429-G-1

2002-0146

65 Kensington St.

New Bld. / Dk. lot

Yacht Haven

on spreadsheet

NOTES:

1.) ELEVATIONS DEPICTED HEREON ARE BASED ON N.G.V.D. 1929.

2.) THE TOPOGRAPHY AND SPOT ELEVATIONS DEPICTED HEREON REFLECT A SURVEY PERFORMED ON SEPTEMBER 28, 2000. ONLY THOSE EXISTING UTILITIES UNOBSTRUCTED BY CONSTRUCTION DEBRIS, CONSTRUCTION EQUIPMENT, STORED MATERIALS AND MULTIPLE DUMPSTERS WERE LOCATED.

3.) THE SITE DEPICTED ON THIS PLAN IS UNDER CONSTRUCTION. INFORMATION DEPICTED ON THIS PLAN REFLECTS THE EXISTING CONDITIONS ON THE DATE OF THE FIELD SURVEY.

4.) VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITY IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.

5.) BOUNDARY LINES DEPICTED HEREON ARE BASED ON GEOMETRY AND MONUMENTATION DEPICTED ON REFERENCE PLAN 1 FROM LOCATION OF EXISTING MONUMENTATION LOCATED BY POST ROAD SURVEYING, INC. ON OCTOBER 26, 2000. THE BOUNDARIES DEPICTED HEREON ARE BASED SOLELY ON A RETRACEMENT OF THE BOUNDARIES DEPICTED ON SAID REFERENCE PLAN 1. POST ROAD SURVEYING, INC. HAS NOT PERFORMED A STANDARD BOUNDARY SURVEY ON THE PROPERTY DEPICTED.

6.) FOR LOCATION OF EASEMENTS AND ADDITIONAL UNDERGROUND UTILITIES, SEE REFERENCE PLAN 1.

7.) DEED REFERENCE TO LOCUS PARCEL: FSF MAINE PARTNERS, LLC TO YACHT HAVEN, LLC, DATED AUGUST 22, 2000, RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 15720, PAGE 73.

8.) TOPOGRAPHY DEPICTED HEREON WAS REVISED 1/18/01 FROM ADDITIONAL FIELD SURVEYS PERFORMED 1/11–13/01 WITH 18 INCHES OF SNOW COVER. POST ROAD SURVEYING, INC IS NOT RESPONSIBLE FOR LOCATION OF IMPROVEMENTS WHICH ARE NOT VISIBLE OR APPARENT TO DUE TO SNOW COVER.

REFERENCE PLANS:

1.) "STANDARD BOUNDARY SURVEY FOR WEBBER PETROLEUM COMPANY, KENSINGTON STREET, CUMBERLAND COUNTY, PORTLAND, MAINE," DATED MAY 15, 1989, REVISED 8/24/1989, PREPARED BY RICHARD N. PERRY, JR. P.L.S., 586 HAMMOND STREET, BANGOR, MAINE 04401.

2.) "CANADIAN NATIONAL RAILWAYS, ST. LAW. DIV., BERLIN SUB. DIV., DEERING, PROPOSED SALE OF LAND TO SUN OIL COMPANY," DATED JULY 5, 1938, LAST REVISED JULY 31, 1961, PREPARED BY J.R. BRAYNE, AREA ENGINEER, FILE 4520–71, PLAN 1183, RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 66, PAGE 9.

BENCH MARK DATA:

BM1 ELEV. 25.04' N.G.V.D. 1929

DESCRIPTION – 5" SQUARE GRANITE MONUMENT WITH BRASS PLUG AT THE INTERSECTION OF LENNOX AND KENDALL STREETS (F.E.M.A. REFERENCE MARK 26).

BM2 ELEV. 23.98' N.G.V.D. 1929

DESCRIPTION – PUNCH MARK IN CHISELED TRIANGLE ON THE SOUTHERLY RIM OF A SEWER MANHOLE AT THE SOUTHERLY TERMINUS OF KENSINGTON STREET.

BM3 ELEV. 15.16' N.G.V.D. 1929

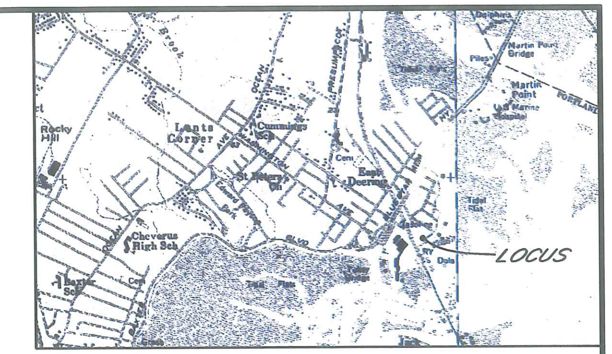
DESCRIPTION – TOP OF THE NORTHWEST CORNER OF THE CONCRETE FLAG POLE BASE, TWO INCHES IN FROM EACH FACE.

BM4 ELEV. 13.75' N.G.V.D. 1929
BM4 ELEV. 18.15' M.L.W. = 0.00, BASED ON DIFFERENTIAL LEVEL RUN NOVEMBER 20, 1998 FROM N.O.A.A. TIDAL BENCH MARK STAMPED "841 8175 A 1979," TIDAL EPOCH 1960–1978.

DESCRIPTION – U.S. ENGINEERING DEPARTMENT BRASS DISK STAMPED "RY" LOCATED ON TOP OF THE GRANITE RETAINING WALL THAT RUNS APPROXIMATELY PARALLEL TO THE TRACKS NOW OR FORMERLY OF THE CANADIAN NATIONAL RAILWAY.

REF. PLAN 1

NO.	DATE	DESCRIPTION	BY
9	08/24/10	ADD 11/08/2004 DRAINAGE EASEMENT	FOL
8	08/24/10	ADD 10/15/2003 TRAIL EASEMENT	FOL
7	01/18/00	REVISED TITLE BLOCK	FOL
6	01/18/00	ADDED NOTE 8	FOL
5	01/18/00	SUPPLEMENTAL TOPO & NEW CONTOURS	FOL
4	12/06/00	ADDED GRADE STAKES SET	FOL
3	12/06/00	ADDED MONUMENTATION SET	FOL
2	11/02/00	REV. NOTE 5, ADDED NOTE 6	FOL
1	11/02/00	ADDED BOUNDARY LINE DATA	FOL



LOCATION MAP
n.t.s.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

STATE OF MAINE
FRANCES O. LAPIERRE
No 1320
PROFESSIONAL LAND SURVEYOR

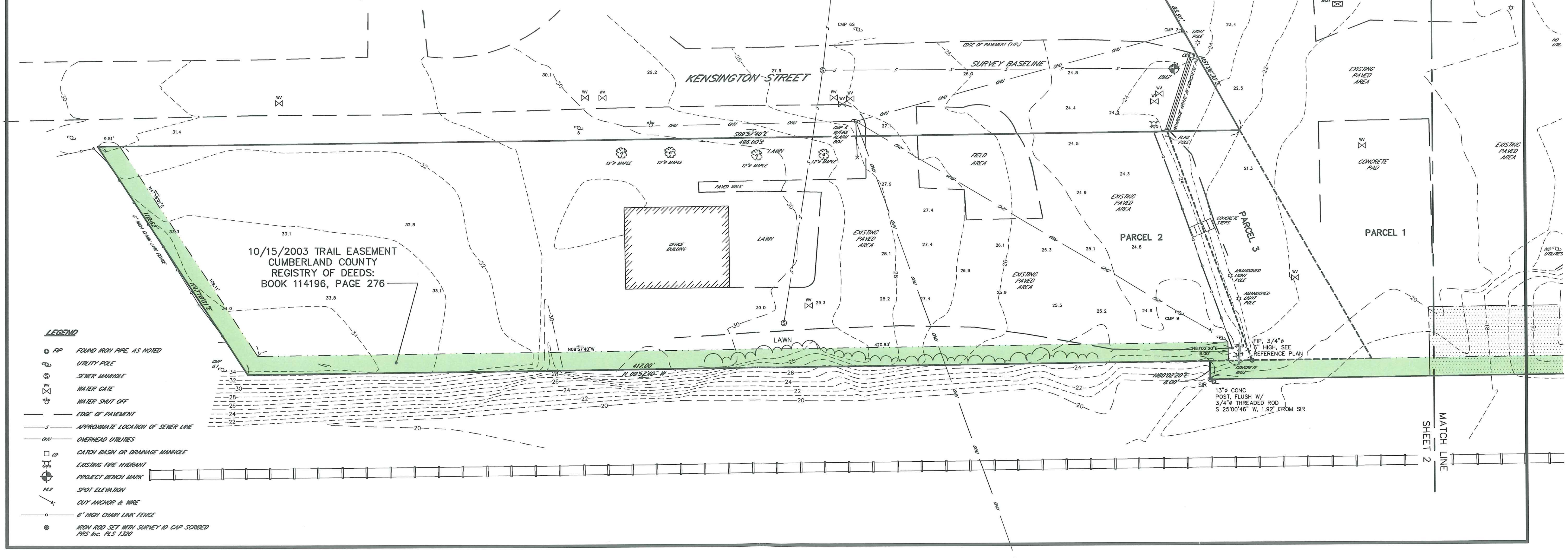
Post Road Surveying
Wells, Maine 04090
P.O. Box 1557
Tel. 207-646-4246
FAX 207-646-4242

DRAWN FOL	SCALE 1" = 20'	DATE 10/02/00
CALC. FOL	APPROVED	
N.B. GRAVES.RW5	SHEET 1 OF 2	DWG. 00166.01.PRJ SHEET1

TOPOGRAPHIC PLAN
PREPARED FOR

YACHT HAVEN, L.L.C.

100 KENSINGTON STREET
PORTLAND ~ MAINE

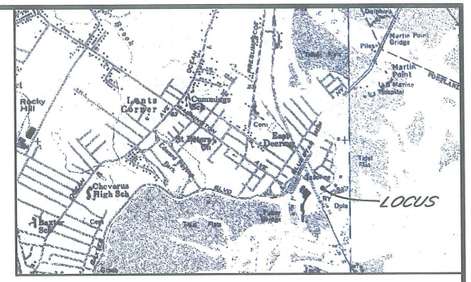


NO.	DATE	DESCRIPTION	BY
10	08/24/10	ADD 11/08/2004 DRAINAGE EASEMENT	FOL
9	08/24/10	ADD 10/15/2003 TRAIL EASEMENT	FOL
8	02/12/02	ADDITIONAL TOPO INTER TIDAL AREA	FOL
7	01/18/00	REVISED TITLE BLOCK	FOL
6	01/18/00	ADDED NOTE 8	FOL
5	01/18/00	SUPPLEMENTAL TOPO & NEW CONTOURS	FOL
4	12/06/00	ADDED GRADE STAKES SET	FOL
3	12/06/00	ADDED MONUMENTATION SET	FOL
2	11/02/00	REV. NOTE 5, ADDED NOTE 6	FOL
1	11/02/00	ADDED BOUNDARY LINE DATA	FOL

LEGEND

- FIP — FOUND IRON PIPE, AS NOTED
- UTILITY POLE
- SEWER MANHOLE
- WATER GATE
- WATER SHUT OFF
- EDGE OF PAVEMENT
- s — APPROXIMATE LOCATION OF SEWER LINE
- OHU — OVERHEAD UTILITIES
- CB — CATCH BASIN OR DRAINAGE MANHOLE
- EXISTING FIRE HYDRANT
- PROJECT BENCH MARK
- 14.2 — SPOT ELEVATION
- GUY ANCHOR & WIRE
- 6' HIGH CHAIN LINK FENCE
- IRON ROD SET WITH SURVEY ID CAP STAMPED PWS Inc. PLS 1320

REF. PLAN 1



LOCATION MAP
n.t.s.

GRAPHIC SCALE
20 0 10 20 40 60
(IN FEET)
1 inch = 20 ft.

NOTE: FOR GENERAL NOTES, REFERENCE PLANS AND BENCH MARK DATA, SEE SHEET 1 OF 2

ADDITIONAL TOPOGRAPHIC SURVEY
INTER-TIDAL AREA
DECEMBER 12, 2002

MEAN LOWER LOW WATER APPROXIMATELY -4.4 NGVD 1929

STORM DRAIN EASEMENT:
CUMBERLAND COUNTY REGISTRY OF DEEDS
BOOK 22055, PAGE 122

10/15/2003 TRAIL EASEMENT
CUMBERLAND COUNTY
REGISTRY OF DEEDS:
BOOK 114196, PAGE 276

PARCEL 1

PARCEL 3

MATCH LINE SHEET 1

TOPOGRAPHIC PLAN
PREPARED FOR
YACHT HAVEN, L.L.C.
100 KENSINGTON STREET
PORTLAND ~ MAINE

STATE OF MAINE
FRANCES Q. LAPIERRE
No 1320
PROFESSIONAL LAND SURVEYOR

Post Road Surveying
Wells, Maine 04090
P.O. Box 1557
Tel 207-646-4246
FAX 207-646-4242

DRAWN FOL	SCALE 1" = 20'	DATE 10/02/00
CALC FOL	APPROVED	
N.R. GRAVES.RW5	SHEET 2 OF 2	DWG 00166.01.PRJ SHEET2

CATCH BASIN FLOW SUMMARY				
CB#	INLET TRIBUTARY AREA	25 YEAR EVENT FLOW AT EXIT	25 YEAR EVENT HGL ELEVATION AT EXIT	PIPE SIZE/INVERT AT EXIT
2	0.68 ACRES	2.1 CFS	13.19'	12"/12.57'
3	2.14 ACRES	8.7 CFS	11.55'	18"/10.46'
6	0.42 ACRES	1.9 CFS	12.44'	12"/11.85'

50 0 25 50 100

1 inch = 50 ft.

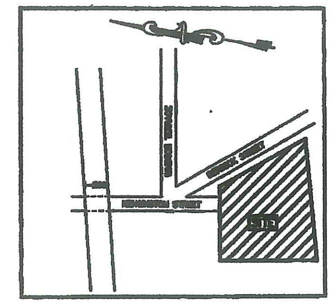
Design: JMM	Date: JAN 2003		
Drafted: SGB	Job No.: 519		
Checked: WCH	Scale: 1"=50'		

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

Drawing Name: WATERSHED AREA MAP

Project: MAINE YACHT CENTER – PHASE 2
MAINE YACHT CENTER, L.L.C.
PORTLAND, ME

Figure No.



LOCATION MAP
NOT TO SCALE

DEVELOPMENT PLANS FOR MAINE YACHT CENTER - PHASE 2

PORTLAND, MAINE

KENSINGTON STREET

PHASE 2 MODIFIED SITE PLAN APPLICATION

PROJECT PARCEL SITE PORTLAND ASSESSOR'S MAP & LOT NUMBERS

MAP	BLOCK	LOT
430	B	013

Owner & Applicant

MAINE YACHT CENTER, L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE 04103

NOTES

GENERAL NOTES

1. TOPOGRAPHIC DATA AND BOUNDARY INFORMATION IS BASED ON A GROUND SURVEY CONDUCTED BY POST ROAD SURVEYING OF WELLS, MAINE COMPLETED ON OCTOBER 2, 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 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. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRICADES, LIGHTS, WARNING SIGNS AND OTHER DEVICES TO SAFEGUARD TRAFFIC PROPERLY WHILE WORK IS IN PROGRESS FOR THE DURATION OF THE PROJECT.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN PERMIT FROM THE CITY OF PORTLAND WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS. THE CONSTRUCTION WILL BE GOVERNED BY THE ZONING 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 EDGE OF PAVEMENT.

2. THE STOP SIGNS INDICATED ON THE LAYOUT PLANS ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

3. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.

4. 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.

5. 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 PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.

6. PROPOSED RIGHT OF WAY MONUMENTS AND PROPERTY LINE PINS SHALL BE INSTALLED UNDER THE DIRECTION OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.

UTILITY NOTES

1. ALL SEWER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO CITY OF PORTLAND SEWER DEPARTMENT AND PORTLAND WATER DISTRICT STANDARDS.

2. DOMESTIC WATER METERS SHALL BE INSTALLED WITHIN THE UTILITY VAULT WITH A REMOTE READER. THE DOMESTIC WATER AND FIRE SERVICE SHALL HAVE GATE VALVES INSTALLED IN THE BUILDING.

3. 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 THE ENGINEER FOR REVIEW.

GRADING AND DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS. THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

   POLYVINYLCHLORIDE (PVC) PIPE
   SMOOTH BORE POLYETHYLENE PIPE

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.

4. ALL EXCAVATION NECESSARY FOR THIS PROJECT SHALL BE UNCLASSIFIED.

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 AS NOTED ON PLANS.

3. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL REPORT.

4. 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.

5. SILT REMOVED FROM BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.

6. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE DIRECTED BY THE OWNER.

UTILITIES

SEWER:

PORTLAND PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, MAINE 04101
(207) 874-8801
ATTN: FRANK BRANCELY

WATER:

PORTLAND WATER DISTRICT
P.O. BOX 3553
225 DOUGLAS STREET
PORTLAND, MAINE 04104
(207) 774-5961
ATTN: DAVE COFFIN

ELECTRIC:

CENTRAL MAINE POWER COMPAN
162 CANCO ROAD
PORTLAND, MAINE 04103
(207) 828-2880
ATTN: MARK KREIDER

TELEPHONE:

VERIZON
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
(207) 797-1678
ATTN: JOHN CAPRIO

CABLE:

TIME-WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
(207) 253-2291
ATTN: DEBBIE PAIEMONT

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	PROPERTY LINE	
	BUILDING SETBACK	
EDGE OF PAVEMENT	EDGE OF PAVEMENT	
	GRADING CONTOUR LINE	
	SPOT ELEVATION	
	TREELINE	
	TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
OHU	OVERHEAD ELECTRIC/TELEPHONE	
UGE	UNDERGROUND ELECTRIC/TELEPHONE	
	WATER LINE	
	UNDERGROUND GAS LINE	
	SEWER LINE	
15"D	STORM DRAIN LINE	
24" CULV	CULVERT	
	HYDRANT	
	WATER GATE VALVE	
W.S.O.	WATER SHUT OFF VALVE	
SMHo	MANHOLE	
CB	CATCH BASIN	
	TEST PIT	
	MONUMENT	
	RIPRAP	
	SILT FENCE - PERIMETER	
	STONE SEDIMENT BARRIER	
EXIST.I.P.	EXISTING IRON PIPE	
SET I.P.	SET IRON PIPE	

Dig Safe/Utility Locations

The Sheridan Corporation has made a diligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor/subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's errors.

PLAN LIST

SHEET	TITLE
C-001	COVER SHEET
C-101	N / A
C-102	N / A
C-103	SITE LAYOUT PLAN
C-104	UTILITY PLAN
C-105	GRADING & DRAINAGE PLAN
C-106	EROSION CONTROL PLAN
C-107	OPERATIONS PLAN
L-101	LANDSCAPING PLAN
C-201	SITE CONSTRUCTION DETAILS
C-202	UTILITY DETAILS
C-203	EROSION & SEDIMENTATION CONTROL DETAILS

NOTE:
THIS SITE DESIGN PACKAGE CONSISTS OF ALL THE REFERENCED PLANS AND THE COMPLETE TOWN AND ANY OTHER APPLICABLE APPROVALS.

JOB NO. 030017
ENGINEERING DWG. NO. C-001

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE
BUTLER DESIGN BUILDER

Title
PHASE 2 COVER SHEET
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

DRAWN BY KSL
APPROVED BY
SCALE As Noted
DATE 3-29-04
TYPE

Sheridan
WWW.SHERIDANCORP.COM
FAIRFIELD MAINE
PORTLAND MAINE

GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03.
THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

ITEMS MODIFIED ON THIS PLAN #C-104.
1. NEW BUILDING FOOT PRINT.
2. ADJUSTED PAVED AREA TO CONFORM TO BUILDING.
3. BUILDING FINISH FLOOR RAISED 1.83 FEET TO FACILITATE CONSTRICTION PER LATEST S.W. COLE SOILS REPORT.
4. BITUMINOUS PAVED RAMP ADDED TO EXISTING PIER TO FACILITATE GRADE CHANGES.
5. RELOCATED CB2, DMH3 CHANGED TO CB7 & DMH4 TO CB8. TO FACILITATE BETTER COLLECTION OF STORM WATER FROM PAVEMENT.
6. EXISTING CITY OF PORTLAND STORM DRAIN PIPE THAT CROSSES SITE FROM WEST TO EAST IS REROUTED OUTSIDE NEW BUILDING
7. NORTHERN UTILITIES GAS SERVICE EXTENDED DOWN KENSINGTON ST. TO BUILDING.
8. NEW LOCATION AND ALTERNATE LOCATION FOR ELECTRIC TRANSFORMER SHOWN.
9. PHASE 1 UTILITIES SHOWN FOR REFERENCE.
10. DOMESTIC WATER, FIRE SPRINKLER AND SANITARY SEWER SERVICES ADJUSTED TO FIT NEW BUILDING.
11. PUMP STATION CONTROL PANEL RELOCATED TO BUILDING WALL.
12. ADJUST ALL EXISTING PHASE 1 UTILITIES & FUEL SYSTEM TO ACCOMMODATE MODIFIED GRADES.

NOTE:
TEXT IN THIS COLOR INDICATES RELOCATED CITY OF PORTLAND STORM DRAIN LINE.

NOTE:
TEXT IN THIS COLOR INDICATES NEW UTILITY INFORMATION AS OF 5-1-04. ITEMS MAY BE RELOCATED OR OTHERWISE AMENDED FROM 7-31-03 CITY APPROVAL.

LUMINAIRE SCHEDULE

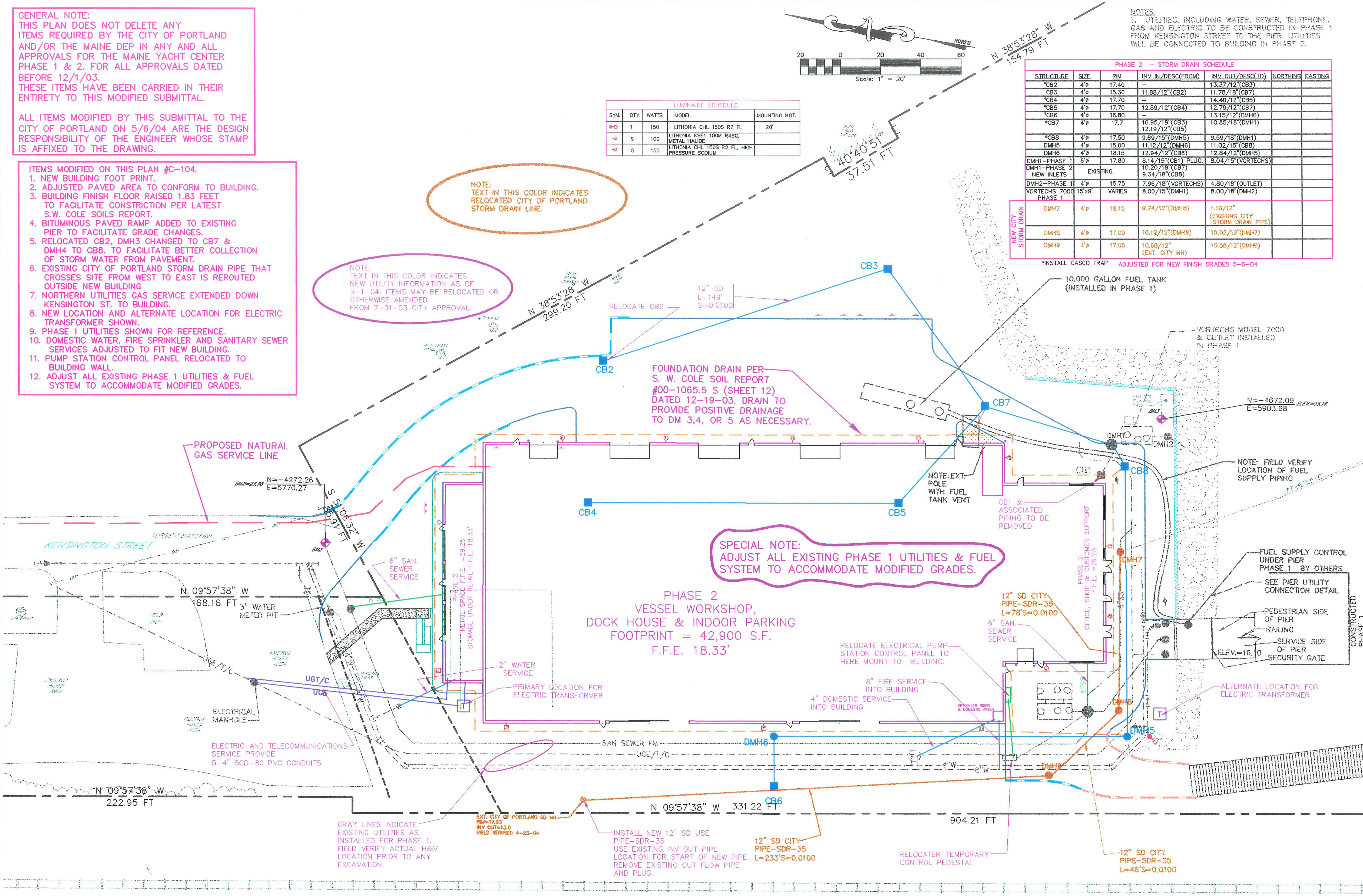
SYM.	QTY.	WATTS	MODEL	MOUNTING HGT.
	1	150	LITHONIA CHL 150S R2 FL	20'
	9	100	LITHONIA KSE1 100M R4SC, METAL HALIDE	
	5	150	LITHONIA CHL 150S R2 FL, HIGH PRESSURE SODIUM	

NOTES:
1. UTILITIES, INCLUDING WATER, SEWER, TELEPHONE, GAS AND ELECTRIC TO BE CONSTRUCTED IN PHASE 1 FROM KENSINGTON STREET TO THE PIER. UTILITIES WILL BE CONNECTED TO BUILDING IN PHASE 2.

PHASE 2 – STORM DRAIN SCHEDULE

	STRUCTURE	SIZE	RIM	INV IN/DESC(FROM)	INV OUT/DESC(TO)	NORTHING	EASTING
	*CB2	4'ø	17.40	–	13.37/12"(CB3)		
	CB3	4'ø	15.30	11.88/12"(CB2)	11.78/18"(CB7)		
	*CB4	4'ø	17.70	–	14.40/12"(CB5)		
	*CB5	4'ø	17.70	12.89/12"(CB4)	12.79/12"(CB7)		
	*CB6	4'ø	16.80	–	13.15/12"(DMH6)		
	*CB7	4'ø	17.7	10.95/18"(CB3) 12.19/12"(CB5)	10.85/18"(DMH1)		
	*CB8	4'ø	17.50	9.69/15"(DMH5)	9.59/18"(DMH1)		
	DMH5	4'ø	15.00	11.12/12"(DMH6)	11.02/15"(CB8)		
	DMH6	4'ø	18.15	12.94/12"(CB6)	12.84/12"(DMH5)		
	DMH1–PHASE 1	6'ø	17.80	8.14/15"(CB1) PLUG.	8.04/15"(VORTECHS)		
	DMH1–PHASE 2 NEW INLETS	EXISTING.		10.20/18"(CB7) 9.34/18"(CB8)			
	DMH2–PHASE 1	4'ø	15.75	7.96/18"(VORTECHS)	4.80/18"(OUTLET)		
	VORTECHS 7000 PHASE 1	15'x9'	VARIES	8.00/15"(DMH1)	8.00/18"(DMH2)		
NEW CITY STORM DRAIN	DMH7	4'ø	18.15	9.24/12"(DMH8)	1.10/12" (EXISTING CITY STORM DRAIN PIPE)		
NEW CITY STORM DRAIN	DMH8	4'ø	17.00	10.12/12"(DMH9)	10.02/12"(DMH7)		
NEW CITY STORM DRAIN	DMH9	4'ø	17.00	10.68/12" (EXT. CITY MH)	10.58/12"(DMH8)		

*INSTALL CASCO TRAP ADJUSTED FOR NEW FINISH GRADES 5-6-04



FAIRFIELD MAINE
PORTLAND MAINE
Sheridan
WWW.SHERIDANCORP.COM

DRAWN BY	KSL
APPROVED BY	
SCALE	As Noted
DATE	5-6-04
TYPE	

Title
PHASE 2 UTILITY PLAN (MODIFIED)
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND, ME.

Engineering Designs For
MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER
BUTLER

JOB NO. 030017
ENGINEERING DWG. NO. C-104

GENERAL NOTE:
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ITEMS MODIFIED ON THIS PLAN #C-105.
1. NEW BUILDING FOOT PRINT.
2. ADJUSTED PAVED AREA TO CONFORM TO BUILDING.
3. BUILDING FINISH FLOOR RAISED 1.83 FEET TO FACILITATE CONSTRUCTION, PER LATEST S.W. COLE SOILS REPORT.
4. MODIFIED GRADES TO ADJUST FOR NEW FINISHED FLOOR ELEVATION OF THE BUILDING.
5. BITUMINOUS PAVED RAMP ADDED TO EXISTING PIER TO FACILITATE GRADE CHANGES.
6. REROUTED CITY OF PORTLAND STORM DRAIN AROUND BUILDING.
7. RELOCATED CB2, DMH3 CHANGED TO CB7 & DMH4 TO CB8. TO FACILITATE BETTER COLLECTION OF STORM WATER FROM PAVEMENT.
8. STORM DRAIN SYSTEM ADJUSTED FOR MODIFIED FINISH GRADE.

NOTE:
TEXT IN THIS COLOR INDICATES RELOCATED CITY OF PORTLAND STORM DRAIN LINE.

NOTE:
ALL ITEMS LABELED IN BLUE TEXT ARE MODIFICATIONS TO THE APPROVED SITE PACKAGE PREPARED BY GORRILL-PALMER ENGINEERS.

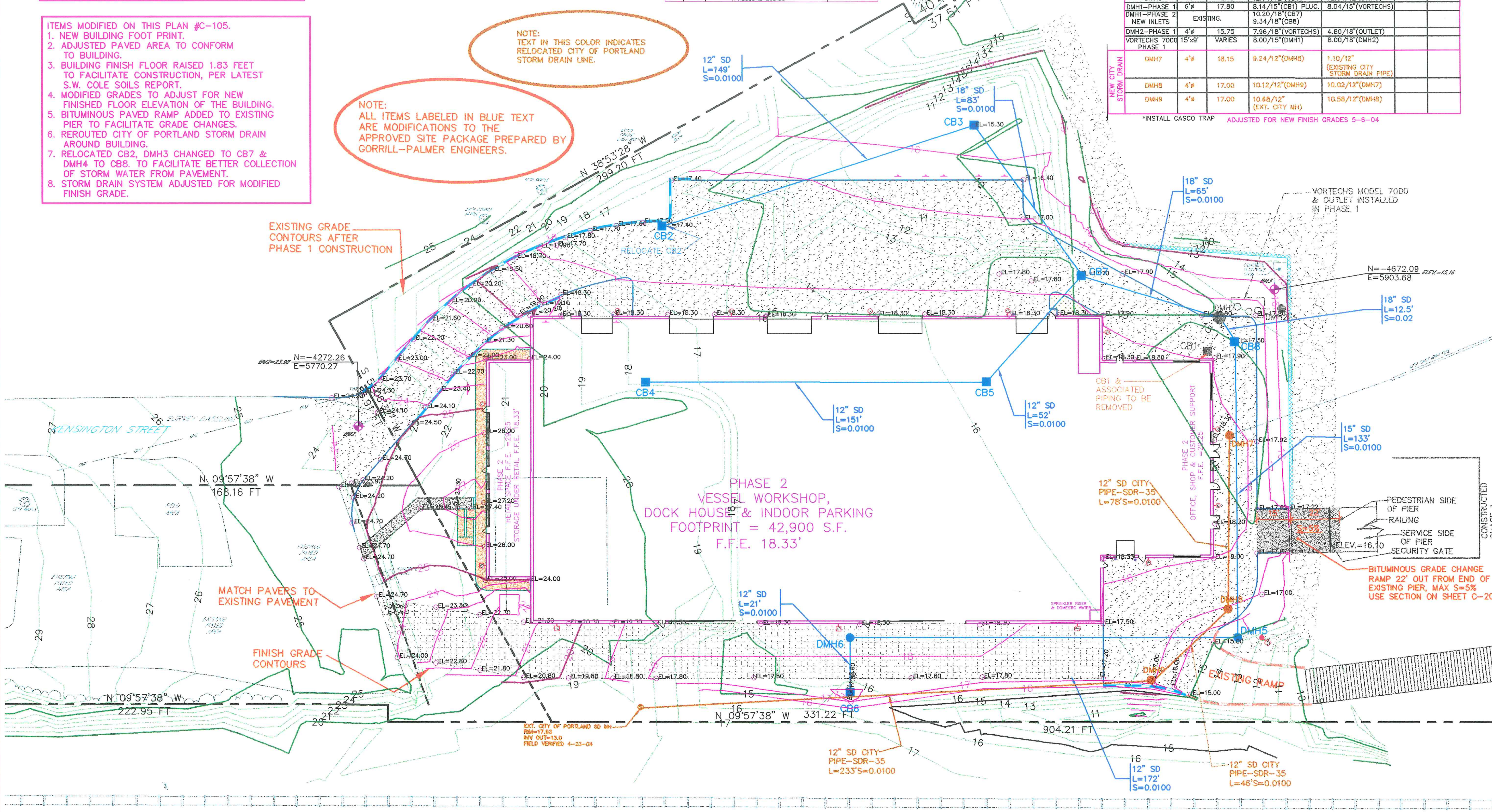
LUMINAIRE SCHEDULE

SYM.	QTY.	WATTS	MODEL	MOUNTING HGT.
	1	150	LITHONIA CHL 150S R2 FL	20'
	9	100	LITHONIA KSE1 100M R4SC, METAL HALIDE	
	5	150	LITHONIA CHL 150S R2 FL, HIGH PRESSURE SODIUM	

PHASE 2 – STORM DRAIN SCHEDULE

	STRUCTURE	SIZE	RIM	INV IN/DESC(FROM)	INV OUT/DESC(TO)	NORTHING	EASTING
	*CB2	4'ø	17.40	–	13.37/12"(CB3)		
	CB3	4'ø	15.30	11.88/12"(CB2)	11.78/18"(CB7)		
	*CB4	4'ø	17.70	–	14.40/12"(CB5)		
	*CB5	4'ø	17.70	12.89/12"(CB4)	12.79/12"(CB7)		
	*CB6	4'ø	16.80	–	13.15/12"(DMH6)		
	*CB7	4'ø	17.7	10.95/18"(CB3) 12.19/12"(CB5)	10.85/18"(DMH1)		
	*CB8	4'ø	17.50	9.69/15"(DMH5)	9.59/18"(DMH1)		
	DMH5	4'ø	15.00	11.12/12"(DMH6)	11.02/15"(CB8)		
	DMH6	4'ø	18.15	12.94/12"(CB6)	12.84/12"(DMH5)		
	DMH1–PHASE 1	6'ø	17.80	8.14/15"(CB1) PLUG.	8.04/15"(VORTECHS)		
	DMH1–PHASE 2 NEW INLETS	EXISTING.		10.20/18"(CB7) 9.34/18"(CB8)			
	DMH2–PHASE 1	4'ø	15.75	7.96/18"(VORTECHS)	4.80/18"(OUTLET)		
	VORTECHS 7000 PHASE 1	15'x9'	VARIES	8.00/15"(DMH1)	8.00/18"(DMH2)		
NEW CITY STORM DRAIN	DMH7	4'ø	18.15	9.24/12"(DMH8)	1.10/12" (EXISTING CITY STORM DRAIN PIPE)		
	DMH8	4'ø	17.00	10.12/12"(DMH9)	10.02/12"(DMH7)		
	DMH9	4'ø	17.00	10.68/12" (EXT. CITY MH)	10.58/12"(DMH8)		

*INSTALL CASCO TRAP ADJUSTED FOR NEW FINISH GRADES 5-6-04



JOB NO. 030017
ENGINEERING DWG. NO. C-105
Engineering Designs For MAINE YACHT CENTER L.L.C. 65 KENSINGTON STREET PORTLAND, MAINE
DESIGN BUILDER
Title PHASE 2 GRADING & DRAINAGE PLAN (MODIFIED) MAINE YACHT CENTER FACILITY 100 KENSINGTON ST., PORTLAND, ME.
DRAWN BY KSL
APPROVED BY
SCALE As Noted
DATE 5-6-04
TYPE
Sheridan FAIRFIELD MAINE PORTLAND MAINE

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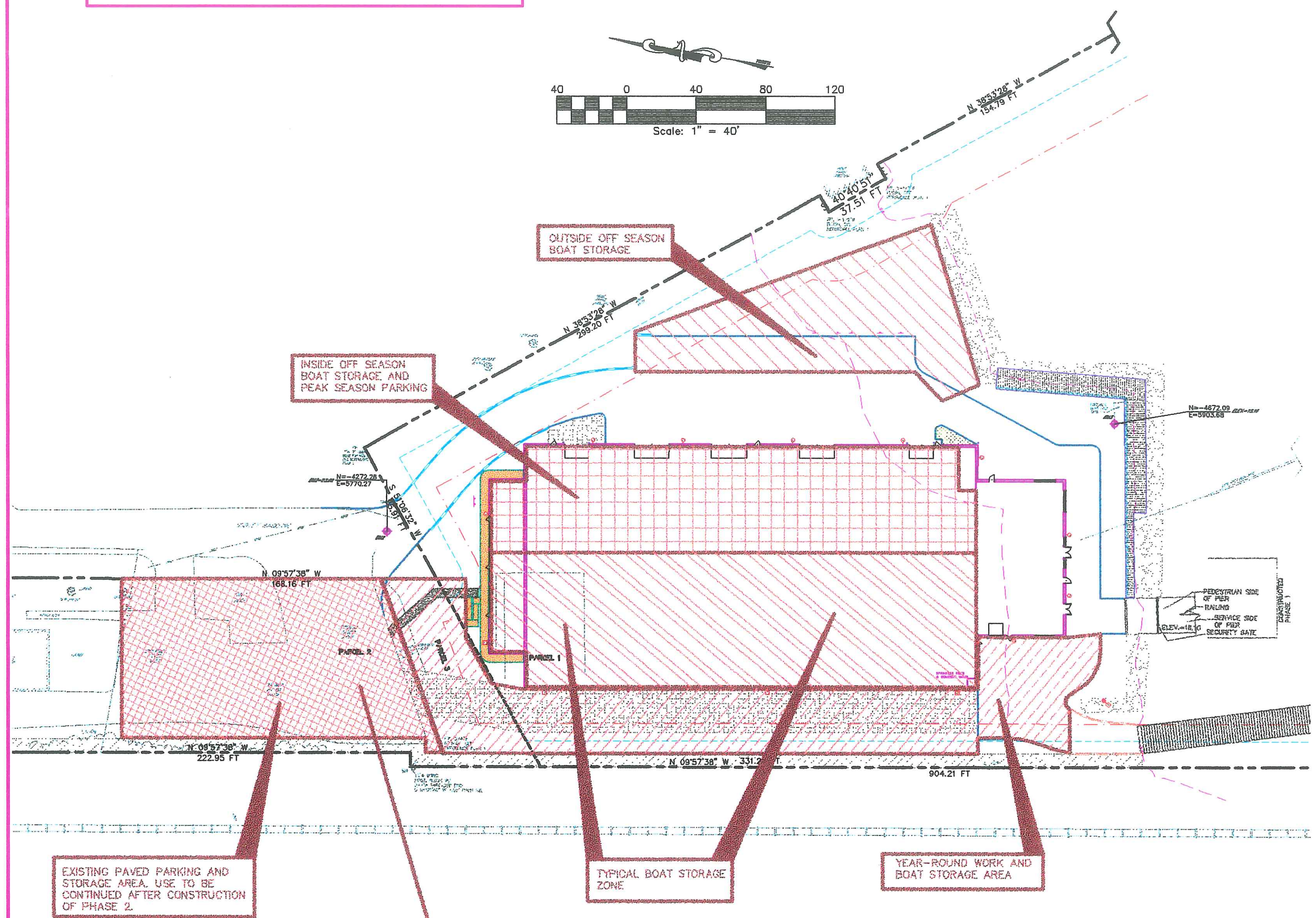
ITEMS MODIFIED ON THIS PLAN #C-106.
1. NO BOAT STOEAGE ON PARCEL 2 NOTE OF PLANNING BOARD CONDITION #IV ADDED.

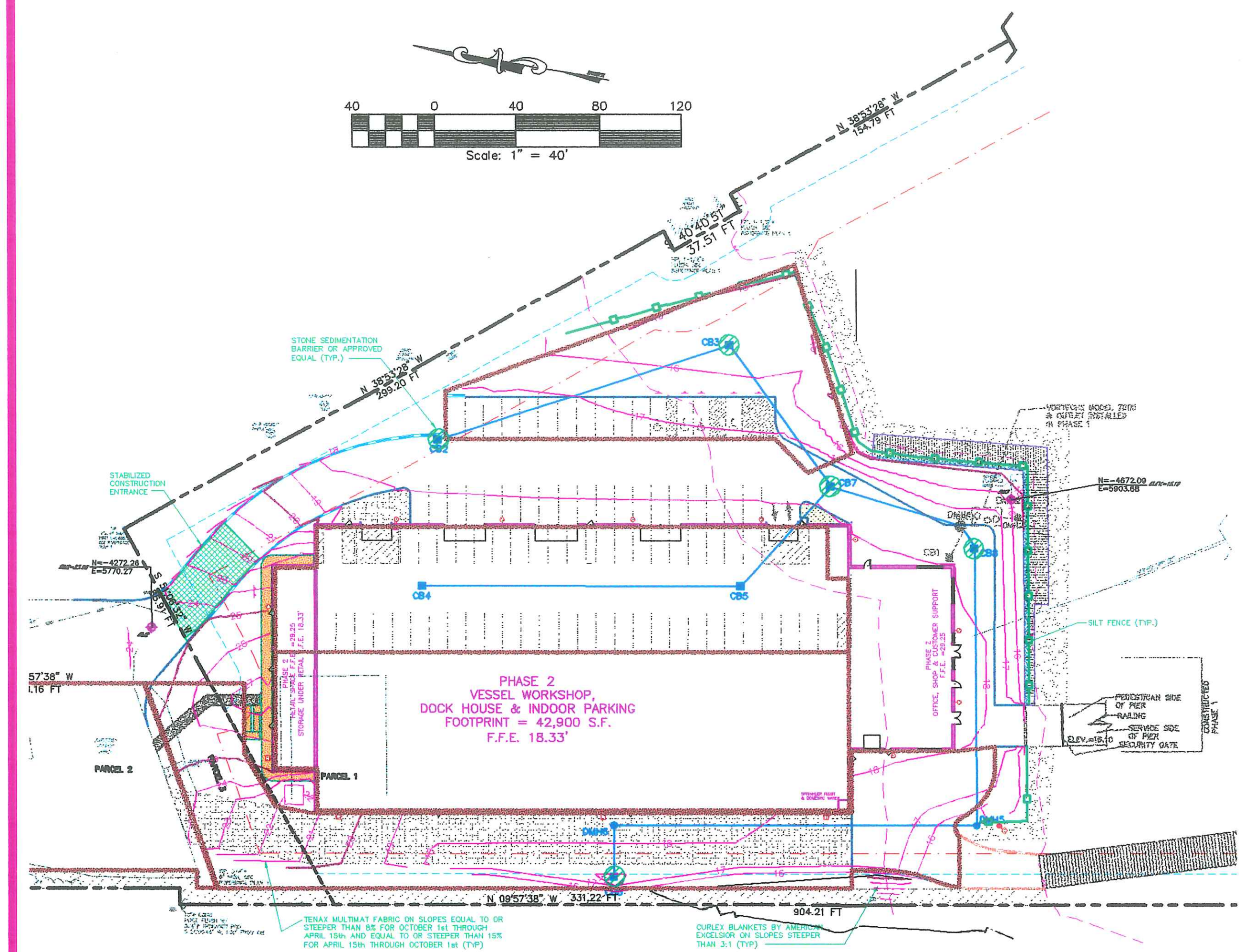


NOTE: PHASE 2 PLANNING BOARD CONDITION #IV
NO BOAT STORAGE ALLOWED ON PARCEL 2, WHICH IS LOCATED IN THE R-3 ZONE, WITHOUT APPRORIATE ZONING CHANGE OR VARIANCE, EITHER OF WHICH MUST BE REVIEWED AND APPROVED BY THE PLANNING BOARD.

PHASE 2
OPERATIONS PLAN
C-107

OPERATIONS NOTES:
1. PEAK SEASON MAY 1 – OCTOBER 31. MAY AND OCTOBER ARE TRANSITIONAL MONTHS WHERE THE OFF SEASON BOAT STORAGE AREAS MAY BE USED FOR BOTH PARKING AND STORAGE.
2. OFF SEASON: NOVEMBER 1 – APRIL 30.

ITEMS MODIFIED ON THIS PLAN #C-107.
1. ADDED SEDIMENTATION PROTECTION TO CB7 & CB8.



PHASE 2
EROSION CONTROL PLAN
C-106

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

DRAWN BY KSL
SCALE As Noted
DATE 5-6-04

PHASE 2 EROSION CONTROL PLAN AND OPERATIONS PLAN
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME

MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER

JOB NO. 030017
DWG NO. C-106 & C-107

LANDSCAPE LEGEND

(1/A) — QUANTITY / KEY

PLANTING SCHEDULE					
KEY	QTY.	Botanical Name	Common Name	Size	Remarks
PG	7	Picea glauca	White Spruce	5–6'	B&B, full, 12' o.c.

Plant Notes:

1. The Landscape Contractor is advised of the existence 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. Prior to plant installation, the Landscape Contractor shall submit a written affidavit of all plant species, cultivars and varieties that they proposed to install. The name phone number and location of all nurseries where plant material has been grown shall also be submitted prior to installation.

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. Backfill1/2 of the pit at a time, and compact. See Note 6 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.

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 according to manufacturers 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. The landscape contractor shall submit samples of the slow release fertilizer and copies of the label of the liquid fertilizer prior to plant installation. The Landscape Contractor shall not install any plant material unless appropriate watering equipment is on site. All plants shall be adequately watered the day of installation or these plants will be rejected and replaced by the Landscape Contractors at no cost to the owner.

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 Landscape Architect or Owner for their approval. In no cases shall a tree be staked because the root ball crumbled. In those cases the tree shall be removed and replaced with a tree of the same species and size with a solid and intact root ball. If stakes are used, they shall be removed by the contractor, after 1 year.

9. Mulch to be installed to a depth of 3" after normal settling. Mulch shall be medium shredded Hemlock bark, dark brown in color. Do not place mulch in contact with the tree or shrub trunk. The Landscape Contractor shall submit a .25 cubic foot sample prior to installation.

10. All plants shall have their locations staked and approved by the Landscape Architect prior to plant installation. All plants shall be oriented for best appearance.

11. Plant species substitutions will not be allowed unless first approved by the Landscape Architect. Any substituted plants installed without prior approval will be rejected

12. All plants shall be guaranteed for one growing season (1 year from the date of acceptance). Any plants that die during the guarantee, shall be replaced by the landscape contractor at no cost to the owner.

13. All areas not identified with other surface treatments shall be lawn. The lawn area 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 of grass is established.

14. 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.

15. Allow Juniper and deciduous shrubs to grow together to form a natural looking plant mass.

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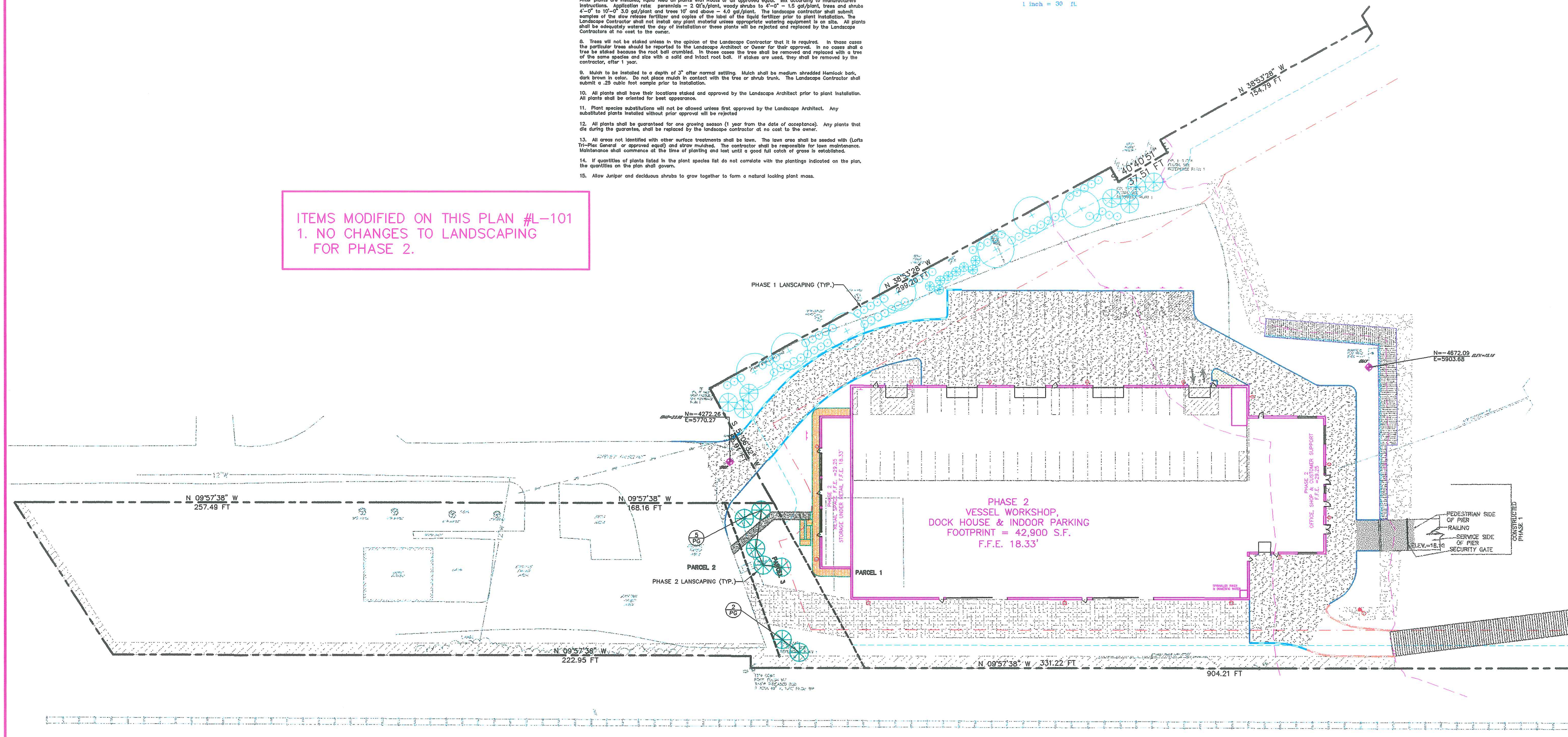
GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

ITEMS MODIFIED ON THIS PLAN #L-101
1. NO CHANGES TO LANDSCAPING FOR PHASE 2.



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JOB NO.	030017
ENGINEERING DWG. NO.	L-101
Engineering Designs For	MAINE YACHT CENTER L.L.C. 65 KENSINGTON STREET PORTLAND, MAINE
	DESIGN BUILDER
Title	PHASE 2 LANDSCAPING PLAN MAINE YACHT CENTER FACILITY 100 KENSINGTON ST., PORTLAND, ME.
DRAWN BY	KSL
APPROVED BY	
SCALE	As Noted
DATE	5-6-04
TYPE	

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

SITE CONSTRUCTION NOTES AND TECHNICAL REQUIREMENTS

Dig Safe/Utility Locations

The Sheridan Corporation has made a dilligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor/subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's errors.

CONSTRUCTION NOTES

1) ALL WORK WILL BE EXECUTED IN ACCORDANCE WITH THE LATEST PUBLISHED TECHNICAL DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY LOCAL CITY OR TOWN OFFICALS.
2) ALL UTILITY WORK WILL BE EXECUTED PER THE RULES AND/OR REGULATIONS OF THE APPROPRIATE GOVERNING AUTHORITY.
3) ALL SUBCONTRACTOR'S ARE RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR THEIR SCOPE OF WORK. THEY ARE ALSO RESPONSIBLE FOR SCHEDULING AND ATTENDING ALL INSPECTIONS OF WORK, AND SUPPLYING WRITTEN PROOF OF ACCEPTANCE OF WORK BY INSPECTOR.
4) ALL SANITARY SEWER, STORM SEWER, AND WATER CROSSINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE AND CITY STANDARDS.

Site Fill Materials:

Foundation Fill Materials:

A. Structural Fill:
Structural fill shall be used for the following purposes:
1. To provide a minimum 12 inch base below the building floor slab.
2. To backfill interior footings and over excavated wall and interior footing excavations.

This material shall meet the following gradations:

Sieve Size	Percent Passing
6 inch	100
3 inch	70-100
No. 4	35-70
No. 40	5-35
No. 200	0-5

Structural fill shall consist of a well graded gravelly sand to sandy gravel. It shall be free of organic material, loam, trash, snow, ice, frozen soil or other deleterious material and conform to the gradation indicated in the table above. Boulders of greater than the placed lift thickness shall be removed priorto compaction.

Structural fill shall be placed in layers not exceeding 12 in. (loose measure) and compacted with heavy operator-driven compaction equipment and in 6 in. layers if utilizing hand guided or small remote controlled vibratory equipment. Lift thickness may require to be reduced if difficulty in achieving the required compaction.

Structural fill shall be compacted at approximately optimum moisture content (plus 1 to minus 2 percent) to 95 percent of maximum dry density as determined by ASTM D1557 (modified density).

B. Granular Borrow:
Granular borrow or structural fill may be used as a backfill material as follows:
1. For backfilling exterior footings, foundation and frost walls and retaining wall excavations.
2. For raising building interior site grades to subbase grade; frost free backfill to subbase below access drives and parking area pavement.

Granular borrow shall consist of sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of that portion passing a 3 inch sieve shall meet the following gradation requirements:

Sieve Size	Percent Passing
No. 40	0-70
No. 200	0-20

Surface tolerance of 3/8in., above or below the required cross sectional shape shall be maintained.

General Site Fill Materials:

Common Borrow:
Common borrow may be used as a non-building site fill material to raise site grades to subbase level. This material and installation shall follow the Maine Dept. of Transportation Specifications Revision of 1995. The utilization of this material is subject to the review of the Engineer prior to its use.

NOTE:
SUBSURFACE PREPARATION WILL ENTAIL THE REMOVAL OF TOPSOIL, ALL UNSUITABLE MATERIALS, STUMPS, TRASH, ETC. THEN IT WILL BE PROOF ROLLED. STRUCTURAL FILL PLACED IN 12" MAX. LIFTS AND COMPACTED TO 95% DRY DENSITY. THIS APPLIES ALL BUILDING PAVED AREAS. GRADING OF SUBGRADE WILL BE MINUS THE DEPTH OF ALL SUBBASE, BASE AND FINISH MATERIALS. WITH ALLOWABLE GRADE DEVIATION OF PLUS OR MINUS 1/10 OF ONE FOOT.

SPECIAL NOTE:
ALL RIP RAP TO BE ANGULAR, CRUSHED STONE GRADED FOR SIZE. SMOOTH BANK RUN STONE IS NOT ALLOWED

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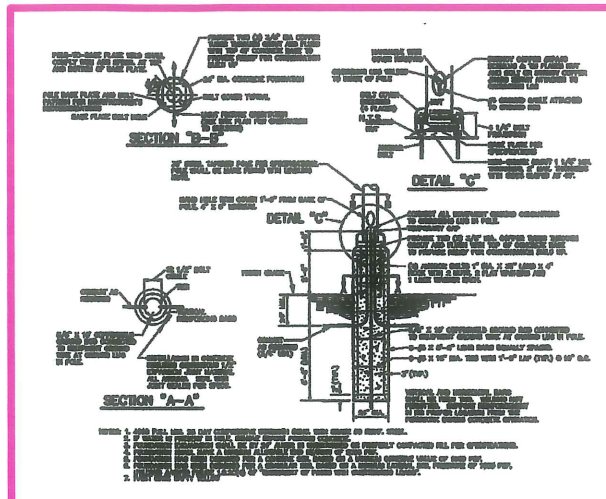
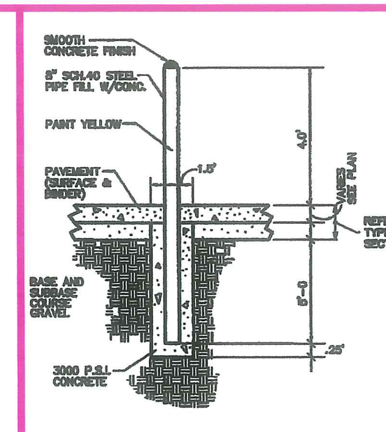
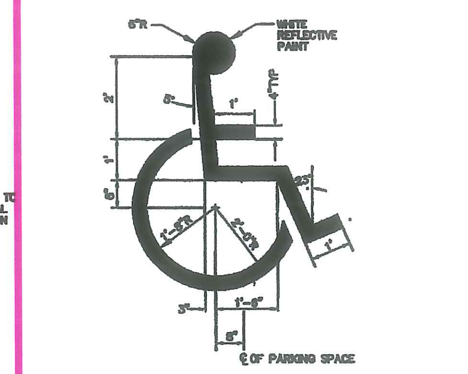
NOTE: ITEMS MODIFIED THIS SHEET
1. MISCELLANEOUS CONSTRUCTION NOTES ADDED.
2. REVISED PAVEMENT SECTION.
3. REVISED GRASS PAVER SECTION.



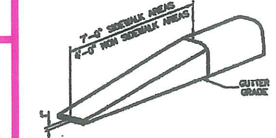
TYPICAL PARKING LOT LIGHTING POLE FOUNDATION
N.T.S.



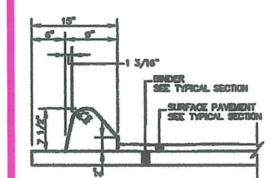
CONCRETE BOLLARD DETAIL
N.T.S.



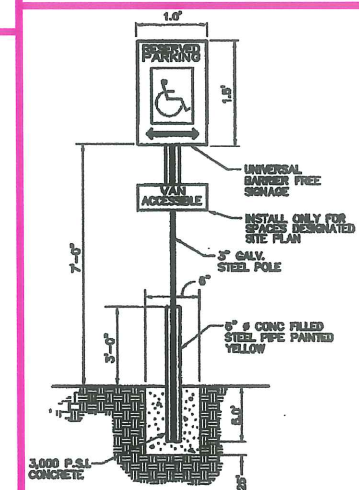
INTERNATIONAL BARRIER FREE SYMBOL
N.T.S.



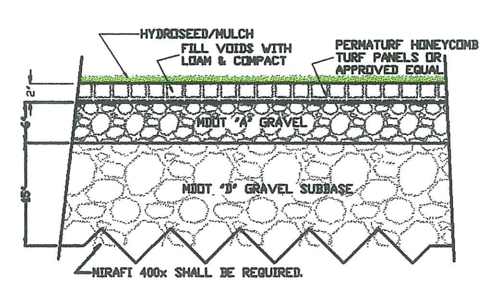
TERMINAL END CURB



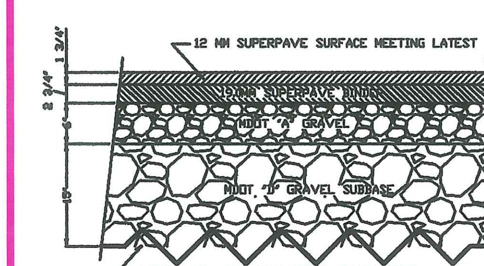
BITUMINOUS CURB DETAIL
N.T.S.



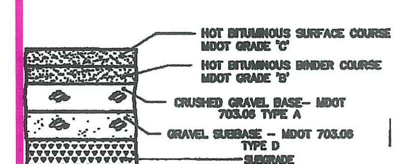
BARRIER FREE PARKING SIGN
N.T.S.



DETAIL FOR GRASS PAVER



DETAIL 1



NOTE:
COMPACT BASE, SUBBASE AND SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557

THICKNESS OF LAYERS

STANDARD	LAYERS
1-1/2"	HOT BITUMINOUS SURFACE COURSE MDOT GRADE 'C'
2"	HOT BITUMINOUS BINDER COURSE MDOT GRADE 'B'
6"	CRUSHED GRAVEL BASE - MDOT 703.06 TYPE A
12"	GRAVEL SUBBASE - MDOT 703.06 TYPE D

BITUMINOUS ASPHALT PAVEMENT SECTION
N.T.S.

USE THIS DETAIL FOR RAMP AT PIER

Title: PHASE 2 SITE CONSTRUCTION DETAILSS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

BUTLER DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. C-201

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

SCALE As Noted
DATE 5-6-04

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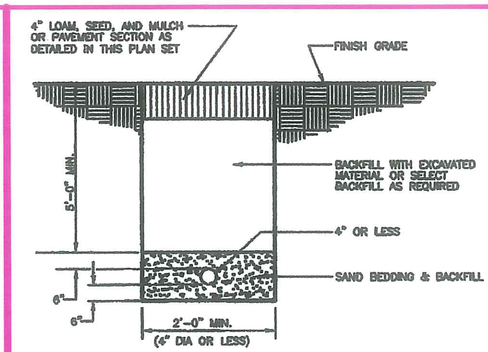
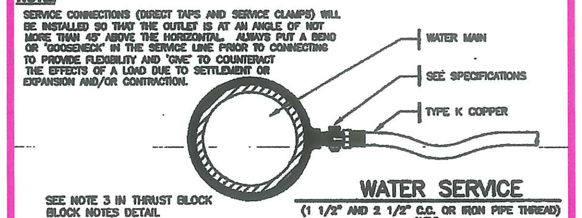
ITEMS MODIFIED ON THIS SHEET
1. NO CHANGES.



SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

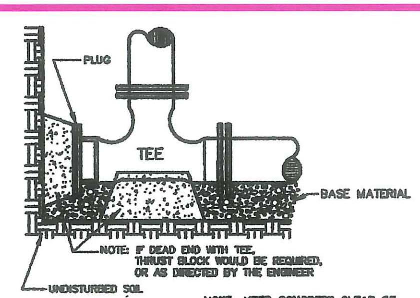
WATER SERVICE TRENCH SECTION
N.T.S.

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

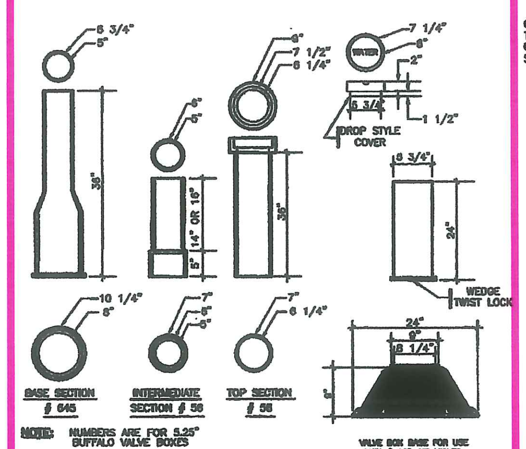
WATER SERVICE
(1 1/2" AND 2 1/2" C.C. OR IRON PIPE THREAD)
N.T.S.



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

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

STANDARD TEE BLOCKING
N.T.S.



NOTE: NUMBERS ARE FOR 5.25" BUFFALO VALVE BOXES

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

TYPICAL VALVE BOXES
N.T.S.

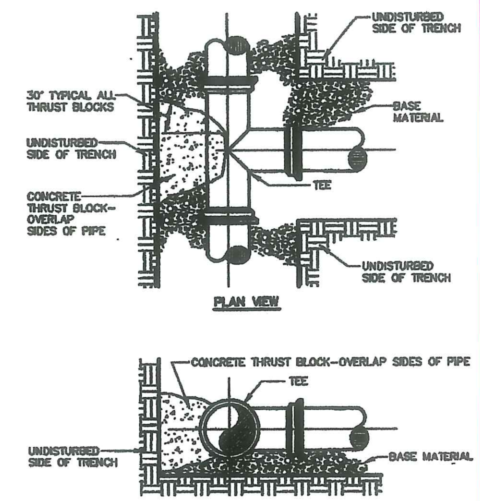
THRUST BLOCK NOTES

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

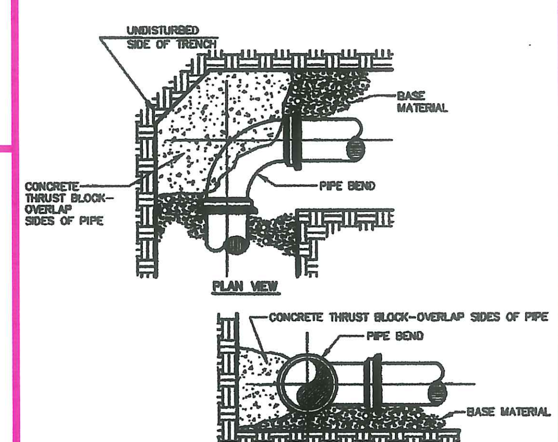
PIPE SIZE	1/32 BEND	1/16 BEND	1/8 BEND	1/4 BEND	TEES/CAPS
8"	2.9	5.7	11.1	20.5	14.5
4"	0.8	1.6	3.1	5.8	4.1

- ASSUMING TEST PRESSURE = 150 PSI, PASSIVE SOIL PRESSURE = 1000 PSF
- 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.



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

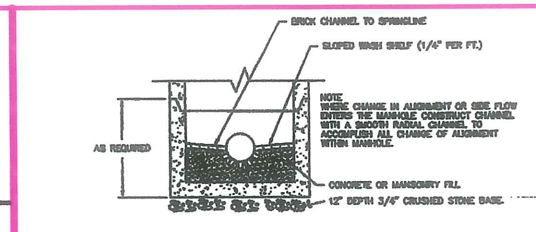
SECTION

THRUST/RETAINER GLAND SCHEDULE		
1/4 BEND	(90°)	THRUST BLOCK w/RESTRAINED JOINT
1/8 BEND	(45°)	THRUST BLOCK w/RESTRAINED JOINT
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.

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

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

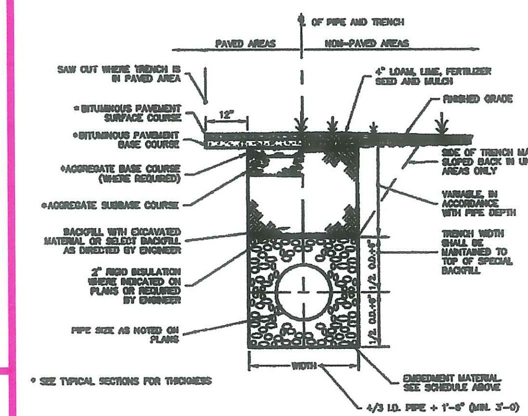


NOTE:
WHERE CHANGE IN ALIGNMENT OR SIDE FLOW ENTERS THE MANHOLE CONSTRUCT CHANNEL WITH A SMOOTH RADIAL CHANNEL TO ACCOMPLISH ALL CHANGE OF ALIGNMENT WITHIN MANHOLE.

STORM DRAIN & SEWER MANHOLE BRICK CHANNEL DETAIL
N.T.S.

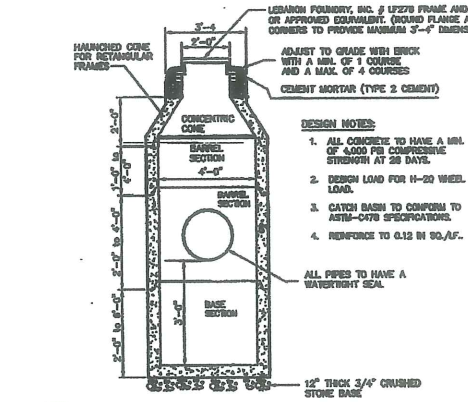
SCHEDULE OF TRENCH BACKFILL		
TYPE OF PIPE	EMBEDMENT MATERIAL	SELECT BACKFILL
CMP DUCTILE IRON RCP	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL

NOTE:
1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR



* SEE TYPICAL SECTIONS FOR THICKNESS

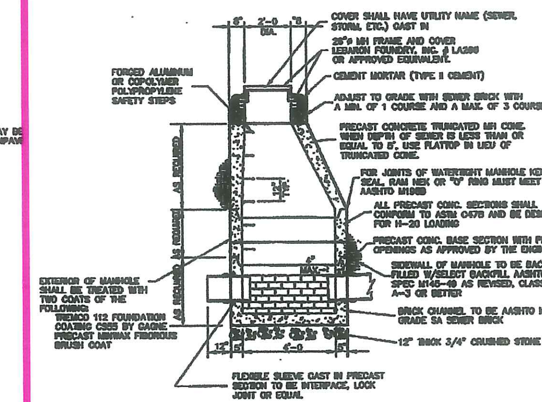
TYPICAL TRENCH SECTION
N.T.S.



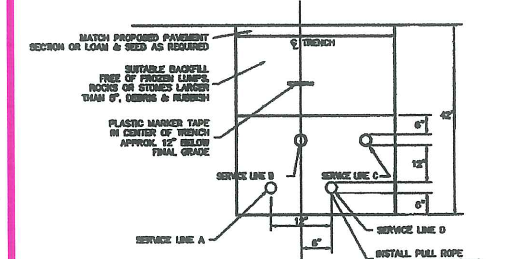
DESIGN NOTES:
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF.

NOTE:
1. CASCO TRAPS SHALL BE PROVIDED ON CATCH BASIN PIPES 15" OR LESS

4'-0" PRECAST CATCH BASIN
N.T.S.



4'-0" PRECAST STORM DRAIN & SEWER MANHOLE
N.T.S.

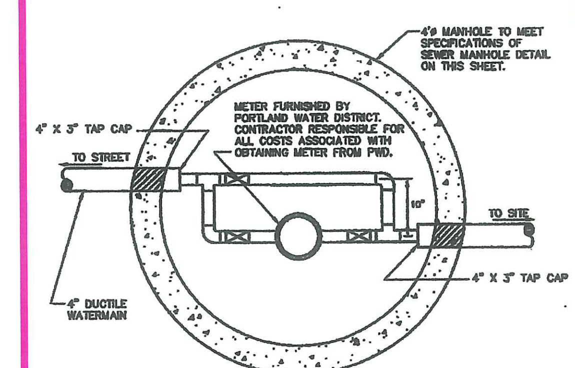


CONDUIT TYPE

SERVICE	CONDUIT SIZE	GRASS AND PAVED AREAS	UTILITY	REMARKS
A	6"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
B	4"	SCHEDULE 40 PVC	TELEPHONE	SEE NOTE 1
C	2"	SCHEDULE 40 PVC	CABLE	SEE NOTE 1
D	2"	SCHEDULE 40 PVC ELECTRICAL GRADE	SECONDARY POWER	SEE NOTE 1

NOTE:
1. PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10' ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS
2. ALL DIMENSIONS, SIZES, NUMBER OF CONDUITS AND MATERIALS TO BE VERIFIED WITH SERVING UTILITIES.

UTILITY TRENCH – PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE
N.T.S.



NOTES:
1. METER FLANGES AND A SPACER ARE AVAILABLE ON REQUEST, BY THE PLUMBER, AT THE PORTLAND WATER DISTRICT.
2. ALL PIPING WITHIN METER PIT SHALL BE 2" COPPER TUBING WITH BRASS GATE VALVES.
3. WHEN REQUESTING THE METER FROM PWD, INDICATE THAT THIS METER WILL REQUIRE A RADIO READ METER RATHER THAN A TOUCH PAD.

3" WATER METER PIT AND VALVE
SCALE: 1" = 1'

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

DRAWN BY: KSL
SCALE: As Noted
DATE: 5-6-04

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE
DESIGN BUILDER

PHASE 2 UTILITY DETAILS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

JOB NO. 030017
DRAWING NO. C-202

GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03.
THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

ITEMS MODIFIED ON THIS SHEET
1. NO CHANGES.

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 intersection of the site roadway and Kensington Street.

2. Siltation fence shall be installed downstream of any disturbed areas to trap runoff borne sediments until the tributary disturbed area is revegetated. The silt fence shall be installed per the detail provided in the plan set 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 line. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind fence, 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 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 of less than 8 percent shall be anchored by applying water; mulch placed on slopes equal to or steeper than 8 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturers recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive curlex blankets by American Excelsior or equal.

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 the wetlands or open water, which will remain and shall be located away from drainage swales.

b) Stockpiles shall be stabilized within 7 days by either temporarily seeding the stockpile with 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 new denuded areas that are within 50 feet of a wetland or open water that will remain, which have been rough graded and are not located within the 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 a wetland or open water body, which will remain 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 a fabric netting. The time period for applying mulch as noted in Paragraph 5 above, shall be limited to 7 days for all areas.

7. Kensington Street shall be swept to control mud and dust as necessary.

8. During grubbing operations stone check dams may 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. Water and/or calcium chloride shall be furnished and applied in accordance with MDOT specifications – Section 637 – Dust Control.

11. 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 in the Seeding Plan. Seeding shall not occur over snow.

12. Temporary seed mixture shall be annual rye grass applied at the rate of 0.9 lbs/1000 sq. ft.

Permanent Erosion Control Measures

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

1. All storm drain pipe outlets shall have riprap aprons at their outlet to protect the outlet and receiving channel of the culverts from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized to the extent practicable prior to directing runoff to the tributary pipe or culvert.

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 50' of a wetland or open water body, which will remain 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.

Implementation Schedule

The following construction sequence shall be required 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 at the intersection of the site driveway and Kensington Street.

2. Clear work areas

3. Install perimeter siltation fence for roadway construction and temporary parking and fill areas.

4. Clear and grub work areas using care not to overexpose the site.

5. During grubbing operations, install stone check dams at any evident concentrated flow discharge points.

6. Commence earthwork operations.

7. Commence excavation of building foundation.

8. Commence installation of waterline and sewer main.

9. Continue earthwork and grading to subgrade as necessary for construction.

10. Install light pole foundations and utility poles as well as underground elec./tel./cable services.

11. Complete all remaining earthwork operations.

12. Complete installation of all utilities.

13. Loam, lime, fertilize, seed, and mulch disturbed areas.

14. Remove accumulated sediment from ahead of any sediment barriers as necessary.

15. Once the site is stabilized and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.

16. Touch up loam and seed.

Note: All denuded (created by this construction) areas not subject to final paving, riprap or gravel, shall be revegetated.

Prior to construction of the access drives, parking areas and utilities, the contractor shall submit a schedule to the Owner 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 entrance 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 a wetland or open water body, which will remain and 14 days for all other areas. Areas within 50 feet of a wetland, which will remain 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

It is anticipated that construction of the access road, utilities and other site improvements can be completed in one construction season. However, if any work is necessary between October 15 and April 15, the contractor shall submit a schedule which will satisfy the following criteria:
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 4" 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 dless 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 in the road or paved areas 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 50 feet of a wetland shall remain denuded for a period of over 7 days before it is temporarily stabilized. Temporary stabilization shall be the installation of gravel or mulching. 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.

Provisions for Maintenance of the Erosion/Sedimentation Control Features

The Contractor shall prepare a list and designate by name, address and telephone number all individuals who will be responsible for implementation, inspection and maintenance of all erosion control measures identified within this section and as contained in the Erosion and Sedimentation Control Plan of the contract drawings. Specific responsibilities of the inspector(s) will include:

1. Assuring and certifying the owner's construction sequence is in conformance with the specified schedule of this section. A weekly certification stating compliance, any deviations, and corrective measures necessary to comply with the erosion control requirement of this section shall be prepared and signed by the inspector(s).

2. In addition to the weekly certifications, the inspector(s) shall maintain written reports recording construction activities on site which include:

Dates when major grading activities occur in a particular area.

Dates when major construction activities cease in a particular area, either temporarily or permanently.

Dates when an area is stabilized.
3. Inspection of this project work site on a weekly basis and after each significant rainfall event (0.5 inches or more within any consecutive 24 hour period) during construction until permanent erosion control measures have been properly installed and the site has been stabilized. Inspection of the project work site shall include:

Identification of proper erosion control measure installation in accordance with the erosion control detail sheet or as specified in this section.

Determine whether each erosion control measure is properly operating. If not, identify damage to the control device and determine remedial measures.

Identify areas which appear vulnerable to erosion and determine additional erosion control measures which should be used to improve conditions.

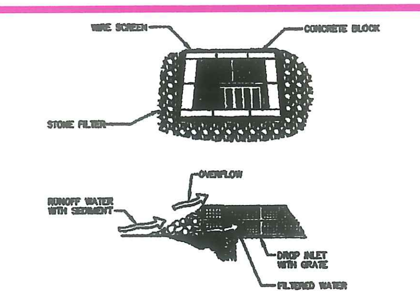
Inspect areas of recent seeding to determine percent catch of grass. A minimum catch of 75 percent is required prior to removal of erosion control measures.

Accumulated silt/sediment should be removed when the depth of sediment reaches 50 percent of the barrier height. Accumulated silt/sediment should be removed from behind silt fencing when the depth of the sediment reaches 6 inches.

4. If inspection of the site indicates a change should be made to the erosion control plan, either to improve effectiveness or correct a site specific deficiency, the inspector shall immediately implement the corrective measure and notify the Owner of the change.

Preconstruction Conference

Prior to any construction at the site, representatives of the Contractor 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.



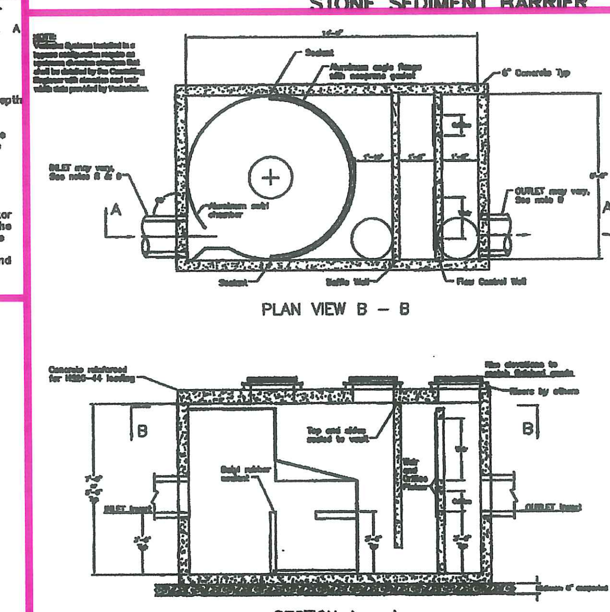
SPECIFIC APPLICATION

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.

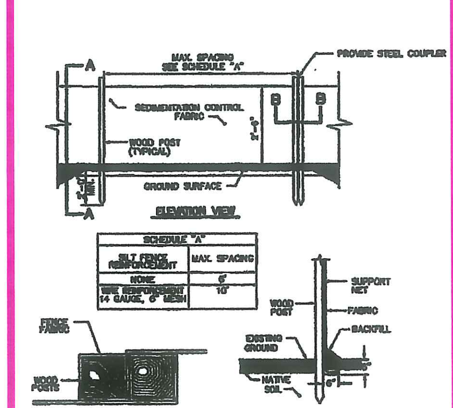
NOTES:

1. 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.
2. 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.
3. 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.
4. 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.

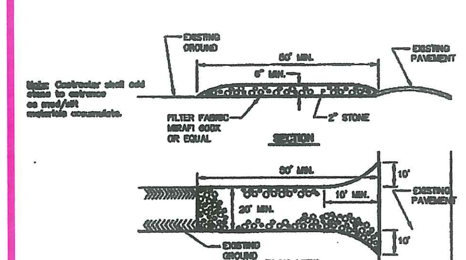
STONE SEDIMENT BARRIER



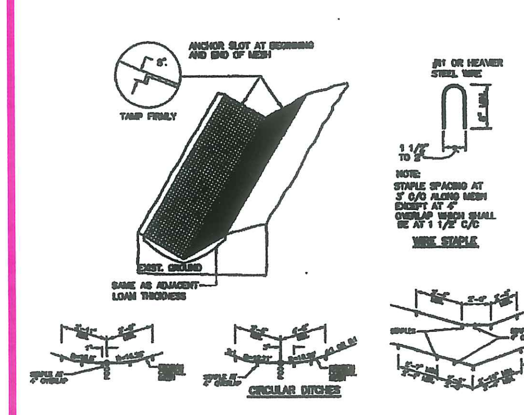
WATER QUALITY UNIT
N.T.S.



SILTATION FENCE DETAIL
N.T.S.



STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



EROSION CONTROL MESH
N.T.S.

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

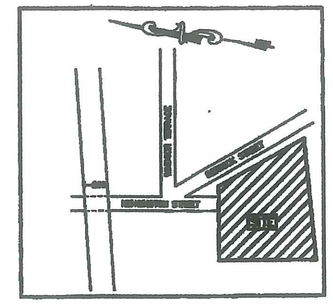
DRAWN BY: KSL
SCALE: As Noted
DATE: 5-6-04

PHASE 2 EROSION & SEDIMENTATIN CONTROL DETAILS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER

JOB NO. 030017
DWG. NO. C-203



LOCATION MAP
NOT TO SCALE

DEVELOPMENT PLANS
FOR
MAINE YACHT CENTER - PHASE 2
PORTLAND, MAINE
KENSINGTON STREET

PHASE 2 MODIFIED SITE PLAN APPLICATION

PROJECT PARCEL SITE
PORTLAND ASSESSOR'S
MAP & LOT NUMBERS

MAP	BLOCK	LOT
430	B	013

Owner & Applicant
MAINE YACHT CENTER, L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE 04103

UTILITIES

SEWER:
PORTLAND PUBLIC WORKS
55 PORTLAND STREET
PORTLAND, MAINE 04101
(207) 874-8801
ATTN: FRANK BRANCELY

WATER:
PORTLAND WATER DISTRICT
P.O. BOX 3553
225 DOUGLAS STREET
PORTLAND, MAINE 04104
(207) 774-5961
ATTN: DAVE COFFIN

ELECTRIC:
CENTRAL MAINE POWER COMPAN
162 CANCO ROAD
PORTLAND, MAINE 04103
(207) 828-2880
ATTN: MARK KREIDER

TELEPHONE:
VERIZON
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
(207) 797-1678
ATTN: JOHN CAPRIO

CABLE:
TIME-WARNER CABLE
118 JOHNSON ROAD
PORTLAND, MAINE 04102
(207) 253-2291
ATTN: DEBBIE PAIEMONT

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	PROPERTY LINE	
	BUILDING SETBACK	
EDGE OF PAVEMENT	EDGE OF PAVEMENT	
	GRADING CONTOUR LINE	
00.31	SPOT ELEVATION	
	TREELINE	
	TREES & HEDGES	
	POLE WITH LIGHT FIXTURE(S)	
	UTILITY POLE	
	FREESTANDING SIGN	
	PAINTED DIRECTIONAL TRAFFIC ARROW	
OHU	OVERHEAD ELECTRIC/TELEPHONE	
UGE	UNDERGROUND ELECTRIC/TELEPHONE	
	WATER LINE	
	UNDERGROUND GAS LINE	
	SEWER LINE	
15"D	STORM DRAIN LINE	
24" CULV	CULVERT	
	HYDRANT	
	WATER GATE VALVE	
W.S.O.	WATER SHUT OFF VALVE	
SMH	MANHOLE	
CB	CATCH BASIN	
	TEST PIT	
	MONUMENT	
	RIPRAP	
	SILT FENCE - PERIMETER	
	STONE SEDIMENT BARRIER	
EXIST.I.P.	EXISTING IRON PIPE	
SET I.P.	SET IRON PIPE	

Dig Safe/Utility Locations

The Sheridan Corporation has made a dilligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor/subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's errors.

NOTES

GENERAL NOTES

1. TOPOGRAPHIC DATA AND BOUNDARY INFORMATION IS BASED ON A GROUND SURVEY CONDUCTED BY POST ROAD SURVEYING OF WELLS, MAINE COMPLETED ON OCTOBER 2, 2000.

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 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. THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRICADES, LIGHTS, WARNING SIGNS AND OTHER DEVICES TO SAFEGUARD TRAFFIC PROPERLY WHILE WORK IS IN PROGRESS FOR THE DURATION OF THE PROJECT.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A SITE PLAN PERMIT FROM THE CITY OF PORTLAND WHICH WILL BE MADE A PART OF THE CONTRACT BID DOCUMENTS. THE CONSTRUCTION WILL BE GOVERNED BY THE ZONING 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 EDGE OF PAVEMENT.

2. THE STOP SIGNS INDICATED ON THE LAYOUT PLANS ARE TO MEET ALL REQUIREMENTS & STANDARDS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION & THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

3. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.

4. 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.

5. 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 PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.

6. PROPOSED RIGHT OF WAY MONUMENTS AND PROPERTY LINE PINS SHALL BE INSTALLED UNDER THE DIRECTION OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.

UTILITY NOTES

1. ALL SEWER UTILITY MATERIALS AND INSTALLATION METHODS SHALL CONFORM TO CITY OF PORTLAND SEWER DEPARTMENT AND PORTLAND WATER DISTRICT STANDARDS.

2. DOMESTIC WATER METERS SHALL BE INSTALLED WITHIN THE UTILITY VAULT WITH A REMOTE READER. THE DOMESTIC WATER AND FIRE SERVICE SHALL HAVE GATE VALVES INSTALLED IN THE BUILDING.

3. 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 THE ENGINEER FOR REVIEW.

GRADING AND DRAINAGE NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH NHDOT SPECIFICATIONS. THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

POLYVINYLCHLORIDE (PVC) PIPE
SMOOTH BORE POLYETHYLENE PIPE

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.

4. ALL EXCAVATION NECESSARY FOR THIS PROJECT SHALL BE UNCLASSIFIED.

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 AS NOTED ON PLANS.

3. SILT FENCES SHALL BE INSPECTED, REPAIRED AND CLEANED AS NOTED IN THE EROSION CONTROL REPORT.

4. 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.

5. SILT REMOVED FROM BEHIND THE SILT FENCES SHALL BE PLACED ON A TOPSOIL STOCKPILE AND MIXED INTO IT FOR LATER USE IN LANDSCAPING OPERATIONS.

6. ALL NON-PAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE LOAMED AND SEEDED, UNLESS OTHERWISE DIRECTED BY THE OWNER.

PLAN LIST

SHEET	TITLE
C-001	COVER SHEET
C-101	N / A
C-102	N / A
C-103	SITE LAYOUT PLAN
C-104	UTILITY PLAN
C-105	GRADING & DRAINAGE PLAN
C-106	EROSION CONTROL PLAN
C-107	OPERATIONS PLAN
L-101	LANDSCAPING PLAN
C-201	SITE CONSTRUCTION DETAILS
C-202	UTILITY DETAILS
C-203	EROSION & SEDIMENTATION CONTROL DETAILS

NOTE:
THIS SITE DESIGN PACKAGE CONSISTS OF ALL THE REFERENCED PLANS AND THE COMPLETE TOWN AND ANY OTHER APPLICABLE APPROVALS.

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

DRAWN BY KSL
SCALE As Noted
DATE 3-29-04

Title
PHASE 2 COVER SHEET
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

BUTLER
DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. C-001

SPACE AND BULK STANDARDS

	REQUIRED		PROVIDED	
ZONE:	I-L	R-3	I-L	R-3
MIN. LOT SIZE	NONE	6,500 S.F.	105,972 S.F.	N/A
BUILDING SETBACKS				
FRONT	25'	25'	45'	SEE NOTE 5
SIDE	25' (1)	16' (4)	45'	SEE NOTE 5
REAR	25' (1)	25' (2)	45'	SEE NOTE 5
PAVEMENT SETBACKS	15'	N/A	15'	SEE NOTE 5
MAX. HEIGHT	45'	35' (3)	<45'	SEE NOTE 5
MIN. STREET FRONTAGE	60'	50'	100'	SEE NOTE 5
MAX. IMPERVIOUS SURFACE RATIO	<65%	N/A	70%	SEE NOTE 5
MAX. LOT COVERAGE	SEE NOTE 6	25%	SEE NOTE 6	SEE NOTE 5

NOTES:

(1) THE REQUIRED SETBACK SHOULD BE 40' WHEN IT ABUTS A RESIDENTIAL ZONE.

(2) FOR PRINCIPAL OR ACCESSORY STRUCTURES WITH COVERAGE GREATER THAN 100 S.F., HOWEVER ANY ACCESSORY DETACHED STRUCTURES WITH LESS THAN 100' OF GROUND COVERAGE THE REAR YARD DECREASES TO 5'.

(3) ACCESSORY DETACHED STRUCTURE: EIGHTEEN (18) FEET

(4) VARIES WITH PROPOSED BUILDING HEIGHT.

(5) SECTION 14-51 OF THE PORTLAND ZONING ORDINANCE STATES: "THE PROVISIONS OF THIS ARTICLE FOR THE LESS RESTRICTED PORTION OF SUCH LOT SHALL EXTEND NOT MORE THAN THIRTY (30) FEET INTO THE MORE RESTRICTED PORTION..."

(6) THE EXISTING LOT (PARCEL 1 & 3) INCLUDES ABOUT 71% IMPERVIOUS COVERAGE (ABOVE MEAN TIDE). THE PROPOSED PHASE 2 IMPERVIOUS COVERAGE IS 70%.

(7) EXISTING SOILS ARE NOTED AS "CUT AND FILL LAND" IN THE SCS "SOIL SURVEY, CUMBERLAND COUNTY, MAINE", 1974.

(8) LARGE OVERHEAD DOORS ON THE EAST SIDE OF THE BUILDING WILL REMAIN CLOSED DURING NORMAL OPERATIONS, EXCEPT FOR THE MAIN INGRESS/EGRESS DOOR (NEAR THE SOUTH END OF THE BUILDING) TO THE INTERIOR PARKING AREA.

SITE DATA

ZONE:	I-L	R-3
SITE AREA	267,955 S.F.	4,162 S.F.

PARKING
REQUIRED:
1 SP/ 2 BOAT SLIPS X 124 SLIPS + 10 MOORINGS = 72 SPACES
PROVIDED:
80 SPACES, INCLUDING 4 BARRIER FREE SPACES

SIGN LEGEND

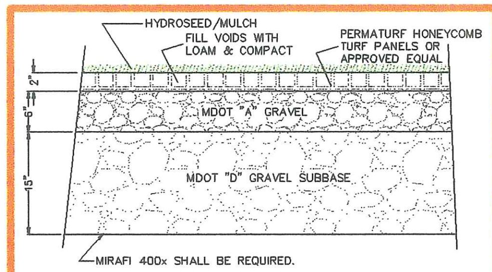
R7-8 12"x 18"	R7-8 12"x 18"	R5-1 30"x 30"	R84 12"x18"
1	2	3	4

ITEMS MODIFIED ON THIS PLAN #103
1. NEW BUILDING FOOT PRINT.
2. ADJUSTED PAVED AREA TO CONFORM TO BUILDING.
3. MODIFIED GRADES AT NORTH END OF BUILDING.
4. PEDESTRIAN EASEMENT ACKNOWLEDGED.
5. ACCESS TO RETAIL SPACE.
6. PARKING SPACES ADJUSTED, 3 SPACES WERE ADDED NEW TOTAL IS 83 SPACES.
7. PAVEMENT AND GRASS PAVERS REVISED. CONST. DETAIL ADDED PER S.W. COLES LATEST SOILS REPORT.
8. GRASS ISLAND AT OHD WAS REDUCED BY 124 SF, TO ALLOW RELOCATED PARKING GARAGE ENTRY DOOR.
9. NO BOAT STOEAGE ON PARCEL 2 NOTE OF PLANNING BOARD CONDITION #IV ADDED.

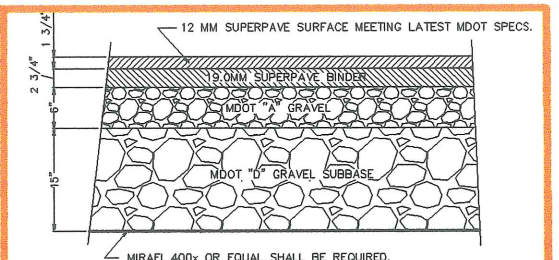
GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03. THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

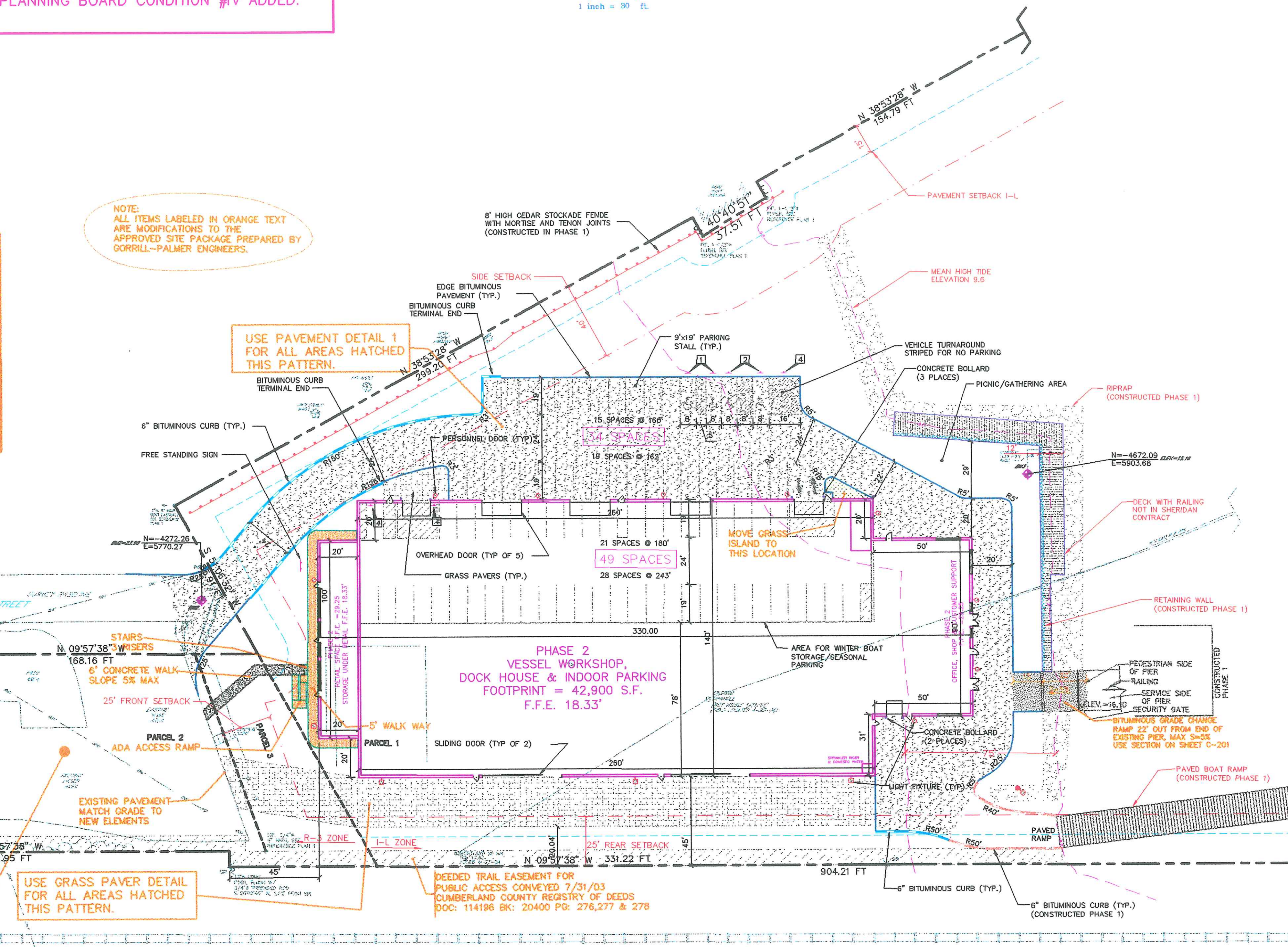


DETAIL FOR GRASS PAVER



DETAIL 1

NOTE:
ALL ITEMS LABELED IN ORANGE TEXT ARE MODIFICATIONS TO THE APPROVED SITE PACKAGE PREPARED BY GORRILL-PALMER ENGINEERS.



NOTE: PHASE 2 PLANNING BOARD CONDITION # IV
NO BOAT STORAGE ALLOWED ON PARCEL 2, WHICH IS LOCATED IN THE R-3 ZONE, WITHOUT APPROPRIATE ZONING CHANGE OR VARIANCE, EITHER OF WHICH REQUIRE REVIEW AND APPROVAL BY THE PLANNING BOARD.

USE GRASS PAVER DETAIL FOR ALL AREAS HATCHED THIS PATTERN.

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

DRAWN BY KSL
SCALE As Noted
DATE 5-6-04

Title: PHASE 2 SITE LAYOUT PLAN (MODIFIED)
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND, ME.

Engineering Designs For
MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. C-103

GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03.
THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

ITEMS MODIFIED ON THIS PLAN #C-104.
1. NEW BUILDING FOOT PRINT.
2. ADJUSTED PAVED AREA TO CONFORM TO BUILDING.
3. BUILDING FINISH FLOOR RAISED 1.83 FEET TO FACILITATE CONSTRICTION PER LATEST S.W. COLE SOILS REPORT.
4. BITUMINOUS PAVED RAMP ADDED TO EXISTING PIER TO FACILITATE GRADE CHANGES.
5. RELOCATED CB2, DMH3 CHANGED TO CB7 & DMH4 TO CB8. TO FACILITATE BETTER COLLECTION OF STORM WATER FROM PAVEMENT.
6. EXISTING CITY OF PORTLAND STORM DRAIN PIPE THAT CROSSES SITE FROM WEST TO EAST IS REROUTED OUTSIDE NEW BUILDING
7. NORTHERN UTILITIES GAS SERVICE EXTENDED DOWN KENSINGTON ST. TO BUILDING.
8. NEW LOCATION AND ALTERNATE LOCATION FOR ELECTRIC TRANSFORMER SHOWN.
9. PHASE 1 UTILITIES SHOWN FOR REFERENCE.
10. DOMESTIC WATER, FIRE SPRINKLER AND SANITARY SEWER SERVICES ADJUSTED TO FIT NEW BUILDING.
11. PUMP STATION CONTROL PANEL RELOCATED TO BUILDING WALL.
12. ADJUST ALL EXISTING PHASE 1 UTILITIES & FUEL SYSTEM TO ACCOMMODATE MODIFIED GRADES.

NOTE:
TEXT IN THIS COLOR INDICATES RELOCATED CITY OF PORTLAND STORM DRAIN LINE.

NOTE:
TEXT IN THIS COLOR INDICATES NEW UTILITY INFORMATION AS OF 5-1-04. ITEMS MAY BE RELOCATED OR OTHERWISE AMENDED FROM 7-31-03 CITY APPROVAL.

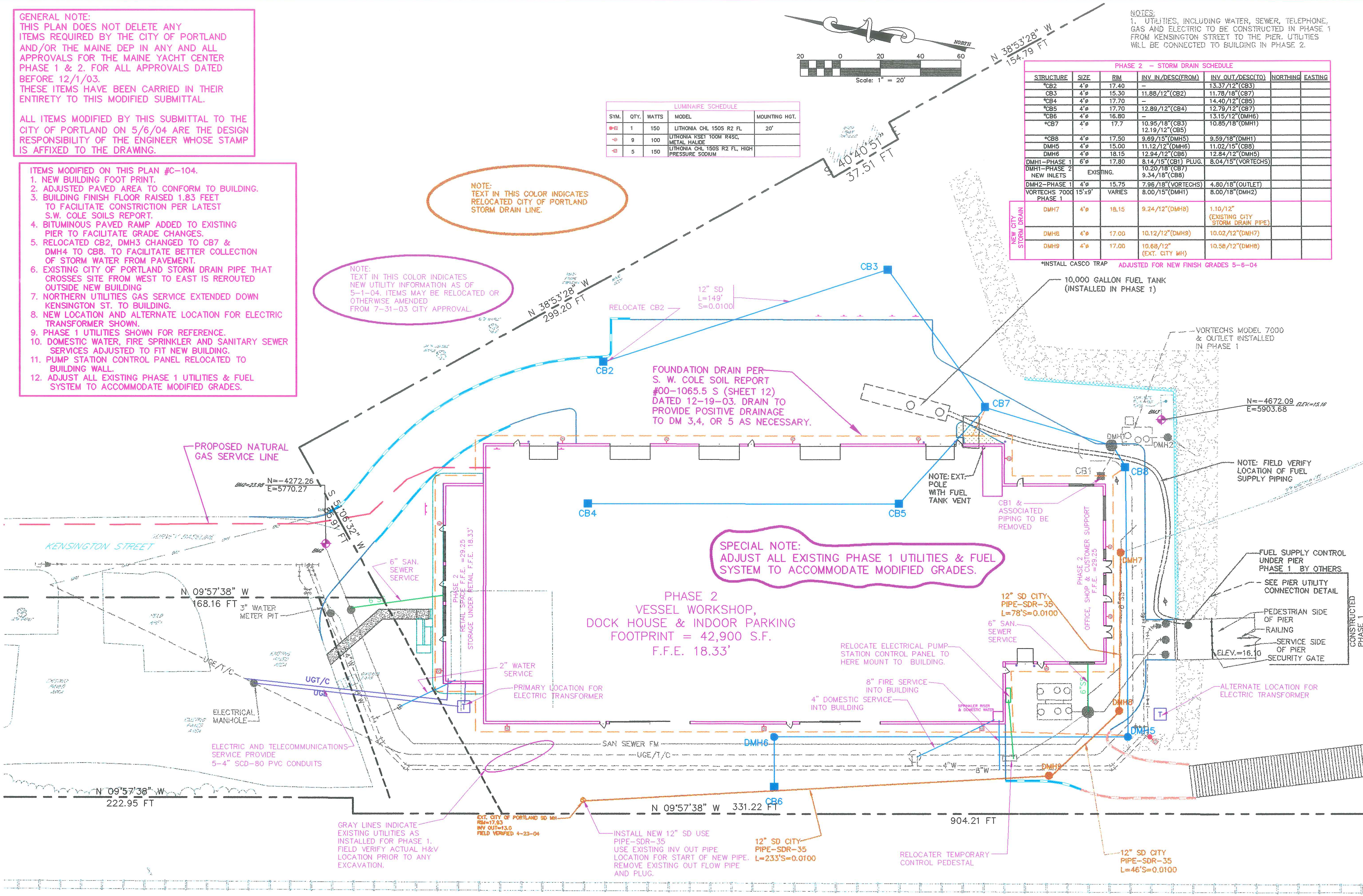
LUMINAIRE SCHEDULE				
SYM.	QTY.	WATTS	MODEL	MOUNTING HGT.
	1	150	LITHONIA CHL 150S R2 FL	20'
	9	100	LITHONIA KSE1 100M R4SC, METAL HALIDE	
	5	150	LITHONIA CHL 150S R2 FL, HIGH PRESSURE SODIUM	

NOTES:
1. UTILITIES, INCLUDING WATER, SEWER, TELEPHONE, GAS AND ELECTRIC TO BE CONSTRUCTED IN PHASE 1 FROM KENSINGTON STREET TO THE PIER. UTILITIES WILL BE CONNECTED TO BUILDING IN PHASE 2.

PHASE 2 – STORM DRAIN SCHEDULE

	STRUCTURE	SIZE	RIM	INV IN/DESC(FROM)	INV OUT/DESC(TO)	NORTHING	EASTING
	*CB2	4'ø	17.40	–	13.37/12"(CB3)		
	CB3	4'ø	15.30	11.88/12"(CB2)	11.78/18"(CB7)		
	*CB4	4'ø	17.70	–	14.40/12"(CB5)		
	*CB5	4'ø	17.70	12.89/12"(CB4)	12.79/12"(CB7)		
	*CB6	4'ø	16.80	–	13.15/12"(DMH6)		
	*CB7	4'ø	17.7	10.95/18"(CB3) 12.19/12"(CB5)	10.85/18"(DMH1)		
	*CB8	4'ø	17.50	9.69/15"(DMH5)	9.59/18"(DMH1)		
	DMH5	4'ø	15.00	11.12/12"(DMH6)	11.02/15"(CB8)		
	DMH6	4'ø	18.15	12.94/12"(CB6)	12.84/12"(DMH5)		
	DMH1–PHASE 1	6'ø	17.80	8.14/15"(CB1) PLUG.	8.04/15"(VORTECHS)		
	DMH1–PHASE 2 NEW INLETS	EXISTING.		10.20/18"(CB7) 9.34/18"(CB8)			
	DMH2–PHASE 1	4'ø	15.75	7.96/18"(VORTECHS)	4.80/18"(OUTLET)		
	VORTECHS 7000 PHASE 1	15'x9'	VARIES	8.00/15"(DMH1)	8.00/18"(DMH2)		
NEW CITY STORM DRAIN	DMH7	4'ø	18.15	9.24/12"(DMH8)	1.10/12" (EXISTING CITY STORM DRAIN PIPE)		
NEW CITY STORM DRAIN	DMH8	4'ø	17.00	10.12/12"(DMH9)	10.02/12"(DMH7)		
NEW CITY STORM DRAIN	DMH9	4'ø	17.00	10.68/12" (EXT. CITY MH)	10.58/12"(DMH8)		

*INSTALL CASCO TRAP ADJUSTED FOR NEW FINISH GRADES 5-6-04



FAIRFIELD MAINE PORTLAND MAINE
Sheridan
WWW.SHERIDANCORP.COM

DRAWN BY	KSL
APPROVED BY	
SCALE	As Noted
DATE	5-6-04
TYPE	

Title: PHASE 2 UTILITY PLAN (MODIFIED)
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND, ME.

Engineering Designs For
MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

JOB NO. 030017
ENGINEERING DWG. NO. C-104

BUTLER DESIGN BUILDER

GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03. THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

ITEMS MODIFIED ON THIS PLAN #C-105.
1. NEW BUILDING FOOT PRINT.
2. ADJUSTED PAVED AREA TO CONFORM TO BUILDING.
3. BUILDING FINISH FLOOR RAISED 1.83 FEET TO FACILITATE CONSTRUCTION, PER LATEST S.W. COLE SOILS REPORT.
4. MODIFIED GRADES TO ADJUST FOR NEW FINISHED FLOOR ELEVATION OF THE BUILDING.
5. BITUMINOUS PAVED RAMP ADDED TO EXISTING PIER TO FACILITATE GRADE CHANGES.
6. REROUTED CITY OF PORTLAND STORM DRAIN AROUND BUILDING.
7. RELOCATED CB2, DMH3 CHANGED TO CB7 & DMH4 TO CB8. TO FACILITATE BETTER COLLECTION OF STORM WATER FROM PAVEMENT.
8. STORM DRAIN SYSTEM ADJUSTED FOR MODIFIED FINISH GRADE.

NOTE:
ALL ITEMS LABELED IN BLUE TEXT ARE MODIFICATIONS TO THE APPROVED SITE PACKAGE PREPARED BY GORRILL-PALMER ENGINEERS.

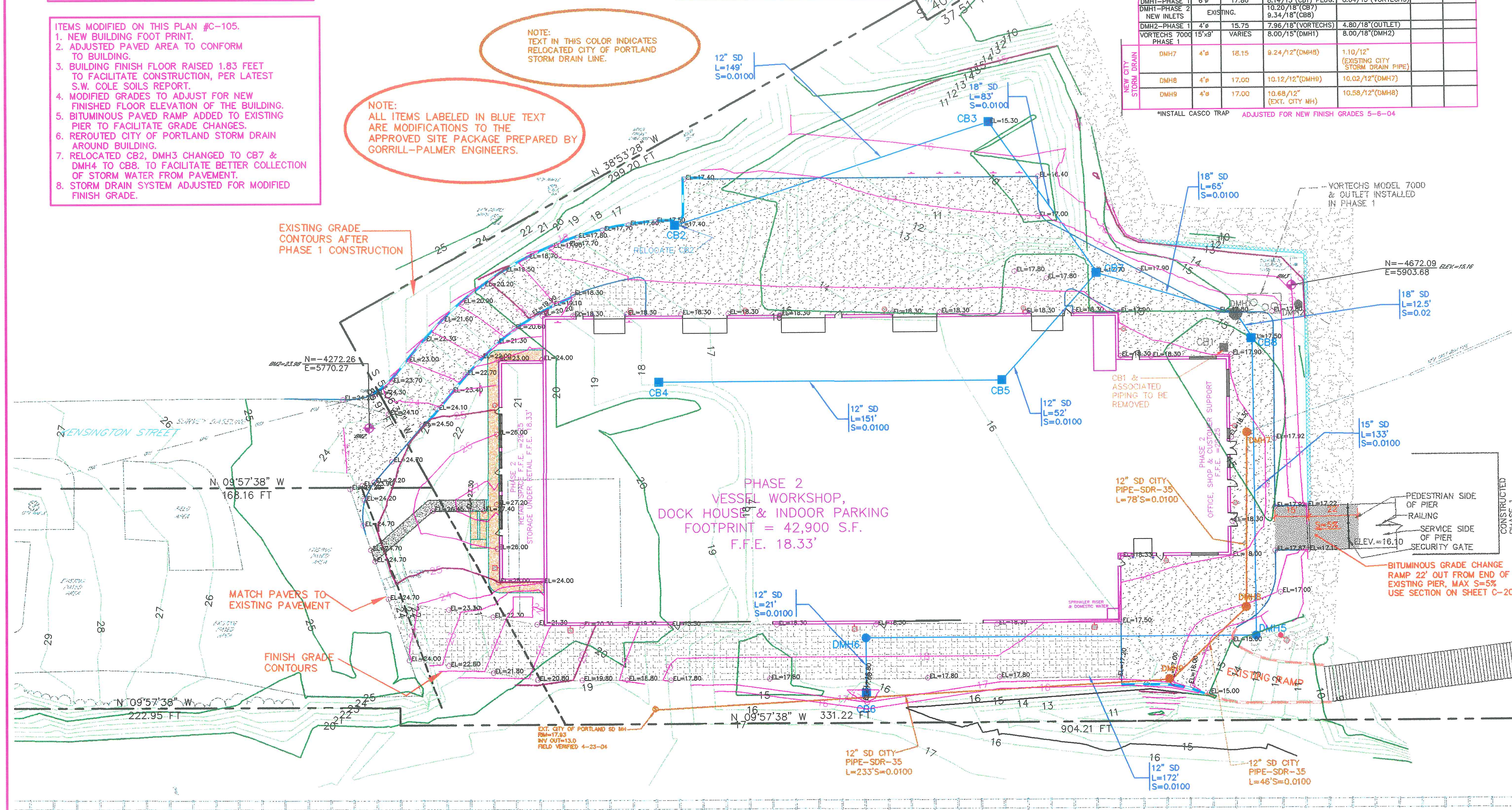
NOTE:
TEXT IN THIS COLOR INDICATES RELOCATED CITY OF PORTLAND STORM DRAIN LINE.

LUMINAIRE SCHEDULE				
SYM.	QTY.	WATTS	MODEL	MOUNTING HGT.
	1	150	LITHONIA CHL 150S R2 FL	20'
	9	100	LITHONIA KSE1 100M R4SC, METAL HALIDE	
	5	150	LITHONIA CHL 150S R2 FL, HIGH PRESSURE SODIUM	

PHASE 2 – STORM DRAIN SCHEDULE

	STRUCTURE	SIZE	RIM	INV IN/DESC(FROM)	INV OUT/DESC(TO)	NORTHING	EASTING
	*CB2	4'ø	17.40	–	13.37/12"(CB3)		
	CB3	4'ø	15.30	11.88/12"(CB2)	11.78/18"(CB7)		
	*CB4	4'ø	17.70	–	14.40/12"(CB5)		
	*CB5	4'ø	17.70	12.89/12"(CB4)	12.79/12"(CB7)		
	*CB6	4'ø	16.80	–	13.15/12"(DMH6)		
	*CB7	4'ø	17.7	10.95/18"(CB3) 12.19/12"(CB5)	10.85/18"(DMH1)		
	*CB8	4'ø	17.50	9.69/15"(DMH5)	9.59/18"(DMH1)		
	DMH5	4'ø	15.00	11.12/12"(DMH6)	11.02/15"(CB8)		
	DMH6	4'ø	18.15	12.94/12"(CB6)	12.84/12"(DMH5)		
	DMH1–PHASE 1	6'ø	17.80	8.14/15"(CB1) PLUG.	8.04/15"(VORTECHS)		
	DMH1–PHASE 2 NEW INLETS	EXISTING.		10.20/18"(CB7) 9.34/18"(CB8)			
	DMH2–PHASE 1	4'ø	15.75	7.96/18"(VORTECHS)	4.80/18"(OUTLET)		
	VORTECHS 7000 PHASE 1	15'x9'	VARIES	8.00/15"(DMH1)	8.00/18"(DMH2)		
NEW CITY STORM DRAIN	DMH7	4'ø	18.15	9.24/12"(DMH8)	1.10/12" (EXISTING CITY STORM DRAIN PIPE)		
	DMH8	4'ø	17.00	10.12/12"(DMH9)	10.02/12"(DMH7)		
	DMH9	4'ø	17.00	10.68/12" (EXT. CITY MH)	10.58/12"(DMH8)		

*INSTALL CASCO TRAP   ADJUSTED FOR NEW FINISH GRADES 5-6-04



Engineering Designs For
MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

Title
PHASE 2 GRADING & DRAINAGE PLAN (MODIFIED)
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND, ME.

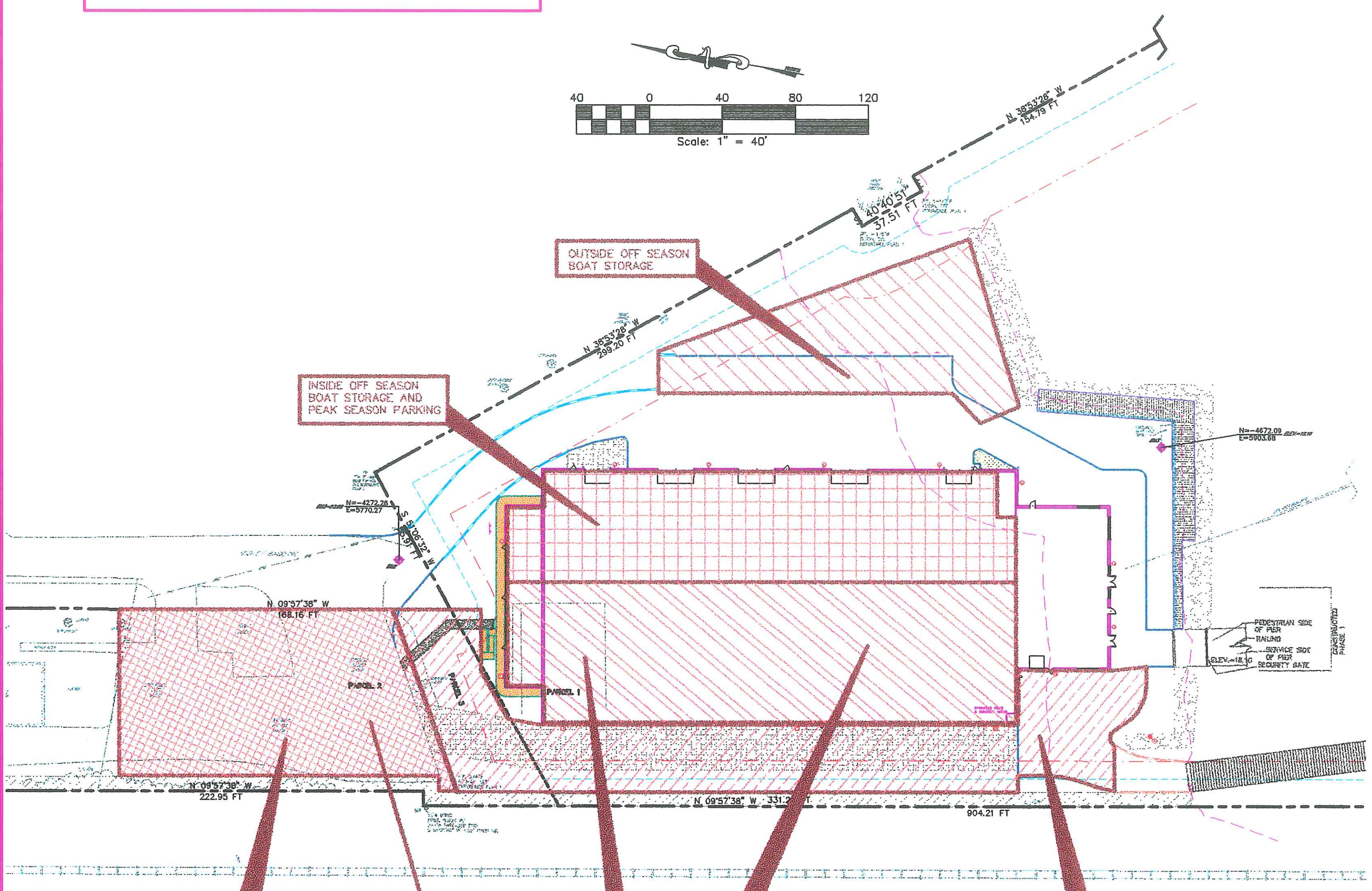
JOB NO. 030017
ENGINEERING DWG. NO. C-105
DRAWN BY KSL
APPROVED BY
SCALE As Noted
DATE 5-6-04
TYPE

Sheridan
FAIRFIELD MAINE
PORTLAND MAINE
DESIGN BUILDER

GENERAL NOTE:
THIS PLAN DOES NOT DELETE ANY ITEMS REQUIRED BY THE CITY OF PORTLAND AND/OR THE MAINE DEP IN ANY AND ALL APPROVALS FOR THE MAINE YACHT CENTER PHASE 1 & 2. FOR ALL APPROVALS DATED BEFORE 12/1/03.
THESE ITEMS HAVE BEEN CARRIED IN THEIR ENTIRETY TO THIS MODIFIED SUBMITTAL.

ALL ITEMS MODIFIED BY THIS SUBMITTAL TO THE CITY OF PORTLAND ON 5/6/04 ARE THE DESIGN RESPONSIBILITY OF THE ENGINEER WHOSE STAMP IS AFFIXED TO THE DRAWING.

ITEMS MODIFIED ON THIS PLAN #C-106.
1. NO BOAT STOEAGE ON PARCEL 2 NOTE OF PLANNING BOARD CONDITION #IV ADDED.



EXISTING PAVED PARKING AND STORAGE AREA. USE TO BE CONTINUED AFTER CONSTRUCTION OF PHASE 2.

TYPICAL BOAT STORAGE ZONE

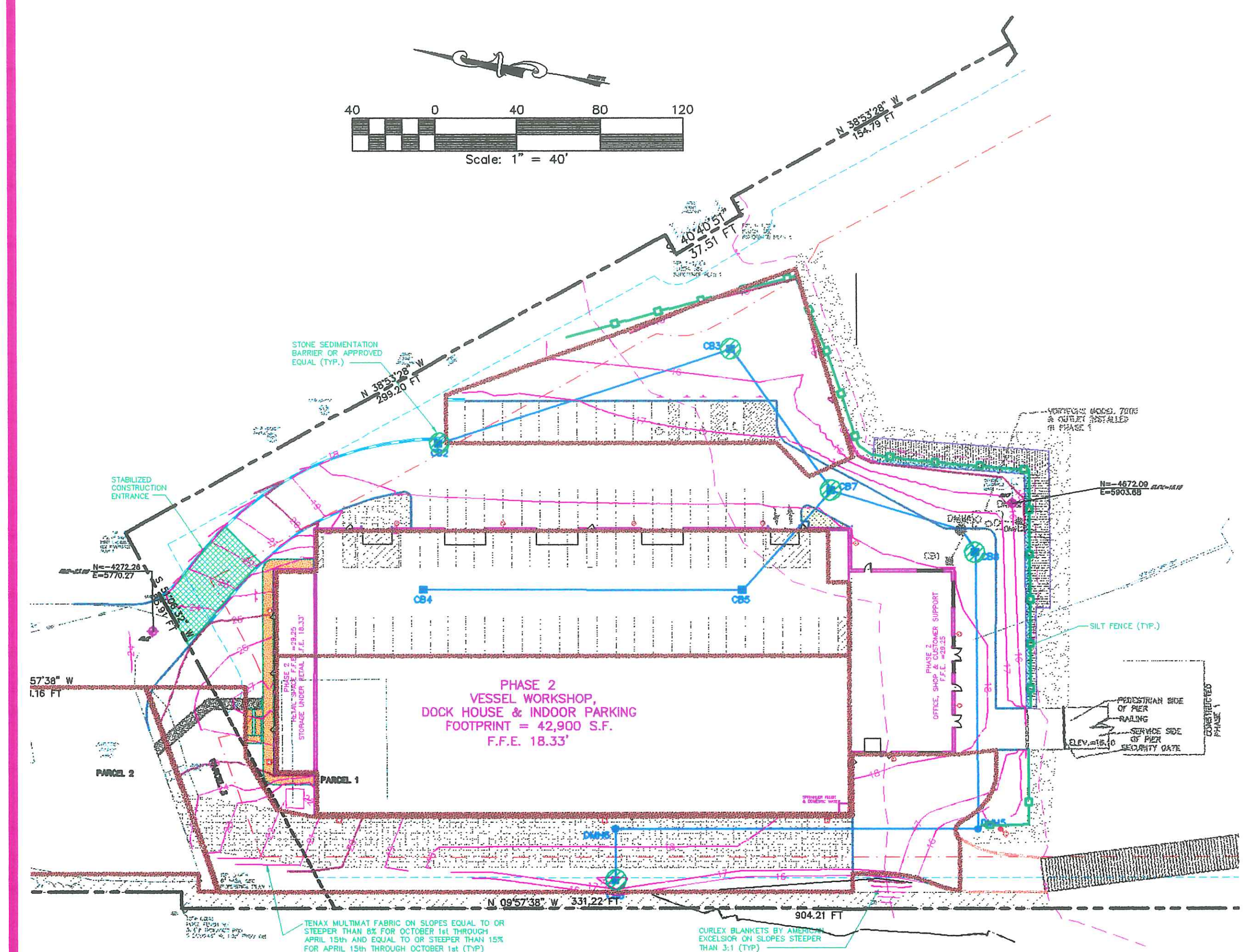
YEAR-ROUND WORK AND BOAT STORAGE AREA

NOTE: PHASE 2 PLANNING BOARD CONDITION #IV
NO BOAT STORAGE ALLOWED ON PARCEL 2, WHICH IS LOCATED IN THE R-3 ZONE, WITHOUT APPROPRIATE ZONING CHANGE OR VARIANCE, EITHER OF WHICH MUST BE REVIEWED AND APPROVED BY THE PLANNING BOARD.

PHASE 2
OPERATIONS PLAN
C-107

OPERATIONS NOTES:
1. PEAK SEASON MAY 1 – OCTOBER 31. MAY AND OCTOBER ARE TRANSITIONAL MONTHS WHERE THE OFF SEASON BOAT STORAGE AREAS MAY BE USED FOR BOTH PARKING AND STORAGE.
2. OFF SEASON: NOVEMBER 1 – APRIL 30.

ITEMS MODIFIED ON THIS PLAN #C-107.
1. ADDED SEDIMENTATION PROTECTION TO CB7 & CB8.



PHASE 2
EROSION CONTROL PLAN
C-106

FAIRFIELD MAINE
PORTLAND MAINE
Sheridan

DRAWN BY KSL
SCALE As Noted
DATE 5-6-04

PHASE 2 EROSION CONTROL PLAN AND OPERATIONS PLAN
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME

Engineering Designs For
MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER

JOB NO. 030017
DRWG NO. C-106 & C-107

LANDSCAPE LEGEND

QUANTITY / KEY

PLANTING SCHEDULE					
KEY	QTY.	Botanical Name	Common Name	Size	Remarks
PG	7	Picea glauca	White Spruce	5–6'	B&B, full, 12' o.c.

Plant Notes:

1. The Landscape Contractor is advised of the existence 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. Prior to plant installation, the Landscape Contractor shall submit a written affidavit of all plant species, cultivars and varieties that they proposed to install. The name phone number and location of all nurseries where plant material has been grown shall also be submitted prior to installation.

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. Backfill1/2 of the pit at a time, and compact. See Note 6 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.

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 according to manufacturers 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. The landscape contractor shall submit samples of the slow release fertilizer and copies of the label of the liquid fertilizer prior to plant installation. The Landscape Contractor shall not install any plant material unless appropriate watering equipment is on site. All plants shall be adequately watered the day of installation or these plants will be rejected and replaced by the Landscape Contractors at no cost to the owner.

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 Landscape Architect or Owner for their approval. In no cases shall a tree be staked because the root ball crumbled. In those cases the tree shall be removed and replaced with a tree of the same species and size with a solid and intact root ball. If stakes are used, they shall be removed by the contractor, after 1 year.

9. Mulch to be installed to a depth of 3" after normal settling. Mulch shall be medium shredded Hemlock bark, dark brown in color. Do not place mulch in contact with the tree or shrub trunk. The Landscape Contractor shall submit a .25 cubic foot sample prior to installation.

10. All plants shall have their locations staked and approved by the Landscape Architect prior to plant installation. All plants shall be oriented for best appearance.

11. Plant species substitutions will not be allowed unless first approved by the Landscape Architect. Any substituted plants installed without prior approval will be rejected

12. All plants shall be guaranteed for one growing season (1 year from the date of acceptance). Any plants that die during the guarantee, shall be replaced by the landscape contractor at no cost to the owner.

13. All areas not identified with other surface treatments shall be lawn. The lawn area 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 of grass is established.

14. 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.

15. Allow Juniper and deciduous shrubs to grow together to form a natural looking plant mass.

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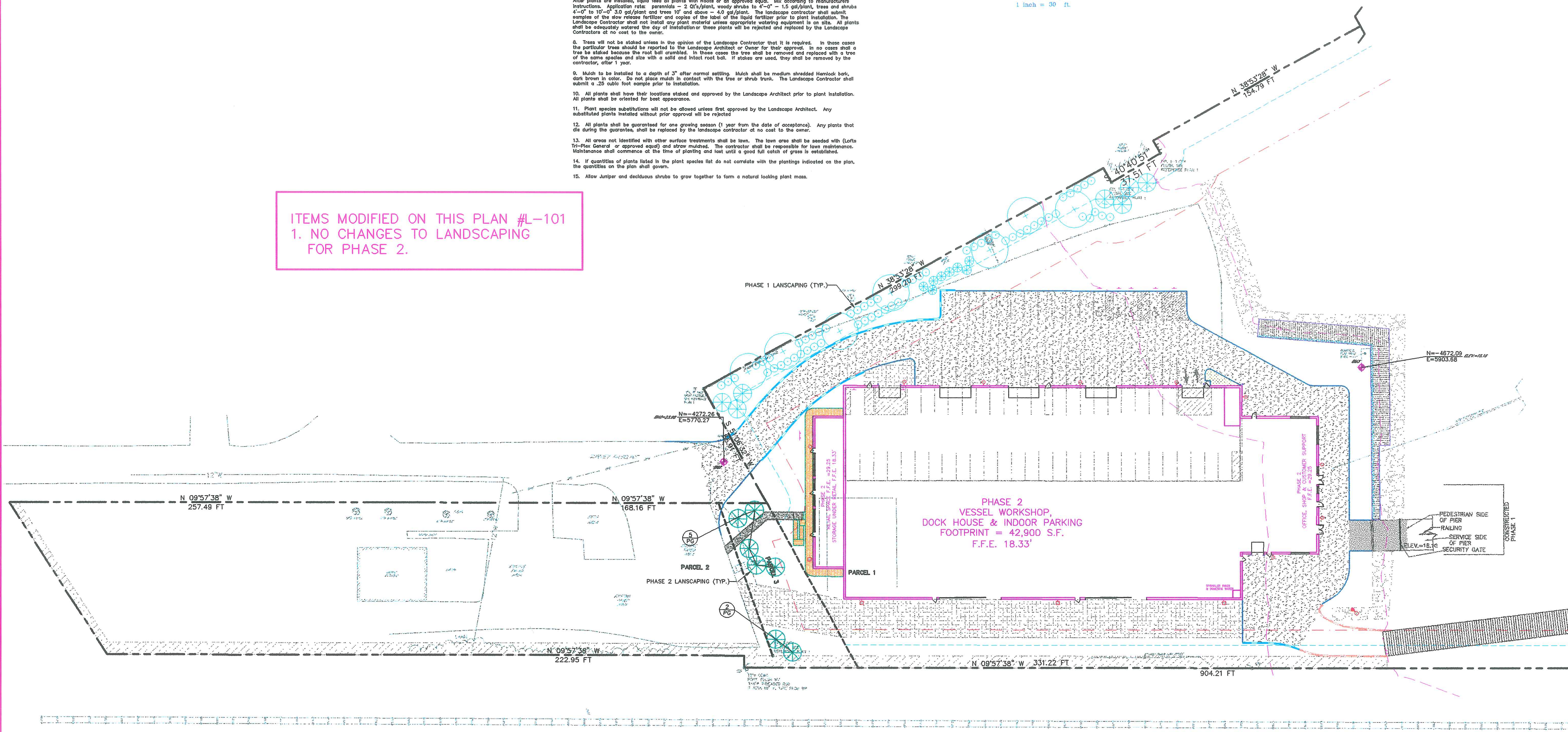
GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

ITEMS MODIFIED ON THIS PLAN #L–101
1. NO CHANGES TO LANDSCAPING FOR PHASE 2.



Sheridan
FAIRFIELD MAINE
PORTLAND MAINE

DRAWN BY KSL
SCALE As Noted
DATE 5-6-04

PHASE 2 LANDSCAPING PLAN
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND, ME.

MAINE YACHT CENTER L.L.C.
65 KENSINGTON STREET
PORTLAND, MAINE

DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. L-101

SITE CONSTRUCTION NOTES AND TECHNICAL REQUIREMENTS

Dig Safe/Utility Locations

The Sheridan Corporation has made a dilligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor/subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's errors.

CONSTRUCTION NOTES

1) ALL WORK WILL BE EXECUTED IN ACCORDANCE WITH THE LATEST PUBLISHED TECHNICAL DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY LOCAL CITY OR TOWN OFFICALS.
2) ALL UTILITY WORK WILL BE EXECUTED PER THE RULES AND/OR REGULATIONS OF THE APPROPRIATE GOVERNING AUTHORITY.
3) ALL SUBCONTRACTOR'S ARE RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR THEIR SCOPE OF WORK. THEY ARE ALSO RESPONSIBLE FOR SCHEDULING AND ATTENDING ALL INSPECTIONS OF WORK, AND SUPPLYING WRITTEN PROOF OF ACCEPTANCE OF WORK BY INSPECTOR.
4) ALL SANITARY SEWER, STORM SEWER, AND WATER CROSSINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE AND CITY STANDARDS.

Site Fill Materials:

Foundation Fill Materials:

A. Structural Fill:
Structural fill shall be used for the following purposes:
1. To provide a minimum 12 inch base below the building floor slab.
2. To backfill interior footings and over excavated wall and interior footing excavations.

This material shall meet the following gradations:

Sieve Size	Percent Passing
6 inch	100
3 inch	70-100
No. 4	35-70
No. 40	5-35
No. 200	0-5

Structural fill shall consist of a well graded gravelly sand to sandy gravel. It shall be free of organic material, loam, trash, snow, ice, frozen soil or other deleterious material and conform to the gradation indicated in the table above. Boulders of greater than the placed lift thickness shall be removed priorto compaction.

Structural fill shall be placed in layers not exceeding 12 in. (loose measure) and compacted with heavy operator-driven compaction equipment and in 6 in. layers if utilizing hand guided or small remote controlled vibratory equipment. Lift thickness may require to be reduced if difficulty in achieving the required compaction.

Structural fill shall be compacted at approximately optimum moisture content (plus 1 to minus 2 percent) to 95 percent of maximum dry density as determined by ASTM D1557 (modified density).

B. Granular Borrow:
Granular borrow or structural fill may be used as a backfill material as follows:
1. For backfilling exterior footings, foundation and frost walls and retaining wall excavations.
2. For raising building interior site grades to subbase grade; frost free backfill to subbase below access drives and parking area pavement.

Granular borrow shall consist of sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of that portion passing a 3 inch sieve shall meet the following gradation requirements:

Sieve Size	Percent Passing
No. 40	0-70
No. 200	0-20

Surface tolerance of 3/8in., above or below the required cross sectional shape shall be maintained.

General Site Fill Materials:

Common Borrow:
Common borrow may be used as a non-building site fill material to raise site grades to subbase level. This material and installation shall follow the Maine Dept. of Transportation Specifications Revision of 1995. The utilization of this material is subject to the review of the Engineer prior to its use.

NOTE:
SUBSURFACE PREPARATION WILL ENTAIL THE REMOVAL OF TOPSOIL, ALL UNSUITABLE MATERIALS, STUMPS, TRASH, ETC. THEN IT WILL BE PROOF ROLLED. STRUCTURAL FILL PLACED IN 12" MAX. LIFTS AND COMPACTED TO 95% DRY DENSITY. THIS APPLIES ALL BUILDING PAVED AREAS. GRADING OF SUBGRADE WILL BE MINUS THE DEPTH OF ALL SUBBASE, BASE AND FINISH MATERIALS. WITH ALLOWABLE GRADE DEVIATION OF PLUS OR MINUS 1/10 OF ONE FOOT.

SPECIAL NOTE:
ALL RIP RAP TO BE ANGULAR, CRUSHED STONE GRADED FOR SIZE. SMOOTH BANK RUN STONE IS NOT ALLOWED

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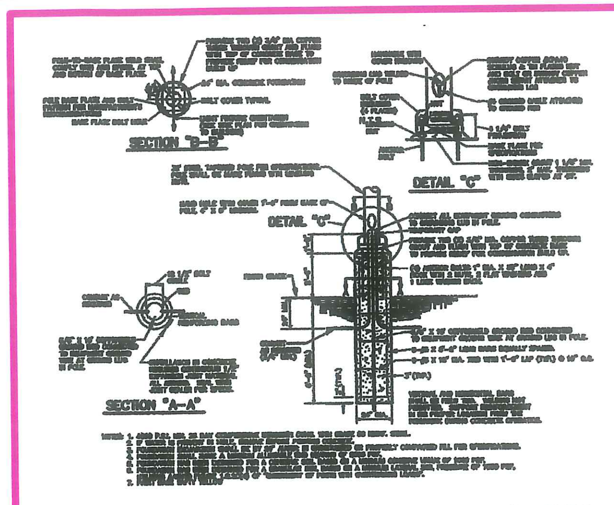
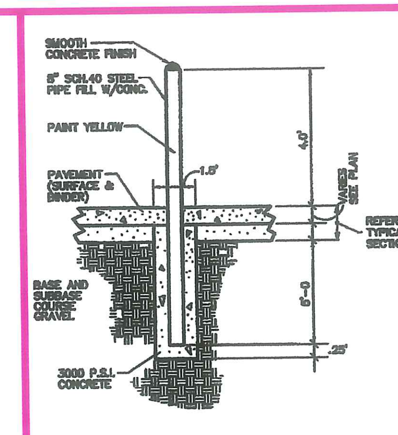
NOTE: ITEMS MODIFIED THIS SHEET
1. MISCELLANEOUS CONSTRUCTION NOTES ADDED.
2. REVISED PAVEMENT SECTION.
3. REVISED GRASS PAVER SECTION.



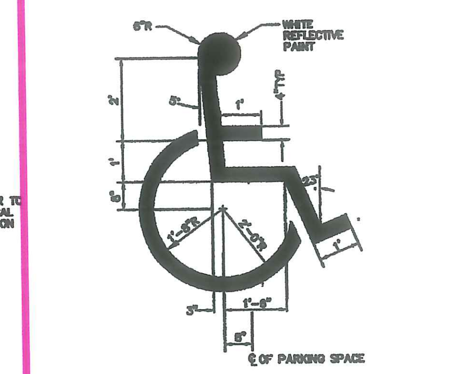
TYPICAL PARKING LOT LIGHTING POLE FOUNDATION

N.T.S.



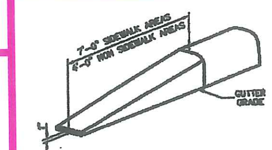
CONCRETE BOLLARD DETAIL

N.T.S.

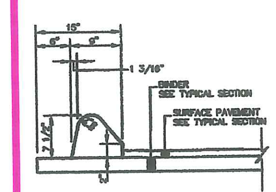


INTERNATIONAL BARRIER FREE SYMBOL

N.T.S.

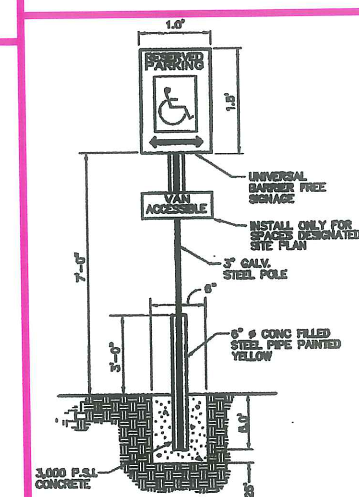


TERMINAL END CURB



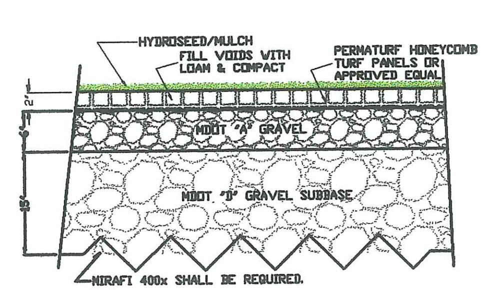
BITUMINOUS CURB DETAIL

N.T.S.

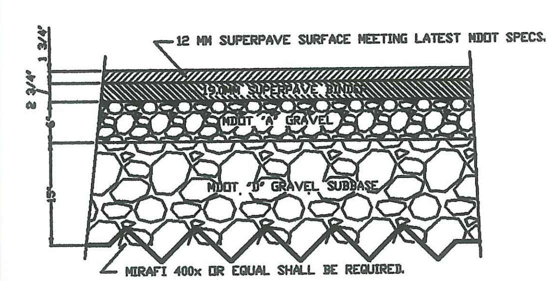


BARRIER FREE PARKING SIGN

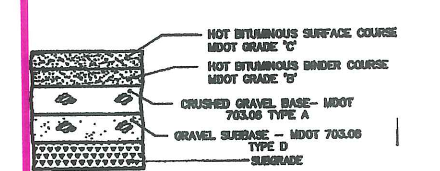
N.T.S.



DETAIL FOR GRASS PAVER



DETAIL 1



NOTE:
COMPACT BASE, SUBBASE AND SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557

THICKNESS OF LAYERS

STANDARD	LAYERS
1-1/2"	HOT BITUMINOUS SURFACE COURSE MDOT GRADE 'C'
2"	HOT BITUMINOUS BINDER COURSE MDOT GRADE 'B'
6"	CRUSHED GRAVEL BASE - MDOT 703.06 TYPE A
12"	GRAVEL SUBBASE - MDOT 703.06 TYPE D

BITUMINOUS ASPHALT PAVEMENT SECTION

N.T.S.

USE THIS DETAIL FOR RAMP AT PIER

FAIRFIELD MAINE PORTLAND MAINE

Sheridan

DRAWN BY KSL
SCALE As Noted
DATE 5-6-04

Title: PHASE 2 SITE CONSTRUCTION DETAILSS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

BUTLER DESIGN BUILDER

JOB NO. 030017

ENGINEERING DWG. NO. C-201

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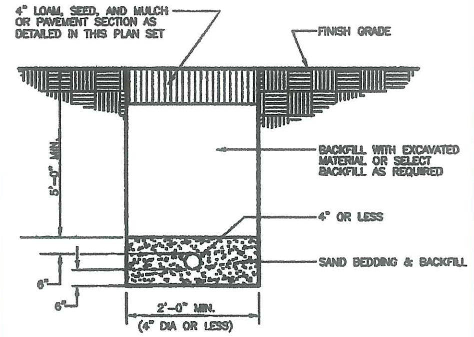
ITEMS MODIFIED ON THIS SHEET
1. NO CHANGES.

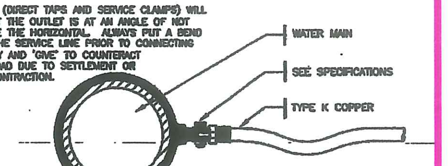


SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

WATER SERVICE TRENCH SECTION

N.T.S.

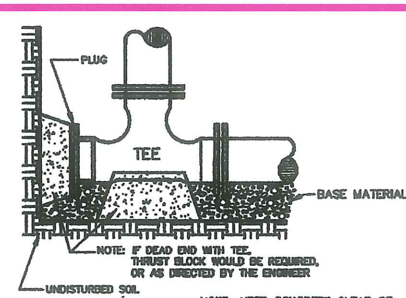
NOTE:
SERVICE CONNECTIONS (DIRECT TAPS AND SERVICE CLAMPS) WILL BE INSTALLED SO THAT THE OUTLET IS AT AN ANGLE OF NOT MORE THAN 45° ABOVE THE HORIZONTAL. ALWAYS PUT A BEND OR 'GOOSENECK' IN THE SERVICE LINE PRIOR TO CONNECTING TO PROVIDE FLEXIBILITY AND 'GIVE' TO COUNTERACT THE EFFECTS OF A LOAD DUE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



SEE NOTE 3 IN THRUST BLOCK BLOCK NOTES DETAIL

WATER SERVICE

(1 1/2" AND 2 1/2" C.C. OR IRON PIPE THREAD)
N.T.S.

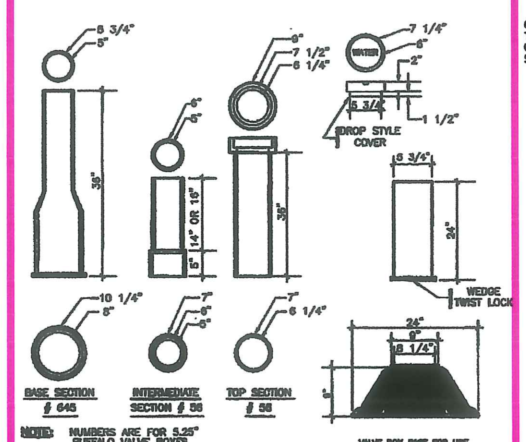


NOTE: KEEP CONCRETE CLEAR OF PIPE JOINT, NUTS AND BOLTS

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

STANDARD TEE BLOCKING

N.T.S.



NOTE: NUMBERS ARE FOR 5.25" BUFFALO VALVE BOXES

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

TYPICAL VALVE BOXES

N.T.S.

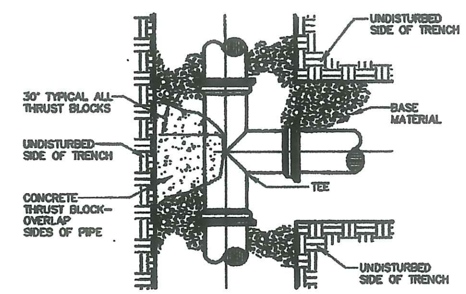
THRUST BLOCK NOTES

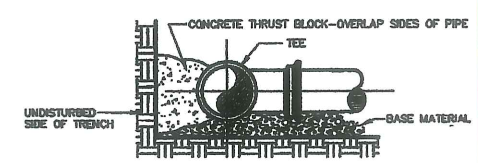
1. INSTALL POLY BARRIER BETWEEN PIPE AND ALL THRUST BLOCKS.
2. ANY MODIFICATION TO THRUST BLOCK SIZING OR PIPE RESTRAINT REVISIONS SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO IMPLEMENTATION IN THE FIELD
3. ANY WORK RELATING TO WATER PIPING OR DETAILS SHALL BE IN ACCORDANCE WITH THE PORTLAND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

PIPE SIZE	1/32 BEND	1/16 BEND	1/8 BEND	1/4 BEND	TEES/CAPS
8"	2.9	5.7	11.1	20.5	14.5
4"	0.8	1.6	3.1	5.8	4.1

– ASSUMING TEST PRESSURE = 150 PSI, PASSIVE SOIL PRESSURE = 1000 PSF
– BEARING SURFACE REQUIRED IN SQUARE FEET

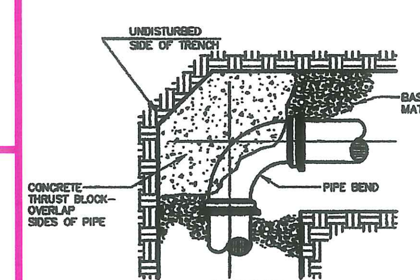
NOTE: KEEP CONCRETE CLEAR OF PIPE JOINT, NUTS AND BOLTS

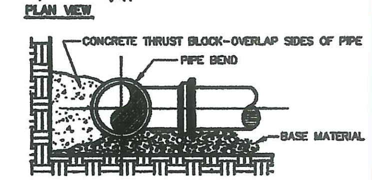




TYPICAL THRUST BLOCK PLACEMENT ON TEES

N.T.S.





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

SECTION

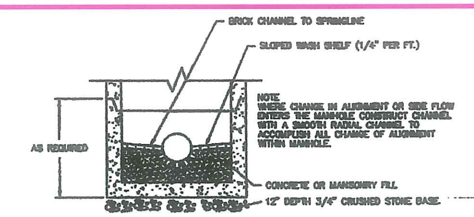
THRUST/RETAINER GLAND SCHEDULE		
1/4 BEND	(90°)	THRUST BLOCK w/RESTRAINED JOINT
1/8 BEND	(45°)	THRUST BLOCK w/RESTRAINED JOINT
1/16 BEND	(22 1/2°)	THRUST BLOCK
1/32 BEND	(11 1/4°)	THRUST BLOCK

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

SEE NOTE 3 IN THRUST BLOCK NOTES DETAIL

TYPICAL THRUST BLOCK PLACEMENT ON BENDS

N.T.S.

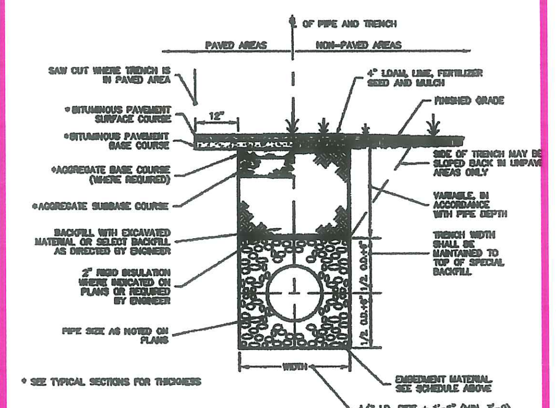


STORM DRAIN & SEWER MANHOLE BRICK CHANNEL DETAIL

N.T.S.

SCHEDULE OF TRENCH BACKFILL		
TYPE OF PIPE	EMBEDMENT MATERIAL	SELECT BACKFILL
CMP DUCTILE IRON RCP	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.22 TYPE C 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL

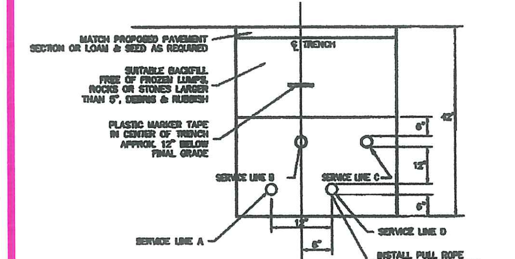
NOTE:
1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR



* SEE TYPICAL SECTIONS FOR THICKNESS

TYPICAL TRENCH SECTION

N.T.S.



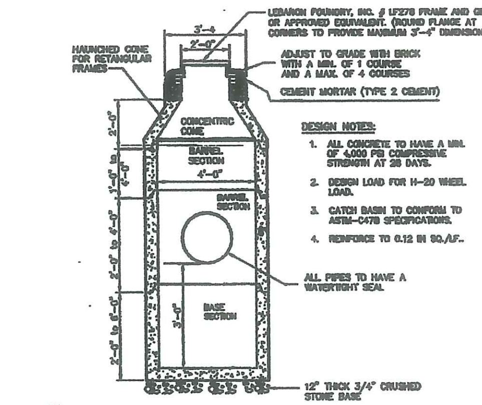
CONDUIT TYPE

SERVICE	CONDUIT SIZE	GRASS AND PAVED AREAS	UTILITY	REMARKS
A	6"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
B	4"	SCHEDULE 40 PVC	TELEPHONE	SEE NOTE 1
C	2"	SCHEDULE 40 PVC	CABLE	SEE NOTE 1
D	2"	SCHEDULE 40 PVC ELECTRICAL GRADE	SECONDARY POWER	SEE NOTE 1

NOTE:
1. PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10' ABOVE GRADE AT POLE WITH STAND-OFF BRACKETS
2. ALL DIMENSIONS, SIZES, NUMBER OF CONDUITS AND MATERIALS TO BE VERIFIED WITH SERVING UTILITIES.

UTILITY TRENCH – PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE

N.T.S.

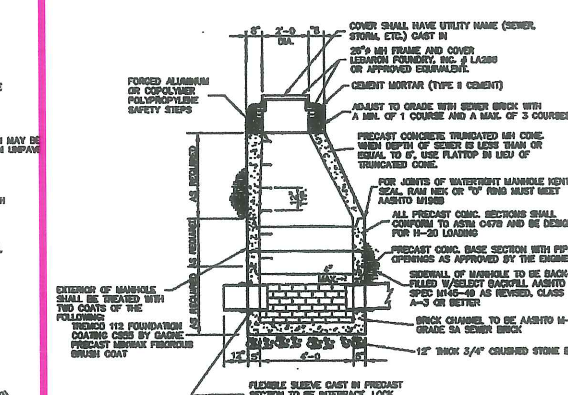


DESIGN NOTES:
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.12 IN SQ./LF.

NOTE:
1. CASCO TRAPS SHALL BE PROVIDED ON CATCH BASIN PIPES 15" OR LESS

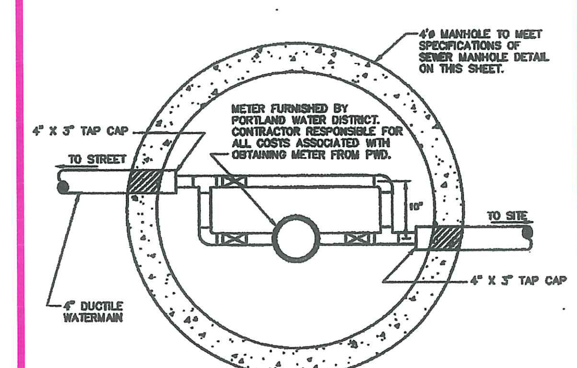
4'-0" PRECAST CATCH BASIN

N.T.S.



4'-0" PRECAST STORM DRAIN & SEWER MANHOLE

N.T.S.



NOTES:
1. METER FLANGES AND A SPACER ARE AVAILABLE ON REQUEST, BY THE PLUMBER, AT THE PORTLAND WATER DISTRICT.
2. ALL PIPING WITHIN METER PIT SHALL BE 2" COPPER TUBING WITH BRASS GATE VALVES.
3. WHEN REQUESTING THE METER FROM PWD, INDICATE THAT THIS METER WILL REQUIRE A RADIO READ METER RATHER THAN A TOUCH PAD.

3" WATER METER PIT AND VALVE

SCALE: 1" = 1'

FAIRFIELD MAINE
PORTLAND MAINE
Sheridan
WWW.SHERIDANCORP.COM

DRAWN BY: KSL
APPROVED BY:
SCALE: As Noted
DATE: 5-6-04
TYPE:

Title: PHASE 2 UTILITY DETAILS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

BUTLER
DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. C-202

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ITEMS MODIFIED ON THIS SHEET
1. NO CHANGES.

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 intersection of the site roadway and Kensington Street.

2. Siltation fence shall be installed downstream of any disturbed areas to trap runoff borne sediments until the tributary disturbed area is revegetated. The silt fence shall be installed per the detail provided in the plan set 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 line. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind fence, 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 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 of less than 8 percent shall be anchored by applying water; mulch placed on slopes equal to or steeper than 8 percent shall be covered with a fabric netting and anchored with staples in accordance with the manufacturers recommendations. Slopes steeper than 3:1 which are to be revegetated shall receive curlex blankets by American Excelsior or equal.

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 the wetlands or open water, which will remain and shall be located away from drainage swales.

b) Stockpiles shall be stabilized within 7 days by either temporarily seeding the stockpile with 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 new denuded areas that are within 50 feet of a wetland or open water that will remain, which have been rough graded and are not located within the 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 a wetland or open water body, which will remain 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 a fabric netting. The time period for applying mulch as noted in Paragraph 5 above, shall be limited to 7 days for all areas.

7. Kensington Street shall be swept to control mud and dust as necessary.

8. During grubbing operations stone check dams may 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. Water and/or calcium chloride shall be furnished and applied in accordance with MDOT specifications – Section 637 – Dust Control.

11. 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 in the Seeding Plan. Seeding shall not occur over snow.

12. Temporary seed mixture shall be annual rye grass applied at the rate of 0.9 lbs/1000 sq. ft.

Permanent Erosion Control Measures

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

1. All storm drain pipe outlets shall have riprap aprons at their outlet to protect the outlet and receiving channel of the culverts from scour and deterioration. Installation details are provided in the plan set. The aprons shall be installed and stabilized to the extent practicable prior to directing runoff to the tributary pipe or culvert.

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 50' of a wetland or open water body, which will remain 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.

Implementation Schedule

The following construction sequence shall be required 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 at the intersection of the site driveway and Kensington Street.

2. Clear work areas

3. Install perimeter siltation fence for roadway construction and temporary parking and fill areas.

4. Clear and grub work areas using care not to overexpose the site.

5. During grubbing operations, install stone check dams at any evident concentrated flow discharge points.

6. Commence earthwork operations.

7. Commence excavation of building foundation.

8. Commence installation of waterline and sewer main.

9. Continue earthwork and grading to subgrade as necessary for construction.

10. Install light pole foundations and utility poles as well as underground elec./tel./cable services.

11. Complete all remaining earthwork operations.

12. Complete installation of all utilities.

13. Loam, lime, fertilize, seed, and mulch disturbed areas.

14. Remove accumulated sediment from ahead of any sediment barriers as necessary.

15. Once the site is stabilized and a 75% catch of vegetation has been obtained, remove all temporary erosion control measures.

16. Touch up loam and seed.

Note: All denuded (created by this construction) areas not subject to final paving, riprap or gravel, shall be revegetated.

Prior to construction of the access drives, parking areas and utilities, the contractor shall submit a schedule to the Owner 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 entrance 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 a wetland or open water body, which will remain and 14 days for all other areas. Areas within 50 feet of a wetland, which will remain 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

It is anticipated that construction of the access road, utilities and other site improvements can be completed in one construction season. However, if any work is necessary between October 15 and April 15, the contractor shall submit a schedule which will satisfy the following criteria:
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 4" 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 dlese 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 in the road or paved areas 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 50 feet of a wetland shall remain denuded for a period of over 7 days before it is temporarily stabilized. Temporary stabilization shall be the installation of gravel or mulching. 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.

Provisions for Maintenance of the Erosion/Sedimentation Control Features

The Contractor shall prepare a list and designate by name, address and telephone number all individuals who will be responsible for implementation, inspection and maintenance of all erosion control measures identified within this section and as contained in the Erosion and Sedimentation Control Plan of the contract drawings. Specific responsibilities of the inspector(s) will include:

1. Assuring and certifying the owner's construction sequence is in conformance with the specified schedule of this section. A weekly certification stating compliance, any deviations, and corrective measures necessary to comply with the erosion control requirement of this section shall be prepared and signed by the inspector(s).

2. In addition to the weekly certifications, the inspector(s) shall maintain written reports recording construction activities on site which include:

Dates when major grading activities occur in a particular area.

Dates when major construction activities cease in a particular area, either temporarily or permanently.

Dates when an area is stabilized.
3. Inspection of this project work site on a weekly basis and after each significant rainfall event (0.5 inches or more within any consecutive 24 hour period) during construction until permanent erosion control measures have been properly installed and the site has been stabilized. Inspection of the project work site shall include:

Identification of proper erosion control measure installation in accordance with the erosion control detail sheet or as specified in this section.

Determine whether each erosion control measure is properly operating. If not, identify damage to the control device and determine remedial measures.

Identify areas which appear vulnerable to erosion and determine additional erosion control measures which should be used to improve conditions.

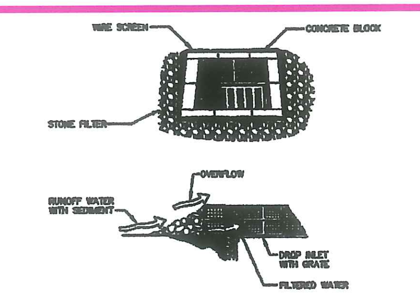
Inspect areas of recent seeding to determine percent catch of grass. A minimum catch of 75 percent is required prior to removal of erosion control measures.

Accumulated silt/sediment should be removed when the depth of sediment reaches 50 percent of the barrier height. Accumulated silt/sediment should be removed from behind silt fencing when the depth of the sediment reaches 6 inches.

4. If inspection of the site indicates a change should be made to the erosion control plan, either to improve effectiveness or correct a site specific deficiency, the inspector shall immediately implement the corrective measure and notify the Owner of the change.

Preconstruction Conference

Prior to any construction at the site, representatives of the Contractor 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.

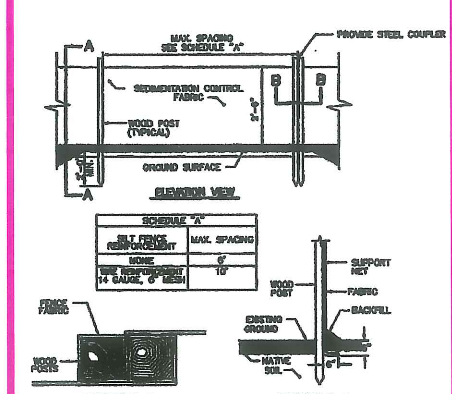


SPECIFIC APPLICATION

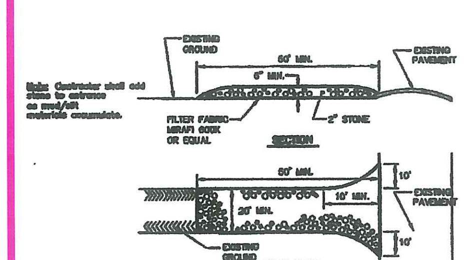
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

NOTES:
1. 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.
2. 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.
3. 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.
4. 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.

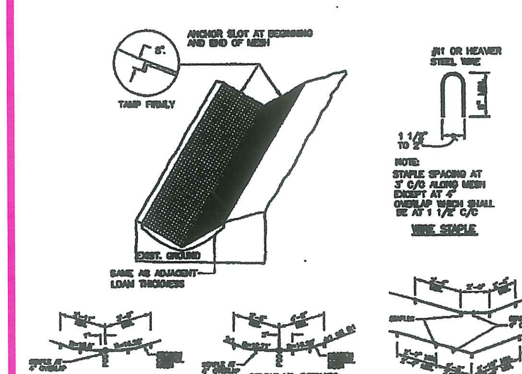
STONE SEDIMENT BARRIER



SILTATION FENCE DETAIL
N.T.S.

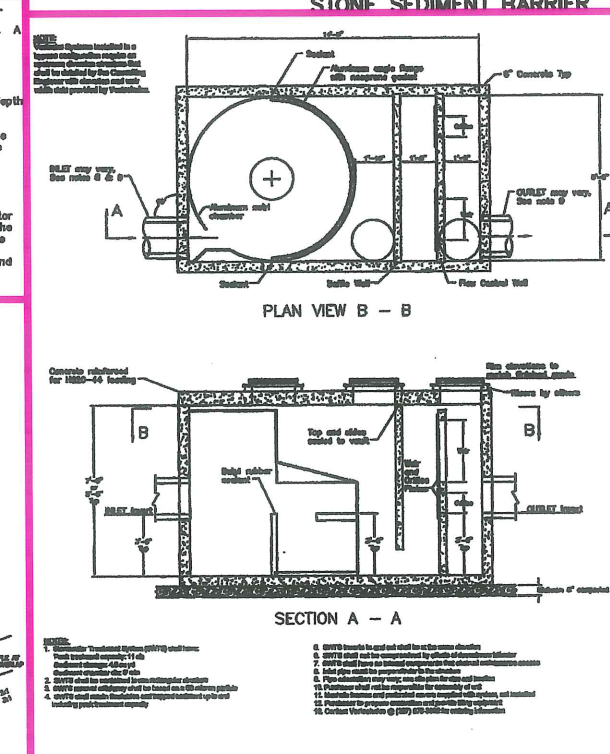


STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.



STAPLES AT EDGES, AT QUARTER POINTS, AT 4" OVERLAP

EROSION CONTROL MESH
N.T.S.



WATER QUALITY UNIT
N.T.S.

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DRAWN BY: KSL
APPROVED BY:
SCALE: As Noted
DATE: 5-6-04
TYPE:

Title: PHASE 2 EROSION & SEDIMENTATIN CONTROL DETAILS
MAINE YACHT CENTER FACILITY
100 KENSINGTON ST., PORTLAND ME.

Engineering Designs For:
MAINE YACHT CENTER LLC
65 KENSINGTON STREET
PORTLAND, MAINE

BUTLER — DESIGN BUILDER

JOB NO. 030017
ENGINEERING DWG. NO. C-203