Road FAX: 207-657-6912
Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

Drawing Name:	Existing Sewer Plan & Profile
Project:	CARRIAGE LANE
Client:	BROADWAY DEVELOPMENT P.O. Box 10127, Portland, Maine 04104

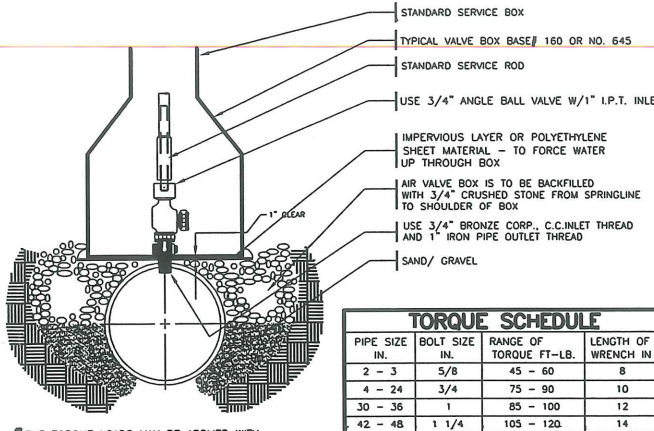
Drawing No.
5A



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
FIRE HYDRANT INSTALLATION DETAIL
N.T.S.



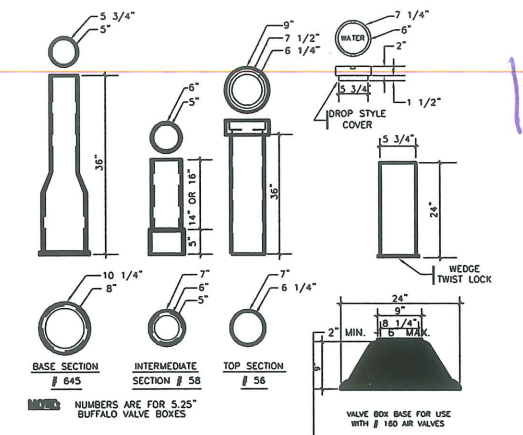
SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
STANDARD TEE BLOCKING
N.T.S.



TORQUE SCHEDULE

PIPE SIZE IN.	BOLT SIZE IN.	RANGE OF TORQUE FT.-LB.	LENGTH OF WRENCH IN *
2 - 3	5/8	45 - 60	8
4 - 24	3/4	75 - 90	10
30 - 36	1	85 - 100	12
42 - 48	1 1/4	105 - 120	14

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
TYPICAL AIR VALVE SECTION (1")
N.T.S.



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
TYPICAL VALVE BOXES
N.T.S.

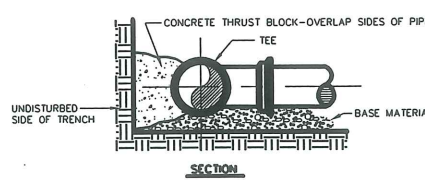
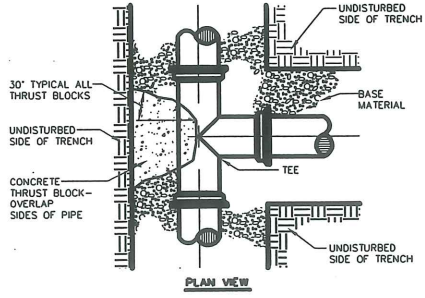
THRUST BLOCK NOTES

- INSTALL POLY BARRIER BETWEEN PIPE AND ALL THRUST BLOCKS.
- ANY MODIFICATION TO THRUST BLOCK SIZING OR PIPE RESTRAINT REVISIONS SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO IMPLEMENTATION IN THE FIELD.
- ANY WORK RELATING TO WATER PIPING OR DETAILS SHALL BE IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT SPECIFICATIONS.

PIPE SIZE	1/32 BEND	1/16 BEND	1/8 BEND	1/4 BEND	TEES/CAPS
8"	2.0	3	6	10	8

BEARING SURFACE REQUIRED IN SQUARE FEET

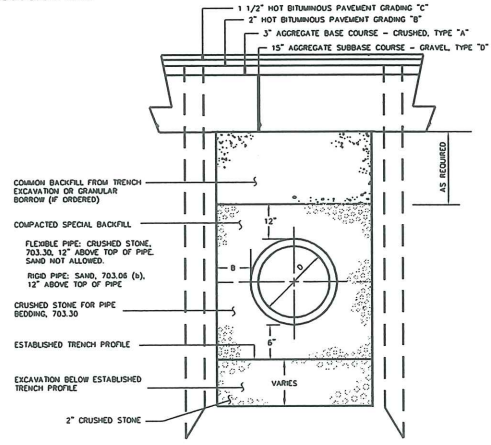
NOTE: KEEP CONCRETE CLEAR OF PIPE JOINT, NUTS AND BOLTS



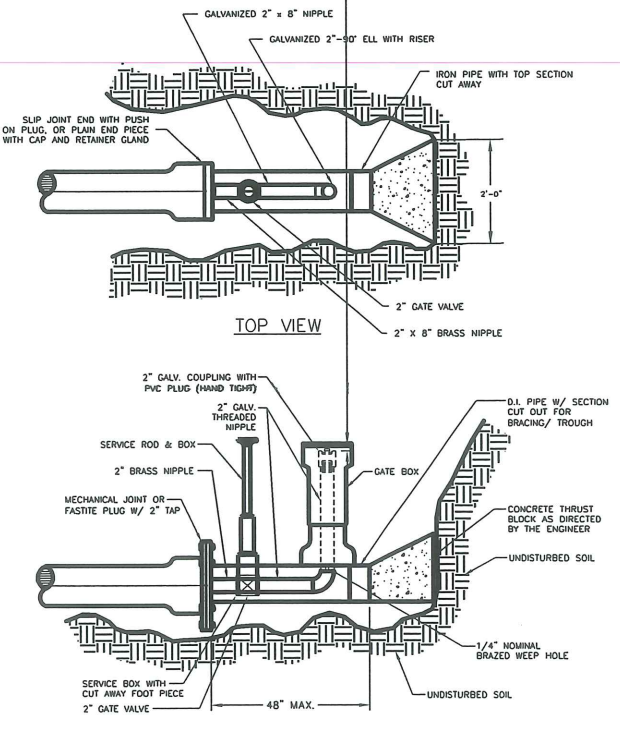
TYPICAL THRUST BLOCK PLACEMENT ON TEES
N.T.S.

PIPE DIAMETER	DIMENSION
D	B
12"	0'-10"
15"	0'-8 1/4"
18"	0'-6 1/2"

NOTES: TRENCH PAVEMENT REPLACEMENT SHALL EXTEND 8' BEYOND EDGE OF TRENCH.

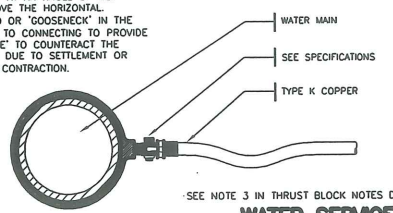


TYPICAL PIPE INSTALLATION DETAIL
N.T.S.

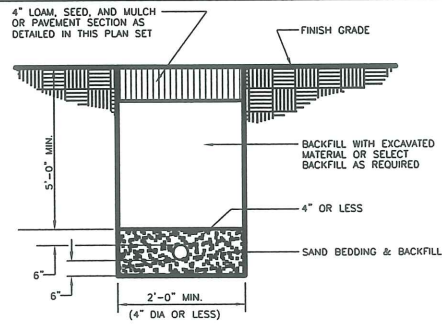


STANDARD 2\"/>

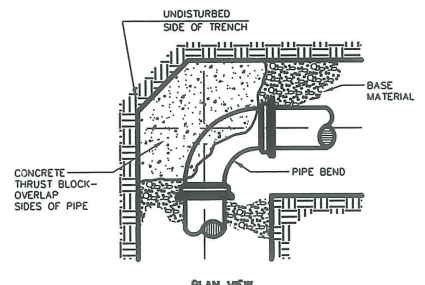
NOTE: SERVICE CONNECTIONS (DIRECT TAPS AND SERVICE CLAMPS) WILL BE INSTALLED SO THAT THE OUTLET IS AT AN ANGLE OF NOT MORE THAN 45° ABOVE THE HORIZONTAL. ALWAYS PUT A BEND OR 'GOOSENECK' IN THE SERVICE LINE PRIOR TO CONNECTING TO PROVIDE FLEXIBILITY AND 'GIVE' TO COUNTERACT THE EFFECTS OF A LOAD DUE TO SETTLEMENT OR EXPANSION AND/OR CONTRACTION.



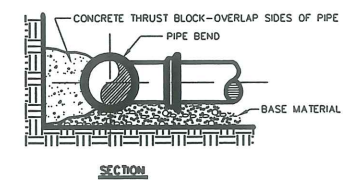
SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
WATER SERVICE
(1 1/2" AND 2 1/2" C.C. OR IRON PIPE THREAD)
N.T.S.



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
WATER SERVICE TRENCH SECTION
N.T.S.



NOTE: KEEP CONCRETE CLEAR OF PIPE JOINT, NUTS AND BOLTS



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL
TYPICAL THRUST BLOCK PLACEMENT ON BENDS
N.T.S.

THRUST/RETAINER BLOCK SCHEDULE

1/4 BEND (90°)	THRUST BLOCK w/ RETAINERS
1/8 BEND (45°)	THRUST BLOCK w/ RETAINERS
1/16 BEND (22 1/2°)	THRUST BLOCK
1/32 BEND (11 1/4°)	THRUST BLOCK

THE ABOVE SCHEDULE IS SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR DUE TO SOILS AND WORKING PRESSURES IN THE AREA.

NOTE: THIS PLAN SET IS ISSUED FOR PERMITTING PURPOSES AND SHALL NOT BE USED FOR CONSTRUCTION.

Rev.	Date	Revision

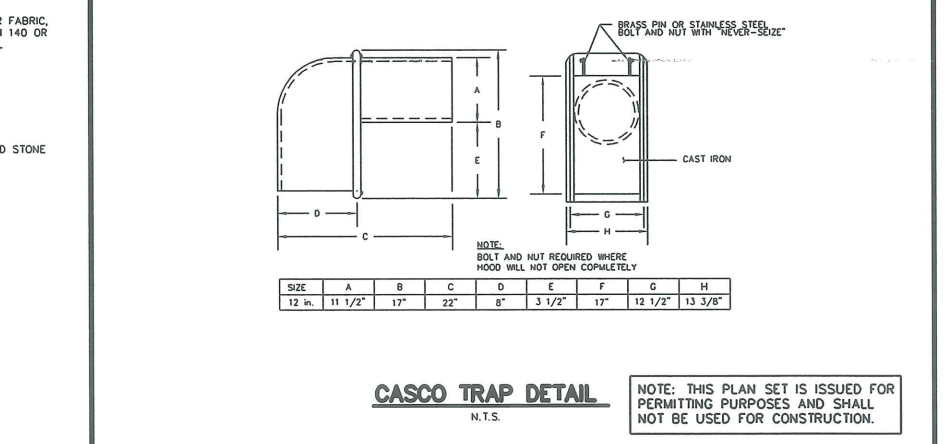
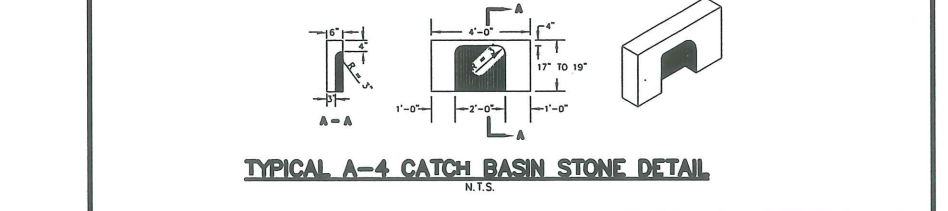
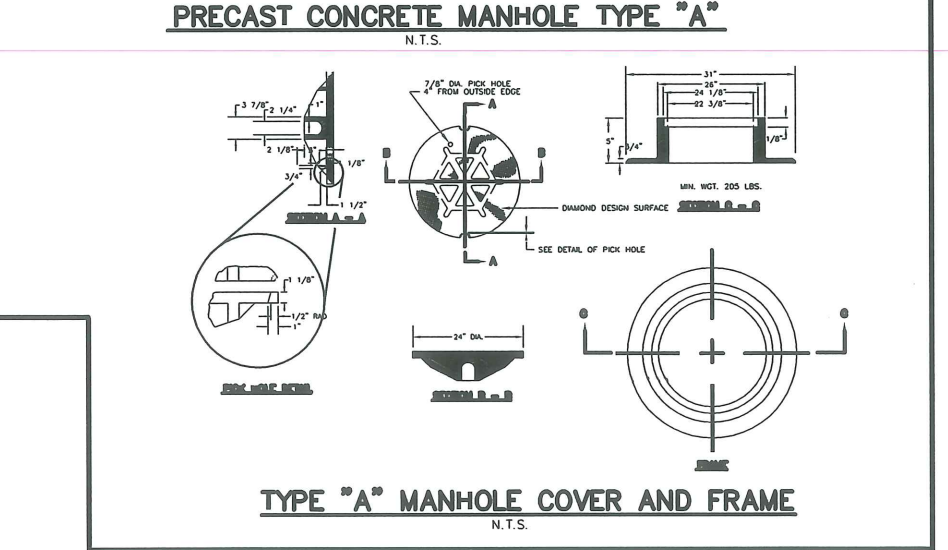
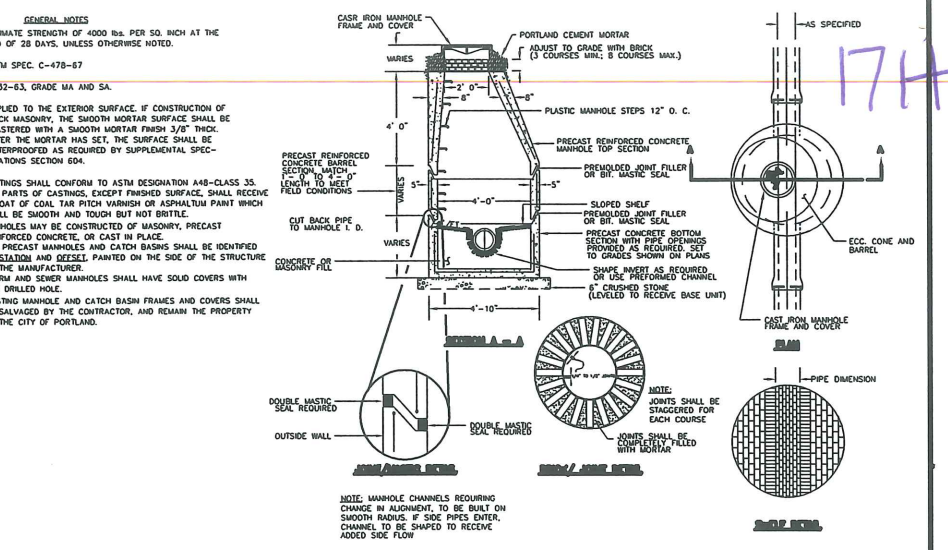
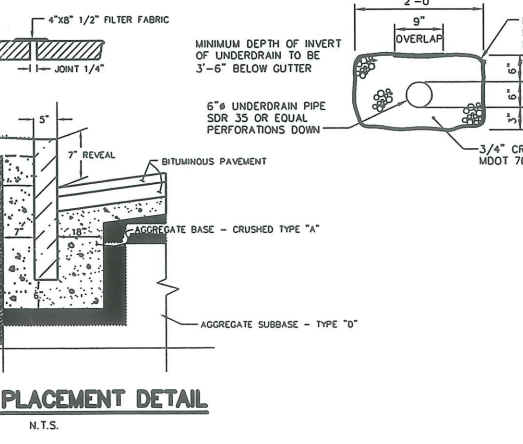
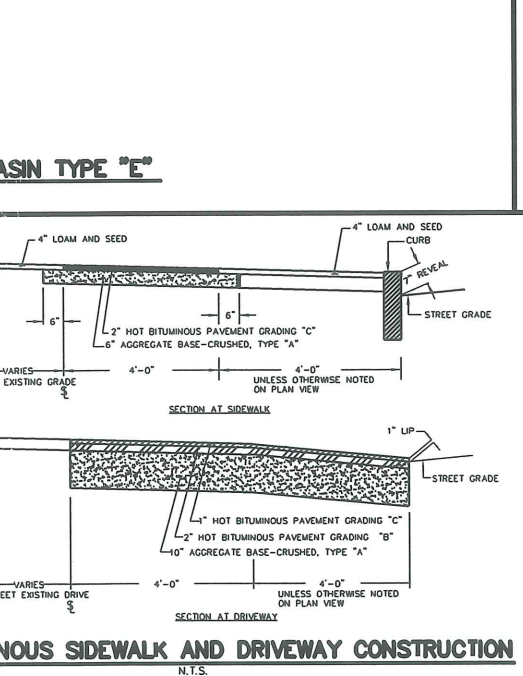
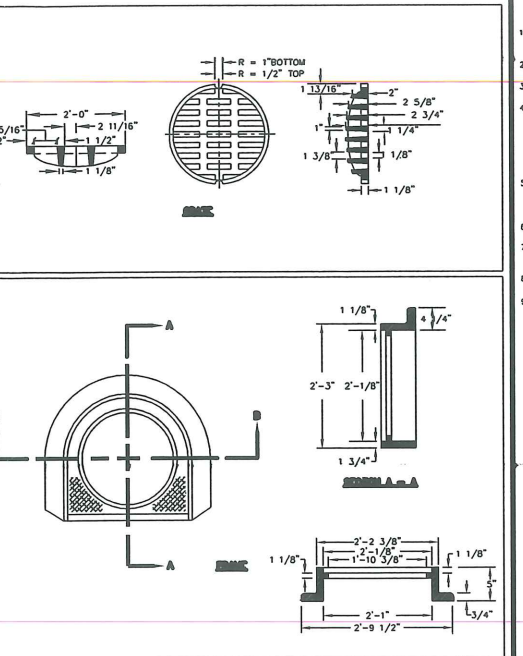
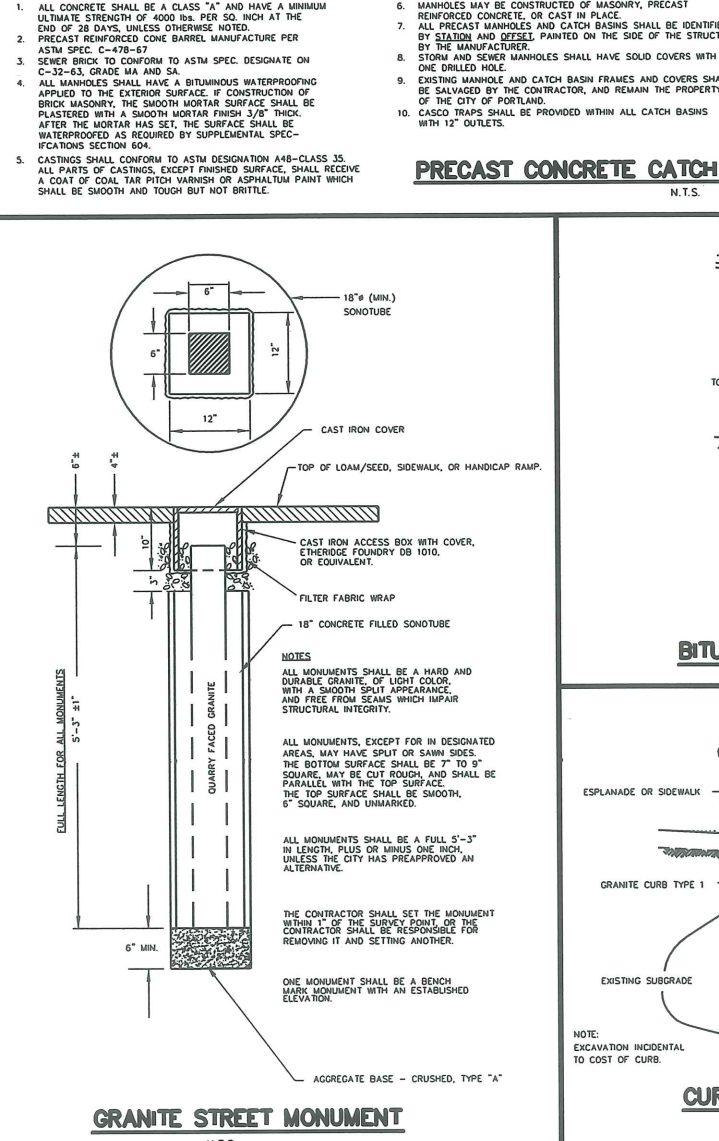
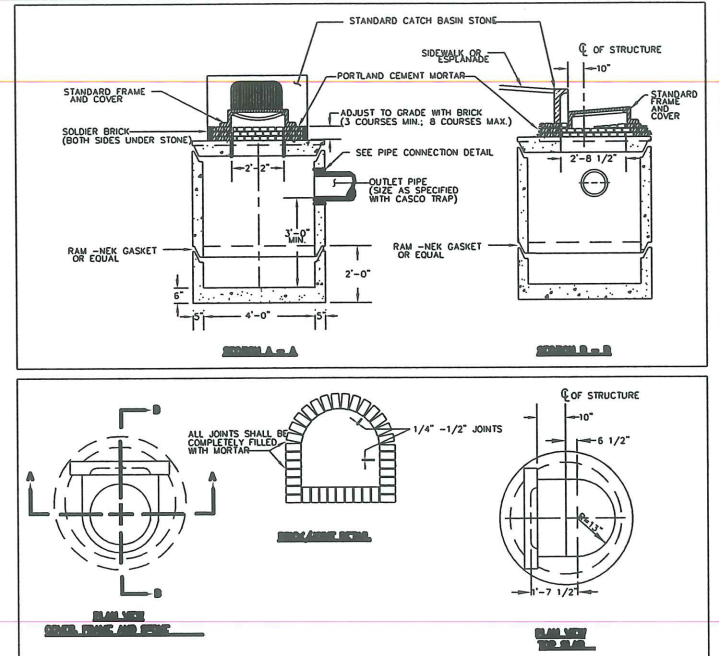
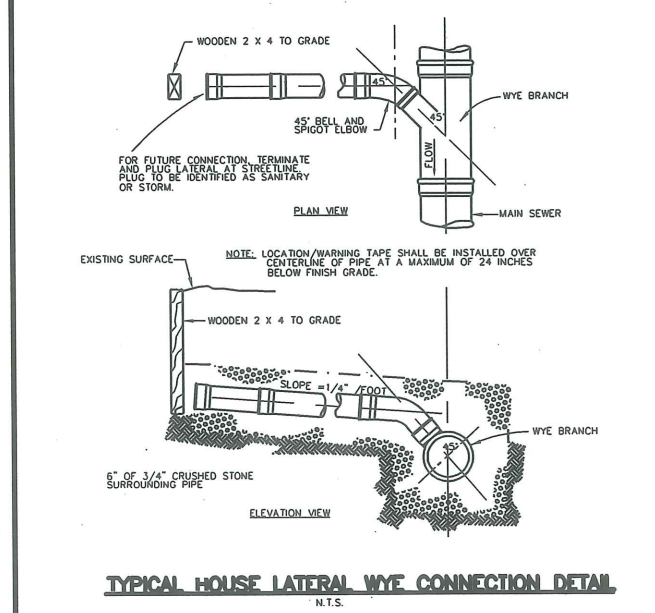
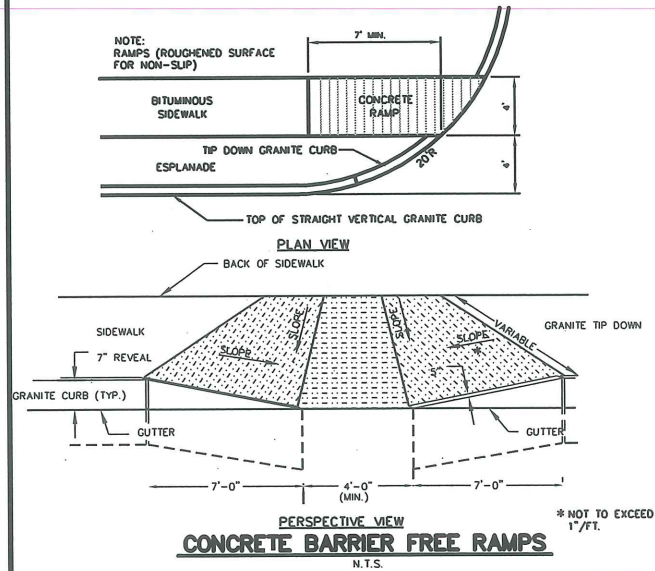
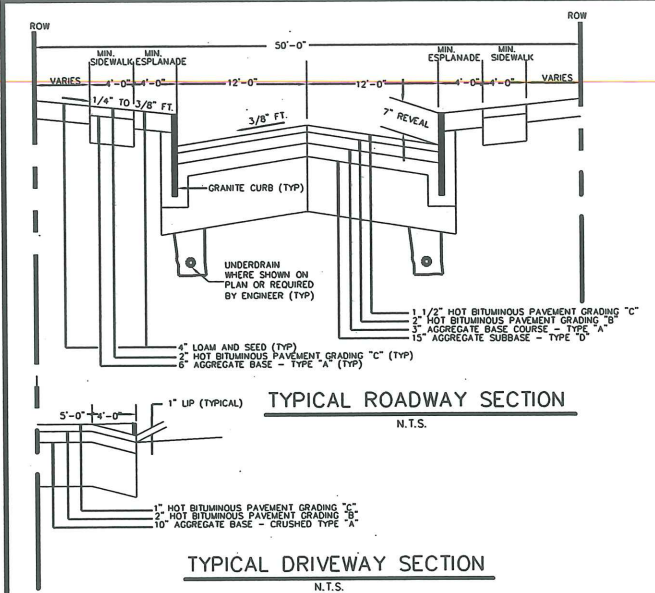
SKETCH PLAN SUBMISSION	1/6/03	AMP
Issued For	Date	By

Design: DER Draft: GJL Date: NOV 02
Checked: AMP Scale: NTS Job No.: 632
File Name: 632-DET.dwg
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Drawing Name: Utility Details
CARRIAGE LANE
Broadway Development
PO Box 10127, Portland, Maine 04104

Drawing No. 7



Rev.	Date	Revision

SKETCH PLAN SUBMISSION	1/6/03	AMP
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Design: DER Draft: GJL Date: NOV 02
 Checked: AMP Scale: NTS Job No.: 632
 File Name: 632-DET.dwg
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GP Gorrill-Palmer Consulting Engineers, Inc.
 Traffic and Civil Engineering Services
 PO Box 1237 207-657-6910
 15 Shaker Road 207-657-6912
 Gray, ME 04039 E-Mail: mail@gorrillpalmer.com

Drawing Name: **Roadway, Stormdrain & Misc. Details**
 Project: **CARRIAGE LANE**
 Client: **Broadway Development**
 PO Box 10127, Portland, Maine 04104

Drawing No. **8**

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 fill 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 proposed Carriage Lane.
2. Siltation fence or wood waste compost berms shall be installed downstream of any disturbed areas to trap runoff borne sediments until the roadway side-slopes are revegetated. The silt fence and/or the wood waste compost berms 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 or berm line. 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 in Attachment A of this section. Mulch shall not be placed over snow.
4. Temporary stockpiles of stumps, grubbing, or common excavation will be protected as follows:
 - a) Temporary stockpiles shall not be located within 100 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 100 feet of an undisturbed wetland, which have been rough graded, and are not located within a roadway subsurface 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. Broadway 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 stone 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. Wood waste compost/bark berms may be used in lieu of siltation fencing, but not in wetland areas. Berms shall be removed and spread into a layer not to exceed 3" thick once upstream areas are completed and a 75% catch of vegetation is obtained.
11. 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 1/2 the design depth of the barrier. The barrier shall be removed when the tributary drainage area has been stabilized.
12. Water and/or calcium chloride shall be furnished and applied in accordance with MDOT specifications - Section 637 - Dust Control.
13. Loom 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 in Attachment A of this section. Seeding shall not occur over snow.

B. Permanent Erosion Control Measures

The following permanent erosion control measures have been designed as part of the Erosion/Sedimentation Control Plan:

1. The storm drain outlet at the detention pond shall have a riprap apron to protect the outlet and pond bottom from scour and deterioration. An installation detail is included within the plan set with this package. The apron shall be installed and stabilized to the extent practicable prior to directing runoff to the detention facility.
2. 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 5 of Temporary Erosion Control Measures. All areas within 100' 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.
3. 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 required for roadway construction to insure the effectiveness of the erosion and sedimentation control measures are optimized:

1. Install stabilized construction entrance at the proposed Carriage Lane.
2. Clear area necessary for the roadway and detention basin construction.
3. Install perimeter siltation fence and/or wood waste berms prior to grubbing respective areas.
4. During grubbing operations, install stone check dams at any evident concentrated flow discharge points.
5. Begin construction of the detention basin, pond outlet piping, emergency spillway and level lip spreader. Excess material shall be stock-piled and stabilized for use as fill for later grading operations. Install pond and concrete pond to rough grade. Final grading and stabilization of the detention basin perimeter and side-slopes shall be completed in accordance with the timing and sequence of other project elements.
6. Commence earthwork and grading to subgrade as necessary for the roadway.
7. Commence installation of catch basins and storm drain piping.
8. Commence installation of underground utilities.
9. Install riprap outlet aprons.
10. Complete remaining earthwork operations.
11. Install subbase and base course gravels for roadway.
12. Install gravel for sidewalks.
13. Install curbing for roadway.
14. Complete installation of storm drainage structures and utility appurtenances.
15. Install base course paving for the roadway.
16. Install surface course paving for the roadway and sidewalk.
17. Loom, lime, fertilize, seed and mulch disturbed areas.
18. Remove accumulated sediment from ahead of any sediment barriers as necessary.
19. Once the site is stabilized and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.
20. 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 preceding 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 100 feet of an undisturbed wetland and 14 days for all other areas. Areas within 100 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.

Erosion, Sedimentation and Stabilization Control Plan

The Erosion, Sedimentation and Stabilization Control Plans are included in the plan set. Details and Specifications

The Erosion and Sedimentation details and specifications are included in the plan set. 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:

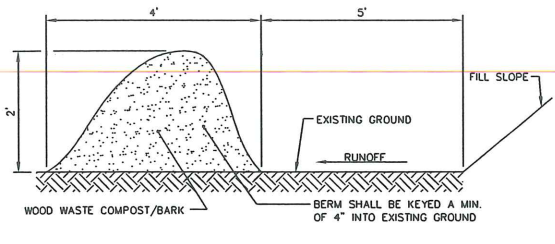
1. Limit the amount of exposed area to those areas in which work is expected to be undertaken during the preceding 15 days and that which can be mulched in the event of a predicted snow event.
2. During the construction process, all disturbed areas shall be covered with mulch within 7 days of final grading. 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 5g/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, 115g/1,000 s.f. x 2 = 230g/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 within 7 days.

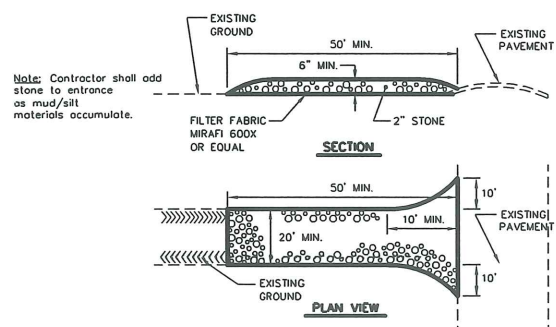
Preconstruction Conference

Prior to any construction of the site, representatives of the Contractor and the site design engineer shall arrange for and meet with the Owner and a representative of the City to discuss the scheduling of the site construction. On or before that meeting, the Contractor will prepare a detailed schedule and a marked-up site plan indicating areas and components of the work and key dates showing date of disturbance and completion of the work. If disturbed areas are not to be finished (loamed, seeded, and mulched) within seven (7) days, the scheduling shall indicate those areas to be protected with temporary seeding/mulch. Three copies of the schedule and marked-up site plan shall be provided to the Owner. Temporary seed mixture shall be annual rye grass applied at the rate of 0.9 lbs/1000 sq. ft.

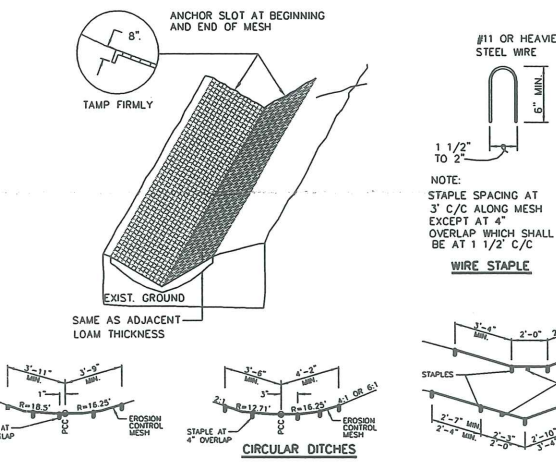


- NOTES:**
1. THE WOOD WASTE COMPOST/BARK MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:
 - A. MOISTURE CONTENT - 30-60%
 - B. pH - 5.0 - 8.0
 - C. SCREEN SIZE - 100% LESS THAN 3", MAX. 70% LESS THAN 1"
 - D. NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION.
 - E. NO STONES LARGER THAN 2" IN DIAMETER.
 - F. SILTS, CLAYS OR SUGAR SANDS ARE NOT ACCEPTABLE IN THE MIX.
 2. THE COMPOST BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.
 3. THE WOOD WASTE COMPOST/BARK FILTER BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS.
 4. BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS COMPLETED OR 70% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.
 5. WOOD WASTE COMPOST/BARK FILTER BERM SHALL NOT BE USED IN WETLAND AREAS.

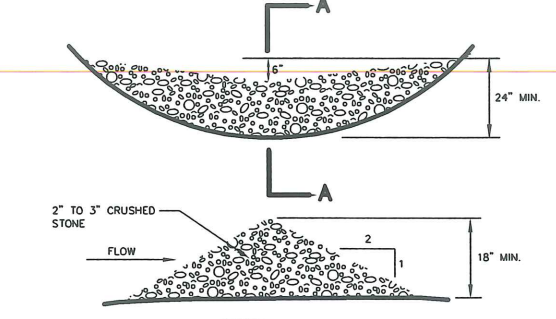
WOOD WASTE COMPOST/BARK FILTER BERM DETAIL
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



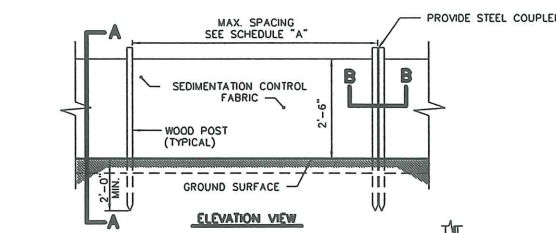
EROSION CONTROL MESH
N.T.S.



STONE CHECK DAM
N.T.S.

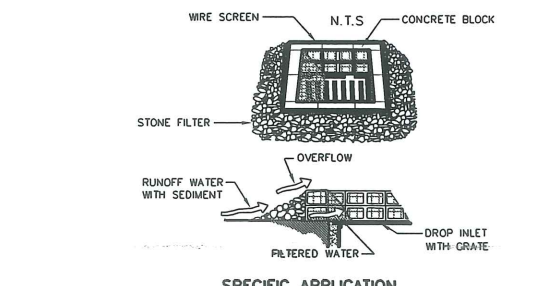
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

S ₀ (FT./FT.)	L (FT.)
0.020	75
0.030	50
0.040	40
0.050	30
0.060	20
0.100	15'



SCHEDULE "A"

SILT FENCE REINFORCEMENT	MAX. SPACING
NONE	6'
WIRE REINFORCEMENT 14 GAUGE, 6" MESH	10'



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE FLOODING 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.

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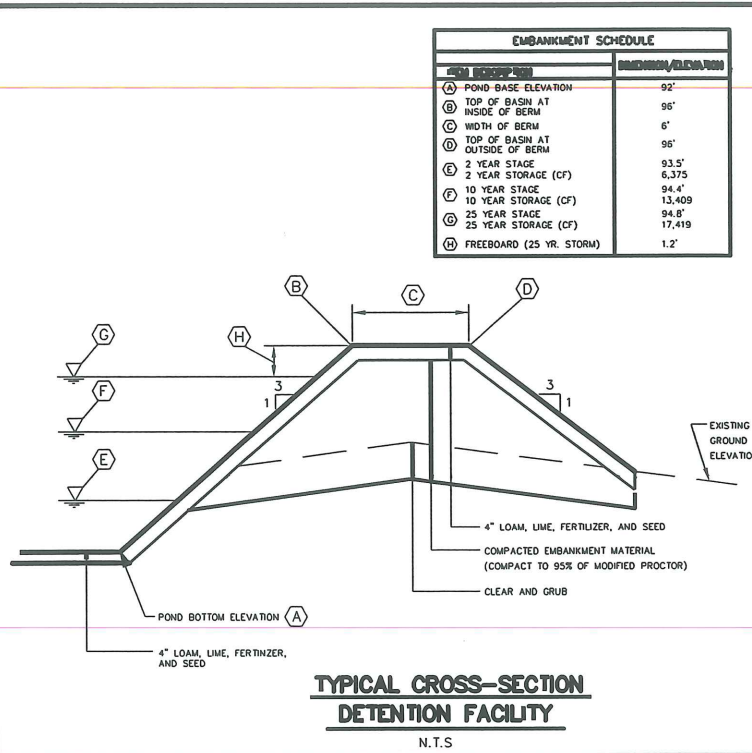
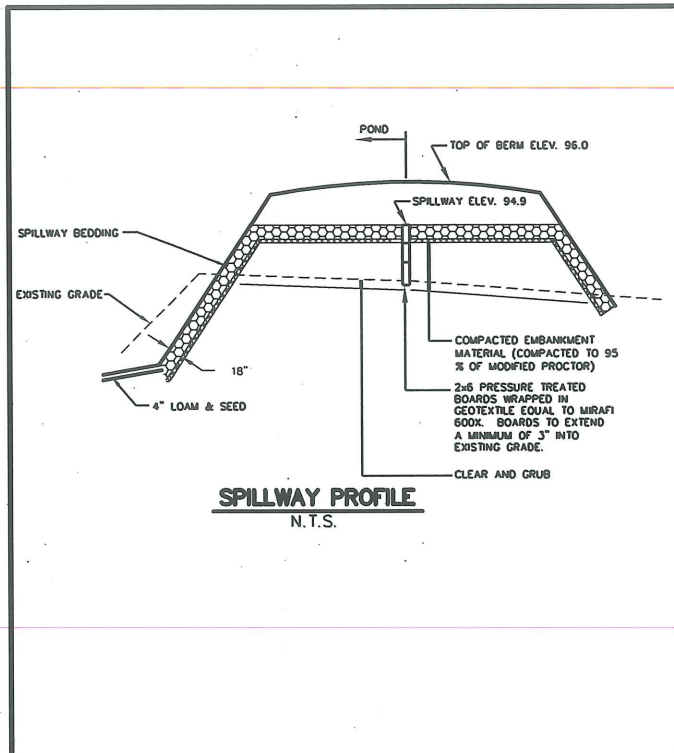
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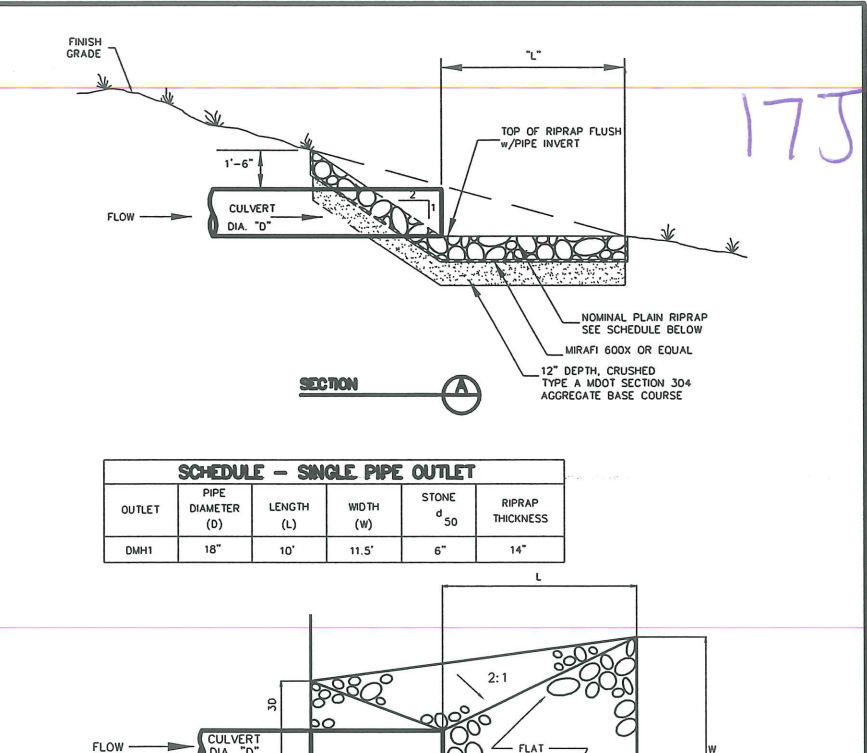
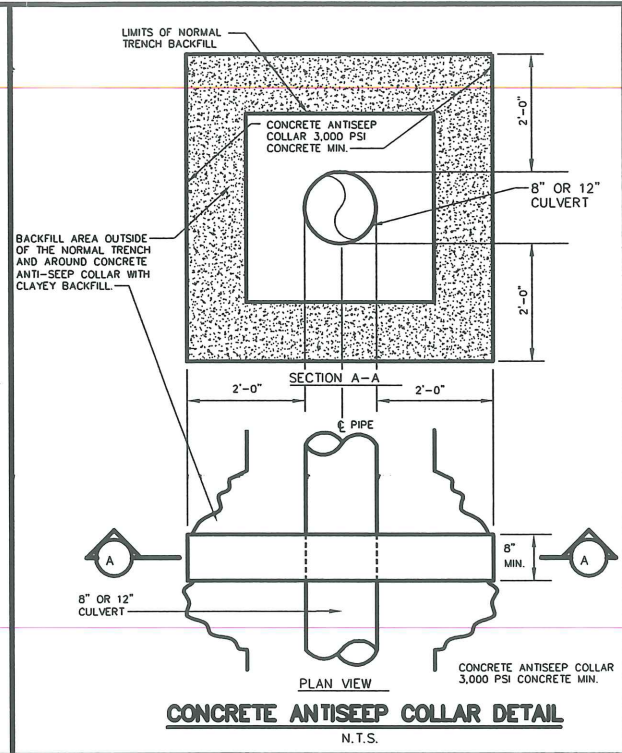
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PO Box 1237 Traffic and Civil Engineering Services 207-657-6910
15 Shaker Road FAX: 207-657-6912
Gray, ME 04039 E-Mail: mailbox@gorrillpalmer.com

Drawing Name: **Erosion & Sedimentation Control Details & Notes**
Project: **CARRIAGE LANE**
Broadway Development
PO Box 10127, Portland, Maine 04104

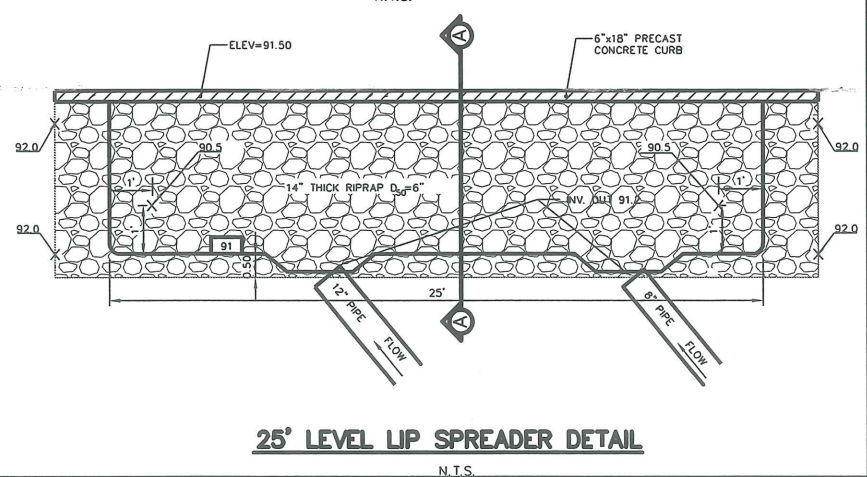
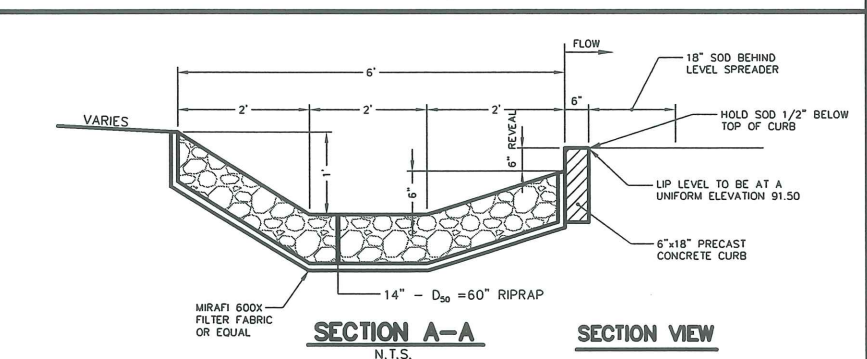
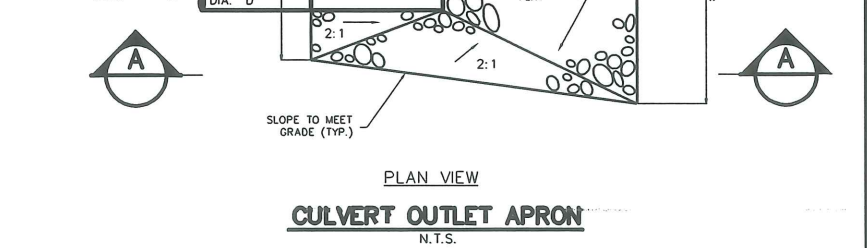
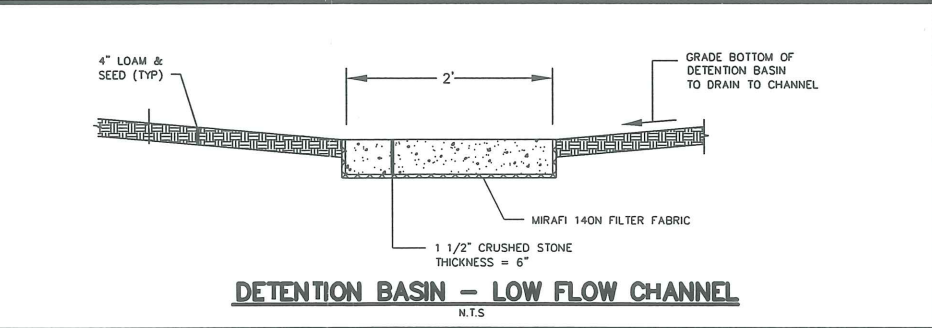
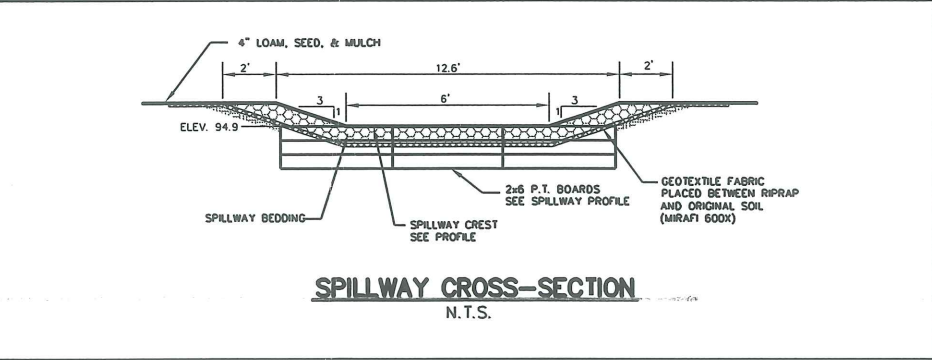
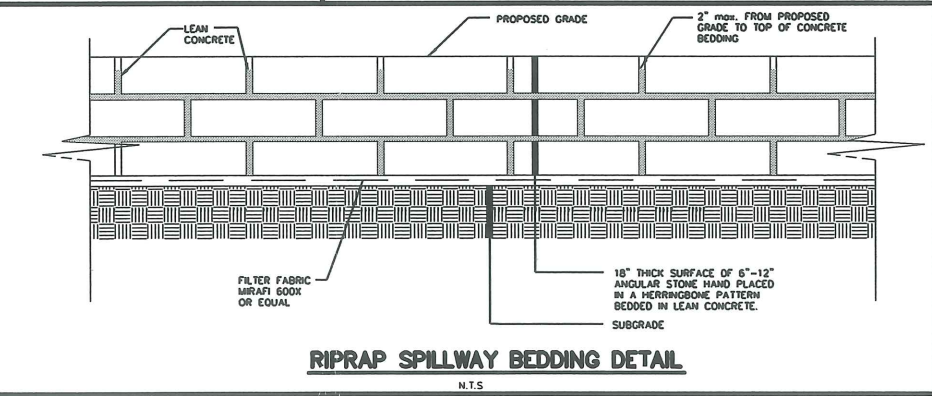
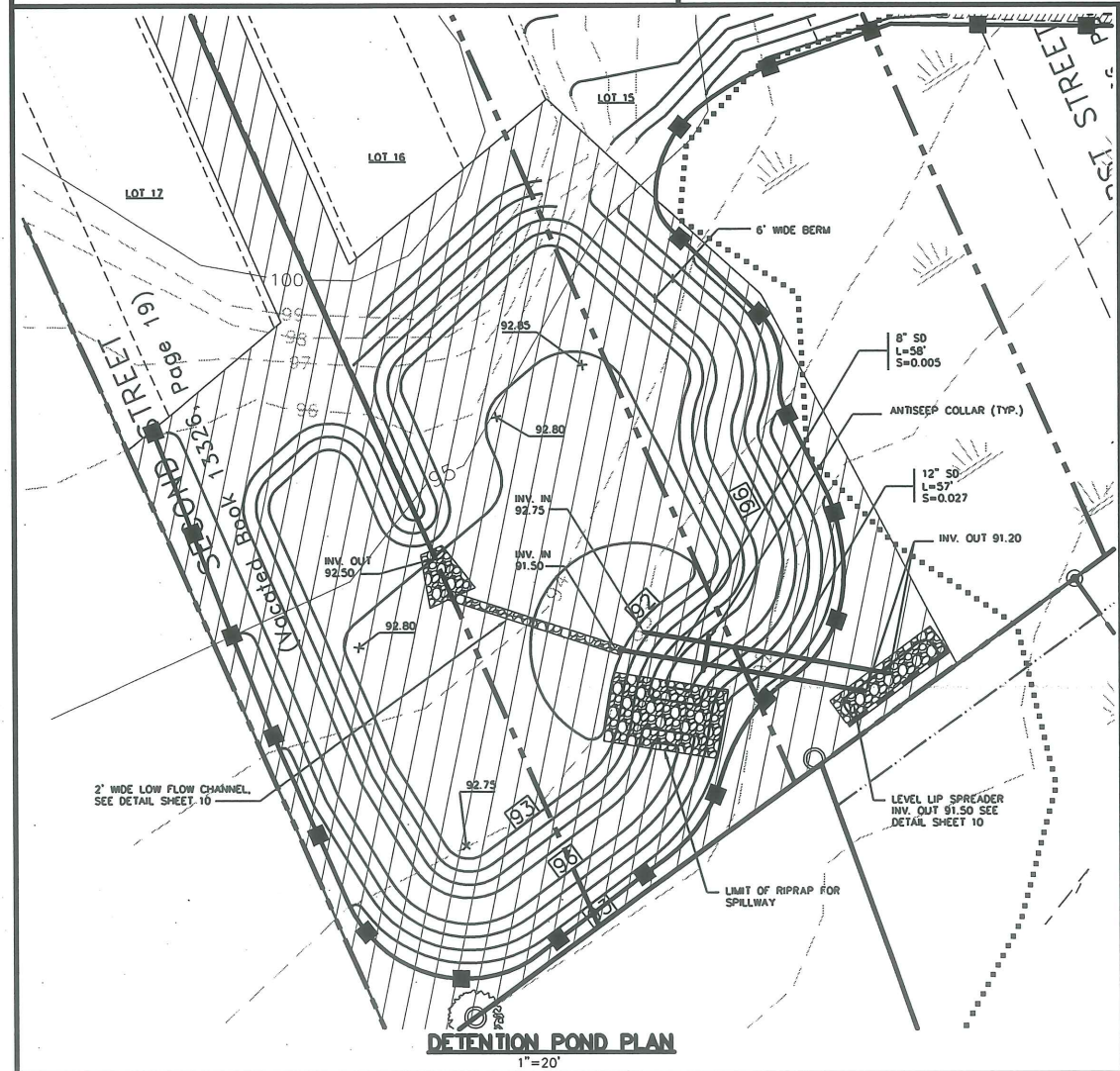
Drawing No. **9**



ITEM	MINIMUM/ELEVATION
(A) POND BASE ELEVATION	92'
(B) TOP OF BASIN AT INSIDE OF BERM	96'
(C) WIDTH OF BERM	6'
(D) TOP OF BASIN AT OUTSIDE OF BERM	96'
(E) 2 YEAR STAGE	93.5'
(F) 10 YEAR STAGE	94.4'
(G) 25 YEAR STAGE	94.8'
(H) FREEBOARD (25 YR. STORM)	1.2'



SCHEDULE - SINGLE PIPE OUTLET					
OUTLET	PIPE DIAMETER (D)	LENGTH (L)	WIDTH (W)	STONE d ₅₀	RIPRAP THICKNESS
DMH1	18"	10'	11.5'	6"	14"



Rev.	Date	Revision
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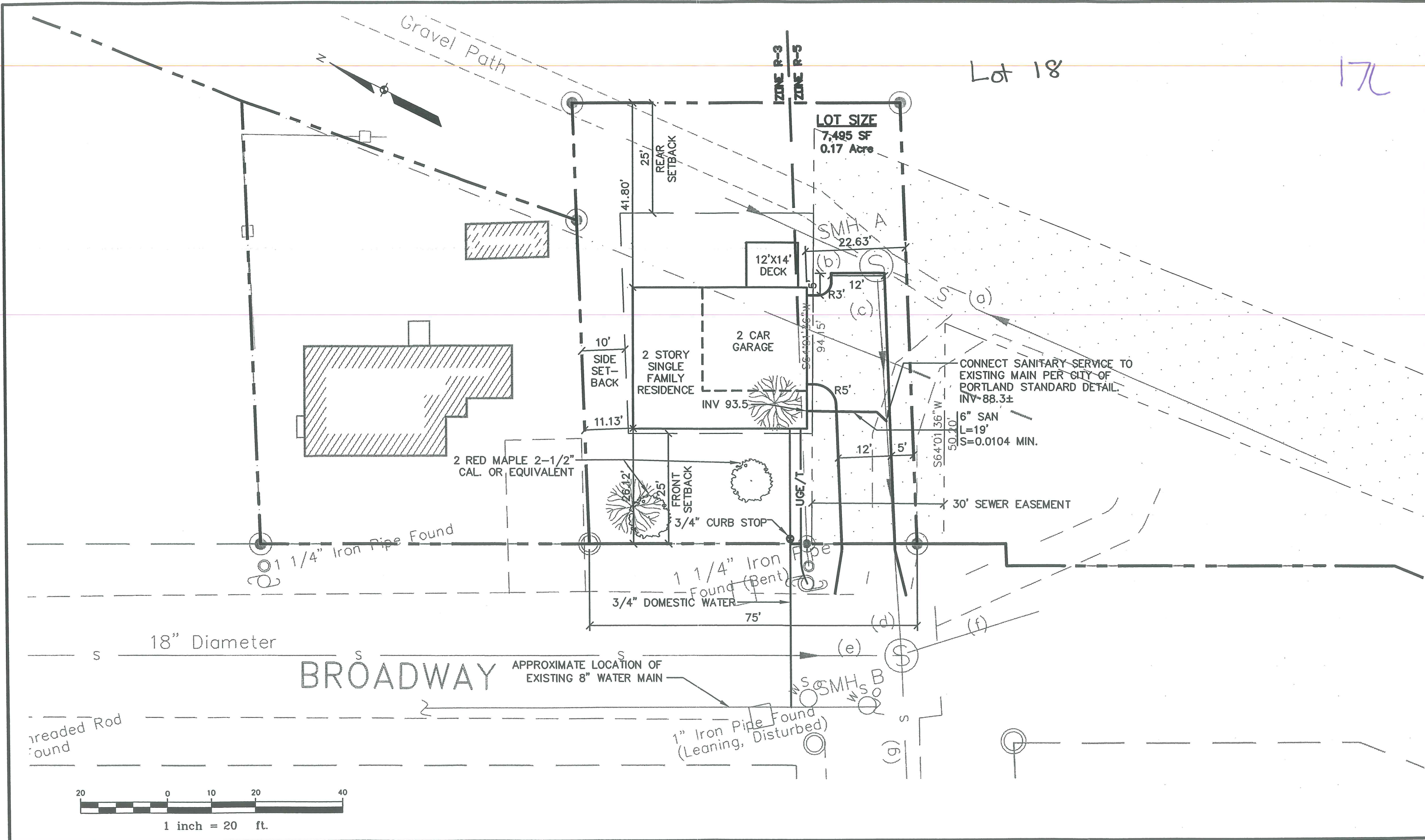
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Design: DER Draft: CAH Date: NOV 02
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Drawing Name: **Pond Details**
CARRIAGE LANE
Broadway Development
 PO Box 10127, Portland, Maine 04104

Drawing No. **10**



Rev.	Date	Revision

Design: PDO/DER	Date: NOV 2002
Draft: SGB	Job No.: 515
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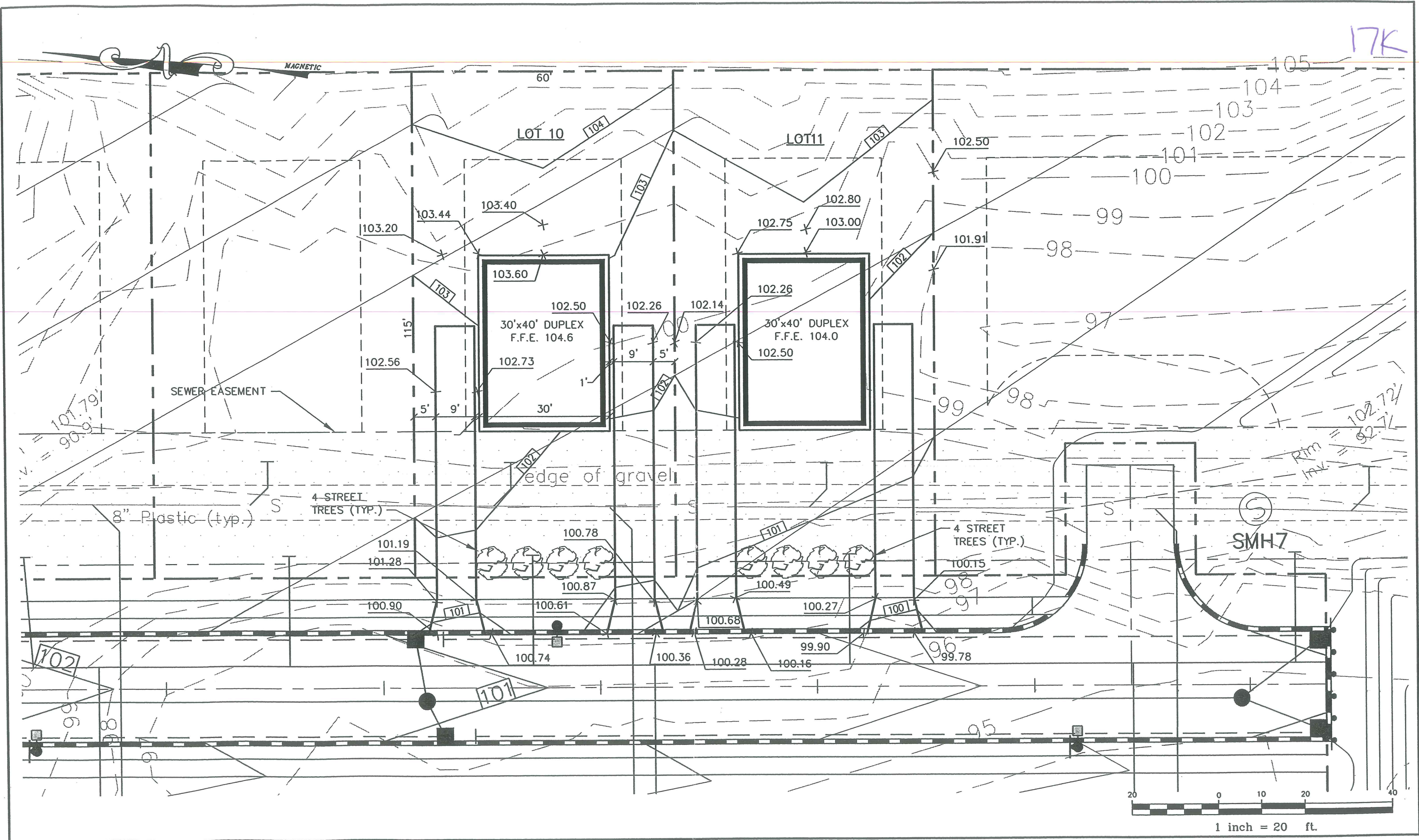
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FAX: 207-657-6912
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Drawing Name:	Site Layout & Utility Plan
Project:	BROADWAY, PORTLAND

Figure No.	2
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17K



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Design: PDO	Date: DEC 2002
Draft: CAH	Job No.: 632
Checked: DER	Scale: 1"=20'
File Name: 632-BASE	

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Drawing Name:	Lots 10 and 11
Project:	CARRIAGE LANE

Figure No.
1