AMBIT ENGINEERING,INC. CIVIL ENGINEERS AND LAND SURVEYORS
200 Griffin Road, Unit 3, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

23 December 2019

Juliet Walker, Planning Director
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for TAC Site Plan Approval at 60 Penhallow Street, Tax Map 107 / Lot 27

Dear Ms. Walker:

On behalf of McNabb Properties, LTD we hereby submit the attached and enclosed revisions for TAC Approval for the Brick Market Project at 60 Penhallow Street. This letter is intended to address email comments received on December 3, 2019, as discussed at the TAC Meeting on the same day. Comments from the email, along with responses **in bold** are listed below:

1. Trip Generation Summary Letter
    i. It was assumed that no employees at the site would take public transportation, so the trip generation numbers are likely conservative, or higher than expected. **Agreed. The Updated Trip Generation Summary (UTGS) indicated this in the "Transit Trips" section.**
    ii. 30% of the office trips (14 trips) are assumed to use Sheafe Street to access the site. While this is the shortest route to the site for these trips, it is not desirable to add traffic to this very narrow, two-way street. **The Developer is willing to place a condition in the office lease(s) that employees must be directed not to utilize Sheafe Street to access the parking garage. See UTGS Page 6, "Trip Distribution".**
    iii. The restaurant trips are all assumed to park in the Hanover Garage. This presents a worst case for the intersections in proximity to the garage. If they park elsewhere, the impacts could be different. **The UTGS distributes Restaurant Trips to both the Hanover and Portwalk Garages.**
    iv. There are some numbers missing from Figures 2, 4A, 4B, and 4C. **The requested numbers have been added.**
    v. On Figures 4A, 4B, and 4C, the total volume of entering and exiting traffic should be shown in the Hanover Garage box and the Site box, so it is clear as to where the traffic is heading. **See updated Figures 4A and 4B.**
    vi. The peak traffic generation period for the project will be the Saturday midday peak hour, which was not studied in the City's Downtown

Traffic Model. While the Model can be used for analysis of the PM peak hour, a separate study will be needed for the Saturday midday peak hour for any intersection that will see an increase of at least 100 vehicles, unless you can show that the weekday pm peak is the overall critical peak hour. **The UTGS confirms that the weekday PM peak hour is the overall critical peak hour.**

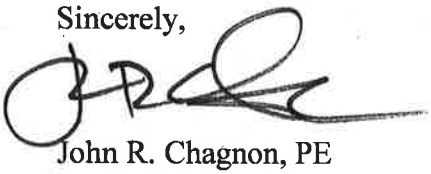
2. Driveway apron on Penhallow should be asphalt, not cobblestone, within the City street layout. **The reference to Cobblestones has been removed from Sheet L1 (formerly L2).**
3. Vehicles will block the sidewalk on Penhallow when entering the building, waiting for the gate/garage door to open. Placing the gate 20 feet from the sidewalk would allow room for the vehicle to pull in without blocking the sidewalk. **The garage door is set back 16 feet from the back of the sidewalk (tip downs) at Penhallow Street. We believe this is sufficient room and that vehicles will not block pedestrian sidewalk access.**
4. A flashing warning sign/signal should be installed at the driveway to alert pedestrians when a vehicle is exiting from the garage. **Note 13 has been added to Sheet C3 to address this issue.**
5. It appears that there is a column in the handicap parking access aisle, next to space 19. **The revision to the van space may alleviate this concern; if not we will request that the column be reviewed for a relocation.**
6. It would be better to have the van use space 20, as the wheelchair lifts in a van are typically on the passenger side of the van. **The Van Space has been assigned to Space 20. See Sheet AO.01A.**
7. How will the tandem parking spaces on level 2 be used? Will they be assigned to the same tenant? **Yes.**
8. The developer is increasing stormwater runoff slightly, about 4-10% from existing depending on the storm. If there is no opportunity to mitigate this increase onsite, the Developer should consider mitigating this via an off-site municipal drainage improvement such as adding storm drainage to upper Daniel Street. **The developer is willing to contribute to off-site drainage improvements on Daniel Street. See Sheet P1.**
9. It is not clear whether the developer is intending for the period lights on Daniel to stay or go. There is a note about returning parking meters after construction, a similar note should refer to lighting. **The Demolition Plan has been updated to require storage of the lights during construction. The requested Note about replacing has been added to Sheet C3.**
10. There are no period lights being shown on Penhallow St despite the wider sidewalk width. Period lights should be added with the final design layout approved by the City. Details need to be added to plan set. **The requested lights have been added to Sheet C3, and the Detail added as Detail L on Sheet D3.**
11. Developer should identify a space for refuse containers on the plan. They are needed in this vicinity and get used quite often. **Sheet C3 shows the location(s) of three on-site refuse containers.**

12. They are planning on relocating pole 1/9 on Daniel, this is a larger pole with multiple transformers and its proposed location will impact the lighting conduit already in place. **The revised plans show proposed elimination of the overhead wires and associated poles in Daniel Street; See Sheet P1. Utility Plan C4 notes the re-connection of underground conduits (as required).**
13. They are showing a pole on Penhallow to be removed by Consolidated with no explanation. Does the line the pole is holding go away entirely? **The line will be relocated to the poles on the other side of Penhallow Street, per discussion with Consolidated Communications.**
14. Sanborn map from 1920 shows up to 11 structures located on this lot. There should be a note that any services to these buildings encountered should be abandoned per the requirements of DPW. Since Penhallow has been reconstructed, this will likely only be an issue on the Daniel Street side. **See Note 10 on Sheet C4.**
15. They are planning a 3" domestic service tapped off their new fire line both located on the antique main on Daniel Street. If at all possible, this should get routed to Penhallow's new main instead. If connection to Penhallow is not possible, main replacement on Daniel may be required. The domestic service should be a size commonly available and both the fire and domestic lines are to be tapped to the main directly. **Sheet C4 has been revised to show a 2 inch Domestic and a 6 inch Sprinkler line tapping the water main in Penhallow Street.**
16. 6" sewer connection is planned on Penhallow, with a rubber saddle. This shall be changed to a pvc wye cut into the main with solid repair couplings. **See revised Detail P on Sheet D3.**
17. Plans show a new 24" HDPE drain pipe being installed between new building and old police station building then connecting to 18" pipe in Penhallow. This pipe is likely oversized and would require the manhole in Penhallow to be 5' in diameter. **The pipe does work as an 18 inch; it has been re-labelled.**
18. There was a 6" HDPE drain connection that was installed for this parcel near the south east corner that will need to be removed. **See Note 10 on Sheet C4.**
19. Catch basin liners should be used whenever catch basins are constructed. **See Detail D on Sheet D1.**
20. Pavement cross section shown in detail E is odd use of mix thicknesses. **Detail E on Sheet D2 has been revised.**
21. Detail E **(F)**, only cast iron ADA tactile panels will be acceptable. All final details shall be approved by the Department prior to installation. **Detail F on Sheet D2 has been revised.**
22. Detail K shows 5" granite curbing where the standard is 6". **Detail K on Sheet D2 has been revised.**
23. Drain manholes in the ROW shall have hinged covers type Ergo XL. **Detail J on Sheet D2 has been revised.**
24. Pipe connections in all structures shall be booted and the space between the pipe and manhole shall be parged with mortar. **Detail D on Sheet D1 and Detail J on Sheet D2 have been revised.**

25. Sewer manhole detail is shown (incorrectly, wrong cover type) but none are evident on the utility plan. **Detail has been replaced with the Light Detail.**
26. Pipe trench detail N should call out fabric between the bedding stone and sand for all pipes greater than 12". **Detail N on Sheet D3 has been revised.**
27. Excavation for 2-stories beneath ground will require support of City infrastructure. **Noted; see Portsmouth Approval Conditions, Note 4 on Sheet C3.**
28. Basement foundation systems shall be water tight. **See Portsmouth Approval Conditions, Note 6 on Sheet C3.**
29. Excavation for foundation will require dewatering permits, soil testing should be completed to determine if contamination procedures should be planned for. **Developer is aware of the requirements and will follow all protocols.**
30. Gas service trench detail shows 42" of cover. This is not typical and will likely cause issues with other utilities. Change depth to standard 3' depth at least in ROW. **Detail O on Sheet D3 has been revised.**
31. Bricks in the sidewalk detail shall be called out to be Pinehall Pavers, remove the note about building bricks. **Detail I on Sheet D2 has been revised.**
32. Community Space Easement – The final community space easements need to be approved by the legal department. Importantly, three properties will be used to establish the minimum required community space. Note that the community space was required under a Condition Use Permit issued by the Planning Board to approve a building footprint of over 15,000 SF. **Agreed.**
33. Screen Walls and Murals – Note that these items have not yet been reviewed by the Historic District Commission (HDC) and will be reviewed under an Administrative Approval process once the wall and fence details have been submitted to the HDC. **Agreed.**
34. All proposed off-site improvements to the streetscape that are unrelated to the proposed development should be shown on separate plans, as these are not the purview of the Planning Board's site plan review approval. **Sheets P1 and P2 have been created for this purpose.**
35. Building Canopies – It appears that several of the proposed roof canopies overhang the public right-of-way. If so, similar to the projecting bays on 25 Maplewood Avenue, an easement deed/license will be required from the city prior to construction. **Agreed.**
36. Landscape Plan – Are the proposed tree planters along the proposed alleyway off of Daniel Street proposed to be raised? If not, consideration should be given to increase the spacing between the planter and the building wall. **Planters are raised – see Details on Sheets L3 and L4.**
37. Transformer Pad – To reduce the unsightliness and obstruction to pedestrian circulation, can the proposed transformer pad on the Daniel Street alleyway be located any closer to either the existing or proposed building walls? **Transformer removed from alleyway; to be placed in right of way.**
38. Building Elevations – Note that the HDC approved the building design on 11-13-19 with stipulations. The stipulations appear to be shown on the revised elevations. **Agreed.**

We look forward to the TAC Committee's review of this submission. If there are any questions or comments please feel free to reach out to me.

Sincerely,



John R. Chagnon, PE

CC: Mark McNabb, Tracy Kozak, Robbi Woodburn, FX Bruton

SITE REDEVELOPMENT

BRICK MARKET

60 PENHALLOW STREET
PORTSMOUTH, NEW HAMPSHIRE

SITE PERMIT PLANS

OWNER:
DAGNY TAGGART, LLC

APPLICANT:
MCNABB PROPERTIES, LTD
30 PENHALLOW ST, STE 300 EAST
PORTSMOUTH, NH 03801
(603) 427-0725

CIVIL ENGINEER & LAND SURVEYOR:
AMBIT ENGINEERING, INC.
200 GRIFFIN ROAD, UNIT 3
PORTSMOUTH, N.H. 03801
Tel. (603) 430-9282
Fax (603) 436-2315

STRUCTURAL ENGINEER:
JSN ASOCIATES, LLC
1 AUTUMN STREET
PORTSMOUTH NH, 03801
TEL.(603) 433-8639

MEP & FIRE PROTECTION:
PETERSEN ENGINEERING
127 PARROTT AVENUE
PORTSMOUTH NH, 03801
TEL.(603) 436-4233

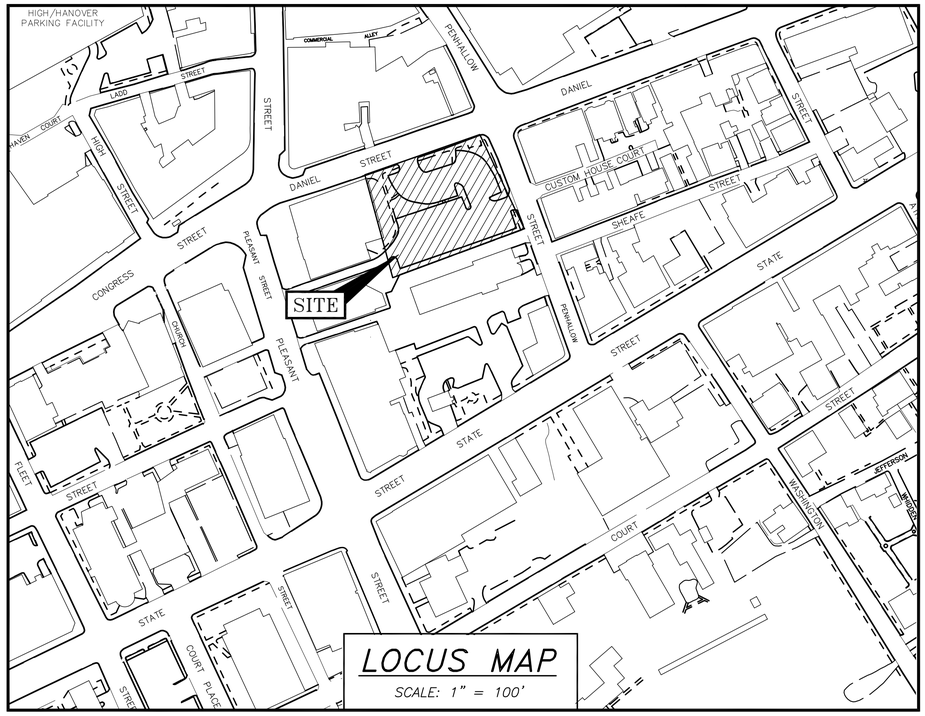
LIGHTING DESIGNER:
J&M LIGHTING DESIGN, INC.
PO BOX 4 WOODLAND AVENUE
KENNEBUNKPORT ME, 04046-1659
TEL.(207) 967-5223

ATTORNEY:
FX BRUTON
BRUTON & BERUBE, PLLC
601 CENTRAL AVENUE
DOVER, NH 03820
(603) 749-4529

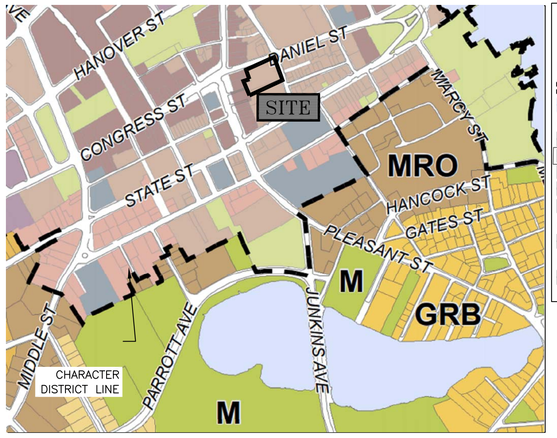
LANDSCAPE ARCHITECT:
WOODBURN & COMPANY
103 KENT PLACE
NEWMARKET, NH 03857
TEL. (603) 659-5949
FAX (603) 659-5939

ARCHITECT:
JSA ARCHITECTS
273 CORPORATE DRIVE
SUITE 100
PORTSMOUTH NH 03801
TEL. (603) 436-2551
FAX (603) 436-6973

GEOTECHNICAL ENGINEER:
GSI
18 COTE AVENUE #11
GOFFSTOWN NH 03045
TEL. (603) 624-2722



LOCUS MAP
SCALE: 1" = 100'



Map 10.5A21A
Character Districts and Civic Districts

Legend
- Downtown Overlay District
- Historic District

Character Districts
- CD5 Character District 5
- CD4 Character District 4
- CD4-W Character District 4-W
- CD4-L1 Character District 4-L1
- CD4-L2 Character District 4-L2

Civic District
- Civic District

Municipal District
- Municipal District

INDEX OF SHEETS

PERMIT LIST:
PORTSMOUTH HDC: APPROVED 11-13-19
PORTSMOUTH ZONING BOARD: PENDING
PORTSMOUTH SITE REVIEW: PENDING
PORTSMOUTH CONDITIONAL USE PERMIT: PENDING

LEGEND:

EXISTING	PROPOSED	
		PROPERTY LINE
		SETBACK
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	G	GAS LINE
D	D	STORM DRAIN
W	W	WATER LINE
WS	WS	WATER SERVICE
UGE	UGE	UNDERGROUND ELECTRIC
OHW	OHW	OVERHEAD ELECTRIC/WIRES
	UD	FOUNDATION DRAIN
		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
		UTILITY POLE
		WALL MOUNTED EXTERIOR LIGHTS
		TRANSFORMER ON CONCRETE PAD
		ELECTRIC HANDHOLD
		SHUT OFFS (WATER/GAS)
	GV	GATE VALVE
	HYD	HYDRANT
CB	CB	CATCH BASIN
S	SMH	SEWER MANHOLE
D	DMH	DRAIN MANHOLE
T	TMH	TELEPHONE MANHOLE
14	14	PARKING SPACE COUNT
PM		PARKING METER
LSA		LANDSCAPED AREA
TBD	TBD	TO BE DETERMINED
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
AC	–	ASBESTOS CEMENT PIPE
VC	VC	VITRIFIED CLAY PIPE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
FF	FF	FINISHED FLOOR
INV	INV	INVERT
S =	S =	SLOPE FT/FT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL

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PORTSMOUTH APPROVAL CONDITIONS NOTE:
ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

UTILITY CONTACTS

ELECTRIC:
EVERSOURCE
1700 LAFAYETTE ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 436-7708, Ext. 555.5678
ATTN: MICHAEL BUSBY, P.E. (MANAGER)

NATURAL GAS:
UNITIL
325 WEST ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 294-5144
ATTN: DAVE BEAULIEU

CABLE:
COMCAST
155 COMMERCE WAY
PORTSMOUTH, N.H. 03801
Tel. (603) 679-5695 (X1037)
ATTN: MIKE COLLINS

SEWER & WATER:
PORTSMOUTH DEPARTMENT OF PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 427-1530
ATTN: JIM TOW

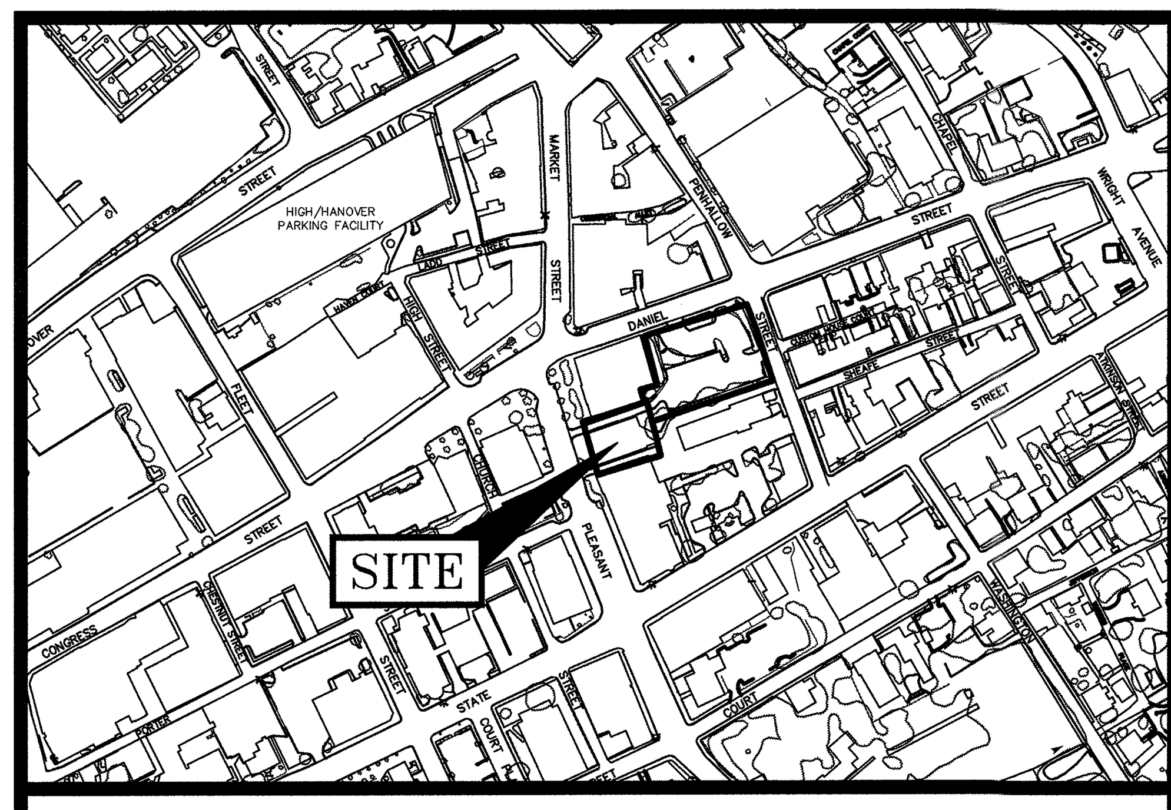
COMMUNICATIONS:
FAIRPOINT COMMUNICATIONS
JOE CONSIDINE
1575 GREENLAND ROAD
GREENLAND, N.H. 03840
Tel. (603) 427-5525

SITE PERMIT PLANS
BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

PLAN SET SUBMITTAL DATE: 23 DECEMBER 2019

J:\JOBS3\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 COVER 60 PENHALLOW.dwg, COVER-SITE



PLAN REFERENCES:

1) PLAN OF LAND FOR INDIAN HEAD BANK OF PORTSMOUTH, DANIEL AND PENHALLOW STREETS. PORTSMOUTH, NH. PREPARED BY BY TOWN PLANNING AND ENGINEERING ASSOC. INC. DATED JUNE 10, 1977, FINAL REVISION DATE AUGUST 30, 1978. R.C.R.D. PLAN C–8101.

2) PLAN OF LAND FOR INDIAN HEAD BANK OF PORTSMOUTH, DANIEL & PENHALLOW STREETS, COUNTY OF ROCKINGHAM, PORTSMOUTH, NEW HAMPSHIRE. PREPARED BY TOWN PLANNING AND ENGINEERING ASSOC., INC. R.C.R.D. PLAN C–7121.

3) LAND IN PORTSMOUTH COUNTY OF ROCKINGHAM TO CITY OF PORTSMOUTH, PORTSMOUTH, NH. PREPARED BY JOHN W. DURGIN, FILE NUMBER NO. 555 PLAN NO 7171. R.C.R.D. PLAN #01878.

4) SUBDIVISION OF LAND PORTSMOUTH, NH FOR SUSAN PETRIE–CLEMONS. PREPARED BY JOHN W. DURGIN ASSOCIATES, INC. DATED AUGUST 13, 1981. R.C.R.D. PLAN C–11434.

5) AS BUILT PLAN FOR INDIAN HEAD BANK OF PORTSMOUTH, PLEASANT STREET, PORTSMOUTH, N.H. COUNTY OF ROCKINGHAM PREPARED BY TOWN PLANNING AND ENGINEERING ASSOC. INC. DATED JANUARY 29, 1980, FINAL REVISION DATE FEBRUARY 19, 1980. NOT RECORDED.

6) PLAN OF LAND OF PORTSMOUTH TRUST CO., MARKET SQUARE, PORTSMOUTH N.H. PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, FILE NO. 555 PLAN NO. 6427. DATED JULY 1957. R.C.R.D. PLAN #02644.

7) PLAN OF PROPERTIES ON STATE AND PLEASANT STS., PORTSMOUTH, N.H. OWNED BY FREDERICK GARDNER AND PISCATAQUA BANK. PREPARED BY WILLIAM A. GROVER CIVIL ENGINEER. DATED SEPT 10, 1919. R.C.R.D. PLAN #0249.

8) WATER LINE EASEMENT, 28 PENHALLLOW STREET, PORTSMOUTH, NH. DATED OCTOBER 13, 1989. NOT RECORDED.

9) LOT CONSOLIDATION, PORTSMOUTH N.H. FOR AMERICAN BANK DESIGN. PREPARED BY DURGIN–SCHOFIELD ASSOCIATES. DATED APRIL 20, 1988, FINAL REVISION MAY 17, 1988. R.C.R.D. PLAN D–18233.

10) SUBDIVISION PLAN OF LAND 22 AND 26 MARKET SQUARE, PORTSMOUTH, NEW HAMPSHIRE, COUNTY OF ROCKINGHAM AS PREPARED FOR / OWNER OF RECORD JAMES A. SHANLEY P.O. BOX 1380 PORTSMOUTH, N.H. 03801. PREPARED BY CIVILWORKS, INC. DATED FEBRUARY 15, 1989. R.C.R.D. PLAN D–19371.

11) CONDOMINIUM SITE PLAN OF LAND, 22–26 MARKET SQUARE, PORTSMOUTH, NEW HAMPSHIRE, COUNTY OF ROCKINGHAM, AS PREPARED FOR / OWNER OF RECORD LBJ PROPERTIES, LLC 1618 HIGHWAY 395 MINDEN, NV 94923. PREPARED BY CIVILWORKS, INC. DATED AUGUST 3, 2007, FINAL REVISION MARCH 6, 2009. R.C.R.D. PLAN D–36050.

12) PROPOSED EASEMENT PLAN MAP U–7 – LOT 42 FOR COVENTRY ASSETS, LTD, 30 PENHALLOW STREET PORTSMOUTH, N.H. COUNTY OF ROCKINGHAM. PREPARED BY AMBIT ENGINEERING, INC. DATED OCTOBER 2000. R.C.R.D. PLAN C–28714.

13) EASEMENT RELEASE PLAN MAP U–7 – LOT 42 FOR COVENTRY ASSETS, LTD, 30 PENHALLOW STREET, PORTSMOUTH N.H. COUNTY OF ROCKINGHAM. PREPARED BY AMBIT ENGINEERING. INC. DATED DECEMBER 2000, FINAL REVISION DECEMBER 20, 2000. R.C.R.D. PLAN C–28681.

14) TAX MAP 107 LOT 29 BOUNDARY PLAN OWNER: BNG PROPERTIES, INC. PREPARED FOR: TUSCAN BRANDS LOCATED AT: 14 MARKET SQUARE, PLEASANT STREET & DANIEL STREET, PORTSMOUTH, NEW HAMPSHIRE. PREPARED BY S&H LAND SERVICES, LLC. DATED JANUARY 2, 2019. R.C.R.D. PLAN D–41249.

15) PLAN OF LAND TAX MAP 107 LOTS 39, 40 AND 41, PROPERTY OF HELEN S. BROSSEAU GST EXEMPT TRUST AND HELEN S. BROSSEAU REVOCABLE TRUST OF 2000, 12 PENHALLOW, 191 & 195 STATE STREET, COUNTY OF ROCKINGHAM, PORTSMOUTH NEW HAMPSHIRE. PREPARED BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC. DATED DECEMBER 12, 2007, FINAL REVISION JANUARY 8, 2008. R.C.R.D. PLAN D–35246.

16) CONDOMINIUM SITE PLAN TAX MAP 107 LOTS 39, 40 AND 41, PROPERTY OF HELEN S. BROSSEAU GST EXEMPT TRUST AND HELEN S. BROSSEAU REVOCABLE TRUST OF 2000, 12 PENHALLOW, 191 & 195 STATE STREET, COUNTY OF ROCKINGHAM, PORTSMOUTH NEW HAMPSHIRE. PREPARED BY MSC CIVIL ENGINEERS & LAND SURVEYORS, INC. DATED JANUARY 31, 2008, FINAL REVISION JUNE 19, 2008. R.C.R.D. PLAN D–335541.

17) PLAN OF A LOT OF LAND IN PORTSMOUTH BELONGING TO JONATHAN M. TREDICK, PORTSMOUTH, NH. PREPARED BY ALFRED M. HOYT, SURVYEOR DATED JULY 1, 1864. R.C.R.D. PLAN #0019.

18) SUBDIVISION PLAN FOR LI JUNE CHEN AND SHIANG TA CHEN, 54 DANIEL ST, PORTSMOUTH, NEW HAMPSHIRE, COUNTY OF ROCKINGHAM. PREPARED BY AMBIT SURVEY. DATED NOVEMBER 1998. R.C.R.D. PLAN D–27033.

19) EASEMENT PLAN OF LAND 26 MARKET SQUARE, PORTSMOUTH, NEW HAMPSHIRE, COUNTY OF ROCKINGHAM, AS PREPARED FOR JAMES A. SHANLEY PO BOX 1380 PORTSMOUTH, NH 03801. PREPARED BY CIVILWORKS, INC. DATED SEPTEMBER 10, 1993. R.C.R.D. PLAN B–22525.

20) DIVISION PLAN, ESTATE OF JOTHAM ODIORNE. c.1774 RP 4093.

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801–7114
Tel (603) 430–9282
Fax (603) 436–2315

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOTS 27 & 31.

2) OWNER OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801
5990/1701 (LOT 31) & 5990/1703 (LOT 27)
C–7121, C–8101, & D–41408

3) PARCELS ARE NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREAS:
MAP 107 LOT 27
23,279 S.F.
0.5344 ACRES

MAP 107 LOT 31
8,867 S.F.
0.2036 ACRES

5) ASSESSOR'S MAP 107 LOT 27 IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT. ASSESSOR'S MAP 107 LOT 31 IS LOCATED IN THE CHARACTER DISTRICT 5 (CD5) ZONING DISTRICT. BOTH PARCELS ARE LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT AND THE HISTORIC DISTRICT.

6) DIMENSIONAL REQUIREMENTS:
SEE ZONING ORDINANCE

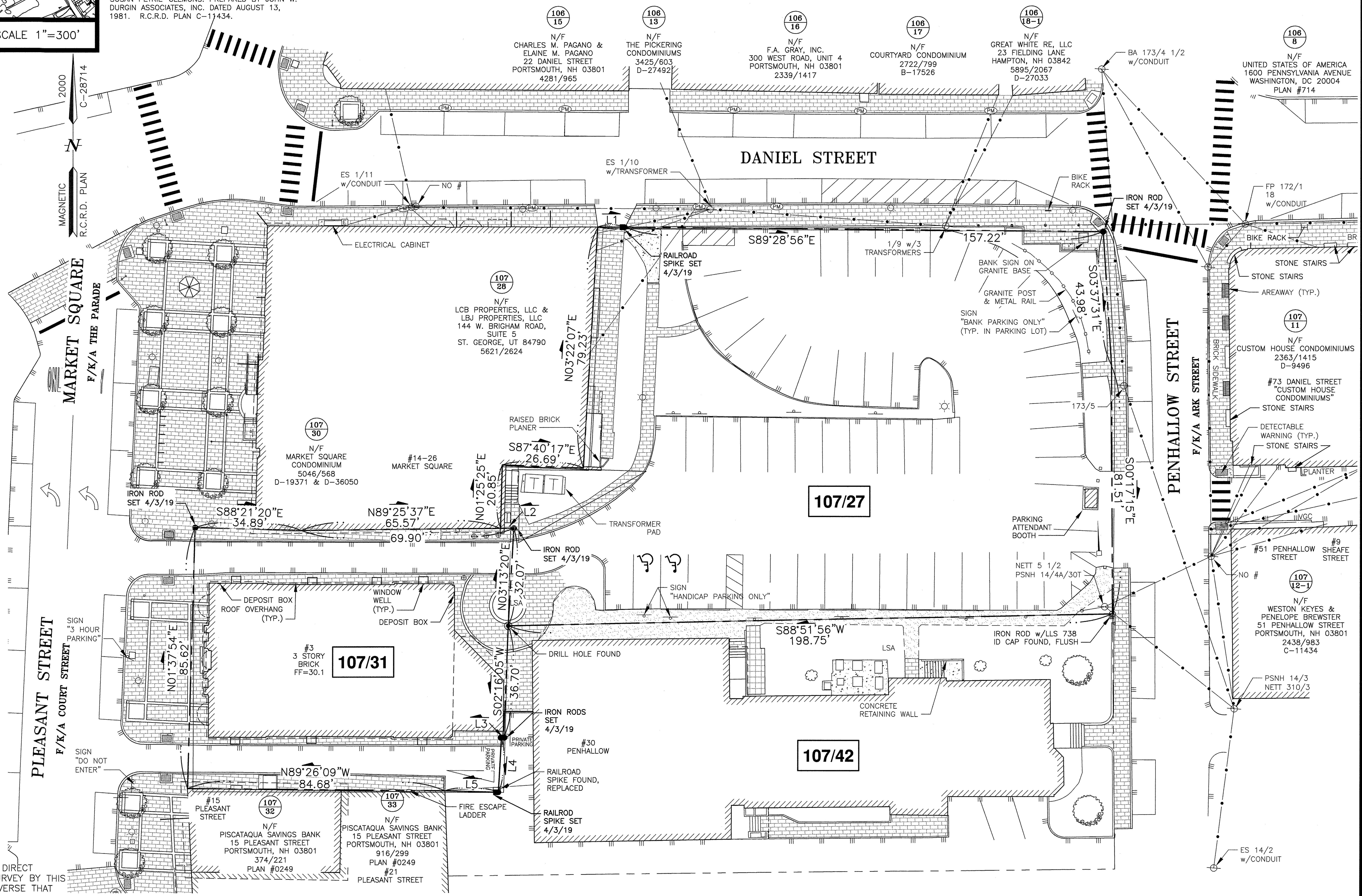
7) THE PURPOSE OF THIS PLAN IS TO SHOW THE RESULT OF A STANDARD BOUNDARY SURVEY OF ASSESSOR'S MAP 107 LOTS 27 & 31 IN THE CITY OF PORTSMOUTH.

8) SEE SHEET 2 OF 2 FOR EASEMENTS, RESTRICTIONS, AND ENCUMBRANCES.

9) NOT ALL UTILITIES SHOWN HEREON.

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21	MAP 11 / LOT 21
	BOUNDARY
	SETBACK
	RAILROAD SPIKE FOUND
	IRON ROD/PIPE FOUND
	DRILL HOLE FOUND
	STONE/CONCRETE BOUND FOUND
	RAILROAD SPIKE SET
	IRON ROD SET
	DRILL HOLE SET
	GRANITE BOUND SET
S	SEWER LINE
G	GAS LINE
D	STORM DRAIN
W	WATER LINE
	UNDERGROUND ELECTRIC
	OVERHEAD ELECTRIC/WIRES
100	CONTOUR
97x3	SPOT ELEVATION
	EDGE OF PAVEMENT (EP)
	WOODS / TREE LINE
	UTILITY POLE (w/ GUY)
	GAS SHUT OFF
	WATER SHUT OFF/CURB STOP
GV	GATE VALVE
HYD	HYDRANT
G W E	METER (GAS, WATER, ELECTRIC)
	CATCH BASIN
	TELEPHONE MANHOLE
	SEWER MANHOLE
	DRAIN MANHOLE
AC	AIR CONDITIONER UNIT
	SIGNS
AC	ASBESTOS CEMENT PIPE
CI	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
COP	COPPER PIPE
DI	DUCTILE IRON PIPE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
VC	VITRIFIED CLAY PIPE
EL.	ELEVATION
EP	EDGE OF PAVEMENT
F.F.	FINISHED FLOOR
INV.	INVERT
TBM	TEMPORARY BENCHMARK
TYP.	TYPICAL
VGC/SGC	VERTICAL/SLOPED GRANITE CURB
CCB	CAPE COD BERM
LSA	LANDSCAPED AREA



LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S89°30'55"E	9.00'
L2	S89°25'37"W	4.33'
L3	N89°52'12"W	0.76'
L4	S03°04'06"W	17.95'
L5	N88°22'54"W	17.56'

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

PAUL A. DOBBERSTEIN, LLS #1000 — 11/18/2019 DATE

STATE OF NEW HAMPSHIRE PAUL A. DOBBERSTEIN No. 1000 LICENSED LAND SURVEYOR — SIGNATURE

NO.	DESCRIPTION	DATE
4	ISSUED WITH 60 PENHALLOW	11/18/19
3	MISCELLANEOUS REVISIONS	10/7/19
2	ISSUED WITH TAC SUBMISSION	7/15/19
1	MONUMENTS SET	4/3/19
0	ISSUED FOR COMMENT	3/27/19

REVISIONS

STANDARD BOUNDARY SURVEY
TAX MAP 107 – LOTS 27 & 31

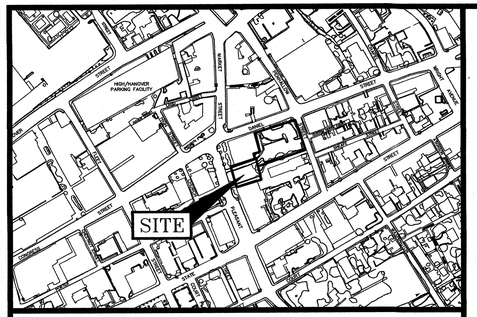
LAND OF:

DAGNY TAGGART, LLC

PROPERTY LOCATED AT:
3 PLEASANT STREET &
60 PENHALLOW STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=20' SHEET 1 OF 2 MARCH 2019

FB 402 PG 1 3039

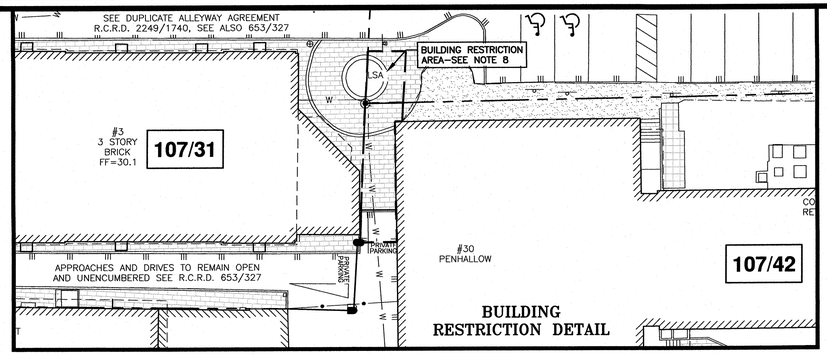


LOCATION MAP

2000 C-28714

N

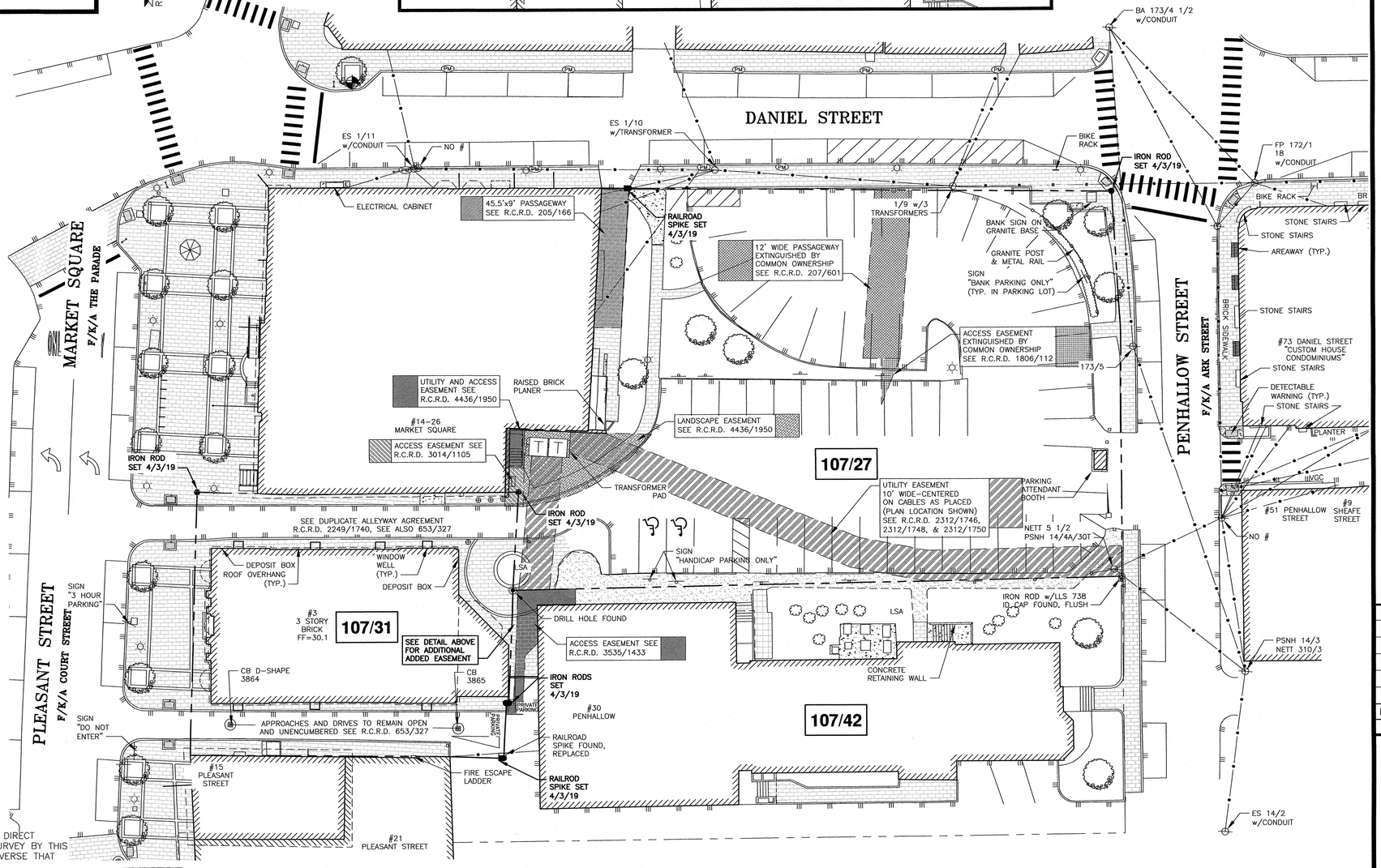
MAGNETIC R.C.R.D. PLAN



LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/27	MAP 11 / LOT 21
	BOUNDARY
	SETBACK
	RAILROAD SPIKE FOUND
	IRON ROD/PIPE FOUND
	DRILL HOLE FOUND
	STONE/CONCRETE BOUND FOUND
	RAILROAD SPIKE SET
	IRON ROD SET
	DRILL HOLE SET
	GRANITE BOUND SET
S	SEWER LINE
G	GAS LINE
D	STORM DRAIN
W	WATER LINE
	UNDERGROUND ELECTRIC
	OVERHEAD ELECTRIC/WIRES
100	CONTOUR
97x3	SPOT ELEVATION
	EDGE OF PAVEMENT (EP)
	WOODS / TREE LINE
	UTILITY POLE (w/ GUY)
	GAS SHUT OFF
	WATER SHUT OFF/CURB STOP
GV	GATE VALVE
HYD	HYDRANT
GWE	METER (GAS, WATER, ELECTRIC)
	CATCH BASIN
T	TELEPHONE MANHOLE
S	SEWER MANHOLE
D	DRAIN MANHOLE
AC	AIR CONDITIONER UNIT
	SIGNS

AC	ASBESTOS CEMENT PIPE
CI	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
COP	COPPER PIPE
DI	DUCTILE IRON PIPE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
VC	VITRIFIED CLAY PIPE
EL.	ELEVATION
EP	EDGE OF PAVEMENT
F.F.	FINISHED FLOOR
INV.	INVERT
TBM	TEMPORARY BENCHMARK
TYP.	TYPICAL
VGC/SGC	VERTICAL/SLOPED GRANITE CURB
CCB	CAPE COD BERM
LSA	LANDSCAPED AREA



GRAPHIC SCALE

10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 1000 PAUL A. DOBBERSTEIN SIGNATURE

PAUL A. DOBBERSTEIN, LLS #1000

11/18/2019
DATE

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOTS 27 & 31.

2) OWNER OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801
5990/1701 (LOT 31) & 5990/1703 (LOT 27)
C-7121, C-8101, & D-41408

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREAS:

MAP 107 LOT 27
23,279 S.F.
0.5344 ACRES

MAP 107 LOT 31
8,867 S.F.
0.2036 ACRES

5) ASSESSOR'S MAP 107 LOT 27 IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT. ASSESSOR'S MAP 107 LOT 31 IS LOCATED IN THE CHARACTER DISTRICT 5 (CD5) ZONING DISTRICT. BOTH PARCELS ARE LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT AND THE HISTORIC DISTRICT.

6) DIMENSIONAL REQUIREMENTS:
SEE ZONING ORDINANCE

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EASEMENTS ASSOCIATED WITH A STANDARD BOUNDARY SURVEY OF ASSESSOR'S MAP 107 LOTS 27 & 31 IN THE CITY OF PORTSMOUTH. ALSO SHOWN IS A PROPOSED EASEMENT RESTRICTING BUILDING CONSTRUCTION ON ASSESSOR'S MAP 107 LOTS 27 & 42.

8) ASSESSOR'S MAP 107 LOTS 27 & 42 WILL BE BURDENED BY A POTENTIAL NO BUILD AREA; SUBJECT TO FINAL DESIGN APPROVAL BY THE PORTSMOUTH BUILDING INSPECTOR'S OFFICE FOR ANY BUILDING CONSTRUCTION ON ASSESSOR'S MAP 107 LOT 31. OWNER SHALL REVIEW APPLICABLE IBC CODES RELATIVE TO THE OPENINGS IN THE 30 PENHALLOW STREET BUILDING AND DESIGN ACCORDINGLY TO COMPLY.

NO.	DESCRIPTION	DATE
	REVISIONS	
4	ISSUED WITH 60 PENHALLOW	11/18/19
3	MISCELLANEOUS REVISIONS	10/7/19
2	ADD BUILDING EASEMENT	7/15/19
1	REVISE PER COMMENTS	3/28/19
0	ISSUED FOR COMMENT	3/27/19

EASEMENT PLAN
TAX MAP 107 – LOTS 27 & 31

LAND OF:
DAGNY TAGGART, LLC

PROPERTY LOCATED AT:
3 PLEASANT STREET &
60 PENHALLOW STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

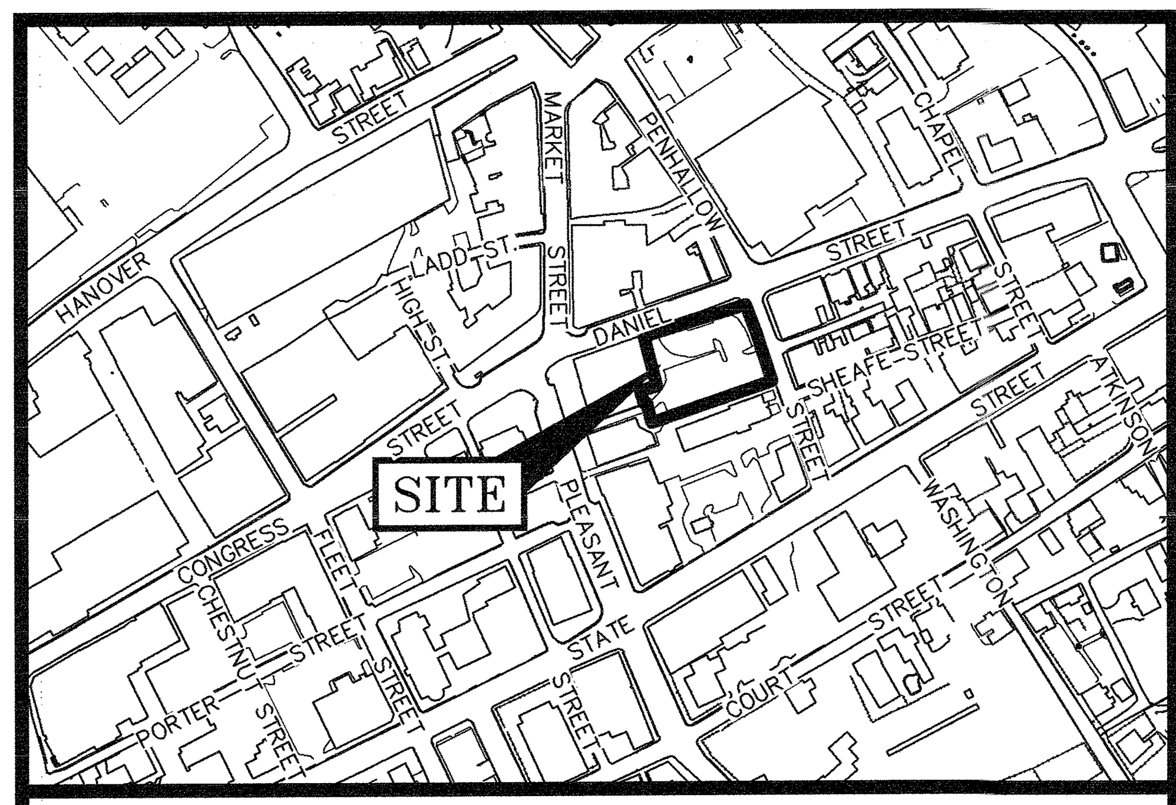
SCALE 1"=20' SHEET 2 OF 2 MARCH 2019

FB 402 PG 1 3039

PLAN REFERENCES:

1) STANDARD BOUNDARY SURVEY TAX MAP 107 – LOTS 27 & 31, PREPARED FOR: McNABB PROPERTIES, LTD., LAND OF: JARBEL REALTY, LLC, PROPERTY LOCATED AT: 3 PLEASANT STREET & 0 DANIEL STREET, CITY OF PORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE. PREPARED BY AMBIT ENGINEERING, INC. DATED MARCH 2019, FINAL REVISION DATE APRIL 3, 2019. R.C.R.D. PLAN D-41408.

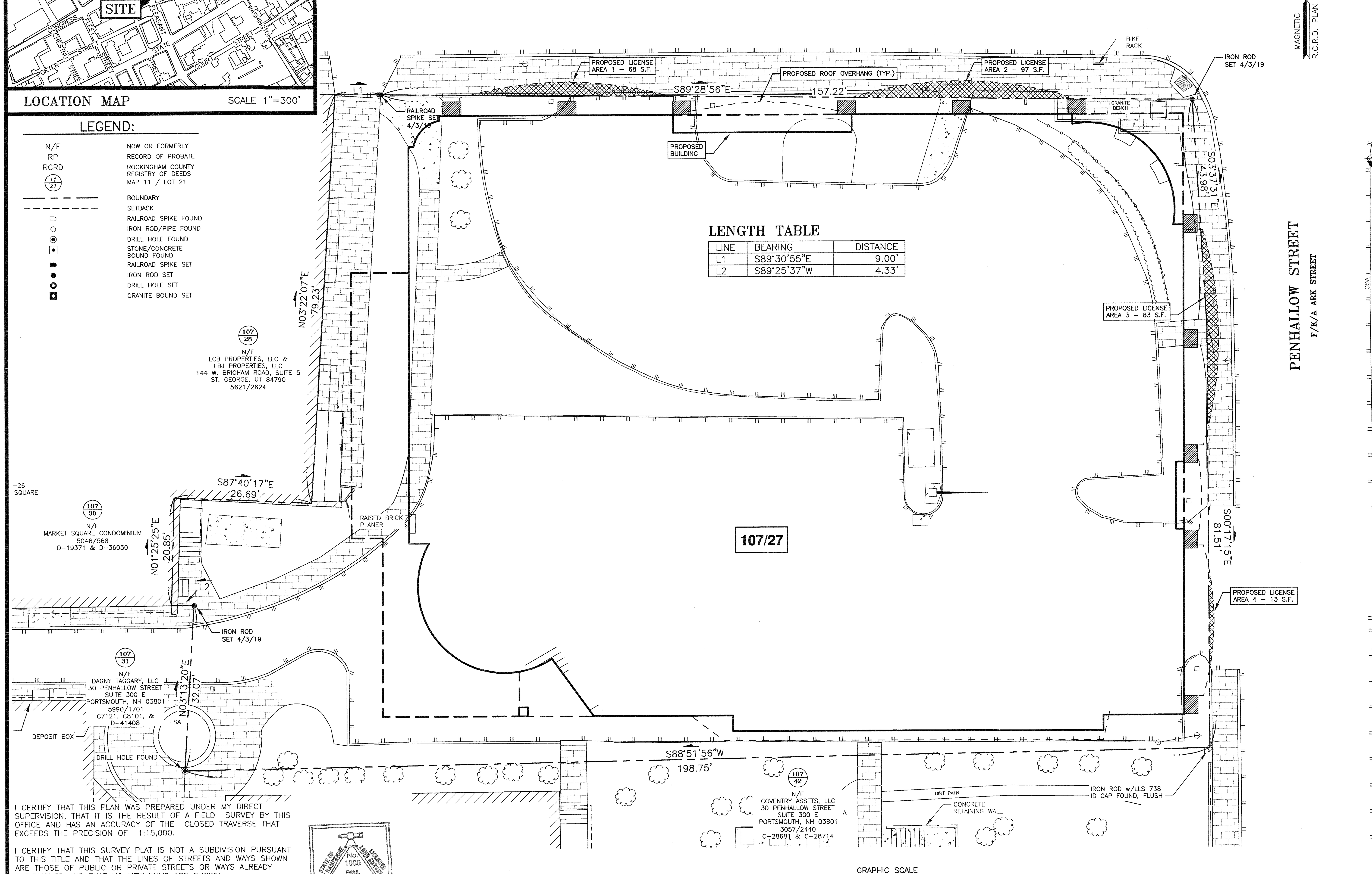
2) SEE PLAN REFERENCE 1 FOR ADDITIONAL PLAN REFERENCES.



LOCATION MAP SCALE 1"=300'

LEGEND:

N/F	NOW OR FORMERLY
RP	RECORD OF PROBATE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21	MAP 11 / LOT 21
— — —	BOUNDARY
- - - -	SETBACK
	RAILROAD SPIKE FOUND
	IRON ROD/PIPE FOUND
	DRILL HOLE FOUND
	STONE/CONCRETE BOUND FOUND
	RAILROAD SPIKE SET
	IRON ROD SET
	DRILL HOLE SET
	GRANITE BOUND SET



LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S89°30'55"E	9.00'
L2	S89°25'37"W	4.33'

I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000.

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 1000 PAUL A. DOBBERSTEIN SIGNATURE

PAUL A. DOBBERSTEIN, LLS #1000 12/23/2019 DATE

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOT 27.

2) OWNER OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801
5990/1703
C-7121, C-8101, & D-41408

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREA:
23,279 S.F.
0.5344 ACRES

5) THE PURPOSE OF THIS PLAN IS TO SHOW THE LOCATION OF PROPOSED LICENSES FOR ROOF OVERHANGS OF A PROPOSED BUILDING ON ASSESSOR'S MAP 107 LOT 27 IN THE CITY OF PORTSMOUTH. LICENSE TO BE GRANTED ARE WITHIN THE RIGHTS-OF-WAY OF DANIEL STREET AND PENHALLOW STREET.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	12/23/19

REVISIONS

LICENSE PLAN FOR TAX MAP 107 – LOT 27

OVER RIGHTS-OF-WAY OF:

DANIEL STREET & PENHALLOW STRET

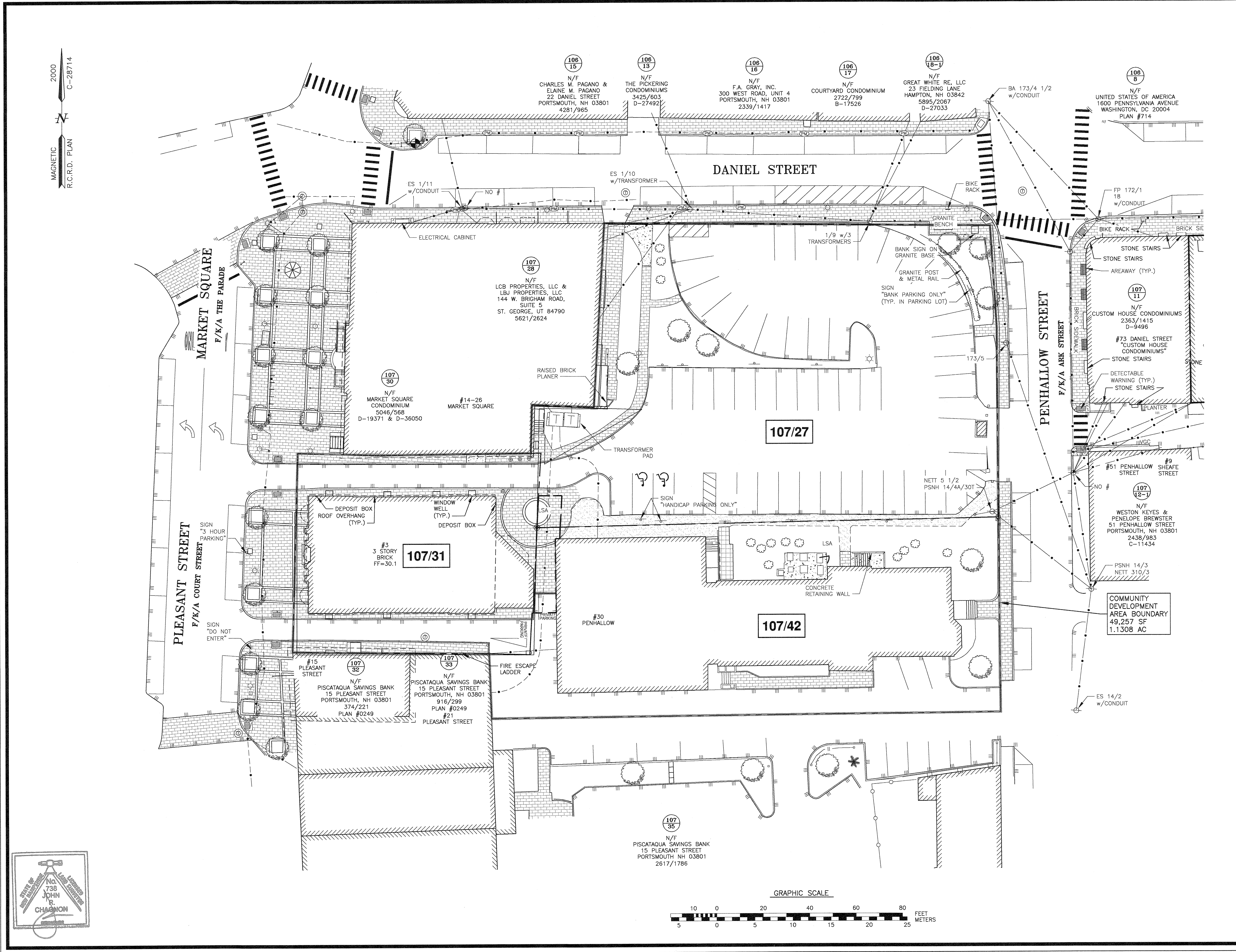
FOR BENEFIT OF:

DAGNY TAGGART, LLC

PROPERTY LOCATED AT:
60 PENHALLOW STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=10' DECEMBER 2019

FB 402 PG 1 3039



NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOTS 27, 31 & 42.

2) OWNERS OF RECORD:

107/27 & 31
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801
5990/701 (LOT 31) & 5990/1703 (LOT 27)
C-7121, C-8101, & D-41408

107/42
COVENTRY ASSETS, LTD
30 PENHALLOW STREET, SUITE 300 E
PORTSMOUTH, NH 03801
3067/2440 (LOT 42)
C-28681 & C-28714

3) PARCELS ARE NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREAS:

MAP 107 LOT 27
23,279 S.F.
0.5344 ACRES

MAP 107 LOT 31
8,867 S.F.
0.2036 ACRES

MAP 107 LOT 42
17,111 S.F.
0.3928 ACRES

5) ASSESSOR'S MAP 107 LOTS 27 & 42 ARE LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT. ASSESSOR'S MAP 107 LOT 31 IS LOCATED IN THE CHARACTER DISTRICT 5 (CD5) ZONING DISTRICT. PARCELS ARE LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT AND THE HISTORIC DISTRICT.

6) DIMENSIONAL REQUIREMENTS:
SEE ZONING ORDINANCE

NO.	DESCRIPTION	DATE
2	ISSUED FOR APPROVAL	11/18/19
1	UPDATED FOR 60 PENHALLOW	10/7/19
0	ISSUED FOR COMMENT	7/25/19

REVISIONS

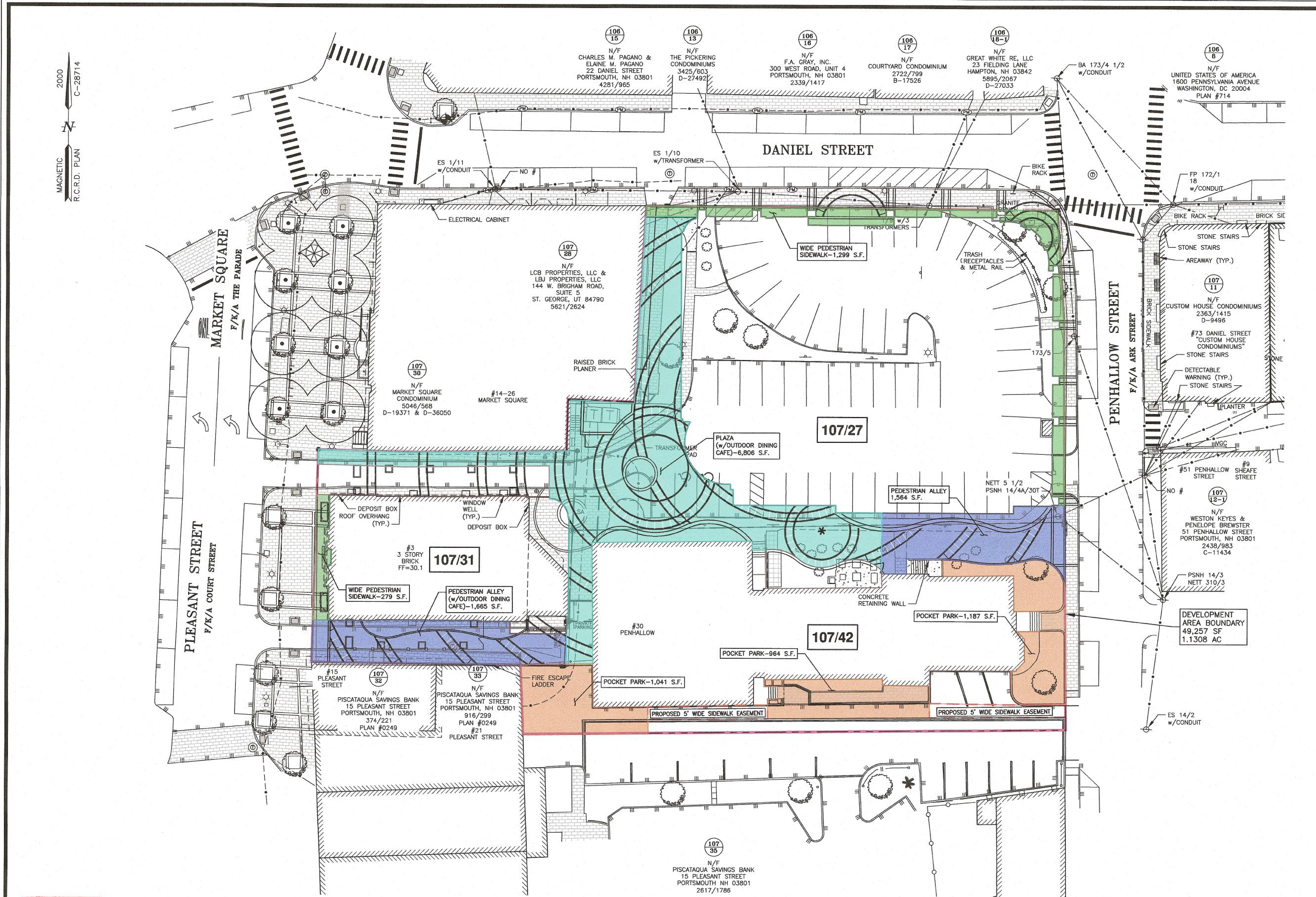
AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

MASTER PLAN
EXISTING CONDITIONS
TAX MAP 107
LOTS 27, 31 & 42
BRICK MARKET

PROPERTY LOCATED AT:
3 PLEASANT STREET
30 PENHALLOW STREET
60 PENHALLOW STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=20' JULY 2019

FB 402 PG 1 3039



6,806 S.F. OF PLAZA
3,229 S.F. OF PEDESTRIAN ALLEYS
1,578 S.F. OF WIDE PEDESTRIAN SIDEWALKS
3,192 S.F. OF POCKET PARKS

14,805 S.F. (30.0%) OF DEVELOPMENT AREA

GRAPHIC SCALE

10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCELS ARE SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOTS 27, 31 & 42.

2) OWNERS OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801
5990/701 (LOT 31) & 5990/1703 (LOT 27)
C-7121, C-8101, & D-41408

COVENTRY ASSETS, LTD
30 PENHALLOW STREET, SUITE 300 E
PORTSMOUTH, NH 03801
3067/2440 (LOT 42)
C-28681 & C-28714

3) PARCELS ARE NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREAS:

MAP 107 LOT 27
23,279 S.F.
0.5344 ACRES

MAP 107 LOT 31
8,867 S.F.
0.2036 ACRES

MAP 107 LOT 42
17,111 S.F.
0.3928 ACRES

5) ASSESSOR'S MAP 107 LOTS 27 & 42 ARE LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT. ASSESSOR'S MAP 107 LOT 31 IS LOCATED IN THE CHARACTER DISTRICT 5 (CD5) ZONING DISTRICT. PARCELS ARE LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT AND THE HISTORIC DISTRICT.

6) DIMENSIONAL REQUIREMENTS:
SEE ZONING ORDINANCE

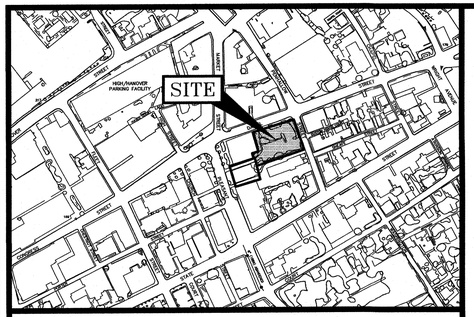
NO.	DESCRIPTION	DATE
6	ISSUED FOR DESIGN REVIEW	12/3/19
5	ISSUED WITH 60 PENHALLOW	11/18/19
4	WALKWAY	10/21/19
3	TRANSFORMER AREA	10/10/19
2	ISSUED FOR 60 PENHALLOW STREET	10/7/19
1	ADD COMMUNITY SPACE AREA	8/28/19
0	ISSUED FOR COMMENT	7/25/19

REVISIONS

BRICK MARKET MASTER PLAN
COMMUNITY SPACE
TAX MAP 107
LOTS 27, 31 & 42
PROPERTY LOCATED AT:
3 PLEASANT STREET
30 PENHALLOW STREET
60 PENHALLOW STREET
CITY OF PORTSMOUTH
COUNTY OF ROCKINGHAM
STATE OF NEW HAMPSHIRE

SCALE 1"=20' JULY 2019

FB 402 PG 1 3039



LOCATION MAP SCALE 1"=300'

2000 C-28714

N

MAGNETIC R.C.R.D. PLAN

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S89°30'55"E	9.00'
L2	S89°25'37"W	4.33'

DANIEL STREET

12" CI WATER

8" VCP SEWER

ES 1/10 w/TRANSFORMER

1/9 w/3 TRANSFORMERS

BORING LOCATION (TYP.)

BIKE RACK

BANK SIGN ON GRANITE BASE

TRASH RECEPTACLES

SIGN "ONE WAY"

GRANITE POST & METAL RAIL

SIGN "BANK PARKING ONLY" (TYP. IN PARKING LOT)

TBM C SPIKE IN UPOLE EL. 28.69

CB 4363

DMH 5961

SMH 1596

DMH 5961

CB 5964

CB 5965

DMH 5962

CB 4266

CB 5966

CB 4267

DMH 5963

CB 4265

SMH 5518

107/27

EXISTING SINGLE PHASE 240/120V TRANSFORMER TO REMAIN

RAISED BRICK PLANER

TRANSFORMER PAD

PARKING ATTENDANT BOOTH

PARKING BAR GATE

SIGN "HANDICAP PARKING ONLY"

LSA

DRILL HOLE FOUND

CRUSHED STONE WALK

IRON ROD w/LLS 738 ID CAP FOUND, FLUSH

SIGN "3 HOUR PARKING"

NETT 5 1/2 PSNH 14/4A/30T

4" DOGWOOD

18" PE DRAIN

18" PVC SEWER

8" D WATER

PENHALLOW STREET

F/K/A ARK STREET

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET

3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOT 27.

2) OWNER OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) LOT AREA:
23,279 S.F.
0.5344 ACRES

5) ASSESSOR'S MAP 107 LOT 27 IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT, DOWNTOWN OVERLAY DISTRICT (DOD), AND THE HISTORIC DISTRICT (HDC).

6) DIMENSIONAL REQUIREMENTS:
SEE ZONING ORDINANCE

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF ASSESSOR'S MAP 107 LOT 31 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM: MEAN SEA LEVEL NAVD 88
BENCHMARK: NGS
PID OCO 289 (V-31 USGS 1943)
ELEVATION: 29.19

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

STATE OF NEW HAMPSHIRE No. 738 JOHN R. CHAGNON LICENSED LAND SURVEYOR

SCALE: 1'=10' OCTOBER 2019

EXISTING CONDITIONS PLAN

C1

FB 402 PG 1

3039

DEMOLITION NOTES

A) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE DESIGNER. IT IS THE CONTRACTORS' RESPONSIBILITY TO LOCATE UTILITIES AND ANTICIPATE CONFLICTS. CONTRACTOR SHALL REPAIR EXISTING UTILITIES DAMAGED BY THEIR WORK AND RELOCATE EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED PRIOR TO COMMENCING ANY WORK IN THE IMPACTED AREA OF THE PROJECT.

B) ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTORS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES. THE CONTRACTOR SHALL COORDINATE REMOVAL, RELOCATION, DISPOSAL, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.

C) ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO THE ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D) THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.

E) SAWCUT AND REMOVE PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.

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

G) THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL CONSTRUCTION PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR ANY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK.

H) THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE, UTILITIES, VEGETATION, PAVEMENT, AND CONTAMINATED SOIL WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ANY EXISTING MONITORING WELLS IN THE PROJECT AREA IDENTIFIED DURING THE CONSTRUCTION AND NOT CALLED OUT ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER TO COORDINATE MONITORING WELL REMOVAL AND/OR RELOCATION WITH NHDES AND OTHER AUTHORITY WITH JURISDICTION PRIOR TO CONSTRUCTION.

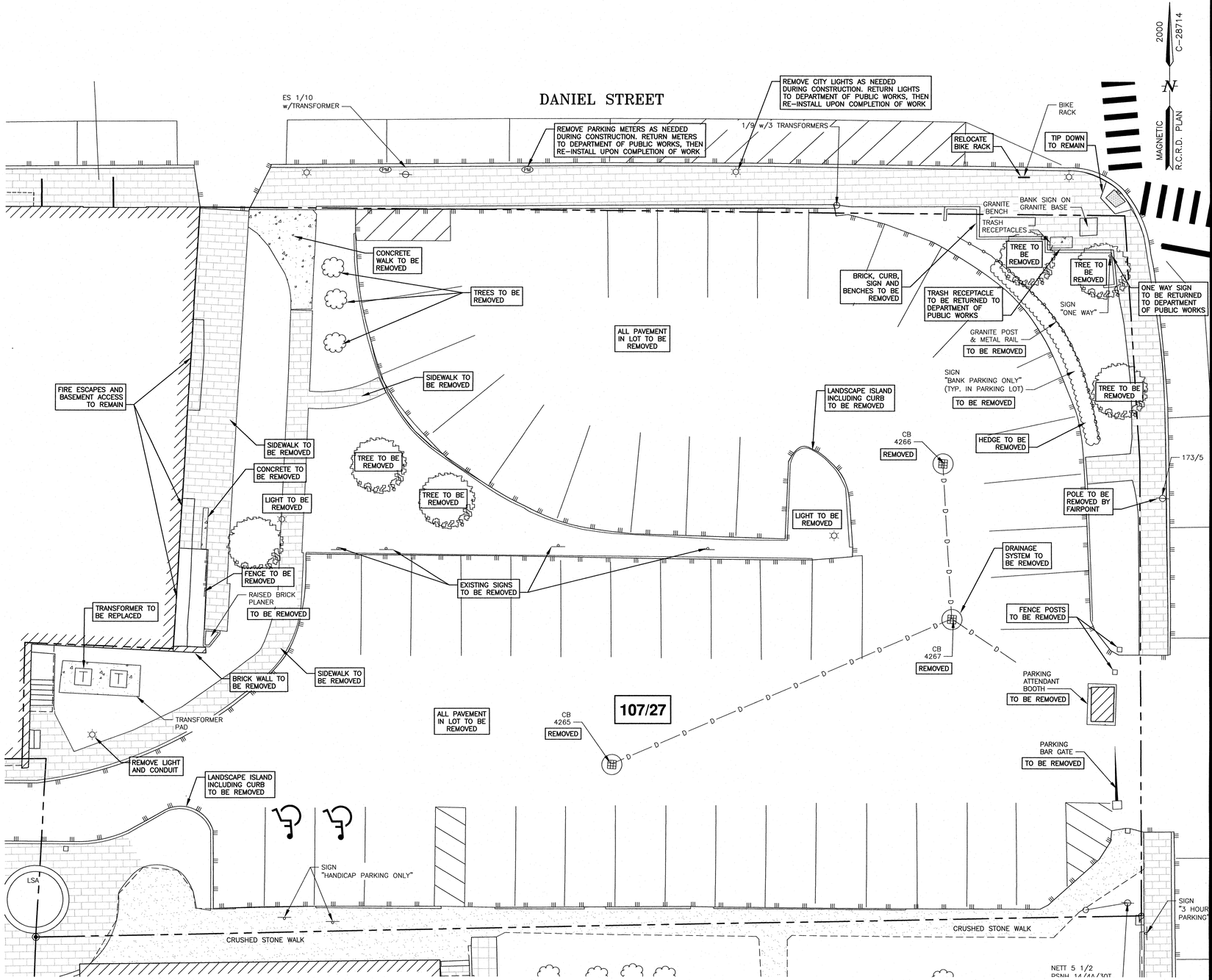
I) ALL WORK WITHIN THE CITY OF PORTSMOUTH RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS (DPW).

J) CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED, THE CONTRACTOR SHALL EMPLOY A NH LICENSED LAND SURVEYOR TO REPLACE THEM.

K) PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS WITHIN CONSTRUCTION LIMITS AND IMMEDIATELY OFF-SITE TO BE MAINTAIN FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE HIGH FLOW SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN 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 WARRANTED OR FABRIC BECOMES CLOGGED. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.

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

M) ANY CONTAMINATED MATERIAL REMOVED DURING THE COURSE OF THE WORK WILL REQUIRE HANDLING IN ACCORDANCE WITH NHDES REGULATIONS. CONTRACTOR SHALL HAVE A HEALTH AND SAFETY PLAN IN PLACE, AND COMPLY WITH ALL APPLICABLE PERMITS, APPROVALS, AUTHORIZATIONS, AND REGULATIONS



APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN 30 DAYS.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
2	LIGHTING NOTE	12/23/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

STATE OF NEW HAMPSHIRE - JOHN R. CHAGNON No. 7651 - LICENSED PROFESSIONAL ENGINEER -

SCALE: 1"=10' OCTOBER 2019

DEMOLITION PLAN C2

FB 402 PG 1

3039

J:\0853\JN 3000's\JN 3030's\JN 3039\2019 Survey and Site Development\Plans & Specs\Site\3039 Existing Conditions 2019.dwg, C2 DEMO 60 PENHALLOW

ZONING DEVELOPMENT STANDARD

CD4: CHARACTER DISTRICT 4

DOWNTOWN OVERLAY DISTRICT AND HISTORIC DISTRICT

BUILDING PLACEMENT (PRINCIPAL):

	REQUIRED	107/27 (60 PENHALLOW ST) EXISTING NO BUILDING	PROPOSED
MAX. PRINCIPAL FRONT YARD:	10 FEET	N/A	0.5 FEET
MIN. SIDE YARD:	NR	N/A	3.8 FEET
MIN. REAR YARD:	5 FEET*	N/A	14.8 FEET
FRONT LOT LINE BUILDOUT:	50% MIN	N/A	96%

* REAR SETBACK: 5' (REAR LINE) OR 10' (ALLEY CENTERLINE)

BUILDING TYPES:

BUILDING TYPES: OFFICE, FOOD SERVICE

DOWNTOWN OVERLAY DISTRICT DOES NOT PERMIT RESIDENTIAL USES FOR GROUND FLOOR. ENTRY CAN NOT EXCEED 20% OF GROUND FLOOR AREA (N/A).

FACADE TYPE: SHOPFRONT

BUILDING FORM:

	REQUIRED	EXISTING	PROPOSED
MAX STRUCTURE HEIGHT:	40 FEET*	N/A	39'-10"
MAX. FINISHED FLOOR SURFACE OF GROUND FLOOR ABOVE SIDEWALK GRADE:	36 INCHES	N/A	<36 INCHES
MIN. GROUND STORY HEIGHT:	12 FEET	N/A	14'-0"
MIN. SECOND STORY HEIGHT	10 FEET	N/A	10'-0"
FACADE GLAZING (WINDOW/PERIMETER):	70% SHOP 20-50% OTHER	N/A	OTHER 33-44%

ROOF TYPE: CURVED GABLE

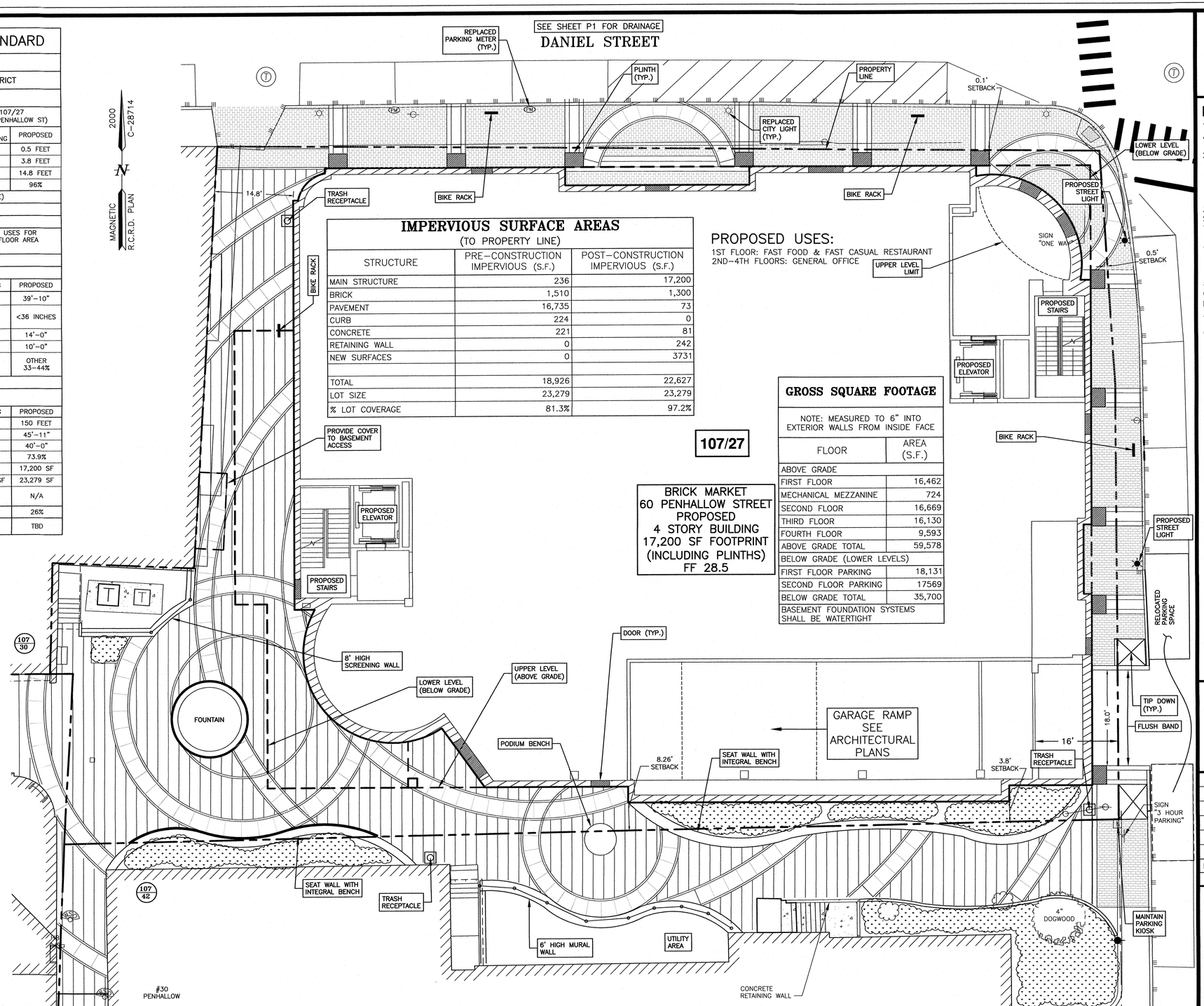
LOT OCCUPATION:

	REQUIRED	EXISTING	PROPOSED
MAX BUILDING BLOCK:	200 FEET	N/A	150 FEET
MAX FACADE MOD. LENGTH:	80 FEET	–	45'-11"
MAX. ENTRANCE SPACING:	50 FEET	–	40'-0"
MAX BUILDING COVERAGE:	90%	0%	73.9%
MAX BUILDING FOOTPRINT:	20,000 SF**	NONE	17,200 SF
MIN. LOT AREA:	NR	23,279 SF	23,279 SF
MIN. LOT AREA/DWELLING (LOT AREA/# OF UNITS):	NR	–	N/A
MIN. OPEN SPACE :	10%	N/A	26%
MAX. GROUND FLOOR GFA PER USE	15,000 SF	N/A	TBD

*50 FOOT WITH COMMUNITY SPACE INCENTIVE
** WITH COMMUNITY SPACE INCENTIVE

PORTSMOUTH APPROVAL CONDITIONS NOTES:

1) *ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.*
2) *THIS SITE PLAN SHALL BE RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.*
3) *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.*
4) *FOUNDATION EXCAVATION WILL REQUIRE SHORING TO PROTECT CITY STREETS AND INFRASTRUCTURE.*
5) *A FLASHING WARNING SIGN/SIGNAL SHALL BE INSTALLED AT THE DRIVEWAY TO ALERT PEDESTRIANS WHEN A VEHICLE IS EXITING FROM THE GARAGE.*
6) *BASEMENT FOUNDATION SYSTEMS SHALL BE WATERTIGHT*



IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE)

STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (S.F.)	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	236	17,200
BRICK	1,510	1,300
PAVEMENT	16,735	73
CURB	224	0
CONCRETE	221	81
RETAINING WALL	0	242
NEW SURFACES	0	3731
TOTAL	18,926	22,627
LOT SIZE	23,279	23,279
% LOT COVERAGE	81.3%	97.2%

PROPOSED USES:
1ST FLOOR: FAST FOOD & FAST CASUAL RESTAURANT
2ND-4TH FLOORS: GENERAL OFFICE

107/27

BRICK MARKET
60 PENHALLOW STREET
PROPOSED
4 STORY BUILDING
17,200 SF FOOTPRINT
(INCLUDING PLINTHS)
FF 28.5

GROSS SQUARE FOOTAGE
NOTE: MEASURED TO 6" INTO EXTERIOR WALLS FROM INSIDE FACE

FLOOR	AREA (S.F.)
ABOVE GRADE	
FIRST FLOOR	16,462
MECHANICAL MEZZANINE	724
SECOND FLOOR	16,669
THIRD FLOOR	16,130
FOURTH FLOOR	9,593
ABOVE GRADE TOTAL	59,578
BELOW GRADE (LOWER LEVELS)	
FIRST FLOOR PARKING	18,131
SECOND FLOOR PARKING	17569
BELOW GRADE TOTAL	35,700
BASEMENT FOUNDATION SYSTEMS SHALL BE WATERTIGHT	

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE
10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOT 27.

2) OWNER OF RECORD:
DAGNY TAGGART, LLC
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREA:
23,279 S.F.
0.5344 ACRES

5) ASSESSOR'S MAP 107 LOT 27 IS LOCATED IN THE CHARACTER DISTRICT 4 (CD4) ZONING DISTRICT. PARCEL IS LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT (DOD) AND THE HISTORIC DISTRICT (HDC).

6) PARKING SPECIFICATIONS: NO PARKING REQUIRED. SUBSURFACE PARKING PROVIDED.

7) THE PURPOSE OF THIS PLAN IS TO SHOW SITE LAYOUT FOR BUILDING ON ASSESSOR'S MAP 107 LOT 27 IN THE CITY OF PORTSMOUTH.

8) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS.

9) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

10) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

11) SEE LANDSCAPE PLANS FOR PROPOSED SURFACE TREATMENTS.

12) SNOW SHALL BE REMOVED FROM THE SITE.

13) A FLASHING WARNING SIGN/SIGNAL SHALL BE INSTALLED AT THE DRIVEWAY TO ALERT PEDESTRIANS WHEN A VEHICLE IS EXITING FROM THE GARAGE.

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
3	NOTE 13, CONDITION NOTE 4, LIGHTS	12/23/19
2	ISSUED FOR DESIGN REVIEW	12/2/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR REVIEW	10/8/19

REVISIONS

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 738 JOHN R. CHAGNON

STATE OF NEW HAMPSHIRE JOHN R. CHAGNON No. 7851 LICENSED PROFESSIONAL ENGINEER

SCALE: 1'=10' OCTOBER 2019

SITE LAYOUT PLAN C3

FB 402 PG 1 3039

J:\JOBS\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 SITE 60 PENHALLOW.dwg, C3 SITE

Landscape Notes

1. Design is based on drawings by Ambit Engineering dated November 18, 2019 and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
5. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
6. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
7. This plan is for review purposes only, NOT for Construction. Construction Documents will be provided upon request.
8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
10. The Contractor shall procure any required permits prior to construction.
11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
15. All plants shall be legibly tagged with proper botanical name.
16. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
19. All landscaping shall be provided with either of the following
    a. An underground sprinkling system
    b. An outside hose attachment within 150 feet
20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility to provide water from off-site, should it not be available on site.
22. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy.
26. Snow shall be removed from the site.
27. Landscape Architect is not responsible for the means and methods of the contractor.

City of Portsmouth Notes

1. The property owner and all future property owners shall be responsible for the maintenance, repair and replacement of all required screening and landscape materials.
2. All required plant materials shall be tended and maintained in a healthy growing condition, replaced when necessary, and kept free of refuse and debris. All required fences and walls shall be maintained in good repair.
3. The property owner shall be responsible to remove and replace dead or diseased plant materials immediately with the same type, size and quantity of plant materials as originally installed, unless alternative plantings are requested, justified and approved by the Planning Board or Planning Director.

Plant List

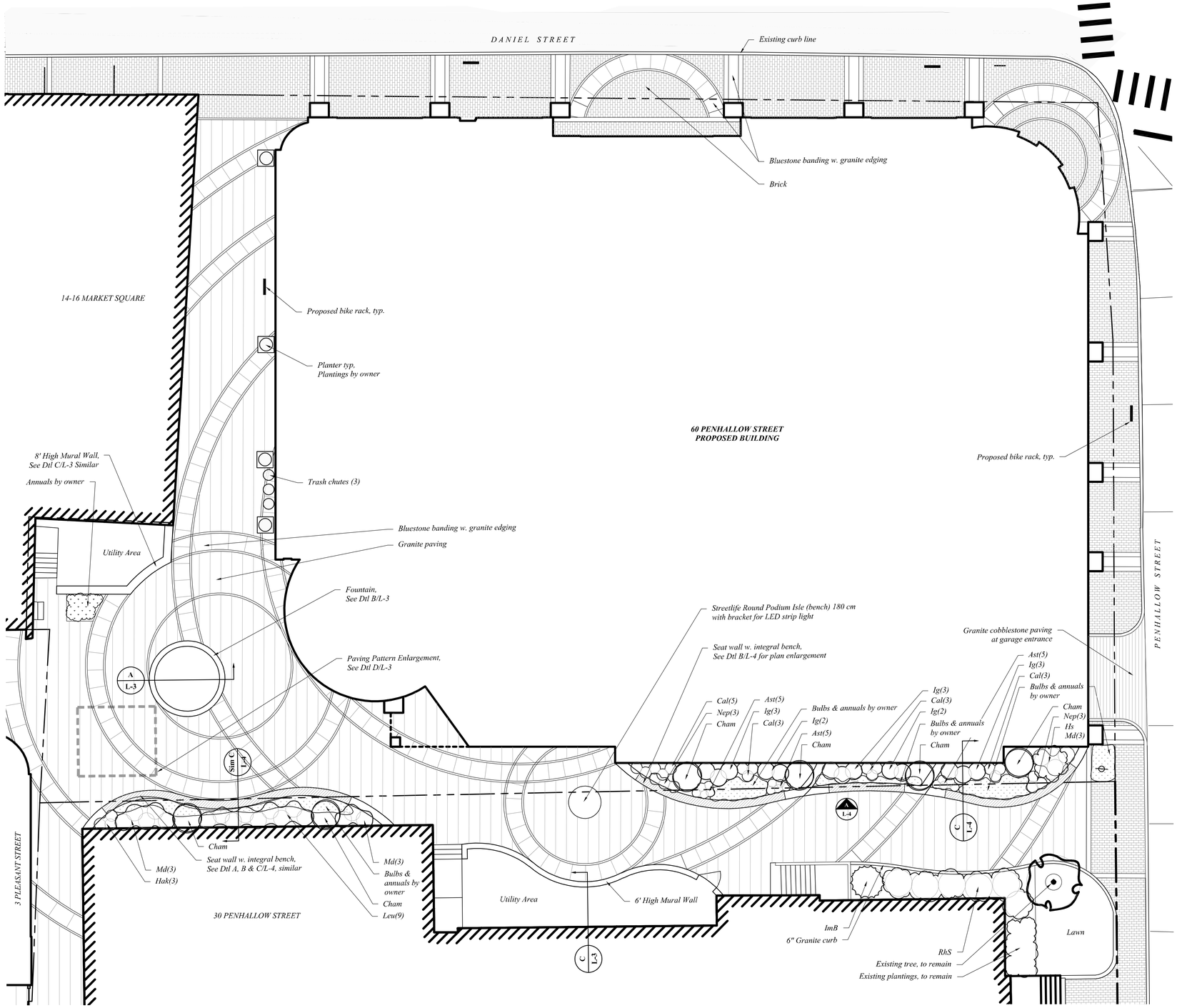
Plant List

SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Cham	*Chamaecyparis obtusa 'Gracilis'*	Gracilis Falsecypress	6	7-8' ht	B&B Matched Specimen
Hs	*Hibiscus syriacus 'Ardens'*	Ardens Rose-of-Sharon	1	6-7' ht	B&B Full
Ig	*Ilex glabra 'Shamrock'*	Shamrock Inkberry	13	5 gal	Full
ImB	*Ilex meserve 'Blue Maid'*	Blue Maid Holly	1	6-7' ht	B&B Full
Leu	*Leucothoe fontanesiana 'Silver Run'*	Silver Run Leucothoe	9	3 gal	
Md	*Microbiota decussata*	Russian Cypress	9	5 gal	
RhS	*Rhododendron 'Scintillation'*	Scintillation Rhododendron	6	2.5-3' ht	B&B

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Ast	*Astilbe 'Fanal'*	Rubyred Astilbe	15	1 gal	
Cal	*Calamagrostis acutifolia 'Karl Foerster'*	Feather Reed Grass	14	3 gal	
Hak	*Hakonechloa macra 'Aureola'*	Golden Japanese Forest Grass	3	1 gal	
Nep	*Nepeta faassenii x 'Six Hills Giant'*	Lavender blue Catmint	6	1 gal	



PAVING MATERIALS LIST

	MATERIAL	FINISH	DIMENSIONS	NOTES
Bluestone Banding	Select Bluestone	Thermal	3' W x 3'+/- L x 4" thick	Custom radius pieces (see plans). Contractor to provide shop drawings. Select stone for greenish blue color tones, without reeds or spalling.
Granite Paving	Deer Isle Granite	Thermal	2' W x 3' L x 4" thick	
Granite Edging in Plaza	Wausau Granite	Thermal	4" W x 4" L x 4" thick	
Granite Edging in Sidewalk	To match existing	To match existing	Thickness to match brick	Length and width dimensions vary, see plan.
Brick	Clay paving brick			Specification TBD

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

Brick Market

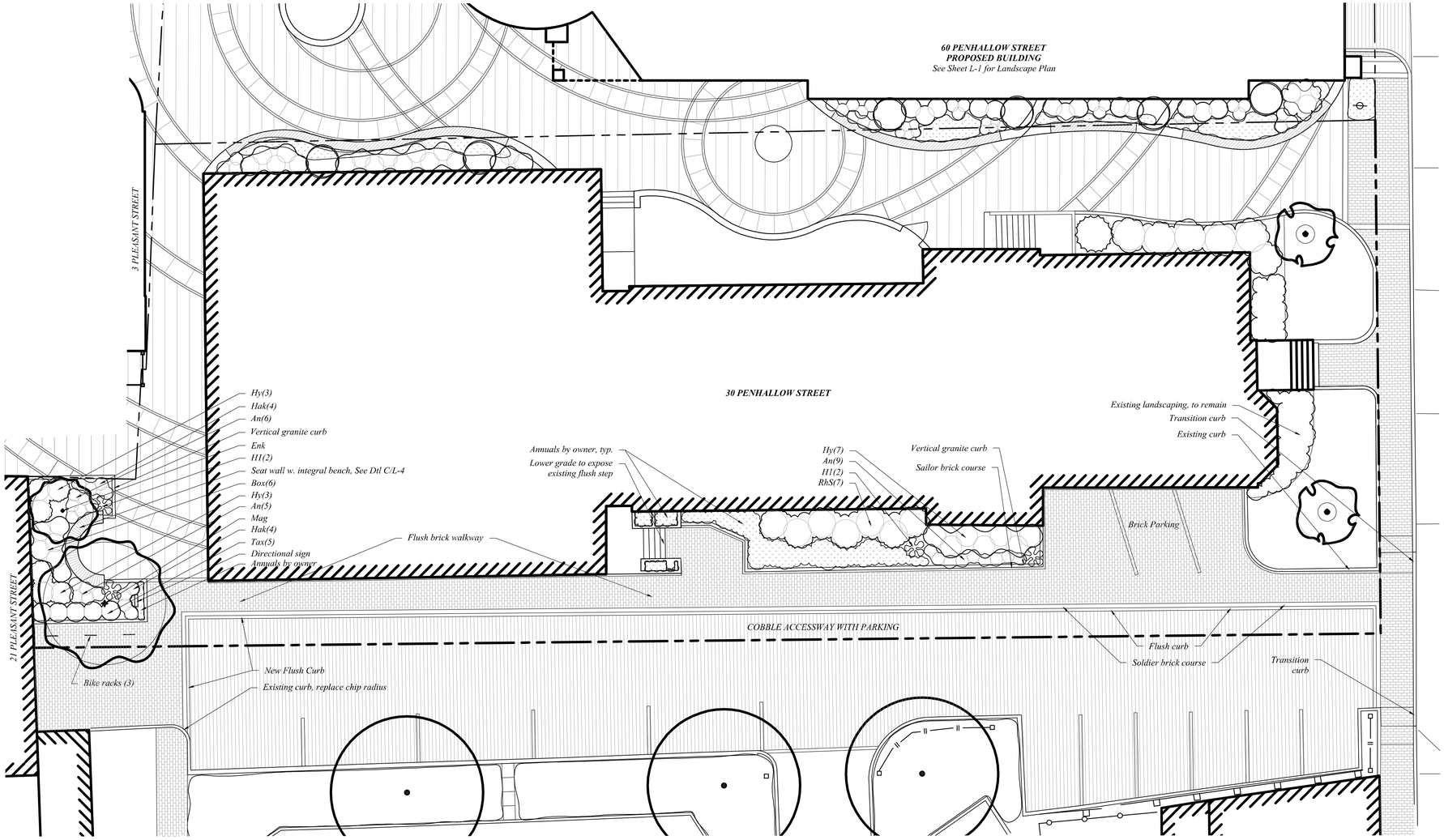
60 PENHALLOW STREET

Portsmouth, New Hampshire

Drawn By: VM
Checked By: RW
Scale: 1" = 10' - 0"
Date: November 18, 2019
Revisions: November 26, 2019

L-1

Sheet 1 of 5



Plant List

TREES

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Mag	*Magnolia loebneri Leonard Messel'*	Leonard Messel Magnolia	1	8-10' Ht	B&B

SHRUBS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
Box	*Buxus microphylla 'Winter Gem'*	Winter Gem Boxwood	6	3 gal	
Enk	*Enkianthus campanulatus*	Redvein Enkianthus	1	7-8' ht	Multi-stem tree form, B&B
Hy	*Hydrangea arborescens 'Incrediball'*	Incrediball Hydrangea	13	5 gal	
RhS	*Rhododendron 'Scintillation'*	Scintillation Rhododendron	7	2.5-3' ht	B&B
Tax	*Taxus media 'Tauntonii'*	Taunton Yew	5	2.5-3' ht	B&B

PERENNIALS, GROUNDCOVERS, VINES and ANNUALS

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
An	*Anemone 'September Charm'*	Japanese Anemone	20	1 gal	
H1	*Hosta 'Bold Ribbons'*	Bold Ribbons Hosta	4	1 gal	
Hak	*Hakonechloa macra 'Aureola'*	Golden Japanese Forest Grass	8	1 gal	

PAVING MATERIALS LIST

	MATERIAL	FINISH	DIMENSIONS	NOTES
Bluestone Banding	Select Bluestone	Thermal	3' W x 3'+/- L x 4" thick	Custom radius pieces (see plans). Contractor to provide shop drawings. Select stone for greenish blue color tones, without reeds or spalling.
Granite Paving	Deer Isle Granite	Thermal	2' W x 3' L x 4" thick	
Granite Edging in Plaza	Wausau Granite	Thermal	4" W x 4" L x 4" thick	
Granite Edging in Sidewalk	To match existing	To match existing	Thickness to match brick	Length and width dimensions vary, see plan.
Brick	Clay paving brick			Specification TBD

0 2 5 10 20

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

Brick Market

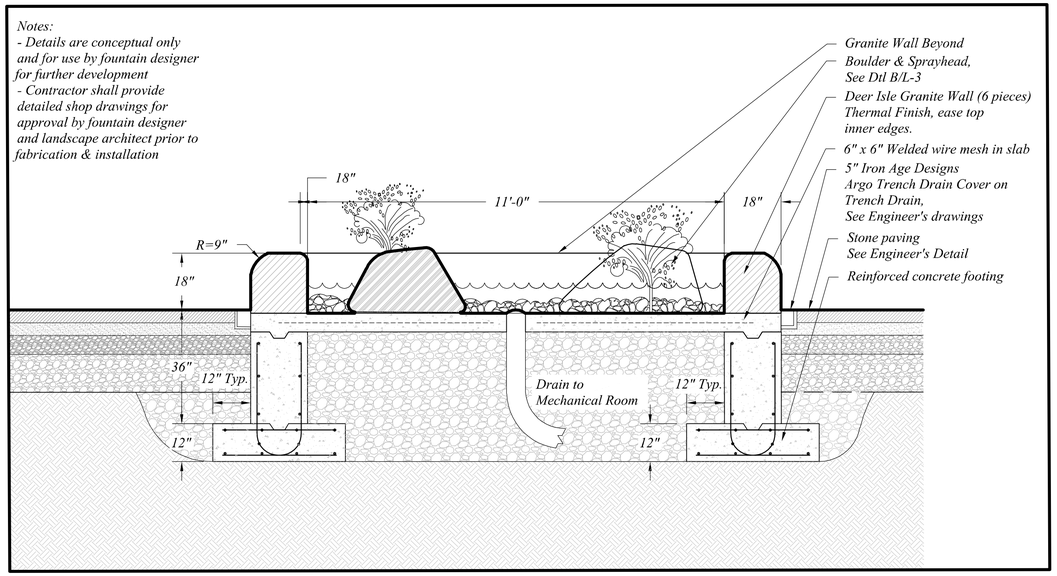
30 PENHALLOW LANDSCAPE PLAN

Portsmouth, New Hampshire

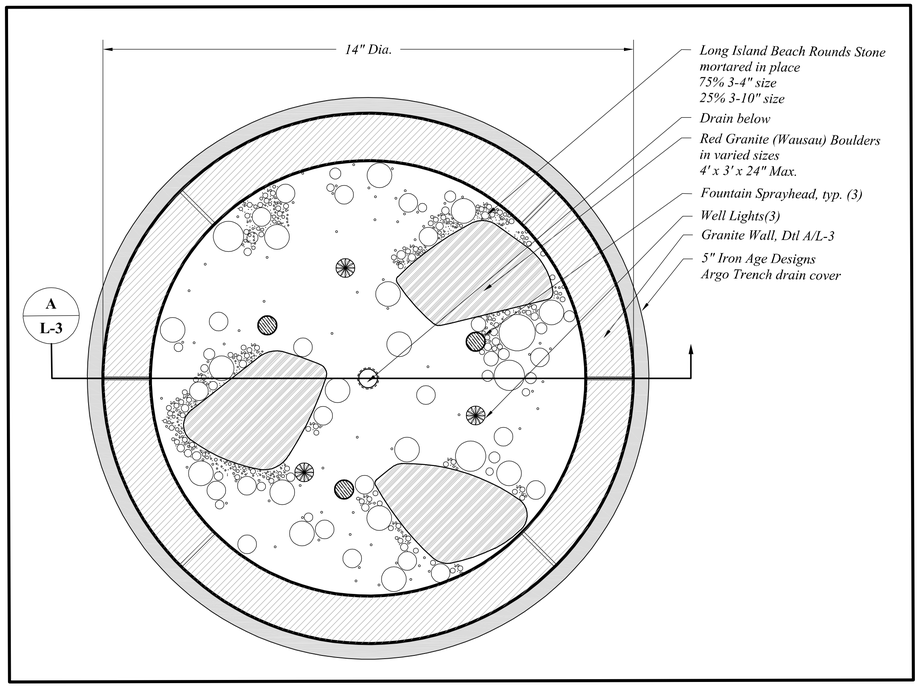
Drawn By: VM
Checked By: RW
Scale: 1" = 10' - 0"
Date: November 26, 2019
Revisions: December 20, 2019

L-2

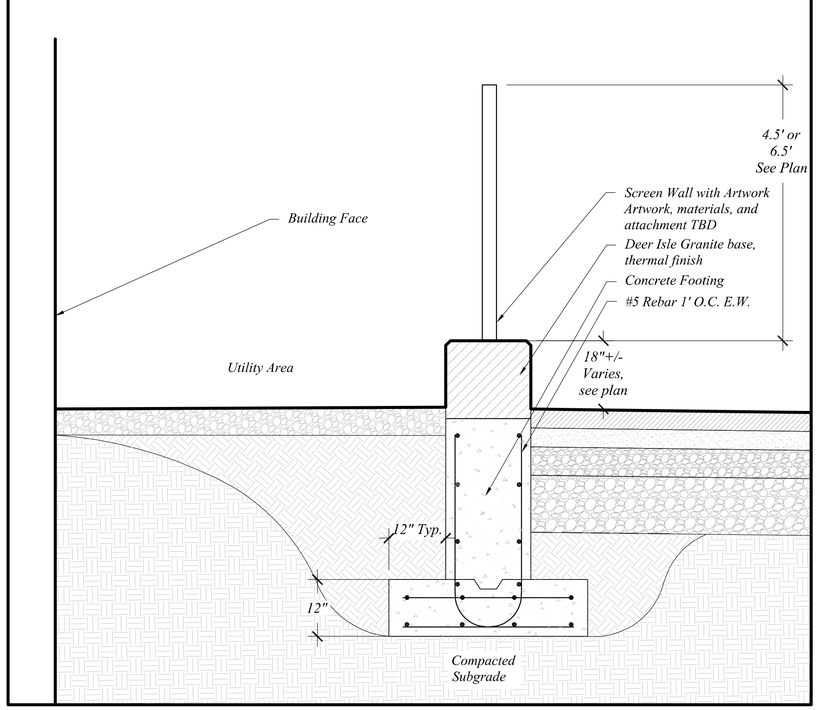
Sheet 2 of 5



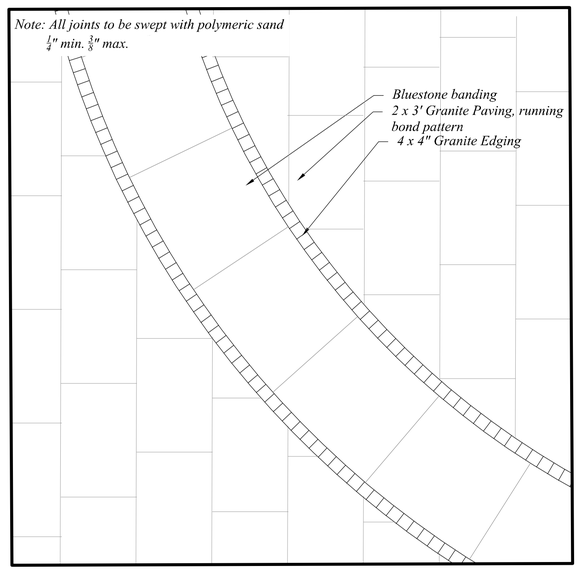
A ***Fountain Section***
Scale: ½"=1'-0"



B ***Fountain Plan***
Scale: ½"=1'-0"



C ***Mural Wall Section***
Scale: ¾"=1'-0"



D ***Paving Enlargement***
Scale: ½"=1'-0"

PAVING MATERIALS LIST

	MATERIAL	FINISH	DIMENSIONS	NOTES
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Granite Edging in Sidewalk	To match existing	To match existing	Thickness to match brick	Length and width dimensions vary, see plan.
Brick	Clay paving brick			Specification TBD

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

Brick Market

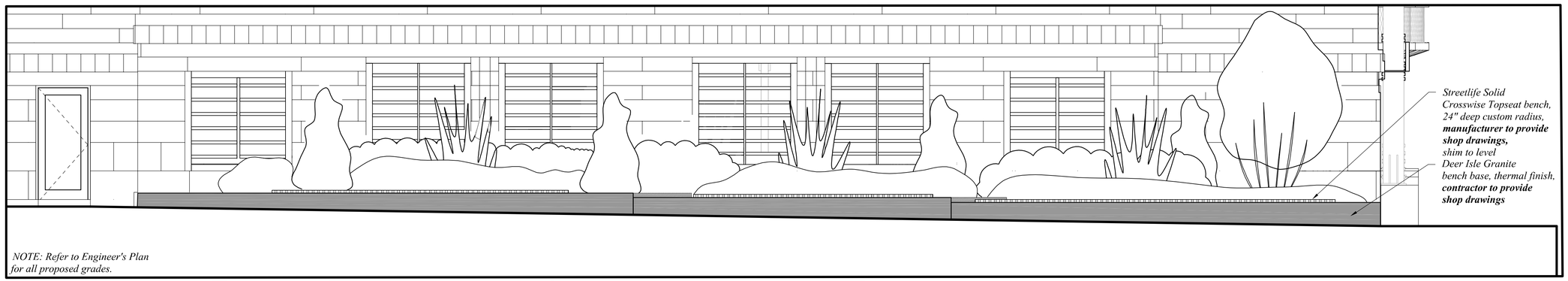
LANDSCAPE DETAILS

Portsmouth, New Hampshire

Drawn By: LF
Checked By: RW
Scale: See details
Date: November 18, 2019
Revisions: November 26, 2019

L-3

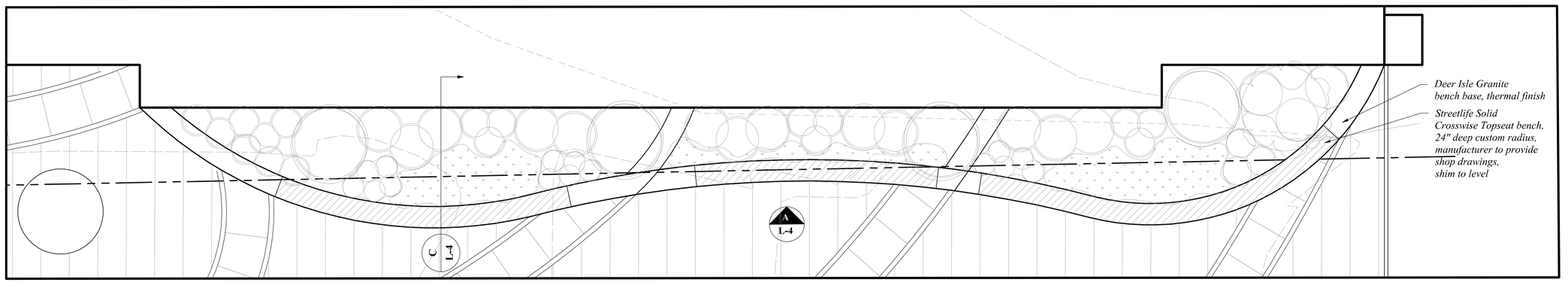
Sheet 3 of 5



NOTE: Refer to Engineer's Plan for all proposed grades.

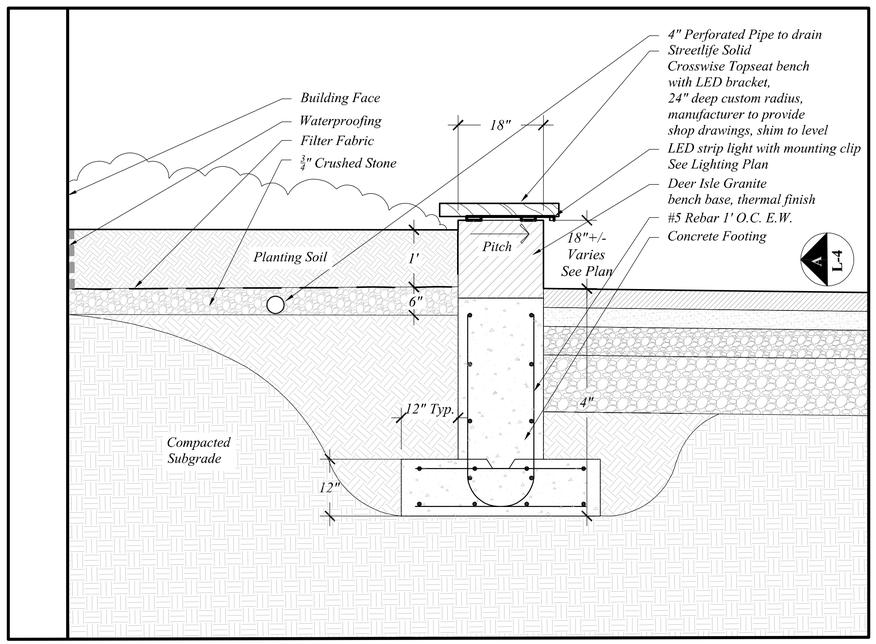
A **Bench Elevation**
Scale: 1/4"=1'-0"

0 2 4 8



B **Bench Plan**
Scale: 1/4"=1'-0"

0 2 4 8



C **Bench Section**
Scale: 3/4"=1'-0"

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

Brick Market

LANDSCAPE DETAILS

Portsmouth, New Hampshire

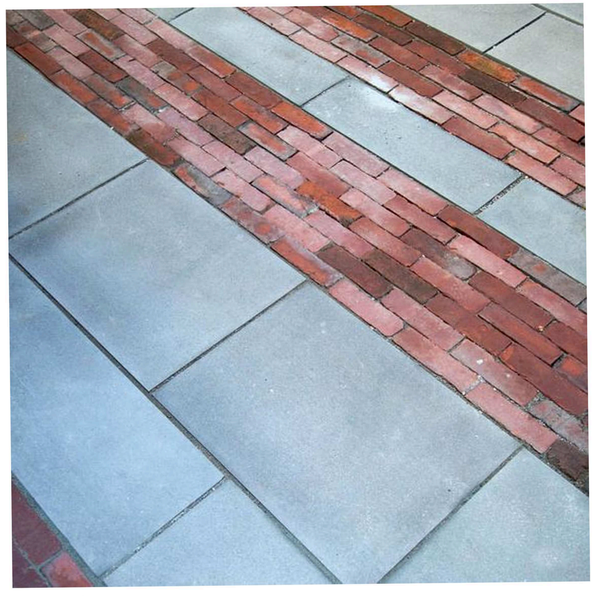
Drawn By:	LF
Checked By:	RW
Scale:	See details
Date:	November 18, 2019
Revisions:	November 26, 2019 December 20, 2019

L-4

Sheet 4 of 5

Wausau Red Granite - *Slim banding*

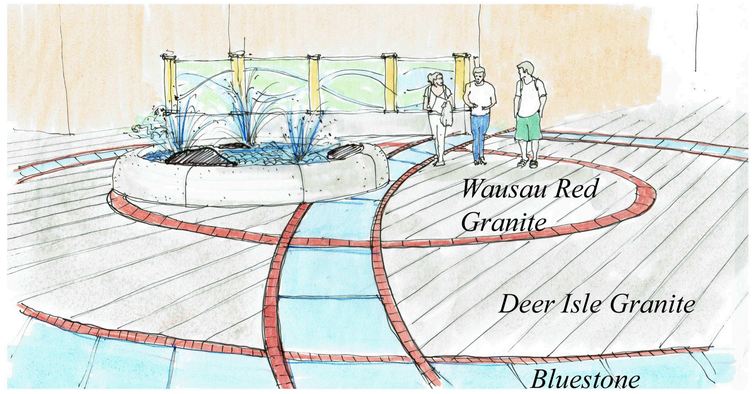
Deer Isle Granite - *Paving Field*



Bluestone

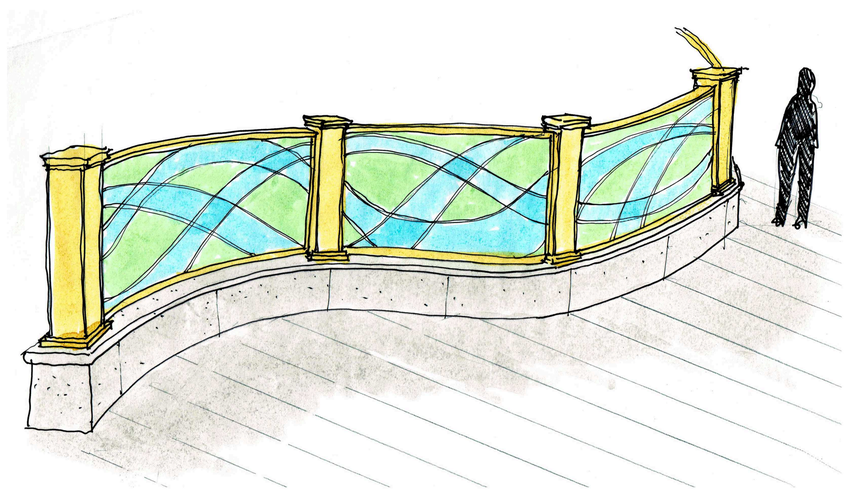
Podium Bench - *6' diameter*

Wood Bench Top - *sits on Deer Isle granite wall base instead of steel feet as shown here*
18"w x 14" -20" base (varies with grade)



Granite Fountain - *low sprays*
18" high x 14' diameter

Tree planters *shown as core ten here*
3'x3'x3'



Mural Wall - Height 6' and 8' see plan - *Granite base 18x18"*
Posts wood to match building

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

Brick Market

60 PENHALLOW LANDSCAPE MATERIALS

Portsmouth, New Hampshire

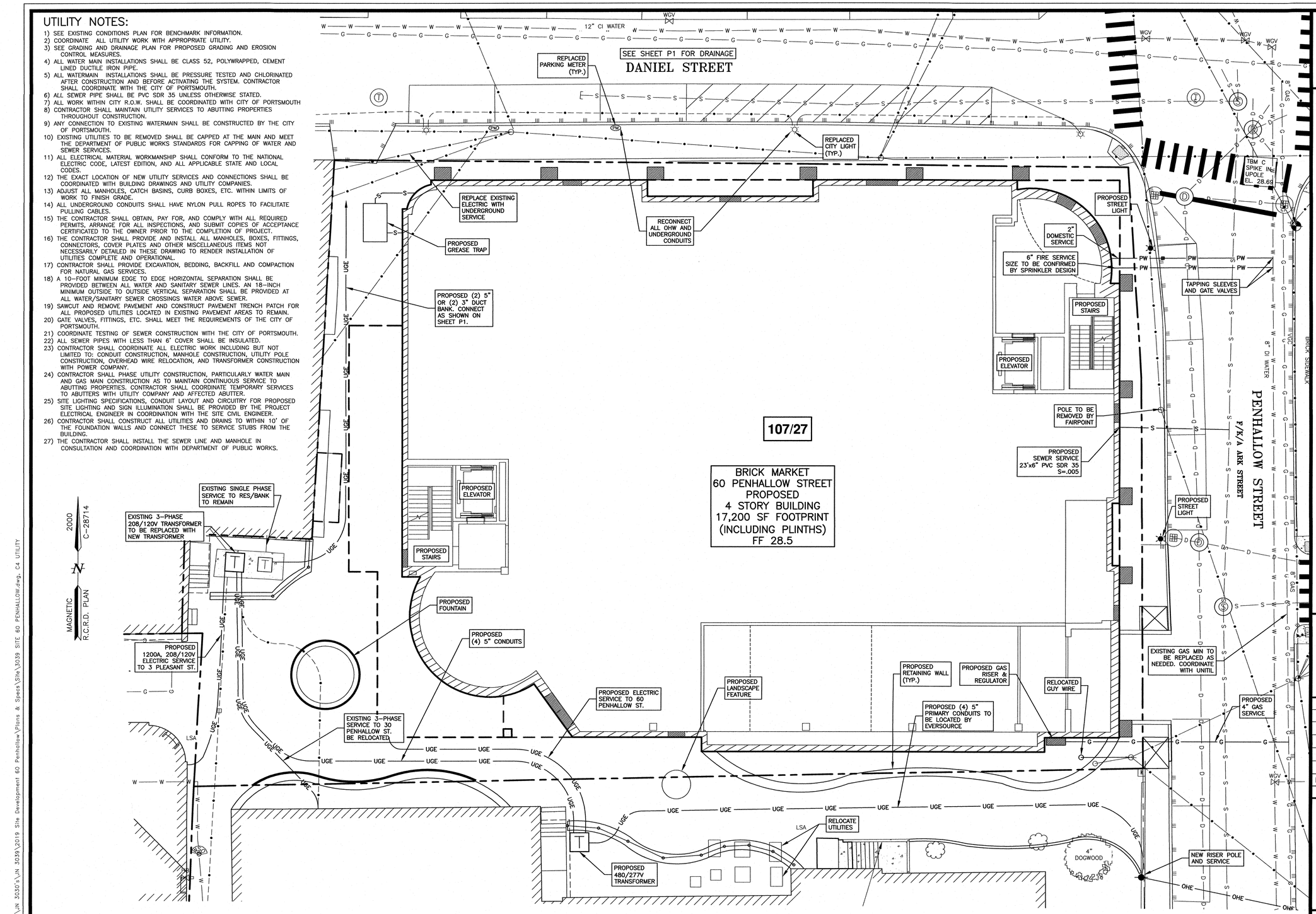
Drawn By:	VM
Checked By:	RW
Scale:	1" = 10' - 0"
Date:	November 26, 2019
Revisions:	December 20, 2019

L-M

Sheet 5 of 5

UTILITY NOTES:

1) SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
2) COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY.
3) SEE GRADING AND DRAINAGE PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
4) ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, POLYWRAPPED, CEMENT LINED DUCTILE IRON PIPE.
5) ALL WATERMAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION AND BEFORE ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE WITH THE CITY OF PORTSMOUTH.
6) ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
7) ALL WORK WITHIN CITY R.O.W. SHALL BE COORDINATED WITH CITY OF PORTSMOUTH
8) CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ABUTTING PROPERTIES THROUGHOUT CONSTRUCTION.
9) ANY CONNECTION TO EXISTING WATERMAIN SHALL BE CONSTRUCTED BY THE CITY OF PORTSMOUTH.
10) EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
11) ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
12) THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH BUILDING DRAWINGS AND UTILITY COMPANIES.
13) ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
14) ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
15) THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF PROJECT.
16) THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED IN THESE DRAWING TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
17) CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.
18) A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS WATER ABOVE SEWER.
19) SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
20) GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF PORTSMOUTH.
21) COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF PORTSMOUTH.
22) ALL SEWER PIPES WITH LESS THAN 6' COVER SHALL BE INSULATED.
23) CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
24) CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH UTILITY COMPANY AND AFFECTED ABUTTER.
25) SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER IN COORDINATION WITH THE SITE CIVIL ENGINEER.
26) CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.
27) THE CONTRACTOR SHALL INSTALL THE SEWER LINE AND MANHOLE IN CONSULTATION AND COORDINATION WITH DEPARTMENT OF PUBLIC WORKS.



APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE
10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

4) INSTALL CATCH BASIN INLET PROTECTION ON ALL EXISTING AND PROPOSED CATCH BASINS IN THE PROJECT VICINITY UNTIL CONSTRUCTION IS COMPLETED AND THE SITE IS STABILIZED.

5) ALL WATER MAIN AND SANITARY SEWER WORK SHALL MEET THE STANDARDS OF THE NEW HAMPSHIRE STATE PLUMBING CODE AND CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.

6) UTILITY AS-BUILTS SHALL BE SUBMITTED TO THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS UPON COMPLETION OF THE PROJECT.

7) EVERSOURCE WORK ORDER #3107781

8) PROPOSED SEWER FLOW:
1ST FLOOR RESTAURANT: 3,600 GPD
OFFICE SPACE:
141,526 SF/(2.5 GPD X 100 SF) = 1,038 GPD
TOTAL PROPOSED FLOW = 4,638 GPD

9) THE APPLICANT SHALL HAVE A COMMUNICATIONS SITE SURVEY CONDUCTED BY A MOTOROLA COMMUNICATIONS CARRIER APPROVED BY THE PORTSMOUTH'S COMMUNICATIONS DIVISION. THE RADIO COMMUNICATIONS CARRIER MUST BE FAMILIAR AND CONVERSANT WITH THE PORTSMOUTH POLICE AND FIRE RADIO SYSTEMS CONFIGURATION. IF THE SITE SURVEY INDICATES THAT 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 PROPERTY OWNER WILL BE REQUIRED TO MAINTAIN ANY INSTALLED EQUIPMENT. THE PROPERTY OWNER SHALL BE RESPONSIBLE TO PAY FOR THE SITE SURVEY WHETHER OR NOT THE SURVEY INDICATES THAT EQUIPMENT IS NECESSARY. THE OWNER SHALL COORDINATE WITH THE SUPERVISOR OF RADIO COMMUNICATIONS FOR PORTSMOUTH. THE SURVEY SHALL BE COMPLETED AND ANY REQUIRED EQUIPMENT INSTALLED, TESTED, AND ACCEPTED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

10) ANY HISTORIC SERVICES ENCOUNTERED DURING UTILITY WORK SHALL BE ABANDONED PER THE REQUIREMENTS OF THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
3	NOTE 10, UTILITIES	12/23/19
2	ISSUED FOR DESIGN REVIEW	12/2/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

JOHN R. CHAGNON No. 7651 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

SCALE: 1'=10" MAY 2019

UTILITY PLAN

C4

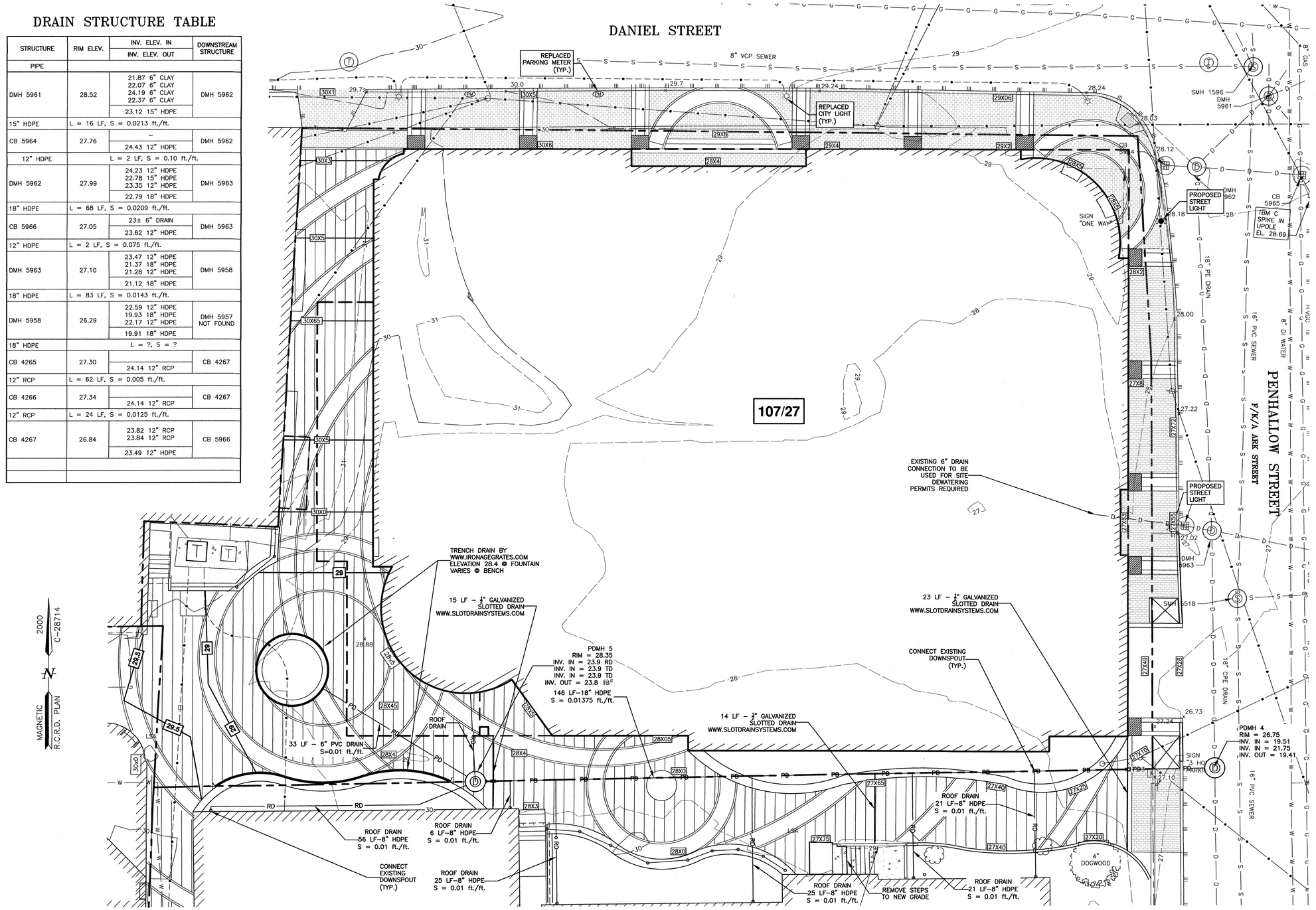
FB 402 PG 1

3039

J:\JOBS\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 SITE 60 PENHALLOW.dwg, C4 UTILITY

DRAIN STRUCTURE TABLE

STRUCTURE	RIM ELEV.	INV. ELEV. IN / INV. ELEV. OUT	DOWNSTREAM STRUCTURE
PIPE			
DMH 5961	28.52	21.87 6" CLAY 22.07 6" CLAY 24.19 6" CLAY 22.37 6" CLAY	DMH 5962
		23.12 15" HDPE	
15" HDPE	L = 16 LF, S = 0.0213 ft./ft.		
CB 5964	27.76	–	DMH 5962
		24.43 12" HDPE	
12" HDPE	L = 2 LF, S = 0.10 ft./ft.		
DMH 5962	27.99	24.23 12" HDPE 22.78 15" HDPE 23.35 12" HDPE	DMH 5963
		22.79 18" HDPE	
18" HDPE	L = 68 LF, S = 0.0209 ft./ft.		
CB 5966	27.05	23± 6" DRAIN	DMH 5963
		23.62 12" HDPE	
12" HDPE	L = 2 LF, S = 0.075 ft./ft.		
DMH 5963	27.10	23.47 12" HDPE 21.37 18" HDPE 21.28 12" HDPE	DMH 5958
		21.12 18" HDPE	
18" HDPE	L = 83 LF, S = 0.0143 ft./ft.		
DMH 5958	26.29	22.59 12" HDPE 19.93 18" HDPE 22.17 12" HDPE	DMH 5957 NOT FOUND
		19.91 18" HDPE	
18" HDPE	L = ?, S = ?		
CB 4265	27.30		CB 4267
		24.14 12" RCP	
12" RCP	L = 62 LF, S = 0.005 ft./ft.		
CB 4266	27.34		CB 4267
		24.14 12" RCP	
12" RCP	L = 24 LF, S = 0.0125 ft./ft.		
CB 4267	26.84	23.82 12" RCP 23.84 12" RCP	CB 5966
		23.49 12" HDPE	



APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801–7114
Tel (603) 430–9282
Fax (603) 436–2315

NOTES:

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2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

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4) CITY SHALL BE NOTIFIED IF THERE ARE ANY CONFLICTS WITH PROPOSED DRAINAGE PIPES UNCOVERED DURING CONSTRUCTION. REVIEW AND APPROVAL OF REMEDIES, BY THE CITY, REQUIRED.

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
3	DRAIN PIPE SIZE	12/23/19
2	ISSUED FOR DESIGN REVIEW	12/21/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

JOHN R. CHAGNON No. 9551 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

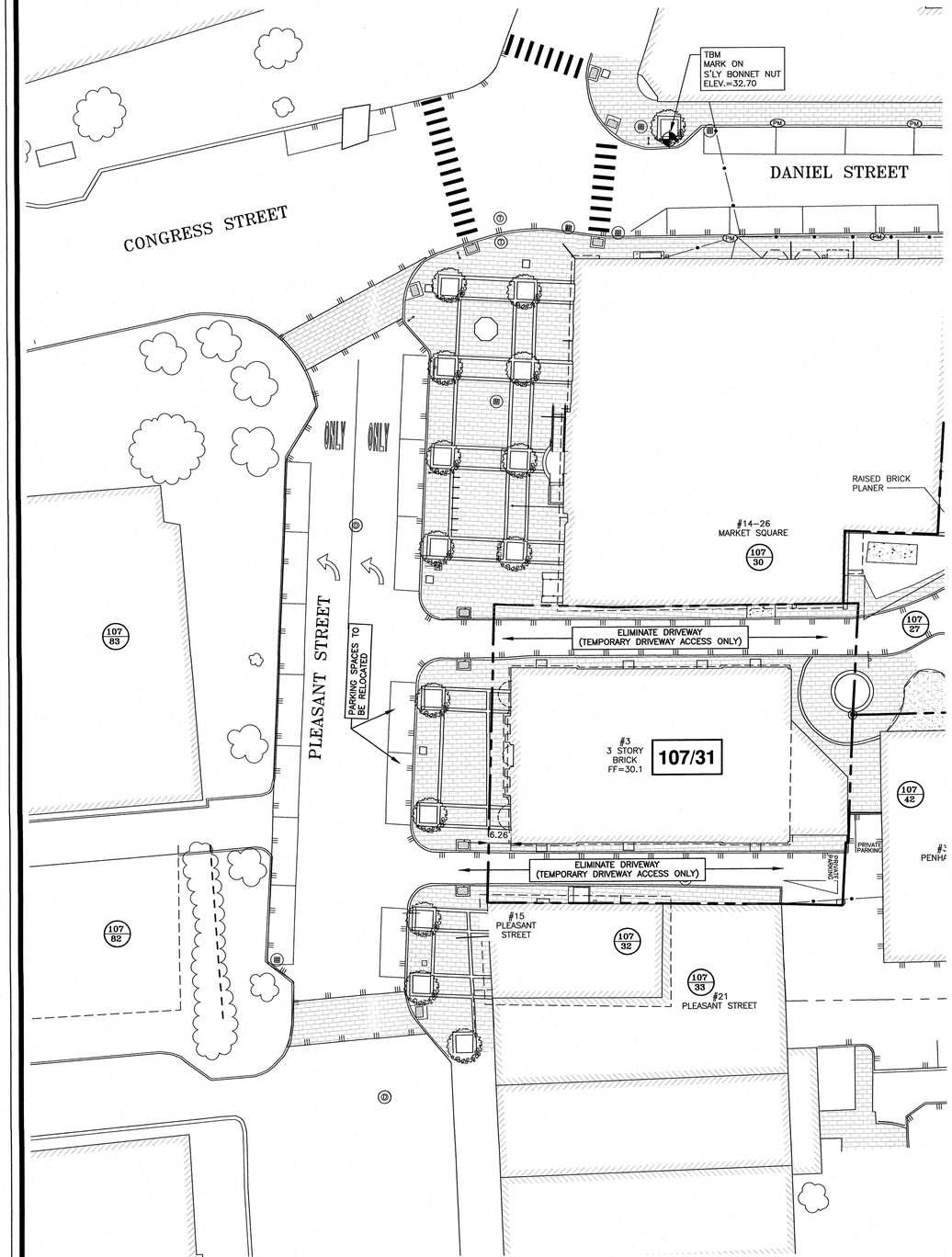
SCALE: 1"=10' MAY 2019

GRADING AND DRAINAGE PLAN C5

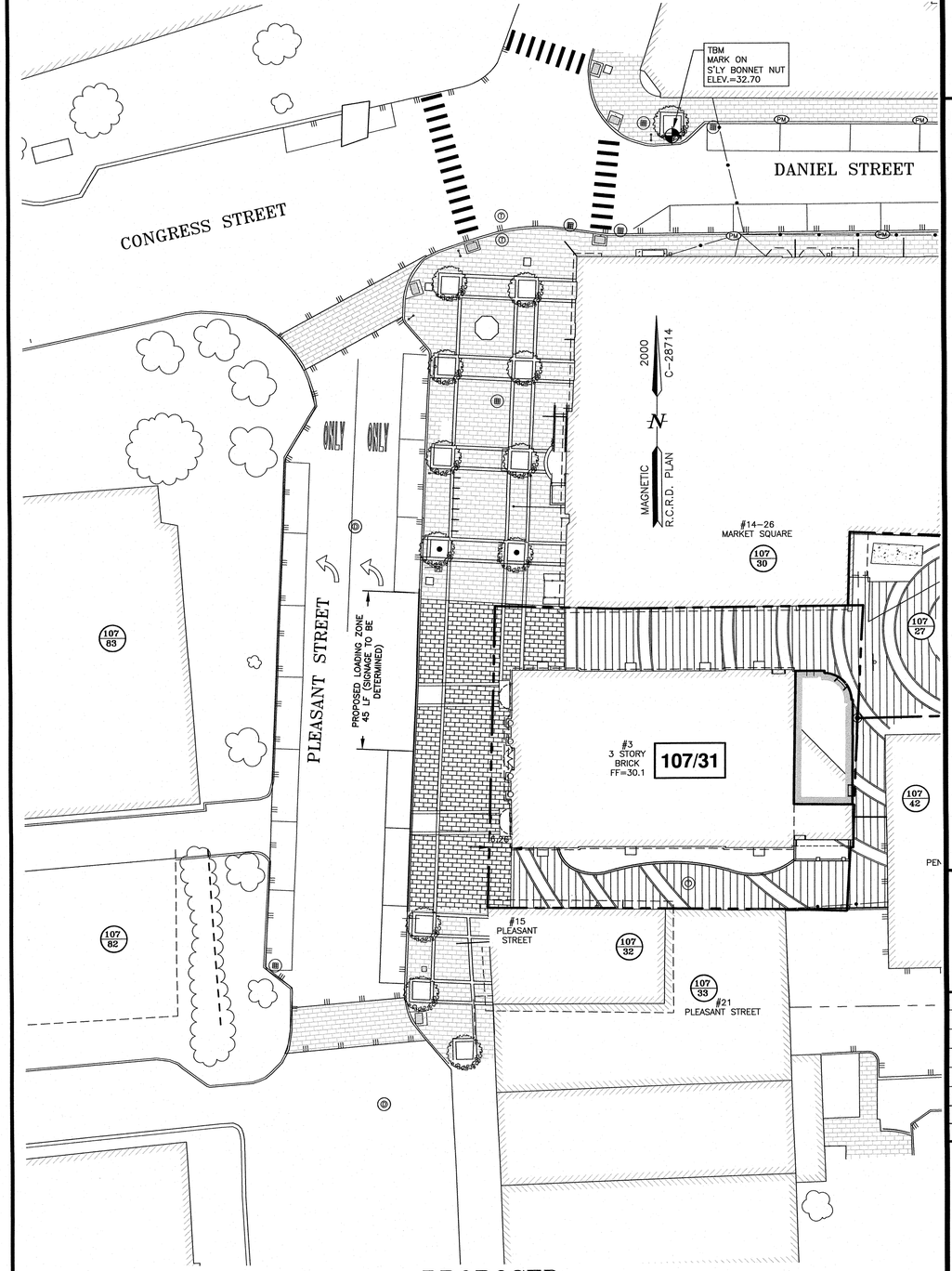
FB 402 PG 1

3039

J:\JOBS3\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 SITE 60 PENHALLOW.dwg, C5 DRAIN_GRADE



EXISTING



PROPOSED

GRAPHIC SCALE

10 0 20 40 60 80 FEET

5 0 5 10 15 20 25 METERS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 107 AS LOT 31.

2) OWNER OF RECORD:

DAGNY TAGGART
30 PENHALLOW STREET, SUITE 300 EAST
PORTSMOUTH, NH 03801

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259E. EFFECTIVE DATE MAY 17, 2005.

4) EXISTING LOT AREA:
8,867 S.F.
0.2036 ACRES

5) ASSESSOR'S MAP 107 LOT 31 IS LOCATED IN THE CHARACTER DISTRICT 5 (CD5) ZONING DISTRICT. PARCEL IS LOCATED WITHIN THE DOWNTOWN OVERLAY DISTRICT (DOD) AND THE HISTORIC DISTRICT (HDC).

6) THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED IMPROVEMENTS IN THE PLEASANT STREET RIGHT-OF-WAY. THIS PLAN WAS APPROVED AS PART OF THE 3 PLEASANT STREET SITE PLAN APPROVAL.

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
3	ISSUED WITH 60 PENHALLOW	11/18/19
2	BIKE RACKS	9/20/19
1	PROPOSED LAYOUT	9/10/19
0	ISSUED FOR COMMENT	8/27/19

REVISIONS

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 738 JOHN R. CHAGNON

JOHN R. CHAGNON No. 7801 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

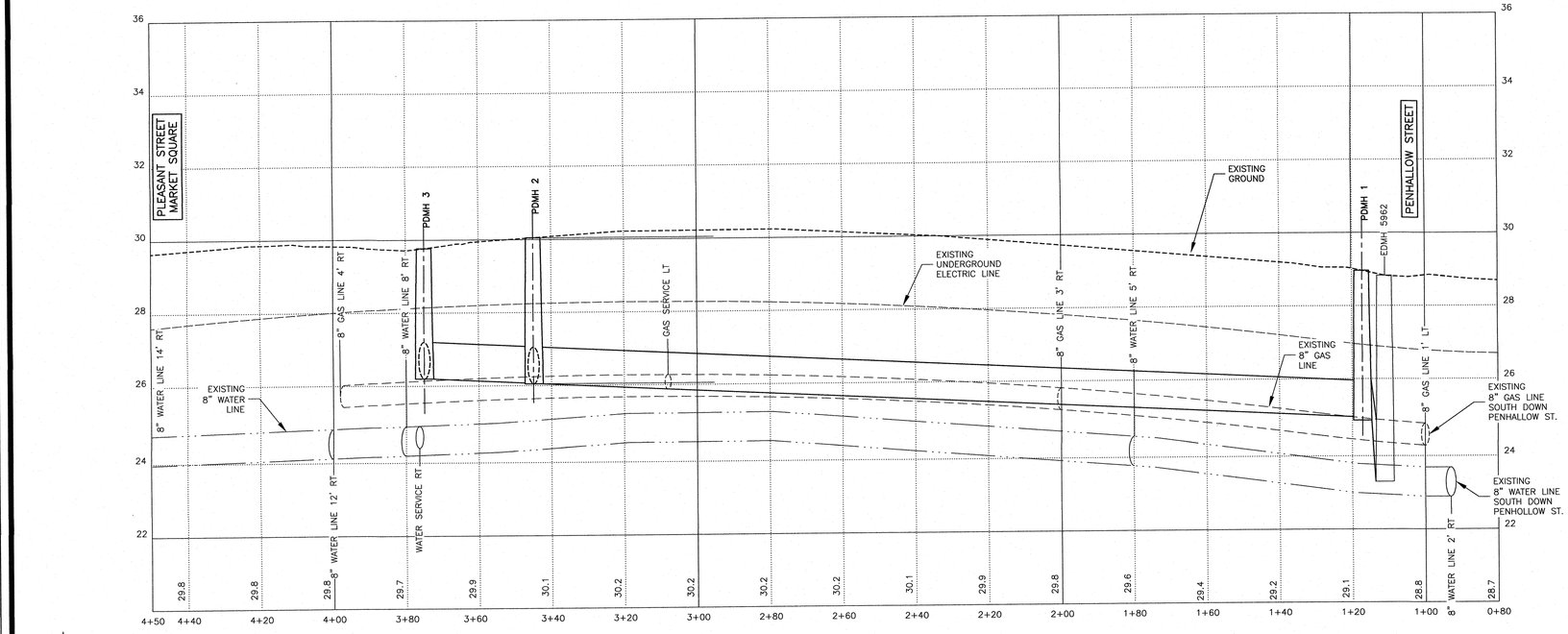
SCALE: 1"=20' AUGUST 2019

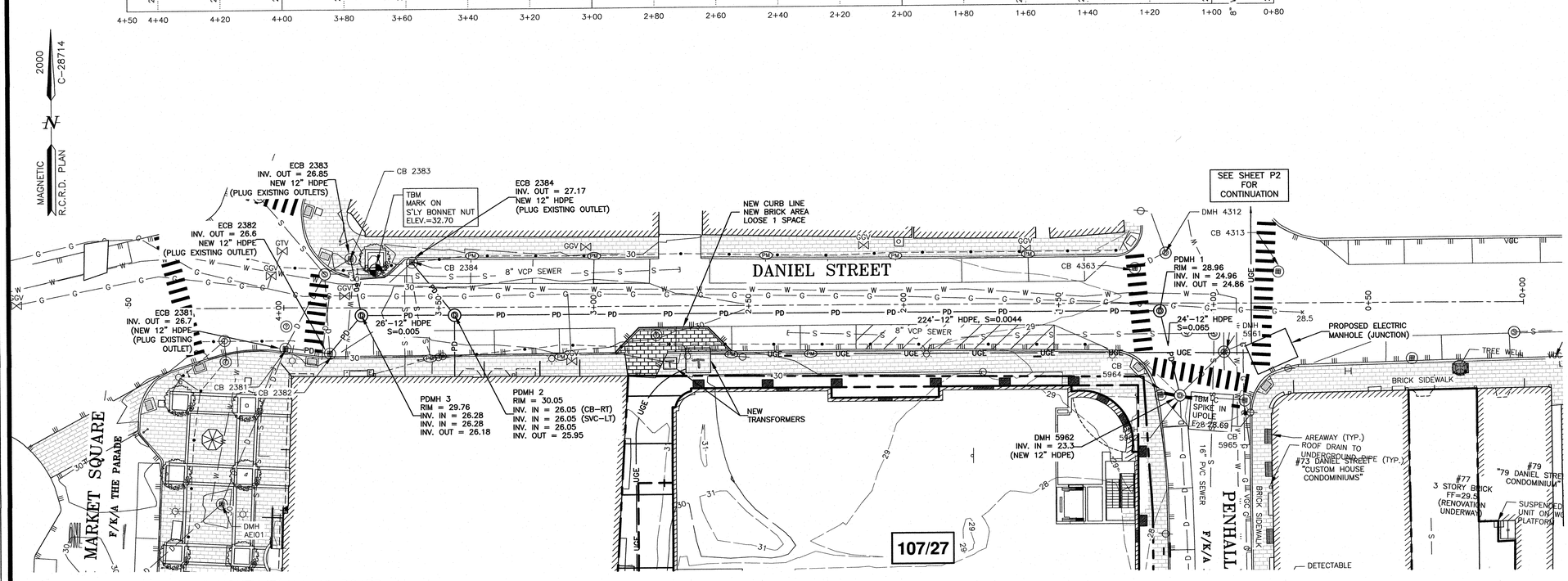
OFFSITE IMPROVEMENT PLAN 3 PLEASANT STREET

C6

FB 402 PG 1

3039





APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

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4) CITY SHALL BE NOTIFIED IF THERE ARE ANY CONFLICTS WITH PROPOSED DRAINAGE PIPES UNCOVERED DURING CONSTRUCTION. REVIEW AND APPROVAL OF REMEDIES, BY THE CITY, REQUIRED.

5) ANY HISTORIC SERVICES ENCOUNTERED DURING UTILITY WORK SHALL BE ABANDONED PER THE REQUIREMENTS OF THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS.

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	12/23/19

REVISIONS

JOHN R. CHAGNON NO. 9351 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

SCALE: 1'=20' MAY 2019

DANIEL STREET
OFFSITE IMPROVEMENTS

P1

FB 402 PG 1

3039

J:\JOBS3\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 SITE 60 PENHALLOW.dwg, P1 DANIEL STREET

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
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4) COORDINATE ALL WORK WITH EVERSOURCE – UTILIZING FINAL APPROVED PLANS

2000 C-28714

MAGNETIC R.C.R.D. PLAN

BOW STREET

NEW RECLOSER

NEW RISER POLE

NEW UNDERGROUND ELECTRIC RUN (TYP.)

PROPOSED ELECTRIC MANHOLE (JUNCTION)

PENHALLOW STREET

NEW OVERHEAD ELECTRIC LINE (TYP.)

RELOCATED POLE AND OVERHEAD LINE

NEW POLE AND CONDUCTOR

COMMERCIAL ALLEY

DANIEL STREET

REMOVE EXISTING POLE AND WIRE

CONNECT UGE TO ON-SITE LINE

BRICK MARKET
60 PENHALLOW STREET
PROPOSED
4 STORY BUILDING
17,200 SF FOOTPRINT
(INCLUDING PLINTHS)
FF 28.5

MARKET STREET

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

GRAPHIC SCALE

10 0 20 40 60 80 FEET
5 0 5 10 15 20 25 METERS

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	12/23/19

REVISIONS

SCALE: 1'=20' DECEMBER 2019

PENHALLOW STREET OFFSITE IMPROVEMENTS

P2

FB 402 PG 1

3039

J:\JOBS\N 3000's\N 3030's\N 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 SITE 60 PENHALLOW.dwg, P2 PENHALLOW STREET

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

THE CONTRACTOR SHALL OBTAIN AN **NPDES** PHASE II STORMWATER PERMIT AND SUBMIT A NOTICE OF INTENT (N.O.I) BEFORE BEGINNING CONSTRUCTION AND SHALL HAVE ON SITE A STORMWATER POLLUTION PREVENTION PLAN (**S.W.P.P.P.**) AVAILABLE FOR INSPECTION BY THE PERMITTING AUTHORITY DURING THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT THE **S.W.P.P.P.** AND INSPECTING AND MAINTAINING ALL BMP'S CALLED FOR BY THE PLAN. THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (**N.O.T.**) FORM TO THE REGIONAL EPA OFFICE WITHIN 30 DAYS OF FINAL STABILIZATION OF THE ENTIRE SITE OR TURNING OVER CONTROL OF THE SITE TO ANOTHER OPERATOR.

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX, FODS AND CATCH BASIN PROTECTION AROUND THE LIMITS OF DISTURBANCE BEFORE ANY CONSTRUCTION. THE USE OF HAYBALES IS NOT ALLOWED.

REMOVE DEBRIS AND RUBBISH AS REQUIRED. DEMOLISH BUILDINGS AND OTHER IMPROVEMENTS AS SHOWN ON THE PLANS.

CUT AND CAP IMPACTED UTILITIES AS DIRECTED BY UTILITY PROVIDERS.

CONSTRUCT OFF SITE UTILITY IMPROVEMENTS NECESSARY TO CONSTRUCT BUILDING.

CONSTRUCT FOUNDATION

LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO THE PROPOSED BUILDING FOUNDATION. CAP AND MARK TERMINATIONS OR LOG SWING TIES.

BEGIN BUILDING CONSTRUCTION.

CONNECT UTILITIES AS NEEDED.

PLACE BASE MATERIALS IN WALKWAYS AND PROTECT.

CONTINUE BUILDING CONSTRUCTION.

PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. CONSTRUCT OTHER SITE IMPROVEMENTS.

AFTER BUILDINGS ARE COMPLETED, FINISH ALL REMAINING WORK.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

DUST CONTROL: IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

SILT FENCES AND SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

AVOID THE USE OF FUTURE OPEN SPACES (LOAM AND SEED AREAS) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL USE THE ROADBEDS OF FUTURE ACCESS DRIVES AND PARKING AREAS.

ADDITIONAL TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS--CONSTRUCT SILT FENCE OR SILTSOXX AROUND TOPSOIL STOCKPILE.

AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL. STUMPS SHALL BE DISPOSED OF IN AN APPROVED FACILITY.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
- A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
- EROSION CONTROL BLANKETS HAVE BEEN INSTALLED

VEGETATIVE PRACTICE

FOR PERMANENT MEASURES AND PLANTINGS:

LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE.

FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

SEED SHALL BE SOWN AT THE RATES SHOWN IN THE TABLE BELOW. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE, AND SHALL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE:

GENERAL COVER	PROPORTION	SEEDING RATE
CREEPING RED FESCUE	50%	100 LBS/ACRE
KENTUCKY BLUEGRASS	50%	

SLOPE SEED (USED ON ALL SLOPES GREATER THAN OR EQUAL TO 3:1)

CREEPING RED FESCUE	42%	
TALL FESCUE	42%	48 LBS/ACRE
BIRDSFOOT TREFOIL	16%	

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH APPLICABLE STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:
PERENNIAL RYE: 0.7 LBS/1,000 S.F.
MULCH: 1.5 TONS/ACRE

MAINTENANCE AND PROTECTION

THE CONTRACTOR SHALL MAINTAIN ALL LOAM & SEED AREAS UNTIL FINAL ACCEPTANCE AT THE COMPLETION OF THE CONTRACT. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, REMOVAL OF STONES AND OTHER FOREIGN OBJECTS OVER 1/2 INCHES IN DIAMETER WHICH MAY APPEAR AND THE FIRST TWO (2) CUTTINGS OF GRASS NO CLOSER THEN TEN (10) DAYS APART. THE FIRST CUTTING SHALL BE ACCOMPLISHED WHEN THE GRASS IS FROM 2 1/2 TO 3 INCHES HIGH. ALL BARE AND DEAD SPOTS WHICH BECOME APPARENT SHALL BE PROPERLY PREPARED, LIMED AND FERTILIZED, AND RESEEDED BY THE CONTRACTOR AT HIS EXPENSE AS MANY TIMES AS NECESSARY TO SECURE GOOD GROWTH. THE ENTIRE AREA SHALL BE MAINTAINED, WATERED AND CUT UNTIL ACCEPTANCE OF THE LAWN BY THE OWNER'S REPRESENTATIVE.

THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT IS DEVELOPING.

TO BE ACCEPTABLE, SEEDED AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.

SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.

THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.

THE SILT FENCE OR SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

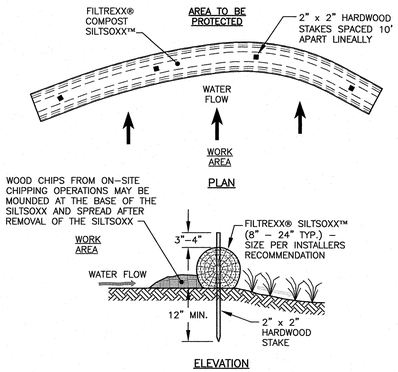
SILT FENCING AND SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE AND SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

WINTER NOTES

ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

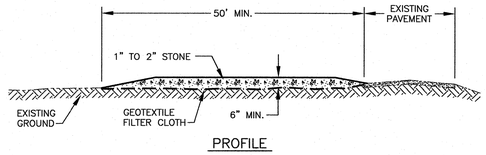
ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

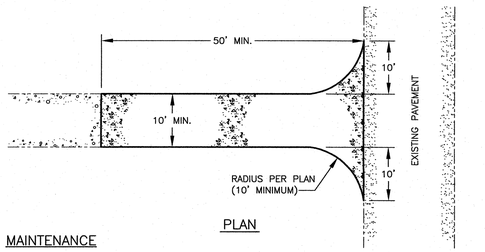
AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

A — FILTREXX® SILTSOXX™ FILTRATION SYSTEM (IF NEEDED) — NTS





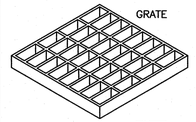
MAINTENANCE

1) MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOP DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
2) IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

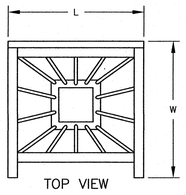
CONSTRUCTION SPECIFICATIONS

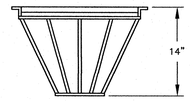
1) STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE.
2) THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3) THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4) THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
5) GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6) ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
8) WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

B / C5 — STABILIZED CONSTRUCTION ENTRANCE — FODS TRACKOUT CONTROL MAT SYSTEM MAY BE SUBSTITUTED — NTS



LENGTH (L) & WIDTH (W) AS REQUIRED TO FIT NHDOT TYPE GRATE & FRAME.





C / C5 — CATCH BASIN INLET BASKET — NTS

1) INLET BASKETS SHALL BE INSTALLED IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION IS COMPLETE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

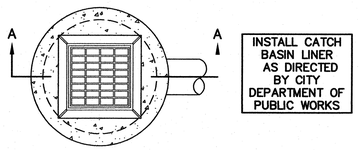
2) FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND, SHALL EXTEND AT LEAST 6" PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.

3) THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE, OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:
- -RAB STRENGTH: 45 LB. MIN. IN ANY PRINCIPAL DIRECTION (ASTM D1682)
- -MULLEN BURST STRENGTH: MIN. 60 psi (ASTM D774)

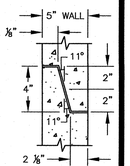
4) THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 gpm/s.f. (MULTIPLY THE PERMITTIVITY IN SEC.-1 FROM ASTM 54491-85 CONSTANT HEAD TEST USING THE CONVERSION FACTOR OF 74.)

5) THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

6) SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.



NOTES:
1) CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2) CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS & SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3) THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4) EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5) OUTLET HOOD SHALL BE A "SNOUT" BY BEST MANAGEMENT PRODUCTS, INC. OR APPROVED EQUAL. SIZING AND INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.



D / — — CATCH BASIN w/ OIL-DEBRIS HOOD — (IF NEEDED) — NTS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
2	DETAIL D	12/23/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19
REVISIONS		

JOHN R. CHAGNON NO. 7651 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

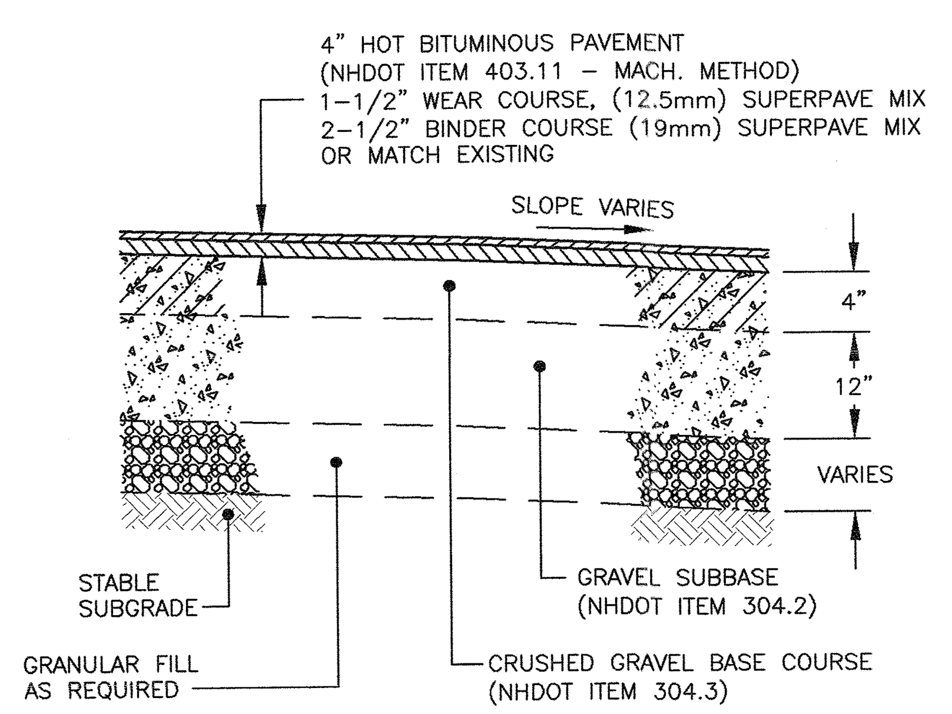
SCALE: AS SHOWN — OCTOBER 2019

DETAILS — **D1**

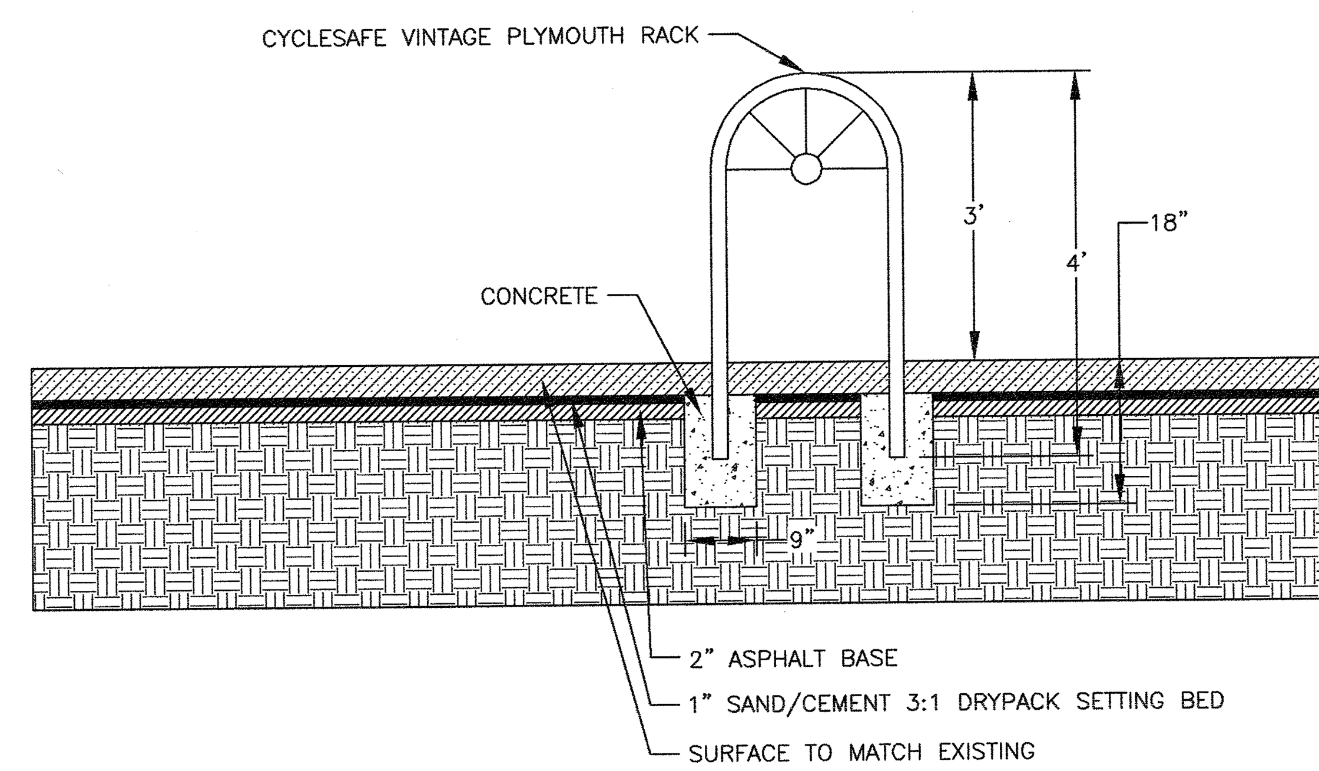
FB 402 PG 1

3039

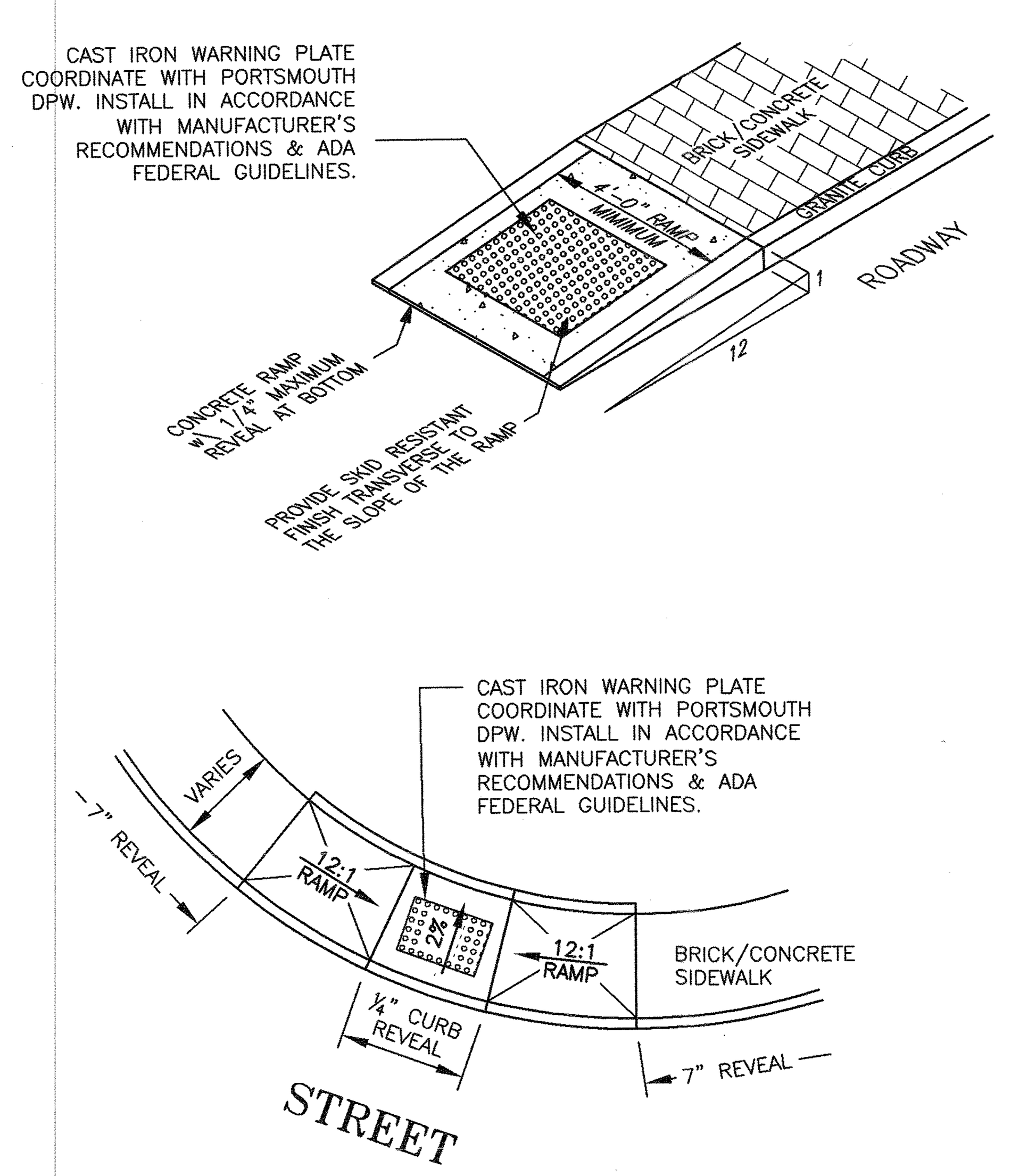
J:\08S3\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 DETAILS 60 PENHALLOW.dwg, DETAILS D1



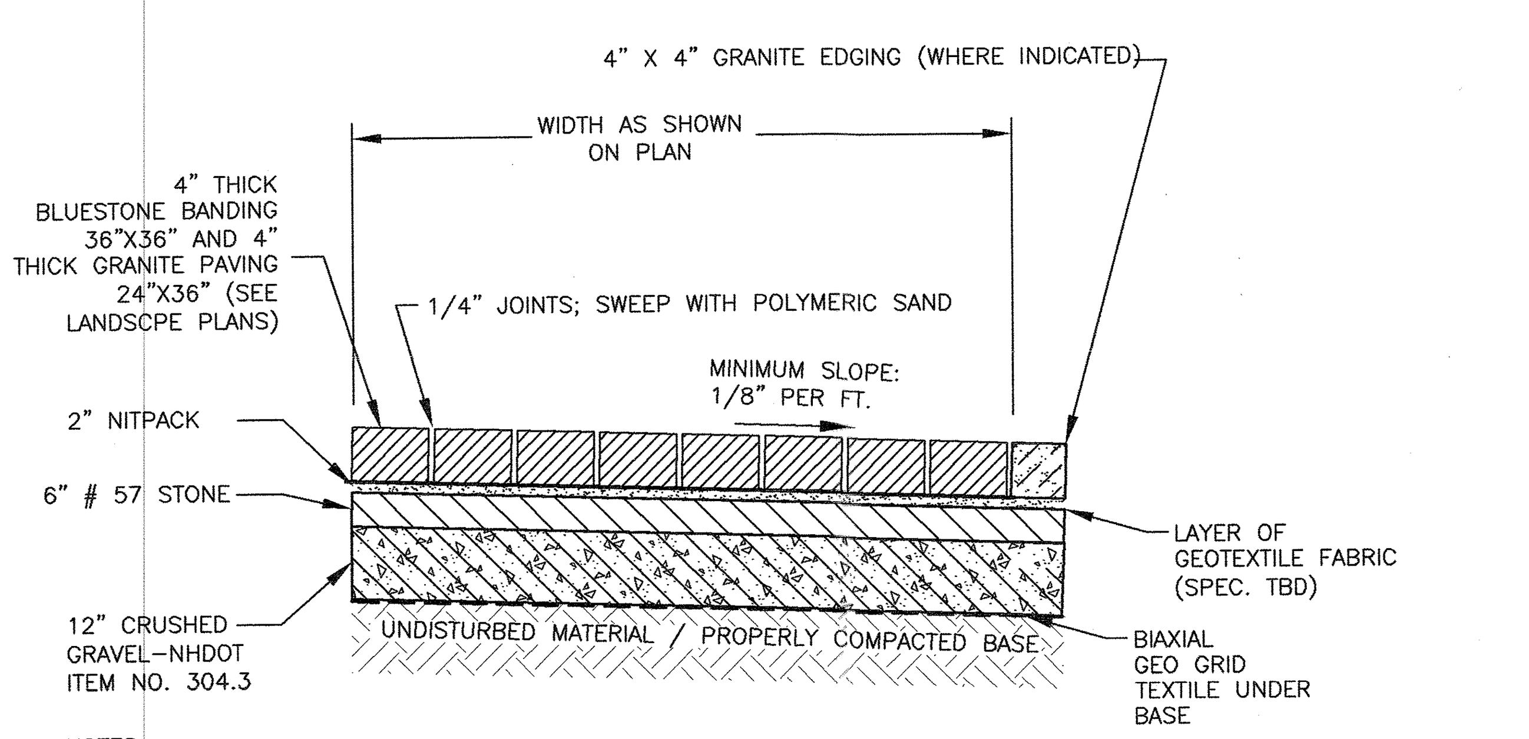
E / – TYPICAL PAVEMENT CROSS–SECTION
OFF SITE REPAIR AS NEEDED — NTS



H / C3 BIKE RACK — NTS



F / C3 TYPICAL SIDEWALK TIP DOWNS — NTS



NOTES:

1) ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY ORDINANCES & SPECIFICATIONS.

G / C3 GRANITE / BLUESTONE DETAIL (DRIVEABLE) — NTS

BRICK PAVEMENT NOTES

SCOPE OF WORK:

1) THE WORK SHALL CONSIST OF CONSTRUCTING/RECONSTRUCTING THE SUB–BASE AND CONSTRUCTING A NEW BRICK SIDEWALK AS DIRECTED IN THE FIELD BY THE ENGINEER AND COORDINATED WITH PORTSMOUTH DPW.
2) REVEAL SHALL BE COORDINATED WITH PORTSMOUTH DPW.

METHODS OF CONSTRUCTION:

A) ALL LABOR AND MATERIALS SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 608, AND CITY OF PORTSMOUTH SPECIFICATIONS FOR NEW BRICK SIDEWALK, SECTION 6.

B) EXCAVATION FOR SIDEWALKS SHALL BE AT A DEPTH OF 10 INCHES BELOW FINISH GRADE. IN AREAS NOT BUTTING CURBING OR BUILDINGS, THE EXCAVATION SHALL BE 6 INCHES WIDER THAN THE FINISHED SIDEWALK WIDTH. AT ALL DRIVE CROSSINGS, THE DEPTH OF EXCAVATION SHALL BE INCREASED ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE NEAT AND SQUARE CUTTING OF EXISTING ASPHALT ROAD SURFACE AS NEEDED. ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF OFF–SITE AT THE CONTRACTOR'S OWN EXPENSE.

C) THE BASE MATERIAL SHALL CONSIST OF A MIXTURE OF STONES OR ROCK FRAGMENTS AND PARTICLES WITH 100% PASSING THE 3 INCH SIEVE, 95% TO 100% PASSING THE 2 INCH SIEVE, 55% TO 85% PASSING THE 1 INCH SIEVE, AND 27% TO 52% PASSING THE NO. 4 SIEVE. AT LEAST 50% OF THE MATERIALS RETAINED ON THE 1 INCH SIEVE SHALL HAVE A FRACTURED FACE. THE BASE MATERIAL SHALL BE THOROUGHLY COMPACTED TO THE DEPTH SPECIFIED OR DIRECTED. IN THE WAY OF ALL DRIVE CROSSINGS THE BASE WILL BE INCREASED TO A COMPACTED DEPTH OF 12 INCHES. GRAVEL REQUIREMENTS FOR RECONSTRUCTION WILL BE AS DIRECTED, BASED ON SITE CONDITIONS. THE WORK INCLUDES BACKING UP ANY AND ALL CURB BEING INSTALLED BY OTHERS ON BOTH SIDES.

D) THE CLAY BRICK PAVERS SHALL BE LAID IN A 1 INCH BED OF A SAND MIXTURE COMPRISED OF: 3 PARTS SAND MIXED WITH 1 PART PORTLAND CEMENT.

E) THE CONTRACTOR SHALL LAY THE BRICKS SO THAT APPROXIMATELY 4.5 BRICKS SHALL COVER ONE SQUARE FOOT.

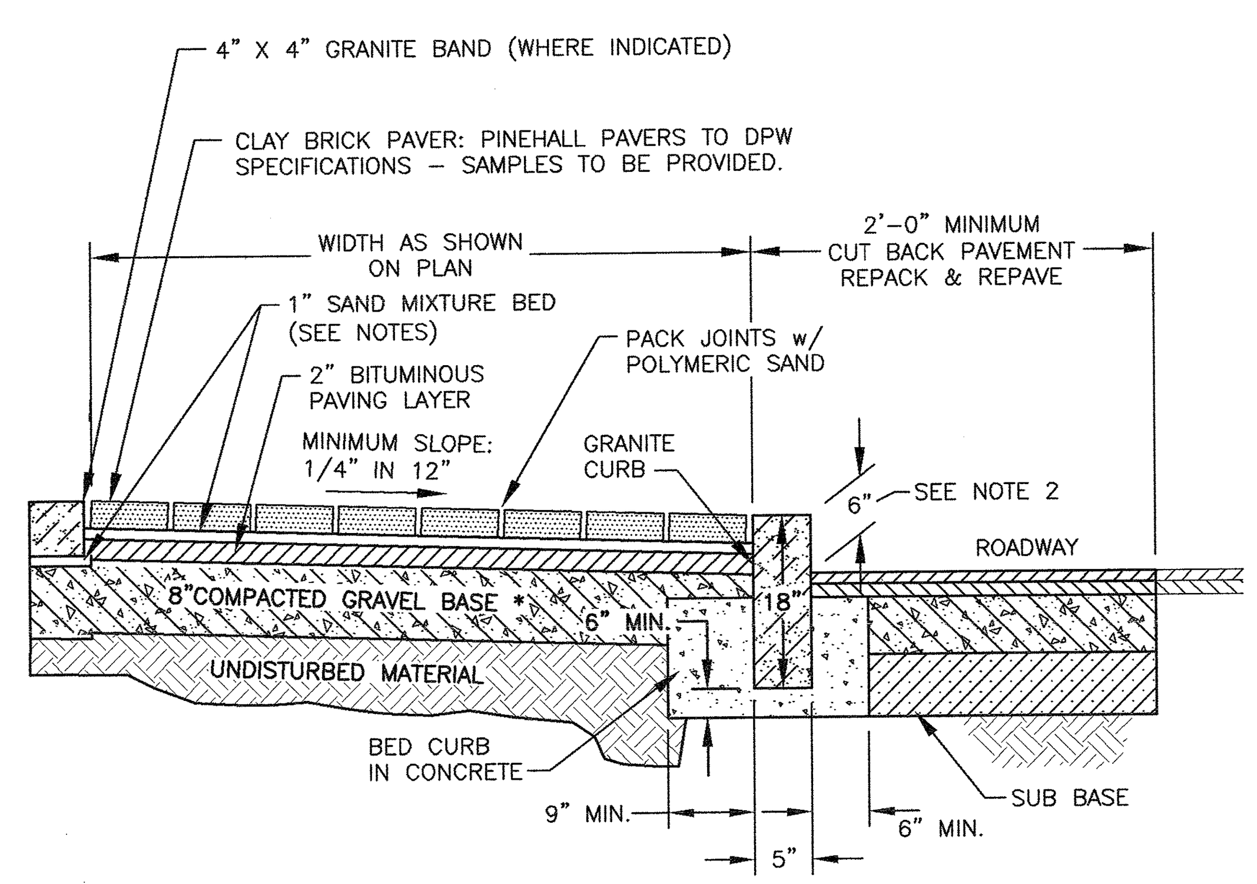
F) THE SIDEWALK SHALL PITCH TOWARDS THE STREET AS SHOWN ON THE GRADING PLAN.

G) IN AREAS WHERE THE FRONT OF THE BRICK SIDEWALK IS NOT ADJACENT TO GRANITE CURBING, THE CONTRACTOR SHALL INSTALL EDGING TO HOLD THE BRICKS IN PLACE. SUCH EDGING SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.

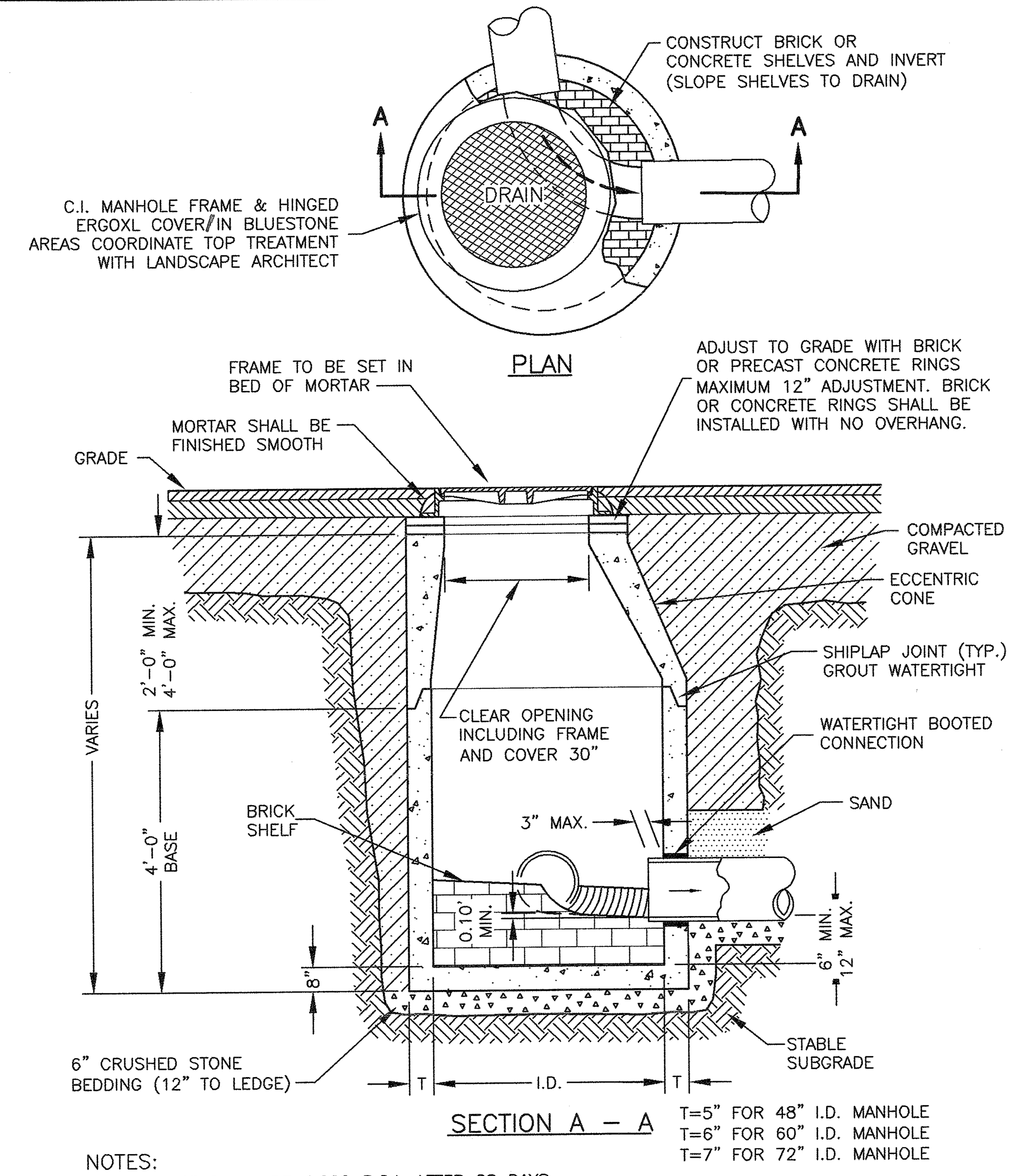
H) THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE BRICKS FOR APPROVAL BY THE CITY BEFORE BRICKS ARE INSTALLED.

CONSTRUCTION NOTE:

EXISTING GRANITE CURB DISTURBED BY CONSTRUCTION SHALL BE REUSED AND ANY MISSING CURB SHALL BE REPLACED WITH NEW CURB MATCHING EXISTING CURB SIZE. NO CURB LESS THAN 3' IN LENGTH WILL BE ALLOWED.



I / C3 BRICK SIDEWALK w/ VERTICAL GRANITE CURB
(STONE DUST BEDDING OVER BITUMINOUS PAVING) — NTS



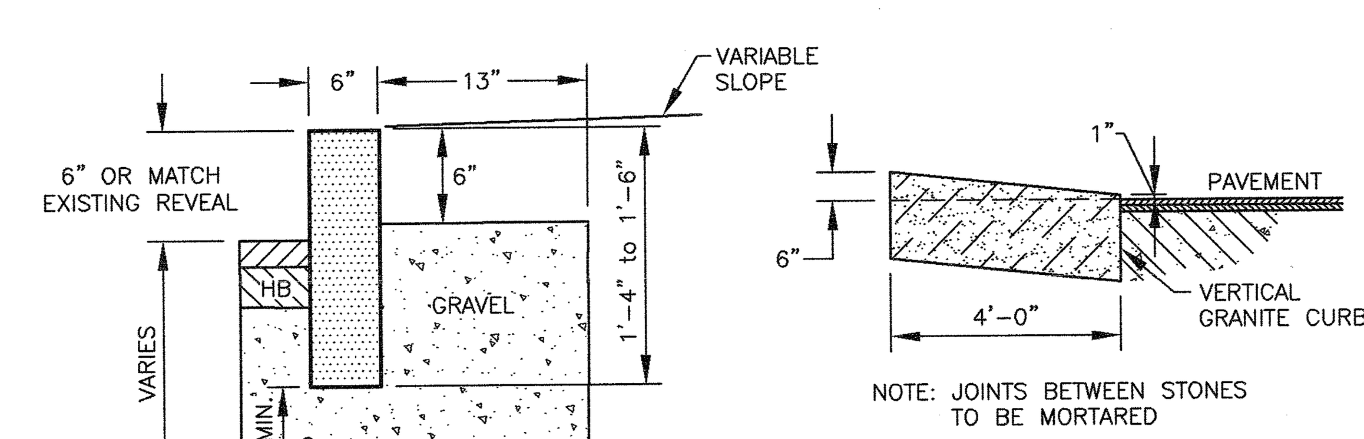
NOTES:
1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FOOT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5. ALL MANHOLES SHALL BE 48" I.D. UNLESS SPECIFIED OTHERWISE ON THE PLANS.
6. MANHOLE SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND H–20 LOADING.
7. PARGE SPACES BETWEEN PIPE AND MANHOLE WITH MOTAR.

J / C5 DRAIN MANHOLE WITH BOOT DETAIL — NTS

MIN. LENGTH OF CURB STONES 3FT.
MAX. LENGTH OF CURB STONES 10FT.
MAX. LENGTH OF STRAIGHT CURB STONES LAID ON CURVES SEE CHART

NOTE: ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATE LENGTH.

Radius	Max. length
21'	3'
22' – 28'	4'
29' – 35'	5'
36' – 42'	6'
43' – 49'	7'
50' – 56'	8'
57' – 60'	9'
over 60'	10'



VERTICAL GRANITE CURB

GRANITE CURB END

K / C3 GRANITE CURBING DETAILS — NTS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road – Unit 3
Portsmouth, N.H. 03801–7114
Tel (603) 430–9282
Fax (603) 436–2315

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1–888–DIG–SAFE (1–888–344–7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
2	DETAILS E, F, I & K	12/23/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

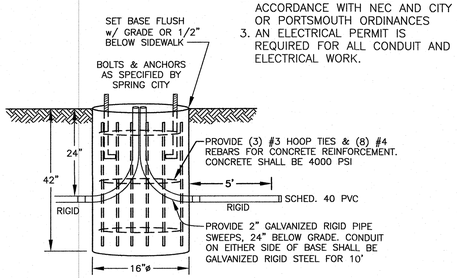
STATE OF NEW HAMPSHIRE · JOHN R. CHAGNON · No. 7851 · LICENSED · PROFESSIONAL ENGINEER

SCALE: AS SHOWN — OCTOBER 2019

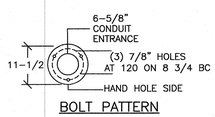
DETAILS — D2

FB 402 PG 1 — 3039

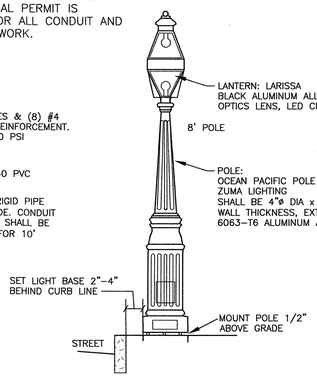
NOTES:
1. ELECTRICAL INSTALLATION SHALL BE BY A LICENSED ELECTRICIAN.
2. LIGHTS SHALL BE WIRED IN ACCORDANCE WITH NEC AND CITY OR PORTSMOUTH ORDINANCES
3. AN ELECTRICAL PERMIT IS REQUIRED FOR ALL CONDUIT AND ELECTRICAL WORK.



LIGHT POLE BASE DETAIL

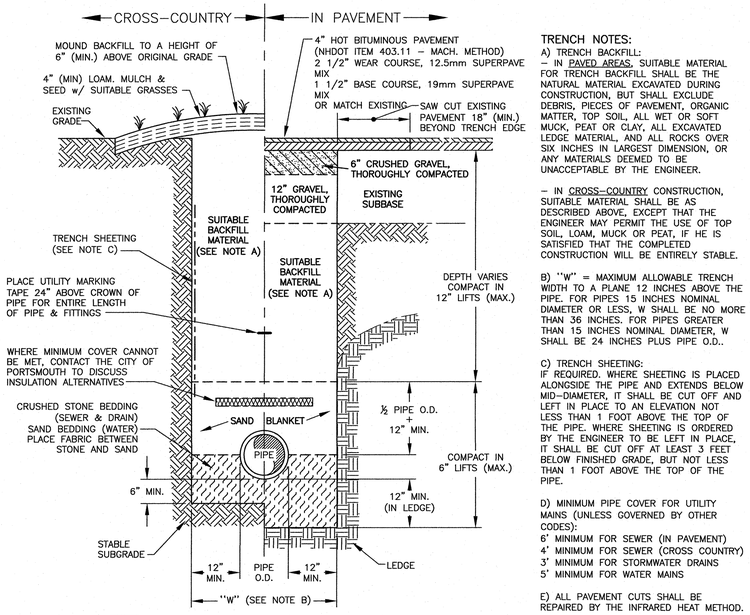


BOLT PATTERN



LIGHT POLE DETAIL

L / C3 CITY STREET LIGHT
NTS



N / — TYPICAL PIPE TRENCH
NTS

TRENCH NOTES:
A) TRENCH BACKFILL:
– IN PAVED AREAS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.

– IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE.

B) "W" = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D..

C) TRENCH SHEETING:
IF REQUIRED. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

D) MINIMUM PIPE COVER FOR UTILITY MAINS (UNLESS GOVERNED BY OTHER CODES):
6' MINIMUM FOR SEWER (IN PAVEMENT)
4' MINIMUM FOR SEWER (CROSS COUNTRY)
3' MINIMUM FOR STORMWATER DRAINS
5' MINIMUM FOR WATER MAINS

E) ALL PAVEMENT CUTS SHALL BE REPAIRED BY THE INFRARED HEAT METHOD.

PLAN

SECTION B-B

NOTES:
1) ALL MATERIALS SHALL BE APPROVED BY THE PORTSMOUTH WATER DEPARTMENT PRIOR TO INSTALLATION AND USE.
2) ALL JOINTS SHALL BE MECHANICAL.
3) "CLEAR" DIMENSIONS SHOWN ATE REQUIRED FOR WORKSPACE. NO JOINTS ON PIPE BEING TAPPED WITHIN "CLEAR" AREA.
4) FORD TYPE STAINLESS STEEL TAPPING SADDLES OR APPROVED EQUAL ARE ALSO ACCEPTABLE.

M / C4 TAPPING SLEEVE AND GATE
INSTALL PER PORTSMOUTH REQUIREMENTS NTS

SEWER SERVICE

SECTION

SEWER SERVICE CONNECTION

NOTE:
PREFERRED LOCATION IS WATER AT LEAST 18" ABOVE SEWER--CONTRACTOR TO COMPLY AS MUCH AS POSSIBLE.

WATER CROSSING

P / C4 SEWER SERVICE DETAILS
INSTALL PER PORTSMOUTH REQUIREMENTS NTS

SEWER UTILITY GENERAL NOTES:

1) MINIMUM PIPE SIZE FOR COMMERCIAL SERVICE SHALL BE SIX INCHES.

2) PIPE AND JOINT MATERIALS:
A. PLASTIC SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 To T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
AWWA C900	PVC (SOLID WALL)	8" THROUGH 18"

*PVC: POLYVINYL CHLORIDE

2. JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON BELL AND SPIGOT TYPE.

B. DUCTILE IRON PIPE, FITTINGS AND JOINTS.

1. DUCTILE IRON PIPE AND FITTINGS FOR SEWERS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:

A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.

A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOULDS OR SAND LINED MOULDS FOR SEWER APPLICATIONS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:

A21.11 RUBBER GASKET JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.

3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE DEPENDING ON THE PIPE ENCOUNTERED, FOR PVC PIPE, CUT IN A SANITARY TEE. FOR CLAY PIPE, USE INSERT-A-TEE OR CUT IN A SANITARY TEE. ALL WORK TO BE APPROVED BY GOVERNING BODY.

6) HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND REFILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7) TESTING: WHEN REQUIRED BY THE GOVERNING AUTHORITY, TESTING SHALL CONFORM TO ENV-WQ 704.07.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM DWELLING TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9) WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE, UNLESS IT IS ON A SHELF 12" HIGHER, AND 18" APART.

10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE, FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%- 55% PASSING	3/8 INCH SCREEN
0%- 10% PASSING	#4 SIEVE
0%- 5% PASSING	#8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.

11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPE FINDER.

12) CAST-IN-PLACE CONCRETE: SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:

CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG OF CEMENT
MAXIMUM AGGREGATE SIZE: 3/4 INCH

13) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

14) BACKFILL UP TO SUBBASE GRAVEL SHALL BE WITH EXCAVATED SOIL FROM TRENCHING OPERATIONS. COMPACT IN 8" LIFTS WITH VIBRATORY PLATE COMPACTORS TO 90% OF MODIFIED PROCTOR DENSITY. IF FINE-GRAINED, COMPACT WITH POGO STICKS OR SHEEPSFOOT ROLLERS. PLACE NO LARGE ROCKS WITHIN 24" OF PIPE. TRENCHES THAT ARE NOT ADEQUATELY COMPACTED SHALL BE RE-EXCAVATED AND BACKFILLED UNDER THE SUPERVISION OF THE DESIGN ENGINEER OR GOVERNING BODY. UNSUITABLE BACKFILL MATERIAL INCLUDES CHUNKS OF PAVEMENT, TOPSOIL, ROCKS OVER 6" IN SIZE, MUCK, PEAT OR PIECES OF PAVEMENT.

15) THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB-SITE SAFETY AND COMPLIANCE WITH GOVERNING REGULATIONS.

16) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. FOR TRENCH WIDTH SEE TRENCH DETAIL.

17) SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90% - 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.

18) BASE COURSE GRAVEL, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE:
"STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION".

19) FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

20) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.

21) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

22) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION.

23) THE PURPOSE OF THIS PLAN IS TO SHOW STANDARDS FOR SEWER CONSTRUCTION.

24) ALL WORK SHALL BE IN COMPLIANCE WITH NHDES CODE OF ADMINISTRATIVE RULES PART ENV-WQ 704 DESIGN OF SEWERS.

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

NOTES:

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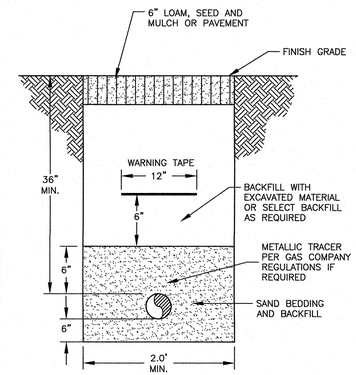


0 / C4 GAS SERVICE TRENCH
NTS

BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
2	DETAILS L, N, O, & P	12/23/19
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS

STATE OF NEW HAMPSHIRE
JOHN A.R. CHAMPION
No. 13851
LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN OCTOBER 2019

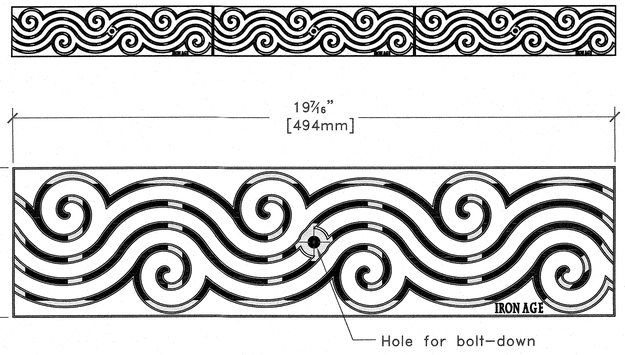
DETAILS D3

FB 402 PG 1

3039

J:_JOBS\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\SIte\3039 DETAILS 60 PENHALLOW.dwg, DETAILS 03

3 GRATES ARRAYED



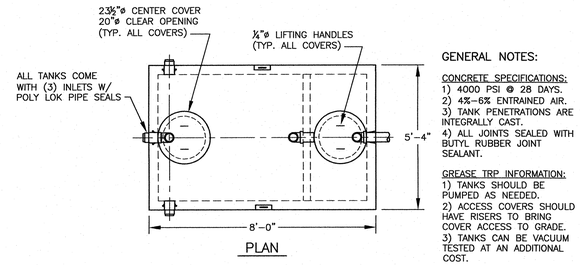
NOTES:
1. Material: cast iron
2. Natural finish
3. Total thickness: $1\frac{3}{16}$"
4. Fits drain channels manufactured by:
   ABT® PolyDrain®,
   ACO™ KlassikDrain-K100/K100S
   MEADRAIN® 1000 Series
5. No openings greater than $\frac{1}{4}$"
6. Due to casting inconsistencies, all dimensions are nominal.
7. Weight: 11 lbs. per casting

IRON AGE DESIGNS
2104 SW 152nd St #4 Burien, WA 98166
TEL 206.276.0925 FAX 206.257.0318
www.ironagegrates.com

Argo 5"x20" Heel-Proof Trench Grate
drawing no. ARG.A.05x20
drawn by: CD
scale: NTS
date: 01/01/09

Registration Number: VA 2-007-074

Q / C3 IRON AGE GRATE DETAIL
WWW.IRONAGEGRATES.COM
(877)418-3568
ARGO 5" X 20' HEEL PROOF TRENCH GRATE NTS

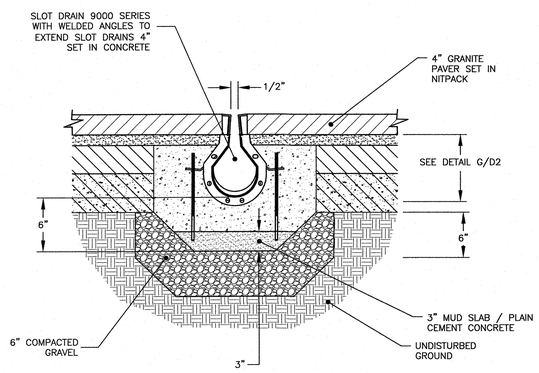


GENERAL NOTES:

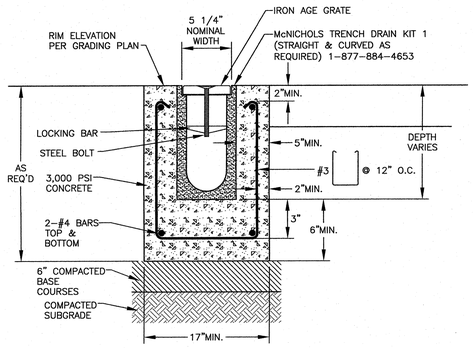
CONCRETE SPECIFICATIONS:
1) 4000 PSI @ 28 DAYS.
2) 4%-6% ENTRAINED AIR.
3) TANK PENETRATIONS ARE INTEGRALLY CAST.
4) ALL JOINTS SEALED WITH BUTYL RUBBER JOINT SEALANT.

GREASE TRP INFORMATION:
1) TANKS SHOULD BE PUMPED AS NEEDED.
2) ACCESS COVERS SHOULD HAVE RISERS TO BRING COVER ACCESS TO GRADE.
3) TANKS CAN BE VACUUM TESTED AT AN ADDITIONAL COST.

T / C4 AMERICAN CONCRETE INDUSTRIES
1000 GALLON 2 COMP. GREASE TRAP NTS
9,200 Lbs ITEM # 8827



R / C5 SLOT DRAIN DETAIL
WWW.SLOTDRAINSYSTEMS.COM
(855)497-7508
NTS



S / C5 TRENCH DRAIN DETAIL
AT FOUNTAIN AND BENCH NTS

AMBIT ENGINEERING, INC.
Civil Engineers & Land Surveyors
200 Griffin Road - Unit 3
Portsmouth, N.H. 03801-7114
Tel (603) 430-9282
Fax (603) 436-2315

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1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

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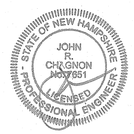
BRICK MARKET
60 PENHALLOW STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR APPROVAL	11/18/19
0	ISSUED FOR COMMENT	10/8/19

REVISIONS



SCALE: AS SHOWN OCTOBER 2019

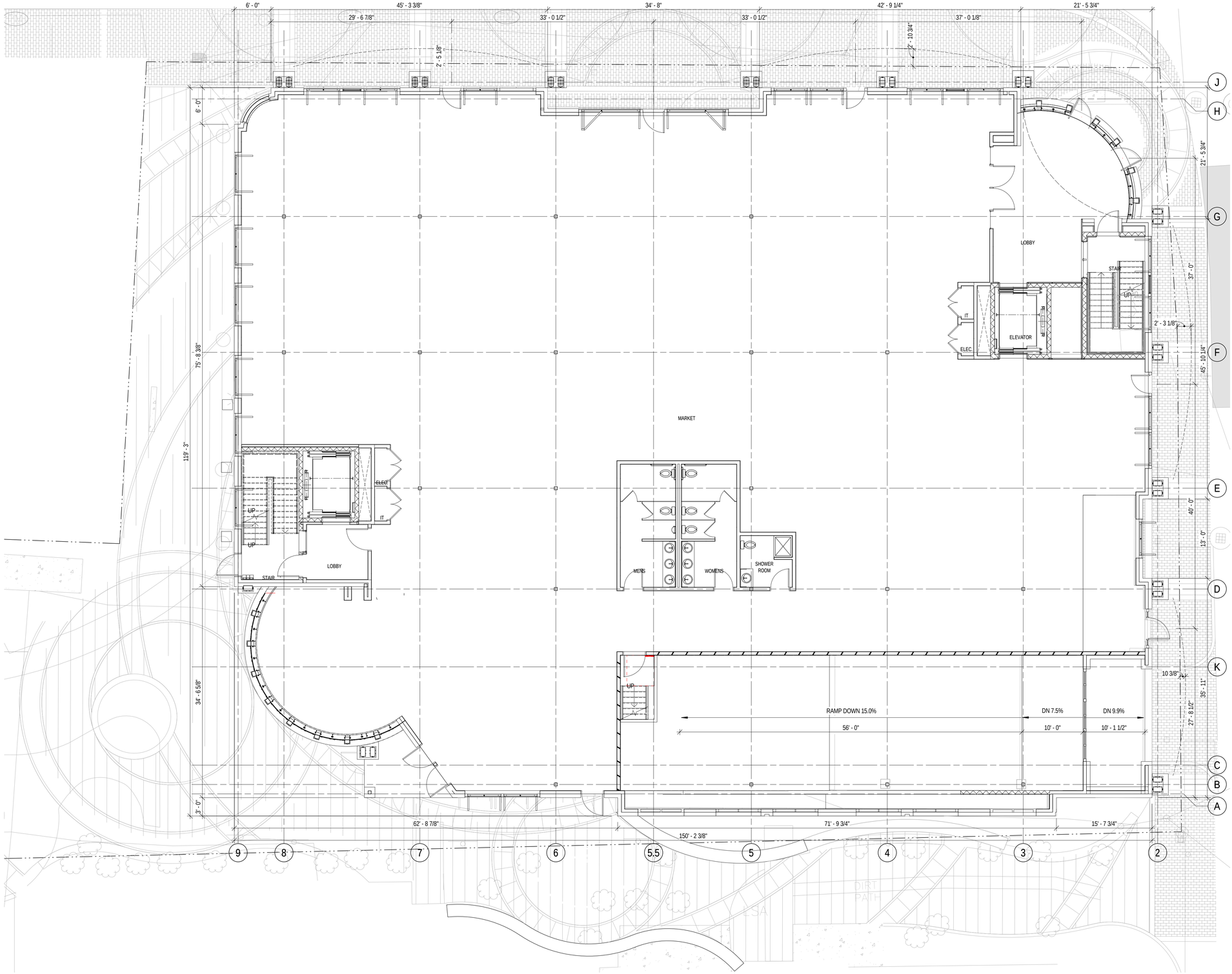
DETAILS

D4

FB 402 PG 1

3039

J:\3065's\JN 3000's\JN 3030's\JN 3039\2019 Site Development 60 Penhallow\Plans & Specs\Site\3039 DETAILS 60 PENHALLOW.dwg, DETAILS D4



1 FIRST FLOOR OVERALL PLAN
1/8" = 1'-0"

GROSS SQUARE FOOTAGE	
NOTE: MEASURED TO 6" INTO EXTERIOR WALLS FROM INSIDE FACE	
ABOVE GRADE	
FIRST FLOOR	16,462
MECHANICAL MEZZANINE	724
SECOND FLOOR	16,669
THIRD FLOOR	16,130
FOURTH FLOOR	9,593
TOTAL	59,578
BELOW GRADE	
FIRST FLOOR	18,131
SECOND FLOOR	17,569
TOTAL	35,700
GRAND TOTAL (ABOVE AND BELOW TOTALS)	95,278

FOOTPRINT	
NOTE: MEASURED TO OUTSIDE FACE OF EXTERIOR WALLS	
FIRST FLOOR	17,197

GRAPHIC SCALE: 1/8" = 1'-0"
0' 4' 8' 16'

JSA
ARCHITECTS
INTERIORS
PLANNERS
273 CORPORATE DRIVE
PORTSMOUTH, NH 03801
T 603.436.2551
F 603.436.6973
www.jsainc.com

60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale: 1/8" = 1'-0"
Date: 11/18/2019
Project Number: P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

FIRST FLOOR PLAN

A0.01

GROSS SQUARE FOOTAGE	
NOTE: MEASURED TO 6" INTO EXTERIOR WALLS FROM INSIDE FACE	
ABOVE GRADE	
FIRST FLOOR	16,462
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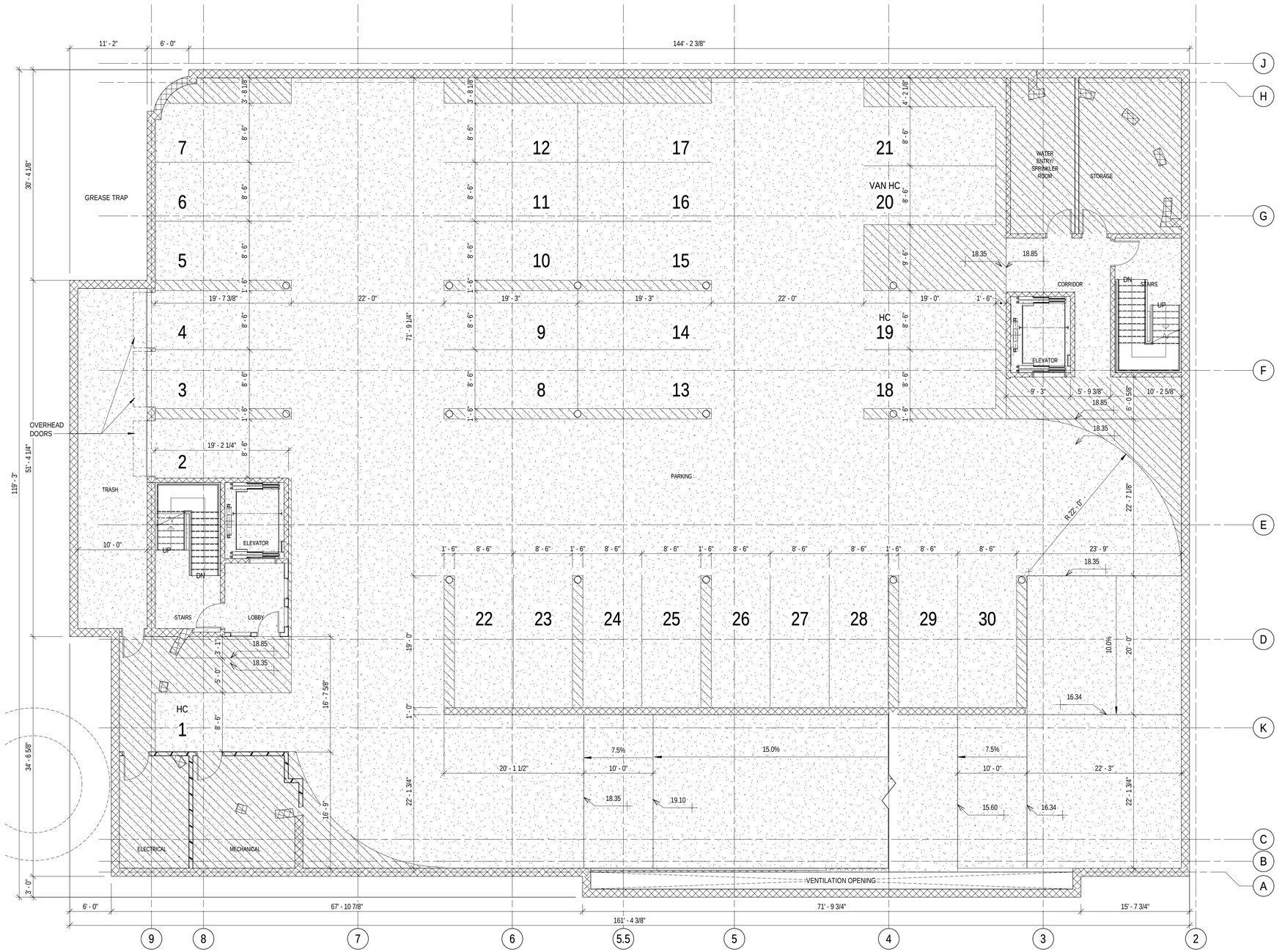
NOTE: MEASURED TO OUTSIDE FACE OF EXTERIOR WALLS	
FIRST FLOOR	17,197



1 PARKING LEVEL 1 PLAN
1/8" = 1'-0"

GRAPHIC SCALE: 1/8" = 1'-0"
0' 4' 8' 16'

JSA
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INTERIORS
PLANNERS

273 CORPORATE DRIVE
PORTSMOUTH, NH 03801
T 603.436.2551
F 603.436.6973
www.jsainc.com

J & M Lighting Design Inc.
PO Box 1959
Kennebunkport, ME 04046
207.967.5223

60 PENHALLOW STREET at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

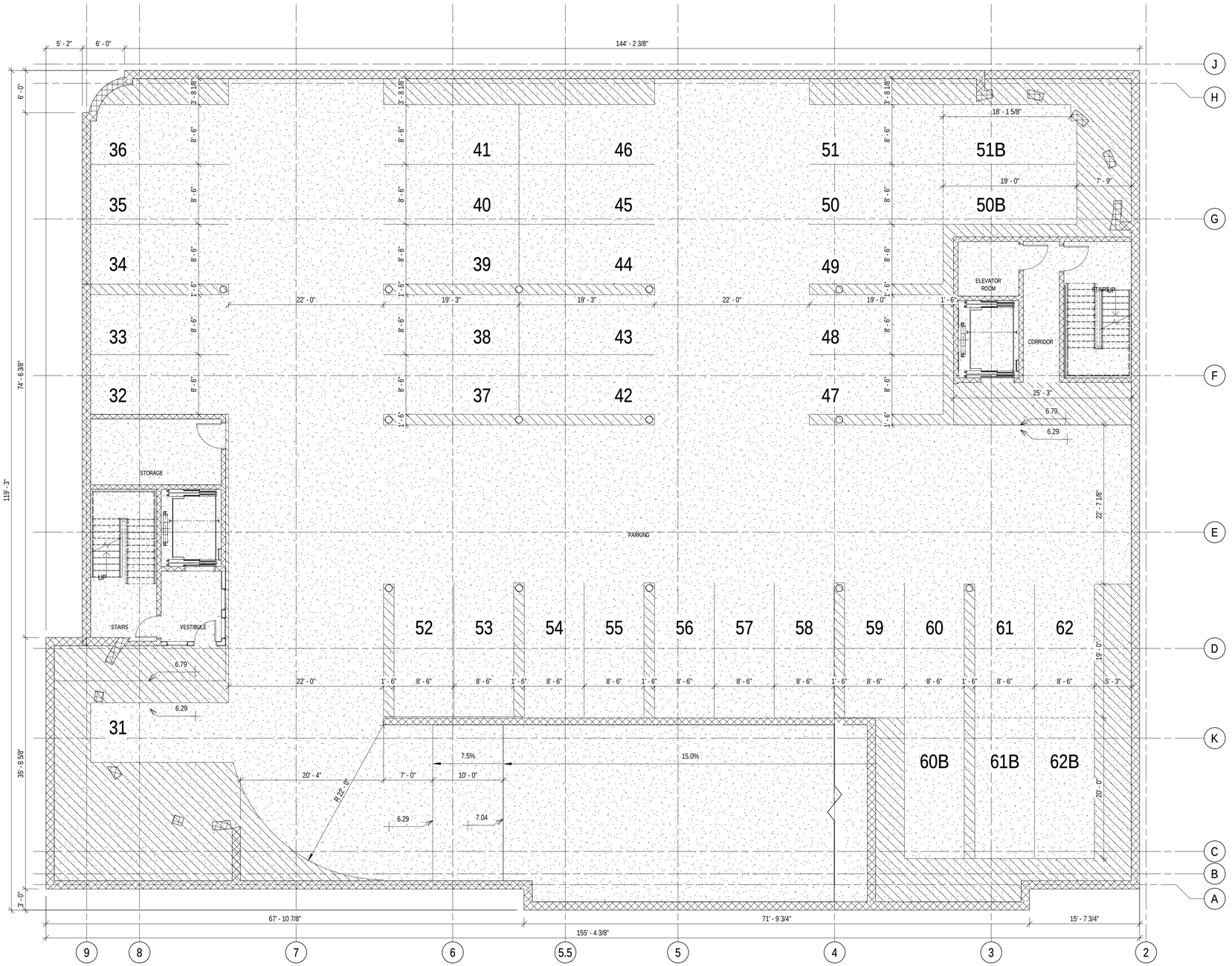
Scale:	1/8" = 1'-0"
Date:	12/02/2019
Project Number:	P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

PARKING LEVEL 1 PLAN

A0.01A



1 PARKING LEVEL 2 PLAN
1/8" = 1'-0"

GRAPHIC SCALE: 1/8" = 1'-0"
0' 4' 8' 16'

GROSS SQUARE FOOTAGE	
NOTE: MEASURED TO 6" INTO EXTERIOR WALLS FROM INSIDE FACE	
ABOVE GRADE	
FIRST FLOOR	16,462
MECHANICAL MEZZANINE	724
SECOND FLOOR	16,669
THIRD FLOOR	16,130
FOURTH FLOOR	9,593
TOTAL	59,578
BELOW GRADE	
FIRST FLOOR	18,131
SECOND FLOOR	17,569
TOTAL	35,700
GRAND TOTAL (ABOVE AND BELOW TOTALS)	95,278

FOOTPRINT	
NOTE: MEASURED TO OUTSIDE FACE OF EXTERIOR WALLS	
FIRST FLOOR	17,197

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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

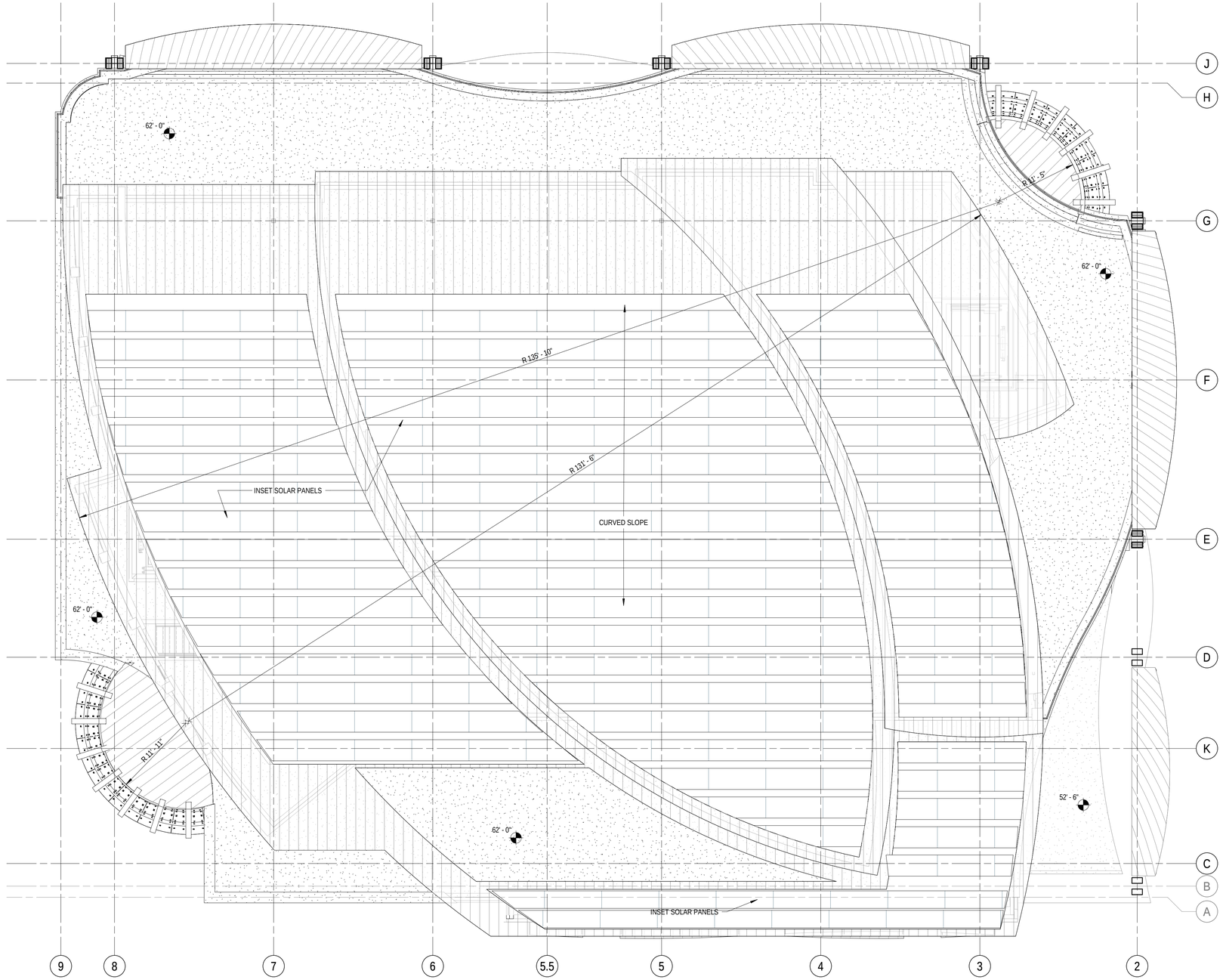
Scale:	1/8" = 1'-0"
Date:	11/18/2019
Project Number:	P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

PARKING LEVEL
2 PLAN

A0.01B



1 ROOF OVERALL PLAN
1/8" = 1'-0"

GRAPHIC SCALE: 1/8" = 1'-0"
0' 4' 8' 16'

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PORTSMOUTH, NH 03801
T 603.436.2551
F 603.436.6973
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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale:	1/8" = 1'-0"
Date:	11/18/2019
Project Number:	P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

ROOF PLAN

A0.02

1 NORTH ELEVATION - DANIEL STREET
1/8" = 1'-0"

2 EAST ELEVATION - PENHALLOW STREET
1/8" = 1'-0"

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PORTSMOUTH, NH 03801
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F 603.436.6973
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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale:	1/8" = 1'-0"
Date:	11/18/2019
Project Number:	P19081.02

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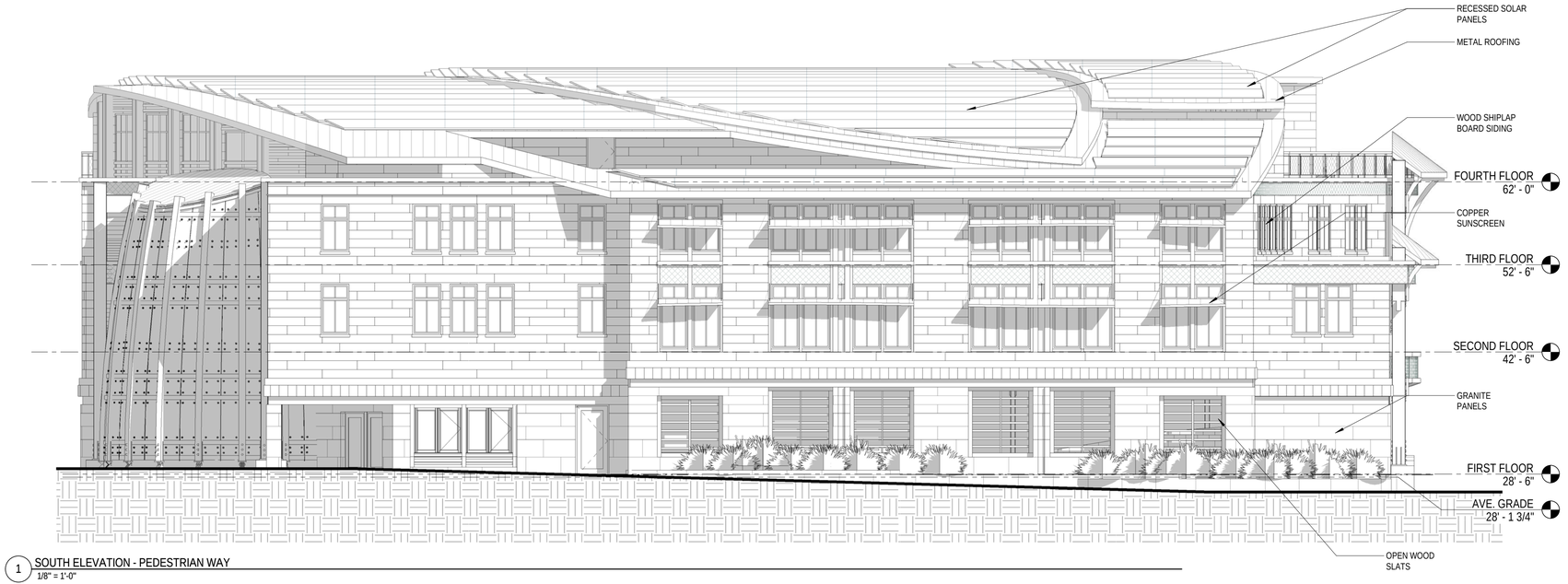
NO.	DESCRIPTION	DATE

TAC SUBMISSION

EXTERIOR ELEVATIONS

A0.03



1 SOUTH ELEVATION - PEDESTRIAN WAY
1/8" = 1'-0"

2 WEST ELEVATION - PEDESTRIAN WAY
1/8" = 1'-0"

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F 603.436.6973
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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale:	1/8" = 1'-0"
Date:	11/18/2019
Project Number:	P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

EXTERIOR ELEVATIONS

A0.04

NORTHEAST VIEW

NORTHWEST VIEW

SOUTHWEST VIEW

SOUTHEAST VIEW

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T 603.436.2551
F 603.436.6973
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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale:
Date: 11/18/2019
Project Number: P19081.02

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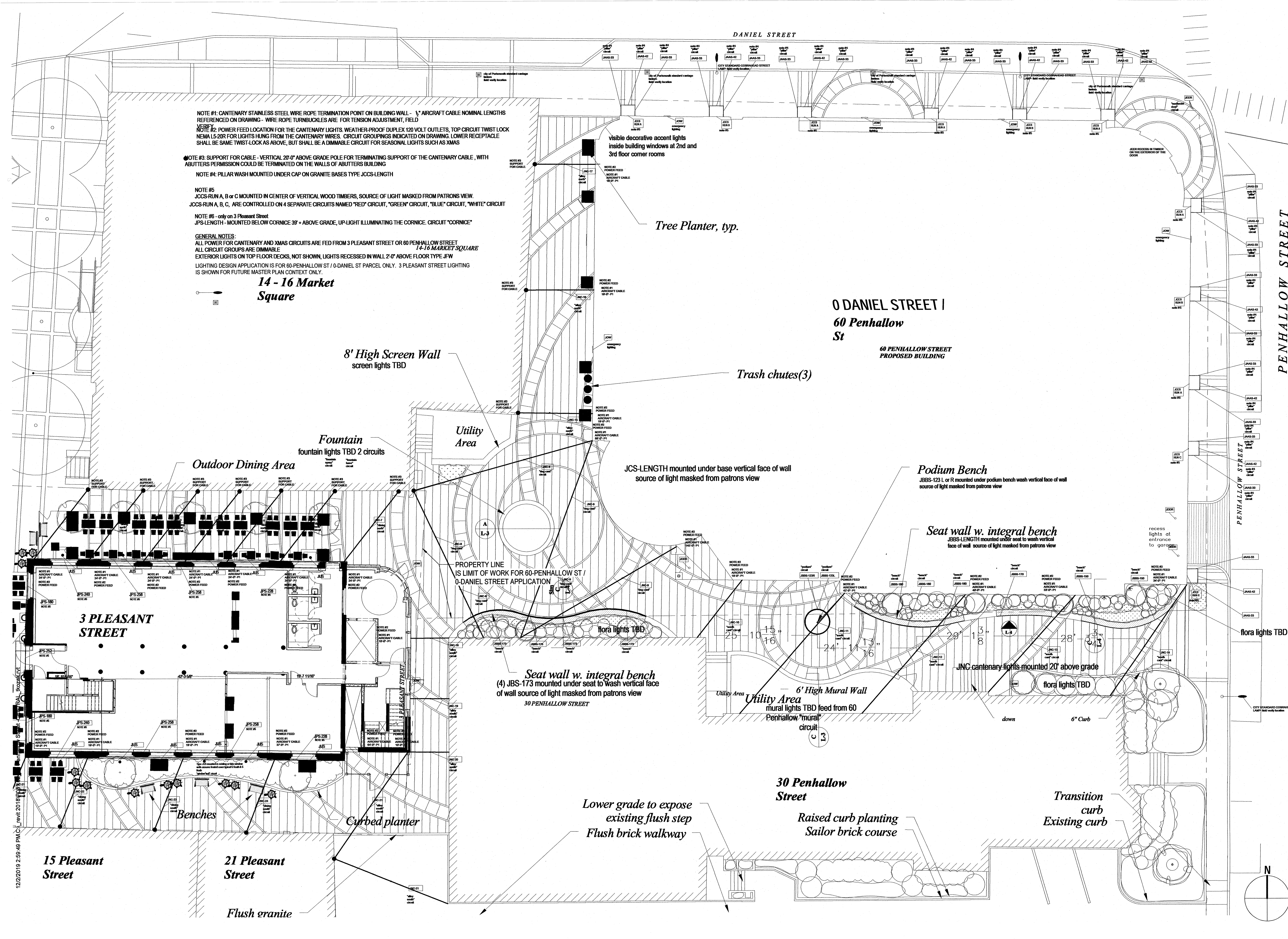
NO.	DESCRIPTION	DATE

TAC SUBMISSION

TANGRAM
RENDERINGS

A0.05


DANIEL STREET
NOTE #1: CANTENARY STAINLESS STEEL WIRE ROPE TERMINATION POINT ON BUILDING WALL - AIRCRAFT CABLE NOMINAL LENGTHS REFERENCED ON DRAWING - WIRE ROPE TURNBUCKLES ARE FOR TENSION ADJUSTMENT, FIELD VERIFY
NOTE #2: POWER FEED LOCATION FOR THE CANTENARY LIGHTS. WEATHER-PROOF DUPLEX 120 VOLT OUTLETS, TOP CIRCUIT TWIST LOCK NEMA L5-20R FOR LIGHTS HUNG FROM THE CANTENARY WIRES. CIRCUIT GROUPINGS INDICATED ON DRAWING. LOWER RECEPTACLE SHALL BE SAME TWIST-LOCK AS ABOVE, BUT SHALL BE A DIMMABLE CIRCUIT FOR SEASONAL LIGHTS SUCH AS XMAS
NOTE #3: SUPPORT FOR CABLE - VERTICAL 20'-0" ABOVE GRADE POLE FOR TERMINATING SUPPORT OF THE CANTENARY CABLE, WITH ABUTTERS PERMISSION COULD BE TERMINATED ON THE WALLS OF ABUTTERS BUILDING
NOTE #4: PILLAR WASH MOUNTED UNDER CAP ON GRANITE BASES TYPE JCCS-LENGTH
NOTE #5
JCCS-RUN A, B or C MOUNTED IN CENTER OF VERTICAL WOOD TIMBERS, SOURCE OF LIGHT MASKED FROM PATRONS VIEW.
JCCS-RUN A, B, C, ARE CONTROLLED ON 4 SEPARATE CIRCUITS NAMED "RED" CIRCUIT, "GREEN" CIRCUIT, "BLUE" CIRCUIT, "WHITE" CIRCUIT
NOTE #6 - only on 3 Pleasant Street
JPS-LENGTH - MOUNTED BELOW CORNICE 39' + ABOVE GRADE, UP-LIGHT ILLUMINATING THE CORNICE. CIRCUIT "CORNICE"
GENERAL NOTES:
ALL POWER FOR CANTENARY AND XMAS CIRCUITS ARE FED FROM 3 PLEASANT STREET OR 60 PENHALLOW STREET
ALL CIRCUIT GROUPS ARE DIMMABLE
EXTERIOR LIGHTS ON TOP FLOOR DECKS, NOT SHOWN, LIGHTS RECESSED IN WALL 2'-0" ABOVE FLOOR TYPE JFW
LIGHTING DESIGN APPLICATION IS FOR 60-PENHALLOW ST / 0-DANIEL ST PARCEL ONLY. 3 PLEASANT STREET LIGHTING IS SHOWN FOR FUTURE MASTER PLAN CONTEXT ONLY.
14-16 MARKET SQUARE
14 - 16 Market Square
visible decorative accent lights inside building windows at 2nd and 3rd floor corner rooms
Tree Planter, typ.
0 DANIEL STREET /
60 Penhallow St
60 PENHALLOW STREET PROPOSED BUILDING
8' High Screen Wall
screen lights TBD
Trash chutes(3)
PENHALLOW STREET
Utility Area
Fountain
fountain lights TBD 2 circuits
Outdoor Dining Area
JCS-LENGTH mounted under base vertical face of wall source of light masked from patrons view
Podium Bench
JBBS-123 L or R mounted under podium bench wash vertical face of wall source of light masked from patrons view
Seat wall w. integral bench
JBBS-LENGTH mounted under seat to wash vertical face of wall source of light masked from patrons view
recess lights at entrance to garage
PROPERTY LINE IS LIMIT OF WORK FOR 60-PENHALLOW ST / 0-DANIEL STREET APPLICATION
3 PLEASANT STREET
flora lights TBD
Seat wall w. integral bench
(4) JBS-173 mounted under seat to wash vertical face of wall source of light masked from patrons view
30 PENHALLOW STREET
JNC cantenary lights mounted 20" above grade
flora lights TBD
Utility Area
Utility Area
6' High Mural Wall
mural lights TBD feed from 60 Penhallow "mural" circuit
down
6" Curb
30 Penhallow Street
Benches
Curbed planter
Lower grade to expose existing flush step
Flush brick walkway
Raised curb planting
Sailor brick course
Transition curb
Existing curb
15 Pleasant Street
21 Pleasant Street
Flush granite
N

JSA

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273 CORPORATE DRIVE
PORTSMOUTH, NH 03801
T 603.436.2551
F 603.436.6973
www.jsainc.com

J & M Lighting Design Inc.
PO Box 1959
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207.967.5223

60 PENHALLOW STREET at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale:	3/32" = 1'-0"
Date:	12/02/2019
Project Number:	P19081.02

REVISIONS

NO.	DESCRIPTION	DATE

TAC SUBMISSION

LIGHTING PLAN

A0.06-R1

DANIEL STREET

14 - 16 Market Square

visible decorative accent lights
inside building windows at 2nd and
3rd floor corner rooms

ILLUMINATION STUDY ASSUMES A FLAT HORIZONTAL PLANE
ALL ILLUMINATION LEVELS ARE MAINTAINED WITH A 20% DEPRECIATION

CONTRIBUTION FROM CITY OWNED COBRA-HEADS OR CITY DECORATIVE
LANTERN NOT INCLUDED IN ILLUMINANCE STUDY

CONTRIBUTION FROM HIDDEN BENCH AND PODIUM LIGHTS ARE
NOT INCLUDED IN ILLUMINANCE STUDY

CONTRIBUTION FROM MURAL OR FOUNTAIN LIGHT ARE
NOT INCLUDED IN ILLUMINANCE STUDY

CONTRIBUTION FROM INTERIOR BUILDING
ILLUMINATION IS INCLUDED IN CALCULATIONS

CONTRIBUTION FROM TYPE JOW EMERGENCY LIGHTS AT EGRESS
NOT INCLUDED IN CALCULATIONS

TYPE JCCS VERTICALLY MOUNTED ON DANIEL & PENHOLLOW
STREETS SIDE OF THE BUILDING ARE COLOR CHANGING
LUMINIOUS ELEMENTS RED,GREEN,BLUE AND WHITE ARE FOR
EFFECT AND NOT CONTRIBUTING TO ILLUMINATION LEVELS ON THE GROUND

PENHALLOW STREET

screen lights TBD

Utility Area

fountain lights TBD 2 circuits

60 Penhallow St

JBBS-123 L or R mounted under podium bench wash vertical face of wall
source of light masked from patrons view

recess lights at entrance to garage
are for reference values are not included
in calculations

JBBS-LENGTH mounted under seat to wash vertical face
of wall source of light masked from patrons view

flora lights TBD

flora lights TBD

JNC canterlary lights mounted 20' above grade

flora lights TBD

(4) JBS-173 mounted under seat to wash vertical face of
wall source of light masked from patrons view

Utility Area

mural lights TBD feed from 60 Penhallow
"mural"
circuit

30 Penhallow Street

Brick

3 PLEASANT STREET

ant Street

21 Pleasant Street

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273 CORPORATE DRIVE
PORTSMOUTH, NH 03801
T 603.436.2551
F 603.436.6973
www.jsainc.com

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PO Box 1959
Kennebunkport, ME 04046
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60 PENHALLOW STREET
at BRICK MARKET

Penhallow Street
Portsmouth, NH

DAGNY TAGGART LLC
McNABB PROPERTIES

Scale: 3/32" = 1'-0"
Date: 12/02/2019
Project Number: P19081.02

REVISIONS		
NO.	DESCRIPTION	DATE

TAC SUBMISSION

PHOTOMETRIC PLAN

A0.07-R1

December 23, 2019

MAX-2019184.00

Mr. Eric B. Eby, P.E.
Department of Public Works
City of Portsmouth
680 Peverly Hill Road
Portsmouth, New Hampshire 03801

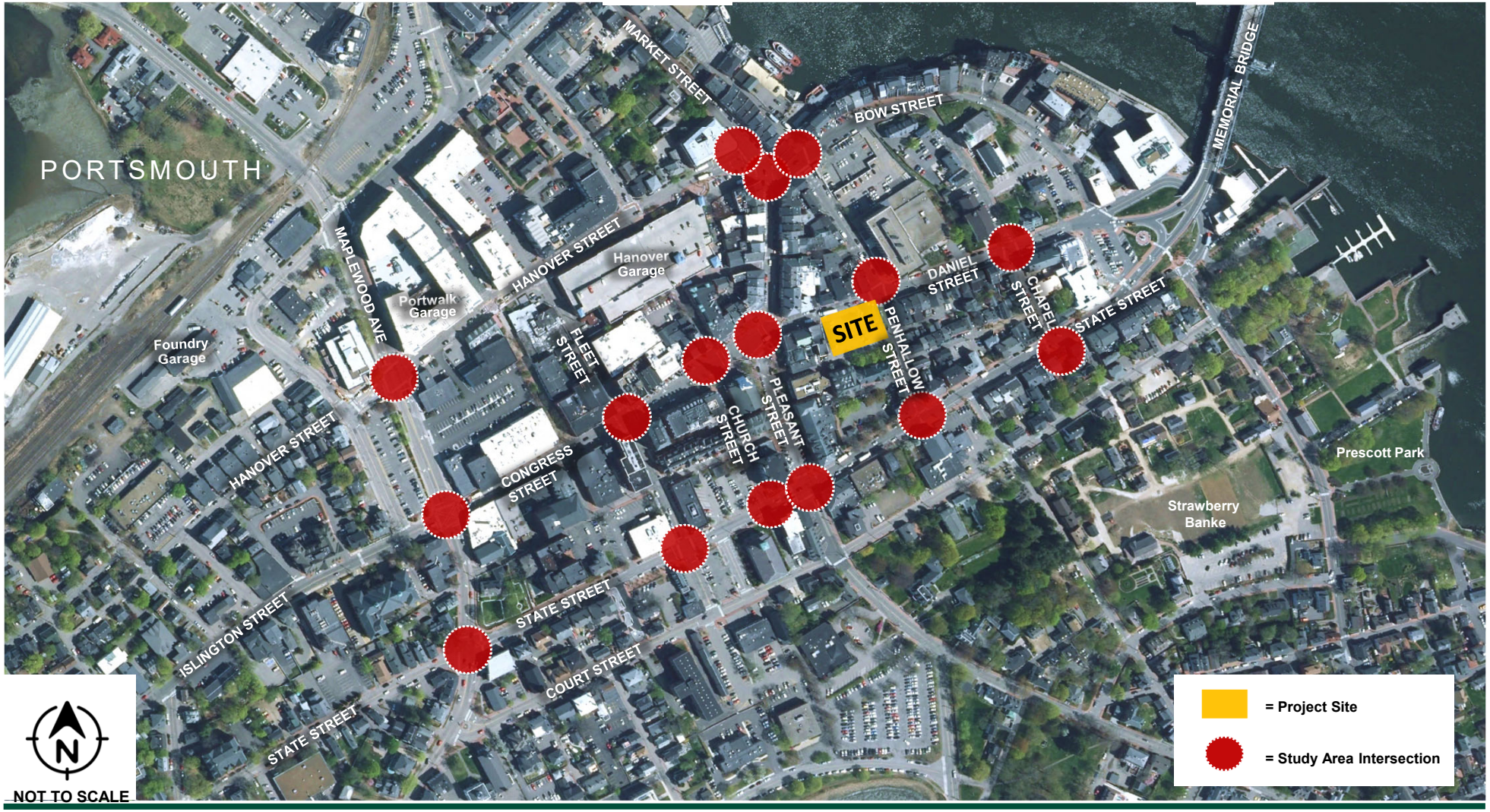
SUBJECT: Updated Trip Generation Summary
#60 Penhallow Street – Portsmouth, NH

Dear Mr. Eby:

Greenman-Pedersen, Inc. (GPI) is in the process of preparing a *Traffic Impact and Access Study (TIAS)* for a proposed mixed-use development, referred to as Brick Market, to located at #60 Penhallow Street in Portsmouth, New Hampshire. The existing site is currently a public 50-space parking lot with a single full-access / egress curb cut on Penhallow Street. The project consists of constructing a mixed-use development with a ±16,800 square foot (SF) of fast-food and fast-casual restaurant space on the first floor and ±41,600 SF of general office space on the second through fourth floors. The existing driveway will remain at Penhallow Street but be modified to provide garage access below street level. The site location in relation to the surrounding roadways is shown on the Project Location Map in Figure 1.

GPI and the Applicant met with representatives of the City of Portsmouth Planning Department on October 28, 2019 to review the scope of the TIAS. During this meeting, the Planning Department requested that the trip generation and distribution assumptions of the Project be provided to the City's Parking and Transportation Engineer for review prior to finalizing the TIAS. This information was provided to the City in a letter titled *Trip Generation Summary Letter*[1] on November 18, 2019. On December 3, 2019, GPI received comments from the City's Technical Advisory Committee (TAC) related to the *Trip Generation Summary Letter* regarding the distribution of office trips, missing numbers from some figures, and the critical time period for analysis. This letter is intended to provide an update to the previous trip generation and distribution assumptions to address the comments from TAC, as well as identify the scope of the full *Traffic Impact and Access Study (TIAS)*.

[1] *Trip Generation Summary Letter; #60 Penhallow Street – Portsmouth, NH*; Greenman-Pedersen, Inc.; November 18, 2019.



GPI
Engineering
Design
Planning
Construction Management
603.831.2213
GPINET.COM

Greenman-Pedersen, Inc.
21 Daniel Street
Second Floor
Portsmouth, NH 03801

Figure 1
Site Location Map

TRIP GENERATION

The Project is proposed to consist of the construction of approximately 41,600 SF of office space and 16,800 SF of restaurant space. The restaurant space will be a food-court style restaurant, similar to Faneuil Hall in Boston, with a mix of fast-food and fast-casual dining options with shared seating. To estimate the volume of traffic to be generated by the proposed redevelopment, trip-generation rates published by the Institute of Transportation Engineers (ITE) *Trip Generation Manual* [2] were utilized for Land Use Code (LUC) 710 (General Office), LUC 930 (Fast Casual Restaurant), and LUC 933 (Fast-Food Restaurant without Drive-Through Window). Approximately half of the restaurant space was assumed to be fast-food style and half was assumed to be fast-casual style. The detailed trip generation calculations are provided as an Attachment and are summarized in Table 1.

Multi-Use Trips

Internal Capture

Studies have shown that for developments of mixed-use or multi-use sites, it is realistic to assume that there will be some multi-use trips within the site itself. For example, someone working in the office spaces may dine at one of the restaurants on-site. Therefore, a reduction in the overall trips experienced at the site driveway can be anticipated as a result of multi-use trips that include stops at more than one use on the site. Based on information published in ITE's *Trip Generation Handbook* [3], it is estimated that multi-use trips account for 2 to 10 percent of the trips generated by the site. The Multi-Use Development Trip Generation and Internal Capture Worksheets are provided in the Attachments.

External Capture

The proposed development is located within the downtown central business district of Portsmouth, in close proximity to numerous other retail, restaurant, office, residential, entertainment, hotel, and commercial uses. While many of the office trips generated by the project will be new to the area, a large portion of the restaurant trips will be shared with other retail, office, residential, and other uses within the downtown area. It is anticipated that patrons will park at a single location either within one of the public parking garages or within on-street parking spaces and visit multiple uses within the downtown, stopping at one of the restaurants as part of their trip. In addition, employees of surrounding area businesses, residents of downtown, or patrons of area hotels may choose to dine at one of the on-site restaurants. These patrons would likely walk to the site from other locations and would not be new to the area. GPI utilized the Multi-Use Development Trip Generation and Internal Capture worksheets contained within ITE's *Trip Generation Handbook* to estimate the potential number of trips that could be shared between the proposed restaurants and the surround area businesses, hotels, and residences. Based on this information, 45 to 75 percent of restaurant trips are anticipated to be shared with other downtown uses.

Pass-by Trips

Studies have shown that for restaurant developments, a substantial portion of the site-generated vehicle trips are already present in the adjacent passing stream of traffic or are diverted from another route to the proposed site. For example, some vehicles which are already on the roadways may decide to visit the site on their way to another destination. Based on information published in the ITE *Trip Generation Handbook*, the average *pass-by* trip percentage is 43 to 50 percent for fast-food and high-turnover sit-down restaurants. Due to the location of the proposed restaurants in the downtown business district, it is likely that pass-by trips will arrive to the site

2 *Trip Generation, 10th Edition*. Institute of Transportation Engineers; Washington, DC; 2017.

3 *Trip Generation Handbook, 3rd Edition.* Institute of Transportation Engineers; Washington, DC; September 2017.

in the form of walking trips from patrons parking at another location downtown and visiting multiple stops before returning to their vehicle. For example, an area employee may stop at the restaurants to purchase dinner before leaving the downtown in their vehicle, or a person shopping in the downtown area may stop at the restaurant to grab lunch while shopping. Therefore, any pass-by trips generated by the proposed restaurant have been accounted for within the *external capture multi-use trips* described above.

Walking and Bicycling Trips

As previously noted, the proposed development is located within downtown Portsmouth in close proximity to multiple retail, restaurant, office, and commercial developments. In addition, a strong sidewalk network on the surrounding area roadways provides pedestrian connections between the site and these establishments. The City of Portsmouth has also made concerted efforts to provide bicycle accommodations throughout the downtown including dedicated bicycle lanes, shared lanes, and bicycle parking. As described in the *Multi-Use Trips – External Capture* section of this letter, approximately 45 to 75 percent of the restaurant trips are anticipated to be shared with surrounding area businesses and residences, and will travel to the site via walking or bicycling. In addition, based on U.S. Census Bureau information on means of travel for residence of Portsmouth, approximately 7.7 percent of Portsmouth residents travel to work via walking or biking. To provide a conservative (worse case) analysis scenario, 5 percent of the office trips were assumed to travel to/from the site via walking or bicycle.

Transit Trips

The Cooperative Alliance for Seacoast Transportation (COAST) and the University of New Hampshire (UNH) Wildcat Transit provide bus service along Congress Street / Daniel Street, Hanover Street, and Maplewood Avenue in the vicinity of the site. Based on U.S. Census Bureau data for residence of Portsmouth, approximately 1.4 percent of Portsmouth residents utilize public transit services to travel to/from work. It should be noted that this percentage includes also Portsmouth residents traveling to all places of employment, most of which may be located outside of the City. The percentage of residents using public transit to travel to places of employment within the City is likely to be much higher. To provide a conservative (worse case) analysis condition, no credit was applied for trips traveling to the site via public transportation.

The detailed trip generation and mode split calculations are provided in the Attachments. Table 1 provides a summary of the resulting site-generated trips.

Table 1
TRIP-GENERATION SUMMARY

Time Period / Direction	External Trips		Walking / Biking Trips		New Primary Trips		
	Office Trips [a]	Restaurant Trips [b]	Office Trips [c]	Restaurant Trips [d]	Office Trips [e]	Restaurant Trips [f]	Total Trips [g]
Weekday Daily	377	5,479	19	3,534	358	1,945	2,303
Weekday AM Peak Hour							
In	49	132	2	131	47	1	48
Out	3	82	0	40	3	42	45
Total	52	214	2	171	50	43	93
Weekday PM Peak Hour							
In	6	182	0	96	6	86	92
Out	39	171	2	131	37	40	77
Total	45	353	2	227	43	126	169
Saturday Daily	80	8,510	4	4,846	76	3,664	3,740
Saturday Midday Peak Hour							
In	7	380	0	204	7	176	183
Out	8	358	0	130	8	228	236
Total	15	738	0	334	15	404	419

[a] Based on ITE LUC 710 (General Office) for ±41,600 SF.
[b] Based on sum of ITE LUC 930 (Fast Casual Restaurant) for ±8,400 SF and ITE LUC 933 (Fast-Food Restaurant without Drive-Through) for ±8,400 SF.
[c] Five percent of office trips based on U.S. Census data.
[d] Trips based on mixed-use percentages to retail, residential, hotel, and entertainment uses.
[e] General office external trips minus walking / biking trips.
[f] Restaurant external trips minus walking / biking trips.
[g] New Primary Office Trips plus New Primary Restaurant Trips.

TRIP DISTRIBUTION

Having estimated project-generated vehicle trips, the next step is to determine the distribution of project traffic and assign these trips to the local roadway network. The *Trip Generation Summary Letter* assumed that a portion of the office trips coming from the Memorial Bridge would utilize Sheafe Street to access the on-site parking garage. The TAC noted that Sheafe Street is a narrow, residential street, and that use of Sheafe Street was not desirable. The Applicant agreed to place a condition in the office lease(s) that employees must be directed not to utilize Sheafe Street to access the parking garage. As a result, these site-generated trips were reassigned to utilize Church Street to State Street to access Penhallow Street. The updated trip distribution and site-generated trip networks are provided as an Attachment to this letter.

Office Trips

The distribution of site-generated office trips was based on a Journey-to-Work model using U.S. Census Data for the place of residency of employees of Portsmouth, which was prepared as part of the Traffic Impact Study for the proposed McIntyre Building Federal property redevelopment project by Tighe & Bond. As part of the #60 Penhallow Street project, 77 parking spaces will be provided on-site within an underground garage to accommodate the proposed office use. Therefore, the trip distribution prepared as part of the McIntyre Building study was slightly modified to account for vehicles traveling directly to/from the on-site parking garage. The resulting trip distribution is graphically depicted in Figure 2 and summarized in Table 2 below.

Restaurant Trips

Similarly, the McIntyre Building redevelopment includes a residential component and is located in close proximity to the #60 Penhallow Street site. Therefore, the trip distribution assumptions used for the McIntyre project were utilized to distribute restaurant trips for the #60 Penhallow Street project. As previously noted in the *Trip Generation* section of this letter, the majority of restaurant trips are likely to be shared with other uses in the downtown area and will travel to/from the site via walking. However, the portion of *new primary* trips traveling to the proposed restaurants will likely park in nearby parking garages and walk to the site. The Hanover Garage and Portwalk Garage provide a large amount of parking at relatively low costs and are in close proximity to the site. Therefore, all of the *new primary* restaurant trips were assumed to travel to one of these two garages on Hanover Street. The resulting trip distribution is graphically depicted in Figure 3 and summarized in Table 2 below.

Table 2
TRIP DISTRIBUTION SUMMARY

Direction	Office Distribution (%)	Restaurant Distribution (%)
Middle Street to/from South	5	25
Market Street to/from North	20	15
Maplewood Avenue to/from North	60	30
Memorial Bridge to/from East	10	20
Islington Street to/from West	5	10
Total	100	100

The site-generated trips were distributed to the study area intersections based on the percentages in Table 2 above. The resulting site-generated trips are illustrated in Figures 4A, 4B, and 4C for the weekday AM, weekday PM, and Saturday midday peak hours, respectfully.

DETERMINATION OF CRITICAL PEAK HOUR

During the October 28, 2019 scoping meeting, the City's Planning Department requested that the TIAS include an analysis of the Project-related traffic impacts during the weekday PM peak period, as this time period had previously been determined to be the critical time period for traffic volumes within the downtown area. On December 3, 2019, the TAC noted that based on the findings of the *Trip Generation Summary Letter,* the Project is anticipated to generate the highest volume of traffic during the Saturday midday peak period. The TAC requested that GPI provide a traffic volume comparison to assess whether the weekday PM or Saturday midday peak period would be the critical period for analysis based on Build traffic volumes with the proposed development in place.

GPI obtained existing traffic volumes from two sources, New Hampshire Department of Transportation (NHDOT) count station data provided on the Transportation Data Management System, and manual turning movement counts collected at several downtown intersections provided by the City's Planning Department. GPI then added the projected site-generated trips through each of these count locations during the weekday PM and Saturday midday peak hours to estimate the Build traffic volumes. The Build volumes for the weekday PM and Saturday midday peak hours were compared to assess which was higher and establish and overall critical time period for analysis. The detailed calculations are provided as an Attachment to this letter and the results are summarized in Tables 3 and 4 below.

Table 3
TRAFFIC VOLUME COMPARISON – NHDOT COUNT STATION DATA

	Existing Volume		Site-Generated Trips		Build Volume	
Location	Weekday PM	Saturday Midday	Weekday PM	Saturday Midday	Weekday PM	Saturday Midday
Maplewood Avenue	987	865	61	128	**1,048**	993
Market Street	1,036	875	32	63	**1,068**	938
Memorial Bridge	1,232	1,202	28	69	1,260	**1,271**
Islington Street	841	753	12	40	**853**	793
Middle Road	957	992	34	100	991	**1,092**
Congress Street	548	506	27	21	**575**	527
Total Network	**5,601**	**5,193**	**194**	**421**	**5,795**	**5,614**

Four out of six of the NHDOT count stations indicate that the weekday PM peak hour will be the critical time period for analysis under Build conditions. The Existing weekday PM peak hour volumes are higher than Saturday volumes at five of the six locations. For the two locations where the Saturday volumes are higher (both on Route 1), the weekday PM peak hour volumes are within one (1) to nine (9) percent of the Saturday midday volumes. When considering the overall network (sum of all count station data), the weekday PM peak hour volumes are approximately three (3) higher than the Saturday midday volumes.

Table 4
TRAFFIC VOLUME COMPARISON – CITY'S TMC DATA

Location	Existing Volume		Site-Generated Trips		Build Volume	
	Weekday PM	Saturday Midday	Weekday PM	Saturday Midday	Weekday PM	Saturday Midday
Maplewood Ave / Congress St / Islington St / Middle St	1,442	1,387	66	137	1,508	**1,534**
Maplewood Ave / Deer St	1,611	1,165	61	128	**1,672**	1,293
Maplewood Ave / Hanover St	1,371	1,255	100	245	1,471	**1,500**
State St / Middle St	1,158	1,077	38	104	**1,196**	1,118
Total Network	**5,582**	**4,884**	**265**	**624**	**5,847**	**5,508**

Based on the TMC data that the City collected in Fall 2019, the existing volumes are higher during the weekday PM peak hour for all four study area intersections. However, based on the total (Build) trips, two of the intersections indicate the weekday PM peak hour is the critical time period and two indicate that the Saturday midday is the critical time period. For those where the Saturday volumes are higher, the weekday PM volumes are within two (2) percent of the Saturday midday volumes. For the Maplewood Avenue / Deer Street intersection, the weekday PM volumes are 23 percent higher than the Saturday volumes. When considering the overall network (sum of all intersection data), the weekday PM peak hour volumes are approximately six (6) percent higher than the Saturday midday volumes.

It should be noted that the Saturday midday peak hour results in the critical time period at the Maplewood / Congress / Islington / Middle and the Maplewood / Hanover intersections mainly due to the assumption that all restaurant trips will park in the Hanover Street garage. In reality, some of these trips will park in on-street parking spaces along the surrounding roadways or in other parking areas. In addition, only a 45 percent walking/biking credit was applied to restaurant trips during the Saturday midday peak hour based on ITE data, while a 64 percent walking/biking credit was applied in the weekday PM condition. GPI anticipates that a significantly higher portion of restaurant trips will be walking/biking trips that are shared with other uses in the downtown during the Saturday midday time period, particularly during the warmer-weather months. Therefore, the Project's impact on these intersections during the Saturday midday peak hour may be heavily over-stated in Table 4.

GPI submitted the data above to the City's Parking and Transportation Engineer, Eric Eby, P.E., via email on December 9, 2019 and received confirmation on the same date that the weekday PM peak hour continues to be the critical peak period for analysis based on Build conditions traffic volumes. Therefore, the full TIAS will be prepared based on the weekday PM peak hour only for analysis purposes.

STUDY AREA INTERSECTIONS

The City's Planning Department has requested that the full TIAS evaluate the Project's impacts on any intersection that will experience in increase of 50 trips or more during the peak hour as a result of the Project. Based on this threshold, detailed capacity and queue analyses will be performed for the following intersections as part of the TIAS:

- Maplewood Avenue / Hanover Street
- Maplewood Avenue / Islington Street / Congress Street / Middle Street
- Middle Street / State Street
- Daniel Street / Chapel Street
- Daniel Street / Penhallow Street
- Market Street / Hanover Street

SUMMARY

GPI has estimated the site-generated vehicle trips associated with the proposed redevelopment of #60 Penhallow Street as described in this letter. The site-generated trips were added to the existing traffic volumes at multiple locations within the downtown area to assess the critical time period for analysis, which was confirmed with the City's Parking and Traffic Engineer to be the weekday PM peak hour. This information was utilized to define the study area for detailed capacity and queue analyses to be included within a comprehensive Traffic Impact and Access Study (TIAS). The detailed site-generated traffic-volume networks have been submitted to the City's Consultant, Resource Systems Group, Inc. (RSG) to conduct the capacity and queue analysis. Once this information is received, the full TIAS will be prepared and submitted to the City for review.

Should you have any questions, or require additional information, please contact me at (978) 570-2946.

Sincerely,

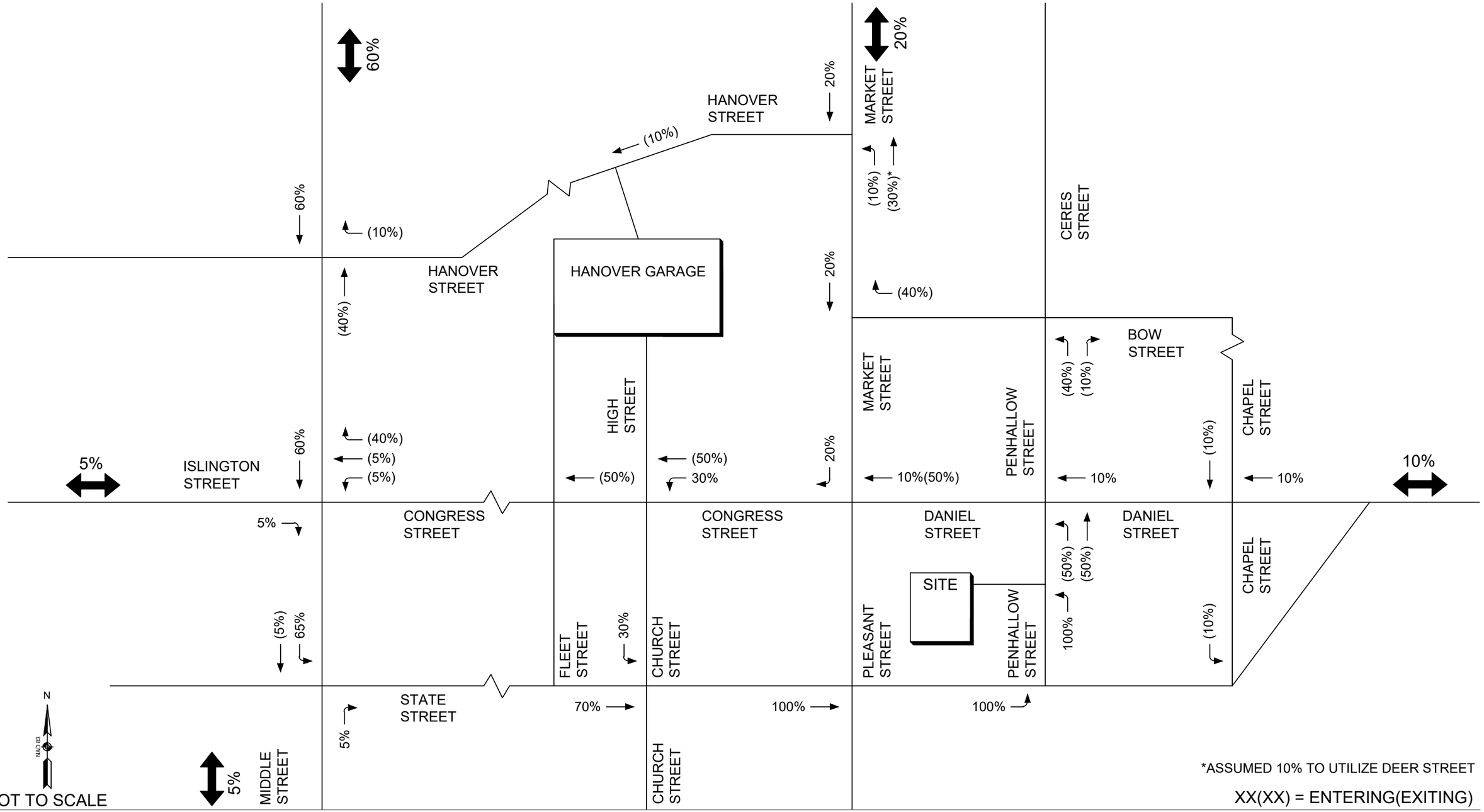
GREENMAN-PEDERSEN, INC.

Rebecca L. Brown, P.E., PTOE
Senior Project Manager

Enclosures:

Site-Generated Vehicle Trip Traffic-Volume Networks
Trip Generation Calculations
Mode Split Calculations
Trip Distribution Calculations
Critical Peak Hour Volume Comparison

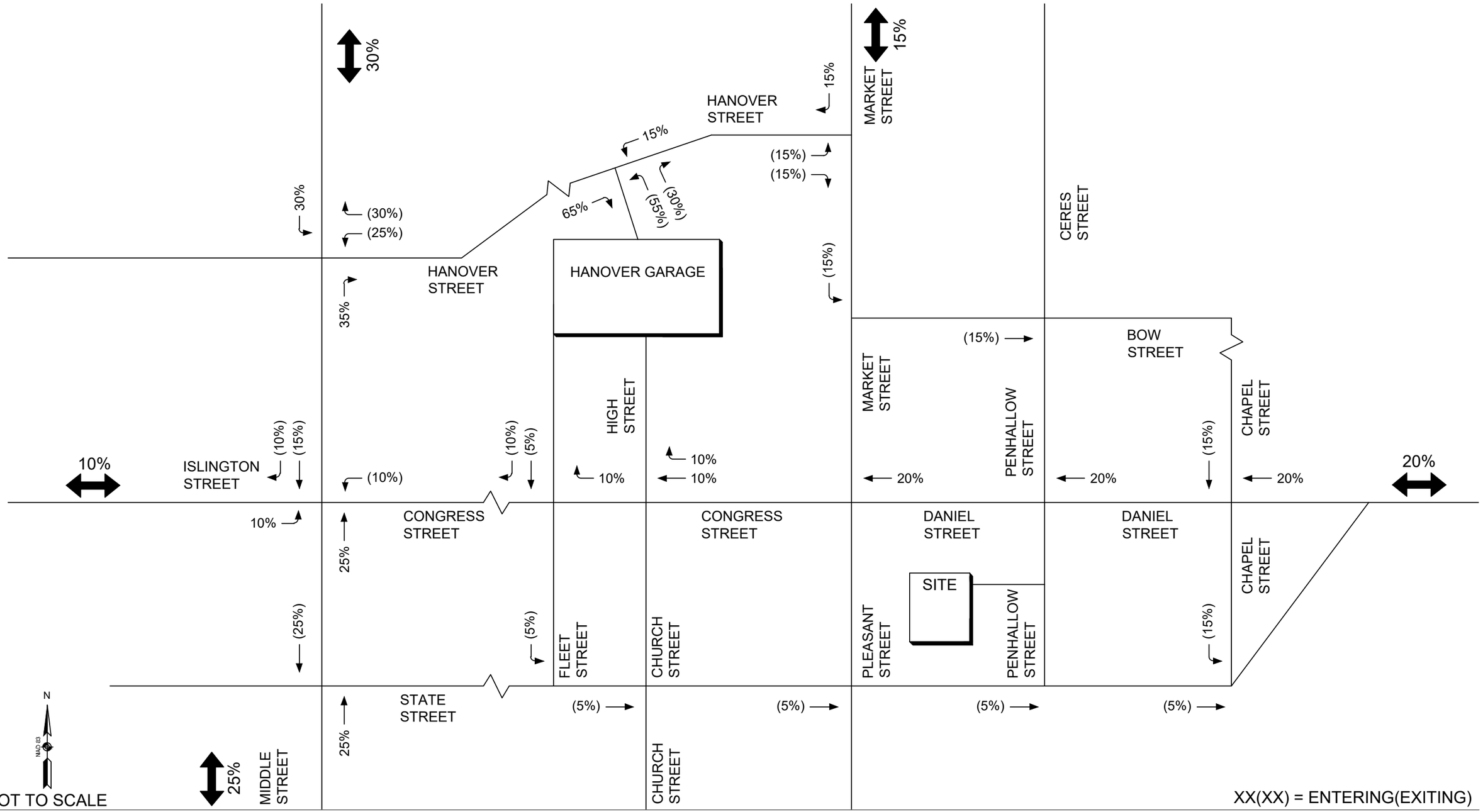
cc: Mark McNabb – Dagny Taggart, LLC (via email)
John Chagnon, P.E., LLS – Ambit Engineering (via email)



GPI Engineering Design Planning Construction Management
603.831.2213 GPINET.COM
Greenman-Pedersen, Inc.
21 Daniel Street
Second Floor
Portsmouth, NH 03801

Figure 2

Office Vehicle Trip Distribution



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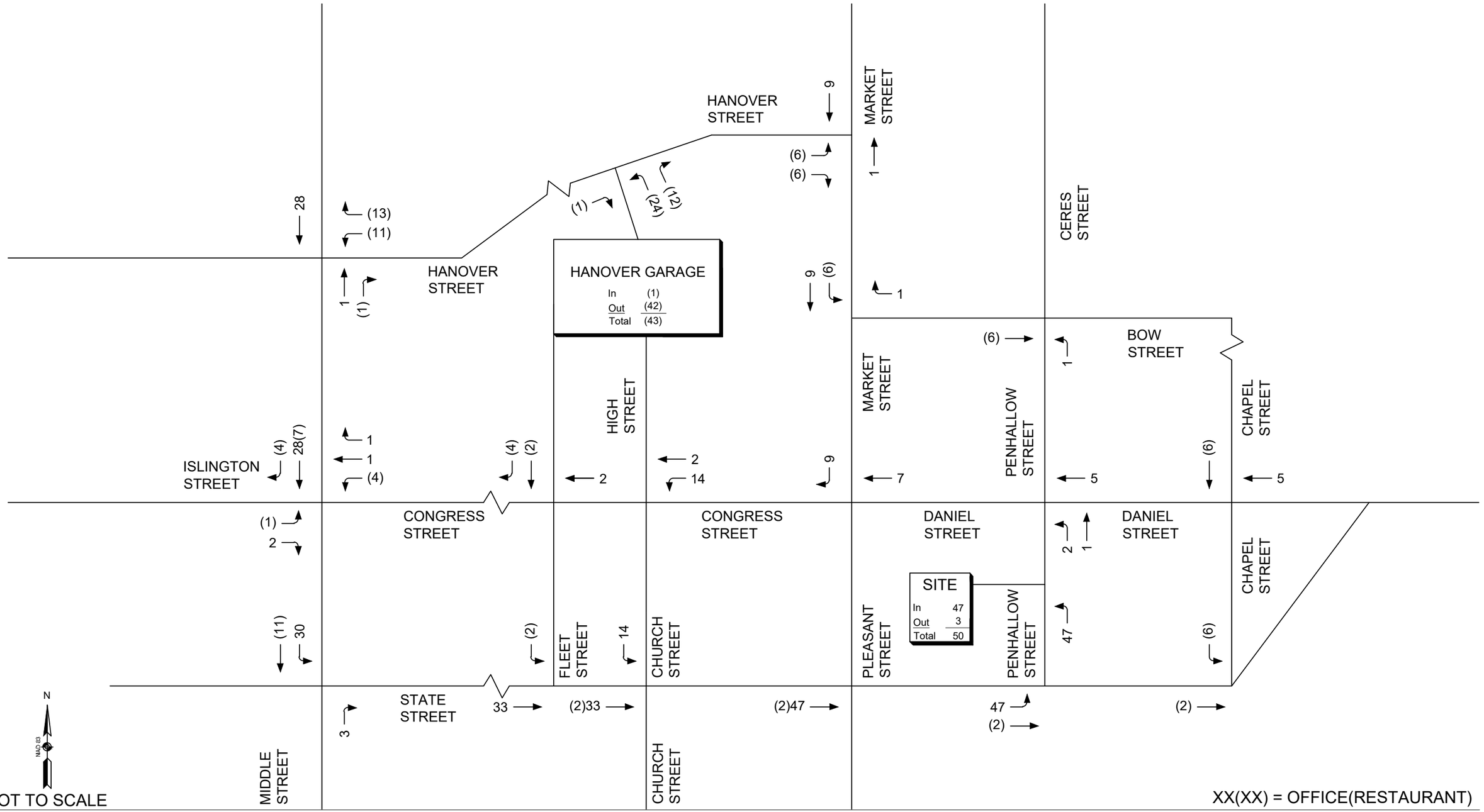
Second Floor
Portsmouth, NH 03801

Figure 3

Restaurant Vehicle Trip Distribution



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21 Daniel Street
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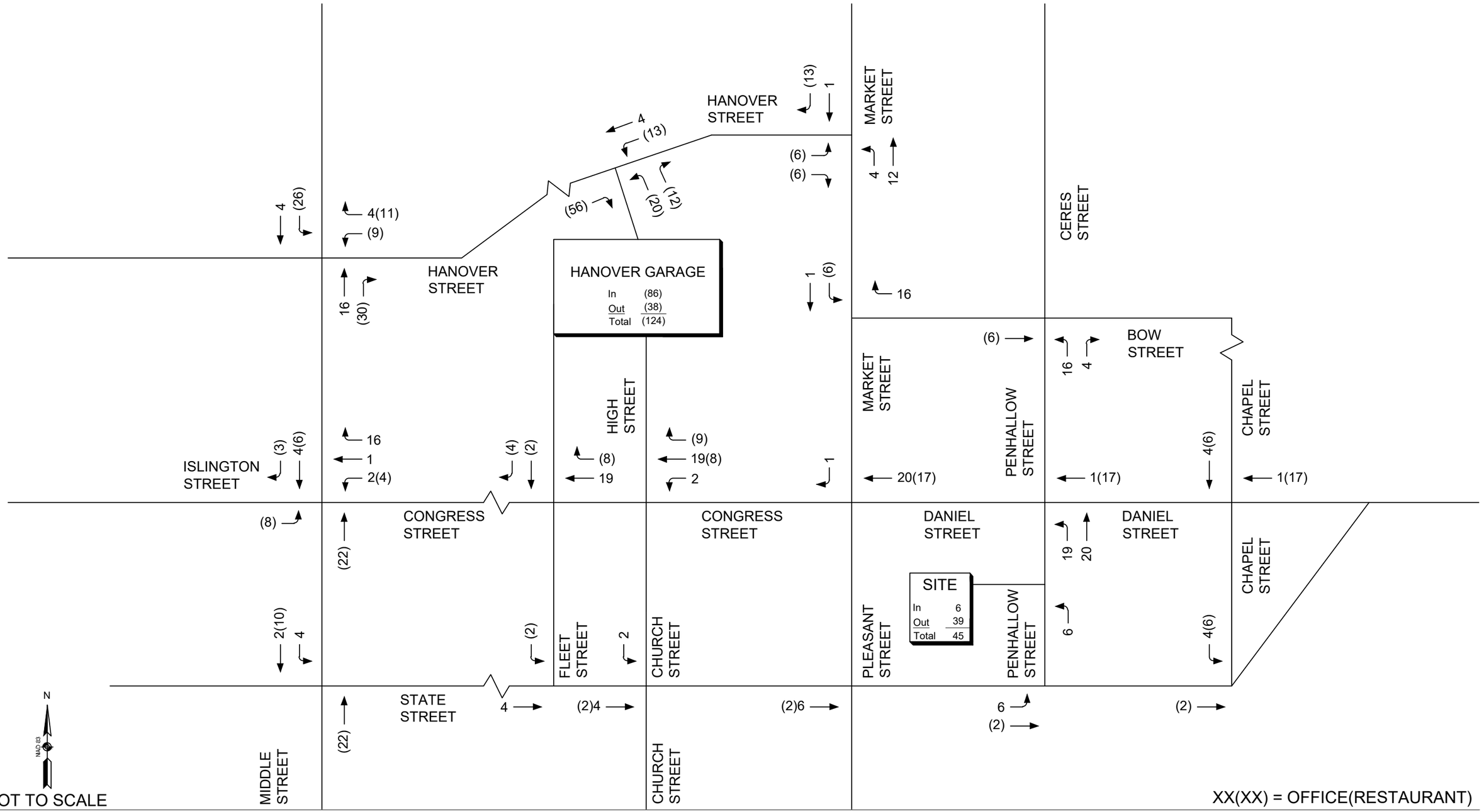
Portsmouth, NH 03801

Figure 4A

Site-Generated Trips
Weekday AM



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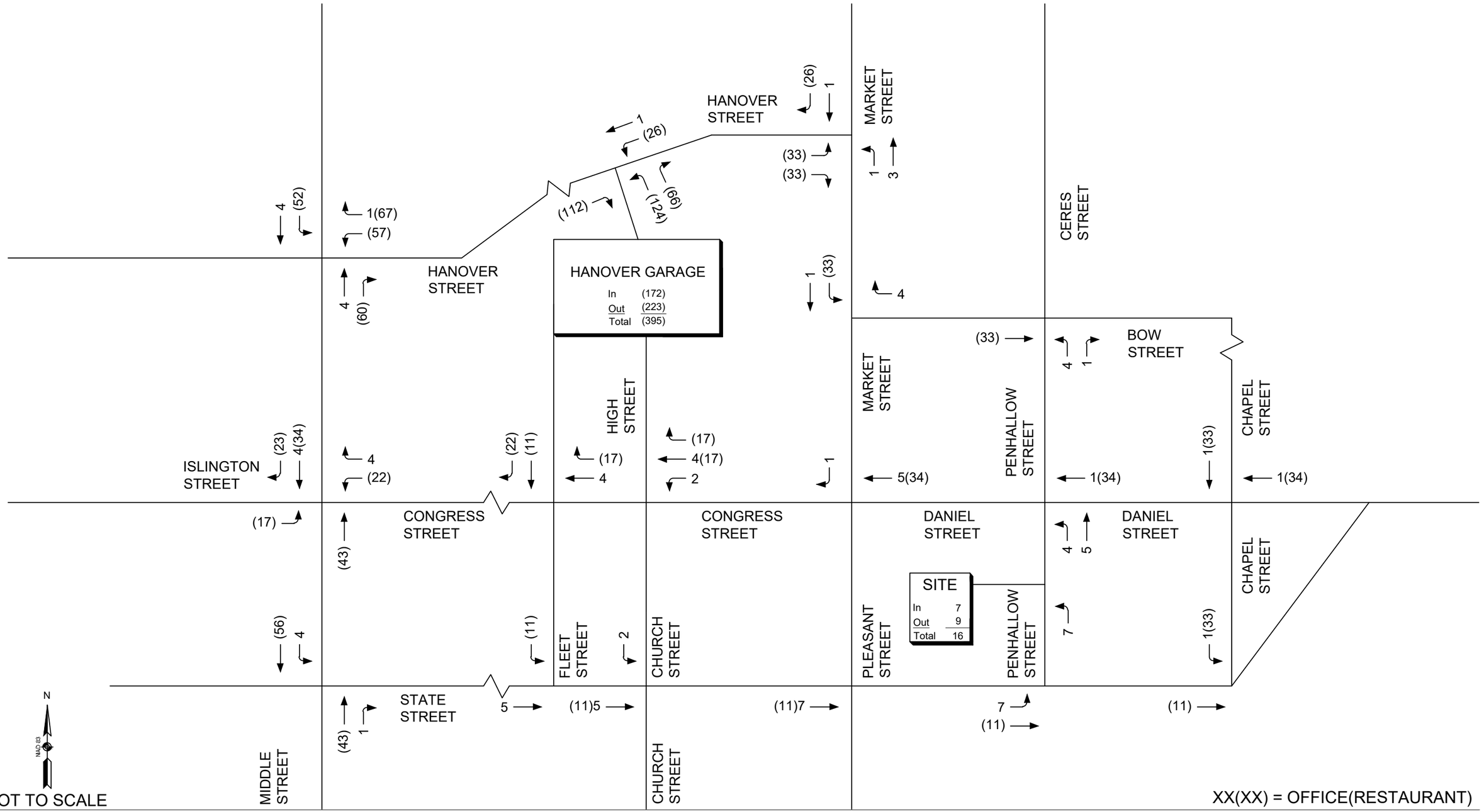
Portsmouth, NH 03801

Figure 4B

Site-Generated Trips
Weekday PM



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Greenman-Pedersen, Inc.
21 Daniel Street
Second Floor
Portsmouth, NH 03801

Figure 4C

Site-Generated Trips
Saturday Midday

Size	Units	Land Use
41,600	SF	LUC 710
8,400	SF	LUC 933
8,400	SF	LUC 930

Walk/Bike Credit: 5%

		Total Trips				External Trips				Walking / Biking Trips				New Primary Trips			
		LUC 710	LUC 933	LUC 930	TOTAL	LUC 710	LUC 933	LUC 930	TOTAL	LUC 710	LUC 933	LUC 930	TOTAL	LUC 710	LUC 933	LUC 930	TOTAL
Weekday Daily	Entering	227	1,454	1,324	3,005	159	2,769		2,928	8	1,464		1,472	151	1,305		1,456
	Exiting	227	1,454	1,324	3,005	218	2,710		2,928	11	2,070		2,081	207	640		847
	Total	454	2,908	2,648	6,010	377	5,479		5,856	19	3,534		3,553	358	1,945		2,303
Weekday AM Peak Hour	Entering	57	127	11	195	49	132		181	2	131		133	47	1		48
	Exiting	9	84	6	99	3	82		85	0	40		40	3	42		45
	Total	66	211	17	294	52	214		266	2	171		173	50	43		93
Weekday PM Peak Hour	Entering	8	119	65	192	6	182		188	0	96		96	6	86		92
	Exiting	41	119	54	214	39	171		210	2	131		133	37	40		77
	Total	49	238	119	406	45	353		398	2	227		229	43	126		169
Saturday Daily	Entering	46	2,923	1,338	4,307	36	4,259		4,295	2	2,683		2,685	34	1,576		1,610
	Exiting	46	2,923	1,338	4,307	44	4,251		4,295	2	2,163		2,165	42	2,088		2,130
	Total	92	5,846	2,676	8,614	80	8,510		8,590	4	4,846		4,850	76	3,664		3,740
Saturday Midday Peak Hour	Entering	12	225	157	394	7	380		387	0	204		204	7	176		183
	Exiting	10	234	129	373	8	358		366	0	130		130	8	228		236
	Total	22	459	286	767	15	738		753	0	334		334	15	404		419

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 710 - General Office Building

General Urban/Suburban

Average Vehicle Trips Ends vs: 1000 Sq. Feet Gross Floor Area
Independent Variable (X): 41.600

AVERAGE WEEKDAY DAILY

Ln(T) = 0.97 Ln (X) + 2.50
Ln(T) = 0.97 Ln (41.600) + 2.50
Ln(T) = 6.12
T = 453.17
T = 454 vehicle trips
with 50% (227 vpd) entering and 50% (227 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 0.94 * (X) + 26.49
T = 0.94 * 41.600 + 26.49
T = 65.59
T = 66 vehicle trips
with 86% (57 vph) entering and 14% (9 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

Ln(T) = 0.95 Ln (X) + 0.36
Ln(T) = 0.95 Ln (41.600) + 0.36
Ln(T) = 3.90
T = 49.49
T = 49 vehicle trips
with 16% (8 vph) entering and 84% (41 vph) exiting.

SATURDAY DAILY

T = 2.21 * (X)
T = 2.21 * 41.600
T = 91.94
T = 92 vehicle trips
with 50% (46 vph) entering and 50% (46 vph) exiting.

SATURDAY PEAK HOUR OF GENERATOR

T = 0.53 * (X)
T = 0.53 * 41.600
T = 22.05
T = 22 vehicle trips
with 54% (12 vph) entering and 46% (10 vph) exiting.

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 933 - Fast-Food Restaurant without Drive-Through Window

General Urban/Suburban

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area
Independent Variable (X): 8.400

AVERAGE WEEKDAY DAILY

T = 346.23 * (X)
T = 346.23 * 8.400
T = 2908.33
T = 2,908 vehicle trips
with 50% (1,454 vpd) entering and 50% (1,454 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 25.10 * (X)
T = 25.1 * 8.400
T = 210.84
T = 211 vehicle trips
with 60% (127 vph) entering and 40% (84 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 28.34 * (X)
T = 28.34 * 8.400
T = 238.06
T = 238 vehicle trips
with 50% (119 vph) entering and 50% (119 vph) exiting.

SATURDAY DAILY

T = 696.00 * (X)
T = 696.00 * 8.400
T = 5846.40
T = 5,846 vehicle trips
with 50% (2,923 vpd) entering and 50% (2,923 vpd) exiting.

SATURDAY PEAK HOUR OF GENERATOR

T = 54.60 * (X)
T = 54.60 * 8.400
T = 458.64
T = 459 vehicle trips
with 49% (225 vph) entering and 51% (234 vph) exiting.

Institute of Transportation Engineers (ITE)

Land Use Code (LUC) 930 - Fast Casual Restaurant

General Urban/Suburban

Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area
Independent Variable (X): 8.400

AVERAGE WEEKDAY DAILY

T = 315.17 * (X)
T = 315.17 * 8.400
T = 2647.43
T = 2,648 vehicle trips
with 50% (1,324 vpd) entering and 50% (1,324 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 2.07 * (X)
T = 2.07 * 8.400
T = 17.39
T = 17 vehicle trips
with 67% (11 vph) entering and 33% (6 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 14.13 * (X)
T = 14.13 * 8.400
T = 118.69
T = 119 vehicle trips
with 55% (65 vph) entering and 45% (54 vph) exiting.

SATURDAY DAILY

T = 318.62 * (X)
T = 318.62 * 8.400
T = 2676.41
T = 2,676 vehicle trips
with 50% (1,338 vpd) entering and 50% (1,338 vpd) exiting.

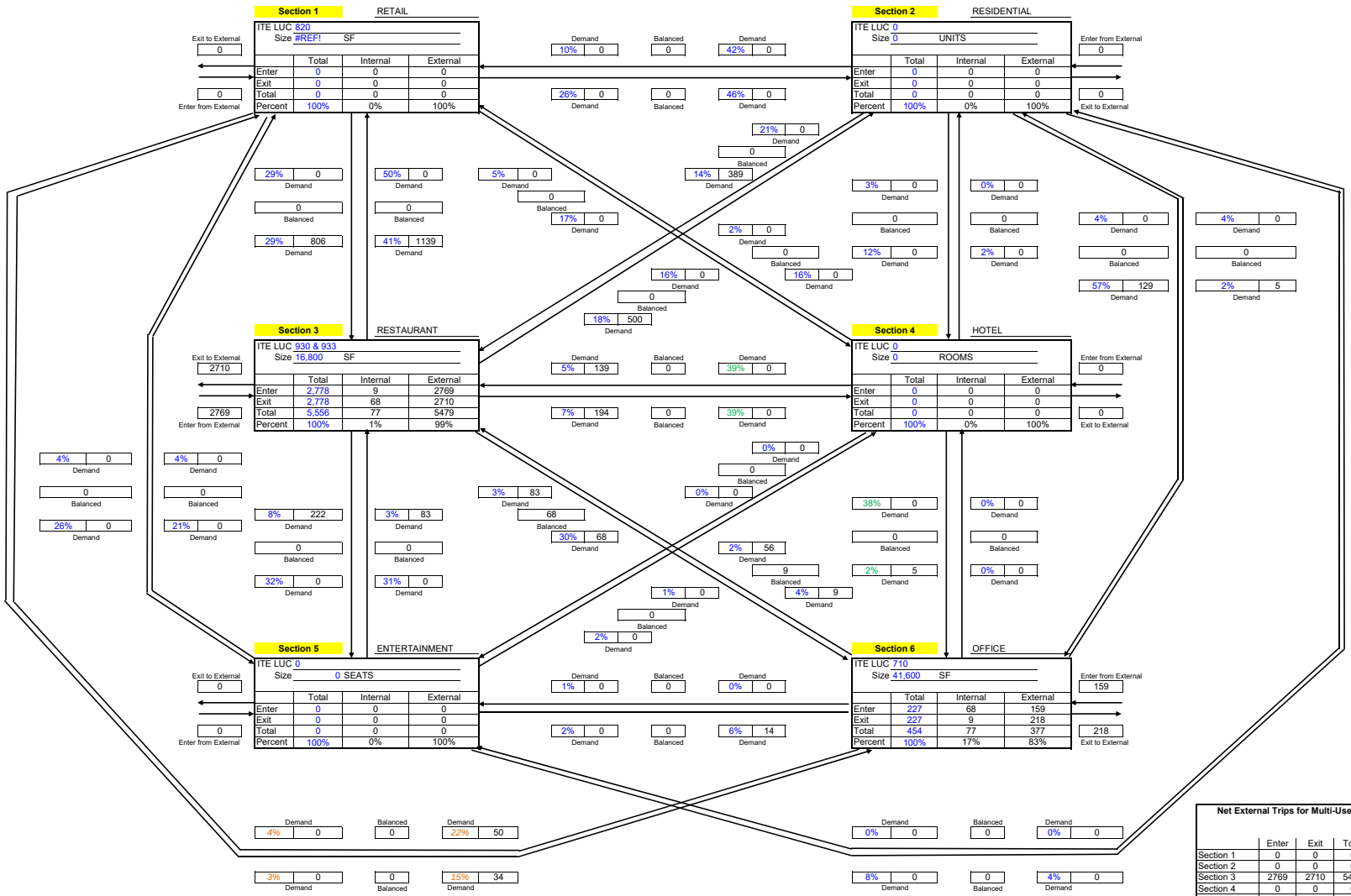
SATURDAY PEAK HOUR OF GENERATOR

T = 34.02 * (X)
T = 34.02 * 8.400
T = 285.77
T = 286 vehicle trips
with 55% (157 vph) entering and 45% (129 vph) exiting.

Analyst: Douglas S. Halpert, P.E.
Date: October 24, 2019

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt: 60 Penhallow Street
Time Period: Weekday Daily



Net External Trips for Multi-Use Development

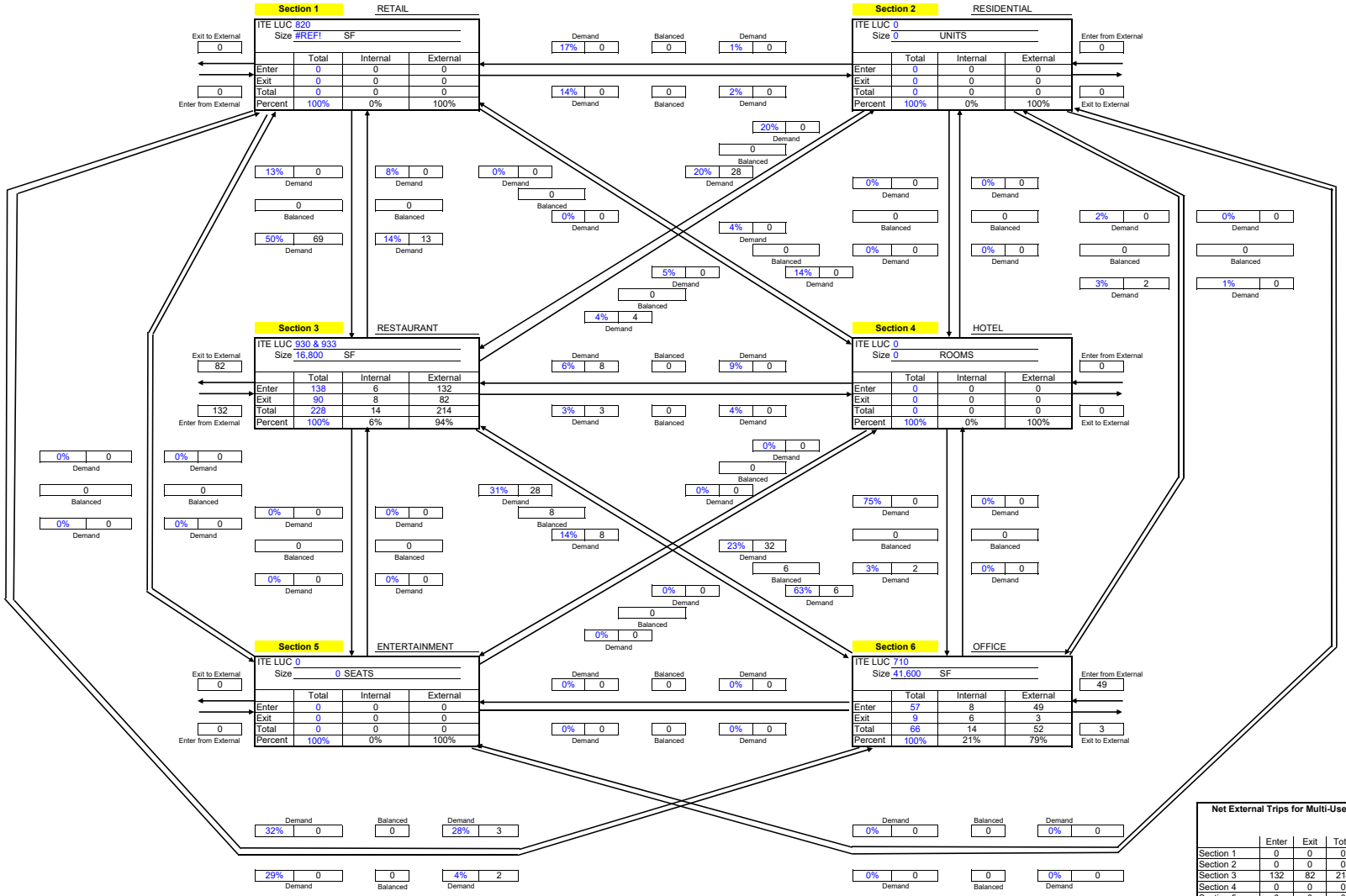
	Enter	Exit	Total	Single-Use Trip Gen Est.	
Section 1	0	0	0	0	
Section 2	0	0	0	0	
Section 3	2769	2710	5479	5556	
Section 4	0	0	0	0	
Section 5	0	0	0	0	
Section 6	159	218	377	454	*Internal Capture*
TOTAL	2928	2928	5856	6010	**3%**

Based on Weekday PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.
Based on an average of Weekday AM or PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.

Analyst: Douglas S. Halpert, P.E.
Date: October 24, 2019

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt: 60 Penhallow Street
Time Period: Weekday AM



Net External Trips for Multi-Use Development

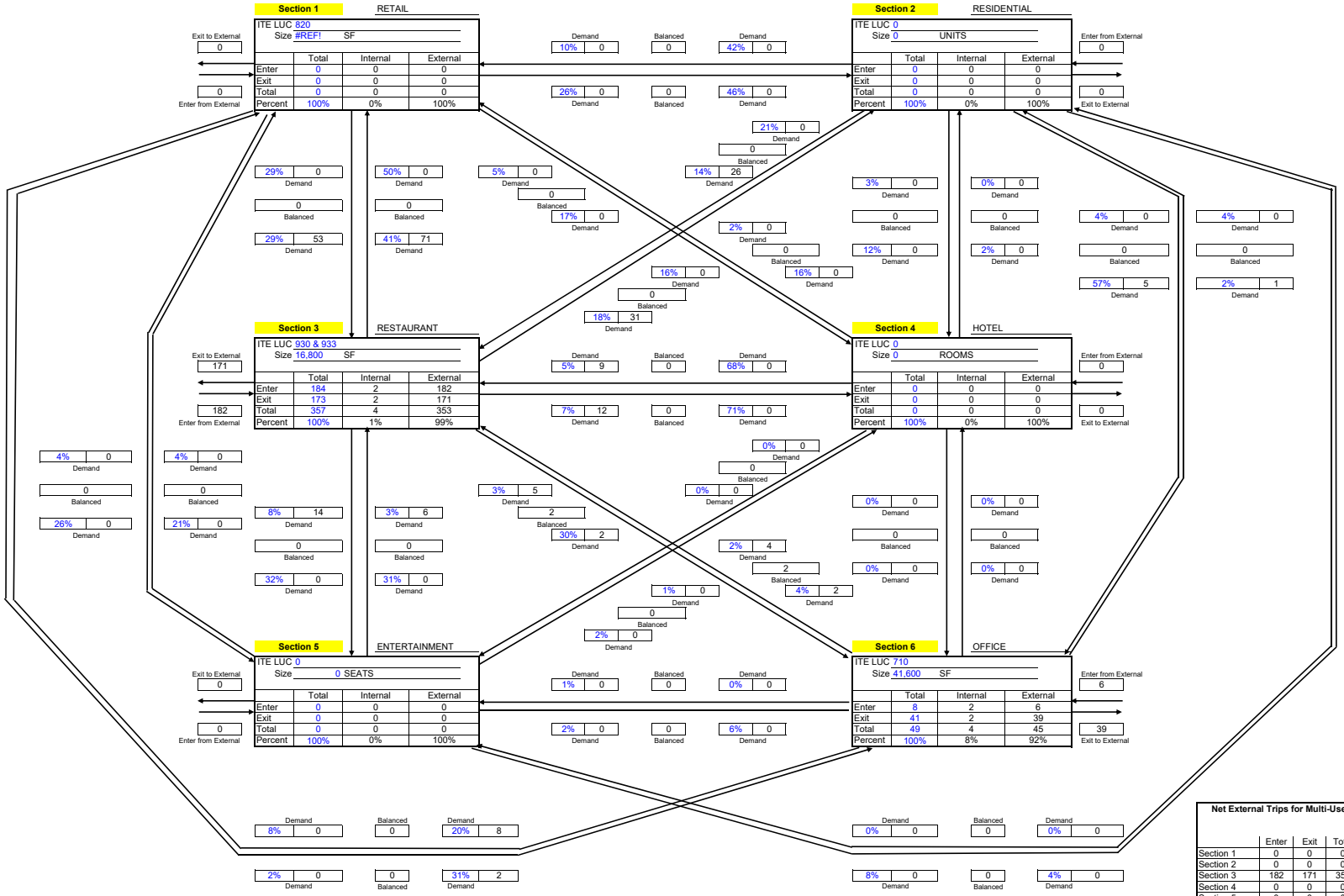
	Enter	Exit	Total	Single-Use Trip Gen Est.	
Section 1	0	0	0	0	
Section 2	0	0	0	0	
Section 3	132	82	214	228	
Section 4	0	0	0	0	
Section 5	0	0	0	0	
Section 6	49	3	52	66	*Internal Capture*
TOTAL	181	85	266	294	**10%**

Based on ITE Trip Generation Handbook, 3rd Edition, August 2014.

Analyst: Douglas S. Halpert, P.E.
Date: October 24, 2019

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt: 60 Penhallow Street
Time Period: Weekday PM



Net External Trips for Multi-Use Development

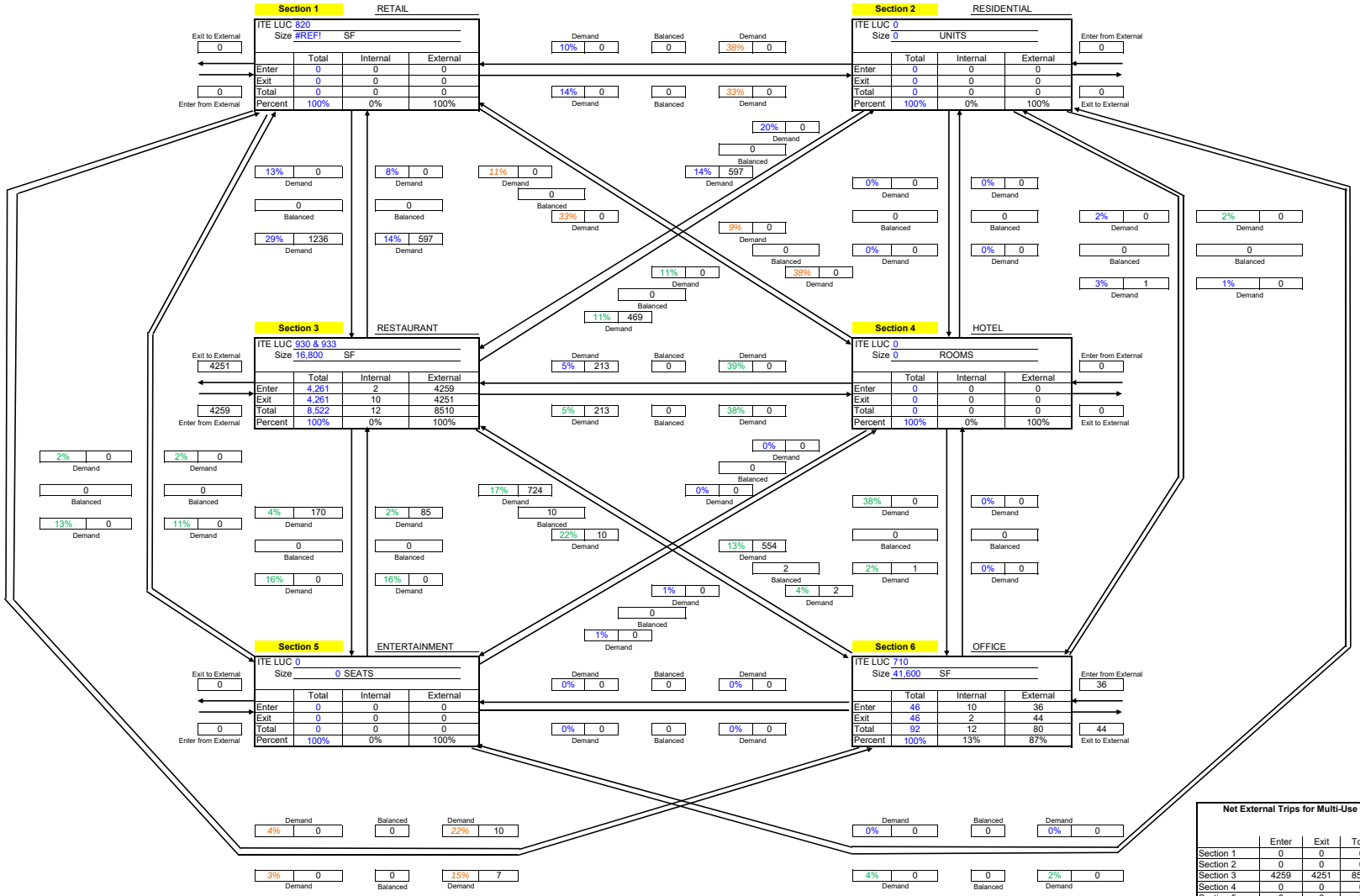
	Enter	Exit	Total	Single-Use Trip Gen Est.	
Section 1	0	0	0	0	
Section 2	0	0	0	0	
Section 3	182	171	353	357	
Section 4	0	0	0	0	
Section 5	0	0	0	0	
Section 6	6	39	45	49	*Internal Capture*
TOTAL	188	210	398	406	**2%**

Based on ITE Trip Generation Handbook, 3rd Edition, August 2014.

Analyst: Douglas S. Halpert, P.E.
Date: October 24, 2019

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt: 60 Penhallow Street
Time Period: Saturday Daily



Net External Trips for Multi-Use Development

	Enter	Exit	Total	Single-Use Trip Gen Est.
Section 1	0	0	0	0
Section 2	0	0	0	0
Section 3	4259	4251	8510	8522
Section 4	0	0	0	0
Section 5	0	0	0	0
Section 6	36	44	80	92
TOTAL	4295	4295	8590	8614

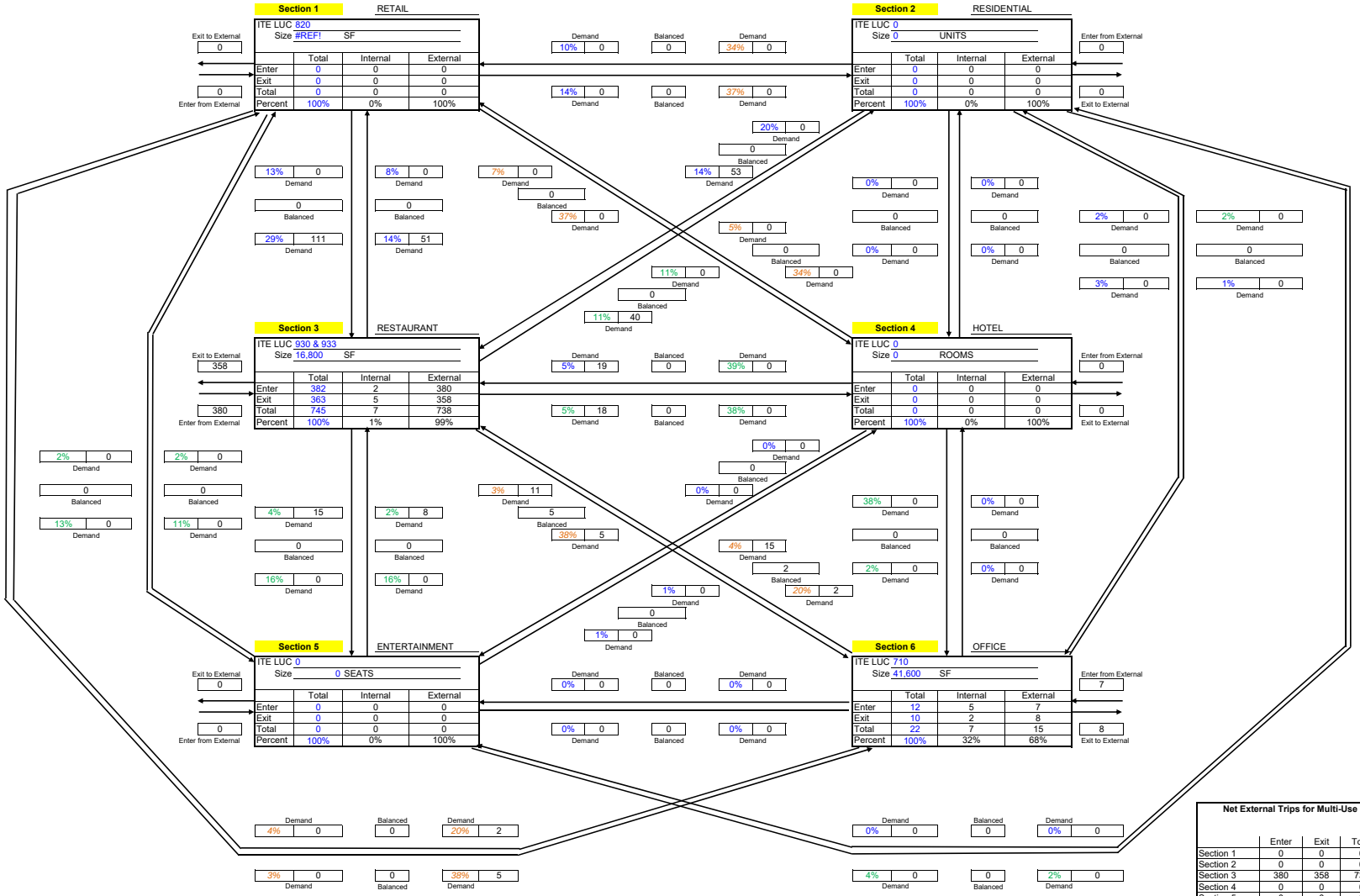
Internal Capture **0%**

Based on most conservative of Weekday AM or PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.
Based on an average of Weekday AM or PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.
Based on ITE Trip Generation Handbook, 2nd Edition, June 2004.

Analyst: Douglas S. Halpert, P.E.
Date: October 24, 2019

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Dvlpt: 60 Penhallow Street
Time Period: Saturday Midday



Section 1	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
Percent	100%	0%	100%

Section 2	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
Percent	100%	0%	100%

Section 3	Total	Internal	External
Enter	382	2	380
Exit	363	5	358
Total	745	7	738
Percent	100%	1%	99%

Section 4	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
Percent	100%	0%	100%

Section 5	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
Percent	100%	0%	100%

Section 6	Total	Internal	External
Enter	12	5	7
Exit	10	2	8
Total	22	7	15
Percent	100%	32%	68%

Net External Trips for Multi-Use Development

	Enter	Exit	Total	Single-Use Trip Gen Est.
Section 1	0	0	0	0
Section 2	0	0	0	0
Section 3	380	358	738	745
Section 4	0	0	0	0
Section 5	0	0	0	0
Section 6	7	8	15	22
TOTAL	387	366	753	767

Internal Capture **2%**

Based on most conservative of Weekday AM or PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.
Based on an average of Weekday AM or PM from ITE Trip Generation Handbook, 3rd Edition, August 2014.
Based on ITE Trip Generation Handbook, 2nd Edition, June 2004.

B08101

MEANS OF TRANSPORTATION TO WORK BY AGE

Universe: Workers 16 years and over
2013-2017 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

	Portsmouth city, New Hampshire	
	Estimate	Margin of Error
Total:	12,584	+/-398
16 to 19 years	381	+/-161
20 to 24 years	1,265	+/-251
25 to 44 years	6,084	+/-431
45 to 54 years	2,327	+/-249
55 to 59 years	1,096	+/-198
60 to 64 years	714	+/-168
65 years and over	717	+/-141
Car, truck, or van - drove alone:	9,564	+/-465
16 to 19 years	145	+/-68
20 to 24 years	981	+/-267
25 to 44 years	4,631	+/-414
45 to 54 years	1,859	+/-245
55 to 59 years	838	+/-187
60 to 64 years	512	+/-120
65 years and over	598	+/-131
Car, truck, or van - carpooled:	896	+/-235
16 to 19 years	132	+/-106
20 to 24 years	54	+/-37
25 to 44 years	475	+/-173
45 to 54 years	97	+/-63
55 to 59 years	84	+/-58
60 to 64 years	54	+/-44
65 years and over	0	+/-21
Public transportation (excluding taxicab):	180	+/-79
16 to 19 years	0	+/-21
20 to 24 years	57	+/-47
25 to 44 years	71	+/-58
45 to 54 years	21	+/-24
55 to 59 years	15	+/-15
60 to 64 years	16	+/-17
65 years and over	0	+/-21
Walked:	761	+/-240
16 to 19 years	79	+/-86

	Portsmouth city, New Hampshire	
	Estimate	Margin of Error
20 to 24 years	131	+/-88
25 to 44 years	376	+/-154
45 to 54 years	70	+/-60
55 to 59 years	27	+/-22
60 to 64 years	57	+/-58
65 years and over	21	+/-24
Taxicab, motorcycle, bicycle, or other means:	210	+/-90
16 to 19 years	6	+/-11
20 to 24 years	0	+/-21
25 to 44 years	134	+/-74
45 to 54 years	55	+/-39
55 to 59 years	0	+/-21
60 to 64 years	15	+/-16
65 years and over	0	+/-21
Worked at home:	973	+/-225
16 to 19 years	19	+/-45
20 to 24 years	42	+/-58
25 to 44 years	397	+/-115
45 to 54 years	225	+/-70
55 to 59 years	132	+/-63
60 to 64 years	60	+/-46
65 years and over	98	+/-64

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

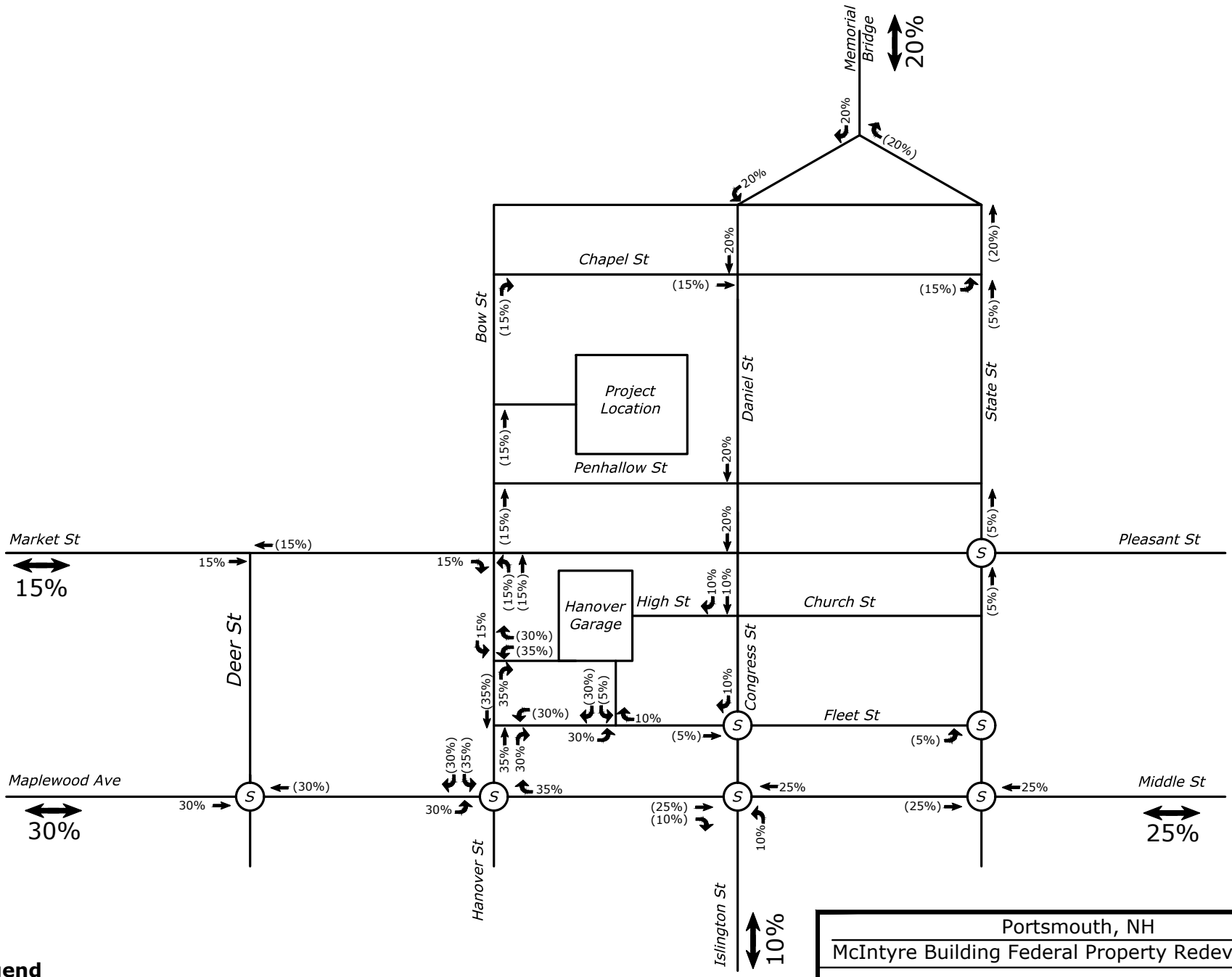
While the 2013-2017 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

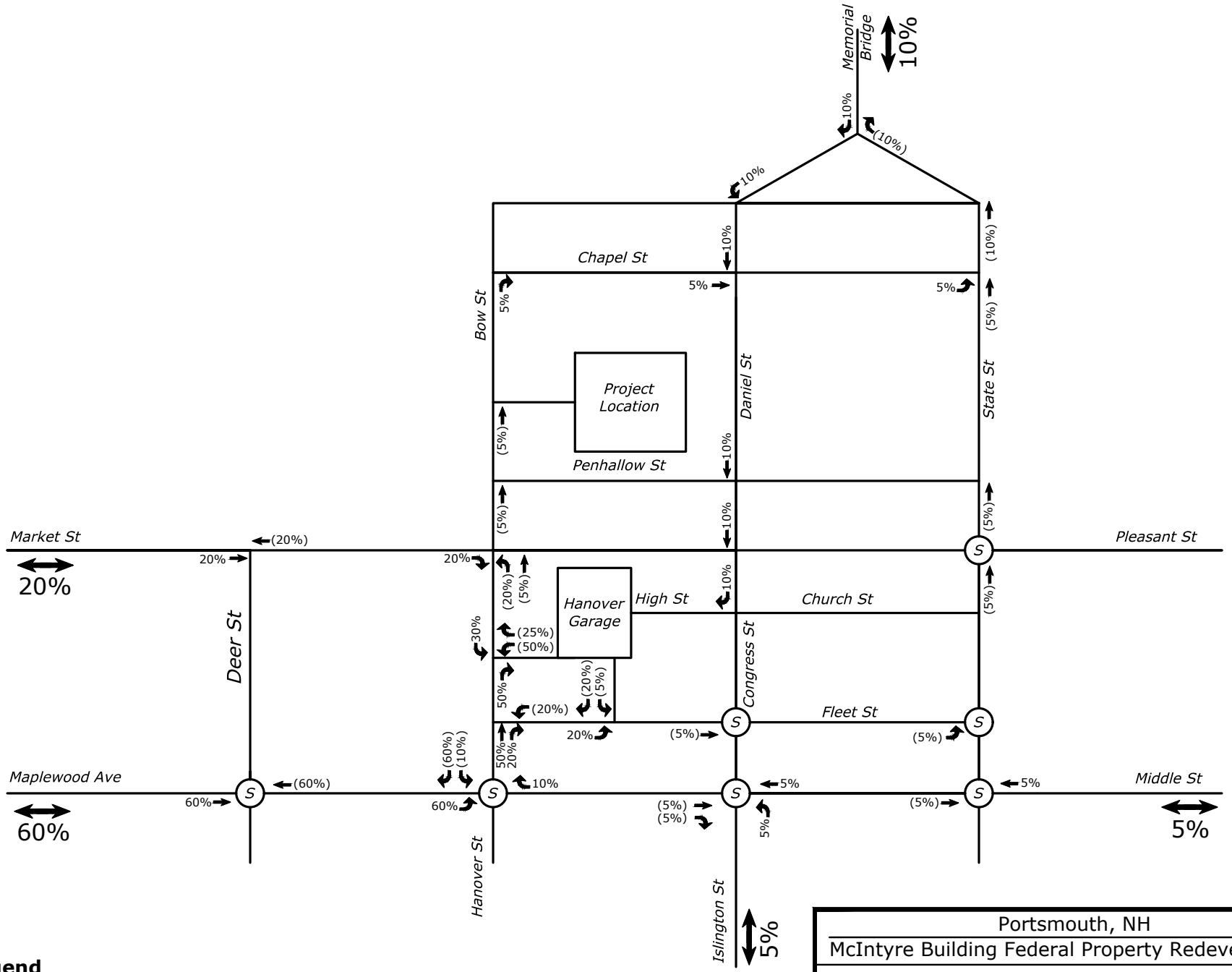
Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '**' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '***' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.





Legend

(S) Traffic Signal
XX Entering Traffic
(XX) Exiting Traffic

Portsmouth, NH
McIntyre Building Federal Property Redevelopment

Office Trip Distribution

DATE 10/17/2019
FIGURE 5

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Critical Peak Hour Traffic Volume Comparison - Weekday PM versus Saturday Midday
Based on NHDOT Count Station Data

Location ID	Location	Date	Volume		Site Gen Trips		Sum		% Difference	
			PM	SAT	PM	SAT	PM	SAT	PM	SAT
	Maplewood Avenue east of Raynes	11/3/2011	987		61		1048		5%	
82379035	Avenue	11/5/2011		865		128		993		-6%
	Market Street west of Hanover	7/14/2011	1036		32		1068		12%	
82379081	Street	7/16/2011		875		63		938		-14%
	US 1 (Memorial Bridge) at Maine	4/27/2017	1232		28		1260		-1%	
82379079	State Line	4/29/2017		1202		69		1271		1%
	Islington Street east of Summer	8/30/2012	841		12		853		7%	
82379044	Street	8/25/2012		753		40		793		-8%
	US 1 (Middle Road) north of	7/28/2011	957		34		991		-10%	
82379076	Richards Avenue)	7/30/2011		992		100		1092		9%
	Congress Street east of	7/21/2011	548		27		575		8%	
82379084	Mapplewood Avenue	7/23/2011		506		21		527		-9%
TOTAL NETWORK VOLUME			**5601**		**194**		**5795**		**3%**	
				5193		**421**		**5614**		**-3%**

Critical Peak Hour Volume Comparison - Weekday PM versus Saturday Midday
Based on City of Portsmouth TMC Data

Location ID	Location	Date	Existing Volume		Site Gen Trips		Build Trips		Difference		% Difference	
			PM	SAT	PM	SAT	PM	SAT	PM	SAT	PM	SAT
	Maplewood Avenue / Congress Street /	9/13/2019	1442		66		1508		-26		-2%	
695168	Islington Street / Middle Street	9/14/2019		1387		147		1534		26		2%
		9/10/2019	1611		61		1672		379		23%	
693453	Maplewood Avenue / Deer Street	9/7/2019		1165		128		1293		-379		-29%
		9/10/2019	1371		100		1471		-29		-2%	
698419	Maplewood Avenue / Hanover Street	9/21/2019		1255		245		1500		29		2%
		9/12/2019	1158		38		1196		15		1%	
82379044	State Street / Middle Street	9/14/2019		1077		104		1181		-15		-1%
			5582		**265**		**5847**		**339**		**6%**	
TOTAL NETWORK VOLUME				**4884**		**624**		**5508**		**-339**		**-6%**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**PROJECT REFERENCE**	**DRAWING TYPE**	**ROOM OR AREA**	**MOUNTING**	**FUNCTION**	**MANUFACTURER**	**CATALOG NUMBER**	**SOURCE**	**LENGTH, DIAMETER OR BEAM SPREAD**	**LUMENS/ FT.**	**TOTAL LUMENS**	**WATTS/ FT**	**TOTAL WATTS**	**COLOR TEMP**	**CRI**	**VOLTS**	**DIMMING PROTOCOL**	**LOW END DIM**	**WEIGHT (IN LBS)**	**COLOR**	**PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL**	**QTY**	**EXTERIOR CIRCUIT GROUP**	**NOTES**	**REVIEWER**
2	3 PLEASANT STREET	JNC-1	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
3	3 PLEASANT STREET	JNC-2	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
4	3 PLEASANT STREET	JNC-3	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
5	3 PLEASANT STREET	JNC-4	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
6	3 PLEASANT STREET	JNC-5	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
7	3 PLEASANT STREET	JNC-6	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
8	60 PENHALLOW	JNC-7	NORTH EXTERIOR-3 PLEASANT	CANTENARY	PATIO DINING LIGHTING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	DINING NORTH		JSA-PETERSEN-JMLD
9	60 PENHALLOW	JNC-8	AROUND FOUNTAIN EXTERIOR	CANTENARY	RING CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	2,628	N/A	30	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	RING CANT		JSA-PETERSEN-JMLD
10	60 PENHALLOW	JNC-9	AROUND FOUNTAIN EXTERIOR	CANTENARY	RING CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	2,628	N/A	30	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	RING CANT		JSA-PETERSEN-JMLD
11	60 PENHALLOW	JNC-10	SOUTH EXTERIOR - 60 PEN	CANTENARY	SOUTH CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH CANT		JSA-PETERSEN-JMLD
12	60 PENHALLOW	JNC-11	SOUTH EXTERIOR - 60 PEN	CANTENARY	SOUTH CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 11'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH CANT		JSA-PETERSEN-JMLD
13	60 PENHALLOW	JNC-12	SOUTH EXTERIOR - 60 PEN	CANTENARY	SOUTH CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 19'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH CANT		JSA-PETERSEN-JMLD
14	60 PENHALLOW	JNC-13	SOUTH EXTERIOR - 60 PEN	CANTENARY	SOUTH CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 17'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH CANT		JSA-PETERSEN-JMLD
15	60 PENHALLOW	JNC-14	SOUTH EXTERIOR - 60 PEN	CANTENARY	SOUTH CANT	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 19'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH CANT		JSA-PETERSEN-JMLD
16	60 PENHALLOW	JNC-15	WEST EXTERIOR - 60 PEN	CANTENARY	ALLEY NORTH	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 19'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY NORTH		JSA-PETERSEN-JMLD
17	60 PENHALLOW	JNC-16	WEST EXTERIOR - 60 PEN	CANTENARY	ALLEY NORTH	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 19'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY NORTH		JSA-PETERSEN-JMLD

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**PROJECT REFERENCE**	**DRAWING TYPE**	**ROOM OR AREA**	**MOUNTING**	**FUNCTION**	**MANUFACTURER**	**CATALOG NUMBER**	**SOURCE**	**LENGTH, DIAMETER OR BEAM SPREAD**	**LUMENS/ FT.**	**TOTAL LUMENS**	**WATTS/ FT**	**TOTAL WATTS**	**COLOR TEMP**	**CRI**	**VOLTS**	**DIMMING PROTOCOL**	**LOW END DIM**	**WEIGHT (IN LBS)**	**COLOR**	**PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL**	**QTY**	**EXTERIOR CIRCUIT GROUP**	**NOTES**	**REVIEWER**
18	60 PENHALLOW	JNC-17	WEST EXTERIOR - 60 PEN	CANTENARY	ALLEY NORTH	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 19'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY NORTH		JSA-PETERSEN-JMLD
19	3 PLEASANT STREET	JNC-18	EAST EXTERIOR - 3 PLEASANT	CANTENARY	ALLEY SOUTH	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 5'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY SOUTH		JSA-PETERSEN-JMLD
20	3 PLEASANT STREET	JNC-19	EAST EXTERIOR - 3 PLEASANT	CANTENARY	ALLEY SOUTH	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 5'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY SOUTH		JSA-PETERSEN-JMLD
21	3 PLEASANT STREET	JNC-20	EAST EXTERIOR - 3 PLEASANT	CANTENARY	ALLEY SOUTH	HK LIGHTING GROUP	(2) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 15'	LED	10.28"	N/A	876	N/A	20	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	ALLEY SOUTH		JSA-PETERSEN-JMLD
22	3 PLEASANT STREET	JNC-21	SOUTH EXTERIOR - 3 PLEASANT	CANTENARY	SOUTH DINING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 10'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH DINING		JSA-PETERSEN-JMLD
23	3 PLEASANT STREET	JNC-22	SOUTH EXTERIOR - 3 PLEASANT	CANTENARY	SOUTH DINING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 12'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH DINING		JSA-PETERSEN-JMLD
24	3 PLEASANT STREET	JNC-23	SOUTH EXTERIOR - 3 PLEASANT	CANTENARY	SOUTH DINING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 13'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH DINING		JSA-PETERSEN-JMLD
25	3 PLEASANT STREET	JNC-24	SOUTH EXTERIOR - 3 PLEASANT	CANTENARY	SOUTH DINING	HK LIGHTING GROUP	(1) CZXL-16i-CAT-GSL-10 WATT-30-57-ABK 120--1/2" CANTENARY CABLE-LIQUID TIGHT CORD GRIP IN BLACK-18/3 SJTN 14'	LED	10.28"	N/A	876	N/A	10	3,000		120	MLV	0%		ANODIZED BLACK	NO	1	SOUTH DINING		JSA-PETERSEN-JMLD
26	60 PENHALLOW	JOW	VARIOUS EGRESS DOORS	WALL	EGRESS-EMERGENCY	SIGNTEX LIGHTING	MUE-AC-20-X-W-TBD	LED					20			120					NO	SEE DRAWINGS			JSA-PETERSEN-JMLD
27	3 PLEASANT STREET	JPS-228	EXTERIOR CORNICE NORTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-228"-WIDE-BK-PL-DF-S1-228"	LED	19	172	3268	1.5	28.5	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
28	3 PLEASANT STREET	JPS-240	EXTERIOR CORNICE NORTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-240"-WIDE-BK-PL-DF-S1-240"	LED	20	172	3440	1.5	30	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
29	3 PLEASANT STREET	JPS-258	EXTERIOR CORNICE NORTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-258"-WIDE-BK-PL-DF-S1-258"	LED	21.5	172	3698	1.5	32.25	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
30	3 PLEASANT STREET	JPS-258	EXTERIOR CORNICE NORTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-258"-WIDE-BK-PL-DF-S1-258"	LED	21.5	172	3698	1.5	32.25	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
31	3 PLEASANT STREET	JPS-TRA-1	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM200-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	MLV	0%		STND	NO	1	CORNICE		JSA-PETERSEN-JMLD
32	3 PLEASANT STREET	JPS-228	EXTERIOR CORNICE SOUTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-228"-WIDE-BK-PL-DF-S1-228"	LED	19	172	3268	1.5	28.5	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
33	3 PLEASANT STREET	JPS-240	EXTERIOR CORNICE SOUTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-240"-WIDE-BK-PL-DF-S1-240"	LED	20	172	3440	1.5	30	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
34	3 PLEASANT STREET	JPS-258	EXTERIOR CORNICE SOUTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-258"-WIDE-BK-PL-DF-S1-258"	LED	21.5	172	3698	1.5	32.25	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
35	3 PLEASANT STREET	JPS-258	EXTERIOR CORNICE SOUTH	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-258"-WIDE-BK-PL-DF-S1-258"	LED	21.5	172	3698	1.5	32.25	3,000	97	24VDC	MLV	0%		BLACK	NO	19	CORNICE		JSA-PETERSEN-JMLD
36	3 PLEASANT STREET	JPS-TRA-2	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM200-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	MLV	0%		STND	NO	1	CORNICE		JSA-PETERSEN-JMLD

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**PROJECT REFERENCE**	**DRAWING TYPE**	**ROOM OR AREA**	**MOUNTING**	**FUNCTION**	**MANUFACTURER**	**CATALOG NUMBER**	**SOURCE**	**LENGTH, DIAMETER OR BEAM SPREAD**	**LUMENS/ FT.**	**TOTAL LUMENS**	**WATTS/ FT**	**TOTAL WATTS**	**COLOR TEMP**	**CRI**	**VOLTS**	**DIMMING PROTOCOL**	**LOW END DIM**	**WEIGHT (IN LBS)**	**COLOR**	**PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL**	**QTY**	**EXTERIOR CIRCUIT GROUP**	**NOTES**	**REVIEWER**
37	3 PLEASANT STREET	JPS-180	EXTERIOR CORNICE WEST	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-180"-WIDE-BK-PL-DF-S1-180"	LED	15	172	2580	1.5	22.5	3,000	97	24VDC	MLV	0%		BLACK	NO	18	CORNICE		JSA-PETERSEN-JMLD
38	3 PLEASANT STREET	JPS-180	EXTERIOR CORNICE WEST	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-180"-WIDE-BK-PL-DF-S1-180"	LED	15	172	2580	1.5	22.5	3,000	97	24VDC	MLV	0%		BLACK	NO	18	CORNICE		JSA-PETERSEN-JMLD
39	3 PLEASANT STREET	JPS-252	EXTERIOR CORNICE WEST	SURFACE	UPLIGHT ON CORNICE MOLDING	Q-TRAN	SW24/1.5-WET-30-BW-CLS-252"-WIDE-BK-PL-DF-S1-252"	LED	21	172	3612	1.5	31.5	3,000	97	24VDC	MLV	0%		BLACK	NO	18	CORNICE		JSA-PETERSEN-JMLD
40	3 PLEASANT STREET	JPS-TRA-3	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM100-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	100	N/A	N/A	120/24	MLV	0%		STND	NO	1	CORNICE		JSA-PETERSEN-JMLD
41	3 PLEASANT STREET	JUS	NORTH EXTERIOR	SURFACE	WINDOW WELL LIGHTS	PRESCOLITE	LBSLEDA10L-30K-9-WH	LED	N/A	N/A	1,000	N/A	17	3,000	90	120	ELV	15%		WHITE	NO	6	WINDOW WELLS	MOUNT FOR UP-LIGHT	JSA-PETERSEN-JMLD
42	3 PLEASANT STREET	JUS	SOUTH EXTERIOR	SURFACE	WINDOW WELL LIGHTS	PRESCOLITE	LBSLEDA10L-30K-9-WH	LED	N/A	N/A	1,000	N/A	17	3,000	90	120	ELV	15%		WHITE	NO	6	WINDOW WELLS	MOUNT FOR UP-LIGHT	JSA-PETERSEN-JMLD
43	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
44	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
45	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-DF-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
46	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
47	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
48	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-DF-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
49	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
50	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
51	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-DF-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
52	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
53	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
54	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-DF-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
55	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
56	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
57	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-DF-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
58	60 PENHALLOW	JAAS-TRA-1	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM200-DC+CAP-120-24-2 X 4 CKS	LED	N/A	373	N/A	N/A	200	N/A	N/A	120/24	MLV	0%		STND	NO	1	PILLAR		JSA-PETERSEN-JMLD

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jmlight2@roadrunner.com

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	PROJECT REFERENCE	DRAWING TYPE	ROOM OR AREA	MOUNTING	FUNCTION	MANUFACTURER	CATALOG NUMBER	SOURCE	LENGTH, DIAMETER OR BEAM SPREAD	LUMENS/ FT.	TOTAL LUMENS	WATTS/ FT	TOTAL WATTS	COLOR TEMP	CRI	VOLTS	DIMMING PROTOCOL	LOW END DIM	WEIGHT (IN LBS)	COLOR	PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL	QTY	EXTERIOR CIRCUIT GROUP	NOTES	REVIEWER
59	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
60	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
61	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-ENC/TL-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
62	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
63	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
64	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-ENC/TL-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
65	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
66	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
67	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-ENC/TL-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
68	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
69	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
70	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-ENC/TL-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
71	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
72	60 PENHALLOW	JAAS-33	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-33"-TORQ-BK-PL-ENC/TL-S1-33"	LED	2.75	373	1025.75	4	11	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
73	60 PENHALLOW	JAAS-42	EXTERIOR PILLAR	SURFACE	PILLAR WASH	Q-TRAN	SW24/4.0-WET-30-BW-BW-42"-TORQ-BK-PL-ENC/TL-S1-42"	LED	3.5	373	1305.5	4	14	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PILLAR		JSA-PETERSEN-JMLD
74	60 PENHALLOW	JAAS-TRA-2	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM200-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	MLV	0%		STND	NO	1	PILLAR		JSA-PETERSEN-JMLD
75	60 PENHALLOW	JBBS-150	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S5/6-BW-N/A-150	LED	12.5	118	1475	1.5	18.75	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
76	60 PENHALLOW	JBBS-150	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S5/6-BW-N/A-150	LED	12.5	118	1475	1.5	18.75	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
77	60 PENHALLOW	JBBS-170	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-N/A-170	LED	14.16	118	1670.88	1.5	21.24	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
78	60 PENHALLOW	JBBS-180	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-180	LED	15	118	1770	1.5	22.5	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	2	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
79	60 PENHALLOW	JBBS-180	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-180	LED	15	118	1770	1.5	22.5	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	2	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
80	60 PENHALLOW	JBBS-180	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-180	LED	15	118	1770	1.5	22.5	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	2	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD

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jmlight2@roadrunner.com

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	PROJECT REFERENCE	DRAWING TYPE	ROOM OR AREA	MOUNTING	FUNCTION	MANUFACTURER	CATALOG NUMBER	SOURCE	LENGTH, DIAMETER OR BEAM SPREAD	LUMENS/ FT.	TOTAL LUMENS	WATTS/ FT	TOTAL WATTS	COLOR TEMP	CRI	VOLTS	DIMMING PROTOCOL	LOW END DIM	WEIGHT (IN LBS)	COLOR	PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL	QTY	EXTERIOR CIRCUIT GROUP	NOTES	REVIEWER
81	60 PENHALLOW	JBBS-TRA-1	SOUTH OF 60-NORTH WALL	WALL EXTERIOR	POWER SUPPLY	Q-TRAN	QTM200-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	MLV	0%		STND	NO		BENCH		JSA-PETERSEN-JMLD
82	60 PENHALLOW	JBBS-173	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-N/A-173	LED	14.41	118	1700.38	1.5	21.615	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
83	60 PENHALLOW	JBBS-173	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S5-BW-N/A-173	LED	14.41	118	1700.38	1.5	21.615	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
84	60 PENHALLOW	JBBS-173	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S6-BW-N/A-173	LED	14.41	118	1700.38	1.5	21.615	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
85	60 PENHALLOW	JBBS-173	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S2-BW-N/A-173	LED	14.41	118	1700.38	1.5	21.615	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	BENCH	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
86	60 PENHALLOW	JBBS-TRA-2	SOUTH OF 60-NORTH WALL	WALL EXTERIOR	POWER SUPPLY	Q-TRAN	QTM60-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	60	N/A	N/A	120/24	MLV	0%		STND	NO	1	BENCH		JSA-PETERSEN-JMLD
87	60 PENHALLOW	JBBS-123R	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S5-BW-N/A-123	LED	10.25	118	1209.5	1.5	15.375	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PODIUM	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
88	60 PENHALLOW	JBBS-123L	SOUTH OF 60-NORTH WALL	SURFACE UNDER SEAT	WALL-WASH	Q-TRAN	KUR -SW-WSC-WET-30-S0-ENC-TL-S6-BW-N/A-123	LED	10.25	118	1209.5	1.5	15.375	3,000	90	24	MLV	0%		STND	PROVIDE CONTRACTOR SHOP DRAWING	1	PODIUM	SUPPLY NEUTRAL WIRE	JSA-PETERSEN-JMLD
89	60 PENHALLOW	JBBS-TRA-3	SOUTH OF 60-NORTH WALL	WALL EXTERIOR	POWER SUPPLY	Q-TRAN	QTM60-DC+CAP-120-24-2 X 4 CKS	LED	N/A	N/A	N/A	N/A	60	N/A	N/A	120/24	MLV	0%		STND	NO	1	PODIUM		
90	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
91	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
92	60 PENHALLOW	JCCS-TRA-1	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
93	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
94	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
95	60 PENHALLOW	JCCS-TRA-2	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
96	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
97	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
98	60 PENHALLOW	JCCS-TRA-3	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
99	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
100	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
101	60 PENHALLOW	JCCS-TRA-4	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
102	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**PROJECT REFERENCE**	**DRAWING TYPE**	**ROOM OR AREA**	**MOUNTING**	**FUNCTION**	**MANUFACTURER**	**CATALOG NUMBER**	**SOURCE**	**LENGTH, DIAMETER OR BEAM SPREAD**	**LUMENS/ FT.**	**TOTAL LUMENS**	**WATTS/ FT**	**TOTAL WATTS**	**COLOR TEMP**	**CRI**	**VOLTS**	**DIMMING PROTOCOL**	**LOW END DIM**	**WEIGHT (IN LBS)**	**COLOR**	**PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL**	**QTY**	**EXTERIOR CIRCUIT GROUP**	**NOTES**	**REVIEWER**
103	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
104	60 PENHALLOW	JCCS-TRA-5	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
105	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
106	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
107	60 PENHALLOW	JCCS-TRA-6	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
108	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
109	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
110	60 PENHALLOW	JCCS-TRA-7	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
111	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
112	60 PENHALLOW	JCCS-RUN B	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-185.04-WIDE-BK-PL-DF-S1-185.04	LED	15.42	292	4502.64	6	92.52	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
113	60 PENHALLOW	JCCS-TRA-8	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
114	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
115	60 PENHALLOW	JCCS-RUN A	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-170.75-WIDE-BK-PL-DF-S1-170.75	LED	14.22	292	4152.24	6	85.32	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
116	60 PENHALLOW	JCCS-TRA-9	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
117	60 PENHALLOW	JCCS-RUN C	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-126.77-WIDE-BK-PL-DF-S1-126.77	LED	10.56	292	3083.52	6	63.36	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
118	60 PENHALLOW	JCCS-RUN C	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-126.77-WIDE-BK-PL-DF-S1-126.77	LED	10.56	292	3083.52	6	63.36	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
119	60 PENHALLOW	JCCS-TRA-10	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
120	60 PENHALLOW	JCCS-RUN C	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-126.77-WIDE-BK-PL-DF-S1-126.77	LED	10.56	292	3083.52	6	63.36	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
121	60 PENHALLOW	JCCS-RUN C	EXTERIOR	VERTICAL SURFACE	VERTICAL COLOR CHANGE	Q-TRAN	RGBW24/6.0-WET-RGBW-30-BW-N/A-126.77-WIDE-BK-PL-DF-S1-126.77	LED	10.56	292	3083.52	6	63.36	3,000	N/A	24	DMX	0%		BLACK	YES	1	RED, GREEN, BLUE, WHITE	LUMENS VARIABLE	JSA-PETERSEN-JMLD
122	60 PENHALLOW	JCCS-TRA-11	TBD	SURFACE	POWER SUPPLY	Q-TRAN	QTM-eLED-DMX	N/A	N/A	N/A	N/A	N/A	200	N/A	N/A	120/24	DMX	0%		STND	YES	1	RED, GREEN, BLUE, WHITE		JSA-PETERSEN-JMLD
123	60 PENHALLOW	JDDR	SOUTHWEST ENTRANCE	RECESS	ENTRY LIGHTS	USAI	B4RCF-16C3-30KS-70-S-WH-WH-NCIC-UNV-D6E	LED	70 degree	N/A		N/A	16	3,000	80	120/277	0-10V	1%		WHITE/WHITE	NO	1	SOUTHWEST ENTRY		JSA-PETERSEN-JMLD
124	60 PENHALLOW	JDDR	GARAGE ENTRANCE	RECESS	ENTRY LIGHTS	USAI	B4RCF-16C3-30KS-70-S-WH-WH-NCIC-UNV-D6E	LED	70 degree	N/A		N/A	16	3,000	80	120/277	0-10V	1%		WHITE/WHITE	NO	2	GARAGE		JSA-PETERSEN-JMLD

J M LIGHTING DESIGN, INC. 207-967-5223
jmlight2@roadrunner.com

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	**PROJECT REFERENCE**	**DRAWING TYPE**	**ROOM OR AREA**	**MOUNTING**	**FUNCTION**	**MANUFACTURER**	**CATALOG NUMBER**	**SOURCE**	**LENGTH, DIAMETER OR BEAM SPREAD**	**LUMENS/ FT.**	**TOTAL LUMENS**	**WATTS/ FT**	**TOTAL WATTS**	**COLOR TEMP**	**CRI**	**VOLTS**	**DIMMING PROTOCOL**	**LOW END DIM**	**WEIGHT (IN LBS)**	**COLOR**	**PROVIDE FACTORY GENERATED SHOP DRAWINGS & BILL OF MATERIAL**	**QTY**	**EXTERIOR CIRCUIT GROUP**	**NOTES**	**REVIEWER**
125	60 PENHALLOW	JEER	NORTHEAST ENTRANCE	RECESS	ENTRY LIGHTS	HUNZA	EAVE/T6/L-S-EBZ-60-3	LED	60 degree	N/a	600	n/a		3,000	80	6 VOLT DC	0-10V	1%		BRONZE	YES	3	NORTHEAST ENTRY		JSA-PETERSEN-JMLD
126	60 PENHALLOW	JEER-TRA-1	TBD	SURFACE	POWER SUPPLY	HUNZA	TCI-122413-1050MA/PC-17-02	N/A	N/A	N/A	600	N/A		N/A	N/A	120/ 6 VOLT DC	0-10V	1%		STND	YES	1	NORTHEAST ENTRY		

J M LIGHTING DESIGN, INC. 207-967-5223
jmlight2@roadrunner.com

SW24/4.0

STRIP - STATIC WHITE

c UL us LISTED · RoHS COMPLIANT · NEC 410.2 and 410.16 · JA8-2016

TYPE JAAS-33 or 42 PILLARS

Q-TRAN LED

V/WATTS	RATED	CCT - LUMENS/CRI	[2]CONNECTOR/ WIRE IN	[2]CONNECTOR/ WIRE OUT	ILLUMINATED LENGTH (IN)
SW24/4.0	WET	30	BW	BW	33 or 42

Voltage: 24 VDC
Wattage: 4.0 W/ft

RATED	CCT - LUMENS/CRI	[1]CONNECTOR/ WIRE IN	[2]CONNECTOR/ WIRE OUT	ILLUMINATED LENGTH (IN)
DRY	20 - 2000K 309/93 22 - 2200K 314/96 24 - 2400K 306/95 27 - 2700K 349/98 30 - 3000K 373/98 35 - 3500K 389/98 40 - 4000K 369/96	[1]BW BRL CLS	CLS [1]BW BRL	1"-288" (1" increments) OR [2]MATCH (Matches EXT length ordered)
DMP	24 - 2400K 284/94 27 - 2700K 276/97 30 - 3000K ***/** 35 - 3500K ***/** 40 - 4000K 324/95	[1]BW BRL	CLS [1]BW BRL	1"-180" (1" increments) OR [2]MATCH (Matches EXT length ordered)
[3]ENC				[2]MATCH (Matches EXT length ordered)
WET	20 - 2000K 260/94 22 - 2200K ***/** 24 - 2400K 282/96 27 - 2700K 285/95 30 - 3000K 299/96 35 - 3500K 323/96 40 - 4000K 337/96	[1]BW BRL	CLS [1]BW BRL	1"-288" (1" increments) OR [2]MATCH (Matches EXT length ordered)

ENC RATED STRIP ARE NOT FIELD CUTTABLE

NOTES:

- Field modifications must comply with Q-Tran's installation methods otherwise warranty is null and void
- All data has +/- 5% tolerance
- 5 year warranty
- NRTL Listed for install in Storage Areas with Clothing, NEC Field 410.2 and 410.16 when assembled as a fixture, at Q-Tran facility (Not applicable for encapsulation)
- **Title 24 - JA8-2016 Strips:** Dry rated, 2200K and above

1 BW comes in standard 24"- request custom length (Max 120") by writing it in inches next to "BW" in the order code box (ex. BW48)

2 • Wire orientation for MATCH will be dictated by extrusion Feed In/Feed Out selection
• Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire Out

3 If ordering an encapsulated extrusion, ENC (Encapsulated in Extrusion) must be chosen for your strip

TECHNICAL INFORMATION [L70 = 30000 HRS]

*Tested with SW24/4.0-DRY

CCT	Lumen/ft	CRI Ra	CRI R9	TM30 Rf	TM30 Rg
2000K	309	93	60	89	103
2200K	314	96	90	94	101
2400K	306	95	97	94	103
2700K	349	98	93	94	101
3000K	373	98	95	94	101
3500K	389	98	96	92	100
4000K	369	96	90	90	101

DIMENSIONS

Section (in)	DRY	DMP	WET
A	0.32"	0.32"	0.39"
B	0.16"	0.16"	0.16"
C	1.00"	1.00"	1.00"
D	0.06"	0.12"	0.21"

CONNECTOR/WIRE IN

[1]BW	BRL	CLS
Bare Wire 24"	Male Barrel 6"	Not soldered DRY ONLY

CONNECTOR/WIRE OUT

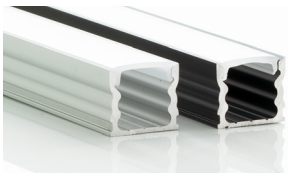
[1]BW	BRL	CLS
Bare Wire 24"	Female Barrel 6"	Not soldered

COMPATIBLE EXTRUSIONS

SLIM	WIDE	ROND	VEGA	TORQ	TRE3	ARKA	TELA	VEVE	FLUR	LATO	MDIN
☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☐ DRY
☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☐ DMP
☐ ENC	☐ ENC	☐ ENC	☐ ENC	☑ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☑ ENC	☑ ENC	☐ ENC
☑ WET - No Lens	☑ WET	☐ WET	☐ WET	☑ WET	☑ WET	☑ WET	☑ WET	☑ WET	☑ WET	☑ WET	☐ WET

PROJECT NAME	DATE	COMPANY	TYPE	NOTE

 | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com | Specification subject to change | Rev-10-22-19



TORQ
EXTRUSIONS - ALUMINUM
Model: iQA

TYPE JAAS-33 or 44

PRODUCT	FINISH	MOUNTING	LENS	TYPE	FINISHED FIXTURE LENGTH (IN)
TORQ	BK	SST	ENC/TL	S1	33 or 44
	ST, BK, BZ	SST	CL/60, CL/70, FR, PR, DF, ENC/CL, ENC/TL	S1, S2, S3, S4 (Single (Closed exit)); P1, P2, P3, P4 (Pass through); NI (Not installed (Strip not installed in factory))	1" increments from 1" - 98.43"; Tolerance +0.0"/-0.5"

NOTES:
- UL Listed when assembled with STRIP LEDs at Q-Tran
- NRTL Listed for install in Storage Areas with Clothing, NEC Field 410.2 and 410.16 when assembled as a fixture, with 4.0 w/ft or less, at Q-Tran facility (Not applicable for encapsulation)
- Field modifications must comply with Q-Tran's installation methods otherwise warranty is null and void

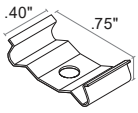
FINISH

ST | BK | BZ

Satin | Black | Bronze

MOUNTING
NOTE: 2 clips provided for 4' or less; 4 clips provided for greater than 4'

TORQ-SST



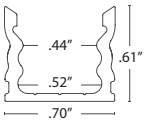
Stainless Steel

QTY:

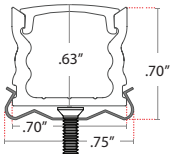
LENS with LED visibility

CL	FR	PR	DF	ENC/CL	ENC/TL
Clear	Frosted	Polar	Diffused	Encapsulated in Clear	Encapsulated in Translucent

DIMENSIONS



Profile



Profile with Stainless Steel Mounting Clip

TYPE

SINGLE (Input only)

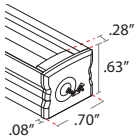
S1	S2	S3	S4
In	In	In	In

PASS THROUGH (Input/Output)

P1	P2	P3	P4
Out / In	Out / In	Out / In	Out / In

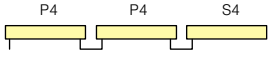
END CAPS

QTY:



Endcap

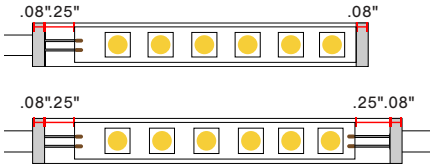
ORDER EXAMPLE

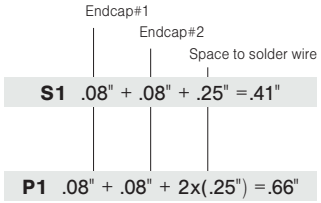


CUT OFF

CL/60	CL/70
60°	70°
Clear 60°	Clear 70°

LENGTH (IN) : Add to nominal LED length for fixture length





PROJECT NAME	DATE	COMPANY	TYPE	NOTE

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KURV-SW
FIXTURES - FLEXIBLE (Q-CAP)

PRODUCT	MOUNTING	RATED	CCT	OUTPUT	LENS	TYPE	CONNECTOR/ WIRE IN	CONNECTOR/ WIRE OUT	END CAPS (NO FEED)	LENGTH (IN)
KURV-SW	WSC	WET	30	SO	ENC-TL	S5	BW			
Voltage: 24 VDC Wattage: see table	WSC RLC MC *SGC PPS PPS-96	DRY WET	24 - 2400K 27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	SO HO VHO	ENC/CL ENC/TL	Single (Closed exit): S1, S2, S3, S4, 2S5, 2S6 Pass through: P1, P2, P3, P4, 2P5	1BW BRL	N/A	CL WH	1" increments from 1"-191" Tolerance +0.0"/-cutpoint for installed product"

ENCAPSULATED PRODUCTS ARE NOT FIELD CUTTABLE

*White Snug Clip included with Side Graze Channel

NOTES:
- Field modifications are not covered under Q-Tran warranty
- Data subject to change, all data has +/- 5% tolerance

1 • BW comes in standard 24"- request custom length (Max 120") by writing it in inches next to "BW" in the order code box (ex. BW48)
• Connector/Wire In or Out not needed to specify product. Standard configuration is Type S1, Connector/Wire In: BW & Connector/Wire Out: N/A with White Endcap (WH)

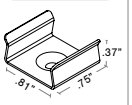
2 PPS mounting clip recommended for seamless applications

OUTPUT Tested for KURV-SW-WSC-DRY [L70 = 40000 HRS]

	SO Standard Output 1.5 Wft				HO High Output 3.0 W/ft				VHO Very High Output 5.0 W/ft			
	ENC/CL		ENC/TL		ENC/CL		ENC/TL		ENC/CL		ENC/TL	
CCT	LM	CRI	LM	CRI	LM	CRI	LM	CRI	LM	CRI	LM	CRI
2400K	110	94	103	95	197	93	182	93	274	94	261	94
2700K	110	98	103	97	208	98	195	98	279	99	247	99
3000K	118	98	109	98	213	98	198	98	298	97	277	97
3500K	121	96	115	95	213	96	203	97	305	97	295	97
4000K	128	96	121	96	229	97	213	97	294	97	284	97

MOUNTING NOTE: 2 clips provided per first 12", 1 clip provided per additional 12"

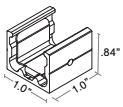
WSC



White Snug Clip

QTY:

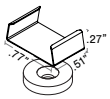
RLC



Rigid Lock Channel

QTY:

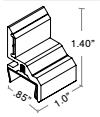
MC



Magnetic Clip (Cove use only)

QTY:

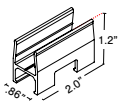
SGC



Side Graze Channel

QTY:

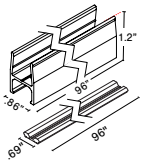
PPS



PVC Mount Clip

QTY:

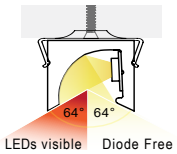
PPS-96



PVC Channel

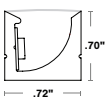
QTY:

VIEWING ANGLE

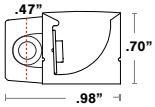


ENC/CL only

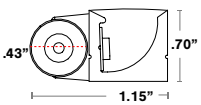
DIMENSIONS



Profile (Standard)



Profile (Seamless Bare Wire)



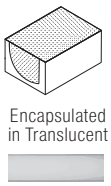
Profile (Seamless Barrel)

LENS with LED visibility

ENC/CL

Encapsulated in Clear

ENC/TL



Encapsulated in Translucent

CONNECTOR/WIRE IN

1BW

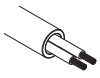
Bare Wire 24"

BRL

Male Barrel 6"

CONNECTOR/WIRE OUT

1BW



Bare Wire 24"

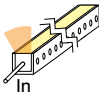
BRL

Female Barrel 6"

TYPE

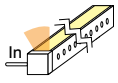
SINGLE (Input only)

S1

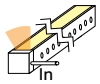


S2

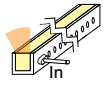
S3



S4

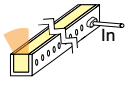


2S5



Seamless

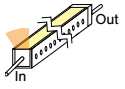
2S6



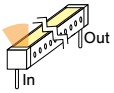
Seamless

PASS THROUGH (Input/Output)

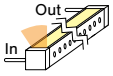
P1



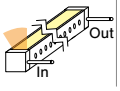
P2



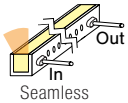
P3



P4

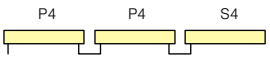


2P5

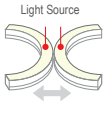


Seamless

ORDER EXAMPLE



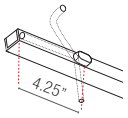
FLEXIBILITY



Side Bend 6" Bending Radius

SEAMLESS

Shown with Bare Wire, connectors vary

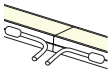


Omnidirectional Wireways

S5, S6, P5

END CAPS (NO FEED)

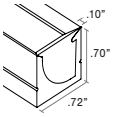
CL



CLEAR ENDCAPS .0" added at end

.00" dim spot

WH

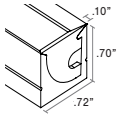


WHITE ENDCAPS .0" added at end

.10" dim spot

END CAPS (WITH FEED)

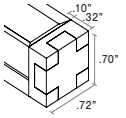
End Feed S1, P1



WHITE ENDCAPS .0" added at end

.10" dim spot

Tri-Directional S2, S3, S4, P2, P3, P4



WHITE ENDCAPS .32" added at end

.42" dim spot

PROJECT NAME	DATE	COMPANY	TYPE	NOTE

 | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com | Specification subject to change | Rev-10-16-19

WIDE
EXTRUSIONS - ALUMINUM
Model: iQA

TYPE JCCS-LENGTHS

PRODUCT	FINISH	MOUNTING	LENS	TYPE	FINISHED FIXTURE LENGTH (IN)
WIDE	BK	PL	DF	S1	LENGTHS
	ST BK BZ	PL	CL PR DF	S1 S2 S3 S4 — Single (Closed exit) P1 P2 P3 P4 — Pass through NI — Not installed (Strip not installed in factory)	1" increments from 1" - 98.43" Tolerance +0.0"/-0.5"

NOTES:
- UL Listed when assembled with STRIP LEDs at Q-Tran
- NRTL Listed for install in Storage Areas with Clothing, NEC Field 410.2 and 410.16 when assembled as a fixture, with 4.0 w/ft or less, at Q-Tran facility (Not applicable for encapsulation)
- Field modifications must comply with Q-Tran's installation methods otherwise warranty is null and void

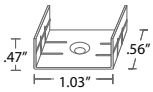
FINISH

ST	BK	BZ
Satin	Black	Bronze

MOUNTING
NOTE: 2 clips provided for 4' or less; 4 clips provided for greater than 4'

WIDE-PL QTY

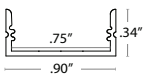
Plastic



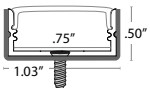
LENS with LED visibility

CL	PR	DF
Clear	Polar	Diffused

DIMENSIONS



Profile



Profile with Plastic Mounting Clip

TYPE

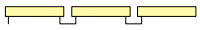
SINGLE (Input only)

S1	S2	S3	S4
In	In	In	In

PASS THROUGH (Input/Output)

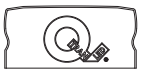
P1	P2	P3	P4
Out / In	Out / In	Out / In	Out / In

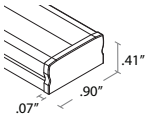
ORDER EXAMPLE



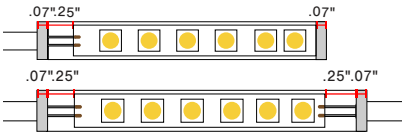
END CAPS

ENDCAP QTY





LENGTH (IN) : Add to nominal LED length for fixture length



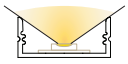
Endcap#1
Endcap#2
Space to solder wire

S1 .07" + .07" + .25" = .39"

P1 .07" + .07" + 2(.25") = .64"

CUT OFF

CL



Clear 97°

COMPATIPLE LEDs

STATIC WHITE (SW)				DYNAMIC WHITE (DW)				STATIC COLOR (SC)				RGB				RGBW			
DRY	DMP	WET	ENC	DRY	DMP	WET	ENC	DRY	DMP	WET	ENC	DRY	DMP	WET	ENC	DRY	DMP	WET	ENC
✓	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✗

✓ = Compatible
✗ = NOT Compatible

PROJECT NAME	DATE	COMPANY	TYPE	NOTE

 | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com | Specification subject to change | Rev-11-22-19

TYPE JCCS-LENGTHS

RGBW24/6.0

STRIP - DYNAMIC COLOR

c UL us LISTED RoHS COMPLIANT

V/WATTS	RATED	CCT - LUMENS/CRI	[2]CONNECTOR/ WIRE IN	[2]CONNECTOR/ WIRE OUT	ILLUMINATED LENGTH (IN)
RGBW24/6.0 Voltage: 24 VDC Wattage: 6.0 W/ft	WET	RGBW-30	BW	N/A	LENGTHS
	DRY	**RGBW-27** - 2700K 89/93 **RGBW-30** - 3000K 99/94	**[1]BW** **CLS**	**CLS** **[1]BW**	**4"-192"** (3.85" increments) OR **[2]MATCH** (Matches EXT length ordered)
	DMP	**RGBW-27** - 2700K**/** **RGBW-30** - 3000K**/**	**[1]BW**	**CLS** **[1]BW**	**4"-180"** (3.85" increments) OR **[2]MATCH** (Matches EXT length ordered)
	WET	**RGBW-27** - 2700K**/** **RGBW-30** - 3000K**/**	**[1]BW**	**CLS** **[1]BW**	**4"-192"** (3.85" increments) OR **[2]MATCH** (Matches EXT length ordered)

ENC RATED STRIP ARE NOT FIELD CUTTABLE

NOTES:

- Field modifications must comply with Q-Tran's installation methods otherwise warranty is null and void
- All data has +/- 5% tolerance
- 5 year warranty
- Consent factory for alternate Kelvin temperature

1 BW comes in standard 24"- request custom length (Max 120") by writing it in inches next to "BW" in the order code box (ex. BW48)

2 • Wire orientation for MATCH will be dictated by extrusion Feed In/Feed Out selection
• Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out

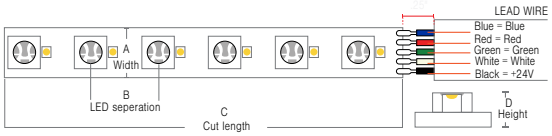
TECHNICAL INFORMATION [L70 = 30000 HRS]

*Tested with RGBW24/6.0-DRY

CCT	Lumen/ft	Wavelength	Circuit Wattage
Red	37	630	1.5
Green	124	513	1.5
Blue	32	466	1.5

CCT	Lumen/ft	CRI Ra	CRI R9	TM30 Rf	TM30 Rg	Circuit Wattage
2700K	89	93	67	92	100	1.5
3000K	99	94	75	91	102	1.5

DIMENSIONS



Section (in)	DRY	DMP	WET
A	0.47"	0.47"	0.55"
B	0.65"	0.65"	0.65"
C	3.85"	3.85"	3.85"
D	0.10"	0.10"	0.18"

CONNECTOR/WIRE IN

[1]BW

Bare Wire 24"

CLS

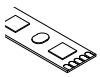
Not soldered
DRY ONLY

CONNECTOR/WIRE OUT

[1]BW

Bare Wire 24"

CLS



Not soldered

COMPATIBLE EXTRUSIONS

SLIM	WIDE	ROND	VEGA	TORQ	TRE3	ARKA	TELA	VEVE	FLUR	LATO	MDIN
☐ DRY	☑ DRY	☐ DRY	☐ DRY	☐ DRY	☑ DRY	☑ DRY	☑ DRY	☑ DRY	☐ DRY	☐ DRY	☐ DRY
☐ DMP	☑ DMP	☐ DMP	☐ DMP	☐ DMP	☑ DMP	☑ DMP	☑ DMP	☑ DMP	☐ DMP	☐ DMP	☐ DMP
☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC	☐ ENC
☐ WET	☑ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET	☐ WET

PROJECT NAME	DATE	COMPANY	TYPE	NOTE

 | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@q-tran.com | www.q-tran.com | Specification subject to change | Rev-10-14-19

TYPE JDDR

BeveLED® 2.2 Complete
4.5″ Round Deep Regress Downlight - B4RC

USAI® Lighting

Universal and Field Convertible - Trim | Trimless | Millwork

Trimmed - B4RCF

Trimless - B4RCL

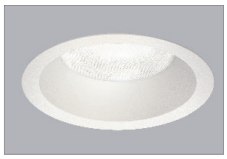
Millwork - B4RCM

usailighting.com/beveled

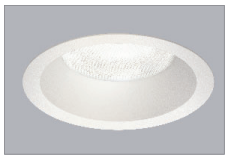
FEATURES

- Field Flexibility between trimmed, trimless and millwork
- Dry/damp/wet location rated for bathrooms and showers, including trimless and millwork
- 1% dimming standard + more dimming options
- Clear overspray protector for installation convenience
- Full family platform
- Iconic beveled look

COMPANION FAMILY PRODUCTS



Downlight - B4RD
usailighting.com/B4RD



Adjustable - B4RA
usailighting.com/B4RA

Wall Wash - B4RW
usailighting.com/B4RW

DEEP REGRESS DOWNLIGHT PERFORMANCE DATA

	LED COLOR CHOICES									
	Classic White						Warm Glow Dimming		Color Select	
DELIVERED* PERFORMANCE:	**9W**	**12W**	**16W**	**24W**	**33W**	**36W**	**16W**	**32W**	**16W**	**32W**
Source Lumens:	1150	1300	1725	2400	3025	4150	1275	2150	1250	2075
Lumens Per Watt:	70	69	68	64	58	85	56	47	54	52
Delivered Lumens:	625	825	1100	1550	1925	2950	900	1500	850	1525
EM Mode Output:	450 Delivered Lumens (nominal)						350 Delivered Lumens		375 Delivered Lumens	

*Based on 3000K, 80+ CRI. Performance varies for each specific beamspread and color temperature. See IES files for exact values at usailighting.com.

CORRELATED COLOR TEMPERATURE MULTIPLIER	Classic White									Warm Glow Dimming					Color Select					
	2200K	**2700K**		**3000K**		**3500K**		**4000K**		**2700K**		**3000K**		**3500K**	**2200K**	**2700K**	**3500K**	**4000K**	**5000K**	**6000K**
Color Rendering Index:	80+	80+	90+	80+	90+	80+	90+	80+	90+	80+	90+	80+	90+	80+	80+	80+	80+	80+	80+	80+
Multiplier for Lumen Output:	0.72	0.94	0.78	1.00	0.78	1.00	1.00	1.06	1.06	0.94	0.74	1.00	0.80	1.07	0.87	0.96	1.04	1.09	1.13	1.18

THE COMPLETE BEVELED FAMILY PLATFORM

More Ceiling Applications

Sloped Ceiling

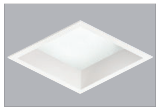
BeveLED Block

Cylinders

More Sizes and Shapes

BeveLED Micro

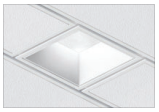
BeveLED Mini



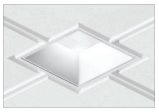
BeveLED 5.0

Armstrong® Ceiling Solutions Compatible

Trimless Acoustical



Connect TechZone



BeveLED Connect

USAI LIGHTING COLLABORATORY
13 Crosby Street
New York, NY 10013
845-234-4090
showroom@usailighting.com

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1126 River Road
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info@usailighting.com

BeveLED® 2.2 Complete
4.5" Round Deep Regress Downlight - B4RC

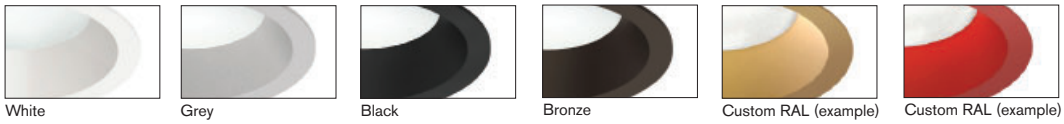
USAI® Lighting

Specify fixture part number. (All boxes must be filled in to correctly order)

B4RC_	16C3	30KS	70	S	WH	WH	NCIC	UNV	D6E	
BeveLED Trim Style	**Wattage Options**	**LED Color Options**	**Beam Options**	**Lens Options**	**Bevel Trim Finish Options**	***Flange/ Millwork Collar Finish**	**Housing Options**	**Voltage Options** *Select one*	**Dimming Driver Options**	**Acessories (Optional)***
F Trimmed with Flange (use with all materials) **L** Trimless Spackle-in (use with sheetrock and plaster only) **M** Millwork Knife-Edge (use with wood and stone)	**Classic White Light** **09C3** 9W LED **12C3** 12W LED **16C3** 16W LED **24C3** 24W LED **33C3** 33W LED **36E1** 36W LED	**22KS** (1) 2200K, 80+ CRI **27KS** 2700K, 80+ CRI **27KH** 2700K, 90+ CRI **30KS** 3000K, 80+ CRI **30KH** 3000K, 90+ CRI **35KS** 3500K, 80+ CRI **35KH** 3500K, 90+ CRI **40KS** 4000K, 80+ CRI **40KH** 4000K, 90+ CRI	**25** 25° beam **40** 40° beam **70** 70° beam	**S** Solite (provided standard) **SF** Solite Frosted **BF** Borosilicate Frosted	**WH** White **SC** Conduit Silver **GR** Grey **BL** Black **BZ** Bronze **PR** Primer Finish **AC** Clear Matte Anodized **AB** Piano Gloss Black **RAL** Custom Color Specify RAL #	**WH** White **SC** Conduit Silver **GR** Grey **BL** Black **BZ** Bronze **PR** Primer Finish **AC** Clear Matte Anodized **WH** White **GR** Grey **BL** Black **AB** Piano Gloss Black **WH** White **GR** Grey **BL** Black **RAL** Custom Color Specify RAL # *Leave blank for Trimless	**NCSM** New Construction Narrow Width **NC** New Construction **NCCP** Chicago Plenum **NCIC** Insulation Contact Rated / Airtight (1)	**UNV** 120V-277V	***For use with Universal Voltage 120V - 277V*** *No Additional Charge* **D6E** EldoLED 0-10V, 1% (provided standard) **D6F** EldoLED 0-10V, 1% **D4A** Lutron Hilume Premier ECO, 0.1% (1, 2, 3, 5, 6) **D4E** Lutron 5 ECO, 5% (2, 3, 4) **D4H** Lutron H ECO, 1% Fade (2, 3, 4) **D4P** Lutron Hilume Premier ECO, 1% (1, 5, 6) **D6A** EldoLED 0-10V, 0.1% **D6B** EldoLED 0-10V, 0.1% **D7** EldoLED DALI, 0.1% **D18** Moons DMX, 0.1% (2, 3)	**CB27** 27" C-Channel Bars **CB32** 32" C-Channel Bars **CB52** 52" C-Channel Bars **EM** Emergency Battery (7) **EMW** Emergency Battery Wet Location (7) *Residential grade nailer bars provided standard
	Warm Glow Dimming **16WG2** 16W LED **32WG2** 32W LED	**2722KS** 2700K-2200K, 80+ CRI **2722KH** 2700K-2200K, 90+ CRI **3022KS** 3000K-2200K, 80+ CRI **3022KH** 3000K-2200K, 90+ CRI **3522KS** 3500K-2200K, 80+ CRI	**25** 25° beam **40** 40° beam **65** 65° beam						**120V**	***For use with 120V only*** *No Additional Charge* **D19** Phase 2-wire, 1% (1, 2, 3, 4, 5) **D3** Lutron 2-wire, 1%	
	Color Select Tunable White **16CS1** 16W LED **32CS1** 32W LED	**6022KS** 6000K-2200K, Tunable White Light 80+ CRI	**30** 30° beam **40** 40° beam **50** 50° beam					**347V**	***For use with 347V only*** **D15** 0-10V dim, 1% 347V only (2, 3)	

Notes: *1 Not available with 36E1LED*
2 Not available for Warm Glow.
3 Not available for Color Select.
4 Not available with 9W.
5 Not available with 33W
6 For use with 16W and lower only.
7 Not available with 347V. For NC and NCSM housings only. NCSM housing requires above ceiling access.

TRIM FINISH OPTIONS



White | Grey | Black | Bronze | Custom RAL (example) | Custom RAL (example)

Custom colors and primer finish also available

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13 Crosby Street
New York, NY 10013
845-234-4090
showroom@usailighting.com

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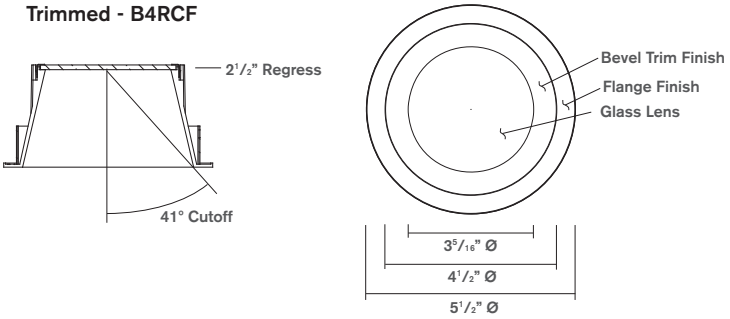
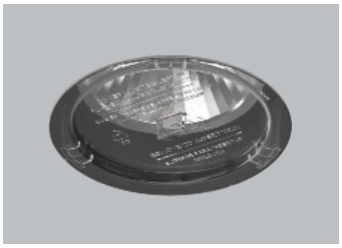
BeveLED® 2.2 Complete
4.5″ Round Deep Regress Downlight - B4RC

Trimmed - B4RCF

TRIM DETAILS

Trimmed - B4RCF

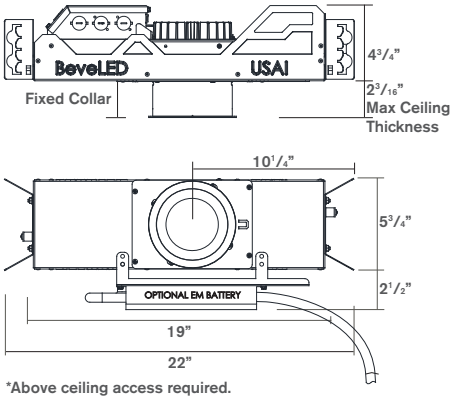




Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

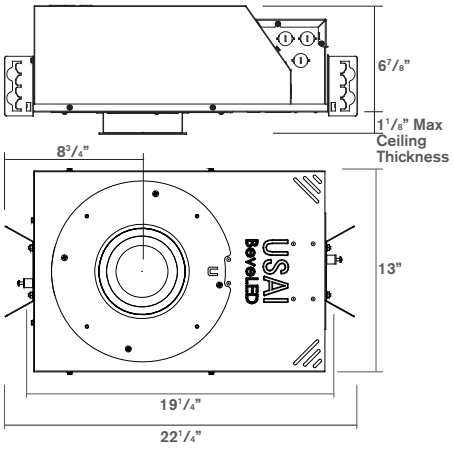
HOUSING OPTIONS

New Construction Narrow Width - NCSM
NCSM with Emergency Battery*

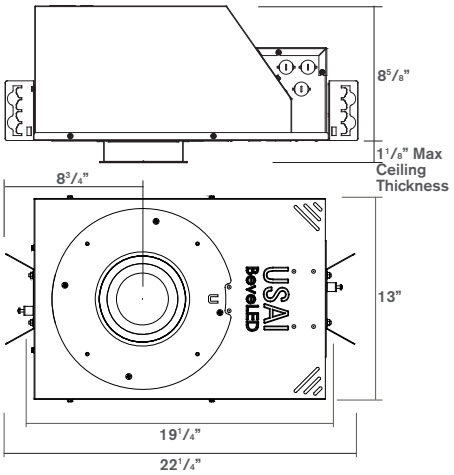


*Above ceiling access required.

New Construction - NC
Insulation-Contact Rated (24W Max) - NCIC
Chicago Plenum Rated (24W Max) - NCCP
NC with Emergency Battery



Insulation-Contact Rated (32W-33W) - NCIC
Chicago Plenum Rated (32W-36W) - NCCP



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showroom@usailighting.com

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BeveLED® 2.2 Complete
4.5" Round Deep Regress Downlight - B4RC

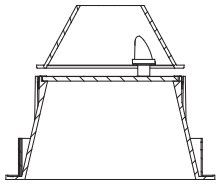
USAI® Lighting

BEVELED 2.2 SPECIFICATIONS

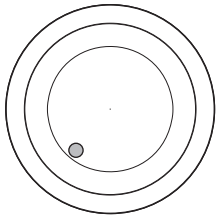
FIELD REPLACEABLE LED LIGHT ENGINE
is serviceable through the aperture without tools or with a Philips screwdriver. All USAI Lighting light engines feature industry-leading color consistency.

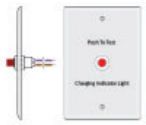
FIELD REPLACEABLE DRIVER
Unless otherwise specified, a 0-10V, 100%-1% solid state electronic constant current integral D6E dimming driver with a high power factor is provided standard and sources 2mA. All integral dimming drivers are located within the fixture housing and are serviceable from below the ceiling through the aperture. Some on-time delay may be experienced depending on control system used. All dimming drivers comply with IEEE C62.41 surge protection.

EMERGENCY BATTERY
IOTA emergency battery provides backup power for 90 minutes. NC EM fixtures are provided with an integral emergency battery with integral test switch and can be serviced through the aperture from below the ceiling plane. NCSM EM fixtures are provided with an integral emergency battery with a remote test switch, which comes with a 24" lead length for location of the test switch. Remote EM test switch is dry/damp only; select EMW emergency option for a wet location-rated EM test switch. NCSM EM fixtures require above ceiling access for service of the EM pack. Fixtures that have no USAI EM option may be connected to an inverter (by others) for emergency lighting. Battery is not available with 347V.



Integral Emergency Test Switch included with NC housing

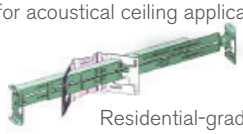




Remote Emergency Test Switch included with NCSM housing (above ceiling access required).

HOUSING
All BeveLED 2.2 fixtures are field-flexible which allows for field changes from trimless to trimmed or millwork with a simple components change with parts from USAI. Housings are fabricated of 20 ga. steel construction with thru wire J-box, 4 in 4 out at min. 90°C, #12 AWG thru branch circuit wiring, except for NCSM which is fabricated of 18 ga. steel. NCIC housing for use with 9W, 12W, and 16W light engines only are rated for direct contact with spray foam insulation of R-42 or less.

MOUNTING
B4RCF overlap flange fixtures are designed for use in sheetrock, acoustical ceiling tile, and many other ceiling materials. B4RCL trimless fixtures are provided with a spackle collar and are designed for use in sheetrock/mud-in ceiling applications. B4RCM millwork fixtures are provided with a millwork collar in finish to match trim finish specified and are designed for use in wood/millwork, stone and tile construction applications. Butterfly brackets and residential grade adjustable nailer bars extendible from 14" to 24" centers with integral nails are provided standard for attachment to building structure. C-channel bars are optionally available for acoustical ceiling applications.



Residential-grade nailer bars provided standard.

FIXTURE WEIGHT
NC, NCIC, and NCCP housings weigh 16 lbs. NCSM housing weighs 10 lbs. NCSM with EM weighs 16.5 lbs, and NC housing with EM weighs 24.5 lbs.

WARRANTY
Based on IESNA LM80-2008, BeveLED has a 50,000 hour rated life at 70% lumen maintenance (L70). USAI Lighting Warranty covers replacement parts for 5 years from date of shipment. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

CEILING CUT OUT
B4RCF Trimmed Overlap Flange: 5-1/16" ∅
B4RCL Trimless Spackle-in: 5-1/2" ∅
B4RCM Millwork Knife-edge: 4-15 /16" ∅

LISTINGS
Dry/Damp/Wet location. UL2043 rated for use in air handling plenums. AC and AB trim finishes are dry/damp only. Remote EM test switch is dry/damp only. Select EMW option for wet location remote test switch. NRTL/CSA-US tested to UL standards. IBEW union made.

NOTES
• Use of pressure washer voids warranty

PHOTOMETRICS
Consult factory or website for IES files. Tested in accordance with IESNA LM79.

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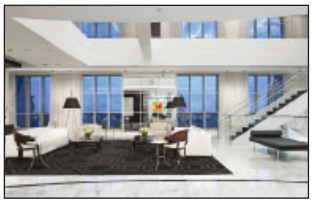
BeveLED® 2.2 Complete
4.5″ Round Deep Regress Downlight - B4RC

USAI® Lighting

LED COLOR OPTIONS

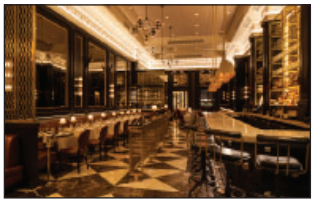
Classic White Light

Our proprietary LED light engines achieve a 2-step MacAdam ellipse along the black body locus, resulting in reliable and uniform color from fixture to fixture. You'll see the results in consistently beautiful light throughout your space, whichever USAI LED product you specify.

Warm Glow® Dimming

Warm Glow Dimming provides warmth and glow once possible only in dimmed incandescent sources. Utilizing our patented proprietary algorithm and circuitry, Warm Glow Dimming technologies precisely mimic the black body curve of a standard 100W A19 lamp by gradually transitioning from 2700K , 3000K or 3500K down to 2200K. The result is virtually indistinguishable from an incandescent light source.

Color Select® Tunable White

Color Select represents the next innovation in color temperature control for advanced LED recessed downlighting. Color Select® products allow users to adjust color temperature from 6000K down to 2200K while independently adjusting intensity to achieve ultimate control over the quality of light in a space with a single fixture type. Color Select interfaces with standard dimming and control systems.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USAI Lighting

DIMMING DRIVER COMPATIBILITY SELECTION GUIDE
D6A / DIML6A and D6E / DIML6E
D6B / DIML6B and D6F / DIML6F

IMPORTANT SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
5. Cap any wires not used separately (not together).

D6A / DIML6A and D6E / DIML6E LED Dimming Compatibility Table

D6A / DIML6A and D6E / DIML6E are linearly programmed dimming drivers for use with the dimming controls listed in the table below.
D6A / DIML6A = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1%
D6E / DIML6E = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6A / DIML6A and D6E / DIML6E Dimmer Compatibility Chart

Manufacturer	Product	Part Number	Dimmed Light Output Range			Qty Fixtures Per Dimmer*
120V & 277V			DIML6A		6E	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Lutron	Diva	DVTV/NFTV with PP-20	99% -	0.1%	1%	
Lutron	Nova T	NTFTV with PP-20	99% -	0.1%	1%	
Lutron	Energi Savr Node	QSN-4T16-S	100% -	0.1%	1%	
Lutron	GP Dimming Panels	TVM2 Module	99% -	0.1%	1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% -	0.1%	1%	
Sensor Switch	nIO	nIO EZ	100% -	0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% -	0.1%	1%	

D6B / DIML6B and D6F / DIML6F LED Dimming Compatibility Table

D6B / DIML6B and D6F / DIML6F are logarithmic-programmed dimming drivers for use with the dimming controls listed in the table below.
D6B / DIML6B = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1% D6F / DIML6F = EldoLED ECOdrive 0-10V control dims from 100% to 1%

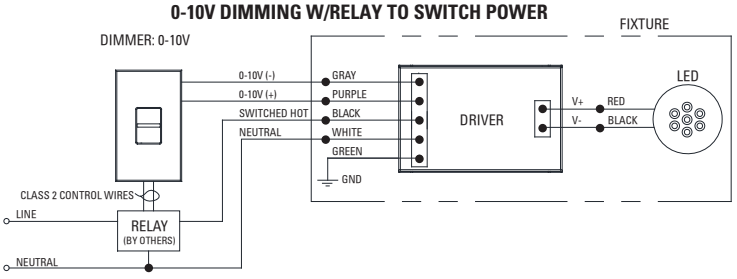
D6B / DIML6B and D6F / DIML6F Dimmer Compatibility Chart

Manufacturer	Product	Part Number	Dimmed Light Output Range			Qty Fixtures Per Dimmer*
120V & 277V			DIML6B		6F	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Bush-Jaeger	Electronic potentiometer	2112U-101	100% -	0.1%	1%	
Jung	Electronic potentiometer	240-10	100% -	0.1%	1%	
Leviton	Iluma Tech dimmer	IP710-DLX	100% -	0.1%	1%	
Lightolier (Philips)	Momentum (120V ONLY)	ZP600FAM120	100% -	0.1%	1%	
Merten	Electronic potentiometer	5729	100% -	0.1%	1%	
Pass & Seymour	Titan	CD4FB-W	100% -	0.1%	1%	
Watt Stopper	Miro	DCLV1	100% -	0.1%	1%	
Synergy	Wallbox Dimmers	ISD BC	100% -	0.1%	1%	
ABB	i-bus	SD/S 2.16.1	100% -	0.1%	1%	
Crestron	Modules	GLX-DIMFLV8, GLXP-DIMFLV8	100% -	0.1%	1%	
Crestron	Green Light	GLPAC-DIMFLV4-, GLPAC-DIMFLV8-	100% -	0.1%	1%	
Crestron	Green Light Power Pack	GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM	100% -	0.1%	1%	
Crestron	DIN Rail Analog Output Module	DIN-A08	100% -	0.1%	1%	
Crestron	DIN Rail 0-10V Fluorescent Dimmer	DIN-4DIMFLV4	100% -	0.1%	1%	
Crestron	iLux 0-10V Dimmer Expansion Module	CLS-EXP-DIMFLV	100% -	0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% -	0.1%	1%	

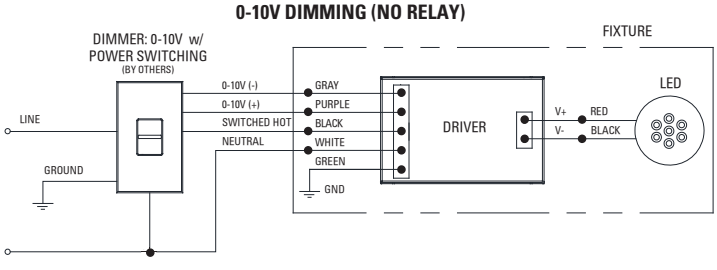
DIMMING DRIVER WIRING SCHEMES:

NOTES: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

D6 / DIML6
0-10V DIMMING W/RELAY TO SWITCH POWER



D6 / DIML6
0-10V DIMMING (NO RELAY)



USAI Lighting
www.usailighting.com
info@usailighting.com
1126 River Road
New Windsor, NY 12553
T 845–565–8500
F 845–561–1130

I2-264-6 Revised 08/16/2019

USAI Lighting

COLOR SELECT®

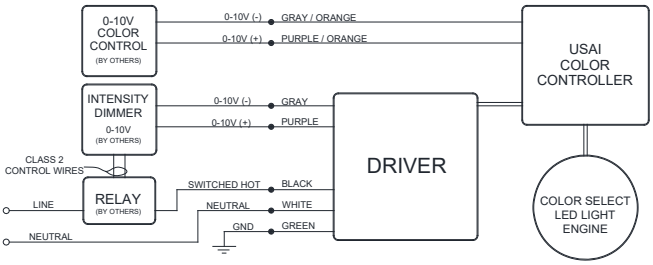
Covered By US Patents 8,581,520 and 8,456,109

INTENSITY DIMMING DRIVER COMPATIBILITY SELECTION GUIDE
DIML6A & 6B
DIML6E & DIML6F

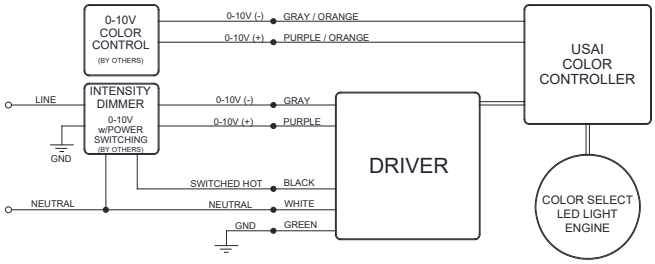
INTENSITY DIMMING DRIVER WIRING SCHEMES:

Note: Wiring diagrams are examples of typical installations intended to illustrate the number of wires that must be run to fixture. These diagrams are not intended to specify all equipment necessary for a given dimming circuit. Refer to specific dimmer manufacturer's documentation for details.

0-10V Dimming w/ Relay Switch to Power



0-10V Dimming



D6A / DIML6A and D6E / DIML6E LED Dimming Compatibility Table

D6A / DIML6A and D6E / DIML6E are linearly programmed dimming drivers for use with the dimming controls listed in the table below
D6A / DIML6A = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1%
D6E / DIML6E = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6A / DIML6A and D6E / DIML6E Dimmer Compatibility Chart

Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
120V & 277V			DIML6A	6E	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Lutron	Diva	DVTV/NFTV with PP-20	99% - 0.1%	1%	
Lutron	Nova T	NTFTV with PP-20	99% - 0.1%	1%	
Lutron	Energi Savr Node	QSN-4T16-S	100% - 0.1%	1%	
Lutron	GP Dimming Panels	TVM2 Module	99% - 0.1%	1%	
Lutron	Interfaces	GRX-TVI w/ GRX3503	100% - 0.1%	1%	
Sensor Switch	nIO	nIO EZ	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

D6B / DIML6B and D6F / DIML6F LED Dimming Compatibility Table

D6B / DIML6B and D6F / DIML6F are logarithmic-programmed dimming drivers for use with the dimming controls listed in the table below
D6B / DIML6B = EldoLED SOLOdrive 0-10V control dims from 100% to 0.1% D6F / DIML6F = EldoLED ECOdrive 0-10V control dims from 100% to 1%

D6B / DIML6B and D6F / DIML6F Dimmer Compatibility Chart

Manufacturer	Product	Part Number	Dimmed Light Output Range		Qty Fixtures Per Dimmer*
120V & 277V			DIML6B	6F	Refer to manufacturer's dimmer load rating for maximum and minimum fixture quantities per dimmer. Enlighted compatible.
Bush-Jaeger	Electronic potentiometer	2112U-101	100% - 0.1%	1%	
Jung	Electronic potentiometer	240-10	100% - 0.1%	1%	
Leviton	Iluma Tech dimmer	IP710-DLX	100% - 0.1%	1%	
Lightolier (Philips)	Momentum (120V ONLY)	ZP600FAM120	100% - 0.1%	1%	
Merten	Electronic potentiometer	5729	100% - 0.1%	1%	
Pass & Seymour	Titan	CD4FB-W	100% - 0.1%	1%	
Watt Stopper	Miro	DCLV1	100% - 0.1%	1%	
Synergy	Wallbox Dimmers	ISD BC	100% - 0.1%	1%	
ABB	i-bus	SD/S 2.16.1	100% - 0.1%	1%	
Crestron	Modules	GLX-DIMFLV8, GLXP-DIMFLV8	100% - 0.1%	1%	
Crestron	Green Light	GLPAC-DIMFLV4-, GLPAC-DIMFLV8-	100% - 0.1%	1%	
Crestron	Green Light Power Pack	GLPP-DIMFLVEX-PM, GLPP-1DIMFLV2EX-PM, GLPP-1DIMFLV3EX-PM	100% - 0.1%	1%	
Crestron	DIN Rail Analog Output Module	DIN-A08	100% - 0.1%	1%	
Crestron	DIN Rail 0-10V Fluorescent Dimmer	DIN-4DIMFLV4	100% - 0.1%	1%	
Crestron	iLux 0-10V Dimmer Expansion Module	CLS-EXP-DIMFLV	100% - 0.1%	1%	
enlighted	Control Unit	CU-3E-1R	100% - 0.1%	1%	

USAI®

www.usailighting.com
info@usailighting.com

1126 River Road
New Windsor, NY 12553

T 845–565–8500
F 845–561–1130

I2-228-6 Revised 08/28/2019

HUNZA™ PURE OUTDOOR LIGHTING

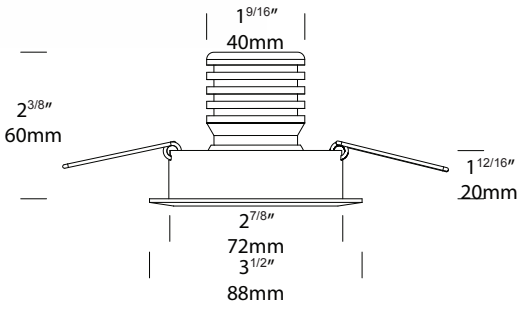
Tilting Eave 6w
PURE LED

PROJECT:
TYPE:
SOURCE:
NOTES:

SPECIFICATIONS

CE cULus LISTED

LED Chip	Cree XHP-50-2 Plug and Play field replaceable LED board
Luminaire Output	600 Lumens @ 1050mA (6 watts), 420 Lumens @ 700mA (4 watts), 240 Lumens @ 350mA (2 watts), delivered from luminaire with unobstructed beam.
Lumens Per Watt	100 Lumens @ 6 watts minimum, delivered from luminaire with unobstructed beam
CRI (3000K)	90+
Colour Temperatures	2700K, 3000K, 4000K
Beam Angles	15, 25, 38, 60
Ingress Protection	IP66
Warranty	Electronics = 5 years Flange Cop / SS = 10 years Body Aluminium = 5 years
Standards	AS/NZS 61046 cUL 2108 CSA C22.2 No. 250.0-08 CE



PRODUCT CONFIGURATION

Please fill in appropriate codes into boxes provided

Cat. No. EAVE/T6/L

Luminaire	Power	Material/ Finish	Beam	Colour	Accessories				
EAVE/T6/L									

Power

S	SERIES, REMOTE DRIVER
D3	12VAC, 2W INTEGRAL
D7	12VAC, 4W INTEGRAL
D10	12VAC, 6W INTEGRAL
DC7	9-36VDC, 700mA

Material/ Finish

ALUMINIUM

EBK	BLACK
EBZ	BRONZE
EOGR	OLIVE GREEN
EWH	WHITE
EWB	WHITE BIRCH
EDG	DARK GREY
ESTAR	SILVER STAR
ECT	CORTEN
COP	SOLID COPPER
SS	STAINLESS STEEL

Beam

15	15°
25	25°
38	38°
60	60°

Colour

2	2700K
3	3000K
4	4000K

Accessories

LF	FROSTED LENS
CJK	CABLE JOINT KIT

SERIES, REMOTE DRIVER REQUIRED:
Constant current driver
Individual fixtures require 6vdc @ 1050mA maximum

12VAC INTEGRAL DRIVER:
Hunza integrated plug and play driver (included)
Input:9-15VAC, 7watt total
Output: 6vdc @ D3=350mA, D7=700mA, D10=1050mA
(1050mA limited to ≤ 40ºC (104ºF) ambient temperature in stainless steel)

24VAC INTEGRAL DRIVER:
Hunza integrated plug and play driver (included)
Input: 9-36vdc, 7 watt total
Output: 6vdc nominal, 700mA

Click here for 240v Remote Power Supply Guidance Charts

Click here for USA Remote Power Supply Guidance Charts

HUNZA™ PURE OUTDOOR LIGHTING

HUNZA FACTORY
130 Felton Mathew Ave
Saint Johns
Auckland 1072
New Zealand

Ph: +64-9-528 9471
Fax: +64-9-528 9361
hunza@hunza.co.nz
www.hunzalighting.com

INTERNATIONAL CONTACTS:
http://www.hunzalighting.com/contact.php

LUMINAIRE CONSTRUCTION

CNC machined from one of the following metals:

Aluminium:
Body: 45mm (1 3/4") anodised aluminium
Flange: high corrosion resistant solid aluminium 88mm (3 1/2") rod with chromate substrate and high UV resistant polyester powder coat.
Colours:
Black, Bronze, Silver Star, White, White Birch, Olive Green, Dark Grey, Corten.

Copper:
Flange: solid copper 88mm (3 1/2") rod.

316 Stainless Steel:
Flange: 88mm (3 1/2") electro polished 316 stainless steel.

Step Lens:
8mm extra clear, low iron, glass lens.
Lifetime Warranty.

Gaskets:
Silicone, iron impregnated 220ºC (428ºF)

Mounting:
This fitting is designed to fit through a 72mm (2") holes and be fixed into position by two spring clips.

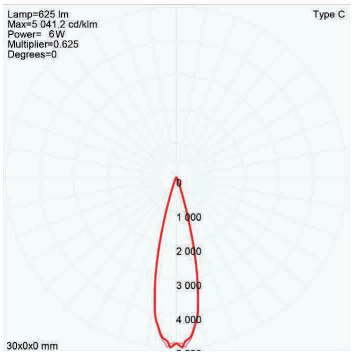
Luminaire Weight:
Low voltage
Alum: 0.300kg (11oz)
Cop: 0.800kg (1lb 12oz)
SS: 0.750kg (1lb 10oz)

ACCESSORIES

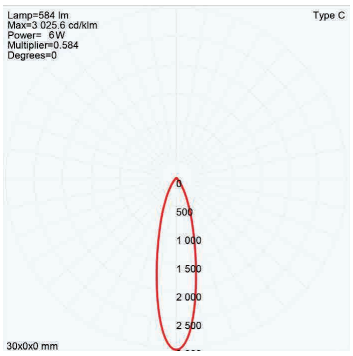
BEAM ANGLES

High efficiency PMMA TIR lenses. Field replaceable

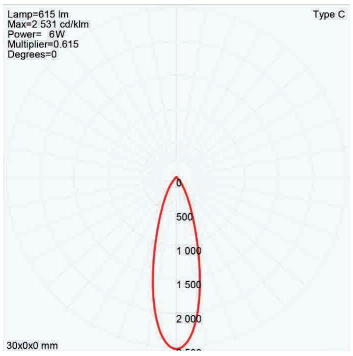
IES files available for download: hunzalighting.com/downloads



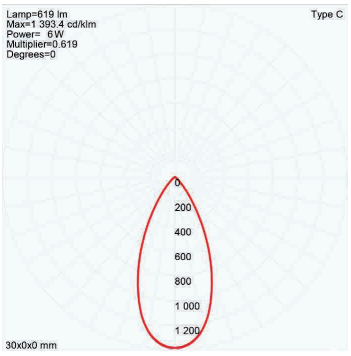
15º FWHM
TIR



25º FWHM
TIR



38º FWHM
TIR

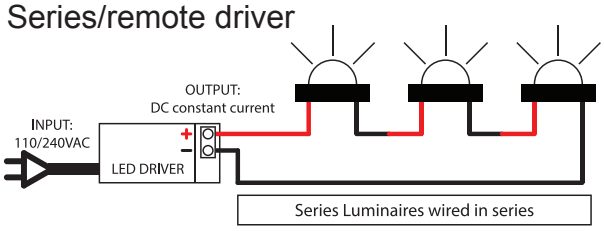


60º FWHM
TIR

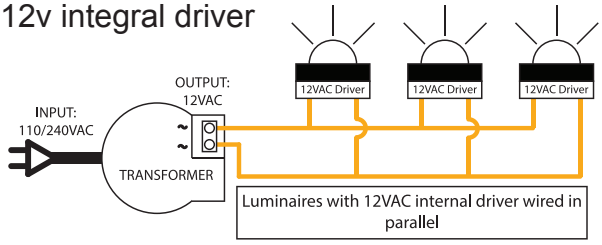
WIRING GUIDE

Available for download: hunzalighting.com/downloads

Series/remote driver



12v integral driver



Diagrams are a guide only, wire colours and polarity may change depending on fixture and country

Specifications may change without notification Aug 2017

HUNZA™ PURE OUTDOOR LIGHTING

HUNZA FACTORY
130 Felton Mathew Ave
Saint Johns
Auckland 1072
New Zealand

Ph: +64-9-528 9471
Fax: +64-9-528 9361
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Moonlite LED®
LED Outdoor Egress Emergency with Night Lighting Option

Mullion Mount Emergency Light
Series MUE

TYPE JOW-EMERGENCY

MUE.5.18.15

The Brightest Idea is Emergency Lighting

GENERAL DESCRIPTION

Operating in emergency mode or optional normal- on, this fixture is designed to mount directly on structural mullion beams used in typical glass-fronted entrances, with vertical surface as small as 2". This fixture has full 90° cut-off and will provide efficient emergency lighting in front of egress doorways, or along extended pathways.

CONSTRUCTION

- Rugged extruded aluminum housing with stainless hardware is corrosion proof.
- Wet location listed UL 924. Certified IP66.
- Uniform, high brightness lighting over the path of egress.
- Full 90° cut- off.
- Three versions are available:

RE= Central Battery System Series CBS or other qualified source 12V- 24 VDC.
BB= Battery backup from Remote Battery Supply Series RPS.
AC= 120/ 277 VAC supply.

ELECTRONICS

- Dual operation from either a battery or optional normally on power source.
- Lamps are connected in parallel-series strings, as required to meet requirements of NEC and Life Safety Codes. Lighting continues even after failure of One lamp or circuit.
- LED color temperature standard 5300K; available color temperatures from 2900K, 3200K, to 3800K.

ENERGY EFFICIENT OPERATION

- Dual function operation for optional normally on night or security lighting as well as emergency lighting.
- Very low power consumption in optional night/ security mode. The security lighting circuit is independent of emergency lighting and may be switched manually, by an exterior photocell, or other automatic means.
- Over 50,000 hour lamp life in normal use.
- IES photometric data available for all models.

CODES

- Manufactured and tested to UL Standard 924 and NFPA Life Safety Code 101.

WARRANTY

- 5 year total customer satisfaction warranty. For Details see product catalog technical data section.

DESIGNED & MADE IN THE USA

C ETL LISTED US
Intertek
CONFORMS TO
UL 924/ CSA 22.2 #141

FIXTURE SCHEDULE

MODEL	CATALOG NO
APPROVAL	JOB INFORMATION

Signtex Inc
LIGHTING
SPECIFIED EMERGENCY LIGHTING

Moonlite LED®
LED Outdoor Egress Emergency with Night Lighting Option

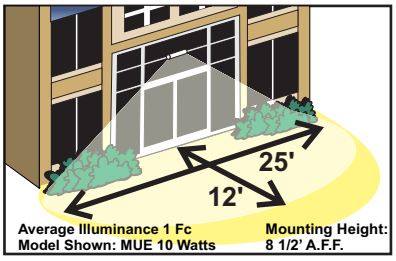
Mullion Mount Emergency Light
Series MUE

MUE.5.18.15

SUGGESTED SPECIFICATIONS:

Supply and install the MOONLITE LED Series MUE Mullion Mount emergency lighting fixture manufactured by Signtex Lighting Inc. The MUE assembly shall be listed for installation in wet locations in compliance with UL 924 and IP66 standards and shall be capable of operating from Signtex remote power supply Series RPS, the Signtex central battery system Series CBS, or from other remote power sources supplying 12-24 VDC or VAC. Upon loss of AC building power, emergency models shall operate for a minimum of 90 minutes in compliance with UL Standard 924 and NFPA LSC 101.

SPACING GUIDE

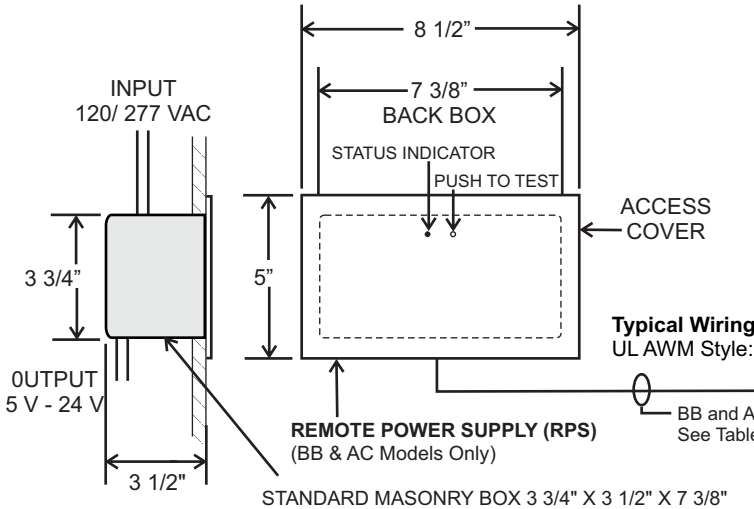


NOTE: FOR REFERENCE ONLY. STANDARD REFLECTANCES 80/50/20. SIGNTEX IS NOT RESPONSIBLE FOR SPECIFIC CONDITIONS THAT MAY ALTER THE RESULTS.

CONTACT SIGNTEX FOR LAYOUT ASSISTANCE

Code Compliant Emergency lighting layouts provided free of charge!

MOUNTING DATA & DIMENSIONS:



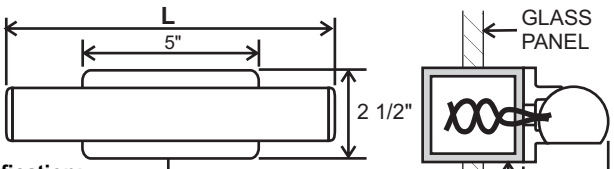
Typical Wiring Specification:
UL AWM Style: Control Cable
#20 AWG 300V

BB and AC Models: 4 Conductors
See Table 1

STANDARD MASONRY BOX 3 3/4" X 3 1/2" X 7 3/8"
(SUPPLIED BY OTHERS)

TYPICAL STOCK MODELS:
CROUSE HINDS #TP693
RACO # 698

WALL MOUNT



TOP MOUNT

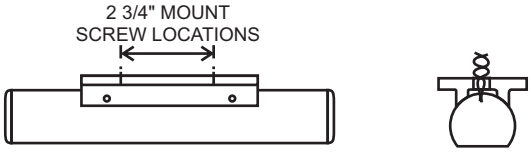


TABLE 1

MAXIMUM WIRING LENGTH FROM RPS TO FIXTURE

WIRING SIZE AWG	LENGTH (FT) MUEBB
#18	25
#16	50
#14	75
#12	125

LENGTH TABLE

POWER	L
10 Watts	10"
20 Watts*	19"

*RE & AC Models Only

SECURITY LIGHTING CONTROL

RE Models: Requires SEC Option 'S' with CBL

BB Models: Requires Option '-SB120' for connection to 120 VAC
Requires Option '-SD277' for connection to 277 VAC

BB-DG Models: Requires Option '-SD' for connection to 120/ 277 VAC

RPS SELF- TEST DIAGNOSTIC FUNCTIONS

BB MODELS WITH DG FUNCTION

STATUS	LED DISPLAY
NORMAL FULL CHARGE	GREEN ON
NORMAL FAST CHARGE	ORANGE ON
FAILED BATTERY	RED FLASH FAST
FAILED LAMP	GREEN FLASH
FAILED TRANSFER	ORANGE FLASH
FAILED CHARGER	RED FLASH SLOW

FIXTURE ORDERING INFORMATION: *EXAMPLE:* MUEBB10AW-DG

MUE BB 10 A W -DG

MODEL SERIES	OPERATION	POWER	HOUSING COLOR	MOUNT	OPTIONS
MUE	RE= Central Battery or other 12- 24 VDC Remote Source BB= Battery Backup (Includes RPS) AC= No Battery (Includes RPS)	10= 10 Watts Emergency & Normal On Power 20= 20 Watts Emergency & Normal On power (RE & AC Models Only)	W= Satin White A= Aluminum B= Dark Bronze X= Custom	T= Top W= Wall	DG= Self- Test Diagnostics (BB Models Only) SB120= Security Lighting with Control Switch for Standard BB Operation (120V) SD277= Security Lighting with Control Switch for Standard BB Operation (277V) SD= Security Lighting with Control Switch for BB Operation with DG option (120/ 277V) CW1= Custom Window Filter- 3800K CW2=Custom Window Filter- 3200K CW3=Custom Window Filter- 2900K DAC= Dual AC Input 2HT= 2" Canopy Height 5HT= 5" Canopy Height

SUITABLE FOR WET LOCATIONS

AMBIENT TEMPERATURE LIMITS:

-40° C to +50° C

Signtex Inc
LIGHTING
220 VFW Avenue, Grasonville, MD 21638
TEL:(410)827-8300 Fax:(410)827-8866
sales@signtexinc.com www.signtexinc.com

DISTRIBUTOR:

Specifications and Dimensions subject to change without notice.