Tighe&Bond

T5047-001 October 18, 2021

Mr. Peter Stith, Principal Planner, Chair Site Plan Review Technical Advisory Committee City of Portsmouth Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801

Re: Site Review Permit Application Proposed Multifamily Development, 2454 Lafayette Road, Portsmouth, NH

Dear Peter:

On behalf of 2422 Lafayette Road Associates, LLC (owner), and Torrington Properties Inc (applicant), we are pleased to submit one (1) set of hard copies of the following information to support a request for a Site Review Permit for the above referenced project:

- One (1) full size & one (1) half size copy of the Site Plan Set, dated October 18, 2021;
- Owner Authorization, dated August 5, 2021;
- Applicant Authorization, dated August 5, 2021;
- Parking Conditional Use Permit Request, dated October 18, 2021;
- Density Bonus Conditional Use Permit Request, dated October 18, 2021;
- Drainage Analysis Memorandum, dated October 18, 2021;
- Community Space Exhibit, dated October 18, 2021;
- Truck Turning Exhibit, dated October 18, 2021;
- Traffic Impact Memorandum, dated September 20, 2021;
- Green Building Statement, dated October 18, 2021;
- Site Review Checklist, dated October 18, 2021;
- Building Perspectives, dated October 18, 2021;
- Application fee calculation form for the Site Review Permit;
- Site Review Application fee check in the amount of \$11,256.50;
- Two (2) Conditional Use Permit fee checks in the amount of \$200

The proposed project is located at 2454 Lafayette Road on properties identified as Map 273 Lot 3 on the City of Portsmouth Tax Maps and is located in the Gateway Neighborhood Mixed Use Corridor, G1 District. The existing parcel is approximately 18.7 acres and is bound by an access drive for Water County to the north, Water Country property to the east, Route One (Lafayette Road) to the south and Constitution Avenue to the west.

The proposed project consists of the demolition of the former Cinemagic movie theater and the construction of a 5-story, 95-unit multifamily condominium building located in the northern corner of the site. Also, the previously approved 5,000 SF restaurant pad proposed for this area will not be constructed. The project will include associated site improvements such as paving, utilities, lighting, landscaping and community space. The proposed project is

providing 21,896 SF of community spaces (14.6% of the total project area) which meets the 10% of total lot area required as part of the Development Site Standards for the G1 District. The community space calculation is depicted in the enclosed Community Space Exhibit.

The proposed project will be designating 20% of the units as workforce housing units which will meet the Density Bonus Incentives of section 10.5B70 of the City of Portsmouth Zoning Ordinance to be eligible for a Conditional Use Permit. The proposed project will require the following site related approvals from the Planning Board:

- Site Plan Review Permit
- Conditional Use Permit for Density Bonus Incentives
- Amended Conditional Use Permit for Parking

To date the applicant has attending the following meetings with the local land-use boards related to the Site Plan:

- August 19, 2021 Planning Board Conceptual Consultation
- September 14, 2021 Technical Advisory Committee Work Session
- September 16, 2021 Planning Board Design Review

The enclosed information which has been prepared to address comments and feedback received to date from these land-use boards.

We respectfully request to be placed on the TAC meeting agenda for November 2, 2021. If you have any questions or need any additional information, please contact Patrick Crimmins by phone at (603) 433-8818 or by email at <u>pmcrimmins@tighebond.com</u>.

Sincerely,

TIGHE & BOND, INC.

Patrick M. Crimmins, PE Senior Project Manager

Neil A. Hansen, PE Project Engineer

Cc: 2422 Lafayette Road Associates, LLC (via e-mail) Torrington Properties Inc (via e-mail) Gregg Mikolaities, August Consulting, PLLC (via e-mail) John Bosen, Bosen & Associates, PLLC (via e-mail)

PROPOSED MULTI-FAMILY DEVELOPMENT PORTSMOUTH GREEN 2454 LAFAYETTE ROAD PORTSMOUTH, NEW HAMPSHIRE AUGUST 5, 2021 LAST REVISED: OCTOBER 18, 2021

LIST OF DRAWINGS			
SHEET NO.	SHEET TITLE	LAST REVISED	
	COVER SHEET	10/18/2021	
C-101	OVERALL EXISTING CONDITIONS PLAN	10/18/2021	
C-101.1	EXISTING CONDITIONS AND DEMOLITION PLAN	10/18/2021	
C-102	OVERALL SITE PLAN	10/18/2021	
C-102.1	SITE PLAN	10/18/2021	
C-103.1	GRADING, DRAINAGE AND EROSION CONTROL PLAN	10/18/2021	
C-104	UTILITIES PLAN	10/18/2021	
C-105	PHOTOMETRICS PLAN	10/18/2021	
L-100	LANDSCAPE PLAN	10/18/2021	
L-101	LANDSCAPE SCHEDULE & DETAILS	10/18/2021	
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	10/18/2021	
C-502	DETAILS SHEET	10/18/2021	
C-503	DETAILS SHEET	10/18/2021	
C-504	DETAILS SHEET	10/18/2021	
C-505	DETAILS SHEET	10/18/2021	
C-506	DETAILS SHEET	10/18/2021	
A-201	NORTH/SOUTH ELEVATIONS	10/18/2021	
A-202	WEST ELEVATION	10/18/2021	
A-203	EAST ELEVATION	10/18/2021	
A-601	1ST FLOOR	10/18/2021	
A-602	2ND FLOOR	10/18/2021	
A-603	3RD TO 4TH FLOOR	10/18/2021	
A-604	5TH FLOOR	10/18/2021	

LIST OF PERMITS			
LOCAL	STATUS	DATE	
SITE PLAN REVIEW PERMIT			
CONDITIONAL USE PERMIT - PARKING			
CONDITIONAL USE PERMIT - DENSITY BONUS INCENTIVES			
STATE			
NHDES - SEWER CONNECTION PERMIT			
NHDOT - DRIVEWAY PERMIT			

T & B PROJECT NO: T-5047-001



PREPARED BY: Tighe&Bond

77 CORPORATE DRIVE PORTSMOUTH, NEW HAMPSHIRE 03801 603-433-8818

OWNERS:

2422 LAFAYETTE ROAD ASSOCIATES, LLC C/O WATERSTONE RETAIL DEVELOPMENT 322 RESERVOIR STREET, 2ND FLOOR NEEDHAM, MASSACHUSETTS 02494

APPLICANT: TORRINGTON PROERTIES INC 11 ELKINS STREET, SUITE 420 BOSTON, MASSACHUSETTS 02127

SURVEYOR: DOUCET SURVEY, LLC 102 KENT PLACE NEWMARKET, NH 03857

ARCHITECT: EMBARC STUDIO 580 HARRISON AVENUE, SUITE 2W BOSTON, MASSACHUSETTS 02118





TAC SUBMISSION **COMPLETE SET 23 SHEETS**

LOCATION MAP SCALE: 1" = 2,000'





- 1.
- DEMOLITION/CONSTRUCTION ACTIVITIES.

- NOTED TO BE COMPLETED BY OTHERS.
- WITHIN THE LIMITS OF WORK.
- **REMOVAL PRIOR TO BID.**
- PORTSMOUTH.

- DEPTH OF THE BARRIER.

- AREAS TO REMAIN.

<u>LEGEND</u>

APPROXIMATE LIMIT OF **PROPOSED SAW CUT** LIMIT OF WORK

PROPOSED SILT SOCK

APPROXIMATE LIMIT OF **PAVEMENT TO BE REMOVED PROPOSED CONSTRUCTION** EXIT

BUILDING TO BE REMOVED LOCATION OF PROPOSED

INLET PROTECTION SILT SACK TO BE REMOVED BUILDING

TYPICAL COORDINATE

BUILDING

DEMOLITION NOTES:

THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S **RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING** UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK. 2. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY

ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL **REGULATIONS, ORDINANCES AND CODES.**

4. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/

DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. 6. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.

8. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION. 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK

10. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED

11. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE. 12. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE.

ADDITIONAL PAVEMENT REMOVAL MAY BE REOUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT

13. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, **BUILDING SLABS, FOUNDATION, TREES AND LANDSCAPING.** 14. COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAYS WITH THE CITY OF

15. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. **16. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT** DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.

17. PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "HIGH FLOW SILT SACK" BY ACF ENVIRONMENTAL OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN

18. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD, EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER. **19. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.**

20. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.

21. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT

NIN OF NEW HAN PATRICK CRIMMINS No. 12378 PSTONAL GRAPHIC SCALE

BRADLEE

MEZQUITA No. 08830

Tighe&Bond

Multi-Family Development

Torrington Properties, Inc.

Portsmouth, New Hampshire

С	10/18/2021	TAC Submission	
В	9/2/2021	Design Review - TAC WS	
А	8/5/2021	PB Conceptual Consultation	
MARK	DATE	DESCRIPTION	
PROJE	CT NO:	T-5047-001	
DATE:		August 5, 2021	
FILE:		T5047-001-C-DSGN.DWG	
DRAWN BY: NAH			
CHECKED BY: NAH/PMC			
APPROVED BY: BLM			
EXISTING CONDITIONS AND DEMOLITION PLAN			

SCALE:

C-101.1

AS SHOWN





- EDITIONS
- EIGHTEEN (18) INCHES WIDE.

- STATE, AND LOCAL CODES & SPECIFICATIONS.
- PORTSMOUTH
- SURVEYOR. ADJACENT TO BUILDING.
- CONTRACTOR.

- STORAGE AREAS.
- DEPARTMENTS.

PROJECT AREA DATA:

- **DEVELOPMENT STANDARDS (MIXED USE):**
- MINIMUM OPEN SPACE COVERAGE:

COMMUNITY SPACE:

LEGEND

BLDG ΤΥΡ COORD 30'R VGC SGC

PROPERTY LINE PROPOSED PROPERTY LINE **PROPOSED EDGE OF PAVEMENT PROPOSED CURB**

PROPOSED BUILDING **PROPOSED PAVEMENT SECTION**

PROPOSED CONCRETE SIDEWALK

PROPOSED BRICK SIDEWALK

PROPOSED BOLLARD BUILDING TYPICAL COORDINATE PROPOSED CURB RADIUS **PROPOSED VERTICAL GRANITE CURB PROPOSED SLOPED GRANITE CURB**

SITE NOTES:

1. STRIPE PARKING AREAS AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES SHALL BE THERMOPLASTIC MATERIAL. THERMOPLASTIC MATERIAL SHALL MEET THE REQUIREMENTS OF AASHTO AASHTO M249. (ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT. CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT. ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F").

2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST

3. SEE DETAILS FOR PARKING STALL MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS. 4. CENTERLINES SHALL BE FOUR (4) INCH WIDE YELLOW LINES. STOP BARS SHALL BE

5. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.

6. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED LAND SURVEYOR TO DETERMINE ALL LINES AND GRADES.

7. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE. 8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL,

9. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAY WITH THE CITY OF

10. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND

11. SEE ARCHITECTURAL/BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS

12. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.

13. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED. COORDINATE WITH BUILDING

14. ALL LIGHT POLE BASES NOT PROTECTED BY A RAISED CURB SHALL BE PAINTED YELLOW. **15. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR.** 16. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

17. ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS. 18. THE APPLICANT SHALL HAVE A SITE SURVEY CONDUCTED BY A RADIO COMMUNICATIONS CARRIER APPROVED BY THE CITY'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE POLICE

AND RADIO CONFIGURATION. IF THE SITE SURVEY INDICATES IT IS NECESSARY TO INSTALL A SIGNAL REPEATER EITHER ON OR NEAR THE PROPOSED PROJECT, THOSE COSTS SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR THE CITY. 19. PROPERTY MANAGEMENT SHALL BE RESPONSIBLE FOR TIMELY SNOW REMOVAL FROM ALL PRIVATE SIDEWALKS, DRIVEWAYS, AND PARKING AREAS. SNOW SHALL BE HAULED OFF-SITE AND LEGALLY DISPOSED OF WHEN NECESSARY TO MAINTAIN ADEQUATE SNOW

20. THE APPLICANT SHALL PREPARE A CONSTRUCTION MANAGEMENT AND MITIGATION PLAN (CMMP) FOR REVIEW AND APPROVAL BY THE CITY'S LEGAL AND PLANNING

PROPOSED PROJECT AREA: ±3.45 ACRES (±150,350 SF)

REQUIRED	
20% 30,070 SF	
10% 15,035 SF	

PROPOSED ±33.16% 49,855 SF ±14.6% 21,896 SF

SITE RECORDING NOTES:

1. THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. 2. ALL IMPROVEMENTS SHOWN ON THIS SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.

3. THIS IS NOT A BOUNDARY SURVEY AND SHALL NOT BE USED AS SUCH.

- **1. COMPACTION REQUIREMENTS:** BELOW PAVED OR CONCRETE AREAS 95% TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95% **BELOW LOAM AND SEED AREAS** 90% * ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
- FINISH GRADE.
- 5. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING 6. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF
- CONSTRUCTION 7. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL STATE AND LOCAL CODES.
- ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6 LOAM, SEED FERTILIZER AND MULCH.
- 9. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION. 10. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS
- AND 4' SUMPS.
- 11. ALL WORK SHALL CONFORM TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION. 12. CONTRACTOR TO SUBMIT AS-BUILT PLANS IN DIGITAL FORMAT (.DWG AND .PDF FILES)
- ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR.
- 1. INSTALL EROSION CONTROL BARRIERS AS SHOWN AS FIRST ORDER OF WORK. 2. SEE GENERAL EROSION CONTROL NOTES ON "EROSION CONTROL NOTES & DETAILS SHEET".
- 3. PROVIDE INLET PROTECTION AROUND ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. MAINTAIN FOR THE DURATION OF THE PROJECT.
- 4. INSTALL STABILIZED CONSTRUCTION EXIT(S). 5. INSPECT INLET PROTECTION AND PERIMETER EROSION CONTROL MEASURES DAILY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
- LOAM, SEED, FERTILIZER AND MULCH.
- 7. CONSTRUCT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1. 8. PRIOR TO ANY WORK OR SOIL DISTURBANCE COMMENCING ON THE SUBJECT PROPERTY, INCLUDING MOVING OF EARTH, THE APPLICANT SHALL INSTALL ALL EROSION AND SILTATION MITIGATION AND CONTROL MEASURES AS REQUIRED BY STATE AND LOCAL PERMITS AND APPROVALS. 9. CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION
- THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, SPRINKLING WATER ON UNSTABLE SOILS SUBJECT TO ARID CONDITIONS. CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
- 10. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION 11. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL
- SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN FULLY PAVED. 12. TEMPORARY SOIL STOCKPILE SHALL BE SURROUNDED WITH PERIMETER CONTROLS AND SHALL BE STABILIZED BY TEMPORARY EROSION CONTROL SEEDING. STOCKPILE AREAS TO BE LOCATED AS FAR AS POSSIBLE FROM THE DELINEATED EDGE OF WETLANDS.
- 13. SAFETY FENCING SHALL BE PROVIDED AROUND STOCKPILES OVER 10 FT. 14. CONCRETE TRUCKS WILL BE REQUIRED TO WASH OUT (IF NECESSARY) SHOOTS ONLY WITHIN AREAS WHERE CONCRETE HAS BEEN PLACED. NO OTHER WASH OUT WILL BE ALLOWED.

LEGEND

	PROPOSED MAJOR CONTOUR
Q	PROPOSED MINOR CONTOUR
	LINE PROPOSED DRAIN LINE (TYP)
	PROPOSED SILT SOCK
\bigcirc	INLET PROTECTION SILT SAC
	PROPOSED CATCHBASIN
	PROPOSED DOUBLE
	GRATE CATCHBASIN
0	PROPOSED DRAIN MANHOLE
0	PROPOSED YARD DRAIN
BLDG	BUILDING
ТҮР	TYPICAL
COORD	COORDINATE
тс	TOP OF CURB
BC	BOTTOM OF CURB
тw	TOP OF WALL
BW	BOTTOM OF WALL

- **GRADING AND DRAINAGE NOTES**
- ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED. 3. SEE UTILITY PLAN FOR ALL SITE UTILITY INFORMATION.
- 4. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO

13. SEE EXISTING CONDITIONS PLAN FOR BENCH MARK INFORMATION.

EROSION CONTROL NOTES

6. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6"

- 1. THE LOCATIONS OF LOCATIONS ARE NO RESPONSIBILITY TO UTILITIES, AND REL **ADDITIONAL COST**
- 2 COORDINATE ALL U • NATURAL GAS - UN • WATER/SEWER -• ELECTRIC - EVERS COMMUNICATIONS
- 3. SEE EXISTING CONE 4. SEE GRADING, DRA CONTROL MEASURE
- 5. ALL WATER MAIN I 6. ALL WATER MAIN I CONSTRUCTION PR CHLORINATION ANI
- 7. ALL SEWER PIPE SHA 8. COORDINATE ALL V 9. CONTRACTOR SHALL
- CONSTRUCTION. 10. CONNECTION TO EXIS STANDARDS.
- 11. EXISTING UTILITIES
- DEPARTMENT OF PU 12. ALL ELECTRICAL MA CODE, LATEST EDIT 13. THE EXACT LOCATIO
- COORDINATED WIT 14. ADJUST ALL MANHO
- FINISH GRADE. 15. ALL UNDERGROUND CABLES.
- 16. THE CONTRACTOR ARRANGE FOR ALL **OWNER PRIOR TO** 17. THE CONTRACTOR S CONNECTORS, COV
- DETAILED ON THESI OPERATIONAL. 18. CONTRACTOR SHAL NATURAL GAS SERV
- 19. A 10-FOOT MINIMU ALL WATER AND SA
- VERTICAL SEPARAT 20. THE CONTRACTOR S CONSTRUCTION. TH TIMES.
- 21. CONTRACTOR TO SU FORMAT (.DWG FILE AS-BUILTS SHALL B SURVEYOR.
- 22. SAW CUT AND REMO PROPOSED UTILITI 23. HYDRANTS, GATE VA PORTSMOUTH.
- 24. COORDINATE TEST 25. ALL SEWER PIPE WI IN UNPAVED AREAS
- 26. CONTRACTOR SHAL CONDUIT CONSTRU OVERHEAD WIRE RE
- 27. CONTRACTOR SHALL MAIN CONSTRUCTIO CONTRACTOR SHAL COMPANY AND AFFE 28. SITE LIGHTING SPE
- LIGHTING AND SIGN ENGINEER.
- 29. EACH OF THE NEW SHALL HAVE A SEP NFPA CODES AND S
- COORDINATED WIT 30. ALL WATER MAIN P WEDGES SHALL BE 31. SHOP DRAWINGS S
- INSPECTOR AND PO INDICATE CONFOR PARTY INSPECTOR

	14	Tighe&Bond
	LEGEND	
	MATCH LINE EXISTING STORM DRAIN	
SS	EXISTING SANITARY SEWER TO BE REMOVED	
TT	EXISTING UNDERGROUND TELECOMMUNICATION	
G	EXISTING WATER EXISTING GAS	
————Е—— ————ОНW————	EXISTING UNDERGROUND ELECTRIC EXISTING OVERHEAD UTILITY	
	PROPOSED STORM DRAIN PROPOSED SANITARY SEWER	
РМ Рб	PROPOSED WATER PROPOSED GAS	
	PROPOSED UNDERGROUND ELECTRIC	
(5)	EXISTING SEWER MANHOLE	
+(-)+ 	EXISTING HYDRANT	WINNER NEW HAMP
\sim	EXISTING WATER VALVE	BRADLEE
\odot	EXISTING ELECTRIC MANHOLE	No. 08830
\bigcirc	EXISTING TELEPHONE MANHOLE	CENSE
	PROPOSED CATCHBASIN	10/18/21
0	PROPOSED DRAIN MANHOLE	D. V
0	PROPOSED SEWER MANHOLE	
×	PROPOSED WATER VALVE	
*	PROPOSED HYDRANT	NINIT OF NEW HAMOS
GV	PROPOSED GAS VALVE	PATRICK
•	PROPOSED LIGHT POLE BASE	₩ No. 12378
BLDG TYP	BUILDING TYPICAL	CENSED H
COORD VIF	COORDINATE VEDTEY IN FIELD	10/18/21////////////////////////////////
ATURAL GAS - UNITIL		GRAPHIC SCALE
NATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI ONTROL MEASURES. LL WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING	ORTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER FIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT.	GRAPHIC SCALE Multi-Family Development
NATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HLORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION.	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER FIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT	GRAPHIC SCALE Multi-Family Development
ATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DNTROL MEASURES. LL WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT ELORINATION AND TESTING LL SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING WA ANDARDS.	ARTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER FIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. HIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH	GRAPHIC SCALE Multi-Family Development
NATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONSTRUCTION. ONNECTION TO EXISTING WA CANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO ODE, LATEST EDITION, AND A E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC INISH GRADE. L UNDERGROUND CONDUITS	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. HIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO	GRAPHIC SCALE Multi-Family Development Development
NATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HLORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING WA ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO DOE, LATEST EDITION, AND A E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DIJUST ALL MANHOLES, CATC INISH GRADE. L UNDERGROUND CONDUITS ABLES. HE CONTRACTOR SHALL OBTA	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. KIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. IN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AND SUBMIT CODIES OF ACCEPTANCE CERTIFICATES TO THE	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc.
ATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DATROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DATER MAIN INSTALLATI DATER MAIN INSTALLATI L WATER MAIN INSTALLATI DATER MAIN INSTALLATI DATE MAIN INSTALLATI DATE MAIN INSTALLATI DATE MAIN INSTALLATI DATE MAIN INSTALLATI DATE MAIN INSTALLATI DATE DATE ALL WORK WITH DATE STORE DATE DATE ALL WORK WITH DATE DATE ALL MAINTAI DATE DATE ALL MATERIAL WO DATE LATEST EDITION, AND A HE EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DJUST ALL MANHOLES, CATC INISH GRADE. L UNDERGROUND CONDUITS ABLES. HE CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPL HE CONTRACTOR SHALL PROD DATE D ON THESE DRAWING	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. IN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY CC TO DENDED INSTALL ATION OF UTILITIES COMPLETE AND	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc.
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DATROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DATER MAIN INSTALLATI DATER MAIN INSTALLATI CONTRUCTION PRIOR TO ACT LORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DATERCTOR SHALL MAINTAI DATERCTION TO EXISTING W/ ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO DOE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTION WNER PRIOR TO THE COMPL E CONTRACTOR SHALL PROVIDE DATED ON THESE DRAWING PERATIONAL. DATEACTOR SHALL PROVIDE	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. HIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR	GRAPHIC SCALEMulti-Family DevelopmentDevelopmentTorrington Properties, Inc.Portsmouth, New Hampshire
ATURAL GAS - UNITIL MATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DATROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DASTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DATRACTOR SHALL MAINTAI DASTRUCTION. DANAECTION TO EXISTING W/ ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO DOE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. IN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPEING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND CONNECTIONS SHALL BE DIDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, 'NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE EXCAVATION, BEDDING, BACK	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONTRACTOR SHALL MAINTAI ONSTRUCTION. ONNECTION TO EXISTING W/ ANDARDS. (ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W/ ODE, LATEST EDITION, AND / E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL OJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. IE CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- IE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL ONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES.	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. HIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR VEDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE . BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONTRACTOR SHALL MAINTAI ONSTRUCTION. ONNECTION TO EXISTING W/ ANDARDS. (ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W/ ODE, LATEST EDITION, AND / E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL OURDINATED WITH THE COMPLINE AND AND AND AND AND AND AND AND AND AND	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. AN UTULITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. IN UTULITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. I UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR DEGGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE . BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. D AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING W/ ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO DOE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTION WNER PRIOR TO THE COMPLIA E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PORDINATED WITH THE COMPLIA E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PORTACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE S-BUILTS SHALL BE PREPARE JVEYOR. W CUT AND REMOVE PAVEM ROPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. HIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPEING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EEQGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE . BEPROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWMER AND ENGINEER UPON COMPLETION OF THE PROJECT. 2D AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND INTAGE. ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire
ATURAL GAS - UNITIL MATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DATROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DASTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DATRACTOR SHALL MAINTAI DASTRUCTION. DANAECTION TO EXISTING W/ ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W/ DDE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WARE PRIOR TO THE COMPLI- E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WARE PRIOR TO THE COMPLI- E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WARE PRIOR TO THE COMPLI- E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. DATRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE CONTRACTOR TO SUBMIT AS-E DATACTOR AND REMOVE PAVEMAR ANDATACTOR AND REMOVE PAVEMAR	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. VITILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANNOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PEDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE . BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWMER AND ENGINEER UPON COMPLETION OF THE PROJECT. D AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND INTAGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF VER CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT TREAS TO REMAIN TINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF COVER	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Comparison of the second seco
ATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONTRACTOR SHALL MAINTAI ONSTRUCTION. ONNECTION TO EXISTING W/ ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W/ ODE, LATEST EDITION, AND / E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL OURDINATED TO THE COMPLI- TABLES. THE CONTRACTOR SHALL ONT/ ARANGE FOR ALL INSPECTION WNER PRIOR TO THE COMPLI- TE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR TO SUBMIT AS-ED ONTRACTOR TO SUBMIT AS-ED ORMAT (.DWG FILES) TO THE CONTRACTOR TO SUBMIT AS-ED ORMAT (.DWG FILES) TO THE S-BUILTS SHALL BE PREPARE INVEYOR. AW CUT AND REMOVE PAVEM ROPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT ORTSMOUTH. ONCDINATE TESTING OF SEV L SEWER PIPE WITH LESS T I UNPAVED AREAS SHALL BE ONTRACTOR SHALL COORDIN	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE OP ONT WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC S SHALL HAVE NION PULL ROPES TO FACILITATE PULLING AND OTHER SOLES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NION PULL ROPES TO FACILITATE PULLING AND OTHER MISCELLANDOUGLES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITHEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PEDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. ACT THISES AFTE' 7 JOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SULT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. D AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND ENTAND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT AREAS TO REMAIN TINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Complete State
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONTRACTOR SHALL MAINTAI ONSTRUCTION TO EXISTING WA ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WA ODE, LATEST EDITION, AND A E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL OUT, ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLIA E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WIEL PRIOR TO THE COMPLIA E CONTRACTOR SHALL PROVIDE ANDER PRIOR TO THE COMPLIANT ONNECTORS, COVER PLATES, ETTICAL SEPARATION SHALL PONNECTORS COVER PLATES, ETTICAL SEPARATION SHALL PONNECTORS, COVER PLATES, ETTICAL SEPARATION SHALL PONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR TO SUBMIT AS-ED ONTRACTOR TO SUBMIT AS-ED CAMAT (.DWG FILES) TO THE S-BUILTS SHALL BE PREPARE JRVEYOR. AW CUT AND REMOVE PAVEM ROPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DORDINATE TESTING OF SEV L SEWER PIPE WITH LESS T I UNPAVED AREAS SHALL BE ONTRACTOR SHALL COORDIN AVERHEAD WIRE RELOCATION, MA VERHEAD WIRE RELOCATION, MA VERHEAD WIRE RELOCATION, MA	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE OP PIPE. CONS SHALL BE CLASS 50 THERWISE STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. VITITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COMPLY WITH ALL REQUIRED PERMITS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSATILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PEDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN NER INDES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWNER AND ENGINERE UPON COMPLETION OF THE PROJECT. DAND CENTIFIED BY A NEW HAMPSHIRE LICENSED LAND IN EXISTING PAVEMENT AREAS TO REMAIN TINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF VER CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT AREAS TO REMAIN TINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF VER CONSTRUCTION WITH THE CITY OF PORTSMOUTH. HAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc. Portsmouth, New Hampshire Inclusion Inclu
NATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL WORK WITH DNTRUCTION. DNNECTION TO EXISTING W/ ANDARDS. ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W/ DE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUI DJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- BE CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- E CONTRACTOR SHALL OBT/ RRANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- BE CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- BE CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- BE CONTRACTOR SHALL PROVIDE ATICAL SEPARATION SHALL PONNECTORS, COVER PLATES, ETAILED ON THESE DRAWING PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR SHALL PROVIDE ATURAL FOR SHALL BE PREPARE PRATIONAL. DORDINATE TESTING OF SEW L SEWER PIPE WITH LESS T I UNPAVED AREAS SHALL BE DNTRACTOR SHALL COORDIN DATACTOR SHALL PLASE UT ANN CONSTRUCTION AS TO MALL ANN	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE OP PIPE. CONS SHALL BE CLASS 52, CEMENT WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. / UTILTY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING ANN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NIS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETION OF THIS PROJECT. VIDE AND JUSTAIL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PEDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL SOWNER AND DE NGINEER UPON COMPLETION OF THE PROJECT. ED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND IN EXISTING PAVEMENT AREAS TO REMAIN TINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF VER CONSTRUCTION WITH THE CITY OF PORTSMOUTH. HAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER INSULATED. IATE	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Comparison of the properties of the prope
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HORINATION AND TESTING L SEWER PIPE SHALL BE PV ORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING WA ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WA DDE, LATEST EDITION, AND A E EXACT LOCATION OF NEW DORDINATED WITH THE BUI DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS BEES. E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLIA E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLIA E CONTRACTOR SHALL PROVIDE ATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PROTONSTRUCTION. THE CONTRACTOR SHALL CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PROTON SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRES. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. DONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. DONTRACTOR SHALL DONTRACTOR SHALL CONTRACTOR SHALL CONTRACTOR DONTRACTOR SHALL COORDIN DATACTOR SHALL COO	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ON SHALL BE PRESSURE TESTED AND CHLORINATED AFTER INTING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SOR 35 UNLESS OTHERWISE STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHTS SHALL CONFORN TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. I UTILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE EDION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEBOUS ITHENS NOT NECESSARILY STOR MORT MISCELLANEBOUS THENS NOT NECESSARILY STOR ENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PERFONDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR I DIG SAFE" 72 HOURS PRIOR TO COMMENCING COR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWNER AND SERPRODUCIBLE MYLARS AND IN DIGITAL INGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF I AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND I MORE CONSTRUCTION WITH THE CITY OF PORTSMOUTI. HAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER INSIG. TO. SHALL HAVE THE REQUIREMENTS OF THE CITY OF INSIG. FOCUSTRUCTION, WITH THE CITY OF PORTSMOUTI. HAN 6' OF COVER IN PAVED AREAS OR LESS THAT 4' OF COVER INSIG. FOCUSTRUCTION, PARTICULUZING BUT NOT LIMITED TO: NOLL CONSTRUCTION,	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Image: Image:
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI ONTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI ONSTRUCTION PRIOR TO ACT ALORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH ONTRACTOR SHALL MAINTAI ONSTRUCTION. ONNECTION TO EXISTING WA ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WA ODE, LATEST EDITION, AND A E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL OJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ALL MANHOLES, CATC ONNECTORS, COVER PLATES, ETAILED ON THESE DRAWING PERATIONAL. ONTRACTOR SHALL NROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. ONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL FORMAT (.DWG FILES) TO THE ONSTRUCTION. THE CONTRACTOR ONTRACTOR SHALL DE PREPARE JRVEYOR. AW CUT AND REMOVE PAVEM ROPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DRANTS, GATE VALVES, FIT DRANTS, GATE VALVES, FIT ONTRACTOR SHALL DOORDIN AVERHEAD WIRE RELOCATION ONTRACTOR SHALL COORDIN AVERHEAD WIRE RELOCATION ONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN ONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN ONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN ONTRACTOR SHALL COORDIN ONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO MONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO MONTACTOR SHALL COORDIN ONTRACTOR SHALL PHASE UT AIN CONSTRUCTION AS TO M	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ON SHALL BE PRESSURE TESTED AND CHLORINATED AFTER WITH THE CLTY OF PORTSMOUTH WATER DEPARTMENT. C SOR 35 UNLESS OTHERWISE STATED. WIN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATTER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH MOVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC ALL APPLICABLE STATE AND LOCAL CODES. VITILITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, 'NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE EITON OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEGOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR 'VER CONIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN BE ROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL SUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL SUMER TAND ENGINEER UPON COMPLETION OF THE FROJECT. D AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND ENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL D IN EXISTING PAVEMENT AREAS TO REMAIN TINGS, ETC. SHALL MATER HE REQUIREMENTS OF THE CITY OF VER CONSTRUCTION WITH THE CITY OF PORTSMOUTH. HAN 6' OCOVER IN PAVED AREAS OR LESS THAT 4' OF COVER IN AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND INTES, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF HOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, I, AND TRANSFORMER CONSTRUCTION WITH THE UTILITY INTER. SC, CONDUIT LAYOUT A	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Colspan="2">Image: Colspan="2" Image: Colspan="2"
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT ELORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING WA ANDARDS. CISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WA DOE, LATEST EDITION, AND A E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. IE CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLA IE CONTRACTOR SHALL ONTA CANGE FOR ALL INSPECTIO WIER PRIOR TO THE COMPLA IE CONTRACTOR SHALL ONTA CANGE FOR ALL INSPECTIO WIER PRIOR TO THE COMPLA IE CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PONTRACTOR TO SUBMIT AS-E DONTRACTOR TO SUBMIT AS-E FORMAT (.DWG FILES) TO THE S-BUILTS SHALL BE PREPARE INVEYOR. W CUT AND REMOVE PAVEM COPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DONTRACTOR SHALL CONTRACTOR SHALL CONTRACTOR SHALL CONTRACTOR DITACTOR SHALL CONTRACTOR DITACTOR SHALL CONTRACTOR DITACTOR SHALL CONTRACTOR DITACTOR SHALL CORDIN DONTRACTOR SHAL	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROUGH SHALL BE CLASS 5.2, CEMENT LINED DUCTILE IRON PIPE, SOURS SHALL BE CLASS 5.2, CEMENT LINED DUCTILE IRON PIPE, SOURS SHALL BE CLASS 5.2, CEMENT LINED DUCTILE IRON PIPE, SOURS SHALL BE PRESSURE TISTED ADD CHLOINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISE STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH KNOVED SHALL BE CONSTRUCTED TO TO Y OF PORTSMOUTH IN UTILITY SERVICES AND CONNECTIONS SHALL BE CONSTMANSHIP SHALL CONFORM TO THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRICAL LAIPPICABLE STATE AND LOCAL CODES. VITITY SERVICES AND CONNECTIONS SHALL BE LDING DRAWINGS AND THE APPLICABLE UTILITY OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NAN ON SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE EDION OF THIS PROJECT. VIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY STO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACITON FOR PEGGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN EDION OF THIS PROJECT. 2016 AND INSTALL ALL WATER/SANITARY SEWER CROSSINGS. ACT "DIG-SAFE" 72 HOURS PRIOT TO COMMENCING CTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL 301LI PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. 30 AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND INFORMER AND ENGINEER THE REQUIREMENTS OF THE CITY OF WENCINGS, CL. SHALL MEET THE REQUIREMENTS OF THE CITY OF NOLE CONSTRUCTION WITH THE CITY OF PORTSMOUTH. AN OF COVER IN PAVED AREAS TO REBAMIN INFORMER AND ENGINEER CONSTRUCTION WITH THE UTILITY CONSTRUCTION, DIAT PAVED AREAS TO RESS THA	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc. Portsmouth, New Hampshire Outsing to the second
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT ALORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING W/ ANDARDS. ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WO DDE, LATEST EDITION, AND / E EXACT LOCATION OF NEW DORDINATED WITH THE BUI DJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUIT ABLES. 4E CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE FRAILED ON THESE DRAWING PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE FRIICAL SEPARATION SHALL FOONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE FRICAL SEPARATION SHALL FOOT MINIMUM EDGE TO L WATER AND SANITARY SE FRICAL SEPARATION SHALL PRATIONAL. DNTRACTOR TO SUBMIT AS-E FRATICAL SEPARATION SHALL CONTRACTOR SHALL CONTON NATERCTOR SHALL DE PREPARE INVEYOR. W CUT AND REMOVE PAVEM (DOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DATACTOR SHALL CONTON NATACTOR SHALL CONTON NATACTOR SHALL COORDIN DITACTOR SHALL COORDIN DATACTOR SHA	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROYSON CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. (ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SOR 35 UNLESS OTHERWISE STATED. (IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. N UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (MOVED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. (IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. (IN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT (IN OVED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (IN VED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (IN OVED SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (IN OVED SHALL BE CAPPED AT THE MAIN AND MEET THE (IN S STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRICA (LA PPICABLE STATE AND LOCAL CODES. (UTILITY SERVICES AND CONNECTIONS SHALL BE DING DRAWINGS AND THE APPICABLE UTILITY COMPARIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AND, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, (NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE ETON OF THIS PROJECT. UDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY S TO RENDER INSTALLATION OF UTILITIES COMPLETE AND (IN EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR WER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE . E PROVIDED ALL WATER FOR TAREN NOT SITE AT ALL UDING FAR INSTALL ALL WANNED FOR OT SITE AT ALL UTILES AN 18-INCH MINIMUM OUTSIDE TO SUTSIDE. . E PROVIDED ALL WATER PROJECT OL COMPLETION OF THE PROJECT. D'ANDER AND ENGINEER UPON COMPLETION OF THE PROJECT. ENTROLOGISTICTON WITH HOUTS PORTSMOUTH. MAD ENGINEER UPON COMPLETION OF THE PROJECT. ENTROLOGISTICTON WITH HOUTS PORTSMOUTH. MAD ENSTRUCTI	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc. Portsmouth, New Hampshire Development Properties, Inc. Development Development Development Development Development Development Development Development Development Date Development Date Development Date Development Date NaH/PMC DRWN BY: NaH Checked BY NaH/PMC APROVED BY BLM
ATURAL GAS - UNITIL WATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EL DNTROL MEASURES. LL WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HORINATION AND TESTING L SEWER PIPE SHALL BE PV OORDINATE ALL WORK WITH DNTRACTOR SHALL MORK WITH DNSTRUCTION. DNNECTION TO EXISTING WA TANDARDS. (ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL WA DDE, LATEST EDITION, AND A E EXACT LOCATION OF NEW OORDINATED WITH THE BUIL DJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLI- E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. DNTRACTOR TO SUBMIT AS-E FORMAT (.DWG FILES) TO THE GONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PRATIONAL. DNTRACTOR TO SUBMIT AS-E FORMAT (.DWG FILES) TO THE GONTRACTOR SHALL DROVE PAVEM COPOSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DRATT, CONSTRUCTION. THE CONTRACTOR SHALL COORDINA DONTRACTOR SHALL BE PREPARE JUNPAVED AREAS SHALL BE DNTRACTOR SHALL BE PREPARE JUNPAVED AREAS SHALL BE DNTRACTOR SHALL COORDIN DATE TESTING OF SEW L SEWER PIPE WITH LESS T I UNPAVED AREAS SHALL BE DNTRACTOR SHALL COORDIN DATACTOR SHALL COORDIN	RTSMOUTH STIFAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. SONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. SONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER TIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE ONTO STALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. CONS SHALL BE CLASS 52, CEMENT LINED THE CITY OF PORTSMOUTH. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. CONSTRUCTION SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. CONVED SHALL BE CAPPED AT THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONSOROMT OT THE NATIONAL ELECTRIC APPLICABLE STATE AND LOCAL CODES. CONTAMINES SHALL BOUNDORY WITH ALL REQUIRED PERMITS. CONTAMINES AND THE APPLICABLE UTILITY COMPANIES. H BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO S SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR PUED HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN MISCELLANEOUS ITEMS NOT NECESSARILY GS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR INTER AND ENGINER MUSES PARATION SHALL BE PROVIDED BETWEEN BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. ACT MISCELLANEOUS TREMS NOT NECESSARILY OWER LINES, AN IBSIENCH MINIMUM OUTSIDE TO OUTSIDE INTER AND ENGINEER UPON COMPLETION OF THE PROJECT. BE PROVIDED AT ALL WATER FASANT AND SEWER CONSINGS. ACT MISCELLANEOUS PRICE INTERNES AND IN DIGITAL OWER SAND ENGINEER UPON COMPLETION OF THE CONST INTER AND ENGINEER UPON COMPLETION OF THE CONST INTER AND ENGINEER UPON COMPLETION OF THE CONST INTER AND ENGINEER THE REQUIREMENTS OF THE CITY OF NHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, AND TANNESO	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire C 10/18/2021 TAC Submission C 10/18/2021 TAC Submission B 9/2/2021 Design Review - TAC WS A 8/5/2021 PB Conceptual Consultation MARK DATE DESCRIPTION PROJECT NO: T-5047-001: DATE: August 5, 2021 FILE: T5047-001-C-DSGN.DWG DRAWN BY: NAH CHECKED BY: NAH
ATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT ALORINATION AND TESTING L SEWER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION. DNNECTION TO EXISTING W/ ANDARDS. ISTING UTILITIES TO BE RE EPARTMENT OF PUBLIC WOR L ELECTRICAL MATERIAL W DOE, LATEST EDITION, AND / ADDE, LATEST EDITION, AND / BE EXACT LOCATION OF NEW DORDINATED WITH THE BUI DUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBT/ RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPL HE CONTRACTOR SHALL PROVIDE ATILED ON THESE DRAWING PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE STICAL SEPARATION SHALL PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE STICAL SEPARATION SHALL PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE STICAL SEPARATION SHALL PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE STICAL SEPARATION SHALL PROVID SHALL BE PREPARE INTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. DONTRACTOR SHALL DE PREPARE INTRACTOR SHALL BE PREPARE INTRACTOR SHALL BE PREPARE INTRACTOR SHALL BE PREPARE DONTACTOR SHALL COORDIN DATACTOR SHALL PHASE UT AN CONSTRUCTION AS TO M DATACTOR SHALL PHASE UT AN CONSTRUCTION AS T	RTSMOUTH ST/FAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. ONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER IVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISS STATED. IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. UTILITY SERVICES AND CONNECTIONS SHALL BE CAPPICABLE STATE AND LOCAL CODES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC. SI SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING AND, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, NS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE EITON OF THIS PROJECT. UTIL AND INSTALL ALL MANHOLES, BOXES, FITTINGS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY SO TO RENDER INSTALLATION OF UTILITIES COMPLETE AND EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR E PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. TACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENTING ENTENTION SHALL BE PROVIDED BETWEEN E ENDVIDED AT ALL WATER/SANITARY SEWER CROSSINGS. E PROVIDED AN UNER SPROTECTION OF THE PROJECT. E DAND CERTIFIED BUY ANEW MAMPSHIRE LICENSED LAND E DAND CERTIFIED SUM AND MAD SASE THAT 4' OF COVER INFORMANY. ENTIMES SENTI TO ROSSINGS OR LESS THAT 4' OF COVER INFORMANY SERVICE TO ABU	GRAPHIC SCALE Multi-Family Development Development Torrington Properties, Inc. Portsmouth, New Hampshire Image: Colspan="2">Image: Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2" Image: Colspan="2">Colspan="2">Colspan="2" Image: Colspan="2">Colspan="2" Image: Colspan="2"
ATURAL GAS - UNITIL NATER/SEWER - CITY OF PO ELECTRIC - EVERSOURCE COMMUNICATIONS - COMCAS E EXISTING CONDITIONS PI E GRADING, DRAINAGE & EI DNTROL MEASURES. L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI L WATER MAIN INSTALLATI DNSTRUCTION PRIOR TO ACT HORINATION AND TESTING L SEWER PIPE SHALL BE PV ORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION TO EXISTING WA TANDARDS. L SEUER PIPE SHALL BE PV DORDINATE ALL WORK WITH DNTRACTOR SHALL MAINTAI DNSTRUCTION TO EXISTING WA TANDARDS. L ELECTRICAL MATERIAL WA DOE, LATEST EDITION, AND A E EXACT LOCATION OF NEW DORDINATED WITH THE BUIL DJUST ALL MANHOLES, CATC NISH GRADE. L UNDERGROUND CONDUITS ABLES. E CONTRACTOR SHALL OBTA RANGE FOR ALL INSPECTIO WNER PRIOR TO THE COMPLA E CONTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL PERATIONAL. DNTRACTOR SHALL PROVIDE ATURAL GAS SERVICES. 10-FOOT MINIMUM EDGE TO L WATER AND SANITARY SE ERTICAL SEPARATION SHALL ONTRACTOR TO SUBMIT AS-E DONTRACTOR TO SUBMIT AS-E DONTRACTOR TO SUBMIT AS-E FORMAT (.DWG FILES) TO THE S-BUILTS SHALL BE PREPARE JRVEYOR. AW COUSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT DINTACTOR SHALL DE PREPARE JRVEYOR. AW COUSED UTILITIES LOCATE (DRANTS, GATE VALVES, FIT ONTRACTOR SHALL BE PREPARE JRVEYOR. AW CONSTRUCTION. THE CONTRACTOR DONTRACTOR SHALL CONTON DATACTOR SHALL BE PREPARE JRVEYOR. AW CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN DATACTOR SHALL BE PREPARE JRVEYOR. AN CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN DATACTOR SHALL BE DONTRACTOR SHALL COORDIN DATACTOR SHALL COORDIN DATACTOR SHALL COORDIN DATACTOR SHALL PHASE UT AN CONSTRUCTION AS TO MONTRACTOR SHALL COORDIN DATACTOR SHALL COORDIN DATACTOR SHALL DE SECTICATIO GHING AND SIGN ILLUMIN MIGNEER. ACH OF THE NEW BUILDINGS DATACTOR SHALL PRASE UT AN CONSTRUCTION AS TO MONTSMOUTH DICATE CONFORMANCE TO I DATACTOR SHALL PRASE UT AN CONSTRUCTION AS TO MONTSMOUTH DATACTOR SHALL PRASE UT AN CONSTRUCTION AS TO MONTSMOUTH DATACTOR SUBMITALES DATACTOR SHALL DE SUBMITALES DATACTO	RTSMOUTH STIFAIRPOINT/FIRST LIGHT LAN FOR BENCHMARK INFORMATION. ROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE. (NOS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER UTINT HE CITY OF PORTSMOUTH WATER DEPARTMENT. C SDR 35 UNLESS OTHERWISS STATED. (IN PUBLIC RIGHT OF WAYS WITH THE CITY OF PORTSMOUTH. UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT. ATER MAIN SHALL BE CONSTRUCTED TO CITY OF PORTSMOUTH. (IN PUBLIC RIGHT OF WAYS WITH THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC. (IN PUBLIC RUSTOR OF ON THE MAIN AND MEET THE KS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES. ORMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC. (IN PUBLIC RUSTOR OF ON THE NITION SHALL BE PUBLICABLE OT THE COMPANIES. (IN PUBLIC RUSTALL AND COMPLY WITH ALL REQUIRED PERMITS, (NS, AND SUBMIT COPIES, DA ACCEPTANCE CERTIFICATES TO THE CITY OF ON THIS PROJECT. (IN PUBLIC RUSTALL AND HOUSS DET OO TOUTSIDE (IN AND OTHER MISCELLANDOUS ITEMS NOT INECESSARILY (IN PUBLIC RUSTALL AND MOLES, BOXES, FITTINGS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE CITY OF ONTROLOT. (IN PUBLIC RUSTALL AND MORS ON SITE AT ALL (IN PUBLIC RUSTS PUBLIC RUSTAR AND IN DIGITAL (IN PUBLIC RUSTRUCT PAVEMENT TRENCH PATCH FOR ALL (IN PUBLIC RUSTRUCT PAVEMENT TRENCH PATCH FOR ALL (IN PUBLIC RUSTRUCT ON THI HE CITY OF PORTSMOUTH. (IN AND CONSTRUCTION WITH HOUSE COMPANY. (IN THAND CONSTRUCTION WITH HOUSE COMPANY. (IN THE OLISING PARATE KNOX BOX. EACH NEW TEMANT (IN R	GRAPHIC SCALE Multi-Family Development Torrington Properties, Inc. Portsmouth, New Hampshire Output C 10/18/2021 TAC Submission C 10/18/2021 TAC Submission B 9/2/2021 Design Review - TAC WS A 8/5/2021 PB Conceptual Consultation MARK DATE DESCRIPTION PROJECT NO: T-5047-001 CATE: T5047-001-C-DSGN.DWG DRAWN BY: NAH CHECKED BY: NAH

Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Descripti
_	6	AA	4 @ 90	4-SVL22-1
			DEGREES	
Ð	4	D	SINGLE	SVL22-IV-
	20	F	SINGLE	LCK1-YK-H
	1	FW	SINGLE	LCK1-YK-I

StatArea_1 NEW PARKING SPCAES Illuminance (Fc) Average = 1.34 Maximum = 6.6 Minimum = 0.1 Avg/Min Ratio = 13.40 Max/Min Ratio = 66.00

tion -IV-400PSMH-FG/ 20' POLE 1' PED	

n
-400PSMH-FG/ 20' POLE 1' PED
00PSMH-FG-HS/ 20' POLE 1' PED
5-100psmh/ 11' pole on 1' ped
5-100PSMH/ WALL MTD 12' AFG

⁴...⁹ ∰ (€) *5.

SHALL BE NURSERY GROWN.

- **ORIGINAL PLANTING GRADE PRIOR TO DIGGING.**

- **BE PROVIDED WITH AN IRRIGATION SYSTEM.**
- YEAR.
- TOPSOIL
- SHRUB.
- DROUGHT
- PLANTINGS
- PLANTING DATES.

LANDSCAPE PLAN

L-100

SCALE:

AS SHOWN

PROPOSED DECIDUOUS TREE PROPOSED ORNAMENTAL TREE

PROPOSED SHRUB

PROPOSED GROUND COVER

LANDSCAPE NOTES: 1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS IN QUANTITIES AS SHOWN ON THIS PLAN. NO SUBSTITUTIONS WILL BE PERMITTED UNLESS APPROVED BY OWNER. ALL PLANTS

2. ALL PLANTS SHALL BE NURSERY GROWN AND PLANTS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS, INCLUDING BUT NOT LIMITED TO SIZE, HEALTH, SHAPE, ETC., AND SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO ARRIVAL ON-SITE AND AFTER PLANTING.

3. PLANT STOCK SHALL BE GROWN WITHIN THE HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT AGRICULTURE, LATEST REVISION. 4. PLANT MATERIAL SHALL BARE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE

5. THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE PROVIDED IN THE PLANT LIST OR ON THE PLAN IS FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LABEL AND THE NUMBER OF SYMBOLS SHOWN ON THE DRAWINGS, THE GREATER NUMBER SHALL APPLY.

6. NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE. 7. THE CONTRACTOR SHALL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED

UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.

8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, SHALL RECEIVE 6" OF LOAM AND SEED. NO FILL SHALL BE PLACED IN ANY WETLAND AREA. 9. LANDSCAPING SHALL BE LOCATED WITHIN 150 FT OF EXTERIOR HOSE ATTACHMENT OR SHALL

10. SEE PLANTING DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. 11. TREE STAKES SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1

12. PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 1ST. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT. 13. PARKING AREA PLANTED ISLANDS TO HAVE MINIMUM OF 1'-0" TOPSOIL PLACED TO WITHIN 3 INCHES OF THE TOP OF CURB ELEVATION. REMOVE ALL CONSTRUCTION DEBRIS BEFORE PLACING

14. TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 'TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES. 15. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON. LANDSCAPE CONTRACTOR SHALL COORDINATE WATERING SCHEDULE WITH OWNER DURING THE ONE (1) YEAR GUARANTEE PERIOD. 16. EXISTING TREES AND SHRUBS SHOWN ON THE PLAN ARE TO REMAIN UNDISTURBED. ALL EXISTING TREES AND SHRUBS SHOWN TO REMAIN ARE TO BE PROTECTED WITH A 4-FOOT SNOW FENCE PLACED AT THE DRIP LINE OF THE BRANCHES OR AT 8 FEET MINIMUM FROM THE TREE

TRUNK. ANY EXISTING TREE OR SHRUB SHOWN TO REMAIN, WHICH IS REMOVED DURING CONSTRUCTION, SHALL BE REPLACED BY A TREE OF COMPARABLE SIZE AND SPECIES TREE OR 17. THE CONTRACTOR SHALL GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING

AND ACCEPTABLE CONDITION FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL GRASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF ONE YEAR PERIOD SHALL BE REPLACED BY THE CONTRACTOR. 18. UPON EXPIRATION OF THE CONTRACTOR'S ONE YEAR GUARANTEE PERIOD, THE OWNER SHALL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE INCLUDING WATERING DURING PERIODS OF

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE

20. PRE-PURCHASE PLANT MATERIAL AND ARRANGE FOR DELIVERY TO MEET PROJECT SCHEDULE AS REQUIRED IT MAY BE NECESSARY TO PRE-DIG CERTAIN SPECIES WELL IN ADVANCE OF ACTUAL

PLANT SCHEDULE

Symbol	Quantity	Botanical Name	Common Name	Size	Spacing
TREES			L		
AF	6	Acer freemanii 'Autumn Blaze'	Autumn Blaze Maple	2.5-3" Cal.	
AG	5	Amelanchier grandiflora 'Autumn Brilliance'	Apple Serviceberry	8'-10' Ht, Multi	
BN	4	Betula nigra 'Heritage'	Heritage River Birch	2.5-3" Cal.	
СК	1	Cornus kousa	Kousa Dogwood	3.5-4" Cal.	
ML	1	Magnolias loebneri 'Dr Merrill'	Merril Star Magnolia	10'-12' Ht, Multi	
PF	2	Picea pungens 'Fat Albert'	Fat Albert Spruce	7'-8' Ht	
PG	14	Picea glauca	White Spruce	8'-10' Ht	
QR	7	Quercus rubra	Northern Red Oak	4-5" Cal.	
тс	4	Tilia cordata 'Greenspire'	Greenspire Littleleaft Linden	2.5-3" Cal.	
SHRUBS	•				
Нр	2	Hydrangea paniculata 'pinky winky	Pinky Winky Hydrangea	3 Gal	
lg	16	llex glabra 'Shamrock'	Shamrock Inkberry	5 Gal	
Po	3	Physocarpus opulifolius 'Coppertina'	Coppertina Ninebark	7 Gal	
Rg	11	Rhus aromatica 'Gro-Low'	Fro-Low Fragrant Sumac	3 Gal	
Tm	9	Taxus media 'Nigra'	Dark Spreading Yew	2'-2.5' BB	
Vc	3	Viburnum carlesii 'Cayuga'	Cayuga Mayflower	3'-4' BB	
PERENNIAL	S				
dp	118	Dennstaedtia punctilobula	Hay Scented Fern	1 Gal	18" oc
vm	348	Vinca minor 'Bowles'	Foamflower	4" Pot	18" oc

FROM HOLE. BACKFILL IN THREE LIFTS, WATER THOROUGHLY BETWEEN LIFTS. SEE NOTE 2.9 FOR ADDITIONAL WATERING AFTER COMPLETION SLOPE -1:1 SIDE

BURLAP FROM ROOT BALL

N.T.S.

<u>PART 1 – GENERAL:</u>

1.1 THE BASE OF THE CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS IS THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING. ANSI A300 PART 6 LAYS OUT TERMS AND BASIC STANDARDS AS SET FORTH BY INDUSTRY BUT IT IS NOT THE "END ALL" FOR THE CITY OF PORTSMOUTH. THE FOLLOWING ARE THE CITY OF PORTSMOUTH, NH TREE PLANTING REQUIREMENTS THAT ARE IN ADDITION TO OR THAT GO BEYOND THE ANSI A300 PART 6.

PART 2 - EXECUTION:

- 2.1 ALL PLANTING HOLES SHALL BE DUG BY HAND NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.
- 2.2 ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
- 2.3 THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT.
- 2.4 THE ROOT COLLAR OF THE TREE SHALL BE 2"-3" ABOVE GRADE OF PLANTING HOLE FOR FINISHING DEPTH.
- 2.5 ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.
- 2.6 ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POCKETS - NO EXCEPTIONS.
- 2.7 AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.
- 2.8 2"-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA.
- 2.9 AT THE TIME OF PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL AND MULCH LAYER.
- 2.10 STAKES AND GUYS SHALL BE USED WHERE APPROPRIATE AND/OR NECESSARY. GUY MATERIAL SHALL BE NON-DAMAGING TO THE TREE.
- 2.11 ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR INJURY. THE CITY OF PORTSMOUTH, NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPORTATION AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS.

GENERAL PROJECT PROJECT OWNER:	INFORMATION 2422 LAFAYETTE ROAD ASSOC LLC C/O WATERSTONE RETAIL 322 RESERVOIR STREET NEEDLIAM MA 02404	FILTERED THROUGH SILT FENCES, MULCH BER STORM DRAIN BASIN INLETS SHALL BE PROVII RACKS. THE SITE SHALL BE STABILIZED FOR T
PROJECT NAME:	PORTSMOUTH GREEN - MULTI-FAMILY DEVELOPMENT	 THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCTION PERIOD.
PROJECT ADDRESS:	2454 LAFAYETTE ROAD PORTSMOUTH, NH 03801	 DUST CONTROL METHODS SHALL INCLUDE, BU EXPOSED AREAS, COVERING LOADED DUMP TR MULCHING.
PROJECT MAP / LOT:	MAP 273 / LOT 3	3. DUST CONTROL MEASURES SHALL BE UTILIZED FROM THE SITE TO ABUTTING AREAS.
PROJECT LATITUDE: PROJECT LONGITUDE	43.036120 N E: -70.784829 W	STOCKPILES:
PROJECT DESCRIP THE PROJECT CONSI PROPOSED MULTI-FA	TION STS OF DEMOLITION OF THE EXISTING CINEMA AND THE CONSTRUCTION OF A AMILY RESIDENTIAL BUILDING.	 LOCATE STOCKPILES A MINIMUM OF SUPEET A CULVERTS. ALL STOCKPILES SHOULD BE SURROUNDED WI PRIOR TO THE ONSET OF PRECIPITATION. DEPIMETER BARRIERS SHOULD BE MAINTAINED
DISTURBED AREA THE TOTAL AREA TO	BE DISTURBED IS APPROXIMATELY 3.5 ACRES.	ACCOMMODATE THE DELIVERY AND REMOVAL O INTEGRITY OF THE BARRIER SHOULD BE INSPE 4. PROTECT ALL STOCKPILES FROM STORMWATEF
SOIL CHARACTERI BASED ON THE NRCS SITE CONSIST OF MO	STICS 5 WEB SOIL SURVEY FOR ROCKINGHAM COUNTY - NEW HAMPSHIRE THE SOILS ON DSTLY URBAN SOILS WHICH HAVE UNKNOWN DRAINAGE PROPERTIES.	MEASURES SUCH AS BERMS, SILT SOCK, OR O MIGRATION OF MATERIAL BEYOND THE IMMED
NAME OF RECEIVING THE STORMWATER FOR DISCHARGES TO THE	NG WATERS RUNOFF WILL BE COLLECTED IN A CLOSED DRAINAGE SYSTEM WHICH ULTIMATELY E LITTLE HARBOR.	OFF SITE VEHICLE TRACKING:1. THE CONTRACTOR SHALL CONSTRUCT STABILIEXCAVATION ACTIVITIES.
	QUENCE OF MAJOR ACTIVITIES:	VEGETATION: 1. TEMPORARY GRASS COVER:
FACILITIES. ERC ANY EARTH MOV • NEW CONST	PORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL PSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS: RUCTION	 A. SEEDBED PREPARATION: a. APPLY FERTILIZER AT THE RATE OF 600 P (EQUIVALENT TO 50 PERCENT CALCIUM P TONS PER ACRE;
CONTROL O NEARNESS (CONSTRUCT)	DOST DF CONSTRUCTION SITE TO RECEIVING WATERS TON DURING LATE WINTER AND EARLY SPRING	a. UTILIZE ANNUAL RYE GRASS AT A RATE C
2. ALL PERMANENT BE STABILIZED RUNOFF TO THE 3. CLEAR AND DIST	DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING M. POSE OF DEBRIS.	TO A DEPTH OF TWO (2) INCHES BEFORE c. APPLY SEED UNIFORMLY BY HAND, CYCLC INCLUDING SEED AND FERTILIZER). HYD
 CONSTRUCT TEN GRADE AND GRA 	IPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.	C. MAINTENANCE: a. TEMPORARY SEEDING SHALL BE PERIODI
6. BEGIN PERMANE	WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.	SOIL SURFACE SHOULD BE COVERE OR SEDIMENTATION IS APPARENT, REPAI
BE SEEDED AND REQUIRED, CON MFASHRES SED	MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.DAILY, OR AS STRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL IMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED	MEASURES USED IN THE INTERIM (MULCH 2. VEGETATIVE PRACTICE: A FOR DEPMANENT MEASURES AND DUANTING
 FINISH PAVING INSPECT AND M. 	ALL ROADWAYS AND PARKING LOTS. AINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.	a. LIMESTONE SHALL BE THOROUGHLY INCO THREE (3) TONS PER ACRE IN ORDER TO
 COMPLETE PERM REMOVE TRAPPE 	IANENT SEEDING AND LANDSCAPING. D SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE	b. FERTILIZER SHALL BE SPREAD ON THE TO SURFACE. FERTILIZER APPLICATION RATE
IEMPORARY ERG	JSION CONTROL MEASURES.	FERTILIZER; c. SOIL CONDITIONERS AND FERTILIZER SF
SPECIAL CONSTRUCT	CTION NOTES: TION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.	SURFACE IS FINELY PULVERIZED, SMOOT SURFACE CONFORMING TO THE REOUIRE
2. THE PROJECT IS RSA 430:53 AND	TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.	WEIGHING BETWEEN 4-1/2 POUNDS AND d. SEED SHALL BE SOWN AT THE RATE SHO
EROSION CONTRO	L NOTES:	DRY DAY, PREFERABLY BY MACHINE, BUT IMMEDIATELY BEFORE SEEDING, THE SO
1. ALL EROSION CO STORMWATER M	ONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE ANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING	SHALL BE SOWN IN ONE DIRECTION AND ORIGINAL DIRECTION. IT SHALL BE LIGH
2. PRIOR TO ANY W	" PREPARED BY THE NHDES. /ORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR	LINEAR FOOT OF WIDTH; e. HAY MULCH SHALL BE APPLIED IMMEDIAT
3. CONTRACTOR SI SILT FENCES, M	HALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, ULCH BERMS, INLET PROTECTION AND SILT SOCKS AS SHOWN IN THESE	f. THE SURFACE SHALL BE WATERED AND K WITHOUT WASHING AWAY THE SOIL, UN
DRAWINGS AS T 4. INLET PROTECTI	ON SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS	WHICH ARE NOT SATISFACTORILY COVER NOXIOUS WEEDS REMOVED;
WITHIN THE WC 5. PERIMETER CON BARRIERS SHAL	RK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT. TROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE L BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS	 g. THE CONTRACTOR SHALL PROTECT AND I h. A GRASS SEED MIXTURE CONTAINING TH APPLIED AT THE INDICATED RATE:
HAVE BEEN STAI 6. THE CONTRACTO	BILIZED. DR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION	SEED MIX APPLI CREEPING RED FESCUE 20 LB
7. ALL DISTURBED	ES UPON COMPLETION OF CONSTRUCTION. AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND	REDTOP 2 LBS, IN NO CASE SHALL THE WEED CONTENT I
8. INSPECT ALL INI STORM OF 0.25	LET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN	SHALL COMPLY WITH STATE AND FEDERA THAN SEPTEMBER 15. IN NO CASE SHALL
EFFICIENCY OF I 9. CONSTRUCT ERG	FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT. DSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.	 DORMANT SEEDING (SEPTEMBER 15 TO FIRST : A. FOLLOW PERMANENT MEASURES SLOPE, LIM
STABILIZATION:		PERMANENT MEASURES.
A. BASE COURSI B. A MINIMUM C	E GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; F 85% VEGETATED GROWTH HAS BEEN ESTABLISHED:	CONCRETE WASHOUT AREA: 1. THE FOLLOWING ARE THE ONLY NON-STORMW
C. A MINIMUM C INSTALLED;	OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN	NON-STORMWATER DISCHARGES ARE PROHIBI A. THE CONCRETE DELIVERY TRUCKS SHALL, V
D EROSION COR 2 WINTER STABIL	NTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.	AT THEIR OWN PLANT OR DISPATCH FACILI B. IF IT IS NECESSARY, SITE CONTRACTOR SH DESIGN FACILITIES TO HANDLE ANTICIDATE
A. ALL PROPOSE VEGETATIVE	D VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL	C. CONTRACTOR SHALL LOCATE WASHOUT ARE DRAINS, SWALES AND SURFACE WATERS OF
BE STABILIZE GREATER THA WITH ANCHO	AN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED RED NETTING, ELSEWHERF, THE INSTALLATION OF FROSTON CONTROL BLANKETS	D. INSPECT WASHOUT FACILITIES DAILY TO DE MATERIALS NEED TO BE REMOVED.
OR MULCH AN GROUND AND	ND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN O SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS:	ALLOWABLE NON-STORMWATER DISCHARGES
B. ALL DITCHES GROWTH BY (OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE	 FIRE-FIGHTING ACTIVITIES; FIRE HYDRANT FLUSHING; WATERS USED TO WASH VEHICLES WHERE DET
STABILIZED 1 THE DESIGN	EMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR FLOW CONDITIONS;	 WATER USED TO WASH VEHICLES WHERE DE WATER USED TO CONTROL DUST; POTABLE WATER INCLUDING UNCONTAMINATE
C. AFTER OUTOE FOR THE WIN GRAVEL PER	TER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED NHDOT ITEM 304.3. OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE	 ROUTINE EXTERNAL BUILDING WASH DOWN W PAVEMENT WASH WATERS WHERE DETERGENT
WINTER SEAS 3. STABILIZATION	SON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT; SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE	 UNCONTAMINATED AIR CONDITIONING/COMPR UNCONTAMINATED GROUND WATER OR SPRING
CONSTRUCTION DAYS BY THE FC	ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR	10. FOUNDATION OR FOOTING DRAINS WHICH ARE 11. UNCONTAMINATED EXCAVATION DEWATERING 12. LANDSCAPE INDICATION
TEMPORARILY C A. TEMPORARY S	EASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE: SEEDING;	VASTE DISPOSAL:
4. WHEN CONSTRU	CTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF	1. WASTE MATERIAL: A. ALL WASTE MATERIALS SHALL BE COLLECTE
SEVEN (7) DAYS	OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES N AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALF BARRIERS AND ANY	RECEPTACLES. ALL TRASH AND CONSTRUCT IN A DUMPSTER;
EARTH/DIKES SI 5. DURING CONST	HALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. RUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES.	B. NO CONSTRUCTION WASTE MATERIALS SHAC. ALL PERSONNEL SHALL BE INSTRUCTED REC
PIPING OR STAB	ILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE	DISPOSAL BY THE SUPERINTENDENT.

MS, HAY BALE BARRIERS, OR SILT SOCKS. ALL DED WITH FLARED END SECTIONS AND TRASH HE WINTER BY NOVEMBER 15.

CONTROL DUST THROUGHOUT THE

F BE NOT LIMITED TO SPRINKLING WATER ON UCKS LEAVING THE SITE, AND TEMPORARY

SO AS TO PREVENT THE MIGRATION OF DUST

WAY FROM CATCH BASINS, SWALES, AND

ITH TEMPORARY EROSION CONTROL MEASURES

AT ALL TIMES, AND ADJUSTED AS NEEDED TO OF MATERIALS FROM THE STOCKPILE. THE CTED AT THE END OF EACH WORKING DAY. RUN-OFF USING TEMPORARY EROSION CONTROL HER APPROVED PRACTICE TO PREVENT IATE CONFINES OF THE STOCKPILES.

ZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY

OUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE LUS MAGNESIUM OXIDE) AT A RATE OF THREE (3)

OF 40 LBS/ACRE;

BY CONSTRUCTION OPERATIONS, LOOSEN SOIL APPLYING FERTILIZER, LIME AND SEED; NE SEEDER, OR HYDROSEEDER (SLURRY ROSEEDINGS, WHICH INCLUDE MULCH, MAY BE MUST BE INCREASED 10% WHEN HYDROSEEDING;

CALLY INSPECTED. AT A MINIMUM, 95% OF THE D BY VEGETATION. IF ANY EVIDENCE OF EROSION IRS SHALL BE MADE AND OTHER TEMPORARY CH, FILTER BARRIERS, CHECK DAMS, ETC.).

RPORATED INTO THE LOAM LAYER AT A RATE OF PROVIDE A PH VALUE OF 5.5 TO 6.5; OP LAYER OF LOAM AND WORKED INTO THE

SHALL BE 800 POUNDS PER ACRE OF 10-20-20 IALL BE APPLIED AT THE RECOMMENDED RATES TO THE LOAM. LOAM SHALL BE RAKED UNTIL THE

TH AND EVEN, AND THEN COMPACTED TO AN EVEN ED LINES AND GRADES WITH APPROVED ROLLERS 5-1/2 POUNDS PER INCH OF WIDTH WN BELOW. SOWING SHALL BE DONE ON A CALM,

IF BY HAND, ONLY BY EXPERIENCED WORKMEN. L SHALL BE LIGHTLY RAKED. ONE HALF THE SEED THE OTHER HALF AT RIGHT ANGLES TO THE TLY RAKED INTO THE SOIL TO A DEPTH NOT OVER LER WEIGHING NOT OVER 100 POUNDS PER

ELY AFTER SEEDING AS INDICATED ABOVE; EPT MOIST WITH A FINE SPRAY AS REQUIRED, TL THE GRASS IS WELL ESTABLISHED. ANY AREAS ED WITH GRASS SHALL BE RESEEDED, AND ALL

MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED; IE FOLLOWING SEED REQUIREMENTS SHALL BE

ATION RATE

S/ACRE

S/ACRE ACRE

EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED L SEED LAWS. SEEDING SHALL BE DONE NO LATER SEEDING TAKE PLACE OVER SNOW. SNOWFALL):

E, FERTILIZER AND GRADING REQUIREMENTS. TED RATE. APPLY MULCH AS INDICATED FOR

ATER DISCHARGES ALLOWED. ALL OTHER ITED ON SITE:

HENEVER POSSIBLE, USE WASHOUT FACILITIES ALL DESIGNATE SPECIFIC WASHOUT AREAS AND

ED WASHOUT WATER; AS AT LEAST 150 FEET AWAY FROM STORM

DELINEATED WETLANDS; TECT LEAKS OR TEARS AND TO IDENTIFY WHEN

TERGENTS ARE NOT USED;

ED WATER LINE FLUSHING;

HERE DETERGENTS ARE NOT USED; S ARE NOT USED;

ESSOR CONDENSATION;

G WATER; UNCONTAMINATED

D AND STORED IN SECURELY LIDDED ION DEBRIS FROM THE SITE SHALL BE DEPOSITED

LL BE BURIED ON SITE; ARDING THE CORRECT PROCEDURE FOR WASTE

- 2. HAZARDOUS WASTE: A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER; B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT. SANITARY WASTE: A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. **SPILL PREVENTION:** CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF: A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION: a. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE; b. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE; c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED; d. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS; e. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER f. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE 2. CONTAINER. B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS 3. ASSOCIATED WITH HAZARDOUS MATERIALS: g. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE; h. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION; i. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE C. FOLLOWED ON SITE: a. PETROLEUM PRODUCTS: a.1. ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE; PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. b. FERTILIZERS: b.1. FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS; b.2. ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER; b.3. STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS. c. PAINTS: c.1. ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE; c.2. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM; c.3. EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS. D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP: a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES; b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE; ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY; d. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE: e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED; f. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. VEHICLE FUELING AND MAINTENANCE PRACTICE: a. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPTMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY; b. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY; c. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED; d. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA; e. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE; f. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID. **EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES**
- 1. THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REOUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.
- THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT: A. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE
- CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER: B. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO
- THE ENGINEER, THE OWNER, AND THE CONTRACTOR; C. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE
- AND REPAIR ACTIVITIES; D. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

NOTES

RECOMMENDATIONS.

- NOTES ACRES
- STABILIZED. STABILIZED.

NOTES THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT THE SITE. WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE

WATERWAYS

SILT SOCK -(12" TYPICAL) WORK AREA

NOTES

aved: 10/15/2021 On:Oct 15, 2021-9:05am Bv: NAHansen

THRUST BLOCKING BEARING ON BED MATERIAL					
	PIPE SIZE				
	8"	10"	12"		
9	3.82	11.14	17.24		
5	2.78	8.38	12.00		
Э	2.12	6.02	9.32		
0	1.06	3.08	4.74		
0	0.54	1.54	2.38		

	S	AND B	LANKET
	SIEV	/E SIZE	% PASSING
	1	L/2"	100
	#	200	15 MAX
VEMENT DETAIL			
	G	RANUL	AR FILL
SEE		(GRA	VEL)
	SIEV	'E SIZE	% PASSING
		3"	95-100
BASE		#4	25-70
IN. CLOSED CELL PIPE JLATION WHERE CALLED FOI			
'LANS	AAS	SHTO 7	#67 STONE
		(#4 t	o 3/4")
	SIE	VE SIZE	% PASSING
		1"	100
		3/4"	90-100
SPRING LINE		3/8"	20-55
		#4	0-10
		#8	0-5
СК	<u> </u>		
ск		#8	

Tighe&Bond

Multi-Family Development

Torrington Properties, Inc.

Portsmouth, New Hampshire

С	10/18/2021	TAC Submission			
В	9/2/2021	Design Review - TAC WS			
А	8/5/2021	PB Conceptual Consultation			
MARK	MARK DATE DESCRIPTION				
PROJE	CT NO:	T-5047-001			
DATE:		August 5, 2021			
FILE:		T5047-001-C-DTLS.DWG			
DRAWI	DRAWN BY: NAH				
CHECKED BY: NAH/PMC					
APPROVED BY: BLM					
	DETAILS				
SCAL	E:	AS SHOWN			
	C-505				

U:\Local Kevir\z 1033_Constitution A

580 HARRISON AVE, SI BOSTON, MA 02118 O: 617.765.8000 www.embarcdesign.com OWNER TORRINGTON PRO	UITE 2W
CONSULTANTS	
2454 LAFAYETTE ROAD PORTSMOUTH, NH	TAC SUBMISSION
REVISIONS MARK ISSUE	DATE
DRAWING INFORMAT ISSUE: TAC SUBMIS DATE: 10/18/21 PROJECT #: 21035 SCALE: 3/32" = 1'- DRAWING TITLE WEST ELEV	TION SSION 0" ZATION
DRAWING NUMBER)2

2 EAST SECTION 3/32" = 1'-0"

		<u>ROOF</u> 56' - 5"
RESIDENTIAL		
RESIDENTIAL		44 - 11
RESIDENTIAL		
		22' - 11 1/2"
PARKING		
		FIRST FLOOR 0' - 0"

Ð

DRAWING NUMBER A6C copyright: EMBARC INC.	DRAWING INFORMATION ISSUE: TAC SUBMISS DATE: 10/18/21 PROJECT #: 21035 SCALE: 1/16" = 1'-0 DRAWING TITLE DRAWING TITLE	REVISIONS MARK ISSUE	2454 LAFAYETTE ROAD PORTSMOUTH, NH	CONSULTANTS	OWNER TORRINGTON PROF	ARCHITECT EMBA 580 HARRISON AVE, SU BOSTON, MA 02118 O: 617.765.8000
)1	 ON 510N	DATE	TAC SUBMISSION		Perties, INC	ARC JITE 2W

ARCHITECT EMB 580 HARRISON AVE, SU BOSTON, MA 02118	ARC
O: 617.765.8000 www.embarcdesign.com	
OWNER	
TORRINGTON PRO	PERTIES, INC
CONSULTANTS	
2454 LAFAYETTE ROAD PORTSMOUTH, NH	TAC SUBMISSION
	DATE
ISSUE: TAC SUBMIS DATE: 10/18/21	SION
PROJECT #: 21035 SCALE: 1/16" = 1'-0)"
DRAWING TITLE	
2ND FLOC)R
DRAWING NUMBER	
	つ
	JL

Local Revit\21035_Constitution Ave_091321_CUribeLJSLH

ARCHITEC EM 580 HARRISC		
O: 617.765.8 www.embarcd	3000 lesign.com	
OWNER		
TORRINGT	ON PROPERT	TES, INC
CONSULTAN	ITS	
2454 LAFAYETTE ROAD	PORISMOUTH, NH	TAC SUBMISSION
	ISSUE	DATE
DRAWING IN ISSUE: 1 DATE: 1 PROJECT #: 2 SCALE: DRAWING TI 3RD TO FLOO	IFORMATION TAC SUBMISSION 10/18/21 21035 1/16" = 1'-0" TLE O 4TH R	
	UMBER 60	3

\Local Revit\21035_Constitution Ave_091321_CUribeLJSLH

/2021_10-21-39_AM

ARCHITECT E MBB/ S80 HARRISON AVE, SU BOSTON, MA 02118 O: 617.658.000 WW.EMB TORRINGTON PROP CONSULTANTS CONSULTANTS HUNCHING SUPURATION PROP HUNCHING HUN	
DRAWING INFORMATION ISSUE: TAC SUBMISS DATE: 10/18/21 PROJECT #: 21035 SCALE: 1/16" = 1'-0" DRAWING TITLE 5TH FLOOI	NON NON
DRAWING NUMBER)4

Tighe&Bond

T5047-001 October 18, 2021

Mr. Peter Britz, Interim Planning Director City of Portsmouth Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801

Re: Conditional Use Permit Request 2454 Lafayette Road (Portsmouth Green)

Dear Peter:

On behalf of 2422 Lafayette Road Associates, LLC (owner), and Torrington Properties Inc (applicant), we are pleased to submit the following information relative to a request for a Conditional Use Permit (CUP) to provide less than the minimum number of off-street parking spaces for the above-referenced project:

- One (1) copy of the Parking Demand Analysis, dated October 18, 2021;
- One (1) check in the amount of \$200 for the CUP application fee

Portsmouth Green, formerly Southgate Plaza, (Project) received a CUP for parking on August 20, 2019 for a new tenant, PINZ, to occupy a portion of the vacant retail space that was formerly Big Lots. A current proposal associated with the Project is related to another change of use. The proposed change of use consists of the demolition of the former Cinemagic movie theater and the construction of a 5-story, 95-unit multifamily condominium building located in the northern corner of the site. Also, a previously approved 5,000 SF restaurant pad that had been proposed and approved for this area will not be constructed.

Due to the change in use for the PINZ, the parking calculations needed to be updated on the Site Plan based on the current Zoning Ordinance. The minimum parking required for the 2016 site approval was based on a previous version of the Zoning Ordinance that included a minimum parking requirement for a Shopping Center Use. While Shopping Center is still a defined Use in the current Zoning Ordinance, the Ordinance no longer has a minimum parking requirement listed for a Shopping Center Use. As such, the minimum parking requirement must be calculated based on each individual commercial use on the property. With this approach the overall site would no longer meet the minimum off-street parking requirement. Therefore, a CUP for parking was applied for and granted on August 20, 2019. With this proposed change of use consisting of the demolition of the movie theater and the construction of a 5-story, 95-unit multifamily condominium building the parking demand analysis included in the existing CUP needs to be updated and the CUP approval amended.

Pursuant Section 10.1112.14, the applicant is respectfully requesting that a CUP be granted by the Planning Board to allow the Project to provide less than the minimum off-street parking spaces required by Section 10.1112.30 or Section 10.1112.61:

- Section 10.1112.141 The enclosed Parking Demand Analysis has been provided as required by this section. The Parking Demand Analysis demonstrates the off-street parking provided by the Project is sufficient for its Uses.
- Section 10.1112.142 This section indicates an application for a CUP shall identify permanent evidence-based measures to reduce parking demand. As described in the

enclosed Parking Demand Analysis, the Project provides measures that promotes alternative modes of transportation such as walking, bicycling, and public transportation.

We trust the enclosed information is sufficient to support a Request for a CUP. As per Section 10.1112.141 the City's Technical Advisory Committee (TAC) shall review the Parking Demand Analysis prior to submission to the Planning Board. We respectfully request to be placed on the TAC meeting agenda for November 2, 2021. If you have any questions, please feel free to contact me by phone at (603) 433-8818 or by email at <u>pmcrimmins@tighebond.com</u>.

Sincerely,

TIGHE & BOND, INC.

Patrick M. Crimmins, PE Senior Project Manager

Neil A. Hansen, PE Project Engineer

Copy: 2422 Lafayette Road Associates, LLC (via e-mail) Torrington Properties Inc (via e-mail) Gregg Mikolaities, August Consulting, PLLC (via e-mail) John Bosen, Bosen & Associates, PLLC (via e-mail)

Portsmouth Green – Parking Demand Analysis

City of Portsmouth Planning Board
Patrick M. Crimmins, PE Neil A. Hansen, PE
Torrington Properties, Inc.
October 18, 2021

Tighe & Bond, Inc. (Tighe & Bond) has prepared this Parking Demand Analysis to summarize the parking demand related to Portsmouth Green (the "Project"), a redevelopment of the former Southgate Plaza, located at 2454 Lafayette Road (Route 1) in Portsmouth, New Hampshire.

Project Background

The Project previously received Site Plan Review approval in April 2016 for the construction of the Veridian Residences, a 4-story 95-unit multi-family residential building in the rear of the site, and two (2) new commercial pads in the existing Portsmouth Green parking area. The Veridian building was completed in Fall 2017. In December 2018, Amended Site Plan approval was granted by the Planning Board for amendments related to the front commercial pads. Construction for the front pads was completed in 2020. The most recent land use approval associated with the Project was the conversion of the former Big Lots space, to a PINZ indoor entertainment use. That change in use required two (2) Special Exceptions which were granted by the Zoning Board of Adjustment on June 18, 2019 and a CUP to provide less than the minimum number of off-street parking spaces which was approved on August 20, 2019. PINZ was opened in Summer 2020.

Parking Demand Calculations for Prior Approved Site Plan

Before the change of use for PINZ, the Project was approved under a prior Zoning Ordinance. Minimum parking requirements for the prior approval were calculated based on two uses, Residential and Shopping Center. The project exceeded the minimum off-street parking requirements for the Residential and Shopping Center Uses in the prior Gateway Planned Development (GPD) regulations under which the Project was approved.

Due to the change in use for PINZ, the parking calculations needed to be updated on the Site Plan based on the current Zoning Ordinance. At the time of the change of use the Shopping Center Use no longer had a minimum parking requirement listed in the Table of Off-Street Parking Requirements for Non-Residential Uses in Section 10.1112.32 of the current Zoning Ordinance, so the minimum parking requirement was to be calculated based on each individual commercial use on the property. With this approach the overall site no longer met the minimum parking space requirement based on Section 10.1112 of the current Zoning Ordinance and therefore applied for and was granted a Conditional Use Permit (CUP) which is enclosed as an attachment.

1.1 Parking Demand Calculations for Change of Use

The current proposal associated with the Project is related to a change of use. The proposed change of use consists of the demolition of the former Cinemagic movie theater and the construction of a 5-story, 95-unit multifamily condominium building located in the northern corner of the site. Also, the previously approved 5,000 SF restaurant pad proposed for this area will not be constructed. Using the Table of Off-Street Parking Requirements for Non-Residential Uses in Section 10.1112.32 of the current Zoning Ordinance, the overall site would

not meet the minimum parking space requirement based on Section 10.1112 of the current Zoning Ordinance as 1,075 spaces would be required as shown in the enclosed attachment.

To demonstrate that the provided number of off-street parking spaces is sufficient for the overall development, a parking demand analysis was performed utilizing the Institute of Transportation Engineers Parking Generation Manual, 5th Edition (ITE Manual). To estimate peak parking demand for the Project, land use codes described in the ITE Parking Generation Manual were researched and the following Land Use Codes (LUC) we used to perform parking generation calculations:

• LUC 221: Multi-family Housing Mid-Rise - ITE description for LUC 221 is a "midrise multi-family housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with between 3 and 10 levels (floors) of residence".

Based on the ITE description, LUC 221 was used to generate the peak parking demand for a the 4-story and 5-story multi-family buildings with a total of 190 dwelling units.

 LUC 820: Shopping Center – ITE description for LUC 820 is "A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands". This description nearly mimics the definition of Shopping Center in the City's Zoning Ordinance.

The ITE Parking Generation Manual also provides additional data for the Shopping Centers studied for LUC 820 parking generation rates. The additional data indicates "The parking demand database includes data from strip, neighborhood, community, town center, and regional shopping centers. Some of the centers contain non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities". The Project's commercial tenants consist of retail, restaurant, health clubs, and indoor recreation facilities.

Based on the ITE description and additional data, LUC 820 was used to generate the peak parking demand for the Project's commercial uses.

ITE Parking G			eneration for Portsmouth Green Development			
ITE Code	ITE - Use	Units	Average Parked Cars Mon Thur.	Average Parked Cars Friday	Average Parked Cars Saturday	Average Parked Cars Sunday
820	820 Shopping 139,441 Center SF		272	364	406	264
Multifamily 190 221 Housing Dwelling (Mid Rise) Units		249	N/A	232	390	
Total Parking Spaces Needed		654				
Total Parking Spaces Provided			795			

The following table summarizes the peak parking demand generated by the Project utilizing the ITE Manual:

As depicted above the off-street parking provided by the Project exceeds peak parking demand.

Mode Share

The Project was designed under the GPD regulations of the prior Zoning Ordinance. The GPD regulations promoted sustainability by requiring that the Project demonstrate it was LEED Certifiable. As such, the Project has incorporated measures that promote alternative modes of transportation such as walking, bicycling, and public transportation that will further reduce parking demand. The following are examples of mode share incorporated by the Project:

- Bicycle storage facilities The Project provides facilities for 108 bicycle parking spaces on-site which promotes the use of bicycles as an alternative mode of transportation to/from the Project.
- Multi-use path The Project constructed a 10-foot wide, 1,500 LF multi-use path along the site's Constitution Avenue and Lafayette Road (Route 1) frontages. The multi-use path promotes the use of bicycles and walking as alternative modes of transportation to/from the Project. The multi-use path ultimately will become part of a larger network of pedestrian and bicycle facilities along Route 1 as part of the future NHDOT Route 1 Corridor Improvement Project. Based on a Public Advisory Committee Meeting conducted by NHDOT on July 11, 2019, the Route 1 Corridor Improvement Project is anticipated to begin design this year with the start of construction occurring in 2025.
- COAST Bus Stop The Project constructed a new COAST bus stop along Constitution Avenue which includes a new bus shelter and vehicle pull off along the new multi-use path described above. This COAST Bus stop promotes the use of public transportation as an alternative mode of transportation to/from the Project.

Conclusions

Based on parking generation calculations that were performed utilizing the ITE Parking Generation Manual, the peak parking demand of 654 spaces was generated which is less than the 795 off-street parking spaces provided by the Project. The existing CUP was granted for a peak parking demand of 638 spaces and 760 off-street parking spaces provided. This proposal will result in a peak parking demand of 16 additional spaces, with 35 additional spaces being provided. In addition, the Project promotes alternative modes of transportation such as walking, bicycling, and public transportation by incorporating 108 bicycle storage spaces on-site, a 10-foot wide multi-use path along both frontages of Constitution Avenue and Lafayette Road (Route 1) and a COAST bus stop. The integration of these mode share facilities will help further reduce the off-street parking demand for the Project.

Attachments

Parking Generation Data

Current Site Plan with Change of Use

Prior Approved Site Plan

Minimum Parking Requirement per City Zoning Ordinance

Conditional Use Permit for Parking, dated August 20, 2019

Multifamily Housing (Mid-Rise) (221)

Peak Period Parking Demand vs:	Dwelling Units
On a:	Weekday (Monday - Friday)
Setting/Location:	General Urban/Suburban (no nearby rail transit)
Peak Period of Parking Demand:	10:00 p.m 5:00 a.m.
Number of Studies:	73
Avg. Num. of Dwelling Units:	261

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.31	0.75 - 2.03	1.13 / 1.47	1.26 - 1.36	0.22 (17%)

Data Plot and Equation

Multifamily Housing (Mid-Rise) (221) Peak Period Parking Demand vs: **Dwelling Units**

Saturday On a: Setting/Location: General Urban/Suburban (no nearby rail transit) Peak Period of Parking Demand: 11:00 p.m. - 7:00 a.m. 3

Number of Studies:

Avg. Num. of Dwelling Units: 665

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.22	0.84 - 1.33	0.94 / 1.33	***	0.20 (16%)

Data Plot and Equation

Caution – Small Sample Size

Multifamily Housing (Mid-Rise) (221)

Peak Period Parking Demand vs:	Dwelling Units
On a:	Sunday
Setting/Location:	General Urban/Suburban (no nearby rail transit)
Peak Period of Parking Demand:	11:00 p.m 7:00 a.m.
Avg. Num. of Dwelling Units:	1 245

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.05	2.05 - 2.05	*** / ***	***	***

Data Plot and Equation

Caution – Small Sample Size

Shopping Center - Non-December (820)

Peak Period Parking Demand vs:	1000 Sq. Ft. GLA	
On a:	Weekday (Monday - Thursday)	
Setting/Location:	General Urban/Suburban	
Peak Period of Parking Demand:	12:00 - 6:00 p m	
Number of Studies:	46	
Avg. 1000 Sq. Ft. GLA:	218	

Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.95	1.27 - 7.98	1.99 / 3.68	1.73 - 2.17	0.75 (38%)

Data Plot and Equation

Shopping Center - Non-December

(820)

Peak Period Parking Demand vs:1000 Sq. Ft. GLAOn a:FridaySetting/Location:General Urban/SuburbanPeak Period of Parking Demand:12:00 - 6:00 p.m.Number of Studies:37Avg. 1000 Sq. Ft. GLA:174

Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.61	1.34 - 5.25	2.37 / 3.78	2.39 - 2.83	0.67 (26%)

Data Plot and Equation

Shopping Center - Non-December (820)

Peak Period Parking Demand vs:1000 Sq. Ft. GLAOn a:SaturdaySetting/Location:General Urban/SuburbanPeak Period of Parking Demand:11:00 a.m. - 5:00 p.m.Number of Studies:58Avg. 1000 Sq. Ft. GLA:313

Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.91	1.15 - 4.72	2.27 / 3.74	2.72 - 3.10	0.74 (25%)



Data Plot and Equation

Parking Generation Manual, 5th Edition • Institute of Transportation Engineers

Shopping Center - Non-December

(820)

Peak Period Parking Demand vs:1000 Sq. Ft. GLAOn a:SundaySetting/Location:General Urban/SuburbanPeak Period of Parking Demand:12:00 - 3:00 p.m.Number of Studies:11Avg. 1000 Sq. Ft. GLA:201

Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.89	1.47 - 2.75	1.81 / 2.27	***	0.30 (16%)





Parking Generation Manual, 5th Edition • Institute of Transportation Engineers





Waterstone Retail Development

Consulting Engineer

www.tighebond.com

Southgate Plaza Redevelopment

Portsmouth, New Hampshire

F	7/18/19	Conditional Use Approval Request			
E	6/7/19	Administrative Approval			
D	1/3/19	Final Planning Board Approval Plans			
С	12/10/18	PB Submission			
В	12/4/18	Rev. per TAC Comments			
Α	11/19/18	TAC Submission			
Mark	Date	Description			
PROJ	ECT N	D: W1725			
FILE:		W-1725-4-DSGN.dwg			
DRAW	VN BY:	NAH/CML			
CHEC	KED:	PMC			
APPR	OVED	BY: BLM/PMC			
PLAZA OVERALL SITE PLAN					
SCALE: AS SHOWN					
C-3					

	MINIMUM PARKING REQUIRED PER CITY ZONING ORDINANCE					
		We	ekday	Wee	Nighttime	
	Type of Use	Daytime (8:00 AM -	Evening (6:00 PM-	Daytime (8:00 AM-	Evening (6:00 PM-	(Midnight-6:00
		5:00 PM)	Midnight)	5:00 PM)	Midnight)	AM)
	Residential	60%	100%	80%	100%	100%
	Retail/Service	60%	90%	100%	70%	5%
	Restaurant	70%	100%	80%	100%	10%
	Entertainment	40%	100%	80%	100%	10%
	Other Institutional	40%	100%	80%	100%	10%
	Required Spaces per		Dogwinod Ch		10 1112 01	
Use	Section 10.1112.30		Required Sha	ared spaces per section	10.1112.01	
EXISTING RETAIL (PETCO)	42	26	38	42	30	3
EXISTING RETAIL (CYCLE FIERCE)	4	3	4	4	3	1
EXISTING RESTAURANT	40	28	40	32	40	4
EXISTING RETAIL	11	7	10	11	8	1
EXISTING HEATH CLUB / YOGA STUDIO (PURE BARRE)	7	5	7	7	5	1
EXISTING PERSONAL SERVICE (SALON No. 5)	5	3	5	5	4	1
EXISTING HEATH CLUB / YOGA STUDIO (ORANGE THEORY)	10	6	9	10	7	1
EXISTING RESTAURANT (PEACHEAVE)	22	16	22	18	22	3
EXISTING RETAIL (LINDA TAYLOR)	4	3	4	4	3	1
EXISTING PERSONAL SERVICE (LASH OUT BEAUTY)	4	3	4	4	3	1
EXISTING PERSONAL SERVICE (HAND & STONE)	9	6	9	9	7	1
EXISTING RETAIL (MUSE)	13	8	12	13	10	1
EXISTING RESTAURANT (SHIO)	74	52	74	60	74	8
PROPOSED RESTAURANT (former Big Lots)	144	101	144	116	144	15
PROPOSED INDOOR RECREATIONAL (PINZ)	112	45	112	90	112	12
EXISTING RESTAURANT (SUBWAY)	18	13	18	15	18	2
EXISTING RESTAURANT (THE 99)	64	45	64	52	64	7
EXISTING RETAIL (McKINNON'S)	121	73	109	121 85		7
EXISTING RETAIL	9	6	9	9	7	1
EXISTING RETAIL	23	14	21	23	17	2
EXISTING RESTAURANT (DINER)	19	14	19	16	19	2
PROPOSED RESTAURANT	16	12	16	13	16	2
EXISTING RESTAURANT (CHIPOTLE)	24	17	24	20	24	3
EXISTING RESTAURANT (STARBUCKS)	22	16	22	18	22	3
PROPOSED RESIDENTIAL UNITS >750 SF	124	75	124	100	124	124
EXISTING RESIDENTIAL UNITS < 500 SF	1	1	1	1	1	1
EXISTING RESIDENTIAL UNITS 500 - 750 SF	26	16	26	21	26	26
EXISTING RESIDENTIAL UNITS >750 SF	89	54	89	72	89	89
SPACES FOR RESIDENTIAL VISITORS	39	24	39	32	39	39
	Total Required Shared Spaces:	692	1075	938	1023	362
	Total Provided:			795		



CITY OF PORTSMOUTH

Planning Department 1 Junkins Avenue Portsmouth, New Hampshire 03801 (603) 610-7216

PLANNING BOARD

August 20, 2019

Neal Shalom 2422 Lafayette Road Associates, LLC 322 Reservoir Street Needham, MA 02494

RE: Conditional Use Permit application for property located at 2454 Lafayette Road

Dear Property Owner:

The Planning Board, at its regularly scheduled meeting of Thursday, August 15, 2019, considered your application for a Conditional Use Permit in accordance with Section 10.1112.14 of the Zoning Ordinance to provide less than the required minimum number of off-street parking spaces. Said property is shown on Assessor Map 273 Lot 3 and lies within the Gateway Neighborhood Mixed Use Corridor District. As a result of said consideration, the Board voted to grant the request as follows:

1) To accept the findings of the applicant's parking demand analysis and to find that the provision of 760 off-street parking spaces provided will be adequate and appropriate for the proposed uses of the property.

2) To grant a conditional use permit pursuant to Section 10.112.14 of the Portsmouth Zoning Ordinance to provide less than the required minimum number of off-street parking spaces with the following stipulation:

2.1) The owner shall coordinate with new tenant, Pinz, to advertise COAST bus schedules and bus stop location.

The Board's decision may be appealed up to thirty (30) days after the vote. Any action taken by the applicant pursuant to the Board's decision during this appeal period shall be at the applicant's risk. Please contact the Planning Department for more details about the appeals process.

Unless otherwise indicated above, applicant is responsible for applying for and securing a building permit from the Inspection Department prior to starting any project work. All stipulations of approval must be completed prior to issuance of a building permit unless otherwise indicated above.

This approval shall expire unless a building permit is obtained within a period of one year from the date granted, unless otherwise stated in the conditions of approval. The Planning Board may, for good cause shown, extend such period by as much as one year if such extension is requested and acted upon prior to the expiration date. No other extensions may be requested.

The minutes and audio recording of this meeting are available by contacting the Planning

8/20/2019

Department.

Very truly yours,

Dexter R. Legg, Chairman of the Planning Board

cc: Robert Marsilia, Chief Building Inspector Rosann Maurice-Lentz, City Assessor

Bernard W. Pelech, Bosen & Associates, Inc. Craig Langton, PE, Project Engineer, Tighe & Bond

Tighe&Bond

T5047-001 October 18, 2021

Mr. Dexter Legg, Chair City of Portsmouth Planning Board 1 Junkins Avenue Portsmouth, New Hampshire 03801

Re: **Conditional Use Permit Request for Density Bonus Incentives Proposed Multifamily Development, 2454 Lafayette Road, Portsmouth, NH**

Dear Chairman Legg:

On behalf of 2422 Lafayette Road Associates, LLC (owner), and Torrington Properties Inc (applicant), this letter is to request that a Conditional Use Permit (CUP) be granted by the Planning Board to allow for increased housing density and for increased building height as allowed by Section 10.5B72.10 and Section 105B72.20 of the Zoning Ordinance.

PROJECT SUMMARY

Existing Conditions

The proposed project is located at 2454 Lafayette Road on property identified as Map 273 Lot 3 on the City of Portsmouth Tax Maps and is located in the Gateway Neighborhood Mixed Use Corridor, G1 District. The existing parcel is bound by Lafayette Road to south, Constitution Avenue to the west, Water Country Access Drive to the north and Water Country to the east. The overall existing site has been developed with several buildings of mixed retail, commercial, restaurant, and residential uses, with associated parking areas and stormwater management and treatment systems.

Proposed Redevelopment

The proposed project (Project) is in the location of the former Cinemagic movie theater and consists of the construction of a 5-story, 95-unit multifamily condominium building located in the northern corner of the Portsmouth Green Plaza, with ground floor parking, upper floor residential units, and associated site improvements. The proposed \pm 41,800 SF footprint will be located in the area of the existing 29,000 SF, 1,264 seat movie theater that will be demolished. Also, the previously approved 5,000 SF restaurant pad proposed for this area will not be constructed.

CONDITIONAL USE PERMIT

Under Section 10.5B72 Density Bonus Incentives "A conditional use permit may be granted by the Planning Board for increased housing density or for increased building height. Such conditional use permit shall be contingent upon satisfying the requirements of Section 10.5B73. The Project is requesting a CUP for increased dwelling units per building allowed under Section 10.5B72.10 and increased building height allowed under Section 10.5B72.30. In order to be eligible for multiple bonus incentives outlined in Section 10.5B72 a development shall include workforce housing according to the requirements of 10.5B73.10 and shall also provide public realm improvements according to the requirements of 10.5B73.20.

Conditional Use Permit Criteria

Based on the above described and enclosed materials, the following addresses how the Project warrants the granting of a Conditional Use Permit for a Development Site by satisfying the following requirements for approval in Section 10.5B73.10 and 10.5B73.20 of the Zoning Ordinance:

10.5B73.10 Workforce Housing Requirement: At least 20% of the dwelling units in the development, but no less than three units, shall be workforce housing units for sale or rent complying with the following criteria:

1) For sale units shall be at least the average gross floor area of the proposed units in the building or 1,000 sq. ft., whichever is greater.

All the proposed dwelling units will be for sale units. All the workforce housing units will be at least the average gross floor area of the proposed units in the building.

2) Rental units shall be at least the average gross floor area of the proposed units in the building or 800 sq. ft., whichever is greater.

All the proposed dwelling units will be for sale units.

3) The workforce housing units shall be distributed throughout the building wherever dwelling units are located.

All the workforce housing units shall be distributed throughout the building.

10.5B73.20 Public Realm Improvements: All public realm improvements used for a density bonus shall be recommended in plans adopted by the City of Portsmouth including but not limited to the Master Plan, Bicycle and Pedestrian Plan, and Capital Improvement Program. Eligible improvements include the following:

1) Design and construction of an off-road trail or path that is at least equal to the linear public street frontage of the site and expands the Portsmouth Bicycle and Pedestrian Network consistent with the Portsmouth Bicycle and Pedestrian Plan. The trail or path shall be located on or adjacent to the project's building lot or development site, except as provided in (4) below.

A previously approved development on the lot designed, permitted and constructed a 10-foot-wide multi-use path along the entire frontage of the lot from the main entrance of the lot on Lafayette Road and down Constitution Avenue to the end of the lot. Part of that multi-use path construction included the construction of a COAST bus stop on Constitution Avenue. As this work was part of a previous approval public realm improvement cannot feasibly be provided on the same lot as the development. The applicant is proposing to design an extension of the previously constructed multi-use path bringing it approximately 700 linear feet further down Constitution Avenue to the driveway of 199 Constitution Avenue, and contribute funds to the City to have the remainder of Constitution Avenue surveyed for future improvements. This extension of the multi-use path is consistent with the Portsmouth Bicycle and Pedestrian Plan.

4) The Planning Board may allow a proposed public realm improvement to be located on a different lot than the development it if finds that all of the following criteria will be met:

(a) An appropriate public realm improvement cannot feasibly be provided on the same lot as the development. A discussed, the entire frontage of the lot has been previously developed with public realm improvements. As this work has already been completed public realm improvement cannot feasibly be provided on the same lot as the development.

(b) The proposed public realm improvement is within the same Zoning District as the development.

This extension of the multi-use path is consistent with the Portsmouth Bicycle and Pedestrian Plan and is within the same Zoning District as the development.

APPROVAL OF DENSITY BONUS INCENTIVES

Per Section 10.5B74.10 Required Information: In order to be eligible for bonus incentives as described in 10.5B72, the following submissions must be included with an application for a Conditional Use Permit:

10.5B74.11 Workforce Housing:

1) A description of the workforce housing units, identifying quantity, location, and type;

All the proposed dwelling units will be for sale units. As required by Section 10.5B73.10 20% of the proposed dwelling units will be designated as workforce housing units. All the workforce housing units will be at least the average gross floor area of the proposed units in the building and will be distributed throughout the building.

2) Documentation that the proposed units qualify as workforce housing units as defined by this Ordinance;

Documentation that the proposed units qualify as workforce housing units as defined by this Ordinance will be prepared in coordination with the City's legal department.

3) Proposed covenant or other legally binding documents that provide enforceable restrictions as to price and occupancy to ensure long-term availability and affordability of the units.

Workforce housing covenants that provide enforceable restrictions as to price and occupancy to ensure long-term availability and affordability of the units will be prepared in coordination with the City's legal department.

10.5B74.12 Public Realm Improvements:

1) A written description of the intended site development or District improvements, the relevant City plan, the public benefit provided, provision for design, construction, management and maintenance if required, and plans showing the location and type, size and extent of each of the eligible improvements.

The applicant is proposing to design an extension of the previously constructed 10 foot wide multi-use path, bringing it approximately 700 linear feet further down Constitution Avenue to the driveway of 199 Constitution Avenue, and contribute funds to the City to have the remainder of Constitution Avenue surveyed for future improvements. This extension of the multi-use path is consistent with the Portsmouth Bicycle and Pedestrian Plan.

2) A specific time frame for the completion of all required on-site and off-site improvements shall be incorporated as a condition of approval of the Planning Board.

The design off-site public realm improvements being proposed will be completed as part of the overall site work and approval process for the Project.

3) A list of all permits and approvals required in connection with any proposed public realm improvements with the application. These approvals shall be obtained prior to approval of the development, unless authorized by the Planning Board.

The applicant will only need site design approval from the Planning Board in connection with the proposed public realm improvements.

10.5B74.13 Any requests by the applicant for the Planning Board to modify specific standards and requirements set forth in this Section 10.5B70 as allowed under Section 10.5B74.30 and a detailed justification for the requested modification.

The applicant is requesting additional modifications to specific standards and requirements set forth in this Section 10.5B70. A detailed justification for the requested modification is in the section below.

MODIFICATION OF STANDARDS

As allowed by Section 10.5B74.30 of the Zoning Ordinance, and in granting a conditional use permit, the Planning Board may modify specific standards and requirements set forth in Section 10.5B20, 10.5B30, 10.5B40 and 10.5B70 provided that the Planning Board finds such modification will promote design flexibility and overall project quality. As part of the granting of a CUP for Density Bonus Incentives the applicant is respectfully requesting the modification of the standards under 10.5B30, 10.5B40 and 10.5B70. The standards requested to be modified includes:

Sections 10.5B33.20, Front Lot Line Build Out & 10.5B34.40, Front Building Setback

Section 10.5B53.10 states that new buildings that are constructed on a lot or development site that includes one or more non-conforming buildings that existed prior to the effective date of Article 5B, shall comply with the standards for development sites as required by Section 10.5B40 except if the minimum front lot line buildout has not been met, new buildings must be placed within the minimum and maximum front building setback from the lot line. The development site includes one or more non-conforming buildings that existed prior to the effective date of Article 5B and minimum front lot line buildout has not been met. As such, the Project building is required to meet the Building Placement and Orientation standards in Section 10.5B33.

Sections 10.5B33.20, Front Lot Line Build Out

The Project will need to modify the standards of Section 10.5B33.20, Front Lot Line Build Out and Section 10.5B34.40, Front Building Setback. Section 10.5B33.20 requires that all buildings must have a front lot line build out of at least 50% for residential and community building types, and 75% for commercial and mixed-use buildings types. As the site is existing non-conforming it is required to meet the 75% front lot line build out for commercial and mixed-use buildings types. As the Project building is being located in the rear of the site, the standard of Section 10.5B33.20 will need to be modified to allow for 0% front lot line build out, where 75% is required.

10.5B34.40, Front Building Setback

Section 10.5B34.40 requires a front building setback from the lot line of 10 ft minimum and 30 ft maximum. The Project building is being located in rear of the site in the

location of an existing movie theater. As the remainder of the site has been previously developed there is not an alternate location on the development site to locate the Project building. The standard of Section 10.5B34.40 will need to be modified to allow for ± 400 ft setback from the Constitution Avenue lot line, where a maximum of 30 ft is allowed.

• Section 10.5B72.10, Dwelling Units Per Building

The Planning Board may, by conditional use permit, allow up to a maximum of 36 dwelling units per building. The applicant is requesting additional relief as allowed by Section 10.5B74.30 to allow 95 dwelling units per building. Having a 95-unit building is consistent with the existing use of the site as the Veridian apartment building contains 95 dwelling units. Additionally, the development is permitted to have 16 units per acre. With the lot size of 18.71 acres the applicant is permitted 299 dwelling units on the lot. Including the existing residential building, the lot would have 190 total dwelling units which equates to 10.15 units per acre. Due to the available area to be redeveloped, splitting the proposed 95 dwelling units into separate buildings does not allow for the creation of meaningful community space, or adequate parking to support the units.

CONCLUSION

We trust the above described and enclosed materials address the criteria to grant a Conditional Use Permit for the proposed project. The proposed project meets requirements of the Zoning Ordinance for the granting of a CUP and the proposed project achieves the goals of City's Master Plan to encourage walkable mixed-use development, improve access to indoor and outdoor recreation facilities throughout the city, ensure that new development complements and enhances its surroundings, and to adapt housing stock to accommodate changing demographics and to accommodate the housing needs of low and moderate income residents.

The applicant respectfully requests a Conditional Use Permit for the use of the Density Bonus Incentives with the additional Modification of Standards be granted. If you have any questions or need any additional information, please contact Patrick Crimmins by phone at (603) 433-8818 or by email at <u>pmcrimmins@tighebond.com</u>.

Sincerely,

TIGHE & BOND, INC.

Patrick M. Crimmins, PE Senior Project Manager

Neil A. Hansen, PE Project Engineer

Copy: 2422 Lafayette Road Associates, LLC (via e-mail) Torrington Properties Inc (via e-mail) Gregg Mikolaities, August Consulting, PLLC (via e-mail) John Bosen, Bosen & Associates, PLLC (via e-mail)

 $\label{eq:linear} J:\T5047 Torrington Properties 001 Constitution Ave, Portsmouth NH\Report_Evaluation \Applications City of Portsmouth 20211018 TAC Submission T5047-001 Development Site CUP.docx$

Tiahe&Bond

Drainage Analysis

Drainag	NININI NEW HAL	
то:	City of Portsmouth Technical Advisory Committee (TAC)	PATRICK
FROM:	Neil A. Hansen, PE Patrick M. Crimmins, PE	$ \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
COPY:	Torrington Properties, Inc.	PRO CENSED IN
DATE:	October 18, 2021	10/18/21////////////////////////////////

1.0 Project Summary

This Drainage Analysis Memorandum was completed to review the proposed revisions to the stormwater management system that will result from the proposed redevelopment of the northern corner of the Portsmouth Green Plaza located at 2454 Lafayette Road, Portsmouth, New Hampshire.

The overall existing site has been developed with several buildings of mixed retail, commercial, restaurant, and residential uses, with associated parking areas and stormwater management and treatment systems. The site is approximately 18.7 acres and is bound by an access drive for Water County to the north, Water Country property to the east, Route One (Lafayette Road) to the south and Constitution Avenue to the west.

1.1 Project Description

The proposed project is in the location of the former Cinemagic movie theater and consists of the construction of a 5-story, 95-unit multifamily condominium building located in the northern corner of the Portsmouth Green Plaza. Also, the previously approved 5,000 SF restaurant pad proposed for this area will not be constructed.

Under previously approved and constructed projects various Best Management Practices (BMP's) for stormwater management and treatment were designed permitted and constructed. These BMP's include an underground infiltration system, three (3) water quality inlets and twelve (12) tree box filters located in the front parking area and an underground infiltration system and one (1) water quality inlet located in the rear of the site.

This project is anticipated to disturb approximately 3.45 acres. The proposed project will result in a decrease of approximately 3,764 SF of impervious area from the previously approved post development design.

2.0 Drainage Analysis

2.1 **Calculation Methods**

The design storms analyzed in this study are the 2-year, 10-year, 25-year and 50-year 24hour duration storm events. The stormwater modeling system, HydroCAD 10.0 was utilized to predict the peak runoff rates from these storm events. The peak discharge rates were determined by analyzing Type III 24-hour storm events. The rainfall data for these storm events was obtained from the data published by the Northeast Regional Climate Center at Cornell University.

The time of concentration was computed using the TR-55 Method, which provides a means of determining the time for an entire watershed to contribute runoff to a specific location via sheet flows, shallow concentrated flow and channel flow. Runoff curve numbers were

calculated by estimating the coverage areas and then summing the curve number for the coverage area as a percent of the entire watershed.

References

- 1. HydroCAD Stormwater Modeling System, by HydroCAD Software Solutions LLC, Chocorua, New Hampshire.
- 2. New Hampshire Stormwater Management Manual, Volume 2, Post-Construction Best Management Practices Selection and Design, December 2008.
- 3. "Extreme Precipitation in New York & New England." Extreme Precipitation in New York & New England by Northeast Regional Climate Center (NRCC), 26 June 2012.

2.2 Pre- and Post-Development Calculations

The pre- and post-development watershed areas have been analyzed at the same four (4) Points of Analysis for the overall project. These Points of Analysis were held constant, while their contributing sub watershed areas were adjusted between the pre- and post-development conditions. These adjustments were made to reflect the differences between the existing and the proposed conditions drainage patterns. The overall areas analyzed as part of this report were held constant. Table 2.2.1 compares pre- and post-development peak runoff rates during each design storm event.

2.2.1 Peak Rate Comparisons

PA2

PA3

PA4

Post-Development Watershed PA1

PA2

PA3

PA4

Table 2.2.1 - Comparison of Pre- and Post-Development Flows (cfs) 2-Year 10-Year 25-Year 50-Year Storm Storm Storm Storm **Pre-Development Watershed** 17.01 32.01 41.37 61.24 PA1

0.05

0.25

1.96

16.74

0.05

0.18

20.14

0.32

0.51

5.07

31.31

0.31

0.36

12.07

0.60

0.73

12.16

40.60

0.59

0.52

5.05

0.89

0.93

20.82

59.73

0.89

0.66

1.96

Table 2.2.1 summarizes and compares the pre- and post-development peak runoff rates for the 2-year, 10-year, 25-year and 50-year storm events.

As	depicted	in	Table	2.2	.1,	post-development	peak	runoff	rates	are	less	than	the	pre-
dev	velopment	co	ndition	for	all	Points of Analysis.								

2.3 Stormwater Treatment

The stormwater management system was previously designed and constructed to provide stormwater treatment as required by the City of Portsmouth Site Review Regulations and NHDES AoT Regulations (Env-Wq 1500). Per NHDES AoT Regulation Env-Wq 1503.21(1) (5) modifications to a previously approved project are allowed if "No change is made to a stormwater management system that: a. Adds, removes, or relocates any treatment practice, pretreatment practice, groundwater recharge practice, or detention structure; or b. Increases the peak inflow rate to any treatment practice, pretreatment practice, groundwater

recharge practice, or detention structure during the 2-year 24-hour storm". The proposed project will be using the existing treatment and pre-treatment systems described in Section 1.1. Table 2.3.1 summarizes and compares the 2-year storm event pre- and post-development peak runoff rates for runoff flowing to each treatment system to demonstrate compliance with NHDES regulations.

Table 2.3.1 - Comparison ofPre- and Post-Development Flows (cfs)					
2-Yea					
	Storm				
Pre-Development					
Pond 1.0	17.66				
Pond 4.0	13.56				
Post-Development					
Pond 1.0	17.12				
Pond 4.0	13.18				

As depicted in Table 2.3.1, post-development peak runoff rates are less than the predevelopment condition for each treatment system.

3.0 Conclusion

The proposed project will result in a reduction in post-development peak runoff rates from the pre-development condition. The impervious area be reduced by the proposed project. The project will require notifying NHDES of the modifications being made as required by Env-Wq 1503.21.





Area Listing (all nodes)

Area	CN	Description
 (acres)		(subcatchment-numbers)
0.038	39	>75% Grass cover, Good, HSG A (PRE 3.0, PRE 4.0)
2.342	61	>75% Grass cover, Good, HSG B (PRE 1.0, PRE 1.1, PRE 2.0, PRE 3.0, PRE 4.0,
		PRE 4.1)
0.149	98	Paved parking, HSG A (PRE 3.0, PRE 4.0, PRE 4.1)
9.769	98	Paved parking, HSG B (PRE 1.0, PRE 1.1, PRE 3.0, PRE 4.0, PRE 4.1)
4.332	98	Roofs, HSG B (PRE 1.0, PRE 1.1, PRE 4.0, PRE 4.1)
0.307	55	Woods, Good, HSG B (PRE 1.0, PRE 2.0, PRE 4.0)
16.938	92	TOTAL AREA

Soil Listing (all nodes)

Area	a Soil	Subcatchment
(acres) Group	Numbers
0.18	B HSG A	PRE 3.0, PRE 4.0, PRE 4.1
16.75) HSG B	PRE 1.0, PRE 1.1, PRE 2.0, PRE 3.0, PRE 4.0, PRE 4.1
0.00) HSG C	
0.00) HSG D	
0.00	O Other	
16.93	8	TOTAL AREA

T5047-001-PRE	Туре
Prepared by Tighe & Bond	
HvdroCAD® 10.00-20 s/n 03436	© 2017 HvdroCAD Software Solutions LLC

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PRE 1.0: PRE 1.0	Runoff Area=266,042 sf 89.96% Impervious Runoff Depth>2.58" Flow Length=800' Tc=5.8 min CN=94 Runoff=17.66 cfs 1.314 af
Subcatchment PRE 1.1: PRE 1.1	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>2.39" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=12.51 cfs 0.907 af
Subcatchment PRE 2.0: PRE 2.0	Runoff Area=12,433 sf 0.00% Impervious Runoff Depth>0.32" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.05 cfs 0.008 af
Subcatchment PRE 3.0: PRE 3.0	Runoff Area=6,909 sf 49.82% Impervious Runoff Depth>1.30" Flow Length=454' Tc=4.6 min CN=78 Runoff=0.25 cfs 0.017 af
Subcatchment PRE 4.0: PRE 4.0	Runoff Area=208,187 sf 87.10% Impervious Runoff Depth>2.48" Flow Length=528' Tc=5.5 min CN=93 Runoff=13.56 cfs 0.989 af
Subcatchment PRE 4.1: PRE 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>1.71" Flow Length=769' Tc=7.8 min CN=84 Runoff=1.96 cfs 0.150 af
Pond POND 1.0: Underground Infiltration Discarded=0.95	n Peak Elev=72.07' Storage=12,567 cf Inflow=17.66 cfs 1.314 af 5 cfs 0.777 af Primary=7.60 cfs 0.536 af Outflow=8.55 cfs 1.313 af
Pond POND 4.0: Underground Infiltration Discarded=1.76	Peak Elev=71.78' Storage=13,529 cf Inflow=13.56 cfs 0.989 af S cfs 0.989 af Primary=0.00 cfs 0.000 af Outflow=1.76 cfs 0.989 af
Link PA-1: Point of Analysis 1	Inflow=17.01 cfs 1.443 af Primary=17.01 cfs 1.443 af
Link PA-2: Point of Analysis 2	Inflow=0.05 cfs 0.008 af Primary=0.05 cfs 0.008 af
Link PA-3: Ponit of Analysis 3	Inflow=0.25 cfs 0.017 af Primary=0.25 cfs 0.017 af
Link PA-4: Point of Analysis 4	Inflow=1.96 cfs 0.150 af Primary=1.96 cfs 0.150 af

Total Runoff Area = 16.938 ac Runoff Volume = 3.384 af Average Runoff Depth = 2.40" 15.87% Pervious = 2.688 ac 84.13% Impervious = 14.250 ac

T5047-001-PRE	Ty
Prepared by Tighe & Bond	
HvdroCAD® 10.00-20 s/n 03436	© 2017 HvdroCAD Software Solutions LLC

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PRE 1.0: PRE 1.0	Runoff Area=266,042 sf 89.96% Impervious Runoff Depth>4.22" Flow Length=800' Tc=5.8 min CN=94 Runoff=28.05 cfs 2.146 af
Subcatchment PRE 1.1: PRE 1.1 F	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>4.00" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=20.41 cfs 1.519 af
Subcatchment PRE 2.0: PRE 2.0	Runoff Area=12,433 sf 0.00% Impervious Runoff Depth>1.06" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.32 cfs 0.025 af
Subcatchment PRE 3.0: PRE 3.0	Runoff Area=6,909 sf 49.82% Impervious Runoff Depth>2.63" Flow Length=454' Tc=4.6 min CN=78 Runoff=0.51 cfs 0.035 af
Subcatchment PRE 4.0: PRE 4.0	Runoff Area=208,187 sf 87.10% Impervious Runoff Depth>4.11" Flow Length=528' Tc=5.5 min CN=93 Runoff=21.82 cfs 1.636 af
Subcatchment PRE 4.1: PRE 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>3.18" Flow Length=769' Tc=7.8 min CN=84 Runoff=3.62 cfs 0.278 af
Pond POND 1.0: Underground Infiltration Discarded=0.95 cfs	n Peak Elev=73.45' Storage=19,008 cf Inflow=28.05 cfs 2.146 af s 1.031 af Primary=14.17 cfs 1.115 af Outflow=15.12 cfs 2.146 af
Pond POND 4.0: Underground Infiltration Discarded=1.76	n Peak Elev=72.86' Storage=22,215 cf Inflow=21.82 cfs 1.636 af cfs 1.416 af Primary=3.78 cfs 0.220 af Outflow=5.54 cfs 1.636 af
Link PA-1: Point of Analysis 1	Inflow=32.01 cfs 2.634 af Primary=32.01 cfs 2.634 af
Link PA-2: Point of Analysis 2	Inflow=0.32 cfs 0.025 af Primary=0.32 cfs 0.025 af
Link PA-3: Ponit of Analysis 3	Inflow=0.51 cfs 0.035 af Primary=0.51 cfs 0.035 af
Link PA-4: Point of Analysis 4	Inflow=5.07 cfs 0.498 af Primary=5.07 cfs 0.498 af

Total Runoff Area = 16.938 ac Runoff Volume = 5.639 af Average Runoff Depth = 3.99" 15.87% Pervious = 2.688 ac 84.13% Impervious = 14.250 ac

Summary for Subcatchment PRE 1.0: PRE 1.0

Runoff = 28.05 cfs @ 12.08 hrs, Volume= 2.146 af, Depth> 4.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

A	rea (sf)	CN D	Description		
	26,042	98 F	Roofs, HSC	ЪВ	
	3,134	55 V	Voods, Go	od, HSG B	
	23,577	61 >	75% Gras	s cover, Go	ood, HSG B
2	13,289	98 F	aved park	ing, HSG B	
2	66 042	94 V	Veighted A	verage	
-	26 711	1	0.04% Per	vious Area	
2	39 331	8	9 96% Imr	ervious Ar	22
L	00,001	0	0.0070 mip		54
Tc	l enath	Slope	Velocity	Canacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	Decemption
1.0	6	0 0200	0.05	(010)	Shoot Flow
1.9	0	0.0300	0.05		Woods: Light underbruch n= 0.400 P2= 2.24"
0.1	10	0 0200	2.60		Shallow Concentrated Flow
0.1	10	0.0300	2.00		Crassed Weterway, Ky= 15.0 free
1.0	120	0 0142	2 4 2		Shallow Concentrated Flow
1.0	130	0.0142	2.42		Shallow Concentrated Flow,
0.2	50		2 21	2 5 2	Paveu NV-20.5 Ips
0.5	59	0.0050	3.21	2.52	12.0" Dound Aroos 0.9 of Dorims 2.1' rs 0.25'
					12.0 Rouliu Alea- 0.0 SI Felilii- 3.1 I- 0.25
0.0	166	0.0050	2.04	2 5 2	n= 0.013 Confugated PE, smooth interior
0.9	100	0.0050	3.21	2.52	All Oliver Areas 0.8 of Derims 2.1' rs 0.25'
					12.0 Round Alea - 0.0 SI Penini - 3.1 1 - 0.25
0.4	20	0.0050	4.00	7 40	n= 0.015 Confugated PE, smooth interior
0.1	30	0.0050	4.20	7.43	Pipe Channel,
					18.0 Round Area= 1.8 SI Perim= 4.7 r= 0.38
0.4	02	0.0050	4.00	7 40	n= 0.013 Corrugated PE, smooth Interior
0.4	93	0.0050	4.20	7.43	Pipe Channel,
					10.0 Round Alea - 1.0 SI Penini - 4.7 1 - 0.30
0.2	70	0.0050	4 20	7 4 2	n= 0.013 Confugated PE, smooth interior
0.5	10	0.0050	4.20	7.43	Pipe Channel,
					10.0 Round Alea - 1.0 SI Penini - 4.7 1 - 0.30
0.0	0	0 5000	42.02	74.00	n= 0.013 Confugated PE, smooth interior
0.0	0	0.5000	42.03	74.20	Pipe Channel,
					10.0 Round Aled - 1.0 Si Penni - 4.7 1 - 0.30
0.1	10		4 20	7 4 2	Dine Channel
0.1	10	0.0050	4.20	7.43	$\begin{array}{c} \textbf{Pipe Gialliel,} \\ 19.0^{\prime\prime} \text{ Dound Aroos 1.9 of Derims 4.7' rs 0.29'} \\ \end{array}$
					10.0 Round Aled - 1.0 Si Penni - 4.7 1 - 0.30
0.6	167	0.0060	4.60	0 1 /	n= 0.013 Confugated PE, smooth interior
0.0	107	0.0060	4.60	0.14	Pipe Channel,
					10.0 Routin Alea - 1.0 St Petitin - 4.7 1 - 0.30
0.4	10	0.0010	0.00	7 4 5	
0.1	13	0.0010	2.28	1.15	- Tipe Glalinei, 24.0" Bound Aroon 2.1 of Derime 6.2' re 0.50'
					24.0 Round Area = 3.1 SI Perint = 0.3 r = 0.50
					n- 0.013 Corrugated PE, smooth Interior

5.8 800 Total

Summary for Subcatchment PRE 1.1: PRE 1.1

Runoff = 20.41 cfs @ 12.08 hrs, Volume= 1.519 af, Depth> 4.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

_	Ar	ea (sf)	CN	Description		
	(61,623	98	Roofs, HSC	βB	
	;	30,457	61	>75% Gras	s cover, Go	ood, HSG B
	1	06,509	98	Paved park	ing, HSG B	
	19	98,589	92	Weighted A	verage	
		30,457		15.34% Per	vious Area	
	1	68,132		84.66% Imp	pervious Are	ea
		,				
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	0.7	50	0.0200	1.20		Sheet Flow,
						Smooth surfaces n= 0.011 P2= 3.24"
	0.5	110	0.0050	4.03	4.95	Pipe Channel,
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
						n= 0.012 Concrete pipe, finished
	0.4	71	0.0050	3.21	2.52	Pipe Channel,
						12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
						n= 0.013 Corrugated PE, smooth interior
	0.8	157	0.0050	3.21	2.52	Pipe Channel,
						12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
						n= 0.013
	0.6	130	0.0050	3.72	4.57	Pipe Channel,
						15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31'
						n= 0.013 Corrugated PE, smooth interior
	0.4	126	0.0055	4.78	8.44	Pipe Channel,
						18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
						n= 0.012 Concrete pipe, finished
	2.2	1,152	0.0150	8.82	27.71	Pipe Channel,
						24.0" Round Area= 3.1 st Perim= 6.3' r= 0.50'
_						n= 0.013
	- A	4 700	E. I. I			

5.6 1,796 Total

Summary for Subcatchment PRE 2.0: PRE 2.0

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.32 cfs @ 12.08 hrs, Volume= 0.025 af, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

T5047-001-PRE

Type III 24-hr 10-YR Rainfall=4.91" Printed 10/18/2021 Page 8

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

_	A	rea (sf)	CN E	escription		
		8,301	55 V	Voods, Go	od, HSG B	
_		4,132	01 >	75% Gras	s cover, Go	
		12,433	57 V	Veighted A	verage	
		12,433	1	00.00% Pe	ervious Are	а
	Tc	Length	Slope	Velocity	Capacity	Description
	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
_	2.7	20	0.0200	0.12		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.24"
	0.2	29	0.0200	2.28		Shallow Concentrated Flow.
						Unpaved Kv= 16.1 fps
	0.0	9	0.2200	7.55		Shallow Concentrated Flow.
		-				Unpaved $Ky = 16.1 \text{ fps}$
	01	37	0 1091	5 32		Shallow Concentrated Flow
	••••	•.		0.01		Unpaved $Ky = 16.1 \text{ fps}$
	0 1	33	0.0610	3 98		Shallow Concentrated Flow
	0.1	00	0.0010	0.00		Unnaved $K_{V} = 16.1 \text{ fns}$
	05	76	0 0260	2 60		Shallow Concentrated Flow
	0.0	10	0.0200	2.00		Unpayed K_{V} = 16.1 fps
	03	00	0 0000	1 83		Shallow Concentrated Flow
	0.5	90	0.0900	4.05		Unpoved Ky = 16.1 fpc
_		00.4	T ()			011paveu 11v-10.11ps
	3.9	294	Total			

294 Total

Summary for Subcatchment PRE 3.0: PRE 3.0

[49] Hint: Tc<2dt may require smaller dt

0.51 cfs @ 12.07 hrs, Volume= 0.035 af, Depth> 2.63" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

A	rea (sf)	CN	Description		
	403	39	>75% Gras	s cover, Go	bod, HSG A
	821	98	Paved park	ing, HSG A	
	3,064	61	>75% Gras	s cover, Go	bod, HSG B
	2,621	98	Paved park	ing, HSG B	
	6,909	78	Weighted A	verage	
	3,467		50.18% Per	rvious Area	
	3,442		49.82% Imp	pervious Are	ea
Tc	Length	Slope	e Velocity	Capacity	Description
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)	
1.5	75	0.0060	0.81		Sheet Flow,
					Smooth surfaces n= 0.011 P2= 3.24"
3.1	379	0.0100	2.03		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
4.6	454	Total			

Summary for Subcatchment PRE 4.0: PRE 4.0

Runoff = 21.82 cfs @ 12.08 hrs, Volume= 1.636 af, Depth> 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

A	rea (sf)	CN	Description						
	1,271	39	39 >75% Grass cover, Good, HSG A						
	4,452	98	Paved park	ing, HSG A					
	91,769	98	Roofs, HSC	ΒB					
	1,949	55	Woods, Go	od, HSG B					
	23,639	61	>75% Gras	s cover, Go	ood, HSG B				
	85,107	98	Paved park	ing, HSG B					
2	208,187	93	Weighted A	verage					
	26,859		12.90% Pei	vious Area					
1	81,328	i	37.10% Imp	pervious Are	ea				
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
2.7	28	0.0400	0.18		Sheet Flow,				
					Grass: Short n= 0.150 P2= 3.24"				
1.2	200	0.0200	2.87		Shallow Concentrated Flow,				
					Paved Kv= 20.3 fps				
1.6	300	0.0050 3.21 2.52			Pipe Channel,				
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'				
					n= 0.013 Corrugated PE, smooth interior				
5.5	528	Total							

Summary for Subcatchment PRE 4.1: PRE 4.1

Runoff = 3.62 cfs @ 12.11 hrs, Volume= 0.278 af, Depth> 3.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

Area (sf)	CN	Description
1,234	98	Paved parking, HSG A
9,247	98	Roofs, HSG B
17,142	61	>75% Grass cover, Good, HSG B
18,017	98	Paved parking, HSG B
45,640	84	Weighted Average
17,142		37.56% Pervious Area
28,498		62.44% Impervious Area

T5047-001-PRE

Type III 24-hr 10-YR Rainfall=4.91" Printed 10/18/2021

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow,
					Smooth surfaces n= 0.011 P2= 3.24"
0.0	5	0.0100	2.03		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
0.4	75	0.0050	3.21	2.52	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
0.4	84	0.0050	3.47	2.73	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.012 Concrete pipe, finished
2.6	325	0.0200	2.12		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
0.5	75	0.0030	2.69	2.11	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.012 Concrete pipe, finished
2.3	105	0.0025	0.75		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
7.8	769	Total			

Summary for Pond POND 1.0: Underground Infiltration Basin 1

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=69)

Inflow Area	. =	6.107 ac, 8	9.96% Impervious,	Inflow Depth > 4.	.22" for 10-Y	R event
Inflow	=	28.05 cfs @	12.08 hrs, Volume	= 2.146 af		
Outflow	=	15.12 cfs @	12.21 hrs, Volume	= 2.146 af,	, Atten= 46%,	Lag= 7.8 min
Discarded	=	0.95 cfs @	9.96 hrs, Volume	= 1.031 af		
Primary	=	14.17 cfs @	12.21 hrs, Volume	= 1.115 af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Peak Elev= 73.45' @ 12.21 hrs Surf.Area= 5,874 sf Storage= 19,008 cf Flood Elev= 75.65' Surf.Area= 5,874 sf Storage= 25,909 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 22.7 min (796.0 - 773.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	68.65'	10,139 cf	44.50'W x 132.00'L x 7.00'H Field A
			41,118 cf Overall - 15,770 cf Embedded = 25,348 cf x 40.0% Voids
#2A	69.65'	15,770 cf	CMP Round- 60 x 36 Inside #1
			Effective Size= 60.0"W x 60.0"H => 19.59 sf x 20.00'L = 391.8 cf
			Overall Size= 60.0"W x 60.0"H x 20.00'L
			6 Rows of 6 Chambers
			42.50' Header x 19.59 sf x 2 = 1,665.2 cf Inside
		25 909 cf	Total Available Storage

25,909 cf Total Available Storage

Storage Group A created with Chamber Wizard

Page 10

T5047-001-PRE

 Type III 24-hr
 10-YR Rainfall=4.91"

 Printed
 10/18/2021

 LC
 Page 11

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

Device	Routing	Invert	Outlet Devices
#1	Primary	69.65'	24.0" Round Culvert
			L= 30.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 69.65' / 69.55' S= 0.0033 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	69.65'	12.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	71.30'	15.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	74.25'	8.0' long x 1.85' rise Sharp-Crested Rectangular Weir
			2 End Contraction(s)
#5	Discarded	68.65'	7.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.95 cfs @ 9.96 hrs HW=68.73' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.95 cfs)

Primary OutFlow Max=14.13 cfs @ 12.21 hrs HW=73.44' TW=0.00' (Dynamic Tailwater) **1=Culvert** (Passes 14.13 cfs of 25.27 cfs potential flow)

2=Orifice/Grate (Orifice Controls 6.86 cfs @ 8.73 fps)

-3=Orifice/Grate (Orifice Controls 7.27 cfs @ 5.93 fps)

-4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond POND 4.0: Underground Infiltration Basin 2

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=1)

Inflow Area	a =	4.779 ac, 8	87.10% Imp	ervious,	Inflow Depth >	4.11"	for 10-Y	'R event
Inflow	=	21.82 cfs @	12.08 hrs,	Volume=	= 1.636	af		
Outflow	=	5.54 cfs @	12.45 hrs,	Volume=	= 1.636	af, Atte	en= 75%,	Lag= 22.0 min
Discarded	=	1.76 cfs @	11.52 hrs,	Volume=	= 1.416	af		
Primary	=	3.78 cfs @	12.45 hrs,	Volume=	= 0.220	af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Peak Elev= 72.86' @ 12.45 hrs Surf.Area= 10,872 sf Storage= 22,215 cf Flood Elev= 75.50' Surf.Area= 10,872 sf Storage= 30,208 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 64.6 min (842.5 - 777.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	69.50'	16,102 cf	83.25'W x 130.60'L x 5.00'H Field A
			54,362 cf Overall - 14,106 cf Embedded = 40,256 cf x 40.0% Voids
#2A	71.00'	14,106 cf	ADS_StormTech SC-740 x 306 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 17 rows
		30,208 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	71.95'	24.0" Round Culvert
			L= 205.0' CPP, end-section conforming to fill, Ke= 0.500

Inlet / Outlet Invert= 71.95' / 70.90'S= 0.0051 '/'Cc= 0.900n= 0.013Corrugated PE, smooth interior, Flow Area= 3.14 sf#2Discarded69.50'7.000 in/hr Exfiltration over Surface areaPhase-In= 0.01'

Discarded OutFlow Max=1.76 cfs @ 11.52 hrs HW=69.57' (Free Discharge) **2=Exfiltration** (Exfiltration Controls 1.76 cfs)

Primary OutFlow Max=3.77 cfs @ 12.45 hrs HW=72.86' TW=0.00' (Dynamic Tailwater) ←1=Culvert (Barrel Controls 3.77 cfs @ 3.98 fps)

Summary for Link PA-1: Point of Analysis 1

Inflow A	rea =	10.666 ac, 8	37.70% Impervious	, Inflow Depth >	2.96"	for 10-	YR event
Inflow	=	32.01 cfs @	12.10 hrs, Volum	e= 2.634	af		
Primary	=	32.01 cfs @	12.10 hrs, Volum	e= 2.634	af, At	ten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-2: Point of Analysis 2

Inflow /	Area	ı =		0.285 ac,	0.00% Imp	ervious,	Inflow De	epth >	.06"	for 10	-YR ever	nt
Inflow		=	(0.32 cfs @	12.08 hrs,	Volume	;=	0.025 a	f			
Primar	y	=		0.32 cfs @	12.08 hrs,	Volume	;=	0.025 a	f, Att	en= 0%,	Lag= 0.	0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-3: Ponit of Analysis 3

Inflow Are	ea =	0.159 ac, 49.82% In	npervious, I	nflow Depth > 2.0	63" for 10-`	YR event
Inflow	=	0.51 cfs @ 12.07 hr	s, Volume=	0.035 af		
Primary	=	0.51 cfs @ 12.07 hr	s, Volume=	0.035 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-4: Point of Analysis 4

Inflow Area	a =	5.827 ac,	82.66% Impe	ervious,	Inflow De	epth > 1.	03" for	10-YR event
Inflow	=	5.07 cfs @	12.40 hrs,	Volume	=	0.498 af		
Primary	=	5.07 cfs @	12.40 hrs,	Volume	=	0.498 af,	Atten= 0	%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

T5047-001-PRE	Type III
Prepared by Tighe & Bond	
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions	LLC

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PRE 1.0: PRE 1.0	Runoff Area=266,042 sf 89.96% Impervious Runoff Depth>5.52" Flow Length=800' Tc=5.8 min CN=94 Runoff=36.18 cfs 2.810 af
Subcatchment PRE 1.1: PRE 1.1	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>5.29" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=26.58 cfs 2.011 af
Subcatchment PRE 2.0: PRE 2.0	Runoff Area=12,433 sf 0.00% Impervious Runoff Depth>1.82" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.60 cfs 0.043 af
Subcatchment PRE 3.0: PRE 3.0	Runoff Area=6,909 sf 49.82% Impervious Runoff Depth>3.78" Flow Length=454' Tc=4.6 min CN=78 Runoff=0.73 cfs 0.050 af
Subcatchment PRE 4.0: PRE 4.0	Runoff Area=208,187 sf 87.10% Impervious Runoff Depth>5.41" Flow Length=528' Tc=5.5 min CN=93 Runoff=28.27 cfs 2.153 af
Subcatchment PRE 4.1: PRE 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>4.41" Flow Length=769' Tc=7.8 min CN=84 Runoff=4.96 cfs 0.385 af
Pond POND 1.0: Underground Infiltratio Discarded=0.95 c	n Peak Elev=74.56' Storage=23,305 cf Inflow=36.18 cfs 2.810 af fs 1.184 af Primary=21.87 cfs 1.626 af Outflow=22.82 cfs 2.810 af
Pond POND 4.0: Underground Infiltratio Discarded=1.76	Peak Elev=73.51' Storage=25,919 cf Inflow=28.27 cfs 2.153 af cfs 1.646 af Primary=9.52 cfs 0.507 af Outflow=11.28 cfs 2.153 af
Link PA-1: Point of Analysis 1	Inflow=41.37 cfs 3.637 af Primary=41.37 cfs 3.637 af
Link PA-2: Point of Analysis 2	Inflow=0.60 cfs 0.043 af Primary=0.60 cfs 0.043 af
Link PA-3: Ponit of Analysis 3	Inflow=0.73 cfs 0.050 af Primary=0.73 cfs 0.050 af
Link PA-4: Point of Analysis 4	Inflow=12.16 cfs 0.892 af Primary=12.16 cfs 0.892 af

Total Runoff Area = 16.938 ac Runoff Volume = 7.452 af Average Runoff Depth = 5.28" 15.87% Pervious = 2.688 ac 84.13% Impervious = 14.250 ac
T5047-001-PRE	Туре
Prepared by Tighe & Bond	
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions	LLC

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PRE 1.0: PRE 1.0	Runoff Area=266,042 sf 89.96% Impervious Runoff Depth>6.74" Flow Length=800' Tc=5.8 min CN=94 Runoff=43.70 cfs 3.431 af
Subcatchment PRE 1.1: PRE 1.1 F	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>6.51" Tow Length=1,796' Tc=5.6 min CN=92 Runoff=32.28 cfs 2.471 af
Subcatchment PRE 2.0: PRE 2.0	Runoff Area=12,433 sf 0.00% Impervious Runoff Depth>2.62" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.89 cfs 0.062 af
Subcatchment PRE 3.0: PRE 3.0	Runoff Area=6,909 sf 49.82% Impervious Runoff Depth>4.89" Flow Length=454' Tc=4.6 min CN=78 Runoff=0.93 cfs 0.065 af
Subcatchment PRE 4.0: PRE 4.0	Runoff Area=208,187 sf 87.10% Impervious Runoff Depth>6.62" Flow Length=528' Tc=5.5 min CN=93 Runoff=34.24 cfs 2.638 af
Subcatchment PRE 4.1: PRE 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>5.57" Flow Length=769' Tc=7.8 min CN=84 Runoff=6.20 cfs 0.487 af
Pond POND 1.0: Underground Infiltration Discarded=0.95 cfs	n Peak Elev=75.35' Storage=25,214 cf Inflow=43.70 cfs 3.431 af s 1.304 af Primary=32.81 cfs 2.126 af Outflow=33.76 cfs 3.430 af
Pond POND 4.0: Underground Infiltration Discarded=1.76 cfs	n Peak Elev=74.28' Storage=29,236 cf Inflow=34.24 cfs 2.638 af s 1.834 af Primary=15.96 cfs 0.804 af Outflow=17.73 cfs 2.638 af
Link PA-1: Point of Analysis 1	Inflow=61.24 cfs 4.598 af Primary=61.24 cfs 4.598 af
Link PA-2: Point of Analysis 2	Inflow=0.89 cfs 0.062 af Primary=0.89 cfs 0.062 af
Link PA-3: Ponit of Analysis 3	Inflow=0.93 cfs 0.065 af Primary=0.93 cfs 0.065 af
Link PA-4: Point of Analysis 4	Inflow=20.82 cfs 1.291 af Primary=20.82 cfs 1.291 af

Total Runoff Area = 16.938 ac Runoff Volume = 9.153 af Average Runoff Depth = 6.49" 15.87% Pervious = 2.688 ac 84.13% Impervious = 14.250 ac





Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.037	39	>75% Grass cover, Good, HSG A (POST 4.0)
2.452	61	>75% Grass cover, Good, HSG B (POST 1.0, POST 1.1, POST 2.0, POST 3.0,
		POST 4.0, POST 4.1)
0.151	98	Paved parking, HSG A (POST 4.0, POST 4.1)
9.403	98	Paved parking, HSG B (POST 1.0, POST 1.1, POST 3.0, POST 4.0, POST 4.1)
4.611	98	Roofs, HSG B (POST 1.0, POST 1.1, POST 4.0, POST 4.1)
0.283	55	Woods, Good, HSG B (POST 1.0, POST 2.0, POST 4.0)
16.938	92	TOTAL AREA

Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.188	HSG A	POST 4.0, POST 4.1
16.750	HSG B	POST 1.0, POST 1.1, POST 2.0, POST 3.0, POST 4.0, POST 4.1
0.000	HSG C	
0.000	HSG D	
0.000	Other	
16.938		TOTAL AREA

T5047-001-POST Type III 24-hr 2	2-YR Rai	infall=3.24"
Prepared by Tighe & Bond	Printed	10/18/2021
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC		Page 18

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment POST 1.0: POST 1.0	Runoff Area=268,201 sf 88.24% Impervious Runoff Depth>2.58" Flow Length=681' Tc=6.9 min CN=94 Runoff=17.12 cfs 1.324 af
Subcatchment POST 1.1: POST 1.1	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>2.39" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=12.51 cfs 0.907 af
Subcatchment POST 2.0: POST 2.0	Runoff Area=12,353 sf 0.00% Impervious Runoff Depth>0.32" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.05 cfs 0.008 af
Subcatchment POST 3.0: POST 3.0	Runoff Area=4,404 sf 48.18% Impervious Runoff Depth>1.37" Flow Length=139' Tc=2.0 min CN=79 Runoff=0.18 cfs 0.012 af
Subcatchment POST 4.0: POST 4.0	Runoff Area=208,613 sf 87.05% Impervious Runoff Depth>2.48" Flow Length=535' Tc=6.4 min CN=93 Runoff=13.18 cfs 0.991 af
Subcatchment POST 4.1: POST 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>1.71" Flow Length=769' Tc=7.8 min CN=84 Runoff=1.96 cfs 0.150 af
Pond POND 1.0: Underground Infiltratio Discarded=0.95	n Peak Elev=72.08' Storage=12,602 cf Inflow=17.12 cfs 1.324 af cfs 0.781 af Primary=7.65 cfs 0.543 af Outflow=8.60 cfs 1.324 af
Pond POND 4.0: Underground Infiltratio Discarded=1.76	n Peak Elev=71.78' Storage=13,557 cf Inflow=13.18 cfs 0.991 af 5 cfs 0.991 af Primary=0.00 cfs 0.000 af Outflow=1.76 cfs 0.991 af
Link PA-1: Point of Analysis 1	Inflow=16.74 cfs 1.450 af Primary=16.74 cfs 1.450 af
Link PA-2: Point of Analysis 2	Inflow=0.05 cfs 0.008 af Primary=0.05 cfs 0.008 af
Link PA-3: Ponit of Analysis 3	Inflow=0.18 cfs 0.012 af Primary=0.18 cfs 0.012 af
Link PA-4: Point of Analysis 4	Inflow=1.96 cfs 0.150 af Primary=1.96 cfs 0.150 af

Total Runoff Area = 16.938 acRunoff Volume = 3.390 afAverage Runoff Depth = 2.40"16.37% Pervious = 2.773 ac83.63% Impervious = 14.165 ac

T5047-001-POST	Type III 24-hr 10-YR Rainfall=4.91"
Prepared by Tighe & Bond	Printed 10/18/2021
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software	Solutions LLC Page 19

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment POST 1.0: POST 1.0	Runoff Area=268,201 sf 88.24% Impervious Runoff Depth>4.22" Flow Length=681' Tc=6.9 min CN=94 Runoff=27.21 cfs 2.163 af
Subcatchment POST 1.1: POST 1.1	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>4.00" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=20.41 cfs 1.519 af
Subcatchment POST 2.0: POST 2.0	Runoff Area=12,353 sf 0.00% Impervious Runoff Depth>1.06" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.31 cfs 0.025 af
Subcatchment POST 3.0: POST 3.0	Runoff Area=4,404 sf 48.18% Impervious Runoff Depth>2.72" Flow Length=139' Tc=2.0 min CN=79 Runoff=0.36 cfs 0.023 af
Subcatchment POST 4.0: POST 4.0	Runoff Area=208,613 sf 87.05% Impervious Runoff Depth>4.11" Flow Length=535' Tc=6.4 min CN=93 Runoff=21.22 cfs 1.639 af
Subcatchment POST 4.1: POST 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>3.18" Flow Length=769' Tc=7.8 min CN=84 Runoff=3.62 cfs 0.278 af
Pond POND 1.0: Underground Infiltratio Discarded=0.95 c	On Peak Elev=73.45' Storage=18,982 cf Inflow=27.21 cfs 2.163 af fs 1.034 af Primary=14.15 cfs 1.129 af Outflow=15.10 cfs 2.163 af
Pond POND 4.0: Underground Infiltratio Discarded=1.7	On Peak Elev=72.87' Storage=22,243 cf Inflow=21.22 cfs 1.639 af 6 cfs 1.417 af Primary=3.81 cfs 0.222 af Outflow=5.57 cfs 1.639 af
Link PA-1: Point of Analysis 1	Inflow=31.31 cfs 2.648 af Primary=31.31 cfs 2.648 af
Link PA-2: Point of Analysis 2	Inflow=0.31 cfs 0.025 af Primary=0.31 cfs 0.025 af
Link PA-3: Ponit of Analysis 3	Inflow=0.36 cfs 0.023 af Primary=0.36 cfs 0.023 af
Link PA-4: Point of Analysis 4	Inflow=5.05 cfs 0.500 af Primary=5.05 cfs 0.500 af

Total Runoff Area = 16.938 acRunoff Volume = 5.647 afAverage Runoff Depth = 4.00"16.37% Pervious = 2.773 ac83.63% Impervious = 14.165 ac

Summary for Subcatchment POST 1.0: POST 1.0

Runoff = 27.21 cfs @ 12.10 hrs, Volume= 2.163 af, Depth> 4.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

Α	vrea (sf)	CN E	Description		
	43,904	98 F	Roofs, HSC	ЭB	
	2,171	55 N	Noods, Go	od, HSG B	
	29,357	61 >	>75% Gras	s cover, Go	ood, HSG B
	192,769	98 F	Paved park	ing, HSG B	
	268,201	94 V	Veighted A	verage	
	31,528	1	1.76% Pei	rvious Area	
	236,673	8	38.24% Imp	pervious Are	ea
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·
3.9	32	0.0200	0.14		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.24"
0.9	135	0.0150	2.49		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
0.5	101	0.0050	3.21	2.52	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
0.1	36	0.0050	4.20	7.43	Pipe Channel,
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
					n= 0.013 Corrugated PE, smooth interior
0.4	93	0.0050	4.20	7.43	Pipe Channel,
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
					n= 0.013 Corrugated PE, smooth interior
0.3	78	0.0050	4.20	7.43	Pipe Channel,
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
	-				n= 0.013 Corrugated PE, smooth interior
0.0	8	0.5000	42.03	74.28	Pipe Channel,
					18.0" Round Area= 1.8 st Perim= 4.7' r= 0.38'
	10			- 10	n= 0.013 Corrugated PE, smooth interior
0.1	18	0.0050	4.20	7.43	
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
• •	407	0 0000	4 00	0.44	n= 0.013 Corrugated PE, smooth interior
0.6	167	0.0060	4.60	8.14	Pipe Channel,
					18.0° Round Area= 1.8 st Perim= 4.7 r= 0.38
0.4	40	0 0040	0.00	7 4 5	n= 0.013 Corrugated PE, smooth Interior
0.1	13	0.0010	2.28	7.15	ripe Giannel,
					24.0 Kouliu Alea= 3.1 SI Pelilii= 0.3 I= 0.50
	00.1				n- 0.013 Corrugated PE, smooth Interior
6.9	681	Iotal			

Summary for Subcatchment POST 1.1: POST 1.1

Runoff = 20.41 cfs @ 12.08 hrs, Volume= 1.519 af, Depth> 4.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

61,623 98 Roofs, HSG B	
30,457 61 >75% Grass cover, Good, HSG B	
106,509 98 Paved parking, HSG B	
198,589 92 Weighted Average	
30,457 15.34% Pervious Area	
168,132 84.66% Impervious Area	
,	
Tc Length Slope Velocity Capacity Description	
(min) (feet) (ft/ft) (ft/sec) (cfs)	
0.7 50 0.0200 1.20 Sheet Flow,	
Smooth surfaces n= 0.011 P2= 3	3.24"
0.5 110 0.0050 4.03 4.95 Pipe Channel,	
15.0" Round Area= 1.2 sf Perim=	3.9' r= 0.31'
n= 0.012 Concrete pipe, finished	
0.4 71 0.0050 3.21 2.52 Pipe Channel,	
12.0" Round Area= 0.8 sf Perim=	3.1' r= 0.25'
n= 0.013 Corrugated PE, smooth i	nterior
0.8 157 0.0050 3.21 2.52 Pipe Channel ,	
12.0" Round Area= 0.8 sf Perim=	3.1' r= 0.25'
n= 0.013	
0.6 130 0.0050 3.72 4.57 Pipe Channel,	
15.0" Round Area= 1.2 sf Perim=	3.9' r= 0.31'
n= 0.013 Corrugated PE, smooth i	nterior
0.4 126 0.0055 4.78 8.44 Pipe Channel,	
18.0" Round Area= 1.8 sf Perim=	4.7' r= 0.38'
n= 0.012 Concrete pipe, finished	
2.2 1,152 0.0150 8.82 27.71 Pipe Channel,	
24.0" Round Area= 3.1 sf Perim=	6.3' r= 0.50'
n= 0.013	

5.6 1,796 Total

Summary for Subcatchment POST 2.0: POST 2.0

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.31 cfs @ 12.08 hrs, Volume= 0.025 a

0.025 af, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

T5047-001-POST

Type III 24-hr 10-YR Rainfall=4.91" Printed 10/18/2021 Page 22

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

_	A	rea (sf)	CN I	Description		
		8,221	55 \	Woods, Go	od, HSG B	
_		4,132	61 ;	>75% Gras	s cover, Go	ood, HSG B
		12,353	57	Weighted A	verage	
		12,353		100.00% Pe	ervious Are	а
	_					
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cts)	
	2.7	20	0.0200	0.12		Sheet Flow,
						Grass: Short n= 0.150 P2= 3.24"
	0.2	29	0.0200	2.28		Shallow Concentrated Flow,
						Unpaved Kv= 16.1 fps
	0.0	9	0.2200	7.55		Shallow Concentrated Flow,
						Unpaved Kv= 16.1 fps
	0.1	37	0.1091	5.32		Shallow Concentrated Flow,
	0.4	00	0 0040	0.00		Unpaved Kv= 16.1 fps
	0.1	33	0.0610	3.98		Shallow Concentrated Flow,
	0.5	70	0 0000	0.00		Unpaved KV= 16.1 fps
	0.5	76	0.0260	2.60		Shallow Concentrated Flow,
	0.2	00	0 0000	4.00		Unpaved KV= 16.1 fps
	0.3	90	0.0900	4.83		Shallow Concentrated Flow,
-		00.1				Unpaved Kv- 10.1 lps
	3.9	294	lotal			

294 Total

Summary for Subcatchment POST 3.0: POST 3.0

[49] Hint: Tc<2dt may require smaller dt

0.36 cfs @ 12.04 hrs, Volume= 0.023 af, Depth> 2.72" Runoff =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

A	rea (sf)	CN	Description			
	2,282	61	>75% Gras	s cover, Go	bod, HSG B	
	2,122	98	Paved park	ing, HSG B		
	4,404	79	Weighted A	verage		
	2,282		51.82% Pe	rvious Area		
	2,122		48.18% Imp	pervious Are	ea	
Tc	Length	Slope	e Velocity	Capacity	Description	
(min)	(feet)	(ft/ft) (ft/sec)	(cfs)		
1.5	75	0.0060	0.81		Sheet Flow,	
					Smooth surfaces n= 0.011 P2= 3.24"	
0.5	64	0.0100	2.03		Shallow Concentrated Flow,	
					Paved Kv= 20.3 fps	
2.0	139	Total				

Summary for Subcatchment POST 4.0: POST 4.0

Runoff = 21.22 cfs @ 12.09 hrs, Volume= 1.639 af, Depth> 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

A	rea (sf)	CN	Description		
	1,614	39	>75% Gras	s cover, Go	bod, HSG A
	5,333	98	Paved park	ing, HSG A	
	86,084	98	Roofs, HSC	ΒB	
	1,949	55	Woods, Go	od, HSG B	
	23,448	61	>75% Gras	s cover, Go	ood, HSG B
	90,185	98	Paved park	ing, HSG B	
2	08,613	93	Weighted A	verage	
	27,011		12.95% Per	rvious Area	
1	81,602		87.05% Imp	pervious Are	ea
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.6	41	0.0400	0.19		Sheet Flow,
					Grass: Short n= 0.150 P2= 3.24"
0.6	76	0.0100	2.03		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
2.2	418	0.0050	3.21	2.52	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
6.4	535	Total			

Summary for Subcatchment POST 4.1: POST 4.1

Runoff =	3.62 cfs @	12.11 hrs,	Volume=	0.278 af,	Depth> 3.18"
----------	------------	------------	---------	-----------	--------------

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Type III 24-hr 10-YR Rainfall=4.91"

Area (sf)	CN	Description
1,234	98	Paved parking, HSG A
9,247	98	Roofs, HSG B
17,142	61	>75% Grass cover, Good, HSG B
18,017	98	Paved parking, HSG B
45,640	84	Weighted Average
17,142		37.56% Pervious Area
28,498		62.44% Impervious Area

T5047-001-POST

Type III 24-hr 10-YR Rainfall=4.91" Printed 10/18/2021

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow,
					Smooth surfaces n= 0.011 P2= 3.24"
0.0	5	0.0100	2.03		Shallow Concentrated Flow,
					Paved Kv= 20.3 fps
0.4	75	0.0050	3.21	2.52	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.013 Corrugated PE, smooth interior
0.4	84	0.0050	3.47	2.73	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.012 Concrete pipe, finished
2.6	325	0.0200	2.12		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
0.5	75	0.0030	2.69	2.11	Pipe Channel,
					12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'
					n= 0.012 Concrete pipe, finished
2.3	105	0.0025	0.75		Shallow Concentrated Flow,
					Grassed Waterway Kv= 15.0 fps
7.8	769	Total			

Summary for Pond POND 1.0: Underground Infiltration Basin 1

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=69)

Inflow Area	ı =	6.157 ac, 8	8.24% Impervious	, Inflow Depth >	4.22"	for 10-Y	'R event
Inflow	=	27.21 cfs @	12.10 hrs, Volum	e= 2.163	af		
Outflow	=	15.10 cfs @	12.23 hrs, Volum	e= 2.163	af, Atte	en= 44%,	Lag= 8.3 min
Discarded	=	0.95 cfs @	9.96 hrs, Volum	e= 1.034	af		
Primary	=	14.15 cfs @	12.23 hrs, Volum	e= 1.129	af		

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Peak Elev= 73.45' @ 12.23 hrs Surf.Area= 5,874 sf Storage= 18,982 cf Flood Elev= 75.65' Surf.Area= 5,874 sf Storage= 25,909 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow) Center-of-Mass det. time= 22.5 min (796.8 - 774.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	68.65'	10,139 cf	44.50'W x 132.00'L x 7.00'H Field A
			41,118 cf Overall - 15,770 cf Embedded = 25,348 cf x 40.0% Voids
#2A	69.65'	15,770 cf	CMP Round- 60 x 36 Inside #1
			Effective Size= 60.0"W x 60.0"H => 19.59 sf x 20.00'L = 391.8 cf
			Overall Size= 60.0"W x 60.0"H x 20.00'L
			6 Rows of 6 Chambers
			42.50' Header x 19.59 sf x 2 = 1,665.2 cf Inside
		25 909 cf	Total Available Storage

25,909 cf Total Available Storage

Storage Group A created with Chamber Wizard

Page 24

T5047-001-POST

 Type III 24-hr
 10-YR Rainfall=4.91"

 Printed
 10/18/2021

 LC
 Page 25

Prepared by Tighe & Bond HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions LLC

Device	Routing	Invert	Outlet Devices
#1	Primary	69.65'	24.0" Round Culvert
	-		L= 30.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 69.65' / 69.55' S= 0.0033 '/' Cc= 0.900
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	69.65'	12.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	71.30'	15.0" Vert. Orifice/Grate C= 0.600
#4	Device 1	74.25'	8.0' long x 1.85' rise Sharp-Crested Rectangular Weir
			2 End Contraction(s)
#5	Discarded	68.65'	7.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.95 cfs @ 9.96 hrs HW=68.73' (Free Discharge) **5=Exfiltration** (Exfiltration Controls 0.95 cfs)

Primary OutFlow Max=14.14 cfs @ 12.23 hrs HW=73.44' TW=0.00' (Dynamic Tailwater) **1=Culvert** (Passes 14.14 cfs of 25.27 cfs potential flow)

2=Orifice/Grate (Orifice Controls 6.86 cfs @ 8.73 fps)

3=Orifice/Grate (Orifice Controls 0.00 cis @ 0.70 lps)

-4=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond POND 4.0: Underground Infiltration Basin 2

Inflow Area	a =	4.789 ac, 8	7.05% Imp	ervious, l	Inflow Depth >	4.11"	for 10-Y	R event	
Inflow	=	21.22 cfs @	12.09 hrs,	Volume=	: 1.639	af			
Outflow	=	5.57 cfs @	12.46 hrs,	Volume=	: 1.639	af, Atte	en= 74%,	Lag= 22.1	min
Discarded	=	1.76 cfs @	11.52 hrs,	Volume=	: 1.417	af			
Primary	=	3.81 cfs @	12.46 hrs,	Volume=	0.222	af			

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs Peak Elev= 72.87' @ 12.46 hrs Surf.Area= 10,872 sf Storage= 22,243 cf Flood Elev= 75.50' Surf.Area= 10,872 sf Storage= 30,208 cf

Plug-Flow detention time= 64.7 min calculated for 1.636 af (100% of inflow) Center-of-Mass det. time= 64.6 min (843.2 - 778.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	69.50'	16,102 cf	83.25'W x 130.60'L x 5.00'H Field A
			54,362 cf Overall - 14,106 cf Embedded = 40,256 cf x 40.0% Voids
#2A	71.00'	14,106 cf	ADS_StormTech SC-740 x 306 Inside #1
			Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
			Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
			Row Length Adjustment= +0.44' x 6.45 sf x 17 rows
		30,208 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices					
#1	Primary	71.95'	24.0" Round Culvert					
			L= 205.0' CPP, end-section conforming to fill, Ke= 0.500					
			Inlet / Outlet Invert= 71.95' / 70.90' S= 0.0051 '/' Cc= 0.900					
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf					

#2 Discarded 69.50' 7.000 in/hr Exfiltration over Surface area Phase-In= 0.01'

Discarded OutFlow Max=1.76 cfs @ 11.52 hrs HW=69.56' (Free Discharge) **2=Exfiltration** (Exfiltration Controls 1.76 cfs)

Primary OutFlow Max=3.79 cfs @ 12.46 hrs HW=72.86' TW=0.00' (Dynamic Tailwater) -1=Culvert (Barrel Controls 3.79 cfs @ 3.99 fps)

Summary for Link PA-1: Point of Analysis 1

Inflow Area	a =	10.716 ac, 8	36.72% Impe	ervious,	Inflow De	pth > 2	.96" for 1	0-YR event
Inflow	=	31.31 cfs @	12.10 hrs,	Volume	=	2.648 af		
Primary	=	31.31 cfs @	12.10 hrs,	Volume	=	2.648 af	, Atten= 0%	o, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-2: Point of Analysis 2

Inflow Area	a =	0.284 ac,	0.00% Impervious,	Inflow Depth > 1	.06" for 10-YR event
Inflow	=	0.31 cfs @	12.08 hrs, Volume	e 0.025 af	
Primary	=	0.31 cfs @	12.08 hrs, Volume	e= 0.025 af	, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-3: Ponit of Analysis 3

Inflow Are	a =	0.101 ac, 4	8.18% Impe	ervious,	Inflow Depth >	2.7	72" for	10-YR	l event
Inflow	=	0.36 cfs @	12.04 hrs,	Volume	= 0.023	af			
Primary	=	0.36 cfs @	12.04 hrs,	Volume	= 0.023	af,	Atten= 0	%, La	ig= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

Summary for Link PA-4: Point of Analysis 4

Inflow A	Area =	5.837 ac, 82.63% Impervious, Inflow	/ Depth > 1.03"	for 10-YR event
Inflow	=	5.05 cfs @ 12.41 hrs, Volume=	0.500 af	
Primary	/ =	5.05 cfs @ 12.41 hrs, Volume=	0.500 af, Atte	en= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.04 hrs

T5047-001-POST	Type III 24-hr 25-YR Rainfall=6.23"
Prepared by Tighe & Bond	Printed 10/18/2021
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software	e Solutions LLC Page 27

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment POST 1.0: POST 1.0	Runoff Area=268,201 sf 88.24% Impervious Runoff Depth>5.52" Flow Length=681' Tc=6.9 min CN=94 Runoff=35.09 cfs 2.832 af
Subcatchment POST 1.1: POST 1.1	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>5.29" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=26.58 cfs 2.011 af
Subcatchment POST 2.0: POST 2.0	Runoff Area=12,353 sf 0.00% Impervious Runoff Depth>1.82" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.59 cfs 0.043 af
Subcatchment POST 3.0: POST 3.0	Runoff Area=4,404 sf 48.18% Impervious Runoff Depth>3.89" Flow Length=139' Tc=2.0 min CN=79 Runoff=0.52 cfs 0.033 af
Subcatchment POST 4.0: POST 4.0	Runoff Area=208,613 sf 87.05% Impervious Runoff Depth>5.41" Flow Length=535' Tc=6.4 min CN=93 Runoff=27.50 cfs 2.157 af
Subcatchment POST 4.1: POST 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>4.41" Flow Length=769' Tc=7.8 min CN=84 Runoff=4.96 cfs 0.385 af
Pond POND 1.0: Underground Infiltratio Discarded=0.95 c	on Peak Elev=74.58' Storage=23,363 cf Inflow=35.09 cfs 2.832 af fs 1.187 af Primary=22.36 cfs 1.645 af Outflow=23.32 cfs 2.832 af
Pond POND 4.0: Underground Infiltratio Discarded=1.76	on Peak Elev=73.52' Storage=25,943 cf Inflow=27.50 cfs 2.157 af cfs 1.647 af Primary=9.57 cfs 0.510 af Outflow=11.33 cfs 2.157 af
Link PA-1: Point of Analysis 1	Inflow=40.60 cfs 3.655 af Primary=40.60 cfs 3.655 af
Link PA-2: Point of Analysis 2	Inflow=0.59 cfs 0.043 af Primary=0.59 cfs 0.043 af
Link PA-3: Ponit of Analysis 3	Inflow=0.52 cfs 0.033 af Primary=0.52 cfs 0.033 af
Link PA-4: Point of Analysis 4	Inflow=12.07 cfs 0.895 af Primary=12.07 cfs 0.895 af

Total Runoff Area = 16.938 acRunoff Volume = 7.461 afAverage Runoff Depth = 5.29"16.37% Pervious = 2.773 ac83.63% Impervious = 14.165 ac

T5047-001-POST	Type III 24-hr 50-YR Rainfall=7.46'
Prepared by Tighe & Bond	Printed 10/18/2021
HydroCAD® 10.00-20 s/n 03436 © 2017 HydroCAD Software Solutions L	LC Page 28

Time span=0.00-24.00 hrs, dt=0.04 hrs, 601 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment POST 1.0: POST 1.0	Runoff Area=268,201 sf 88.24% Impervious Runoff Depth>6.74" Flow Length=681' Tc=6.9 min CN=94 Runoff=42.39 cfs 3.458 af
Subcatchment POST 1.1: POST 1.1 F	Runoff Area=198,589 sf 84.66% Impervious Runoff Depth>6.51" Flow Length=1,796' Tc=5.6 min CN=92 Runoff=32.28 cfs 2.471 af
Subcatchment POST 2.0: POST 2.0	Runoff Area=12,353 sf 0.00% Impervious Runoff Depth>2.62" Flow Length=294' Tc=3.9 min CN=57 Runoff=0.89 cfs 0.062 af
Subcatchment POST 3.0: POST 3.0	Runoff Area=4,404 sf 48.18% Impervious Runoff Depth>5.01" Flow Length=139' Tc=2.0 min CN=79 Runoff=0.66 cfs 0.042 af
Subcatchment POST 4.0: POST 4.0	Runoff Area=208,613 sf 87.05% Impervious Runoff Depth>6.62" Flow Length=535' Tc=6.4 min CN=93 Runoff=33.31 cfs 2.643 af
Subcatchment POST 4.1: POST 4.1	Runoff Area=45,640 sf 62.44% Impervious Runoff Depth>5.57" Flow Length=769' Tc=7.8 min CN=84 Runoff=6.20 cfs 0.487 af
Pond POND 1.0: Underground Infiltration Discarded=0.95 cf	n Peak Elev=75.17' Storage=24,789 cf Inflow=42.39 cfs 3.458 af s 1.308 af Primary=32.19 cfs 2.150 af Outflow=33.15 cfs 3.458 af
Pond POND 4.0: Underground Infiltration Discarded=1.76 cf	n Peak Elev=74.26' Storage=29,170 cf Inflow=33.31 cfs 2.643 af s 1.835 af Primary=15.87 cfs 0.808 af Outflow=17.63 cfs 2.643 af
Link PA-1: Point of Analysis 1	Inflow=59.73 cfs 4.621 af Primary=59.73 cfs 4.621 af
Link PA-2: Point of Analysis 2	Inflow=0.89 cfs 0.062 af Primary=0.89 cfs 0.062 af
Link PA-3: Ponit of Analysis 3	Inflow=0.66 cfs 0.042 af Primary=0.66 cfs 0.042 af
Link PA-4: Point of Analysis 4	Inflow=20.14 cfs 1.294 af Primary=20.14 cfs 1.294 af

Total Runoff Area = 16.938 ac Runoff Volume = 9.163 af Average Runoff Depth = 6.49" 16.37% Pervious = 2.773 ac 83.63% Impervious = 14.165 ac





PROPOSED MULTI-FAMILY DEVELOPMENT PORTSMOUTH, NEW HAMPSHIRE

COMMUNITY SPACE EXHIBIT

COMMUNITY SPACE:

REQUIRED

PROVIDED

21,896 SF

DOG PARK, PICKLE BALL COURTS & PLAZA COMMUNITY SPACE

TOTAL PROJECT AREA: 150,650 SF COMMUNITY SPACE (10% OF TOTAL)

15,035 SF 10%

21,896 SF 14.6%



Tighe&Bond

October 18, 2021 T5047-001-C-EXHIBIT.dwg



Plot Date: Friday, October 15, 2021 Plotted By: Neil A. Hansen T&B File Location: J:\T\T5047 Torrington Properties\001 Constitution Ave, Portsmouth NH\Drawings_Figures\AutoCAD\Sheet\T5047-001-C-EXHIBIT.dwg Layout Tab: FIRE 1







Transportation: Engineering • Planning • Design

MEMORANDUM

Ref: 2147A

To: Gregg Mikolaities, P.E. August Consulting, PLLC

From: Stephen G. Pernaw, P.E., PTOE

Subject: Proposed Multifamily Development Portsmouth, New Hampshire

Date: September 20, 2021

On March 12, 2009 our office published the report entitled "*Traffic Evaluation-Proposed Southgate Plaza Expansion*" that addressed the traffic impacts associated with the redevelopment of that site, including Addendum One dated 5/29/2012 which addressed the impacts associated with the movie theater. The current development proposal calls for razing the multiplex movie theater at the rear of the site, and replacing it with a five-story, 100-unit multifamily condominium building. The purpose of this memorandum is to compare the trip generating characteristics of the former and proposed uses.

The following trip generation estimates are based upon the ITE trip generation rates and equations, using various independent variables associated with the multiplex movie theater (gross floor area, number of seats, number of screens) and the condominium building (number of dwelling units).

Table 1 on the following page clearly demonstrates that the proposed residential development will generate <u>fewer</u> vehicle-trips during the weekday PM and Saturday midday peak hour periods than the former movie theater. If we can be of further assistance in this matter, please advise.



Attachments



Table 1

Trip Generation Comparison / Summary (Former Cinemagic Theater vs. 100 Residential Apartments)

		Former Cinem	agic Theater ¹		1	
	Estimate A GFA Method (28,270 sf)	Estimate B Screen Method (9 screens)	Estimate C Seat Method (1,264 seats)	ITE Average Estimate	Proposed Apartments ²	Conclusions
Weekday (24 Hour)						
Entering	-	-	-	NA	272 veh	
Exiting	-	-	-	NA	<u>272</u> veh	
Total	-	-	-	NA	544 trips	
AM Peak Hour						Apartments will
Entering	0 veh	0 veh	0 veh	0 veh	9 veh	generate
Exiting	<u>0</u> veh	<u>0</u> veh	<u>0</u> veh	0 veh	<u>25</u> veh	+34 more
Total	0 trips	0 trips	0 trips	0 trips	34 trips	AM trips
PM Peak Hour						Apartments will
Entering	NA	63 veh	36 veh	50 veh	27 veh	generate
Exiting	NA	<u>61</u> veh	<u>65</u> veh	<u>63</u> veh	<u>17</u> veh	-69 fewer
Total	NA	124 trips	101 trips	113 trips	44 trips	PM trips
Friday PM Peak Hour						
Entering	86 veh	121 veh	76 veh	94 veh	NA	
Exiting	<u>53 veh</u>	<u>84</u> veh	<u>50</u> veh	<u>62</u> veh	NA	
Total	139 trips	205 trips	126 trips	156 trips	NA	
Saturday Total						
Entering	-	-	-	NA	246 veh	
Exiting	-	-	-	NA	246 veh	
Total	-	-	-	NA	492 trips	
Saturday Peak Hour						
Entering	100 veh	130 veh	82 veh	104 veh	24 veh	denerate
Exiting	<u>33 veh</u>	<u>50</u> veh	<u>32</u> veh	<u>38</u> veh	<u>25</u> veh	-93 fewer
Total	133 trips	180 trips	114 trips	142 trips	49 trips	SAT peak trips

¹ ITE Land Use Code 445 - Multiplex Movie Theater

² ITE Land Use Code 221- Multifamily Housing (Mid-Rise) (100 Dwelling Units)

.



Stephen G. Pernaw & Company, Inc.

ATTACHMENTS



Trip Generation Summary

Alternative:	Former Cinemagic Theater
Phase:	

Phase:									Ope	n Date:	9/10/2021	
Project: 2147A									Analysi	is Date:	9/10/2021	
	ĕ A	ekday PN djacent S	1 Peak Ho Street Traf	ur of fic	Frida	ıy PM Peak Stree	t Hour of A t Traffic	djacent	Saturday Peak	Hour of G	enerator	
ITE Land Use	Ш	Enter	Exit	Total	*	Enter	Exit	Total	* Enter	Exit	Total	
445 THEATERMULTI 3		36	65	101		76	50	126	82	32	114	
1264 Seats												
445 THEATERMULTI 2		63	61	124		121	84	205	130	50	180	
9 Movie Screens												
445 THEATERMULTI 1				0		86	53	139	100	33	133	
28.27 1000 Sq. Ft. GFA												
Unadjusted Volume		66	126	225		283	187	470	312	115	427	1
Internal Capture Trips		0	0	0		0	0	0	0	0	0	
Pass-By Trips		0	0	0		0	0	0	0	0	0	
Volume Added to Adjacent Streets		66	126	225		283	187	470	312	115	427	

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent Total Friday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent Total Saturday Peak Hour of Generator Internal Capture = 0 Percent

Custom rate used for selected time period.

ummary
S.
S
Ĕ
) a
ne
ů
Trip

Alternative: Proposed Apartments

Phase: Project: 2147A										Ope Analysi	n Date: 9 Is Date: 9)/10/2021)/10/2021	
>	Weeko	lay Averaç	ge Daily [.]	Trips	-	Veekday A Adjacent	M Peak Ho Street Trai	our of ffic	-	Weekday P Adjacent	M Peak Ho Street Tra	our of ffic	
ITE Land Use *	En	iter E	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total	
221 MID-RISE 1	2	72 2	271	543		6	25	34		27	17	44	
100 Dwelling Units													
Unadjusted Volume	51	72	271	543		6	25	34		27	17	44	
Internal Capture Trips	Ŭ	0	0	0		0	0	0		0	0	0	
Pass-By Trips	Ŭ	0	0	0		0	0	0		0	0	0	
Volume Added to Adjacent Streets	21	72 2	271	543		6	25	34		27	17	44	
Total Weekday Average Daily Trips Internal Capture = 0 F Total Meekday AM Deek Hour of Adiacent Street Treffic Iv	Percer	t Conture	- Daro	ţ									

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Alternative: Proposed Apartments								
Phase:						Open D	ate: 9/1	0/2021
Project: 2147A						Analysis D	ate: 9/1	0/2021
		Saturday Av	verage Daily	/ Trips	S	aturday Pea	k Hour of G	enerator
ITE Land Use	*	Enter	Exit	Total	*	Enter	Exit	Total
221 MID-RISE 1		246	245	491		24	25	49
100 Dwelling Units								
Unadjusted Volume		246	245	491		24	25	49
Internal Capture Trips		0	0	0		0	0	0
Pass-By Trips		0	0	0		0	0	0
Volume Added to Adjacent Streets		246	245	491		24	25	49

Total Saturday Average Daily Trips Internal Capture = 0 Percent

Total Saturday Peak Hour of Generator Internal Capture = 0 Percent

* - Custom rate used for selected time period.

EMBARC

October 18, 2021

Portsmouth Planning Board Multi-Family Development at Portsmouth Green Portsmouth, NH 03801

Green Building Statement

- Site/Landscape: Currently the site consists of an existing movie theater surrounded by parking and drive aisles. All of the existing site area is improved and includes predominantly impervious sufrcaes The proposed project will feature a planting buffer on 3 sides with an enlarged plaza with additional plantings (trees and shrubs) at the front entrance.
- Exterior Wall Systems: The exterior wall systems will meet or exceed the 2015 IECC standards for energy efficiency and will include a continuous air barrier and continuous insulation on the metal framed floors as well as insulation within the stud cavities. The exterior cladding materials will include a combination of masonry, metal panel rain screen systems and cementitious panel products that utilize an air space outboard of the insulation layer for efficient moisture management.
- Window Systems: All window systems in the project will meet or exceed 2015 IECC standards for uvalue, shading coefficient and solar heat gain coefficient, including a thermally-broken frame and insulated, high-performance, low-E glazing to reduce thermal transfer. Large window expanses provide plenty of natural daylight to all building occupants.
- **Roofing Systems:** The roofing system will include a light-colored, reflective "cool roof" over continuous, sloped rigid insulation that meets or exceeds code requirements.
- HVAC Systems: The dwelling units will be provided with individualized systems providing either heating and cooling or both. System may include electric heat pumps or a hydronic gas fired heating system with gas fired domestic hot water heaters.

- **Plumbing Systems:** All plumbing fixtures in the proposed project will be low-flow fixtures. Individual EnergyStar rated instantaneous hot water heaters will be used for domestic hot water and heating.
- Lighting Systems: Interior lighting systems will use LED fixtures throughout the building, including the use of occupancy sensors. Exterior lighting design will include energy-efficient LED cutoff fixtures to minimize light pollution.
- Appliances: All appliances for the project will be EnergyStar rated.

Sincerely,

Dartagnan Brown | Founder + CEO

VERIDIAN VIEW



EMBARC TORRINGTON PROPERTIES



ROAD VIEW



EMBARC TORRINGTON PROPERTIES



PARKING VIEW



EMBARC TORRINGTON PROPERTIES



City of Portsmouth Planning Department

Site Plan Review Application Fee

Project:	Portsmouth Green - Multi-F	amily N	Map/Lot: 273/3	
Applicant:	Torrington Properties			
All development				
Base fee \$500)		[\$500.00
Plus \$5.00 pe	r \$1,000 of site costs Site costs	\$1,850,000	+[\$9,250.00
Plus \$10.00 p	er 1,000 S.F. of site developm Site development area	eent area 150,650 S.I	F. + [\$1,506.50
			Fee	\$11,256.50
Maximum fee: \$15,000.00				
Fee received	by:		Date:	

Note: Initial application fee may be based on the applicant's estimates of site costs and site development area. Following site plan approval, the application fee will be recalculated based on the approved site plan and site engineer's corresponding site cost estimate as approved by the Department of Public Works, and any additional fee shall be paid prior to the issuance of a building permit.